

KARORA RESOURCES INC. Suite 1608 141 Adelaide Street West Toronto, Ontario M5H 3L5 CANADA

ANNUAL INFORMATION FORM For the year ended December 31, 2022

Dated as of March 31, 2023

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#### GENERAL MATTERS

Unless otherwise noted or the context otherwise indicates, the terms "Company", "Karora", "we" and "our" refer to Karora Resources Inc. and its subsidiaries.

For reporting purposes, the Company prepares its financial statements in Canadian dollars and in conformity with International Financial Reporting Standards ("**IFRS**"). All dollar amounts in this Annual Information Form ("**AIF**") are expressed in Canadian dollars, except as otherwise indicated. References to US\$ or "U.S. dollars" are to United States dollars, and references to "A\$" are to Australian dollars.

Market data and other statistical information used in this AIF is based on independent industry publications, government publications, reports by market research firms, or other published independent sources. Certain data is based on the Company's good faith estimates derived from its review of internal data and information and its consideration of independent sources, including those listed above. Although the Company believes these sources are reliable, the Company has not independently verified the information and cannot guarantee its accuracy or completeness.

The information contained in this AIF is as at December 31, 2022, unless otherwise indicated.

A glossary of technical terms is included starting on page 39 of this AIF.

## FORWARD LOOKING STATEMENTS

This AIF contains "forward looking information" and "forward looking statements" (collectively referred to as "forward looking statements"). Forward-looking statements relate to future events or the Company's future performance. All statements other than statements of historical fact are forward looking statements. Often, but not always, forward looking statements can be identified by the use of words such as "guidance", "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "does not anticipate" or "believes" or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Forward looking statements in this AIF include, but are not limited to:

- guidance for production, all-in sustaining cost and capital expenditures,
- drilling programs carried on at the Beta Hunt Mine (as defined below), HGO (as defined below) and the Company's other properties, including the type of drilling to be undertaken and the significance of drill results to accurately predict mineralization,
- the results and projections contained in the mineral reserve and mineral resources estimates in respect of the Beta Hunt Mine and HGO,
- available financing sources,
- the geology of the Company's properties;
- the ability to realize upon any mineralization in a manner that is economic,
- the ability to complete any proposed exploration activities and the results of such activities,
- the future financial or operating performance of the Company and its mines and projects,
- the future price of metals,
- the supply and demand for gold and other metals,
- the estimate of the quantity and quality of mineral resources and mineral reserves,
- costs of production, capital, operating and exploration expenditures,
- the successful integration of acquisitions,
- costs and timing of the development of planned production at the Company's operating mines,
- the ability of the Company to obtain and retain all government approvals, permits and third-party consents in connection with the Company's development activities,
- the Company's ability to raise funding privately or on a public market in the future,

- government regulation of mining operations,
- environmental risks,
- reclamation expenses,
- title disputes or claims, and
- the Company's business prospects and opportunities.

Forward looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others:

- the actual results of current mining operations and development activities,
- the uncertainties involved in interpreting drill results and other geological data,
- the speculative nature of mineral exploration and development, and the inherent risks involved therein.
- operating and/or project delays or interruptions and funding needs, including increases in operating and capital costs,
- the global economic climate,
- changes in national, provincial, state, and local government legislation,
- political or economic developments in jurisdictions in which the Company does business or may carry on business in the future,
- fluctuations in currency markets,
- environmental and social governance,
- community and non-governmental actions,
- future prices of metals,
- availability of alternative nickel sources or substitutions,
- actual results of reclamation activities,
- conclusions of economic evaluations.
- changes in mine or project parameters as plans continue to be refined,
- the future cost of capital to the Company,
- possible variations of ore or mineralized material grade or recovery rates,
- failure of plant, equipment or processes to operate as anticipated,
- environmental risks and risks related to climate change,
- accidents, labour disputes and other risks of the mining industry,
- political instability, terrorism, insurrection or war,
- delays in obtaining governmental approvals, necessary permitting or in the completion of development or construction activities,
- the possibility of project cost overruns or unanticipated costs and expenses,
- failure to maintain adequate internal controls over financial reporting,
- risks related to international conflict,
- health risks including outbreaks of communicable diseases and any impact of such outbreaks on operations and the economy in general,

as well as those factors discussed in the section entitled "*Risk Factors*" in this AIF. Such forward looking statements are also based on a number of material factors and assumptions, including:

- the supply and demand for gold and nickel and the level and volatility of future gold and nickel prices,
- operating and capital costs,
- availability of financing,
- permitting, development and operations consistent with Karora's expectations,
- foreign exchange rates,
- Karora's ability to attract and retain skilled staff,

- prices and availability of equipment,
- that contracted parties provide goods and/or services on the agreed timeframes, and
- that no unusual geological or technical problems occur.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. **Accordingly, readers should not place undue reliance on forward looking statements.** Forward-looking statements contained in this AIF are made as of the date of this AIF or the date specified in such statement and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by applicable securities laws. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements.

## CORPORATE STRUCTURE & GENERAL DEVELOPMENT OF THE BUSINESS

Karora is a multi-operational mineral resource company with its mining interests located in Western Australia. The portfolio includes the Beta Hunt Mine (the "Beta Hunt Mine" or "Beta Hunt"), Higginsville Gold Operations, Lakewood mill and Spargos Reward Gold Mine ("Spargos" or the "Spargos Mine", and, collectively with Higginsville Gold Operations and Lakewood mill, "HGO" or "Higginsville"). Beta Hunt is a gold producing underground operation with nickel by-product credits. Karora's mineral property interests at Beta Hunt and HGO host a large historical resource inventory, substantial portfolio of gold tenements and a series of open pits and underground operations. Karora is focused on growth through sustainable organic production and further accretive acquisitions of precious metal/mineral operations. Karora's growth pathway to 170,000 to 195,000 ounces per year by 2024 is underpinned by the increased milling capacity now in place at Higginsville and following the acquisition of the Lakewood Mill in 2022, along with the addition of a second decline at Beta Hunt intended to double the mine's production rate to 2.0 Mtpa during 2024. The Company is also well positioned to grow the nickel component of its business, which offers the potential for higher by-product credits and further improvements in unit costs for gold production.

The Company was incorporated under the *Canada Business Corporations Act* on December 13, 2006. It is a reporting issuer in all Provinces of Canada, and its common shares ("**Common Shares**") are listed on the Toronto Stock Exchange (the "**TSX**"), trading under the symbol "KRR". The Common Shares also trade over-the-counter in the United States on the OTCQX under the symbol "KRRGF". The Company's registered office, head office and records office is at Suite 1608 – 141 Adelaide Street West, Toronto, Ontario, M5H 3L5.

Karora's principal assets are its: (i) 100% interest in the Beta Hunt Mine (represented by a 100% interest in Salt Lake Mining Pty. Ltd. ("**SLM**")); and (ii) 100% interest in HGO (represented by a 100% interest in Karora Australia Pty Ltd.). In 2020, Karora acquired the Spargos project, which is now an open pit mine located in proximity to its Higginsville mill in Western Australia. In July 2022, Karora acquired the Lakewood mill, a fully permitted 1.0 Mtpa gold processing facility located near Kalgoorlie, Western Australia. See "*Description of the Business*" for further detail regarding these assets.

Karora also holds a 15% interest in the net proceeds from a future sale or other monetization event involving the Dumont Nickel Cobalt Project (net of certain agreed costs and deductions) up to a maximum of US\$30 million. This interest was received by Karora as partial consideration for the July 2020 sale of its remaining 28% interest in the project.

In addition, Karora owns, directly or indirectly, the following minority interests: (i) approximately 10.9 million shares of Orford Mining Corporation ("**Orford**"), representing an approximate 6.6% interest in the company, which owns the Qiqavik gold project and West Raglan nickel project located in Northern Quebec; and (ii) approximately 7.9 million shares of SPC Nickel Corp. ("**SPC**"), representing an approximate 6.4% interest in the company, which owns the Aer-Kidd project located in Ontario. Orford is listed on the TSX Venture Exchange under the stock symbol "ORM", and SPC is listed on the TSX Venture Exchange under the stock symbol "SPC".

# **Three Year History**

#### 2022

- In April 2022, the Company published its inaugural ESG Report for the year 2021, which outlines a comprehensive ESG strategy that serves as a key foundation for integrating critical ESG factors into the Company's governance and risk management systems and introducing key metrics and targets for internal monitoring and external reporting.
- In July 2022, the Company acquired the fully-permitted and operating 1.0 Mtpa Lakewood mill, increasing processing capacity by 63%, to 2.6 Mtpa. Additional capacity in 2022 from the Lakewood mill was used to optimize feed from Beta Hunt, Spargos and Higginsville mines and process additional material from low grade surface stockpiles.
- After announcing robust growth in nickel mineral resources early in 2022, a positive preliminary
  economic assessment for nickel resources at Beta Hunt was released on August 12, 2022, which
  included solid growth in low-cost production, robust economics, including attractive returns and a
  low capital investment requirement, and attractive by-product credit potential from nickel
  production.
- Drilling at Beta Hunt in 2022 resulted in new discoveries as well as major extensions to existing zones. Highlights of the 2022 results at Beta Hunt include:
  - The discovery of a new gold zone, the Mason Zone, running parallel to, and west of the Larkin Zone. The Mason Zone has the potential to be an important new source of gold production south of the Alpha Island Fault with a strike length of up to 700 metres.
  - O The extension of known mineralization to depth, including extending shear mineralization at Western Flanks up to 250 metres below current mineral resources as well as extending gold mineralization at the A Zone up to 150 metres below current mineral resources, with both zones remaining open to depth.
  - O The discovery of a new high-grade nickel zone, the 4C Offset zone, including an intercept of 6.5% nickel over 11.9 metres. The new zone is located in the Hunt Block above Western Flanks and situated within 25 metres of existing and actively used mine development.
- After becoming one of the world's first carbon neutral gold producers in 2021, carbon neutrality was achieved for the second consecutive year in 2022 for the Company's own operations (Scope 1 emissions) and purchased electricity consumption (Scope 2 emissions) through the purchase and retirement of 95,000 tonnes of verified carbon offset credits. Karora will provide further updates on emissions reduction efforts underway in its 2022 ESG Report to be released in early second quarter of 2023.
- During a period of extensive capital investment in support of future growth, important steps were taken in 2022 to ensure adequate capital strength and liquidity:
  - Senior secured \$80 million Credit Agreement with Macquarie Bank Limited was completed in July 2022, providing a \$40 million term loan (fully drawn on July 14, 2022) and \$40 million revolving credit facility, both with a term to June 28, 2024 and an option to renew. Proceeds of the term loan were used to refinance the Company's existing \$30 million credit facility and for general working capital purposes.
  - Over-subscribed bought deal financing closed in June 2022 resulting in receipt of \$69.0 million of gross proceeds (\$65.1 million of net proceeds) through the issuance of 14,375,000 Common Shares. The financing was used for the acquisition of the Lakewood mill, a significant step in de-risking the Company's growth plan.
  - On July 15, 2022, the Company's normal course issuer bid ("NCIB") was renewed, through which the Company can purchase up to 8,492,971 Common Shares (representing 5% of total issued and outstanding Common Shares) between July 20, 2022 and July 19, 2023. During the second half of 2022, 157,660 Common Shares were acquired and cancelled through the NCIB at an average price of \$3.12 per share.

# 2021

- On February 1, 2021, the Company announced strong drill results from the Larkin Zone at the Beta Hunt Mine. The results are part of an ongoing infill and step-out drilling program designed to convert the Larkin Zone discovery, announced in September 2020 into Mineral Resources. The new high grade gold intercepts, including the intercept of 19.0 g/t over 9.0 metres and visible gold mineralization observed in drill core EL-EA2-023E, build upon the Larkin high grade gold discovery, included 15.3 g/t over 3.5 metres in hole BE30-010 and a wall sample of 5.0 g/t over 14.4 metres.
- Also on February 1, 2021, the Company announced it filed a technical report supporting the mineral resource and reserve statement for the Beta Hunt Mine and HGO.
- On February 8, 2021, the Company announced encouraging Phase 1 drill results from initial scout drilling on its under-explored Lake Cowan area of HGO. The area contains several of the main regional faults and has similar geology to many of the major gold deposits within the Kalgoorlie-Kambalda-Norseman area.
- On June 28, 2021 the Company announced a multi-year Growth Plan funded through operating cash flows and the current cash balance.
- During 2021, Karora became one of the world's first carbon neutral gold producers for emissions from its own operations (Scope 1 emissions) and purchased electricity consumption (Scope 2 emissions) following the purchase and retirement of verified carbon offset credits. The offset projects include reforestation and conservation initiatives in Australia, among other projects.
- Production commenced at the Spargos open pit mine in the fourth quarter of 2021 in line with schedule.
- The fourth quarter saw the completion of the Phase I mill upgrade to 1.6 Mtpa at Higginsville.
- Beta Hunt Second Decline commenced waste development from underground in the fourth quarter of 2021, having advanced 60 metres as at December 31, 2021. The box cut and portal contracts were awarded in early 2022 and contractors mobilized on site.
- Drilling at Beta Hunt has extended Fletcher Shear Zone (Beta Hunt) gold mineralization to over 500 metres along strike and 150 metres in vertical extent. Potential exists for gold mineralization to extend for up to 2 kilometres of strike length. New results include 3.3 g/t over 9.5 metres, including 5.5 g/t over 4.4 metres and 18.5 g/t over 0.8 metres.
- New gold mineralized setting intersected beneath the 50C nickel trough in the Gamma Block (Beta Hunt) where drilling has confirmed significant mineralization over a 200 metre strike length including intercepts of returned an intercepts of 40.5 g/t over 4.0 metres, 3.4 g/t over 33.6 metres (including 6.0 g/t over 10.5 metres), and 7.6 g/t over 4.6 metres.
- West of the Larkin Gold Zone (Beta Hunt), drilling returned the widest ever mineralized interval ever recorded at Beta Hunt of 1.5 g/t over 90.0 metres, including 50.9 g/t over 0.4 metres.

#### 2020

- On January 8, 2020, the Company announced that it had elected to pay down \$3 million in debt to reduce interest costs.
- On January 29, 2020, the Company announced a recently completed high density gravity survey program at HGO. The program had identified a newly interpreted structure extending over 5 km north of the previously mined high grade 1.0Moz Trident gold deposit. The new structure is considered to have high potential for mineralization at depth and will be the focus of a new round of drilling by the Company as part of its 2020 exploration program. The Company also announced that Stage 2 of the Baloo open pit had been approved by the Department of Mines, Industry Regulation and Safety.
- On February 6, 2020, the Company filed on SEDAR an independent technical report titled "Technical Report Western Australia Operations Eastern Goldfields: the Beta Hunt Mine (Kambalda) and Higginsville Gold Operations (Higginsville)" supporting the mineral reserve statement for the Beta Hunt Mine previously reported in the Company's news release dated December 23, 2019.

- On April 15, 2020, the Company announced a normal course issuer bid to purchase up to 30,415,198
   Common Shares commencing on April 17, 2020 and expiring on April 16, 2021.
- On May 11, 2020, the Company announced that it entered into a purchase agreement to acquire the Spargos Project. On August 7, 2020, the Company announced it closed the acquisition of Spargos from Corona Resources Limited.
- Also on May 11, 2020, the Company announced it reached an agreement with Morgan Stanley Capital Group Inc. ("Morgan Stanley") to terminate the remaining NSR royalty interests held by Morgan Stanley over a number of tenements at HGO for a purchase price of US\$9 million in cash. The transaction eliminates all remaining NSR royalty obligations in respect of the affected tenements, with the exception of the mandatory Western Australia state royalty of 2.5%.
- On June 16, 2020, the Company announced that it has changed its name from "Royal Nickel Corporation" to "Karora Resources Inc." and that its new trading symbol is "KRR".
- On June 30, 2020, the Company announced an agreement to reduce the gold royalty at the Beta Hunt Mine. Maverix Metals Inc. ("Maverix") agreed to reduce the royalty on the Beta Hunt Mine gold production from 7.5% to 4.75%. As consideration for the reduction, Karora agreed to pay Maverix US\$5 million in cash and issue 35,100,000 Common Shares at \$0.506 per Common Share. The cash component was paid in two equal instalments. The transaction closed on September 3, 2020 (the first US\$2.5 million cash payment was made at closing, and the final US\$2.5 million instalment was paid in January 2021).
- On July 22, 2020, the Company announced it reached an agreement to sell its 28% interest in the Dumont Nickel-Cobalt Project to two private funds advised by Waterton Global Resource Management, Inc. for total consideration of up to \$48 million. The transaction closed on July 27, 2020, with the Company receiving cash of \$10.7 million, comprised of \$7.4 million in respect of the interest and a \$3.3 million refund of Karora's share of the cash held within the joint venture. Karora also retained a 15% interest in the net proceeds from a future sale or other monetization event involving the project (net of certain agreed costs and deductions) up to a maximum of an additional US\$30 million.
- On July 14, 2020, the Company announced that Eric Sprott agreed to increase his ownership in Karora by subscribing for an additional 26 million Common Shares.
- On July 30, 2020, the Company announced the consolidation of its Common Shares on the basis of one post-consolidation Common Share for every four and a half pre-consolidation Common Shares (the "Consolidation"). Prior to the Consolidation, approximately 648,700,031 Common Shares were issued and outstanding. Following the Consolidation, approximately 144,155,562 Common Shares were issued and outstanding.
- On December 16, 2020, the Company announced a 334% increase in consolidated gold Proven and Probable Mineral Reserves to 1.33 million ounces for the Beta Hunt Mine and HGO. The Company also announced new consolidated Measured and Indicated gold Mineral Resources of 2.52 million ounces, representing a 167% increase.

# Development of the Business - Events Subsequent to December 31, 2022

- Development of a second (west) decline and related ventilation access at Beta Hunt commenced in the first quarter of 2022, with the decline being completed ahead of schedule and on budget to a length of 1,020 metres during the first quarter of 2023. In addition, the first of three ventilation raises, also critical to Beta Hunt's growth plans, was completed during the first quarter of 2023, with two additional ventilation raises to be completed during the 2023.
- On February 13, 2023, new gold mineral reserve and mineral resource estimates were announced at Beta Hunt dated as of September 30, 2022. The new estimates included a 12% increase in Proven and Probable Mineral Reserves to 538,000 ounces, a 20% increase in Measured and Indicated Mineral Resources to 1.35 million ounces and a 34% increase in Inferred Mineral Resources to 1.05 million ounces.
- On March 7, 2023, the Company announced an 8% increase in Beta Hunt nickel Measured and Indicated Mineral Resources to 21,100 nickel tonnes.
- On March 23, 2023, the Company announced a tightening of the ranges for its previously announced production guidance for 2023 and 2024. The minor adjustment (less than 5%) to the upper end of

the previous 2024 guidance range is primarily due to a shift in the planned production startup of the Spargos underground operations to mid-2024 versus mid-2023 in the prior guidance. The shift was driven by a reallocation of capital priorities to accelerate the nickel project at Beta Hunt, resulting in deferral of a portion of Spargos ounces into 2025.

• On March 27, 2023, the Company announced the appointment of Leigh Junk to the position of Managing Director, Australia.

In response to the global COVID-19 pandemic, Karora's protocols and contingency plans have helped mitigate impacts of the pandemic but did not eliminate them. Karora's ongoing response to the COVID-19 pandemic continues to prioritize the safety of its workforce and host communities. The Australian government officially brought Australia's emergency response to COVID to an end on October 14, 2022 by removing the COVID-19 mandatory isolation requirements and the majority of rules for wearing face masks. See "*Risk Factors*".

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

As noted above, Karora's principal assets are its 100% interest in the Beta Hunt Mine and its 100% interest in Higginsville.

#### The Beta Hunt Mine

The Beta Hunt Mine is a gold and nickel mine located in the Kambalda mining district of Australia, 600 km from Perth. This deposit hosts both gold and nickel resources in adjacent discrete mineralized zones. The mining tenements on which the Beta Hunt Mine is located are held by Gold Fields Limited ("Gold Fields"). Karora operates the Beta Hunt Mine by virtue of a sub-lease agreement with Gold Fields. The Beta Hunt Mine sub-lease grants SLM the right to exploit nickel and gold mineralization on the property free from encumbrances other than the royalties discussed below and certain other permitted encumbrances. The Beta Hunt Mine was purchased from Consolidated Nickel Kambalda Operations ("CNKO") in 2013, and the gold rights to the sub-lease were acquired separately from St Ives Gold Mining Company Pty Ltd. ("SIGMC") in 2014. On an annual basis, Karora must pay to SIGMC 20% of (i) all rent payable by SIGMC in respect of each tenement (ii) all local government rates and (iii) all land or property taxes. Initial gold production occurred in June to July, 2014 and recommenced at the end of 2015. The mine continues to ramp up, having commenced commercial gold production at the end of June 2017. Nickel operations were re-started in 2014 and have operated continuously since then.

The Beta Hunt Mine is owner-operated using conventional underground mining methods. All gold processing is conducted at HGO. Nickel mineralization is trucked and toll treated at a third-party toll mill in the Kalgoorlie area.

## **Higginsville Gold Operations**

On June 10, 2019, Karora acquired 100% of HGO. HGO is located approximately 75 km south of the Beta Hunt Mine in Higginsville, Western Australia. The operation comprises a 1.6Mtpa processing plant and 263 mining tenements (as of December 30, 2022) and includes the Aquarius, Hidden Secret, Mt Henry, Pioneer, Mitchell and Spargos gold deposits. In addition, Karora acquired the 1.0 Mtpa Lakewood mill in July 2022. The Lakewood mill is located approximately 56 km north of the Beta Hunt Mine in Kalgoorlie, Western Australia.

Avoca Resources Limited ("Avoca") initially purchased the Higginsville exploration assets from Gold Fields in June 2004. The Trident underground deposit, historically the largest deposit at HGO, was discovered by Avoca in 2004 with mining commencing at the deposit in 2007. In April 2007, Avoca raised A\$125 million to commission a new process plant facility at HGO. In that same year, Avoca purchased the neighbouring Chalice deposit from Chalice Gold Mines Limited. Gold production began with the first gold pour on July 1, 2008.

Alacer Gold Corporation ("**Alacer**"), a company incorporated in Canada, acquired HGO after it merged with Avoca in 2011. On October 29, 2013, Alacer completed the sale of its Australian business unit, which included HGO and its assets, to Westgold Resources Limited ("**Westgold**"), which was a wholly-owned subsidiary of Metals X Limited ("**Metals X**") at the time.

In July 2015, Metals X acquired the Mt Henry Gold Project from Panoramic Resources Ltd. and Matsa Resources Limited.

Up to December 4, 2016, at which time there was a mine closure, the Trident underground mine produced 7,434,000 tonnes @ 4.4g/t Au for 1,045,000 oz of gold.

On December 1, 2016, Westgold demerged from Metals X. Avoca remained a subsidiary of Westgold and was part of the resultant demerger.

Karora acquired HGO on June 10, 2019 from Westgold. Karora also acquired Spargos, which forms part of HGO, from Corona Resources Limited on August 8, 2020.

#### Mineralization

Gold mineral resources and reserves at the Beta Hunt Mine comprise the Western Flanks, A Zone, and Larkin deposits. Gold mineral resources and reserves at Higginsville comprise the deposits (and stockpiles) associated with the Higginsville Central and Higginsville Greater areas. The nickel mineral resource is associated with the Beta Block and Gamma Block deposits at the Beta Hunt Mine.

## Beta Hunt Gold Mineral Resources as at September 30, 2022

Measured		Ir	Indicated		Measured & Indicated			Inferred			
kt	g/t	koz	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz
269	2.5	22	16,611	2.5	1,329	16,880	2.5	1,351	12,444	2.6	1,052

#### Notes:

- (1) Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mineral Reserves.
- (2) The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce Mineral Reserves.
- (3) The Mineral Resource estimates include Inferred Mineral Resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is also no certainty that Inferred Mineral Resources will be converted to Measured and Indicated categories through further drilling, or into Mineral Reserves once economic considerations are applied.
- (4) The Gold Mineral Resource is estimated using a long term gold price of US\$1,675/oz with a US:AUD exchange rate of 0.70.
- (5) The Gold Mineral Resource is reported using a 1.4g/t Au cut-off grade.
- (6) Beta Hunt is an underground mine and to best represent "reasonable prospects of eventual economic extraction" the mineral resource was reported taking into account areas considered sterilized by historical mining. These areas were depleted from the Mineral Resource.
- (7) Mineral Resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.

# Beta Hunt Nickel Mineral Resources as at September 30, 2022

Measured			Indicated		Measured & Indicated			Inferred			
K	Ni	Ni	K	Ni	Ni	K	Ni	Ni	K	Ni	Ni
tonnes	(%)	tonnes	tonnes	(%)	tonnes	tonnes	(%)	tonnes	tonnes	(%)	tonnes
_		_	745	2.8	21.100	745	2.8	21.100	500	2.7	13.400

#### Notes:

- (1) Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mineral Reserves.
- (2) The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce Mineral Reserves.
- (3) The Mineral Resource estimates include Inferred Mineral Resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is also no certainty that Inferred Mineral Resources will be converted to Measured and Indicated categories through further drilling, or into Mineral Reserves once economic considerations are applied.
- (4) The Nickel Mineral Resource is reported within proximity to underground development and nominal 1% Ni lower cut-off grade for the nickel sulphide mineralization.
- (5) The Nickel Mineral Resource assumes an underground mining scenario and a high level of selectivity.
- (6) Mineral Resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.

## Beta Hunt Gold Mineral Reserves as at September 30, 2022

		Proven			Probable		Proven & Probable			
_	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz	
	115	2.5	9	6,646	2.5	529	6,761	2.5	538	

#### Notes:

- (1) The Gold Mineral Reserve is estimated using a long-term gold price of US\$1,450/oz with a US:AUD exchange rate of 0.70.
- (2) At Beta Hunt, underground Mineral Reserves are reported at a 1.8 g/t cut-off grade. The cut-off grade takes into account Operating Mining, Processing/Haulage and G&A costs, excluding capital.
- (3) The Mineral Reserve is depleted for all mining to September 30, 2022.
- (4) Mineral Reserve tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.

#### **HGO Gold Mineral Resources as at January 31, 2022**

Measured			Ir	dicated		Measur	ed & Indi	cated	1	nferred		
	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz
	15,449	1.3	657	16,262	1.8	930	31,711	1.6	1,587	6,372	2.1	428

#### Notes:

- (1) Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mineral Reserves.
- (2) The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce Mineral Reserves.
- (3) The Mineral Resource estimates include Inferred Mineral Resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is also no certainty that Inferred Mineral Resources will be converted to Measured and Indicated categories through further drilling, or into Mineral Reserves once economic considerations are applied.
- (4) The Gold Mineral Resource are estimated using a long term gold price of US\$1,600/oz with a US:AUD exchange rate of 0.70.
- (5) Gold Mineral Resources were estimated using variable cut-off grades taking into account variable operational costs: Higginsville Underground (Chalice, Trident and Aquarius) 1.3g/t, Higginsville Open Pits (excluding Mt Henry Project) 0.5g/t, Mt Henry Project 0.4g/t, Spargos uses a 0.5 g/t Au cut-off grade above 300mRL and 1.6g/t below 300mRL.
- (6) To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within optimized pit shells at A\$2,285 (US\$1,600) and, for underground resources, areas considered sterilized by historical mining are depleted from the Mineral Resource.
- (7) Mineral Resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.

# **HGO Gold Mineral Reserves as at September 30, 2020**

	Proven		I	Probable		Proven & Probable			
kt	g/t	koz	kt	g/t	koz	kt	g/t	koz	
8.503	1.3	362	9.249	1.6	483	17.752	1.5	845	

## Notes:

- (1) The Gold Mineral Reserve are estimated using a long term gold price of US\$1,400/oz with a US:AUD exchange rate of 0.70.
- (2) Cut-off grades for open-pit mineral reserves vary from 0.50g/t to 0.85g/t. The cut-off grade takes into account dilution, mine recovery and operating mining, processing/haulage, sustaining capital and G&A costs. Dilution and recovery factors varied by deposit.
- (3) Uderground mineral reserves cut-off grades vary between 1.6g/t (modified and diluted grade) to 2g/t (modified/diluted grade). The cut-off grade takes into account Operating Mining, Processing/Haulage and G&A costs, excluding capital.
- (4) The Mineral Reserve is depleted for all mining to September 30, 2020.
- (5) Mineral Reserve tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.

# Consolidated Production – 2022

The consolidated gold production was 133,836 ounces for 2022 from the Beta Hunt Mine and HGO, exceeding the mid-point of 2022 production guidance of 120,000-135,000 ounces by approximately 5%.

## Royalties

Karora pays the following royalties in respect of Beta Hunt gold production: (i) state government equal to 2.5% of recovered gold; and (ii) to third parties, 4.75% of recovered gold (less allowable deductions). Karora pays the following royalties in respect of HGO gold production: (i) traditional land owners are entitled to production payments of up to 1% of gross gold revenue over various tenements; (ii) state government royalty equal to 2.5% of recovered gold; and (iii) various royalties across the tenements to third parties on recovered gold (less allowable deductions).

Karora pays the following royalties in respect of Beta Hunt nickel production: (i) the state government equal to 2.5% of recovered nickel; and (ii) to third parties, 4.5% of payable nickel when prices are less than A\$17,500/t nickel and 6.5% when prices are greater than or equal to A\$17,500/t (capped at A\$16,000,000).

For detailed information regarding the Beta Hunt Mine and the Higginsville Gold Operations, please see Appendix "A" – "Material Mineral Projects – Beta Hunt Mine" and Appendix "A" – "Material Mineral Projects – Higginsville Gold Operations".

# Contingent Interest in Proceeds of a Dumont Sale or other Monetization Event

As noted above, Karora holds at 15% interest in the net proceeds from a future sale or other monetization event involving the Dumont Nickel Cobalt Project (net of certain agreed costs and deductions) up to a maximum of US\$30 million. The project is located in the mining-friendly Canadian province of Québec. Once in production, it is expected to rank as the fifth-largest nickel sulphide operation in the world by annual production – only the mining operations at Norilsk (Russia), Jinchuan (China), Sudbury (Ontario, Canada), Voisey's Bay (Newfoundland and Labrador, Canada) would be larger. Dumont contains the world's second largest nickel reserve and is the largest undeveloped nickel reserve. The cobalt reserve is the ninth largest in the world and is the second largest undeveloped cobalt reserve. An updated feasibility study (titled the "Technical Report on the Dumont Nickel-Cobalt Project, Launay and Trécesson Townships, Quebec, Canada") (the "Feasibility Study") was completed in July 2019. It demonstrates that the project contains approximately 6.1 billion pounds of nickel in the proven and probable reserve categories (a proven and probable reserve of 1,028 million tonnes at 0.27% nickel) and 9.75 billion pounds of nickel resources in the measured and indicated category (a measured resource of 372 million tonnes at 0.28% nickel and an indicated resource of 1.29 billion tonnes at 0.26% nickel). The measured and indicated mineral resources are inclusive of those mineral resources modified to produce mineral reserves. In the inferred resource category, there is approximately 2.9 billion pounds of nickel (500 million tonnes at 0.26% nickel). Once in operation, the mine will produce nickel for 30 years. Construction and operation of the mine and processing facilities will be made easier by the existence of excellent infrastructure, including roads, rail and access to low-cost power.

## **Minority Interests**

As noted above, Karora owns a 6.6% interest in Orford Mining Corporation and a 6.4% interest in SPC Nickel Corp.

Orford's principal assets are the Qiqavik and West Raglan projects, comprising a land package totaling over 80,000 hectares in the Cape Smith Belt of Northern Quebec. The Qiqavik Property covers the 40-km long Qiqavik Break, part of the Cape Smith Belt, which is home to the Glencore Group's Raglan Mine. Early-stage exploration work completed to date on the Qiqavik Property shows that high-grade gold and copper occurrences are structurally controlled and associated with secondary splay structures located along the district-scale Qiqavik Break Shear Zone extending the full 40 km length of the Qiqavik Property. Eleven Gold mineralized areas have been discovered across the property. Highlights from exploration include drill intersections grading 2.6 g/t Au, and 2.2% Cu over 7m (including 5.6 g/t Au, and 3.1% Cu over 1.0m) at the Esperance occurrence as well as 0.7 g/t Au over 32m (including 3.1 g/t over 2.8m) at the Interlake occurrence. The West Raglan project is located in the west central portion of the Cape Smith Belt, which hosts prolific, high-grade nickel sulphide deposits including two producing mines; the Glencore Group's Raglan Mine and the Nunavik Nickel Mine.

SPC holds a 100% interest in the mineral rights of the Aer-Kidd property and the Lockerby East property both located in the Sudbury Basin. The Aer-Kidd property covers approximately 1.3 kilometers of the Worthington Offset Dyke located near Worthington, Ontario in the Sudbury Basin area. Past production on the Aer-Kidd property has come

from numerous shallow underground and surface workings (Howland Pit, Rosen and Robinson Deposits). The Aer-Kidd property is located centrally between two significant known resources also on the Worthington offset, Vale's Totten mine and KGHM's Victoria project. The Lockerby East Property is adjacent to the past producing Lockerby Mine and hosts the past producing LKE Deposit.

## **Karora Employees**

As at December 31, 2022, Karora had a total of 351 employees.

#### **Market Overview**

Karora's primary product is gold. Gold is traded on the world markets. Gold prices averaged approximately US\$1,802 per ounce during 2022, approximately 0.17% higher than the average price of approximately US\$1,799 per ounce in 2021. Gold prices fluctuate widely and are affected by numerous factors, including central bank purchases and sales, producer hedging and de-hedging activities, expectations of inflation, investment demand, the relative exchange rate of the U.S. dollar with other major currencies, interest rates, global and regional demand, political and economic conditions, production costs in major gold-producing regions, speculative positions taken by investors or traders in gold and changes in supply, including worldwide production levels.

# **Competitive Conditions**

Metal exploration and mining is a competitive business. The Company competes with numerous other companies and individuals seeking to: (i) acquire attractive gold and nickel; (ii) engage qualified service providers and labour; and (iii) source equipment and suppliers. The ability of the Company to successfully acquire and develop metal properties in the future will depend not only on its ability to operate and develop its present properties, but also on its ability to select and acquire suitable producing properties or prospects for exploration and development. See "*Risk Factors – Competition*".

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE

# **ESG Strategy**

Karora developed a comprehensive ESG Strategy that identified material ESG factors, alongside measures to enhance ESG integration into our governance processes and risk management systems. We have also established a set of metrics and targets for internal monitoring and external reporting. We will publish our second-year ESG Report in the second quarter of 2023. Karora's ESG strategy is a foundational element in executing our multi-year growth plan.

#### **ESG Governance**

Karora considers good corporate governance to be central to the effective and efficient operation of our business. A transparent culture of corporate governance and ethical behaviour in decision-making is fundamental to the way we do business. We are committed to implementing high standards of corporate governance and reporting, and to conducting our business in ways that are ethical, transparent, and accountable to our investors and other stakeholders. This includes the way we oversee and manage ESG factors.

## Board Oversight of ESG

Karora's Board of Directors (the "**Board**") oversees the Company's ESG program and all related sustainability matters, including climate-related risks and opportunities. During its quarterly meetings, the Board reviews the status of Karora's various ESG initiatives, considers related recommendations, and provides input as to the overall direction of the program. Board members have skills and expertise related to Karora's material ESG factors, including health and safety, environment and permitting, and sustainability. In 2022, Board members received education on ESG-related topics, including diversity and inclusion in mining and climate change. To maintain a high level of awareness of

current and emerging ESG factors, Board members will continue to receive regular, recurring education on ESG-related topics.

# Management Accountability for ESG

The Board is supported in its responsibility for oversight of Karora's ESG program by the Senior Vice President ("SVP"), Technical Services and Sustainability. The SVP, Technical Services and Sustainability has the highest level of management accountability for ESG and is responsible for identifying, assessing, and managing Karora's ESG risks and opportunities, including those related to climate change. The SVP, Technical Services and Sustainability reports to the Board on ESG and sustainability issues on a quarterly basis and works closely with Karora's Chairman and CEO on ESG-related matters. As a topic of high priority for Karora, the Chairman and CEO is actively involved in the development and implementation of Karora's ESG strategy.

We expect all employees, officers, Board members, and, to the extent feasible, consultants, contractors, and representatives of Karora, to be committed to our objective to be an ESG leader by upholding our ESG commitments.

# **ESG Risk Management**

The Board of Directors has overall responsibility for the establishment and oversight of Karora's risk management programs. Our risk management framework is designed to facilitate the identification, assessment, management, and mitigation of the risks we face as a gold mining company, including risks associated with climate change and other social and environmental risks.

Managing ESG risks is a key part of how we create sustainable value and is a strategic priority for Karora. We recognize the need to comprehensively integrate Karora's material ESG risks, including climate-related risks, into our risk management processes. To this end, in 2022, Karora developed an ESG risk register that incorporates all ESG factors identified as material in our ESG materiality assessment. It incorporates criteria consistent with that of our existing risk registers. The ESG risk register identifies contributing factors and causes of Karora's exposure, potential consequences, existing controls to manage the risk, as well as owners for individual ESG risks. In 2023, Karora will seek to formally implement the risk register across operations and will provide updates on progress in future disclosures.

## **ESG** Materiality Assessment

In 2021, Karora completed an ESG materiality assessment, which forms the foundation of our ESG strategy. In 2022, Karora reviewed and refreshed our ESG materiality assessment to ensure that the assessment of the potential impacts of ESG factors on Karora's value is current and reflects the rapidly evolving ESG landscape. As part of this exercise, we have identified "Tailings Storage Facilities Management" and "ESG Governance" as stand-alone ESG factors. Capturing Tailings Storage Facilities Management as a stand-alone ESG factor reflects investors' sustained focus on the issue and better aligns Karora with the Sustainability Accounting Standards Board's ("SASB") revised 2021 Metals & Mining Sustainability Accounting Standard. We have additionally identified ESG Governance as a key priority, in recognition of the importance of maintaining robust governance structures to manage our material ESG factors and implement our ESG strategy.

The ESG materiality assessment identified and prioritized the ESG factors with the greatest potential to materially impact company value and our ability to achieve our strategic objectives over the short-, medium-, and long-term. To identify potentially relevant ESG factors, Karora:

- Conducted a benchmarking of ESG practices relative to industry peers;
- Conducted a review of key investors' ESG priorities;
- Referenced key ESG frameworks, including the SASB Metals & Mining Sustainability Accounting Standard, SASB's Climate Risk Technical Bulletin, and the recommendations of the Task Force on Climate-related Financial Disclosures;
- Referenced the Mining Association of Canada's Towards Sustainable Mining protocols and frameworks; and
- Referenced the methodologies of ESG research and ratings providers.

Industry regulations, trends, initiatives, and relevant ESG guidance, including proposed regulations were also reviewed. The potential impact to the business and the likelihood of each ESG factor emerging over the short-term (0 - 1 years), medium-term (1 - 5 years), and long-term (greater than 5 years) was then assessed.

ESG factors were assessed using the impact and likelihood criteria informed by existing risk management processes to ensure that the ESG factors are assessed consistently and proportionately to other risks. In assessing the ESG factors identified, a materiality threshold was used that aligned with the U.S. and Canadian securities law materiality definitions as well as the International Financial Reporting Standards materiality definition. The results of the ESG materiality assessment were validated by Karora's senior management team and Board of Directors.

Karora will annually review and update the ESG materiality assessment as needed to accommodate the dynamic nature of materiality, changing market conditions, and any future growth or diversification of the company. All material ESG factors identified are discussed in detail in our forthcoming ESG Report, alongside our performance and forward-looking commitments for each of the factors.

# 2022 ESG Performance Highlights

- Continued to maintain zero fatalities and zero near miss rates for employees and contractors
- Achieved carbon neutrality in 2022 for Scope 1 and Scope 2 greenhouse gas ("GHG") emissions for the second year straight through the purchase and retirement of a 95,000 tonne portfolio of verified carbon offset credits
- Undertook a detailed reduction opportunities study to inform GHG emission reduction target-setting efforts. Further details on our commitments will be provided in our upcoming 2022 ESG Report (to be published Q2 2023).
- Developed a new ESG risk register that enhances Karora's ability to identify, manage, and assess ESG risks company-wide. The ESG risk register includes all material ESG risks identified in our materiality assessment.
- Developed new ESG-related policies to enhance oversight and accountability: Potable Water Management Policy, Cultural Heritage Policy, and Community and Stakeholder Engagement Policy.

# **Community Relations**

We recognize that, as a mining company seeking to establish and operate significant and impactful projects, we require a social license from the various stakeholders in our project communities. We work hard to nurture these relationships.

## **Beta Hunt Mine**

The Beta Hunt Mine is located between the local communities of Kambalda (60km north) and Norseman (52km north). Karora is committed to working in partnership with these communities in a manner which fosters active participation and mutual respect. This is supported by Karora's strategy of employing local people at our mine-site wherever possible and using local vendors to supply the mine with equipment and services. With respect to local business, the Beta Hunt and Higginsville mines use over 100 vendors based in the Goldfields, which includes the Kambalda, Kalgoorlie, Norseman, and Esperance communities.

# **HGO**

Higginsville is located close to the local communities of Kambalda (2km west) and Kalgoorlie (60km north). Karora is committed to working in partnership with these communities and the local Ngadju native title holders in a manner which fosters active participation and mutual respect. The Ngadju people have traditional ownership over the Higginsville tenure. Karora regularly consults with the Ngadju Native Title Aboriginal Corporation ("NNTAC"), who act as an agent for the native title rights and interests of the Ngadju people of southern Western Australia.

Karora is committed to co-operatively recognising the rights and interests of the Ngadju people, which include the promotion of their economic self-sufficiency, the ability and access to live on their traditional lands, the protection of their natural environment and resource, and the identification and protection of indigenous sites. We seek to ensure material benefits are available to the Ngadju people to enhance their lifestyle through community and cultural

development activities, which improve their standard of health, employment, and education opportunities, as well as allow participation in the operation through employment, training, and contracting opportunities. As part of the arrangements in place with the Ngadju people, Karora contributes to various social and economic funds run by NNTAC, as well as provides compensation for use of the land.

Most of the current mine workforce permanently reside in Perth and fly-in-fly-out ("**FIFO**") of Perth to attend site on either an 8 days-on/6 days-off or 14 days-on/7 days-off rotation. The FIFO workers are supplemented by workers who reside in closer regional towns such as Norseman, Kambalda, Kalgoorlie, and Esperance.

#### DIVIDEND RECORD AND POLICY

Karora has not, since the date of its incorporation, declared or paid any dividends on its Common Shares. For the foreseeable future, Karora anticipates that it will retain future earnings and other cash resources for the operation and development of its business. The payment of dividends in the future will depend on Karora's earnings, if any, and financial condition and such other factors as the directors of Karora consider appropriate.

#### CAPITAL STRUCTURE

# **General Description of Share Capital**

#### **Common Shares**

Karora is authorized to issue an unlimited number of Common Shares without par value. As of close of business on March 30, 2023, there were 174,292,431 Common Shares of Karora issued and outstanding as fully paid and non-assessable (net of shares re-purchased by Karora for cancellation under the NCIB). See also "General Development of the Business – 2020" for information regarding the Consolidation.

The holders of Common Shares are entitled to receive notice of and to attend and vote at all meetings of shareholders of the Company, except meetings of holders of another class of shares, and at all such meetings shall be entitled to one vote for each Common Share held. Subject to the preferences accorded to holders of any other shares of the Company ranking senior to the Common Shares with respect to the payment of dividends, holders of Common Shares are entitled to receive, if and when declared by the Board, such dividends as may be declared thereon by the Board on a pro rata basis. In the event of the voluntary or involuntary liquidation, dissolution or winding-up of the Company, or any other distribution of its assets among its shareholders for the purpose of winding-up its affairs (a "Distribution"), holders of Common Shares are entitled, subject to the preferences accorded to the holders of any other shares of the Company ranking senior to the Common Shares, to a pro rata share of the remaining property of the Company. The Common Shares carry no pre-emptive, conversion, redemption or retraction rights. The Common Shares carry no other special rights and restrictions other than as described in this AIF.

# **Special Shares**

Karora is authorized to issue an unlimited number of special shares ("**Special Shares**") without par value. As of the date of this AIF, no Special Shares of Karora have been issued.

The Special Shares will be issuable at any time and from time to time in one or more series. The Board will be authorized to fix before issue the number of, the consideration per share of, the designation of, and the rights, privileges, restrictions and conditions attaching to, the Special Shares of each series, which may include voting rights, the whole subject to the issue of a certificate of amendment setting forth the designation of, and the rights, privileges, restrictions and conditions attaching to, shares of the series. The Special Shares of each series will rank on a parity with the Special Shares of every other series and will be entitled to preference over any other shares ranking junior to the Special Shares with respect to payment of dividends or a Distribution. If any cumulative dividends or amounts payable on a return of capital are not paid in full, the Special Shares of all series will participate rateably in respect of such dividends and return on capital.

# **Options**

As of close of business on March 30, 2023, Karora had outstanding options to acquire an aggregate of up to 1,213,098 Common Shares at a weighted average exercise price of \$2.09. Karora also has 503,118 Deferred Share Units and 4,509,167 Restricted Share Units, which includes Performance Share Units, outstanding. As of close of business on March 30, 2023, 1,213,098 Common Shares and 5,012,285 Common Shares were reserved for issuance upon the exercise of such options and share units, respectively.

Karora's 2010 share incentive plan, as amended and restated on June 16, 2022 (the "**Plan**"), provides for the granting of equity-based compensation securities, including options and awards for the purpose of advancing the interests of Karora through the motivation, attraction and retention of key officers, directors, employees and consultants of Karora. The Plan is an "evergreen" plan, which must obtain shareholder approval every three years.

At the time of grant or thereafter, the Human Resources and Compensation Committee of the Karora Board may determine when an option will vest and become exercisable and may determine that the option shall be exercisable in instalments on such terms as to vesting or otherwise as the committee deems advisable subject to the rules of the TSX, if any. Unless otherwise determined by the committee, options will vest and become exercisable, as to one third of the options granted, on each of the first, second and third anniversaries of the date of grant, provided that the participant is an eligible employee, eligible director, consultant or other participant at the time of vesting. Under the Plan, the expiry date of options may not exceed ten years from the date of grant.

#### Debt

In June 2019, the Company entered into a \$35 million credit facility on the closing of the acquisition of HGO. The Company has repaid the balance of the credit facility in full.

In July 2022, the Company entered into an \$80 million credit agreement, which provides for a \$40 million term loan and a \$40 million revolving credit facility, both bearing an interest rate of the Canadian Dealer Offered Rate +4.5% per annum on the drawn principal and standby fee of 1.5% per annum on the undrawn revolving credit facility. The term of the Credit Agreement is to June 28, 2024 with an option for annual renewal thereafter.

## MARKET FOR SECURITIES

The Common Shares are listed and posted for trading on the TSX under the symbol "KRR". The Common Shares also trade on the OTCQX market under the symbol "KRRGF". The following table sets forth the closing price range (high and low) of the Common Shares on the TSX, along with the volumes traded for the periods indicated:

	Common Shares							
2022	High	Low	Volume					
January	\$4.60	\$3.75	12,701,107					
February	\$5.46	\$4.01	19,101,231					
March	\$6.79	\$5.20	34,390,465					
April	\$7.545	\$6.00	17,301,778					
May	\$7.12	\$4.42	21,802,441					
June	\$4.85	\$3.27	17,778,679					
July	\$3.41	\$2.53	15,281,177					
August	\$3.48	\$2.80	12,781,145					
September	\$3.08	\$2.38	25,629,496					
October	\$3.12	\$2.51	11,185,018					
November	\$4.49	\$2.75	15,166,545					
December	\$4.89	\$4.23	13,079,447					

# **DIRECTORS AND OFFICERS**

# **Directors and Officers**

The following table sets forth information regarding the Company's directors and officers as of the date of this AIF. All directors are appointed for a one-year term, and directors are re-elected annually at the general meeting of the Company's shareholders.

Residence and Date first becan a Director/Officer	Position with the Company	Principal Occupation(s)
DIRECTORS		
<b>Peter Goudie</b> <sup>(1)(2)(3)(4)</sup> Manly, NSW, Australia July 17, 2008	Director	Corporate Director
Scott M. Hand <sup>(1)(3)(4)</sup> Lenox, Mass., USA June 27, 2008	Lead Director	Corporate Director
<b>Paul Huet</b> <sup>(4)</sup> Reno, Nevada, USA November 19, 2018	Chairman and Chief Executive Officer	Chairman and Chief Executive Officer, Karora
<b>Chad Williams</b> <sup>(2)(3)(4)</sup> Toronto, Ontario January 6, 2020	Director	Chairman and Chief Executive Officer, Blue Thunder Mining Inc. and the Chairman of Red Cloud Securities Inc.
Shirley In't Veld <sup>(1)(2)(3)</sup> Perth, Australia December 6, 2021	Director	Corporate Director
Meri Verli <sup>(1)(2)(3)</sup> Toronto, Ontario May 16, 2022	Director	Corporate Director
OFFICERS		
<b>Paul Huet</b> Reno, Nevada, USA July 18, 2019	Chairman and Chief Executive Officer	Chairman and Chief Executive Officer, Karora
<b>Barry Dahl</b> Reno, Nevada, USA March 2, 2020	Chief Financial Officer	Chief Financial Officer, Karora
<b>Leigh Junk</b> Perth, Australia March 1, 2023	Managing Director, Australia	Managing Director, Australia, Karora
<b>Bevan Jones</b> Perth, Australia September 27, 2022	Chief Operating Officer, Australia	Chief Operating Officer, Australia, Karora
<b>Michael Doolin</b> Reno, Nevada, USA October 1, 2020	Senior Vice President, Technical Services	Senior Vice President, Technical Services, Karora

Residence and Date first became a Director/Officer	Position with the Company	Principal Occupation(s)
Oliver Turner Toronto, Ontario April 1, 2020	Executive Vice President, Corporate Development	Executive Vice President, Corporate Development, Karora
<b>Greg Mincham</b> Perth, Australia May 1, 2021	Vice President, Human Resources	Vice President, Human Resources, Karora

#### Notes:

- (1) Member of the audit committee of the Board (the "Audit Committee"). Ms. Verli is the Chair of the Audit Committee.
- (2) Member of the human resources and compensation committee of the Board (the "Human Resources and Compensation Committee"). Mr. Goudie is the Chair of the Human Resources and Compensation Committee.
- (3) Member of the corporate governance and nominating committee of the Board (the "Corporate Governance and Nominating Committee"). Ms. In't Veld is the Chair of the Corporate Governance and Nominating Committee.
- (4) Member of the technical, safety and sustainability committee of the Board (the "Technical, Safety and Sustainability Committee"). Mr. Huet is the Interim Chair of the Technical, Safety and Sustainability Committee.

As of the date of this AIF, the directors and executive officers of the Company collectively beneficially own, directly or indirectly, or exercise control and direction over approximately 2,662,185 Common Shares representing, in the aggregate approximately 1.5% of the issued and outstanding Common Shares.

## **Biographies**

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Biographical information for each member of the Board and management team is set forth below.

Mr. Goudie is currently retired from full-time employment (and has been for the past five years). He was Executive Vice President (Marketing) of Inco Limited and then Vale Inco from January 1997 to February 2008. Mr. Goudie was also responsible for the strategy, negotiation, construction and operation of Inco's joint venture production projects in Asia. He was employed with Inco since 1970 in increasingly more senior accounting and financial roles in Australia, Indonesia, Singapore and Hong Kong, before becoming Managing Director (later President and Managing Director) of Inco Pacific Ltd. in Hong Kong in 1988. He is an Australian CPA.

Mr. Goudie serves as Chair of the Human Resources and Compensation Committee, and is a member of the Audit Committee, Corporate Governance and Nominating Committee and the Technical, Safety and Sustainability Committee.

Mr. Hand is the Lead Director of the Company, a position held since February 2019. He served as the Executive Chairman of the Company from November 2009 until February 2019. He is also a founder and Executive Chairman of Kharrouba Copper Company Inc. (copper mining and processing in Morocco), Lead Director of Boyd Biomedical LLC (services and products to the medical and life science industries in the U.S.), and a member of the Board of Trustees of the Massachusetts Museum of Contemporary Art. He is a former director of Fronteer Gold Inc. (sold to Newmont Mining in 2011), Legend Gold Corp., Chinalco Mining Corporation International (copper mining in Peru) and Manulife Financial Corporation. Mr. Hand was the Chairman and Chief Executive Officer of Inco Limited from April 2002 until he retired from Inco in January 2007. Prior to that, Mr. Hand was President of Inco Limited and held positions in Strategic Planning, Business Development and Law. Mr. Hand received a Bachelor of Arts degree from Hamilton College in 1964, a Juris Doctorate degree from Cornell University in 1969 and an Honorary degree from Memorial University of Newfoundland and Labrador in 2005. He served in the United States Peace Corps in Ethiopia from 1964 to 1966.

Mr. Hand serves as a member of the Audit Committee, the Corporate Governance and Nominating Committee and the Technical, Safety and Sustainability Committee.

Paul Huet - Chief Executive Officer and Executive Chairman of the Board

Mr. Huet is the Chairman and Chief Executive Officer of the Company. Mr. Huet served as the Executive Chairman from February 25, 2019 until July 18, 2019, when he was appointed Chairman and interim Chief Executive Officer, the "interim" portion of his title was removed in August 2019. Previously, Mr. Huet was President, Chief Executive Officer and Director of Klondex Mines from 2012 - 2018, until its acquisition by Hecla Mining Company. Mr. Huet has a strong command of capital markets and has served in all levels of engineering and operations of Mining. Mr. Huet graduated with Honors from the Mining Engineering Technology program at Haileybury School of Mines in Ontario, and successfully completed the Stanford Executive program at the Stanford School of business. In 2013 Mr. Huet was nominated for the Premiers Award in Ontario for outstanding College graduates; he is currently a member of OACETT as an applied Science Technologist and an Accredited Director.

Chad Williams, P. Eng – Director

Mr. Williams has an extensive background in mining finance and business management. He is the Chairman and Founder of Red Cloud Mining Capital. In addition to this, Mr. Williams is a director of two emerging mining companies. He is a founder of Agilith Capital Inc., as well as Westwind Capital Inc. He is also the former CEO of Victoria Gold Corp., as well as the former Head of Mining Investment Banking at Blackmont Capital Inc. Prior to these positions, Mr. Williams was a top-ranked mining analyst at TD Securities and other Canadian brokerage firms in Toronto. Mr. Williams is currently a member of the Association of Professional Engineers of Ontario, having received a Bachelor of Mining Engineering degree from McGill University before going on to receive his MBA from the same alma mater.

Mr. Williams is a member of the Human Resources and Compensation Committee, the Corporate Governance and Nominating Committee and the Technical, Safety and Sustainability Committee.

Shirley In't Veld – Director

Ms. In't Veld has over 30 years of career experience in mining, renewables and energy sectors. She is currently a Director of Alumina Limited, APA Group, and Develop Global Ltd. She was formerly Deputy Chair of CSIRO (Commonwealth Science and Industrial Research Organisation), Director of NBN Co. Limited (National Broadband Network Co.), Northern Star Resources Limited, Perth Airport, DUET Group, Asciano Limited and Alcoa of Australia Limited and a Council Member of the Chamber of Commerce and Industry of Western Australia. She was also the Managing Director of Verve Energy (2007 - 2012) and, previously, served in senior roles at Alcoa of Australia Limited, WMC Resources Ltd., Bond Corporation and BankWest Perth. Shirley is also a past Chair of the Queensland Government Expert Electricity Panel and a member of the Renewable Energy Target Review Panel for the Australian Department of Prime Minister and Cabinet. She also served as a member of the COAG Energy Council Selection Panel, a Council member of the Australian Institute of Company Directors (Western Australia) and the SMART Infrastructure Facility (University of Wollongong).

Ms. In't Veld is the Chair of the Corporate Governance and Nominating Committee, and serves as a member of the Human Resources and Compensation Committee.

Meri Verli – Director

Ms. Verli is an experienced senior finance executive with an extensive background in financial management and reporting, financial and operational recovery, mergers and acquisitions, risk management and strategy development. Ms. Verli has held several senior management roles in the gold mining sector, including most recently as Strategic Advisor, Business Improvements at Agnico Eagle Mines, Senior Vice President for Business Operation Management Systems and previously Senior Vice president Finance and Treasury at Kirkland Lake Gold, Chief Financial Officer of McEwen Mining Inc., and Vice President, Finance at Lake Shore Gold from 2007 to 2016. Ms. Verli is a Chartered Professional Accountant, holds a PhD in Economic Sciences, a Bachelor of Geology and

Engineering and a Bachelor of Economics from the University of Tirana, Albania and a Diplome Des Etudes Superieure Specialise (equivalent Master's Degree) in Evaluation of Mineral Resources from CESEV – Ecole Des Etudes Superieure de Geology in Nacy, France.

Ms. Verli serves as the Chair of the Audit Committee.

Barry Dahl – Chief Financial Officer

Mr. Dahl is the Chief Financial Officer of the Company. Mr. Dahl is a seasoned CFO in the mining sector and has over 30 years of financial and operational leadership. Prior to joining Karora, Mr. Dahl was the CFO of TSX listed Excelsior Mining Corp. Previously he held CFO roles at Klondex Mines, where he was instrumental in various equity financings, negotiated royalty and streaming contracts and established crucial financing lines. He also previously served as CFO at Argonaut Gold. Mr. Dahl is a CPA and earned an MBA with distinction from New York Institute of Technology and a bachelor of science degree in accounting from Brigham Young University.

Leigh Junk – Managing Director, Australia

Mr. Junk is the Managing Director, Australia. Most recently, he was Managing Director of Dacian Gold prior to its takeover by Genesis Minerals in 2022 and, prior to that, was Managing Director of Doray Minerals until its merger with Silver Lake Resources in 2019. Mr. Junk has held senior positions in several other Australian mining companies, including WMC Resources, Mincor Operations and Pilbara Manganese. Mr. Junk was a co-founder of Donegal Resources, a private company that successfully acquired and recommissioned several Nickel operations in the Kambalda, Western Australia area, until it was sold to Canadian miner Brilliant Mining Corp in 2006. Mr. Junk has been a Director of several public companies in the mining and financial sectors in both Australia and Canada.

Bevan Jones - Chief Operating Officer, Australia

Mr. Jones is the Chief Operating Officer, Australia. He joined the Company in September 2022 from Gold Fields Limited's adjacent St Ives gold operation near Beta Hunt, where he served as General Manager. Mr. Jones led material operational improvements at St Ives leading to higher output and lower all-in sustaining cost. Mr. Jones has over 28 years of experience in mine management and has held senior leadership roles across Australia, Africa and the South Pacific.

Michael Doolin – Senior Vice President, Technical Services

Mr. Doolin is the Senior Vice President, Technical Services. He is a mining professional with over 30 years of experience in senior technical and management roles. He previously served as the interim Chief Executive Officer and Chief Operating Officer of Silver Elephant Mining Corp. and the Chief Operating Officer of Klondex Mines Limited.

Oliver Turner – Executive Vice President, Corporate Development

Mr. Turner is the Executive Vice President, Corporate Development. He was formerly the Senior Vice President of Precious Metals Equity Research at GMP Securities for seven years following his experience in industry as a mining engineer with Wardrop Engineering. Mr. Turner holds a Bachelor of Science in Mining Engineering from Queen's University and is a CFA charterholder.

Greg Mincham – Vice President, Human Resources

Mr. Mincham has over 30 years of HR experience holding various specialist and leadership roles in the resources industry, including in operational HR, compensation and benefits, employee relations, HR information systems, organisational development, talent management and workforce planning. Mr. Mincham has lead small and large HR teams across Australia with Placer Dome and Barrick Gold, and his work internationally includes PNG, Zambia and Saudi Arabia. Mr. Mincham has had lead HR roles in company mergers, divestments and project ramp-ups that have required considerable levels of versatility, resilience and application of change management skills. Mr. Mincham has

substantial experience in working closely with cross-functional leadership groups and external stakeholders, supporting and influencing at all levels within an organisation, in both a strategic and operational capacity.

# **Corporate Cease Trade Orders**

Except as disclosed below, none of the directors or executive officers of Karora is, or has been within the 10 years before the date of this AIF, a director, chief executive officer or chief financial officer of any company that (i) while such person was acting in that capacity was the subject of a cease trade order, an order similar to a cease trade order or an order that denied the company access to any statutory exemptions under Canadian securities legislation, in each case for a period of more than 30 consecutive days (each, an "**Order**") or (ii) was subject to an Order that was issued after such person ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while such person was acting in the capacity as director, chief executive officer or chief financial officer.

Scott M. Hand was a director of EV Minerals Corporation (formerly, Royal Coal Corp.) ("**Royal Coal**") during the period from August 2010 until May 2012. On May 3, 2012, a cease trade order was issued against Royal Coal by the Ontario Securities Commission for failure to file annual financial statements. On May 17, 2012, Royal Coal announced that it received notice from the TSX Venture Exchange that the TSX Venture Exchange had suspended trading in Royal Coal's securities as a result of the cease trade order. The cease trade order was revoked on July 27, 2020 and, as of the Date of this AIF, Royal Coal remains an unlisted reporting issuer.

# **Bankruptcies**

Except as disclosed below, none of the directors or executive officers of Karora or any shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, is or has been within the 10 years before the date of this AIF, a director or executive officer of any company that while such person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

# **Personal Bankruptcies**

None of the directors or executive officers of Karora or any shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of such person.

## **Penalties and Sanctions**

None of the directors or executive officers of Karora or any shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority or been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

## **Conflicts of Interest**

The directors of the Company are required by law to act honestly and in good faith with a view to the best interest of the Company and to disclose any interests which they may have in any project or opportunity of the Company. However, the Company's directors and officers may serve on the boards and/or as officers of other companies which may compete in the same industry as the Company, giving rise to potential conflicts of interest. To the extent that such other companies may participate in ventures in which the Company may participate or enter into contracts with the Company, they may have a conflict of interest in negotiating and concluding terms respecting the extent of such

participation. In the event that a conflict of interest arises at a meeting of the directors of the Company, such conflict of interest must be declared and the declaring parties must abstain from participating and voting for or against the approval of any project or opportunity in which they may have an interest. Provided such steps are followed and subject to any limitations in the Company's constating documents, a transaction would not be void or voidable because it was made between the Company and one or more of its directors or by reason of such director being present at the meeting at which such agreement or transaction was approved. The remaining directors will determine whether or not the Company will participate in any such project or opportunity.

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

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

## **AUDIT COMMITTEE INFORMATION**

The primary function of the Audit Committee is to assist the Board in fulfilling its financial reporting and controls responsibilities to the shareholders of the Company. In accordance with National Instrument 52-110 – *Audit Committees* ("NI 52-110"), information with respect to the Company's audit committee is contained below.

#### **Audit Committee Charter**

A copy of the current charter of the Audit Committee is attached hereto as Appendix "B".

# **Composition of Audit Committee**

The Audit Committee is composed of Meri Verli (Chair), Peter Goudie and Scott Hand all of whom are "independent" directors and financially literate within the meaning of NI 52-110.

# **Relevant Education and Experience**

For details regarding the relevant education and experience of each member of the Audit Committee relevant to the performance of their duties as a member of the Audit Committee, see "*Directors and Officers*".

# **Pre-Approval Policies and Procedures**

The Audit Committee has adopted policies and procedures for the pre-approval of non-audit services to be provided by the Company's independent auditors. As a general policy, all services provided by the independent auditors must be pre-approved by the Audit Committee. Unless a service has received general pre-approval from the Audit Committee, it will require specific pre-approval by the Audit Committee. When specific pre-approval is required, the Audit Committee has delegated the authority to the Chair of the Audit Committee.

## **External Audit Fees**

The fees billed by the Company's external auditors for the last two fiscal years are as follows:

Financial Year Ending	Audit Fees <sup>(1)</sup>	<b>Audit-Related Fees</b>	Tax Fees <sup>(2)</sup>	All Other Fees
2022	\$566,568	-	\$49,150	-
2021	\$632,330	-	\$178,116	-

#### Notes:

- (1) Fees charged for audit, review, prospectus work, NI 52-109 compliance and accounting matter consultation.
- (2) Fees charged for preparation of income tax and mining duties returns and audit support.

## RISK FACTORS

#### Overview

The Company's business consists of the acquisition, exploration, development and mining of mineral properties and is subject to certain risks. The risks described below are not the only risks facing the Company and other risks now unknown to the Company may arise or risks now thought to be immaterial may become material. No guarantee is provided that other factors will not affect the Company in the future. Many of these risks are beyond the control of the Company.

# No Certainty that Operating Profits will Continue to be Realized at Beta Hunt Mine or HGO

The Company has realized operating profits in 2022 from its operations at the Beta Hunt Mine and HGO. Although the Company expects to continue to record operating profits from these mines, but there can be no assurance that the Company will continue to achieve operating profitability or that the Beta Hunt Mine, HGO or any of the properties the Company may have or hereafter acquire or obtain an interest in will generate earnings, operate profitably or provide a return on investment in the future. There can be no assurance that significant additional losses will not occur in the near future or that the Company will be profitable in the future.

Whether profitable operations will result from the Beta Hunt Mine and HGO will depend on various factors including mining operations, costs, actual mineralization, consistency and reliability of ore grades, commodity prices and efficient design of the mine, availability of required machinery, equipment, qualified personnel, all of which may affect future cash flow and profitability, and there can be no assurance that current or future estimates of these factors will reflect actual results and performance.

It is common in new mining operations to experience unexpected problems, delays and costs during mine development and ramp-up. The costs, timing and complexity of the ramp-up of the Beta Hunt Mine and HGO has been and may continue to be higher than anticipated, including as a result of various adjustments required to optimize the efficiency of the operations. Such factors can add to the cost of mine development, production and operation and/or impair production and mining activities, thereby affecting the Company's profitability. Any unexpected problems and delays in the completion and successful functioning of these operational elements result in additional costs being incurred by the Company and its subsidiaries beyond those already incurred and budgeted. There can be no assurance that current or future ramp-up plans of the Beta Hunt Mine and HGO implemented by the Company or its subsidiaries will be successful.

# Liquidity

As at December 31, 2022, the Company had cash and cash equivalents of approximately \$68.8 million. Management estimates that these funds in addition to operating cash flows from Beta Hunt Mine and HGO and the funds available to the Company under its revolving credit facility will be sufficient to fund the Company for the ensuing twelve months. The Company's ability to fund its exploration, evaluation, development, mining and acquisition activities is dependent on management's ability to secure additional financing in the future, which may be completed in a number

of ways including, but not limited to, the issuance of debt or equity instruments, expenditure reductions, or a combination of strategic partnerships, joint venture arrangements, project debt finance, offtake financing, royalty financing and other capital markets alternatives. While management has been successful in securing financing in the past, there can be no assurance it will be able to do so in the future or that these sources of funding or initiatives will be available on terms which are acceptable to the Company.

# Funding Needs, Financing Risks and Dilution.

Historically, the Company's principal sources of funding have been the issuance of equity securities for cash and the sale of NSR royalties. While the Company may generate additional working capital through operations, fund raising or the sale or joint venture of its mineral properties, there is no assurance that any such funds will be available. If available, future equity financing may result in substantial dilution to existing shareholders of the Company and reduce the value of their investment.

If the credit and capital markets deteriorate, or if any sudden or rapid destabilization of global economic conditions occurs, it could have a material adverse effect on the Company's liquidity, ability to raise capital and costs of capital. If the Company experiences difficulty accessing the credit and/or capital markets, the Company may seek alternative financing options, including, but not limited to, streaming transactions, royalty transactions, off-take transactions or the sale of non-core assets. Failure to raise capital when needed or on reasonable terms may have a material adverse effect on the Company's business, financial condition and results of operations.

# **Operating Cash Flow**

The Company generated positive cash flow from operations in 2022 but has experienced negative cash flow from operations in the past. It is anticipated that the Company will continue to report positive operating cash flow from Beta Hunt Mine and HGO. If additional funds are needed, there is no assurance that additional capital or other types of financing will be available or that these financings will be on terms at least as favourable to the Company as those previously obtained, or at all.

The ability of the Company to meet its debt service and principal repayment requirements will depend on its ability to generate cash in the future, which depends on many factors, including the financial performance of the Company, debt service obligations, the realization of financing activities, the identification of commercially recoverable quantities of ore or the profitable mining or processing of ore reserves and working capital and future capital expenditure requirements. There can be no assurance that the Company will generate cash flow in amounts sufficient to pay outstanding indebtedness or to fund any other liquidity needs.

#### **Financial Instruments**

The Company is exposed to various financial risks resulting from both its operations and its investment activities. The Company's management manages financial risks. The Company does not enter into financial instruments agreements, including derivative financial instruments, for speculative purposes.

# Overview of Exploration, Development and Operating Risk

The Company is engaged in mineral exploration, development and mining operations. Mining operations may be subject to risks and hazards, including environmental hazards, industrial accidents, unusual or unexpected geological formations, unanticipated metallurgical difficulties, ground control problems, seismic activity, weather events and flooding. Mining and exploration operations require reliable infrastructure, such as roads, rail, ports, power sources and transmission facilities and water supplies. Availability and cost of infrastructure affects the production and sales from operations, as well as capital and operating costs. Mineral exploration and development is highly speculative in nature, involves many risks, and is frequently not economically successful. Increasing mineral resources or reserves depends on a number of factors including, among others, the quality of a company's management and their geological and technical expertise and the quality of land available for exploration. Once mineralization is discovered, it may take several years of additional exploration and development until production is possible, during which time the economic feasibility of production may change. Substantial expenditures are required to establish proven and probable

reserves through drilling or drifting to determine the optimal metallurgical process and to finance and construct mining and processing facilities. At each stage of exploration, development, construction and mine operation, various permits and authorizations are required. Applications for many permits require significant amounts of management time and the expenditure of substantial capital for engineering, legal, environmental, social and other activities. At each stage of a project's life, delays may be encountered because of permitting difficulties. Such delays add to the overall cost of a project and may reduce its economic feasibility. As a result of these uncertainties, there can be no assurance that these mineral exploration and development programs will result in profitable commercial production. There is no assurance that any of the projects can be mined profitably. Accordingly, it is not assured that the Company will realize any profits in the short to medium term, if at all. Any profitability in the future from the business of the Company will be dependent upon acquiring, developing and commercially mining an economic deposit of minerals.

Companies engaged in mining activities are subject to all of the hazards and risks inherent in exploring for and developing natural resource projects. These risks and uncertainties include, but are not limited to, environmental hazards, industrial accidents, labour disputes, social unrest, encountering unusual or unexpected geological formations or other geological or grade problems, unanticipated metallurgical characteristics or less than expected mineral recovery, encountering unanticipated ground or water conditions, cave-ins, pit wall failures, flooding, rock bursts, periodic interruptions due to inclement or hazardous weather conditions and other acts of God or unfavourable operating conditions and losses. Should any of these risks or hazards affect the Company's exploration, development or mining activities it may: cause the cost of exploration, development or production to increase to a point where it would no longer be economic to produce metal from the Company's mineral resources or reserves; result in a write down or write-off of the carrying value of one or more mineral projects; cause delays or stoppage of mining or processing; result in the destruction of mineral properties, processing facilities or third party facilities necessary to the Company's operations; cause personal injury or death and related legal liability; or result in the loss of insurance coverage — any or all of which could have a material adverse effect on the financial condition, results of operations or cash flows of the Company.

The Company's business is subject to production and operational risks that could have a material adverse effect on the financial condition, results of operations or cash flows of the Company and the Company's insurance may not cover these risks and hazards adequately or at all.

Mining and metals processing involve significant production and operational risks normally encountered in the exploration, development and production of gold and other base or precious metals, some of which are outside of our control, including, without limitation, the following:

- unanticipated ground and water conditions,
- adverse claims to water rights and shortages of water to which we have rights,
- adjacent or adverse land or mineral ownership that results in constraints on current or future mine operations,
- geological problems, including seismic activity, earthquakes and other natural disasters,
- metallurgical and other processing problems,
- unusual or unexpected mineralogy or rock formations,
- ground or slope failures,
- tailings design or operational issues, including dam breaches or failures,
- structural cave-ins, wall failures or rock-slides,
- flooding or fires,
- equipment failures,
- periodic interruptions due to inclement or hazardous weather conditions or operating conditions and other force majeure events,
- lower than expected ore grades or recovery rates,
- accidents,
- delays in the receipt of or failure to receive necessary government permits,
- the results of litigation, including appeals of agency decisions,
- delays in transportation,
- interruption of energy supply,

- labor disputes,
- inability to obtain satisfactory insurance coverage,
- the availability of drilling and related equipment in the area where mining operations will be conducted, and
- the failure of equipment or processes to operate in accordance with specifications or expectations.

These risks could result in damage to, or destruction of, our mines and milling facilities, resulting in partial or complete shutdowns, personal injury or death, environmental or other damage to our properties or the properties of others, delays in mining, reduced production, monetary losses and potential legal liability. Milling operations are subject to hazards, such as equipment failure or failure of retaining dams around tailings disposal areas that may result in personal injury or death, environmental pollution and consequential liabilities. In addition, we rely on a few key vendors for our operations. A breach of the applicable contract by any of these vendors, a significant dispute with any of these vendors, a force majeure event or other operational or financial issues affecting one or more of these vendors, including labor strikes or work stoppages, or any other event that would significantly impede the ability of these vendors to perform their contractual obligations to us or that would have a significant negative impact on our contractual relationship with them would adversely affect our ability to produce our primary products, which could have a material impact on our financial condition and results of operations. Our insurance will not cover all the potential risks associated with our operations. In addition, although certain risks are insurable, we may be unable to maintain insurance to cover these risks at economically feasible premiums. Insurance coverage may not continue to be available or, if available, may not be adequate to cover any resulting liability. Moreover, insurance against risks such as environmental pollution or other hazards as a result of exploration, development and production may be prohibitively expensive to obtain for a company of our size and financial means. We might also become subject to liability for pollution or other hazards against which we may not be insured or against which we may elect not to insure because of premium costs or other reasons. Losses from these events may cause us to incur significant costs that could have a material adverse effect upon our business, financial condition and results of operations. Furthermore, should we be unable to fund fully the cost of remedying an environmental problem, we might be required to suspend operations or enter into interim compliance measures pending completion of the required remedy.

# Climate Change could have a material adverse impact on the Company's business and results of operations.

There is significant evidence of the effects of climate change on our planet and an intensifying focus on addressing these issues. Climate change is a global challenge that may have both favorable and adverse effects on our business in a range of possible ways. Mining and processing operations are energy intensive and result in a carbon footprint either directly or through the purchase of fossil-fuel based electricity. As such, the Company is impacted by current and emerging policy and regulation relating to greenhouse gas emission levels, energy efficiency, and reporting of climate-change related risks. While some of the costs associated with reducing emissions may be offset by increased energy efficiency, technological innovation, or the increased demand for our metals as part of technological innovations, the current regulatory trend may result in additional transition costs at some of our operations. Governments are introducing climate-change legislation and treaties at the international, national, and local levels, and regulations relating to emission levels and energy efficiency are evolving and becoming more rigorous. Current laws and regulatory requirements are not consistent across the jurisdictions in which we operate, and regulatory uncertainty is likely to result in additional complexity and cost in our compliance efforts. Public perception of mining is, in some respects, negative and there is increasing pressure to curtail mining in many jurisdictions as a result, in part, of perceived adverse effects of mining on the environment and on local communities. Concerns around climate change may also affect the market price of our Common Shares as institutional investors and others may divest interests in industries that are thought to have more environmental impacts. While the Company is committed to operating responsibly and reducing the negative effects of our operations on the environment, our ability to reduce emissions and energy and water usage by increasing efficiency and adopting new innovation is constrained by technological advancement, operational factors, and economics. Adoption of new technologies, the use of renewable energy, and infrastructure and operational changes necessary to reduce water usage may also increase our costs significantly. Concerns over climate-change, and our ability to respond to regulatory requirements and societal pressures, may have significant impacts on our operations and our reputation and may even result in reduced demand for our products.

The physical risks of climate change could also adversely impact our operations. These risks include, among other things, extreme weather events, resource shortages, changes in rainfall and storm patterns and intensities, water

shortages, changing sea levels, and extreme temperatures. Over the past several years, changing weather patterns and climatic conditions due to natural and man-made causes have added to the unpredictability and frequency of natural disasters, such as hurricanes, earthquakes, hailstorms, wildfires, snow, ice storms, the spread of disease and insect infestations. Climate-related events such as mudslides, floods, droughts, and fires can have significant impacts, directly and indirectly, on our operations and could result in damage to our facilities, disruptions in accessing our sites with labour and essential materials or in shipping products from our mines, risks to the safety and security of our personnel and to communities, shortages of required supplies such as fuel and chemicals, inability to source enough water to supply our operations, and the temporary or permanent cessation of one or more of our operations. There is no assurance that we will be able to anticipate, respond to, or manage the risks associated with physical climate-change events and impacts, and this may result in material adverse consequences to our business and to our financial results.

# Community relations and license to operate

The Company's relationships with the communities in which it operates are critical to the future success of its existing operations and the construction and development of its projects. There is an ongoing and potentially increasing public concern relating to the perceived effect of mining activities on the environment and on communities impacted by such activities. Certain non-governmental organizations ("NGOs"), some of which oppose globalization and resource development, are often vocal critics of the mining industry and its practices, including the use of cyanide and other hazardous substances in processing activities. Adverse publicity generated by such NGOs, or others related to extractive industries generally, could have an adverse effect on the Company's reputation or financial condition and may impact its relationship with the communities in which it operates. While Karora is committed to operating in a socially responsible manner, there is no guarantee that the Company's efforts in this respect will mitigate this potential risk.

Karora's ability to successfully obtain key permits and approvals to explore for, develop and operate mines and to successfully operate in communities around the world will likely depend on Karora's ability to develop, operate and close mines in a manner that is consistent with the creation of social and economic benefits in the surrounding communities, which may or may not be required by law. Mining operations should be designed to minimize the negative impact on such communities and the environment, for example, by modifying mining plans and operations or by relocating those affected to an agreed location. The cost of these measures could increase capital and operating costs and therefore could have an adverse impact upon Karora's financial condition and operations. Karora seeks to promote improvements in health and safety, human rights, environmental performance and community relations. However, Karora's ability to operate could be adversely impacted by accidents or events detrimental (or perceived to be detrimental) to the health, safety and well-being of Karora's employees, human rights, the environment or the communities in which Karora operates.

# Major network failures could have a material adverse effect on the financial condition, results of operations or cash flows of the Company.

Major equipment failures, natural disasters including severe weather, terrorist acts, acts of war, cyber-attacks or other breaches of network systems or security that affect computer systems within our network could disrupt our business functions, including our production activities. Our industry has become increasingly dependent on digital technologies. Our mines and mills are automated and networked, and we rely on digital technologies to conduct certain exploration, development, production, processing and other activities. Our industry faces various security threats, including cyber-security threats. Such attacks are increasing and include malicious software, attempts to gain unauthorized access to data and other electronic security breaches that could lead to disruptions to critical systems, unauthorized release of confidential information and corruption of data. A cyber-attack could negatively impact our operations. A corruption of our financial or operational data or an operational disruption of our production infrastructure could, among other potential impacts, result in: (i) loss of production or accidental discharge; (ii) expensive remediation efforts; (iii) distraction of management; (iv) damage to our reputation or our relationship with customers, vendors and employees; or (v) events of noncompliance, which events could lead to regulatory fines or penalties. Any of the foregoing could have a material adverse effect on our business, results of operations and financial condition.

# Drilling and Production Risks Could Adversely Affect the Mining Process

Once mineral deposits are discovered, it can take a number of years from the initial phases of drilling until production is possible, during which the economic feasibility of production may change. Substantial time and expenditures are required to:

- obtain environmental and other licenses;
- construct mining, processing facilities and infrastructure; and
- obtain the nickel or extract minerals from the ore.

If a project proves not to be economically feasible by the time the Company is able to exploit it, the Company may incur substantial write-offs. In addition, potential changes or complications involving metallurgical and other technological processes arising during the life of a project may result in cost overruns that may render the project not economically feasible.

# **Commodity Price Volatility**

The ability of the Company to fully exploit the Beta-Hunt Mine, along with the future profitability of the Company, is directly related to the market price of gold, nickel and copper, each of which is sold in an active global market and traded on commodity exchanges. These prices (i) are subject to significant fluctuations and are affected by many factors, including actual and expected macroeconomic and political conditions, levels of supply and demand, the availability and costs of substitutes, inventory levels, investments by commodity funds and other actions of participants in the commodity markets, and (ii) have fluctuated widely, particularly in recent years. Consequently, the economic viability of any of Karora's projects cannot be accurately predicted and may be adversely affected by fluctuations in these commodity prices. Future price declines could cause the future development and exploitation of the Company's properties to be impracticable or uneconomical.

# Limited Mining Properties and Acquisition of Additional Commercially Mineable Mineral Rights

Any adverse development affecting the progress of the Beta Hunt Mine and HGO such as, but not limited to, obtaining sufficient financing on commercially suitable terms, hiring suitable personnel and mining contractors or securing supply agreements on commercially suitable terms, may have a material adverse effect on the Company's financial performance and results of operations.

# **Uncertainty in the Estimation of Mineral Reserves and Mineral Resources**

The figures for mineral reserves and mineral resources contained in this AIF are estimates, only and no assurance can be given that the anticipated tonnages and grades will be achieved, that the indicated level of recovery will be realized or that mineral reserves could be mined or processed profitably. Actual reserves may not conform to geological, metallurgical or other expectations, and the volume and grade of ore recovered may be below the estimated levels. There are numerous uncertainties inherent in estimating mineral reserves and mineral resources, including many factors beyond the Company's control. Such estimation is a subjective process, and the accuracy of any reserve or resource estimate is a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretation. In addition, there can be no assurance that gold or nickel recoveries in small scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production. Lower market prices, increased production costs, reduced recovery rates and other factors may result in a revision of its reserve estimates from time to time or may render the Company's reserves uneconomic to exploit. Reserve data are not indicative of future results of operations. If the Company's actual mineral reserves and mineral resources are less than current estimates or if the Company fails to develop its resource base through the realization of identified mineralized potential, its results of operations or financial condition may be materially and adversely affected. Evaluation of reserves and resources occurs from time to time, and they may change depending on further geological interpretation, drilling results and metal prices. The category of inferred resource is the least reliable resource category and is subject to the most variability.

# **Uncertainty Relating to Mineral Resources**

Mineral resources that are not mineral reserves do not have demonstrated economic viability. Due to the uncertainty which may attach to inferred mineral resources, there is no assurance that inferred mineral resources will be upgraded to proven and probable mineral reserves as a result of continued exploration.

# Mining Involves a High Degree of Risk

Mining operations involve a high degree of risk. The Company's operations will be subject to all the hazards and risks normally encountered in the exploration, development and production of base or precious metals, including, without limitation, environmental hazards, unusual and unexpected geologic formations, seismic activity, rock bursts, pit-wall failures, cave-ins, flooding, fires, hazardous weather conditions and other conditions involved in the drilling and removal of material, any of which could result in damage to, or destruction of, mines and other producing facilities, damage to life or property, environmental damage and legal liability. The Company's development activities may be further hampered by additional hazards, including, without limitation, equipment failure, which may result in environmental pollution and legal liability.

#### **Uninsurable Risks**

In the course of development of mineral properties, certain risks, and in particular, unexpected or unusual geological operating conditions including rock bursts, cave-ins, fires, flooding and earthquakes may occur. It is not always possible to fully insure against such risks, and the Company may decide not to take out insurance against such risks as a result of high premiums or other reasons. Should such liabilities arise, they could reduce or eliminate the funds available for acquisition of mineral prospects or exploration, increase costs to the Company, reduce future profitability, if any, and/or lead to a decline in the value of the Common Shares.

## **Environmental and Safety Regulations and Risks**

Environmental laws and regulations may affect the operations of the Company. These laws and regulations set various standards regulating certain aspects of health and environmental quality, including air and water quality, mine reclamation, solid and hazardous waste handling and disposal and the promotion of occupational health and safety. These laws provide for penalties and other liabilities for the violation of such standards and establish, in certain circumstances, obligations to rehabilitate current and former facilities and locations where operations are or were conducted. The permission to operate can be withdrawn temporarily where there is evidence of serious breaches of health and safety standards, or even permanently in the case of extreme breaches. Significant liabilities could be imposed on Karora for damages, clean-up costs or penalties in the event of certain discharges into the environment, environmental damage caused by previous owners of acquired properties or noncompliance with environmental laws or regulations. The Technical, Safety & Sustainability Committee of the Company's Board of Directors is charged with the oversight of these risks. To the extent that the Company becomes subject to environmental liabilities, the satisfaction of any such liabilities would reduce funds otherwise available to the Company and could have a material adverse effect on the Company. The Company intends to minimize risks by taking steps to ensure compliance with environmental, health and safety laws and regulations and operating to applicable environmental standards. There is a risk that environmental laws and regulations may become more onerous, making the Company's operations more expensive.

# **Mineral Titles**

There is no guarantee that title to the Company's mineral property interests will not be challenged or impugned, and no assurances can be given that there are no title defects affecting its mineral properties. Karora's mineral property interests may be subject to prior unregistered agreements or transfers and title may be affected by undetected defects. The Company has not conducted surveys of the claims in which it holds direct or indirect interests; therefore, the precise area and location of such items may be in doubt.

# **Foreign Operations**

The Beta Hunt Mine and HGO are located in Australia. Any changes in regulations or shifts in political attitudes in Australia, or other jurisdictions in which the Company has projects from time to time, are beyond the control of the Company and may adversely affect its business. Future development and operations may be affected in varying degrees by production, export controls, income taxes, expropriation of property, repatriation of profits, environmental legislation, land use, water use, land claims of local people, mine safety and receipt of necessary permits. The effect of these factors cannot be accurately predicted.

# **Integration Risk**

The Company has made acquisitions of properties and other assets, including the Lakewood mill, in recent years and may consider additional acquisitions in the future. Such transactions may pose challenges to the Company such as the risks that the integration of acquired businesses or assets may take longer than expected, the anticipated benefits of the integration may be less than estimated or the costs of acquisition may be higher than anticipated could have an adverse impact on the Company's business, financial condition, results of operations and cash flows. The Company may discover it has acquired a substantial undisclosed liability with little recourse against the sellers.

## **Permitting Risks**

The operations of the Company require licenses and permits from various governmental authorities. The Company will use its best efforts to obtain all necessary licenses and permits to carry on the activities which it intends to conduct, and it intends to comply in all material respects with the terms of such licenses and permits. However, there can be no guarantee that the Company will be able to obtain and maintain, at all times, all necessary licenses and permits required to undertake its proposed exploration and development, or to place its properties into commercial production and to operate mining facilities thereon. In the event of commercial production, the cost of compliance with changes in governmental regulations has the potential to reduce the profitability of operations or preclude the economic development of the Company's properties.

With respect to environmental permitting, the development, construction, exploitation and operation of mines at the Company's projects may require the granting of environmental licenses and other environmental permits or concessions by the competent environmental authorities. Required environmental permits, licenses or concessions may take time and/or be difficult to obtain and may not be issued on the terms required by the Company. Operating without the required environmental permits may result in the imposition of fines or penalties as well as criminal charges against the Company for violations of applicable laws or regulations.

## **Land Reclamation**

Although they vary, depending on location and the governing authority, land reclamation requirements are generally imposed on mineral exploration companies, as well as companies with mining operations, in order to minimize long term effects of land disturbance. Reclamation may include requirements to control dispersion of potentially deleterious effluents and to reasonably re-establish pre-disturbance land forms and vegetation. In order to carry out reclamation obligations imposed on the Company, the Company must allocate financial resources that might otherwise be spent on other programs.

## **Production Estimates**

The Company has prepared estimates of future metal production for its existing and future mines. The Company cannot give any assurance that such estimates will be achieved. Failure to achieve production estimates could have an adverse impact on the Company's future cash flows, profitability, results of operations and financial conditions.

The realization of production estimates are dependent on, among other things, the accuracy of mineral reserve and resource estimates, the accuracy of assumptions regarding ore grades and recovery rates, ground conditions (including hydrology), the physical characteristics of ores, the presence or absence of particular metallurgical characteristics, and the accuracy of the estimated rates and costs of mining, ore haulage and processing. Actual production may vary from

estimates for a variety of reasons, including the actual ore mined varying from estimates of grade or tonnage; dilution and metallurgical and other characteristics (whether based on representative samples of ore or not); short-term operating factors such as the need for sequential development of ore bodies and the processing of new or adjacent ore grades from those planned; mine failures or slope failures; industrial accidents; natural phenomena such as inclement weather conditions, floods, droughts, rock slides and earthquakes; encountering unusual or unexpected geological conditions; changes in power costs and potential power shortages; shortages of principal supplies needed for mining operations, including explosives, fuels, chemical reagents, water, equipment parts and lubricants; plant and equipment failure; the inability to process certain types of ores; labour shortages or strikes; and restrictions or regulations imposed by government agencies or other changes in the regulatory environment. Such occurrences could also result in damage to mineral properties or mines, interruptions in production, injury or death to persons, damage to property of the Company or others, monetary losses and legal liabilities in addition to adversely affecting mineral production. These factors may cause a mineral deposit that has been mined profitably in the past to become unprofitable, forcing the Company to cease production.

#### **Cost Estimates**

Capital and operating cost estimates made in respect of the Company's mines and development projects may not prove accurate. Capital and operating cost estimates are based on the interpretation of geological data, feasibility or prefeasibility studies, preliminary economic assessment study, anticipated climatic conditions, market conditions for required products and services, and other factors and assumptions regarding foreign exchange currency rates. Any of the following events could affect the ultimate accuracy of such estimate: unanticipated changes in grade and tonnage of ore to be mined and processed; incorrect data on which engineering assumptions are made; delay in construction schedules, unanticipated transportation costs; the accuracy of major equipment and construction cost estimates; labour negotiations; changes in government regulation (including regulations regarding prices, cost of consumables, royalties, duties, taxes, permitting and restrictions on production quotas on exportation of minerals); and title claims.

# Forward-Looking Statements May Prove to be Inaccurate

Investors should not place undue reliance on forward-looking statements contained in this AIF. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties, of both general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking statements or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate. Additional information on such risks, assumptions and uncertainties can be found in this AIF under the heading "Forward-Looking Statements".

# **Indigenous/First Nation**

In Australia, native title claims and Indigenous heritage issues may affect the ability of the Company to pursue exploration, development and mining on Australian properties. The resolution of native title and Indigenous heritage issues is an integral part of exploration and mining operations in Australia, and the Company is committed to managing any issues that may arise effectively. However, in view of the inherent legal and factual uncertainties relating to such issues, no assurance can be given that material adverse consequences will not arise. Reference is made to Appendix "A" hereto under the heading "Beta Hunt Mine – Native Title Act 1993".

Karora is committed to working in partnership with our local communities and Indigenous/First Nation communities in a manner which fosters active participation and mutual respect. The Company regularly consults with communities proximal to the Company's exploration and development activities to advise them of plans and answer any questions they may have about current and future activities.

## **Reliance on Third Parties**

The Company is heavily dependent on its ability to secure reliable supplies of raw materials and provision of certain services from third-party suppliers in order to carry out its operations. In particular, SLM is reliant on third parties for the processing of its intermediate products. Further, SLM holds its mining title under a sublease with a third party – see Appendix "A" for further information. There can be no guarantee that these arrangements will be sufficient for

the Company's future needs or that such rights, supplies or provision of services will not be interrupted or cease altogether. A failure of such third parties could have a material adverse effect on the Company's business, operating results and financial position.

# The Company is subject to the risk of litigation, the causes and costs of which cannot be known

The Company may be involved in disputes with other parties in the normal course of business in the future which may result in litigation. The causes of potential future litigation cannot be known and may arise from, among other things, business activities, environmental laws, volatility in stock price or failure or alleged failure to comply with disclosure obligations. The results of litigation cannot be predicted with certainty. If the Company is unable to resolve litigation favourably, either by judicial determination or settlement, it may have a material adverse effect on the Company's financial performance and results of operations. In the event of a dispute involving the foreign operations of the Company, the Company may be subject to the exclusive jurisdiction of foreign courts or may not be successful in subjecting foreign persons to the jurisdiction of courts in Canada. The Company's ability to enforce its rights could have an adverse effect on its future cash flows, earnings, results of operations and financial condition.

## Competition

The mining industry is intensely competitive in all its phases. There is a high degree of competition for the discovery and acquisition of properties considered to have commercial potential. Karora competes for the acquisition of mineral properties, claims, leases and other mineral interests as well as for the recruitment and retention of qualified employees with many companies possessing greater financial resources and technical facilities than Karora. The competition in the mineral exploration and development business could have an adverse effect on Karora's ability to acquire suitable properties or prospects for mineral exploration and development in the future.

# Management

The Company's prospects depend in part on the ability of its executive officers and senior management to operate effectively, both independently and as a group. Investors must be willing to rely to a significant extent on management's discretion and judgment. The success of Karora depends to a large extent upon its ability to retain the services of its senior management and key personnel. The loss of the services of any of these persons could have a materially adverse effect on Karora's business and prospects. There is no assurance Karora can maintain the services of its directors, officers or other qualified personnel required to operate its business.

# **Government Regulations**

Exploration and development activities and mining operations are subject to laws and regulations governing health and worker safety, employment standards, environmental matters, mine development, prospecting, mineral production, exports, taxes, labour standards, reclamation obligations and other matters. It is possible that future changes in applicable laws, regulations, agreements or changes in their enforcement or regulatory interpretation could result in changes in legal requirements or in the terms of permits and agreements applicable to the Company or its properties which could have a material adverse impact on the Company's current objectives. Where required, obtaining necessary permits and licences can be a complex, time consuming process and there can be no assurance that required permits will be obtainable on acceptable terms, in a timely manner, or at all. The costs and delays associated with obtaining permits and complying with these permits and applicable laws and regulations could stop or materially delay or restrict the Company from proceeding with the development of a mine.

Any failure to comply with applicable laws and regulations or permits, even if inadvertent, could result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing interruption or closure of exploration, development or mining operations or material fines and penalties, including, but not limited to, corrective measures requiring capital expenditures, installation of additional equipment, remedial actions or other liabilities. Parties engaged in mining operations or in the exploration or development of mineral properties may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

In addition, amendments to current laws and regulations governing operations or more stringent implementation thereof could have a substantial adverse impact on the Company and cause increases in exploration expenses, capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties. Recent increases to mining duties / royalties by the Quebec Minister of Natural Resources are reflected in the Feasibility Study.

# The Company is subject to anti-corruption and anti-bribery laws

The Company's operations are governed by, and involve interactions with, various levels of government in Canada, the U.S. and Australia. The Company is required to comply with anti-corruption and anti-bribery laws, including the *Corruption of Foreign Public Officials Act* (Canada) and the U.S. Foreign Corrupt Practices Act, as well as similar laws in the countries in which the Company conducts its business. There has been a general increase in the frequency of enforcement and the severity of penalties under such laws, resulting in greater scrutiny and punishment to companies convicted of violating anti-corruption and anti-bribery laws. The Company may be found liable for violations by not only its employees, but also by its third party agents. Although the Company has adopted a risk-based approach to mitigate such risks, such measures are not always effective in ensuring that the Company, its employees or third party agents will comply strictly with such laws. If the Company finds itself subject to an enforcement action or is found to be in violation of such laws, this may result in significant penalties, fines and/or sanctions imposed on the Company which could result in a material adverse effect on the Company's reputation, financial performance and results of operations. If the Company chooses to operate in additional foreign jurisdictions in the future, it may become subject to additional anti-corruption and anti-bribery laws in such jurisdictions.

# The Company is dependent on information technology systems

The Company's operations depend, in part, upon information technology systems. The Company's information technology systems are subject to disruption, damage or failure from a number of sources, including, but not limited to, computer viruses, security breaches, natural disasters, power loss and defects in design. Although to date the Company has not experienced any material losses relating to information technology system disruptions, damage or failure, there can be no assurance that it will not incur such losses in the future. Any of these and other events could result in information technology systems failures, operational delays, production downtimes, destruction or corruption of data, security breaches or other manipulation or improper use of the Company's systems and networks, any of which could have adverse effects on the Company's reputation, results of operations and financial performance.

# Other Tax Issues

The Company is subject to income and mining taxes in some jurisdictions. Significant judgement is required in determining the total provision for income taxes. Refundable tax credits for mining exploration expenses for the current and prior periods are measured at the amount expected to be recovered from the tax authorities as at the balance sheet date. Uncertainties exist with respect to the interpretation of tax regulations, including mining duties for losses and refundable tax credits, and the amount and timing of collection. The determination of whether expenditures qualify for exploration tax credits requires significant judgment involving complex technical matters which makes the ultimate tax collection uncertain. As a result, there can be a material difference between the actual tax credits received following final resolution of these uncertain interpretation matters with the relevant tax authority and the recorded amount of tax credits. This difference would necessitate an adjustment to tax credits for mining exploration expenses in future periods. The resolution of issues with the relevant tax authority can be lengthy to resolve. As a result, there can be a significant delay in collecting tax credits for mining exploration expenses. Tax credits for mining exploration expenses that are expected to be recovered beyond one year are classified as non-current assets. The amounts recognized in the financial statements are derived from the Company's best estimation and judgment as described above. However, the inherent uncertainty regarding the ultimate approval by the relevant tax authority means that the ultimate amount collected in tax credits and timing thereof could differ materially from the accounting estimates and therefore impact the Company's balance sheet and cash flow.

## **Conflicts of Interest**

Certain of the directors and officers of Karora may also serve as directors and/or officers of other companies involved in natural resource exploration and development, and consequently, there exists the possibility for such directors and officers to be in a position of conflict.

# **Currency Fluctuations**

The operations of the Company will be subject to currency fluctuations and such fluctuations may materially affect the financial position and results of the Company. The Company is subject to the risks associated with the fluctuation of the rate of exchange of the Canadian dollar, the Australian dollar and the United States dollar. The Company does not currently take any steps to hedge against currency fluctuations although it may elect to hedge against the risk of currency fluctuations in the future. There can be no assurance that steps taken by the Company to address such currency fluctuations will eliminate all adverse effects of currency fluctuations and, accordingly, the Company may suffer losses due to adverse foreign currency fluctuations.

#### **Interest Rate Risk**

The Company has cash balances, generally held in interest-bearing accounts at major Canadian chartered banks. A plus or minus 0.50% change in the interest rates would have a de minimus effect on net income on an annual basis. The Company also has facilities at variable rates based on a spread over the Canadian Dealer Offered Rate. Sensitivity to a plus or minus 1% change in the rates would affect the reported annual interest expense by approximately \$400,000.

# **Dividend History or Policy**

No dividends on the Common Shares have been paid by Karora to date. Karora anticipates that for the foreseeable future it will retain future earnings and other cash resources for the operation and development of its business. Payment of any future dividends will be at the discretion of Karora's Board after taking into account many factors, including Karora's operating results, financial condition and current and anticipated cash needs.

#### **Independent Contractors**

Karora's success also depends, to a significant extent, on the performance and continued service of independent contractors. Karora will contract the services of professional drillers and others for exploration, environmental, construction and engineering services. Poor performance by such contractors or the loss of such services could have a material and adverse effect on Karora and its business and results of operations and could result in failure to meet business objectives.

#### **Global Economic Conditions**

Global economic conditions in recent years have been characterized by volatility and market turmoil and access to financing has been negatively impacted. This may impact the Company's ability to obtain financing on terms acceptable to the Company. In addition, global economic conditions may cause decreases in asset values, which may result in impairment losses. If such volatility and market turmoil continue, the Company's business and financial condition could be adversely affected.

#### **Internal Controls over Financial Reporting**

Canadian legislation requires an annual assessment by management of the effectiveness of the Company's internal control over financial reporting. The Company may fail to maintain the adequacy of its internal control over financial reporting as such standards are modified, supplemented, or amended from time to time, and the Company may not be able to ensure that it can conclude on an ongoing basis that it has effective internal controls over financial reporting. The Company's failure to satisfy the applicable requirements of such legislation on an ongoing, timely basis could result in the loss of investor confidence in the reliability of its financial statements, which in turn could harm the Company's business and negatively impact the trading price of the Common Shares. In addition, any failure to

implement required new or improved controls, or difficulties encountered in their implementation, could harm the Company's operating results, or cause it to fail to meet its reporting obligations.

During the 2022 year-end process, a material weakness was identified in the design and operation of controls relating to the review of the calculation and classification of expenditures between operating and capital costs. In the opinion of management, this represents a material weakness in the Company's internal control over financial reporting.

Management is committed to maintaining a strong internal control environment and implementing measures designed to help ensure that the material weakness is remediated in a timely manner, with the oversight from the Audit Committee. The Company is in the process of responding to the material weakness by implementing more rigorous review processes related to the calculation and classification of expenditures and will monitor these controls each quarter. Material weaknesses cannot be considered remediated until the remedial controls operate for a sufficient period of time and management has concluded through testing, that these controls are operating effectively.

#### **International Conflict**

International conflict and other geopolitical tensions and events, including war, military action, terrorism, trade disputes and international responses thereto have historically led to, and may in the future lead to, uncertainty or volatility in global commodity and financial markets and supply chains. Russia's invasion of Ukraine has led to sanctions being levied against Russia by the international community and may result in additional sanctions or other international action, any of which may have a destabilizing effect on commodity prices, supply chains and global economies more broadly. Volatility in commodity prices and supply chain disruptions may adversely affect the Company's business, financial condition and results of operations. The extent and duration of the current Russia-Ukraine conflict and related international action cannot be accurately predicted at this time and the effects of such conflict may magnify the impact of the other risks identified in this AIF, including those relating to commodity price volatility and global financial conditions. The situation is rapidly changing and unforeseeable impacts, including on our shareholders and counterparties on which we rely and transact with, may materialize and may have an adverse effect on the Company's business, results of operation and financial condition.

Health epidemics and outbreaks of communicable diseases, such as COVID-19, may have a material adverse effect on the Company's business, financial condition and results of operations and could negatively affect the price of the Common Shares and limit the Company's ability to raise capital.

The Company's business could be adversely impacted by the effects of the novel coronavirus or other health epidemics and/or outbreaks of communicable diseases, which could significantly disrupt the Company's operations and may have a material adverse effect on the Company's business and financial condition. The outbreak of COVID-19 has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. Measures taken to contain the spread of the virus, including travel bans, quarantines, social distancing and closures of non-essential services, have triggered significant disruptions to businesses worldwide, resulting in an economic slowdown.

The extent to which COVID-19 impacts the Company's business, including its operations and the market for its securities, will depend on future developments, which are highly uncertain and cannot be predicted at this time, and include the continued duration, severity and scope of the COVID-19 outbreak and further actions taken to contain or treat the outbreak. In particular, the continued or perceived spread of COVID-19 globally could materially and adversely impact the Company's business including, without limitation, employee health, workforce productivity, increased insurance premiums, limitations on travel, the availability of industry experts and personnel, stoppage or suspension of its mining operations, restrictions to its drilling, development and exploration programs and/or the timing to process drill and other metallurgical testing and other factors that will depend on future developments beyond the Company's control, which may have a material adverse effect on the Company's business, financial condition and results of operations. Moreover, the actual and threatened spread of COVID-19 globally could also have a material adverse effect on the regional economies in which the Company operates, could continue to negatively impact stock markets, including the trading price of the Common Shares, could adversely impact the Company's ability to raise capital, could cause continued interest rate volatility and movements that could make obtaining financing more challenging or more expensive, could adversely affect global economies and financial markets resulting in an economic downturn that could have an adverse effect on the demand for precious metals and the Company's future prospects and could result in any operations affected by COVID-19 becoming subject to quarantine. Any of these

developments, and others, could have a material adverse effect on the Company's business and results of operations. There can also be no assurance that the Company's personnel will not be impacted by these pandemic diseases and ultimately see all or a portion of its mining operations suspended, workforce productivity reduced or incur increased medical costs and/or insurance premiums as a result of these health risks.

## **Occupational Health and Wellness**

Although the Company takes every precaution to strictly follow industrial hygiene and occupational health guidelines, and medical services are in place along with pandemic management protocols, due to the areas where the Company operates, the workforce is exposed to pandemics like malaria and other diseases, such as coronavirus, dengue, chikungunya, Zika, Ebola and other flu like viruses (such as avian and swine). Such pandemics and diseases represent a serious threat to maintaining a skilled workforce in the mining industry and is a major health-care challenge for the Company.

There can be no assurance that the Company's personnel will not be impacted by these pandemic diseases and ultimately see its workforce productivity reduced or incur increased medical costs and/or insurance premiums as a result of these health risks. Other potential risks include disruption to operations, supply chain delays, trade restrictions and impact on economic activity in affected countries or regions.

## **Risks Relating to Common Shares**

## Liquidity of Common Shares

The Company's ability to successfully ramp-up production at the Beta Hunt Mine and HGO will be dependent upon a number of factors including the ability to obtain financing. If the Company is unable to achieve these corporate objectives, any investment in the Company's securities may be lost. In such event, the probability of resale of the Common Shares would be diminished.

## The Common Shares are Subject to Market Price Volatility

The market price of the Common Shares may be adversely affected by a variety of factors relating to the Company's business, including fluctuations in the Company's operating and financial results, the results of any public announcements made by the Company and the Company's failure to meet analysts' expectations. In addition, from time to time, the stock market experiences significant price and volume volatility that may affect the market price of the Common Shares for reasons unrelated to the Company's performance. Additionally, the value of the Common Shares is subject to market value fluctuations based upon factors that influence the Company's operations, such as legislative or regulatory developments, competition, technological changes, global capital market activity and changes in interest and currency rates. There can be no assurance that the market price of the Common Shares will not experience significant fluctuations in the future, including fluctuations that are unrelated to the Company's performance. The value of the Common Shares will be affected by the general creditworthiness of the Company. The market value of the Common Shares may also be affected by the Company's financial results and political, economic, financial and other factors that can affect the capital markets generally, the stock exchanges on which the Common Shares are traded and the market segment of which the Company is a part.

## Potential Dilution

The Company's articles of incorporation and by-laws allow it to issue an unlimited number of Common Shares for such consideration and on such terms and conditions as established by the board of directors of the Company, in many cases, without the approval of the Company's shareholders. The Company may issue additional Common Shares in subsequent offerings (including through the sale of securities convertible into or exchangeable for Common Shares) and on the exercise of stock options or other securities exercisable for Common Shares. The Company cannot predict the size of future issuances of Common Shares or the effect that future issuances and sales of Common Shares will have on the market price of the Common Shares. Issuances of a substantial number of additional Common Shares, or the perception that such issuances could occur, may adversely affect prevailing market prices for the Common Shares. With any additional issuance of Common Shares, investors will suffer dilution to their voting power and the Company may experience dilution in its earnings per share.

## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

As of December 31, 2022, Karora is not a party to any legal proceedings material to it, or of which any of its property is the subject matter, and no such proceedings are known to be contemplated. Karora was not subject to any regulatory actions during the preceding financial year.

## INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as disclosed in this AIF, no director or officer of Karora or any shareholder holding, of record or beneficially, directly or indirectly, more than 10% of the issued Common Shares, or any of their respective associates or affiliates, had any material interest, directly or indirectly, in any material transaction with Karora within the three most recently completed financial years or in any proposed transaction which has materially affected or would materially affect Karora.

## REGISTRAR AND TRANSFER AGENT

Karora's registrar and transfer agent for its Common Shares is Computershare Investor Services Inc. at 100 University Avenue, 8th Floor, Toronto, Ontario M5J 2Y1.

#### **EXPERTS**

Information of an economic, scientific or technical nature regarding the Beta Hunt Mine included in this AIF is based upon the technical report entitled "Beta Hunt Operation Eastern Goldfields, Western Australia" dated March 30, 2023 (the "Beta Hunt Mine Technical Report"). The authors of the Beta Hunt Mine Technical Report are Stephen Devlin, FAusIMM and Shane McLeay, B Eng Mining (Hons) FAusIMM AWASM. Stephen Devlin is an employee of Karora and a "Qualified Person" as defined in National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101"). Shane McLeay is "independent" of Karora and a "Qualified Person" as defined in NI 43-101. The Beta Hunt Mine Technical Report was filed on March 30, 2023 under the Company's profile on SEDAR at www.sedar.com.

Information of an economic, scientific or technical nature regarding HGO included in this AIF is based upon the technical report entitled "NI 43-101 Technical Report Higginsville-Beta Hunt Operation, Eastern Goldfields, Western Australia" dated January 29, 2021 (the "HGO Technical Report"). The authors of the HGO Technical Report are Stephen Devlin, FAusIMM, Shane McLeay, B Eng Mining (Hons) FAusIMM AWASM, Anton von Wielligh, FAusIMM, Ian Glacken, Sc (Hons) (Geology), DIC, MSc (Geostatistics), Grad Dip Computing, FAusIMM(CP), FAIG, MIMMM, CEng and Ross Cheyne B Eng (Hons) FAusIMM. Stephen Devlin is an employee of Karora and a "Qualified Person" as defined in NI 43-101. Shane McLeay, Anton von Wielligh, Ian Glacken and Ross Cheyne are each "independent" of Karora and a "Qualified Person", as defined in NI 43-101. The HGO Technical Report was filed on February 3, 2021 under the Company's profile on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

Where appropriate, certain information contained in this AIF provides non-material updates or expansions upon the information contained in such technical reports. Any updates or expansions upon the scientific or technical information contained in such technical reports and any other scientific or technical information contained in this AIF was prepared by or under the supervision of Stephen Devlin, FAusIMM. Mr. Devlin is the Group Geologist of the Company and a "Qualified Person", as defined in NI 43-101.

As of the date of this AIF, to the knowledge of the Company, the aforementioned individuals beneficially owned, directly or indirectly, less than 1% of the outstanding Common Shares.

The Company's independent auditor is PricewaterhouseCoopers LLP, Chartered Professional Accountants, who have issued an independent auditor's report dated March 28, 2023, in respect of Karora Resource Inc.'s consolidated financial statements as at December 31, 2022 and 2021 and for the years then ended. PricewaterhouseCoopers LLP

has advised that it is independent with respect to the Company within the meaning of the Chartered Professional Accountants of British Columbia Code of Professional Conduct.

#### MATERIAL CONTRACTS

The following material contracts were entered into by the Company in 2022, or were entered into by the Company before 2022 but remain in effect:

- Royalty Buyout, Amendment and Restatement Agreement dated May 11, 2020 between Avoca Mining Pty Ltd. and Morgan Stanley Capital Group Inc., as amended;
- Equity Purchase Agreement dated July 21, 2020 between Karora Resources Inc. and Arpent Inc.;
- Royalty Transaction Agreement dated August 31, 2020 between Salt Lake Mining Pty Ltd. and Maverix Metals (Australia) Pty Ltd.; Deed of Amendment and Restatement: Beta Hunt Royalty Agreement dated August 31, 2020 between Salt Lake Mining Pty Ltd. and Maverix Metals (Australia) Pty Ltd.; and Amended and Restated Royalty Agreement dated August 31, 2020 between Salt Lake Mining Pty Ltd. and Maverix Metals (Australia) Pty Ltd.
- Amended and Restated Credit Agreement dated July 14, 2022 between, inter alia, the Company and Macquarie Bank Limited.

#### ADDITIONAL INFORMATION

Additional information relating to the Company may be found on SEDAR at www.sedar.com.

Additional information, including officers' remuneration and indebtedness, and principal holders of the Company's securities will be contained in the Company's information circular for its most recent annual meeting of shareholders involving the election of directors. Additional financial information is provided in the Company's audited consolidated financial statements and management's discussion and analysis as at and for the 12-month period ended December 31, 2022.

## **EXCHANGE RATE INFORMATION**

The closing, high, low and average exchange rates for one U.S. dollar expressed in Canadian dollars for each of the three years ended December 31, 2022, 2021, and 2020, as reported by the Bank of Canada, were as follows. All Bank of Canada exchange rates are indicative rates only, obtained from averages of aggregated price quotes from financial institutions.

	2022 (\$)	2021 (\$)	2020 (\$)
Closing	1.3544	1.2678	1.2732
High	1.3856	1.2942	1.4496
Low	1.2451	1.2040	1.2718
Average	1.3013	1.2535	1.3415

As at March 31, 2023, the exchange rate for one US\$ expressed in Canadian dollars, based upon rates provided by the Bank of Canada was \$1.3533.

The closing, high, low and average exchange rates for one Australian dollar expressed in Canadian dollars for each of the three years ended December 31, 2022, 2021, and 2020, as reported by the Bank of Canada, were as follows. All Bank of Canada exchange rates are indicative rates only, obtained from averages of aggregated price quotes from financial institutions.

	2022 (\$)	2021 (\$)	2020 (\$)
Closing	0.9196	0.9205	0.9835
High	0.9474	0.9978	0.9835
Low	0.8633	0.8994	0.8374
Average	0.9034	0.9420	0.9247

As at March 31, 2023, the exchange rate for one A\$ expressed in Canadian dollars, based upon rates provided by the Bank of Canada was \$0.9060.

# METRIC CONVERSION TABLE

For ease of reference, the following conversion factors are provided:

Metric Unit	U.S. Measure	U.S. Measure	Metric Unit
1 hectare	2.471 acres	1 acre	0.4047 hectares
1 metre	3.2881 feet	1 foot	0.3048 metres
1 kilometre	0.621 miles	1 mile	1.609 kilometres
1 gram	0.032 troy ounces	1 troy ounce	31.1 grams
1 kilogram	2.205 pounds	1 pound	0.4541 kilograms
1 tonne	1.102 short tons	1 short ton	.907 tonnes
1 gram/tonne	0.029 troy ounces/ton	1 troy ounce/ton	34.28 grams/tonne

## GLOSSARY OF TECHNICAL TERMS

In this AIF, including, for greater certainty, Appendix "A", the following terms will have the meanings set forth below, unless otherwise indicated. Words importing the singular include the plural and vice versa and words importing any gender include all genders:

"assay" is an analysis to determine the presence, absence and quantity of one or more elements.

"**awaruite**" is a naturally occurring alloy of nickel and iron with a composition from Ni<sub>2</sub>Fe to Ni<sub>3</sub>Fe. The formula Ni<sub>2.5</sub>Fe is used to represent this natural variability.

"basalt" is dark-colored mafic igneous rocks, commonly extrusive but locally intrusive (i.e. as dikes), composed chiefly of calcic plagioclase and clinopyroxene.

"brucite" is the mineral form of magnesium hydroxide with a composition of Mg(OH)<sub>2</sub>.

"C1 cash costs" are direct costs, which include costs incurred in mining and processing (labour, power, reagents, materials) plus local G&A, freight and realisation and selling costs.

"cash costs" are the cash costs for mining, milling and concentrating, leaching, solution pumping, solvent extraction and electrowinning, on-site administration and general expenses, any off-site services which are essential to the operation, smelting (including toll smelting charges if applicable), refining (including toll refining charges if applicable), concentrate freight costs, marketing costs, and property and severance taxes paid to state/federal agencies that are not profit related.

"chrysotile" is an asbestiform sub-group within the serpentine group of minerals.

"clinopyroxene" is a group name for a number of pyroxene minerals that have similar crystal forms. They are silicates commonly containing aluminum, magnesium, calcium, and iron in their crystal structures.

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

"CIM Standards" are the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM from time to time.

"cm" means centimetre.

"Co" is the chemical symbol for cobalt.

"coalingite" is a mineral weathering product of brucite with a composition of Mg<sub>10</sub>Fe<sub>23</sub>+[(OH)<sub>24</sub>|CO<sub>3</sub>]<sub>2</sub>H<sub>2</sub>O

"core" is the long cylindrical piece of rock brought to surface by diamond drilling.

"core sample" is one or several pieces of whole or split parts of core selected as a sample for analysis or assay.

"Cu" is the chemical symbol for copper.

"cut-off" means the grade above which material is considered significant and below which material is not considered significant and is excluded from resource and reserve estimates.

"dilution" means non-ore material included by mining process and fed to mill.

"disseminated sulphide" is a sulphide deposit, in which the sulphide is non-contiguous and may range from less than 1% up to about 10% of the total rock. The sulphide occurs as individual crystals or small crystalline masses in the interstices of other non-sulphide minerals composing the rock.

"dunite" is an igneous, plutonic rock, of ultramafic composition, with coarse grained or phaneritic texture. The mineral assemblage is typically greater than 90% olivine with minor pyroxene and chromite. Dunite is the olivine-rich endmember of the peridotite group of mantle derived rocks.

"fault" means a break in the Earth's crust caused by tectonic forces which have moved the rock on one side with respect to the other.

"feasibility study" means a comprehensive study of a mineral deposit in which all geological, engineering, legal, operating, economic, social, environmental and other relevant factors are considered in sufficient detail that it could reasonably serve as the basis for a final decision by a financial institution to finance the development of the deposit for mineral production.

"footwall" means the rock on the underside of a vein or mineral deposit.

"g/t" is grams per metric tonne.

"gabbro" is a coarse grained intrusive igneous rock composed of greenish white feldspar and pyroxene.

"geochemical" means prospecting techniques which measure the content of specified metals in soils and rocks for the purpose of defining anomalies for further testing.

"geophysical" means prospecting techniques which measure the physical properties (magnetism, conductivity, density, etc.) of rocks and define anomalies for further testing.

"ha" is hectare.

"hanging wall" is the rock on the upper side of a vein or mineral deposit.

"heazlewoodite" is a nickel sulphide mineral found in serpentinized dunite with the composition Ni<sub>3</sub>S<sub>2</sub>.

"host rock" means the rock surrounding an ore deposit.

"HPAL" means high pressure acid leach.

"igneous rock" means a rock formed by volcanic or magmatic processes.

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

"**inferred mineral resource**" means that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

"IRR" means internal rate of return.

"km" means kilometre.

"kt" mean kilo-tonne.

"kWh" means kilowatt-hour.

"LIDAR" means a light detection and tanging and optical remote sensing technology that measures properties of scattered light to find range and/or other information of a distant target. The prevalent method to determine distance to an object or surface is to use laser pulses. Like the similar radar technology, which uses radio waves, the range to an object is determined by measuring the time delay between transmission of a pulse and detection of the reflected signal.

"lbs" means pounds.

"LOM" means life of mine.

"m" means metre.

"magmatic" means of or related to magma, which is a subterranean molten rock, capable of being extruded at the surface as lava or intruded into rocks in the earth's crust.

"magnetite" is a ferrimagnetic mineral with composition Fe<sub>3</sub>O<sub>4</sub>.

"massive sulphide" means a sulphide deposit in which the sulphide is contiguous and usually forms more than 80% of the rock mass which may contain non-sulphidic rock inclusions.

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

"millerite" is a nickel sulphide mineral, NiS. It is brassy in colour and has an acicular habit, often forming radiating masses and furry aggregates.

"mineral resource" means a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge.

"mineral reserve" means the economically mineable part of a measured or indicated mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve includes diluting materials and allowances for losses that may occur when the material is mined.

"MgO" is the chemical symbol for magnesium oxide.

"Mt" means million tonnes.

"MW" means megawatt.

"NSR" or "net smelter returns" means a payment made by a producer of metals based on the value of the gross metal production from the property, less deduction of certain limited costs including smelting, refining, transportation and insurance costs.

"Ni" is the chemical symbol for nickel.

"NPV" means net present value.

"NQ" is a diamond core drill with diameter of 47.6 mm.

"olivine" is an olive green magnesium iron silicate mineral common in mafic and ultramafic rocks with a composition of (Mg,Fe)<sub>2</sub>SiO<sub>4</sub>.

"Pd" is the chemical symbol for palladium.

"Pt" is the chemical symbol for platinum.

"pentlandite" is a common iron-nickel sulphide mineral with the composition (Fe,Ni)<sub>9</sub>S<sub>8</sub>.

"peridotite" means a general term for intrusive ultramafic igneous rocks consisting of olivine and lacking felspar.

"**PGE**" is platinum group element.

"ppb" means parts per billion.

"ppm" means parts per million.

"PQ" is a diamond core drill with diameter of 85 mm.

"preliminary feasibility study" means a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established, and which, if an effective method of mineral processing has been determined, includes a financial analysis based on reasonable assumptions of technical, engineering, operating, economic factors and the evaluation of other relevant factors which are sufficient for a qualified person, acting reasonably, to determine if all or part of the mineral resource may be classified as a mineral reserve.

"probable mineral reserve" means the economically mineable part of an indicated and, in some circumstances, a measured mineral resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

"**proven mineral reserve**" means the economically mineable part of a measured mineral resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

"pyrite" is a common iron sulphide mineral FeS<sub>2</sub>.

"**pyroxene**" is a group of chiefly magnesium-iron minerals including diopside, hexenbergite, augite pigeonite, and many other rock-forming minerals.

"**pyroxenite**" is an ultramafic igneous rock consisting essentially of minerals of the pyroxene group, such as augite and diopside, hypersthene, bronzite or enstatite.

"pyrrhotite" is an iron sulphide FeS.

"Qualified Person" means an individual who: (a) is an engineer or geoscientist with a university degree, or equivalent accreditation, in an area of geoscience, or engineering, relating to mineral exploration or mining; (b) has at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, that is relevant to his or her professional degree or area of practice; (c) has experience relevant to the subject matter of the mineral project and the technical report; (d) is in good standing with a professional association; and (e) in the case of a professional association in a foreign jurisdiction, has a membership designation that (i) requires attainment of a position of responsibility in their profession that requires the exercise of independent

judgment; and (ii) requires (A) a favourable confidential peer evaluation of the individual's character, professional judgement, experience, and ethical fitness; or (B) a recommendation for membership by at least two peers, and demonstrated prominence or expertise in the field of mineral exploration or mining.

"S" is the chemical symbol for sulphur.

"serpentine" is a group of minerals the composition of which includes magnesium, iron, hydroxide and silicate.

"serpentinized" is a product of hydrated olivine.

"SRMS" means standard reference materials samples.

"STP" means standard test procedures.

"sulphides" means minerals that are compounds of sulphur together with another element (such as iron, copper, lead and zinc).

"tailings" means finely ground material remaining from ore when metal is removed.

"tailings dam" means an enclosed area to which slurry is transported and in which the solids settle while the liquids may be withdrawn.

"tpd" means tonnes per day.

"ultramafic" is igneous rocks consisting essentially of ferro magnesian minerals with trace quartz and feldspar.

"veins" means a fissure, faults or crack in rock filled by minerals that have travelled upwards from some deep source.

"VTEM" means Versatile Time Domain Electromagnetics — a type of geophysical survey used to explore for massive sulphide deposits.

# APPENDIX "A" MATERIAL MINERAL PROJECTS

## **BETA HUNT MINE**

## **Current Technical Report**

Unless otherwise indicated, information in this Appendix "A" – "Material Mineral Projects – Beta Hunt Mine" is summarized or extracted from the Beta Hunt Mine Technical Report. The authors of the Beta Hunt Mine Technical Report are Stephen Devlin, FAusIMM and Shane McLeay, B Eng Mining (Hons) FAusIMM AWASM. Stephen Devlin is an employee of Karora and a "Qualified Person" as defined in NI 43-101. Shane McLeay is independent of Karora and a "Qualified Person" as defined in NI 43-101. The Beta Hunt Mine Technical Report was filed on March 30, 2022 under the Company's profile on SEDAR at <a href="www.sedar.com">www.sedar.com</a>. All monetary amounts in this Appendix "A" are presented in Australian Dollars unless otherwise noted.

Portions of the following information are based on assumptions, qualifications and procedures which are set out only in the full Beta Hunt Mine Technical Report. For a complete description of the assumptions, qualifications and procedures associated with the following information, reference should be made to the full text of the Beta Hunt Mine Technical Report, which is available for review under the Company's profile on SEDAR located at <a href="https://www.sedar.com">www.sedar.com</a>.

## **Project Description, Location and Access**

The Beta Hunt Mine is a gold and nickel mine located in the Kambalda mining district of Australia. Karora has as 100% interest in SLM, a private company whose main asset is a 100% interest in the Beta Hunt Mine. SLM was acquired by Karora during 2016.

The Beta Hunt Mine, located 600 km from Perth in Kambalda, Western Australia, is a deposit with the very rare feature of hosting both nickel and gold resources in adjacent discrete mineralized zones. The mining tenements on which the Beta Hunt Mine is located are held by Gold Fields. SLM operates the Beta Hunt Mine by virtue of a sublease agreement with Gold Fields.

The Beta Hunt Mine resumed nickel production in 2014 and gold production at the end of 2015. The Beta Hunt Mine is part of a multi-million ounce regional gold mineralization system and possesses significant gold by-product potential. Gold mineralization bodies are accessible from the main nickel decline, effectively leveraging existing infrastructure.

The Beta Hunt Mine is an underground mine located 2 km southeast of Kambalda and 60 km south of Kalgoorlie in Western Australia (Figure 1). The original mine portal is located on the northern edge of Lake Lefroy at latitude 31°13′6″S and longitude 121°40′50″E. Kambalda has been a nickel mining centre since the discovery of nickel sulphides by Western Mining Corporation ("WMC") in 1966. The second portal, completed in 2022, is located just 400 m to the west to make use of a central run of mine ("ROM") pad. The project consists of the underground mine and related surface facilities to support underground operations. There are no processing facilities on site. Run of mine gold production is processed at the Company's 1.6 Mtpa gold processing facility located 80 km by road to the south of the Beta Hunt Mine and the recently acquired 1.0 Mtpa Lakewood Gold Processing Facility (the "Lakewood GPF"). Nickel mineralization is processed by BHP Billiton Nickel West Pty Ltd. ("BHP") under the Ore Tolling and Concentrate Agreement with BHP ("OTCPA").

There is a long history of mining in the district with a large pool of experienced mining personnel living and working in the region. The majority of the current Beta Hunt workforce of approximately 100 persons resides locally within these two towns. The Kambalda Airport provides daily chartered flights, 5 days a week, to the state capital of Perth. Perth is a major centre with a population in excess of 2 million and an international airport. The closest port to both mines is at Esperance, which is 350 km south of Kambalda.

Kambalda experiences a semi-arid climate with hot dry summers and cool winters. Temperatures in the peak of summer typically range from a mean minimum temperature of 15 degrees Celsius to a mean maximum of 34 degrees Celsius. Temperatures during winter range from a mean minimum temperature of 6 degrees Celsius to a mean maximum of only 17 degrees Celsius, with occasional frosts.

The Company holds a 100% interest in SLM. The mining rights for the Beta Hunt Mine are held by SLM through a sub-lease agreement with St Ives Gold Mining Company Pty Ltd. ("SIGMC") which gives SLM the right to explore for and mine nickel and gold within the Beta Hunt Mine sub-lease (the "Beta Mine Sub-Lease"). Mineral tenure information is provided in Table 1. The Beta Hunt Mine Sub-Lease covers partial mineral leases for a total area of 960.43 ha as defined in Figure 2. Claim locations with respect to the sub-lease boundary are shown in Figure 2. SLM's rights within the sub-lease boundary only extend below a given elevation, as described in Table 2 below. SIGMC is the registered holder of the mineral leases that are all situated on unallocated Crown Land.

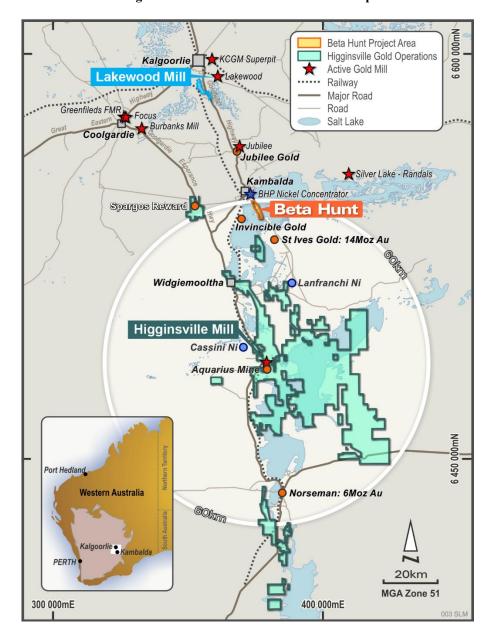


Figure 1: the Beta Hunt Mine Location Map

MISCHES

MIS

Figure 2: the Beta Hunt Mine Sub-Lease Boundary, Mineral Leases and Mineral Resources

**Table 1: the Beta Hunt Mine Mineral Tenure Information** 

Mineral Lease	Holder	Area	Unit	Rent (1)	Commitment (1)	Grant Date	Expiry Date
M15/1512	SIGMC	121.35	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1513	SIGMC	121.20	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1516	SIGMC	121.35	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1517	SIGMC	121.45	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1518	SIGMC	121.35	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1526	SIGMC	121.45	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1527	SIGMC	121.35	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1529	SIGMC	121.40	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1531	SIGMC	121.35	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1628	SIGMC	121.35	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1629	SIGMC	121.35	ha	\$2,928	\$12,200	Dec 24, 2004	Dec 23, 2025
M15/1691	SIGMC	108.15	ha	\$2,616	\$10,900	Dec 24, 2004	Dec 23, 2025
M15/1694	SIGMC	110.85	ha	\$2,664	\$11,100	Dec 24, 2004	Dec 23, 2025
M15/1698	SIGMC	7.74	ha	\$192	\$10,000	Dec 24, 2004	Dec 23, 2025
M15/1699	SIGMC	110.95	ha	\$2,664	\$11,100	Dec 24, 2004	Dec 23, 2025
M15/1702	SIGMC	110.40	ha	\$2,664	\$11,100	Dec 24, 2004	Dec 23, 2025
M15/1705	SIGMC	42.39	ha	\$1032	\$10,000	Dec 24, 2004	Dec 23, 2025

# Notes:

1. Rent and commitment are for 2020-2021 and are given on 100% basis. Karora's share of rent is 20%

Table 2: the Beta Hunt Mine Sub-Lease Exploitable Area

Mineral Lease	Exploitable Area (begins below elevation Australian Height Datum metres)
M 15/1512	Linear decrease from northern limit of the tenement to southern limit of the tenement, being from 200 to zero
M 15/1513	0
M 15/1516	Linear decrease from northern limit of the tenement to southern limit of the tenement, being from 200 to zero
M 15/1517	0
M 15/1518	-100
M 15/1526	0
M 15/1527	-100
M 15/1529	At and below surface
M 15/1531	At and below surface
M 15/1628	-100
M 15/1629	-100
M 15/1691	-100
M 15/1694	-100
M 15/1698	-100
M 15/1699	-100
M 15/1702	-100
M 15/1705	-100

Karora acquired the Higginsville Gold Processing Facility (the "**Higginsville GPF**") when it purchased the Higginsville Gold Operation on June 10, 2019. The Higginsville GPF comprises a 1.6 Mtpa mill and is located 57 km south of Beta Hunt and 107 km south of the regional mining centre of Kalgoorlie-Boulder. The Higginsville GPF is accessed via the Coolgardie-Esperance Highway, which is located 1.2 km southwest of the HGO.

Lakewood is approximately 4 km southeast of the City of Kalgoorlie-Boulder which is the nearest occupied townsite. The Lakewood GPF is located within a historical gold treatment area adjacent to the famous "Golden Mile". The site and its immediate surrounds have been subject to extensive historic disturbance from the early 1900s including timber cutting, town site development, mining, and tailings stockpiling. The main access to the Lakewood GPF is from the Goldfields Highway via the public Mt Monger Road and gazetted Lakewood Gold Processing Facility Access Road.

## Mining Rights in Western Australia

Under section 9 of the *Mining Act* 1978 (WA) ("**Mining Act**") all gold, silver, other precious metals and other minerals are generally the property of the Crown. In Western Australia, a mining lease is considered to be the primary approval required for major mineral development projects as it authorizes the holder to mine for, and dispose of, minerals on the land over which the lease is granted.

The mining tenements subject to the Beta Hunt Mine Sub-Lease are mining leases in good standing as of the date of the Beta Hunt Technical Report. The term of a mining lease is 21 years and may be renewed for further terms.

The lessee of a mining lease may work and mine the land, take and remove minerals and undertake all things necessary to effectually carry out mining operations in, on or under the land, subject to conditions of the mining lease and certain other exceptions under the Mining Act.

#### Native Title Act 1993

In 1992, the High Court of Australia determined in *Mabo v Queensland* (No. 2) that the common law of Australia recognised certain proprietary rights and interests of Indigenous and Torres Strait Islander people in relation to their traditional lands and waters. In response to the Mabo decision, the Native Title Act 1993 (Cth) ("NTA") was enacted. "Native title" under the NTA is recognised where persons claiming to hold that title can establish they have maintained a continuous connection with the land in accordance with traditional laws and customs since settlement and where those rights have not been lawfully extinguished.

The NTA codifies much of the common law in relation to native title. The doing of acts after January 1, 1994 that may affect native title (known as "future acts"), including the grant of mining tenements, are validated subject to certain procedural rights (including the "right to negotiate") afforded to persons claiming to hold native title and whose claim has passed a "registration test" administered by the National Native Title Tribunal (which assesses the claim against certain baseline requirements).

## Aboriginal Heritage Act 1972

The Aboriginal Heritage Act 1972 (WA) ("AHA") protects places and objects that are of significance to Indigenous and Torres Strait Islander people in accordance with their traditional laws and customs. The AHA provides that it is an offence, for a person to damage or in any way alter an Indigenous Site.

Compliance with the AHA is an express condition of all mining tenements in Western Australia. Accordingly, commission of an offence under the AHA may mean that the mining tenement is vulnerable to an order for forfeiture. The Department of Indigenous Affairs maintains a register of sites that have been registered under the AHA.

A search of the Department of Planning Lands and the Aboriginal Heritage Inquiry System conducted on January 23, 2023 shows no registered heritage sites on the four tenements (M15/1512, M15/1516, M15/1529 and M15/1531) where Karora is likely to conduct any surface disturbance.

The Beta Hunt Mine Sub-Lease

The Beta Hunt Mine Sub-Lease grants SLM the right to exploit nickel and gold mineralization on the property free from encumbrances other than the royalties discussed below and certain other permitted encumbrances. It was purchased from CNKO in 2013 and the gold rights to the sub-lease were acquired separately from SIGMC in 2014. On an annual basis, Karora must pay to SIGMC 20% of (i) all rent payable by SIGMC in respect of each tenement, (ii) all local government rates and (iii) all land or property taxes.

Royalties

Karora pays the following royalties on nickel production:

- the state government equal to 2.5% of recovered nickel; and
- third parties equal to 4.5% of payable nickel when prices are less than \$17,500/t nickel and 6.5% when prices are greater than or equal to \$17,500/t (capped at \$16,000,000).

SLM pays the following royalties on gold production:

- the state government equal to 2.5% of recovered gold; and
- third parties equal to 4.75% of recovered gold less allowable deductions.

Effect of Native Title on Beta-Hunt Mining Tenements

As of the date of the Beta Hunt Mine Technical Report, the sub-lease tenemants are not subject to any native title determinations and claims.

#### Environmental Liabilities

Karora is responsible for satisfying all rehabilitation obligations arising on or after 25 July 2013 on the Beta Hunt Mine Sub-Lease that have arisen as a result of the activities of Karora and CNKO. However, Karora is not required to restore or rehabilitate the area to a condition that is better than that existing on July 25, 2003 as determined by the environmental audit conducted at that time. SIGMC is responsible for all other rehabilitation obligations. A 2015 internal audit, based on a 2008 independent audit undertaken by Consolidated Minerals, estimated the current rehabilitation liability accruing to Karora for the Beta Hunt Mine Sub-Lease at \$881,000. In 2022, the disturbance area at Beta Hunt increased due to construction activities to raise underground production rates. The new estimate rehabilitation liability at Beta Hunt for the end of 2022 was \$1,270,560.

Karora is responsible for satisfying all rehabilitation obligations arising at the Higginsville GPF post the acquisition date of June 10, 2019. Karora is required to report annually the estimated rehabilitation liability for Higginsville. At the end of 2022, the estimate rehabilitation liability for Higginsville was \$26,769,885. The Higginsville rehabilitation liability estimate also includes mining activities for the extraction of ore, and the liability associated with the mill and tailings impoundment structures is significantly less.

Karora is responsible for satisfying all rehabilitation obligations at the Lakewood GPF since the site has been operational. Karora completed a new rehabilitation liability estimate for Lakewood GPF for the end of 2022. The review incorporated all known disturbance that has occurred on the associated tenure. The estimate rehabilitation liability for Lakewood was \$3,989,469 at the end of 2022.

Karora advises that there are no other outstanding significant environmental issues.

## History

#### **Beta Hunt Mine**

Kambalda Nickel Camp

WMC first intersected nickel sulphide mineralisation at Red Hill in January 1966 after drilling to test a gossan outcrop grading 1% Ni and 0.3% Cu. This discovery led to delineation of the Kambalda Nickel Field where WMC identified

24 deposits hosted in structures that include the Kambalda Dome, Widgiemooltha Dome and Golden Ridge Greenstone Belt. The deposits extend 90 km from Blair in the north to Redross in the south and over an east-west distance of 30 km, from Helmut to Wannaway. A single concentrator to treat ore from the various mines is centrally located, in Kambalda (now owned by BHP).

Beta Hunt Nickel Discovery

The Hunt nickel deposit was discovered by WMC in March 1970, during routine traverse drilling over the south end of the Kambalda Dome. The discovery hole, KD 262, intersected 2.0 m grading 6.98% nickel. Portal excavation for a decline access began in June 1973. While the decline was being developed, the Hunt orebody was accessed from the neighbouring Silver Lake mine, via a 1.15 km cross-cut on 700 level. The 700 level access is now used to provide service water to the Beta Hunt Mine. The first ore was hauled up the decline in October 1974.

1974 - 1998 WMC Operation

The first ore production from the decline occurred in October 1974. Over the following 14 years, WMC operated the mine periodically and extended the decline south through the Alpha Island Fault (for the purposes of this Appendix "A" only, "AIF") to access the Beta nickel deposit. By the time production was halted in 1998 due to the Asian crisis and associated collapse in nickel prices, the Beta decline and return airway had been established. Figure 3 shows the mine development at the completion of the WMC operation in 1998.

Although patches of gold have been found at Hunt since nickel mining began, it was not until 1978-1979, when decline development reached the 10 and 11 levels of A Zone and the 9 and 10 levels of D Zone deeps that the presence of a major gold mineralised system was confirmed in the footwall basalt. From 1979 to 1984, development and mining of

the A Zone gold orebody took place on four levels using both airlegs and jumbos, with long-hole stopes being mined. Between 1979 and 1984, gold was also mined as specimen stone or in conjunction with nickel stoping operations.

As part of the divestment of non-core assets by WMC in late 2001, the tenements covering the current the Beta Hunt Mine Sub-Lease and all surface and underground infrastructure became the property of SIGMC, which is now part of Gold Fields. SIGMC did not operate the Beta Hunt Mine.

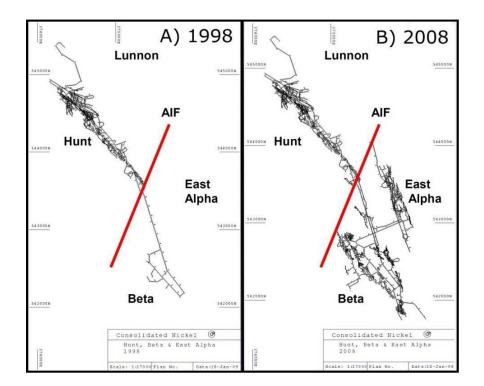


Figure 3: Plan view of the Hunt, Beta and East Alpha mine development

 $2003-2008\ Reliance\ /\ CNKO\ Operation$ 

Reliance Mining Limited ("RML") acquired rights to mine nickel on the Beta Hunt Mine Sub-Lease from SIGMC in 2003 and began production in November of that year. In 2005, RML was taken over by Consolidated Minerals and the operating company was renamed CNKO. The new owners invested heavily in infrastructure to access the deeper mineralization and increase the production rate, spending \$15M on the return air pass ("RAP") and associated fans.

It is important to note that the Beta Hunt Mine Sub-Lease did not include gold rights, which SIGMC retained. Consequently, no effort was made by CNKO to delineate gold resources and there was no follow-up of gold mineralisation intersected while drilling for nickel.

CNKO conducted significant drilling to expand the resource base, resulting in discovery of the East Alpha nickel deposit. The first ore containing nickel was mined from East Alpha in March 2006. Major exploration drilling programs were undertaken at Beta and East Alpha to extend the life of these mines. Despite the success of these programs, the financial crisis and associated collapse in nickel price resulted in CNKO placing the Beta Hunt Mine on care and maintenance on November 13, 2008.

Total reconciled production for Beta and East Alpha for the period 2003 to 2008 is 652 kt grading 2.43% Ni for approximately 16 kt nickel contained in ore.

At the time that CNKO suspended mining activities in 2008, resources were updated using all available drilling results. This historical resource estimate is presented in Table 3 as shown in the internal document by CNKO (2008).

Table 3: Historical the Beta Hunt Mine Mineral Resources as at 31 December 2008<sup>1</sup>

		December 2008			
Category	Tonnes ('000)	Ni%	Ni Tonnes ('000)		
Measured	123	4.9	6.0		
Indicated	328	4.5	14.8		
Inferred	416	3.7	15.4		
Total	867	4.2	36.2		

#### Notes:

1. Mineral Resources reported above 1% Ni cut off.

These are historical estimates. The historical estimates may have been prepared according to the accepted standards for the mining industry for the period to which they refer; however, they do not comply with the current CIM Standards for estimating resources and reserves as required by NI 43-101 guidelines. A qualified person has not done sufficient work to classify the historical estimates as a current resource estimate and the issuer is not treating the historical estimates as a current resource estimate. As a result, historical estimates should not be relied upon unless they have been validated and restated to comply with the latest CIM Standards.

## 2013-Present Salt Lake Mining Operation

The Beta Hunt Mine Sub-Lease was taken over from CNKO by SLM in 2013. Gold mining rights for the sub-lease were also secured by SLM from Gold Fields in 2013. This consolidation of gold and nickel rights put SLM in a position to exploit the synergies of adjacent but separate nickel and gold deposits that are accessible from common mine infrastructure. The mine began producing nickel and gold in the second quarter of 2014, with gold production being temporarily halted in the third quarter before restarting in the fourth quarter of 2015. Karora acquired 100% of SLM through a staged acquisition process that was finalized on May 31, 2016.

Since December 31, 2016 to September 30, 2022, the Beta Hunt Mine has mined 3,949 kt of gold mineralisation at average grade of 2.9 g/t Au (370 koz contained gold) and has delivered for processing 109 kt of nickel mineralization at an average grade of 2.4 % Ni (2.6 kt contained nickel).

Gold production at the Beta Hunt Mine was produced primarily from the Western Flanks and A Zone and includes an estimated 25 koz mined from the 15 level of the A Zone lode – Father's Day Vein in September and October, 2018.

Nickel was produced primarily from East Alpha and Beta areas.

## **Higginsville Processing Facility**

The procurement and construction of a new 1 Mtpa carbon-in-leach ("CIL") processing plant at Higginsville commenced in late 2007. The plant was commissioned in the first half of 2008 with the first official gold pour on July 1, 2008. The plant was designed to treat 1.3 Mtpa. The Trident mine was the base load of the operation, supplemented by feed coming from paleochannels and open pits. A paste plant delivering paste to the underground was completed in October 2009.

Karora acquired the plant, along with the Higginsville project, in June 2019. Modifications to the plant under Karora ownership include crusher product size optimization, larger cyclone feed and tails pumps, introduction of larger gravity screen, and improved cyclone classification. The plant is now designed to treat up to 1.6 Mtpa.

#### Lakewood

The Lakewood (Fimtails) Treatment Plant and associated tailings storage facility ("**TSF**") was initially constructed in 1989 (approved via Notice of Intent and operated on a periodic basis throughout the 1990s. Historic tailings from the Kalgoorlie-Boulder area were retreated using the CIL process, between 1989 and 1991. The Lakewood Treatment Plant was placed into care and maintenance from August 1991 until 1995.

Several companies purchased the Lakewood Treatment Facility between 1995 and 2022. In 2022, Lakewood Mining Pty Ltd (a fully owned subsidiary of Karora Resources) acquired the Lakewood GPF on July 27, 2022.

## Geological Setting, Mineralization and Deposit Types

Regional Geology

The Kambalda–St Ives region forms part of the Norseman–Wiluna greenstone belt which comprises regionally extensive volcano-sedimentary packages. These were extruded and deposited in an extensional environment at about 2700–2660 Ma. The mining district is underlain by a north-northwest trending corridor of basalt and komatiite rocks termed the Kambalda Dome. The iron-nickel mineralisation is normally accumulated within the thick Silver Lake Member of the Kambalda Komatiite Formation above, or on the contact with the dome structured Lunnon Basalt.

#### Lunnon Basalt

The footwall Lunnon Basalt is the lowermost unit in the stratigraphy at Hunt and is the host to the majority of gold mineralisation. The Lunnon Basalt has a minimum inferred thickness of 1,750 m and comprises tholeitic basaltic flows with persistent pillowed layers, flow top breccias and sediment bands.

#### Kambalda Komatiite

The Kambalda Komatiite is a sequence of high-MgO ultramafic flows between 50 m to 1,000 m thick. It is divided into two members: the lower Silver Lake Member, and upper Tripod Hill Member. The Silver Lake Member comprises one or more komatiite flows (10 m - 100 m thick) that are subdivided into a lower cumulate zone and an upper spinifex textured zone. The Tripod Hill Member consists of numerous thin (<0.5 m - 10 m) komatiite flows. Lateral and vertical variations in composition of each flow as well as distribution of interflow sulphidic sediments define channel flow and sheet flow facies. In the nearby nickel resources, the stratigraphic contact is highly irregular and structurally disturbed. Numerous mafic, felsic and intermediate intrusions intersect the sequence. The nickel sulphide resources occur at the base of the Silver Lake Member on the contact with the Lunnon Basalt.

#### Interflow sediments

Thin (< 5 m) interflow sedimentary rocks are common on the contact between the Lunnon Basalt and Kambalda Komatiite and within the komatiite lavas, particularly in the less differentiated Silver Lake Member. Sediments are dominated by pale cherty and dark carbonaceous varieties, which comprise quartz + albite with minor tremolite, chlorite, calcite and talc and sulphidic bands of pyrrhotite, pyrite, and minor sphalerite and chalcopyrite. Chloritic or amphibole-rich varieties are less common.

#### **Intrusions**

The units that host the nickel sulphide mineralisation are intruded by granitoids, dykes and sills of mafic, intermediate and felsic composition. Felsic intrusives of sodic rhyolite composition are coarse grained, porphyritic and quartz-rich, and commonly occur throughout the sequence as dykes and sills. Intermediate intrusives (typically dacitic composition) are more variable in texture and composition, but porphyritic types are common and contain feldspar phenocrysts in a biotite-amphibole matrix. Mafic intrusives of basaltic composition are less common but are known to occur in the Lunnon Shoot. The Kambalda Granodiorite in the core of the Kambalda Dome is trondhjemitic in composition and has associated felsic dykes.

These dykes vary in size and composition but are all thought to have been emplaced post D2 deformation and pre D4 gold mineralisation. As a result, gold mineralisation is not greatly disrupted by the presence of the porphyry intrusives and mineralisation is often enhanced at their contacts with the contrasting lithologies acting as a preferred zone of deposition.

## Local and Property Geology

The Beta Mine Sub-Lease covers the lower stratigraphy of the Kambalda Dome sequence comprising the footwall Lunnon Basalt, overlain by the Silver Lake and Tripod Hill members of the Kambalda Komatiite. The stratigraphy is intruded by quartz-feldspar and intermediate porphyry sills and dykes.

#### Nickel Mineralisation

Nickel mineralisation is hosted by talc-carbonate and serpentine altered ultramafic rocks. The deposits are ribbon-like bodies of massive, matrix and disseminated sulphides varying from 0.5 m to 4.0 m in true thickness but averaging between 1.0 m and 2.0 m. Down dip widths range from 40 m to 100 m and the grade of nickel ranges from below 1% to 20%. Major minerals in the massive and disseminated ores are pyrrhotite, pentlandite, pyrite, chalcopyrite, magnetite, and chromite, with rare millerite and heazlewoodite generally confined to disseminated mineralization. The hangingwall mineralization tends to be higher tenor than the contact material. The range of massive ore grades in the hangingwall is between 10% Ni and 20% Ni while the range for contact ore is between 9% Ni and 12% Ni. The hangingwall mineralogy varies between an antigorite / chlorite to a talc/magnesite assemblage. The basalt mineralogy appears to conform to the amphibole, chlorite, plagioclase plus or minus biotite.

Unlike other nickel deposits on the Kambalda Dome, the Beta Hunt Mine system displays complex contact morphologies, which leads to irregular ore positions. The overall plunge of the nickel deposits is shallow in a southeast direction, with an overall plunge length in excess of 1 km. The individual lode positions have a strike length averaging 40 m and a dip extent averaging 10 m. The geometry of these lose positions vary in dip from 10 degrees to the west to 80 degrees to the east. The mineralization within these ore positions is highly variable ranging from a completely barren contact to zones where the mineralization is in excess of 10 m in true thickness.

#### Gold Mineralisation

Gold mineralisation is focused about the Kambalda Anticline and controlled by northwest trending, steep, west dipping shear zones associated with re-activated normal faults that previously controlled the komatiitic channel flow and associated nickel sulphide deposition. Gold mineralization is interpreted as a D3 extensional event associated with porphyry intrusives – the source of magmatic hydrothermal fluids carrying the gold.

Mineralisation is hosted dominantly in Lunnon Basalt (below the ultramafic contact) with minor amounts associated with specific porphyry intrusives. Not all porphyries are mineralised - some are intruded post-mineralization. The basalt (and porphyries) are preferred mineralization hosts as a result of their susceptibility to hydraulic fracturing to form quartz veining, with the migrating ore fluids causing wall-rock alteration. The migrating ore fluids associated with the shearing are interpreted to pass through the overlying ultramafic (because of its ductile nature), developing as mineralization only where the shear zone passes through more competent rock, e.g., porphyry and basalt.

Gold mineralisation occurs in three broad, steeply dipping, north-northwest striking quartz vein systems within biotite-albite-pyrite altered shear zones hosted by the Lunnon Basalt. Veining is dominated by shear parallel and extensional vein styles. A Zone and the Western Flanks both occur to the north of the AIF, a major north-northeast trending structure and is represented by Beta mineralisation to the south of the fault. The Fletcher Shear Zone was discovered by drilling in 2016 and is the third mineralised gold zone at the Beta Hunt Mine.

A fourth zone, East Alpha, is inferred by analogy to the known mineralised quartz vein systems; however, further drill testing is required to confirm its existence.

Coarse, specimen quality occurrences of gold can occasionally be found where the mineralised shears intersect the interflow sediment horizon and the overlying nickel-bearing basalt/ultramafic contact.

## Deposit Types

The nickel deposits on the Beta Hunt Mine Sub-Lease are type examples of the Kambalda style komatiite hosted nickel sulphide deposits. The characteristics of the Western Flanks and A Zone gold lodes deposits are consistent with the greenstone-hosted quartz-carbonate vein (mesothermal) gold deposit model. Exploration for extensions of these deposits and new deposits within the Beta Hunt Mine Sub-Lease are therefore based on these models as described below.

## Kambalda Style Komatiite-hosted Nickel Sulphide Deposits

Kambalda style nickel sulphide deposits are typical of the greenstone belt hosted komatiitic volcanic flow- and sill-associated subtype of magmatic Ni-Cu-Pt group elements deposits.

#### Komatiitic Ores in Greenstone Belt Setting – Kambalda Camp

Nickel sulphide ores of the Kambalda camp are typical of the basal contact deposits associated with ultramafic flows in greenstone belts. They occur in the Kambalda Komatiite, which is a package of ultramafic flows (2,710 Ma) that has been folded into an elongate doubly plunging anticlinal dome structure about 8 km by 3 km. The underlying member of this succession is the Lunnon Basalt, and the overlying units are a sequence of basalts, slates and greywackes (2,710-2670 Ma). The core of the dome is intruded by a granitoid stock (2,662 Ma) whose dykes crosscut the komatiitic hosts and ores.

The Kambalda Komatiite is made up of a pile of thinner, more extensive sheet flows and thicker channel flows which have created channels by thermal erosion of the underlying substrate. The flows that contain ore are channel flows, which may be up to 15 km long and 100 m thick, and occupy channels in the underlying basalt. Flows in the pile are commonly interspersed with interflow sediment, typically sulphidic.

Most of the orebodies are at the basal contact of the lowermost channel flows (accounting for 80% of reserves), though some do occur in overlying flows in the lower part of the flow sequence. The orebodies typically form long tabular or lenticular bodies up to 3 km long and 5 m thick. The ores generally consist of massive and breccia sulphides at the base, overlain successively by matrix-textured sulphides, and disseminated sulphides. The sediment that underlies the flow sequence is generally absent beneath the lowermost ore-bearing channel flow, due to thermal erosion by the flow.

Structural deformation renders the shape and continuity of ores more complicated in many instances. Because of their weaker competency compared to their wallrocks, sulphide zones are in many cases strung out along, or cut off by faults and shear zones.

Greenstone-Hosted Quartz-Carbonate Vein (a.k.a. Orogenic/Mesothermal) Gold Deposits

Greenstone-hosted quartz-carbonate vein deposits ("GQC") are a sub-type of lode gold deposits. They are also known as mesothermal, orogenic, lode gold, shear-zone-related quartz-carbonate or gold-only deposits. They correspond to structurally controlled complex epigenetic deposits hosted in deformed metamorphosed terranes. They consist of simple to complex networks of gold bearing, laminated quartz-carbonate fault-fill veins in moderately to steeply dipping, compressional brittle-ductile shear zones and faults with locally associated shallow-dipping extensional veins and hydrothermal breccias. They are hosted by greenschist to locally amphibolite facies metamorphic rocks of dominantly mafic composition and formed at intermediate depth in the crust (5-10km).

The greenstone-hosted quartz-carbonate vein deposits are one of the most significant sources of gold and account for 13.1% of all the world gold content (production and reserves). They are second only to the Witwatersrand paleoplacers of South Africa. The largest GQC deposit in terms of total gold content is the Golden Mile complex in Kalgoorlie, Australia with 1821 tonnes Au. The Hollinger-McIntyre deposit in Timmins, Ontario, is the second largest deposit ever found with 987 tonnes of gold. The average grade of the deposits varies from 5 to 15 g/t Au, whereas the tonnage is highly variable from a few thousand tonnes to 10 million tonnes of ore, although more typically there are only a few million tonnes of ore.

## **Exploration**

## Beta Hunt

Exploration on the Beta Hunt Mine Sub-Lease by Karora has been completed primarily by drilling which is described under the heading "Drilling" below. Since the sale of the asset by WMC in 2001, limited non-drilling exploration has been completed on the property. The non-drilling exploration post WMC was conducted by RML and Consolidated Minerals to 2008 and focused on nickel mineralisation using a three dimensional seismic survey and downhole electromagnetic surveys. The current exploration programs are focused both on gold and nickel targets. Drilling is aimed at extending and upgrading known zones of mineralisation plus testing for new discoveries. Significantly in 2020, exploration drilling expanded to target testing for both nickel and gold mineralisation south of the Alpha Island Fault resulting in the discovery of the 30C Nickel Trough, Larkin Gold Zone in the Beta Block, and more recently the 50C Nickel Trough in the Gamma Block.

#### Gold

Non-drilling activity was focused on re-sampling historical drill core where previous owners targeted nickel mineralisation leaving potential gold mineralisation unsampled for gold analysis.

Between October 1, 2020 and September 30, 2022, a total of 19 holes have been resampled with significant results highlighted in Table 4.

Table 4: Significant results received from historical drill core not previously assayed for gold

Hole	From	To	Intercept	Comment
BE17-140RL	22	25.82	3.82m @ 3.23 g/t Au	
BE17-140RL	40	45.5	5.50m @ 2.25 g/t Au	
BE19-285	59	66	7.00m @ 1.33 g/t Au	
BE19-285	270.5	283	12.50m @ 1.46 g/t Au	Extended
BE19-296	179	182	3.00m @ 6.72 g/t Au	
BE19-296	185	188.8	3.80m @ 2.49 g/t Au	Extended
BE20-163RL	31.75	38.3	6.55m @ 1.13 g/t Au	
BE21-148RL	23.1	25.9	2.80m @ 1.83 g/t Au	
BE21-148RL	33.8	37.5	3.70m @ 3.26 g/t Au	
BE23-046	228	229	1.00m @ 8.33 g/t Au	
BE23-046	254	256	2.00m @ 4.32 g/t Au	

These results are incorporated into the current Gold Mineral Resource and also assist in providing future drill targets. The resampling program is ongoing.

#### Nickel

In 2020, a geological targeting exercise was undertaken at Beta Hunt to outline potential new nickel troughs hosting nickel sulphide mineralisation. Guiding principles that underpinned the recently completed drilling programs and continue to influence ongoing drill programs are as follows:

- Mineralisation occurs as corridors over 1 km wide, occurring as parallel troughs that extend for several kilometres down-plunge.
- The nickel troughs are offset by late-stage, dextral faults: Alpha Island Fault and the Gamma Fault.
- At Beta Hunt, the nickel corridor comprises an Eastern and Western Belt, which are interpreted as being continuous throughout the Beta Hunt nickel mineralised system.
- It was the recognition that the Western Belt mineralisation was not tested on the south-side of the Gamma Fault that produced the drill program that led to the discovery of the 50C nickel trough and confirmation that the Western Belt continues south of the Gamma Fault

Based on the Karora geological model, a five hole, 1,381 m underground diamond drill program aimed to test for an offset continuation of the Western Beta nickel belt at the very southern end of the Beta Hunt mine and was completed in late 2020. The offsetting structure is known as the Gamma Fault and is interpreted to up-throw the southern block up to 200 m. The drill program was co-funded by the Western Australian Government as part of its co-funded Exploration Incentive Scheme.

The targeted basalt/ultramafic contact was intersected in four of the five holes, with nickel mineralisation intersected in three holes—G50-22-005E, G50-22-003E and G50-22-002—in the targeted nickel contact position. Two holes, G50-22-005E and G50-22-003E, encountered strong nickel mineralization logged as massive and disseminated nickel sulphide, with hole G50-22-005E intersecting 2.2 m (downhole) of massive nickel sulphide.

Assay results support the visual observation of high tenor mineralisation in this hole:

- G50-22-005E: 11.6% Ni over 4.6 m, including 18.4% Ni over 2.2 m;
- G50-22-002E: 1.2% Ni over 0.3 m; and
- G50-22-003E: 2.4% Ni over 1.8 m.

These results are 140 m from existing mine development and reinforce the potential for a repeat of the Beta Hunt mineralization south of the Gamma Fault, representing a significant growth opportunity for by-product nickel production at Beta Hunt.

## Drilling

Drilling at the Beta Hunt Mine has been completed by numerous owners including WMC, RML, CNKO and Karora. The earliest drilling contained within the Karora database was completed in 1970 by WMC targeting primarily nickel. Subsequent owners completed drill programs to delineate gold resources in addition to the nickel targets.

As of September 30, 2022, the Karora database contains records for 5,352 drill holes within the sub-lease boundary, for approximately 760,000 m. Various drill methods have been completed at Beta Hunt, and these are summarised in Table 5.

Table 5: Beta Hunt drill database summary – September 2022

Drill Type	Number	Metres
Aircore (AC)	88	2,672
Diamond	5,205	750,562
Percussion	13	886
Rotary air blast (RAB)	5	266
Reverse circulation (RC)	33	2,803
Reverse circulation/diamond (RCD)	8	2,076
Total	5,352	759,265

Between the previous Technical Report published by Karora on February 3, 2021 for drilling to September 30, 2020 Karora has completed a further 581 drill holes for approximately 107,000 m to September 30, 2022. Drilling was undertaken to define additional gold and nickel resources and to upgrade the Mineral Resource classification to support ongoing production and define mineable material. A summary of this drilling is shown in Table 6.

Table 6: Beta Hunt drill database summary – October 2020 to September 2022

Drill Type	Number	Metres
Aircore (AC)		
Diamond	570	104,137
Percussion		
Rotary air blast (RAB)		
Reverse circulation (RC)	3	320
Reverse circulation/diamond (RCD)	8	2,076
Total	581	106,533

Drilling at the Beta Hunt Mine has provided key information to support Mineral Resource estimations for gold and nickel, as detailed under the heading "Mineral Resource Estimates" below. A significant number of nickel and gold occurrences were intersected outside the previous (2020) Mineral Resource testing. Drilling for gold in 2021 and 2022 was focused on northern and down-dip extensions of the A Zone and Western Flanks Mineral Resources, testing for mineralized off-set extensions south of the Alpha Island Fault and reconnaissance testing of the Fletcher Zone target. This drilling resulted in:

- Extending the Western Flanks gold mineralisation to the north and down-dip.
- Extending A Zone to the north.
- Defining a new Mineral Resource south of the Alpha Island Fault named the Larkin Zone and a new zone parallel and west of Larkin, known as the Mason Zone.
- Confirmation of over 500 m strike potential for the Fletcher Zone.

Exploration drilling for nickel over the period of October 2020 to January 2022 was focused on the discovery of new nickel troughs south of the Gamma Fault. Drilling targeted the Western Nickel Belt, west of the previously defined 10C nickel Mineral Resource.

The drilling was successful in discovering the 50C Nickel Trend. This discovery was followed up with both extensional and infill drilling which defined continuous nickel sulphide mineralization over 200 m in strike length. The 50C Nickel Trend is now a significant contributor to Karora's nickel Mineral Resources as detailed under the heading "Mineral Resource Estimates" below.

## Sampling, Analysis and Data Verification

Sampling

Since 1966, drill hole data for the Beta Hunt Mine gold and nickel mineralisation has been collected by Karora, SLM (acquired by Karora in 2016), CNKO and WMC. Drill-hole programs by SLM and CNKO were conducted under written protocols which were very similar and generally derived from the original operator, WMC. The operator's geologists performed the geological (and geotechnical where required) logging and marked the core for sampling. The core was either cut on site or delivered to the laboratory where all further sample preparation was completed prior to assay analysis. All diamond core has been 100% logged by a geologist. Core after 2007 has also been geotechnically logged. All core after 2007 has been photographed wet, and the photos are stored on the network.

SLM gold sampling was less-selective to ensure gold assays were received to cover the full extent of gold related alteration. SLM sampling for nickel was selective, and sample intervals correspond with the footwall contact of the Kambalda Komatiite and any areas with visual indicators of nickel-bearing sulphides.

Sample handling and submission to the laboratory protocols were documented for SLM and CNKO. No historic documentation is available for WMC drill holes.

#### Karora 2016-2019

Diamond drilling carried out by Karora is logged, sampled and analysed according to written procedures. Logging was entered into drill hole logging software on field laptop computers and checked into Karoroa's geological databse.

Gold and/or nickel mineralisation was targeted using NQ2 diamond drill holes generally sampled as half core, except for grade control holes which were sampled as whole core. Sample intervals were based on geology, with a minimum 0.2 m to maximum 1.2 m sample size. Whole core samples were taken with a maximum length approximately 1.0 m to reduce excessive sample weight.

Grade control holes in 2018-2020 were drilled in core size LTK60 and sampled as whole core. All grade control completed in 2020–2022 were drilled with NQ2 core and sampled as whole core. Before sampling, diamond core was photographed wet, and the generated files stored electronically on the Karora server.

Sampling was performed by a technician in line with sample intervals marked up on the core by a geologist. Core was cut at the sample line and either full or  $\frac{1}{2}$  core was taken according to the geologist's instructions and placed into numerically marked calico sample bags ready for dispatch to the laboratory, and quality assurance and quality control ("QA/QC") standards and blanks were inserted in series. All diamond core was oriented, as far as possible, and oriented structures logged with alpha and beta angles.

Sample security protocols in place aim to maintain the chain of custody of samples to prevent inadvertent contamination or mixing of samples, and to render active tampering as difficult as possible. Sampling is conducted by Karora staff or contract employees under the supervision of site geologists. The work area and sample storage areas

are covered by general site security video surveillance. Samples bagged in plastic sacks are collected by the laboratory transport contractor and driven to the SGS Kalgoorlie laboratory.

Laboratory Sampling and Sub-Sampling Procedures

All Beta Hunt Mine samples since March 2016 have been processed at the following independent commercial laboratories:

**Table 7: List of Independent Commercial Laboratories** 

Laboratory	Address	Comment			
SGS Australia	17 Stockyard Way	Accreditation Status: ISO 9001. Accrediting Body: BSI			
(SGS Kalgoorlie)	Kalgoorlie WA 6430				
SGS Australia	28 Reid Road	Accreditation Status: ISO 9001 /IEC 17025. Accrediting			
(SGS Perth)	Perth Airport WA 6105	Body: NATA			
Australian Laboratory Services (ALS	31 Denninyup Way	Accreditation Status: ISO 17025.			
Perth Malaga)	Malaga WA 6090	ALS Perth is a NATA Accredited Testing Laboratory.			
		Corporate Accreditation No: 825, Corporate Site No: 23001			
Australian Laboratory Services (ALS	79 Distinction Road	Sample Preparation Facility			
Perth Wangara)	Wangara WA 6065				
Australian Laboratory Services (ALS	5 Keogh Way	Accreditation Status: ISO 9001.			
Kalgoorlie)	Kalgoorlie WA 6430				

Since March 2016, the majority of Beta Hunt samples were processed for gold at SGS Kalgoorlie and nickel at SGS Perth. The laboratory sample preparation process was carried out at SGS Kalgoorlie and SGS Perth at different periods due to SGS resource management, but the process is as follows at both SGS laboratories:

- samples are dried if necessary;
- samples are crushed to 3 mm and split; most samples weigh from 1 kg to 2.8 kg:
  - o one split is forwarded to milling;
  - o second split is kept as retained crushed sample; and
  - o second split is also analysed at intervals generated by the laboratory computer.

Sample splits are pulverised to 85% passing 75  $\mu$ m; this is done in a cycle through a row of four mills, so a sample numbered four higher than the previous will be processed through the same mill.

- The pulverised material is treated as follows:
  - o sampled by scoop (300 g);
  - o subsampled taking 25 g to check screening (one sample in 20); and
  - o excess retained.

Analysis

During 2021, samples were processed for gold at ALS Kalgoorlie and ALS Perth. From 2005 to March 2016, all samples to be analysed for either nickel or gold were sent to Bureau Veritas (Kalassay) laboratories in Kalgoorlie. The assay laboratories used prior to this time are unknown.

Gold Analysis

In March 2016, SLM changed from Bureau Veritas (Kalassay) to SGS Kalgoorlie for analysis.

SGS fire assay procedure for gold used at SGS Kalgoorlie is as follows. First, sample preparation is done through crushing and splitting as per the section titled "Laboratory Sampling and Sub-Sampling Procedures" above. Then, 50

g subsample of pulverised material taken for fire assay in disposable container. The flux dispenser adds 170 g of flux to 50 g charge in racked disposable container. Then the carry out fire assay process occurs by pouring the racked charges into racked fire assay crucible, firing the charges in their racks, removing from furnace and pour racks into cooling mould, recovering the fused button from the glass slag, then the button is fired in a cupel which absorbs the base metals and leaves a prill of precious metal (Au and if present Pt and Pd) only. The prill is then dissolved in nitric acid, hydrochloric acid (aqua regia) and the solution is made up to volume and analysed by atomic absorption spectroscopy ("AAS"). QA/QC is completed by the laboratory using internally supplied blanks duplicates, replicates and standards in every submitted batch. After completion of the sample analyses, either AAS or inductively coupled plasma ("ICP"), the laboratory staff follow internal procedure (QP21) to identify any outliers and conduct required repeats. Only after all QA/QC samples pass will a report be issued to the client.

#### Nickel Analysis

Before March 2016, Beta Hunt nickel samples were analysed at Bureau Veritas (Kalassay). The analytical method for nickel was by multi-element analysis by mixed acid digest/ICP-AES or ICP-MS (MA200, MA201, MA202). The sampling method entailed collecting a 200 mg subsample and the sample was weighed. The subsample was digested using a mixed acid before ICP analysis.

Since March 2016, all analyses for Beta Hunt nickel samples have been carried out by SGS Perth (by multi-element ICP).

## Quality Control

Drill hole programs by SLM, CNKO and RML were conducted under written protocols which were very similar and generally derived from the previous operator. Certified standards, blanks and duplicates were part of the protocols. No umpire laboratories have been used. QA/QC data is available for certified standards and blanks which were routinely inserted into sample batches after 2007.

The standards and blanks analysed suggest the quality of nickel sample preparation and assaying work conducted by Kalassay during 2008 was not to a high standard with some jobs requiring re-assay. The analysis did not demonstrate any clear bias in the data. Reconciliation of nickel mining by SLM has generally been very good. This outcome indicates that the quality of laboratory work during this time has not impacted materially on the estimation of nickel Mineral Resources.

#### Karora / SLM 2014-2020

All drill hole programs completed by Karora were controlled by written procedures. Relevant changes since the February 2016 preliminary economic assessment are outlined below.

- Certified standards for gold and nickel were provided by Ore Research & Exploration Pty Ltd ("OREAS") between 2014 and June 2016. From June 2016 on, Geostats standards were procured for Au, and by November 2016 were exclusively used for Au assay batches. Geostats Ni purpose reference standard samples were introduced in June 2020 and effectively replaced the OREAS reference samples.
- Coarse Blank used by SLM is Bunbury Basalt sourced from Gannet Holdings Pty Ltd via Westernex Pty Ltd.
- From March to December 2017, Karora made their own blank material to reduce costs. This was made up from crushed sample reject, by selecting samples with analyses of <0.01 g/t Au.

The Karora procedure for insertion of quality control samples is as follows. First, insert at least one blank and one certified reference material ("**CRM**") per batch, however small the batch of drill hole samples plus one CRM or blank every 20 samples. One blank and one standard is inserted within a recognised ore zone, and one CRM or blank, either added or by moving ones applied every 20 samples. In samples with observed visible gold, it is recommended to put a coarse blank in the fourth sample after the visible gold. This serves both as a coarse flush to prevent contamination of subsequent samples and a test for Ausmearing from one sample to the next due to inadequate cleaning of the crusher and pulveriser. Visible gold sample numbers are recorded on the laboratory dispatch sheet. The laboratory has added feldspar flush and additional cleaning after those samples.

#### Quality Control Analysis

When assays are imported into the Geological Database Management System (the "GDMS"), the standards and blanks are automatically checked and pass/fail criteria applied. If a batch fails it is assessed using the following procedure. A single failure with no apparent cause, in a length of waste, may be accepted by the Qualified Person (geologist or database administrator). However, a failure or multiple failures that fit a pattern of substituted standards may also be accepted. A failure near or in a length of mineralization, will result in a request to the laboratory for re-assay of relevant samples. The Qualified Person changes the status from "Failed" to "DH Reassay" in the GDMS and then the reassayed results will be re-loaded and checked against QA/QC again.

If the quality control standard(s) and/or blanks fail, the batch may be wholly or partly re-assayed at the discretion of the geologist. Where re-assaying has occurred, the quality control standards and blanks are checked. During the reporting period from September 2020 to September 2022, a total of 873 sample batches were submitted to four laboratories. These represented 94,504 diamond drill hole core samples. A total of 23 QA/QC samples (field resamples) were submitted to SGS Kalgoorlie. A total of 8,042 company certified standards and blanks were submitted to ALS (Perth or Kalgoorlie) and SGS (Perth or Kalgoorlie). No major issues were noted other than the occasional outlier which were individually investigated and resolved. Additionally, there were re-assays of coarse rejects for a number of sample batches taken in early 2020, and the results of these re-assays were reported in the Company's 2020 technical report.

Nickel purpose samples that were collected after September 2020 were processed at the SGS Kalgoorlie laboratory and analysed at the SGS Perth laboratory. There were 78 batches processed that included 2,668 samples. All submitted batches included certified blank material (Bunbury Basalt) and nickel reference standards. Blank samples were inserted at a rate of one in every 29 samples, and nickel reference standards were inserted one in every 18 samples.

The Qualified Person considers the sample preparation, security and analytical procedures to be adequate. Any data with errors have either been corrected or excluded to ensure data used for Mineral Resource estimation are reliable. During the site visits, and working on site, the Qualified Person has inspected the core logging yard and directly observed how core was sampled and transferred to the care of the laboratory. In the opinion of the Qualified Person, the procedures in place ensure samples remained in the custody of appropriately qualified staff. The sampled trays of cut core are stacked on pallets and placed in the onsite core yard.

A laboratory audit of SGS Kalgoorlie was conducted on October 24, 2022 by Karora's database Manager. Pulps returned from laboratory sample preparation are stored in the core yard on pallets. These remain available for later rechecking of assay programs. The Qualified Person conducted an audit of the SGS laboratory, Kalgoorlie on June 17, 2022 and confirmed the processes and equipment met industry standards. During the site visits, and working on site, the Qualified Person found no evidence of active tampering. Procedures to prevent inadvertent contamination of assay samples have been followed, including daily hosing out of the core saw and sampling area.

## Data Verification

The "qualified person" has, through examination of internal Karora documents, including monthly QA/QC site reporting, the implementation of routine, control checks and personal inspections on site and discussions with other Karora personnel, verified the data in the Beta Hunt Mine Technical Report and satisfied himself that the data is adequate for the purpose of the Beta Hunt Mine Technical Report.

## **Mineral Processing and Metallurgical Testing**

#### Gold Processing

The Beta Hunt Mine uses the current Higginsville GPF, which has been in operation since July 2008 and local mill feed variability is well understood. Various testwork programs dating back to 2008 have been used to understand potential impacts during crushing and milling as new production sources come online. As new production sources are delineated, testing is conducted to assess whether the metallurgy will vary significantly for the anticipated responses.

For both the Higginsville GPF and Lakewood GPF, mill feed characterisation, classification and recovery test work is conducted on new production sources as required. Typical metallurgical testwork is comprised of head assays determination; ball mill work index determination and Abrasion index testing; grind establishment to 75 um;

gravity recovery; leach test on the gravity tail with the following set points; pH 8.5; CN at 200ppm; 40% solids with site water; and 48 hours leach time. Additionally, extended leach testwork is sometimes required using lead nitrate additives. Diagnostic leach testwork may also be carried out if the standard leach test shows lower than expected recoveries.

## Nickel Processing

Since ownership by WMC and until June 2018, nickel mineralization from the Beta Hunt Mine was processed at the nearby Kambalda Nickel Concentrator ("KNC") that is currently owned by BHP. As a result, the quality, variability and metallurgical response for this material is well understood. The mineralisation is considered to be typical for the area and was blended with mineralization from other mines. As it would not be possible to measure the metallurgical recovery of the Beta Hunt Mine material within the blend, recovery was credited based on the grade of material treated as per the contractual agreement between BHP and Karora.

In July 2018, KNC was put on care and maintenance due to declining nickel production in the area. From May 2018, until June 2022, nickel mineralisation was being campaigned through BHP's Leinster Nickel Concentrator, while KNC remained on care and maintenance. KNC resumed treatment in July 2022.

The nickel mineralisation also contains limited quantities of both copper and cobalt.

The nickel mineralization is considered "clean" as it has low levels of deleterious elements, specifically arsenic (As), levels currently average < 20 ppm, compared to the penalty threshold of 400 ppm, and iron (Fe), MgO ratio is well above the threshold level of 0.8, below which penalties are charged.

#### **Mineral Resource Estimate**

This Mineral Resource statement presented below sets out the gold and nickel Mineral Resource Estimates. The Consolidated Gold Mineral Resource estimates for the Beta Hunt Mine, as summarised in Table 8Error! Reference s ource not found., are effective as of September 30, 2022. Gold Mineral Resources at the Beta Hunt Mine comprise the Western Flanks, A Zone and Larkin deposits.

The Consolidated Nickel Mineral Resource estimate at Beta Hunt is summarised in Table 9, effective as of September 30, 2022. The Nickel Mineral Resource is associated with the Beta and East Alpha deposits at Beta Hunt.

Table 8: Beta Hunt Consolidated Gold Mineral Resources as at September 30, 2022 (1, 2, 3, 4, 5, 6, 8 & 9)

Measured			Indicated			Measured & Indicated			Inferred			
Location	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz
Beta Hunt Mine	269	2.5	22	16,611	2.5	1,329	16,880	2.5	1,351	12,444	2.6	1,052

Table 9: Karora Consolidated Nickel Mineral Resources as at September 30, 2022 (1, 2, 3, 4, 5, 6, 7, 8 & 9)

		Measured		Indicated			Measured & Indicated			Inferred		
Location	kt	Ni %	Ni Metal kt	kt	Ni %	Ni Metal kt	kt	Ni %	Ni Metal kt	kt	Ni %	Ni Metal kt
Beta Hunt Mine	-	-	-	745	2.80	21,100	745	2.80	21,100	500	2.70	13,400

#### Notes:

- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mineral Reserves.
- The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce Mineral Reserves.
- 3. The Mineral Resource estimates include Inferred Mineral Resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is also no certainty that Inferred Mineral Resources will be converted to Measured and Indicated categories through further drilling, or into Mineral Reserves once economic considerations are applied.

- 4. The Gold Mineral Resource is estimated using a long term gold price of US\$1,675/oz with a US:AUD exchange rate of 0.70.
- 5. The Gold Mineral Resource is reported using a 1.4 g/t Au cut-off grade.
- 6. The Nickel Mineral Resource is reported above a 1% Ni cut-off grade.
- 7. Mineral Resources are depleted for mining as of September 30, 2022 with the exception of A Zone which is depleted as of July 31, 2022.
- 8. Beta Hunt is an underground mine and to best represent "reasonable prospects of eventual economic extraction" the Mineral Resource was reported taking into account areas considered sterilized by historical mining. These areas were depleted from the Mineral Resource.
- Mineral Resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add up due to rounding.
- 10. CIM Definition Standards (2014) were followed in the calculation of Mineral Resources
- 11. Gold and Nickel Mineral Resource estimates were prepared under the supervision of Qualified Person S. Devlin, FAusIMM (Group Geologist, Karora Resources).

This section describes the preparation and estimation of Mineral Resources for the Beta Hunt Mine. The Mineral Resource estimates reported herein were prepared under the supervision of Mr. Stephen Devlin, FAusIMM, in accordance with the NI 43-101 and Form 43-101F – *Technical Report*. Mr. Devlin is Group Geologist - Exploration and Growth at Karora and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code, 2012 Edition and fulfils the requirements to be a "Qualified Person" for the purposes of NI 43-101.

In the opinion of Mr. Devlin, the Mineral Resource estimation reported herein is a reasonable representation of the consolidated gold and nickel Mineral Resources found at the Beta Hunt Mine at the current level of sampling.

Resource Estimation Process

Gold

The September 30, 2022 Mineral Resource estimation process involved updating the previously released January 31, 2022 Western Flanks, A Zone and Larkin models to take into account significant additional drilling to September 2022. The Western Flanks and A Zone estimates were completed in-house by Karora personnel. The Larkin estimate was completed by AMC Consultants using mineralisation interpretations completed by Karora personnel. Gold resource estimation methodology involved the following procedures for the latest update: (i) database compilation and verification of drill hole survey data and collar locations; (ii) construction of wireframe models for cross-cutting faults, host rock types and mineralisation domains. Interpreted shapes for faults were modelled prior to the host lithologies due to the faults disrupting stratigraphy and mineralization. Modelling host lithologies prior to modelling mineralized domains assisted interpretation of the architecture of the mineralization with the Beta Hunt Mine gold bearing structures frequently located along/within the margins of different host lithologies; (iii) data conditioning (compositing assys to 1 m intervals and capping of extreme grades) for geostatistical analysis and variography; (iv) block modelling and grade interpolation. All domains have been estimated directly using ordinary kriging, however, the hangingwall domain of Western Flanks was coded with indicator values (mineralization or waste) prior to estimating; (v) resource classification and validation; and (vi) depletion of the Mineral Resource using triangulations of development and stope voids supplied by the Beta Hunt Mine surveyors.

The Mineral Resources have been reported at a gold cut-off grade of 1.4 g/t based on the grade calculations contained in the Beta Hunt Mine Technical Report. Areas considered sterilised by historical mining have not been reported.

Nickel

Datamine and Micromine software were used to construct the geological and mineralization solids, prepare assay data for geostatistical analysis, construct the block model, estimate metal grades and tabulate Mineral Resources. Datamine RM, Isatis and Datamine Supervisor<sup>TM</sup> software were used for geostatistical analysis and variography.

All nickel Mineral Resources are located south of the Alpha Island Fault, and economic mineralisation is hosted within and adjacent to volcanic channels that sit at the stratigraphic base of the Kambalda Komatiite. Nickel sulphides are within narrow troughs that plunge gently to the south.

The nickel resource estimation methodology involved the following procedures: (i) database compilation and verification of drill hole survey data and collar locations; (ii) construction of wireframe models was completed for cross-cutting faults, host rock types and mineralisation domains. The ultramafic/basalt contact surface is a guide for the orientation and geometry of nickel sulphides. Modelling porphyritic intrusives and faults prior to modelling

mineralized lenses also assisted interpretation of the nickel mineralisation with porphyry intrusions and cross-cutting faults disrupting mineralisation; (iii) data conditioning involved compositing assays to full length intervals for geostatistical analysis and variography. The orientation of interpreted nickel lenses was the basis for calculating true thicknesses of intervals within each lens. A nickel accumulation variable was calculated as NIACC\_M = NI% \* TRUETHK where TRUETHK is the thickness expressed in metres. True thickness was scaled for use in the calculation of accumulation variables to be order-of-magnitude similar to other grade variables estimated; (iv) block modelling and grade interpolation. The majority of domains have been estimated indirectly using metal accumulation kriging and thickness and metal concentration back calculated by dividing the accumulation variable by true thickness. For a small number of domains in the Beta Southwest area, drilling was orientated oblique to the mineralisation and in these cases direct ordinary kriging was involved and drilling composited to 1 m standard intervals; (v) resource classification and validation; and (vi) depletion of the Mineral Resource using triangulations of development and stope voids supplied by Beta Hunt Mine surveyors. Sterilisation triangulations were also used to deplete mineralisation.

#### **Mineral Reserve Estimate**

The gold mineral reserve estimates for the Beta Hunt Mine set out below were calculated by Entech Pty Ltd ("Entech"), who were employed by Karora to undertake the gold mineral reserve estimate for Beta Hunt. The gold mineral reserve estimates have been prepared using accepted industry practice and classified in accordance NI 43-101 reporting standards by Ross Moger under the supervision of Shane McLeay, FAusIMM. Both are employees of Entech. Shane McLeay, FAusIMM of Entech accepts responsibility as "Qualified Person" for the mineral reserve estimates.

Since July 2019, the Beta Hunt Mine has been operated on an integrated basis with the Higginsville GPF and 100% of the Beta Hunt feed has been processed at HGO. The mineral reserve estimate calculations are based on actual costs, production rates and metallurgical factors achieved at these operations.

## Mineral Reserve Estimation Process

A process has been followed to convert the Mineral Resources to Mineral Reserves which is underpinned by design, schedule and economic evaluation completed by Entech and overseen by Karora. Entech's general conversion process is described in the following points:

- the three Mineral Resource models were provided by Karora to Entech; one for the Western Flanks mining area, one for the A Zone mining area and one for the Larkin mining area;
- stope optimizations were run on these Mineral Resource models, using Datamine Software's Mineable Shape Optimiser®, filtered to a 1.8 g/t cut-off grade. The resulting stope shapes were reviewed for practicality of mining, with unpractical mining shapes removed;
- modifying factors were applied to these stope shapes including dilution and recovery factors based on Karora's current dilution and recovery performance;
- a development design was produced to align with the resulting stope shapes that tied into the existing underground as-builts. The development design follows current site design criteria and a development ore dilution factor of 5% and recovery factor of 100% has been applied;
- stope shapes were depleted with development drives;
- the mine design was then depleted with current site as-builts provided by Karora;
- all stope and development designs (the mine design) were evaluated with Mineral Resource models and any inferred material within the mine design was set to waste grade (0 g/t Au);
- levels were evaluated using the cost and revenue assumptions applied in the cut-off grade estimation and sub-economic levels were removed from the Mineral Reserve;
- the mine design was scheduled in Deswik mining software to produce a mine plan, using current site productivity rates and following the appropriate mining sequence; and
- the resulting mining schedule was evaluated in a financial model based on current operation costs to ensure economic viability.

The resulting mineral reserve estimate as at September 30, 2022 is shown in Table 10.

Table 10: Summary of the Beta Hunt Mine Mineral Reserves – September 30, 2022<sup>(1)(2)(3)(4)</sup>

	Proven			Probable			Total		
	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz
Western Flanks	101	2.4	8	4,727	2.5	386	4,827	2.5	393
A Zone	14	3.2	1	1,200	2.2	85	1,214	2.2	87
Larkin	-	-	-	719	2.5	58	719	2.5	58
Total	115	2.5	9	6,646	2.5	529	6,761	2.5	538

#### **Notes:**

- 1. The mineral reserve is reported at a 1.8 g/t incremental cut-off grade
- Key assumptions used in the economic evaluation include:
  - (i) a metal price of USD\$1,405 per oz gold and an exchange rate of 0.70 US\$:A\$.
  - (ii) metallurgical recovery of 94%
  - (iii) the cut-off grade takes into account operating mining processing/haulage and G&A costs, excluding capital.
- 3. The mineral reserve is depleted for all mining to September 30, 2022.
- 4. The tonnes and grades are stated to a number of significant digits reflecting the confidence of the estimate. Since each number is rounded individually, the table may show apparent inconsistencies between the sum of rounded components and the corresponding rounded total. Stope Design Parameter

The following stope design parameters were applied within the mine design: (1) minimum footwall dip angles were set at 40 degrees; (2) minimum mining widths (excluding dilution) of 5.0 m were applied in all mining areas; (3) dilution of 0.25 m on the footwall and hanging wall of each stope shape (total of 0.5 m of dilution) applied as part of the stope optimization process. The dilution is evaluated with the Mineral Resource model; and, therefore, dilution carries the evaluated grade from the Mineral Resource model; and (4) sill pillars have been included in the mine design as per Karora geotechnical recommendations. An additional mining recovery factor of 85% has been applied to account for rib pillar requirements, and bogging recovery losses as per Karora's currently applied geotechnical parameters.

Cut-off Grade Derivation

Cut-off grades are based on revenue inputs and current site actual costs as stated in Table 11.

**Table 11: Cut-off Grade Inputs** 

Factor	Unit	Assumption 1,400	Source
Gold price	\$US / oz	1,450	Karora Forecast
State Royalty	%	2.5	Site Actuals
Other Royalty	%	4.75	Site Actuals
Mill Recovery	%	93.5	Site Actuals
Haulage and Milling Cost	\$A / t ore	44.61	Site Actuals
Mining Direct Operating Costs	\$A / t ore	34.01	Site Actuals
Technical Services	\$A / t ore	2.20	Site Actuals
Mining Maintenance Costs and Admin	\$A / t ore	4.50	Site Actuals
Grade Control Drilling	\$A / t ore	2.75	Site Actuals
Operating Development	\$A / t ore	15.00	Karora Forecast

When completing the initial stope optimisation process, a 1.8 g/t cut-off grade was applied. After depletion of stope shapes with development and setting of Inferred material to waste grade (0 g/t Au), levels were evaluated using the cost and revenue assumptions applied in the cut-off grade estimation and sub-economic levels were removed from the Mineral Reserve. An ore development cut-off grade of 0.8 g/t was applied which covers the processing cost, as mining and haulage of this material is a sunk cost required for access for stoping. The cut-off grade inputs and calculations are shown in the following tables.

**Table 12: Cut-off Grade Inputs** 

Assumptions	Unit	Value			
Gold Price Calculation					
Gold Price	\$US / oz	1,450			
Exchange Rate	\$US : \$A	0.70			
Metallurgical Recovery (Au)	%	93.5			
Total Royalty	%	7.25			
Total Revenue per Ounce of Gold	\$A / oz	1,800			
Total Revenue per Gram of Gold	\$A / g	57.8			

**Table 13: Cut-off Grade Calculation** 

Operating Costs	Unit	Operating Costs	Incremental Stoping Costs	Development Cut-off Grade
Direct Operating Costs	\$A / t	28.78	28.78	
Grade Control Drilling	\$A / t	17.05	17.05	
Technical Services Cost	\$A / t	5.65	5.65	
G&A Cost	\$A / t	8.37		
Sustaining Capital Costs	\$A / t			
Total Mine Operating Cost	\$A / t	59.85	51.48	
Processing and Surface Haulage	\$A / t	36.00	36.00	36.00
Total Operating Cost	\$A / t	95.85	87.48	36.00
Economic Stope cut-off grade	g / t	1.7		
Incremental Stope cut-off grade	g / t		1.6	
Incremental Development cut-off grade	g/t			0.6

## **Mining Operations**

The Beta Hunt Mine is a mechanized underground mine accessed from established portals and declines. The mine commenced operation in 1974, mining both nickel and gold over extended periods. From 2008 to 2014, the mine was on care and maintenance with gold mining recommencing in 2015. Currently, the mine is producing at a rate of approximately 100,000 t/per month ore. Gold mine production is processed at the Higginsville GPF and Lakewood GPF located 78 km south by road and 61 km by road to the north, respectively.

The mine is accessed via an established portal and declines. Pumping, ventilation, power and mine service infrastructure is established and in use for current mining operations.

Underground gold mining currently takes place in two mining areas, the Western Flanks and the A Zone, with planned mining of the Larkin orebody in the future. The strike of the orebody is approximately 1,500 m, with stoping occurring

over a total vertical extent of approximately 360 m. Western Flanks and A Zone employ a top down, longhole retreat mechanized mining method which suits subvertical nature of the orebody. Mining at Larkin will also utilise the same mining method.

In situ rib and sill pillars are left at geotechnically specified positions, with sill pillars typically at 75 m vertical intervals. An isometric view of the stopes captured in the gold Mineral Reserves is shown in Figure 4.

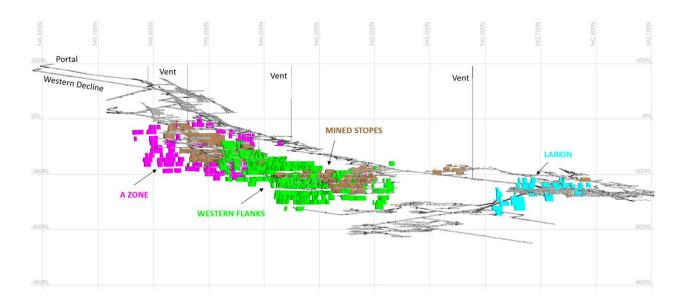


Figure 4: the Beta Hunt Mine Underground Plan

Underground Infrastructure

The Beta Hunt Mine is accessed by portals and a series of declines throughout the mine. The declines are typically

5.5 m width (W) x 5.8 m height (H), with a standard ore drive size of 5.0 mW x 5.0 mH. Lateral development profiles are well matched to the mobile fleet. Ore is hauled from the underground to surface via the decline where it is then transported via a separate surface haulage fleet to the processing facility.

As an established mine, key infrastructure such as underground communications, electrical reticulation, pumping, and ventilation are already set up. Most of the primary development is interconnected for ventilation and ease of access.

There is a radio communications system throughout the mine. Electrical power is available via mains power to site and is distributed throughout the mine at 11 kV. The 11 kV power is transformed to 1 kV for use as required for the mine equipment. The primary pumping system is established at the Beta Hunt Mine and services the relatively dry mine workings. A secondary network of pumps then removes water from work areas back to the primary pumping system to be removed and reused in the mine or discharged to surface.

The ventilation network currently supplies 300 m³/s of fresh air to the underground, with capacity to increase to 430 m³/s. The primary ventilation system is comprised of a combination of a decline intake and underground exhaust fans via an exhaust raisebore to surface. Auxiliary fans then provide secondary ventilation to active work areas. Equipment is maintained and serviced at a surface workshop.

#### Mining Methods

The primary mining method used at Beta Hunt Mine is top down, mechanised long hole retreat. Current stope design dimensions are typically 25 m high, vary in width from 5.0 m to 25 m and up to 50 m on strike. In situ rib and sill pillars are left at geotechnically specified positions, with sill pillars typically left at 75 m vertical intervals. Waste is used to backfill voids where possible. No other methods of backfilling stopes is employed in the mine plan.

The typical stope ore cycle post ore drive development is as follows. First, blast holes are drilled using a longhole drilling rig. Then, those blast holes are charged and fired. Following that, bogging of ore occurs from the stope using conventional and tele-remote loading techniques. The trucks are loaded with a load-haul-dump and haul ore to surface via the portal. The surface trucks then haul ore to the processing facility.

Generally, the ground conditions at the Beta Hunt Mine are good with the gold mineralization located within the Lunnon Basalt unit. The site has an extensive history of mining performance and has developed guidelines to respond local conditions. A ground control management plan is in place on site and is used in mine planning, mine development, and production. Lateral development drives are excavated using mechanised twin boom jumbos, with vertical development excavated using a raisebore drill rig.

## **Processing and Recovery Methods**

Karora treats gold mineralisation at the Higginsville GPF, built by GR Engineering in 2007 and commissioned in 2008, as well as the Lakewood GPF. The Higginsville GPF consists of an open circuit jaw crusher followed by closed circuit secondary and tertiary crushers, a fine ore bin, ball mill, gravity separation circuit, one leach tank, and six carbon adsorption tanks. A quaternary stage hard rock crushing circuit was incorporated in 2010. The Lakewood GPF consists of contract crushing, ball mill, gravity separation circuit, one leach tank, and six carbon adsorption tanks.

The primary sections of the each of the processing plants that are currently in use are: (1) crushing and conveying; (2) ore storage and reclaim and grinding; (3) leaching and carbon adsorption; (4) carbon stripping, electrowinning, refining and carbon re-generation; (5) tailings thickening; (6) tailings deposition and storage; (7) reagent mixing and handling; and (8) plant services.

**Process Description** 

## Crushing

Mill feed is trucked to the ROM pad at the Higginsville GPF from open pits in the immediate Higginsville area together with underground ore from the Beta Hunt Mine, and to the Lakewood GPF with underground ore from the Beta Hunt Mine. The mill feed at the Higginsville GPF is classified and stockpiled according to gold grade to blend an optimal feed mix to the processing facility. Oversize mill feed is sorted from stockpiles and broken on the ROM pad using a loader or excavator. Any oversize that cannot pass through the primary crusher grizzly is broken by a rock breaker. The mill feed at the Lakewood GPF is classified and stockpiled according to gold grade and is not typically blended.

The crushing circuit at the Higginsville GPF has a nameplate capacity of 1.0 Mtpa and consists of four stages of crushing: (1) a 36 x 48 Trio primary single-toggle jaw crusher; (2) a 1.68 m Trio Turbocone TC66 (standard configuration) secondary cone crusher; (3) a 1.68 m Trio Turbocone TC66 (short head configuration) tertiary cone crusher; and (4) a 1.29 m Trio Turbocone T51 quaternary cone crusher.

In addition, there are separate surge bins that are operated in closed circuit with a 2.4m wide by 7.3m long oreflow double deck vibrating screen. Crushed material exits the product screen with a P80 of 10mm and is stored in the fine ore bin. The fine ore bin has a live capacity of 1,500t. The crushing circuit contains one Ramsey belt scale (CV02) for measuring mass of circuit ore.

#### Grinding

Crushed mill feed at the Higginsville GPF is withdrawn from the fine ore bin via a belt feeder (CV 05), which transfers the crushed product onto the mill feed conveyor (CV07) that feeds into the ball mill (ML01). Mill feed can also be fed via an emergency feeder which is fed from the fine ore stockpile via FEL. The grinding circuit consists of an

overflow ball mill, hydro-cyclone cluster classifier and gravity recovery circuit. The ball mill is a LMMP/CITIC-HMC 4.90 m diameter by 6.77 m effective grinding length overflow ball mill.

Crushed mill feed at the Lakewood GPF is fed by a loader via a belt feeder, which transfers the crushed product onto the mill feed conveyor (CV04) that feeds into the ball mill (ML01). The grinding circuit consists of a grate discharge ball mill, hydro-cyclone cluster classifier and gravity recovery circuit.

The crushed mill feed is conveyed to the ball mill feed chute and combined with process water and recirculating cyclone underflow slurry. The ball mill operates in closed circuit with the mill discharge slurry classified by a cluster of hydro-cyclones.

Oversize ore particles and reject grinding balls are rejected from the ball mill discharge slurry by a 16 mm aperture trommel screen connected to the discharge trunnion of the mill. The oversize material (mill scats) is removed from the circuit to protect the cyclone feed slurry pumps and reduce wear rate on cyclone liners and the slurry handling equipment. Mill scats are rejected to a scats bin for removal by wheel loader.

Slurry from the grinding and classification circuit is passed over a trash screen to ensure that no oversize particles enter the leaching circuit and to remove plastic and other containments from the slurry. The trash screen is a 1.5 m wide by 3.6 m long horizontal vibrating screen with an aperture size of 0.80 mm. Undersize from the trash screen is directed to the leach feed distributor ahead of the 1,000 m³ leach tank at the Higginsville GPF and the 1,546 m³ leach tank at the Lakewood GPF.

## Gravity and Intensive Cyanidation

A gravity separation circuit is included in the design to enhance the recovery of gold that concentrates in the hydrocyclone underflow stream. A 100 t/h bleed of the hydro-cyclone underflow stream is delivered to the gravity feed screen for classification. The gravity feed screen is a 1.2 m wide by 2.4 m long horizontal vibrating screen with an aperture size of 3.25 mm. Oversize from this screen will return to the ball mill feed chute for further grinding. Undersize material will report to a centrifugal concentrator to extract the gold. The gravity concentrator is a XD40 Knelson Concentrator at the Higginsville GPF, and a XD30 Knelson Concentrator at the Lakewood GPF.

The resulting concentrate from this process will then be subject to intensive cyanidation in a CS1000DM ConSep Acacia dissolution module to recover the gold. Pregnant solution from the intensive cyanidation process is pumped to the gold room for electrowinning in a CS1000EW ConSep electrowinning module.

#### Leaching and Adsorption

The leach and adsorption circuit at the Higginsville GPF consists of one  $1,000\text{m}^3$  leach tank and six CIL carbon adsorption tanks, all with a  $1,000\text{ m}^3$  capacity. The leach and adsorption circuit consists of one  $1,546\text{ m}^3$  leach tank and seven CIL carbon adsorption tanks, with total  $2,337\text{ m}^3$  capacity at the Lakewood GPF.

All tanks are mechanically agitated with dual, open, down-pumping impellor systems powered by 55 kW drives. Facilities are currently available to inject oxygen into tanks #1, #2 and #3 with a high shear oxygen injector pump recirculating into Tank #1. Leach tank 1 is used as the initial oxidation (oxygen sparged) tank and for the initial dosing of cyanide. Slurry flows from this tank into the carbon adsorption circuit. Gold that is dissolved into the cyanide leach solution is recovered and concentrated by adsorption onto activated carbon (Haycarb) in the adsorption tanks.

Cyanide solution at 30% strength by weight is added to the leach tank feed distributor box and / or the first CIL tank via a flow meter and automatic control valve. The design leaching residence time is 5 hours at the Higginsville GPF and 12.8 hours at the Lakewood GPF. Discharge from the leach tank at the Higginsville GPF will overflow into the first of six 1,000m³ CIL tanks (tanks 2 to 7) which have an average effective working volume of 984m³ each. The combined adsorption residence time is 30 hours. Discharge from the leach tank at the Lakewood GPF will overflow into the first of seven CIL tanks (tanks 11 to 17) which the combined adsorption residence time is 20 hours.

In the CIL tanks, the carbon is advanced counter-current to the slurry flow, with new and regenerated carbon added to the last tank and advanced to the first tank while the slurry flows from tank one to tank six at the Higginsville GPF and tank 11 to 17 at the Lakewood GPF. Loaded carbon is pumped from adsorption tank one and 11 respectively to the gold room elution circuit periodically for stripping of the gold.

The target pH in the leach circuit is 8.6 and the target cyanide concentrations up to 300 ppm. An on-line free cyanide analyser is used to control the cyanide addition. Cyanide can be added to tank one and tank three at the Higginsville GPF and tank 11 and 13 at the Lakewood GPF. Dissolved oxygen probes are installed in tanks one and two.

Carbon stripping, electro-winning, refining, and carbon regeneration

Gold is recovered from the loaded carbon by a pressure Zadra electro-winning circuit. Gold is deposited onto steel wool cathodes by the electro-winning cells. The cathodes are subsequently washed to remove the gold concentrate, which is then dried and smelted in the gold room barring furnace to produce gold bullion for shipment.

The gold from the gravity circuit is leached in the Acacia reactor and it is then electroplated by the Acacia electrowinning circuit onto steel wool cathodes in the Acacia cell. The gold is recovered and smelted in a similar manner to the gold produced by the Pressure Zadra circuit. Barren carbon is reactivated using a liquefied natural gas fired horizontal kiln at around 700 degrees Celsius prior to being returned to the adsorption circuit for reuse.

## Tailings Disposal

Slurry from the last CIL tank flows by gravity to the feed box of the tailings screen. The tailings screen is a 1.5 m wide by 3.6 m long horizontal vibrating screen with an aperture size of 0.8 mm. The screen undersize will flow by gravity to be directed to either the tailings thickener, or allowed to bypass the thickener and report directly to the tailings pump hopper. The screen oversize (trash and carbon fines) is collected and stored in a self-draining carbon fines bin located at ground level.

Plant tailings slurry is pumped through a polyethylene pipeline to the TSF. Pressure and flow in the lines is monitored on the citect system to detect high pressures that result from line obstructions or sanding or low pressure resulting from possible pipe failures.

#### Plant Services

All necessary plant services are available to support the operation of the Higginsville GPF. Raw water is sourced from the main production source at the Chalice open pit 16 km to the west. Process water at the Higginsville GPF is stored for use in a 5,000 m³ process water dam. Process water is made up of raw water from the Chalice production source and tailings return water. Incoming raw water from Chalice reports to the disused Aphrodite pit before it is pumped to the site raw water dam of 2,000 m³ capacity. Process water at the Lakewood GPF is stored for use in the process water tanks. Process water is made up of bore water, tailings return water from Lakewood, and offtake from Northern Stars Resources Limited's Kalgoorlie Consolidated Gold Mines (KCGM) operation.

Potable water is sourced via accessing the water corporation supply line from Kalgoorlie to Norseman. Potable water is utilised in the process plant, admin, workshop, stores, and main camp and mining offices. High pressure air is provided at a nominal pressure of 650 kPa. Power at the Higginsville GPF is generated in the diesel power station at 11 kV and distributed to various plant, the disused Trident mine area and the camp. Power at the Lakewood GPF is drawn from the local power grid.

## Plant Performance

The Higginsville GPF has been in operation since 2008 with historical throughput vs. recoveries for the past two years shown in Figure 5. Recoveries have ranged from 84.6% to 94% since June 2019, with the average recovery over the 18-month period at 92%.

Figure 5: Higginsville – Process Recoveries vs. plant throughput

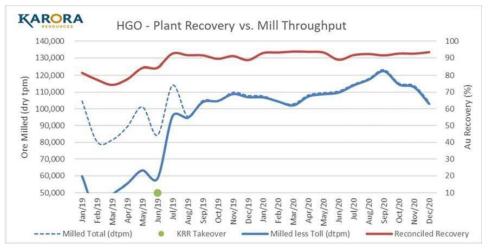
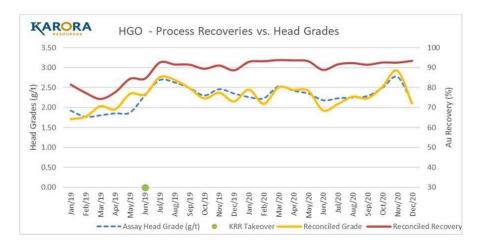


Figure 6 below, shows the historical processing recoveries against the calculated/reconciled and assayed head grades, showing that there is no obvious correlation between head grade and recovery. The calculated and assayed head grades are in good agreement and have ranged from 1.92 g/t Au to 2.92 g/t Au during the observed period, with an average head grade of 2.36 g/t Au.

The tails grade during the same period of time has ranged from 0.14 g/t Au to 0.36 g/t Au, with an average tail grade of 0.19 g/t Au.

Figure 6: Higginsville – Process Recoveries vs. head grade



As expected, and as shown in Figure 7 below, there is a correlation between the head grade and the tails grade discharge from the mill to the TSF.

KARORA HGO - Head Grades vs. Tail Grades 3.50 0.70 3.00 0.60 Head Grades (g/t) Grade 1.50 0.30 0.20 0.10 0.00 Dec/19 May/19 Jun/19 Aug/19 Sep/19 Oct/19 Jan/20 Dec/20 Feb/20 May/20

Rec Tail Grade less Toll (g/t)

Reconciled Grade

Figure 7: Higginsville – Head grades vs. tail grades

# Infrastructure, Permitting and Compliance Activities

-- Assay Head Grade (g/t)

The Beta Hunt Mine is an operating mine with all required infrastructure already in place. The main elements of this infrastructure include: (1) normal infrastructure associated with a ramp access underground mine, including the portal, a decline ramp measuring 5.0 m x 5.5 m, the trackless mining fleet and refuge stations; (2) a surface workshop is available for major maintenance and weekly services for the mobile equipment fleet; (3) an underground workshop used for minor maintenance of the mobile fleet. This is located in the footwall side of the main decline in the East Alpha section; (4) a ventilation system that uses the decline and two smaller raises as intakes, with a single RAP measuring 4.2m in diameter. The system has a capacity to supply 300 m³/s, compared to the current airflow of 216 m³/s; (5) a dewatering system which includes six stage pumps that discharge, via a 100 mm line, into Lake Lefroy; and (6) the management and administration offices, which are portable buildings that will be easy to de-commission at closure.

Utilities provided to the mine include: (1) electricity supplied by SIGMC at a cost of \$0.23/kWh; (2) service water is sourced from ground water stored in what is effectively an aquifer created by the mined out Silver Lake deposit. Storage tanks have been added to provide surge capacity; and (3) potable water is supplied by SIGMC and BHP.

The Lakewood GPF operation has services and infrastructure consistent with an isolated area operating mine. The main elements of this infrastructure include: (1) 1.0 Mtpa processing plant and supporting infrastructure; (2) Administration block and training buildings; (3) Contractors crushing facilities; (4) Maintenance workshop and stores; (5) Fuel storage and dispensing facility; (6) Muster/crib room and ablutions; and (7) Tailings storage facilities.

### Environmental

The Beta Hunt Mine is an operating underground mine that is in possession of all required permits. Karora operates the Beta Hunt Mine through a sub-lease agreement with SIGMC. The environmental permitting and compliance requirements for mining operations on the sub-lease tenements are the responsibility of Karora under the Beta Hunt Sub-Lease, but ultimate responsibility remains with the primary tenement holder, SIGMC. The project is a small operation with a limited disturbance footprint and the environmental impacts of the project are correspondingly modest.

Lakewood GPF is an operating gold processing plant that is in possession of all required permits for operations. Karora is responsible for the environmental permitting and compliance requirements for mineral processing. Karora recently

obtained the necessary environmental approvals to build a new tailings storage facility (TSF 2) and increase the annual plant throughput capacity.

Key environmental aspects requiring management effort are water management and mine rehabilitation and closure. SLM has disclosed that there are no other outstanding significant environmental issues.

# Water Management

Mine dewatering at the Beta Hunt Mine is generally required to be undertaken in accordance with the Licence to "Take Water" (GWL 62505) and the conditions attached to that licence. SIGMC is the licence holder and accordingly has primary responsibility for ensuring compliance with the licence.

Discharge of mine water is regulated under DER licence L8893/2015/1, held by Karora. Karora is required to lodge annual compliance in relation to its water discharge licence and periodic scrutiny by the DER should be expected. The water quality monitoring results presented in the 2012-2013 environmental compliance report showed relatively high concentrations of nickel in water being discharged to Lake Lefroy, as well as trace amounts of hydrocarbon and slight turbidity, but were otherwise unremarkable. The discharge water was hypersaline (as expected). The licence approved by DER specifies no limits for the other parameters to be monitored.

#### Mine Rehabilitation and Closure

Under the Mining Act, responsibility for mine rehabilitation and closure generally lies with the tenement holder (SIGMC, in respect of the Beta Hunt Mine). However, any areas of disturbance created or utilised are the liability of Karora. The Beta Hunt Mine management plan explains that accountability for rehabilitation of the Beta Hunt Mine tenements will be allocated as follows: Karora will be responsible for disturbance arising from September 9, 2003 to the completion of its operations; and Karora will be responsible for disturbance prior to September 9, 2003 or after the cessation of SLM's operations and mine rehabilitation / closure activities.

Once the growth plan for Beta Hunt has been executed, Karora does not contemplate any significant clearing of vegetation or new surface disturbance so rehabilitation and closure costs are limited. Karora notes that it does not propose to undertake any significant work on the existing mullock dump unless it disturbs the dump through removal of material. It is Karora's expectation that the rehabilitation required to complete will be generally limited to closure and the rehabilitation of access tracks, routine clean-up of rubbish and waste materials, removal of buildings, pavements and above ground infrastructure, and sealing of exploration boreholes and mine openings.

### Mining Rehabilitation Fund

The Mining Rehabilitation Fund ("MRF") is a State Government levy, the responsibility of the Department of Mines, Industry Regulation and Safety, which provides a pooled fund, based on the environmental disturbance existing on a tenement at the annual reporting date. Levies paid into the MRF will be used for rehabilitation where the operator fails to meet rehabilitation obligations and every other effort has been used to recover funds from the operator. Liability to pay the MRF Levy became compulsory from July 1, 2014. This means that tenement holders now need to report for the MRF by June 30 each year. The MRF liabilities are based on negotiated set of standard rates for the purposes of setting the levy. The amount of levy payable is assessed as the rehabilitation liability estimate (if over \$50,000) multiplied by the fund contribution rate which is set at 1%.

With respect to the Beta Hunt Mine Sub-Lease, the MRF levy is paid by SIGMC as registered owners of the leases to which Karora contributes an agreed to amount based on its rehabilitation commitments as defined in the Beta Hunt Mine Sub-Lease agreement. For 2015, Karora's contribution is on the order of \$10,000 annually.

## Social and Community

The nearest town to the Beta Hunt Mine is Kambalda, with a population of 1,666 (2021 Census). The closest houses are approximately 2 km from the Beta Hunt Mine. As the active underground workings are a further 1-4 km down the decline and the scale of operation is small, noise and vibration do not affect the residents. The mine workings are underground and waste rock is generally used to backfill mined out voids so there is no active surface waste dump. There is also no concentrator or tailings storage facility at the Beta Hunt Mine. As a result, dust generation is not an issue. There are no registered heritage sites within the project area or nearby.

Lakewood is approximately 4 km southeast of the City of Kalgoorlie-Boulder which is the nearest occupied townsite. Kalgoorlie is the regional centre for the Eastern Goldfields and is a regional hub for transport, communications, commercial activities, and community facilities. Kalgoorlie-Boulder has a population of 29,306 (2021 Census). The majority of the current workforce of approximately 21 persons is accommodated within the Kalgoorlie-Boulder-Kambalda region. The nearest port is Esperance, 390 km south of Kalgoor

# **Capital and Operating Costs**

Capital and operating costs for the Beta Hunt Mine have been estimated using a zero-based model. The design criteria, unit costs and other assumptions used in this model are based on current actual performance at the Beta Hunt Mine.

# Capital Costs

Most major infrastructure capital is already in place at the Beta Hunt Mine. The operation intends to primarily incur sustaining capital costs from 2024, as the planned production rates are achieved with the infrastructure networks that are already in place. Some non-sustaining capital is budgeted for primary ventilation circuit upgrades in 2023 and 2024, including new ventilation fans, variable speed drives for existing fans, and raises to develop a parallel exhaust circuit. New heavy vehicle equipment purchases in 2023 and 2024, along with existing heavy vehicles, are expected to last the life of the Mineral Reserves schedule.

The sustaining capital expenditure is allocated for on-going capital development, mining equipment costs (rebuilds and major overhauls), and other underground infrastructure refurbishment. Sustaining capital requirements also include extensions to the ventilation, pumping, and electrical networks that follow capital decline development as the mine goes deeper. This is in addition to sustaining costs associated with ongoing processing plant infrastructure maintenance which are included in operating cost details.

Table 14: Sustaining Capital Costs Per Annum

Capital Cost Type	Units	Total	2022	2023	2024	2025	2026	2027	2028	2029
Development and Plant	A\$M	91.3	4.1	16.7	16.4	16.4	16.4	15.9	5.4	0.1
Mining Infrastructure	A\$M	53.6	5.5	22.0	11.8	3.5	3.5	3.5	3.5	0.3
Total Mining Capital	A\$M	144.8	9.6	38.7	28.1	19.8	19.9	19.4	8.9	0.4

## **Operating Costs**

As an established operation, the Beta Hunt Mine has a good understanding of its costs and has a functioning cost management system. Operating cost inputs are based on site actual costs in addition to recent supplier quotes. The mining operating costs are split into direct operating costs, maintenance costs, technical services costs and general and administrative costs ("G & A") costs. Direct operating costs include mining operator labour and consumable costs. Maintenance costs include maintenance labour and maintenance consumables. Technical services costs include engineering, geology and geotechnical labour and consumables. G & A costs include administration labour and consumables in addition to safety department labour and consumables. The operating costs are detailed in Table 15.

**Table 15: Site Operating Costs** 

Operating Costs	Unit	Operating Costs						
Mining Costs:								
Direct Operating Costs	A\$/t ore	34.01						
Grade Control Drilling	A\$/t ore	2.75						
Technical Services	A\$/t ore	2.20						

<b>Operating Costs</b>	Unit	Operating Costs		
Mine Overheads and Admin	A\$/t ore	4.50		
Operating Development	A\$/t ore	15.00		
<b>Total Mining Operating Cost</b>	A\$/t ore	58.46		
Processing and Surface Haulage	A\$/t ore	44.61		

**Table 16: Operating Costs per Annum** 

Туре	Units	Total	2022	2023	2024	2025	2026	2027	2028	2029
Mining (including G&A)	\$A M	377.8	47.9	49.4	49.8	49.9	49.6	49.3	23.0	1.7
Processing (including G&A)	\$A M	208.1	26.4	27.2	27.4	27.5	27.3	27.1	12.7	1.0
Total	\$A M	585.9	74.3	76.6	77.2	77.4	76.9	76.4	35.7	2.7

### **Exploration, Development and Production**

Drilling in 2022 was highlighted by significant gold drill intersections that both extended and outlined new parallel mineralized shear zones that support the on-going growth of the Beta Hunt Gold Mineral Resource.

### Western Flanks

Drilling in 2022 successfully extended the Mineral Resource up to 250 m below the previous resource limit resulting in the zone contributing the bulk of the updated Mineral Resource increase. Significantly, the Western Flanks mineralized system remains open at depth and along strike (north).

## Mason Zone

Drill results from testing an interpreted parallel mineralized shear zone west of the Larkin Mineral Resource returned significant assay results up to 300 m west of the Larkin Zone. This new zone is called the Mason Zone. Mason Zone mineralization is characterized by strong biotite-pyrite-albite alteration associated with weak to moderate shearing and both shear and extensional quartz veining – similar to Western Flanks mineralization. Reported results are detailed below:

BM1941SP3-01AE: 12.0 g/t over 17.0 m;
BM1890-23AE: 4.2 g/t over 11.6 m; and

• BM1890-25AE: 6.0 g/t over 13 m.

These results support the potential for the Mason Zone to deliver a new mining opportunity south of the Alpha Island Fault. The Mason Zone is still at a relatively early stage in it development and, until now, this area virtually untested along strike for gold mineralization as a result of the historical focus on nickel targets along the ultramafic/basalt contact.

#### Fletcher Shear Zone

The gold mineralized Fletcher Shear Zone ("**FSZ**") was discovered in 2016 and is considered a structural analogue to the Western Flanks and A Zone deposits, representing Beta Hunt Mine's third major mineralized shear zone system. The FSZ comprises foliated biotite-pyrite altered and irregularly quartz veined basalt – similar alteration to that found at Western Flanks. Previously reported drilling comprised two holes on the same section with results shown below:

- WF14-98 (Lode A): 2.67 g/t Au over 6.2 m, including 3.1 g/t Au over 3.1 m;
- WF14-98 (Lode B): 2.32 g/t Au over 11.2 m, including 3.8 g/t Au over 4.8 m; and

• FZ350-001: 1.21 g/t Au over 17.5 m, including 5.87 g/t over 0.54 m.

Drilling in 2021-2022 comprised of three holes, all of which intersected gold mineralization in the targeted position:

- AF18LV-07AE: 3.3 g/t over 9.5 m, including 5.5 g/t over 4.4 m;
- AF18LV-16AE: 18.6 g/t over 0.8 m and 0.6 g/t over 3.3 m; and
- AF-AZDDC1-11AE: 1.5 g/t over 4.0 m.

The five drill holes now intersecting FSZ support a steep, west-dipping zone over 150 m in down dip extent over 500 m of strike with potential to extend over a total strike length of 2 km. The mineralized system remains open at depth. These results and the potential mining opportunity they will deliver provide continued support of Karora's growth plan.

## Nickel Exploration Potential

Significant potential exists for the discovery of additional nickel deposits at the Beta Hunt Mine along trend from known nickel shoots and in parallel structures north and south of the Alpha Island Fault.

Since the release of the 2016 preliminary economic assessment, drilling activity has mostly focused on gold mineralization. This situation changed in 2020 when Karora re-commenced drilling nickel targets, primarily testing targets south of the AIF. This work was successful in discovering the 30C nickel trough and the 50C nickel trough.

### Gamma Block

Exploration potential remains open south of the Gamma Fault. This potential was highlighted in 2021 with the discovery of the 50C nickel trough from drilling completed in late 2020.

The targeted basalt/ultramafic contact was intersected in four of five diamond holes with nickel mineralization intersected in three holes: G50-22-005E, G50-22-003E and G50-22-002 in the nickel contact position. Two holes, G50-22-005E and G50-22-003E encountered strong nickel mineralization logged as massive and disseminated nickel sulphide, with hole G50-22-005E intersecting 2.2 m (downhole) of massive nickel sulphide. Assay results support the visual observation of high tenor mineralization in this hole:

- G50-22-005E: 11.6% Ni over 4.6 m, including 18.4% Ni over 2.2 m;
- G50-22-002E: 1.2% Ni over 0.3 m; and
- G50-22-003E: 2.4% Ni over 1.8 m.

South of the AIF (Down Plunge Extension)

Infill drilling at the top of the Western Flanks gold Mineral Resource at the south end of the deposit intersected high grade, contact-related, nickel sulphide mineralization in two holes drilled 30 m apart along strike. The mineralization is interpreted to be the offset extension of the 4C nickel deposit, part of the A Zone trend, previously mined by Reliance in 2004-2005. Significantly, these intersections were located only 25 m from existing development. Significant intersections from these two holes are highlighted below:

- BW-1704-07AG: 6.5% Ni over 11.9 m; and
- BW-1704-05AG: 3.0% Ni over 4.6 m.

The intersection in drill hole BW-1704-07AG (6.5% Ni over 11.9 m) comprises four layers of massive sulphide mineralization, up to 2.5 m thick, interbedded with both matrix and disseminated sulphide layers. The multiple massive sulphide layers indicate this intersection to represent stacked repeats of the same massive layer, though no visual evidence of thrusting to produce the repeats was observed in the drill core.

The 4C is currently the focus of active mining development and, significantly, represents the first mining within the Hunt Block in over 15 years. Follow-up infill and extensional drilling is in progress, including testing of the 44C, to better define the geometry and extent of this new discovery.

#### HIGGINSVILLE GOLD OPERATION

#### Overview

Unless otherwise indicated, information in this Appendix "A" – "Material Mineral Projects – Higginsville Gold Operation" is summarized or extracted the HGO Technical Report. The authors of the HGO Technical Report are Stephen Devlin, FAusIMM, Shane McLeay, B Eng Mining (Hons) FAusIMM AWASM, Anton von Wielligh, FAusIMM, Ian Glacken, Sc (Hons) (Geology), DIC, MSc (Geostatistics), Grad Dip Computing, FAusIMM(CP), FAIG, MIMMM, CEng and Ross Cheyne B Eng (Hons) FAusIMM. Stephen Devlin is an employee of Karora and a "Qualified Person" as defined in NI 43-101. Shane McLeay, Anton von Wielligh, Ian Glacken and Ross Cheyne are each "independent" of Karora and a "Qualified Person", as defined in NI 43-101. The HGO Technical Report was filed on February 3, 2021 under the Company's profile on SEDAR at <a href="www.sedar.com">www.sedar.com</a>. All amounts in this section of Appendix "A" are presented in Australian Dollars unless otherwise noted.

Portions of the following information are based on assumptions, qualifications and procedures which are set out only in the full HGO Technical Report. For a complete description of the assumptions, qualifications and procedures associated with the following information, reference should be made to the full text of the HGO Technical Report, which is available for review under the Company's profile on SEDAR located at <a href="https://www.sedar.com">www.sedar.com</a>.

## **Project Description, Location and Access**

HGO is located 57 km south of the Beta Hunt Mine and 107 km south of the regional mining centre of Kalgoorlie. The operation comprises a 1.3Mtpa gold processing facility, 3 underground mines (currently inactive) and 20 open pits (both active and inactive). The recently acquired Spargos Project forms part of HGO. Open-pit mining is currently active at two mines being Baloo and Hidden Secret. The processing facility is accessed via the Coolgardie-Esperance Highway, which is located 1.2kms to the southwest of HGO.

The project lies adjacent to a major highway connecting the Goldfields towns of Coolgardie and Norseman. Higginsville is located in the Coolgardie Mineral Field in the Shire of Coolgardie, approximately 55 km north of the town of Norseman and 50 km south of Kambalda.

Access to the HGO processing facility and offices is via a constructed all-weather access road (0.8 m) from the Goldfields highway. Station tracks and fence lines provide access to most of HGO away from the processing facility and site infrastructure. Most areas are accessible by vehicle except following rare periods of heavy storms when flooding may occur.

HGO comprises 219 tenements covering approximately 1,900 square km owned by Karora. Current tenement holding represents an additional 27 tenements over the original 192 tenements acquired from Westgold in June 2019.

There is an expenditure commitment for each tenement as well as rent payable to the Department of Mines, Industry Regulation and Safety ("**DMIRS**") and local rates. There is also an annual reporting requirement for each tenement or group of tenements, as set out in the Mining Act.

The tenements at Higginsville are currently in good standing, however a number of these tenements have not met annual expenditure commitments. In order to retain these leases, Karora will be required to lodge expenditure exemption applications and have them approved by the DMIRS. If the exemptions are refused, Karora will request DMIRS impose a penalty in lieu of forfeiture. If a penalty is imposed, once paid the tenement will retain its good standing status.

The material mineral tenements are summarized in Table 1.

**Table 1: HGO Mineral Tenure Information** 

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
E15/1037	Live	Avoca Resources Pty Ltd	9,800	\$21,525	\$105,000	30-Sep-08	29-Sep-22

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
E15/1094	Live	Avoca Resources Pty Ltd	2,240	\$4,920	\$70,000	13-Aug-09	12-Aug-21
E15/1117	Live	Avoca Resources Pty Ltd	1,120	\$2,460	\$50,000	13-Aug-09	12-Aug-21
E15/1197	Live	Avoca Resources Pty Ltd	2,800	\$6,150	\$70,000	7-Feb-11	6-Feb-21
E15/1199	Live	Avoca Resources Pty Ltd	560	\$1,230	\$50,000	10-Nov-10	9-Nov-20
E15/1203	Live	Avoca Resources Pty Ltd	5,320	\$11,685	\$70,000	17-Dec-10	16-Dec-20
E15/1223	Live	Avoca Resources Pty Ltd	4,480	\$9,840	\$70,000	8-Sep-11	7-Sep-21
E15/1260	Live	Avoca Resources Pty Ltd	280	\$369	\$20,000	12-Oct-11	11-Oct-21
E15/1298	Live	Polar Metals Pty Ltd	840	\$1,845	\$50,000	31-Jul-12	30-Jul-22
E15/1402	Live	Avoca Mining Pty Ltd	280	\$369	\$15,000	8-Apr-14	7-Apr-24
E15/1423	Live	Corona Minerals Pty Ltd	2,240	\$4,920	\$50,000	30-Dec-14	29-Dec-24
E15/1448	Live	Avoca Resources Pty Ltd	280	\$369	\$15,000	6-May-15	5-May-25
E15/1458	Live	Polar Metals Pty Ltd (80%)Shumwari Pty Ltd (20%)	7,280	\$8,450	\$52,000	24-Aug-15	23-Aug-20
E15/1459	Live	Polar Metals Pty Ltd (80%)Shumwari Pty Ltd (20%)	560	\$650	\$30,000	25-Aug-15	24-Aug-20
E15/1461	Live	Polar Metals Pty Ltd	1,960	\$2,275	\$50,000	16-Oct-15	15-Oct-20
E15/1462	Live	Avoca Resources Pty Ltd	280	\$369	\$15,000	22-Sep-15	21-Sep-20
E15/1464	Live	Polar Metals Pty Ltd (80%)Shumwari Pty Ltd (20%)	280	\$369	\$15,000	6-Oct-15	5-Oct-20
E15/1487	Live	Polar Metals Pty Ltd	5,040	\$5,850	\$30,000	1-Jul-16	30-Jun-21
E15/1512	Live	Avoca Mining Pty Ltd	280	\$238	\$10,000	19-Mar-18	18-Mar-23
E15/1533	Live	Avoca Resources Pty Ltd	1,400	\$1,190	\$20,000	11-Oct-17	10-Oct-22
E15/1541	Live	Polar Metals Pty Ltd	1,680	\$1,428	\$30,000	11-Oct-17	10-Oct-22
E15/1586	Live	Avoca Mining Pty Ltd	560	\$476	\$20,000	6-Oct-17	5-Oct-22
E15/1613	Pending	Avoca Mining Pty Ltd	280				
E15/1620	Pending	Corona Minerals Pty Ltd	5,040				
E15/1628	Live	Avoca Mining Pty Ltd	10,080	\$8,568	\$36,000	26-Nov-18	25-Nov-23
E15/1792	Pending	Avoca Mining Pty Ltd	1,120				
E15/1793	Pending	Avoca Mining Pty Ltd	280				
E15/786	Live	Avoca Resources Pty Ltd	3,920	\$8,610	\$70,000	28-Oct-05	27-Oct-21
E15/808	Live	Avoca Resources Pty Ltd	2,520	\$5,535	\$70,000	5-Jul-06	4-Jul-20
E15/810	Live	Avoca Resources Pty Ltd	9,520	\$20,910	\$102,000	4-Aug-04	3-Aug-20
E15/828	Live	Avoca Mining Pty Ltd	5,600	\$12,300	\$70,000	17-Nov-04	16-Nov-20
E31/789	Live	Hawthorn Resources Limited (80%) Avoca Resources Pty Ltd (20%)	280	\$369	\$20,000	13-Mar-09	12-Mar-21
E63/1051	Live	Avoca Resources Pty Ltd	1,120	\$2,460	\$50,000	3-Jul-07	2-Jul-21
E63/1117	Live	Avoca Resources Pty Ltd (93.33%)Stehn, Trent Paterson (6.67%)	1,400	\$3,075	\$50,000	7-Oct-08	6-Oct-22
E63/1142	Live	Polar Metals Pty Ltd	5,600	\$12,300	\$70,000	13-Feb-09	12-Feb-21
E63/1165	Live	Avoca Resources Pty Ltd	1,400	\$3,075	\$50,000	15-Apr-08	14-Apr-22

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
E63/1712	Live	Polar Metals Pty Ltd	5,880	\$6,825	\$50,000	25-May-15	24-May-25
E63/1724	Live	Avoca Resources Pty Ltd	280	\$369	\$15,000	1-Sep-15	31-Aug-20
E63/1725	Live	Polar Metals Pty Ltd	2,240	\$2,600	\$50,000	26-Oct-15	25-Oct-25
E63/1726	Live	Polar Metals Pty Ltd (80%)Shumwari Pty Ltd (20%)	2,520	\$2,925	\$50,000	1-Sep-15	31-Aug-20
E63/1727	Live	Polar Metals Pty Ltd (80%)Shumwari Pty Ltd (20%)	280	\$369	\$15,000	1-Sep-15	31-Aug-20
E63/1728	Live	Polar Metals Pty Ltd	19,600	\$22,750	\$140,000	6-Jan-16	5-Jan-21
E63/1738	Live	Polar Metals Pty Ltd (80%)Shumwari Pty Ltd (20%)	560	\$650	\$30,000	19-Oct-15	18-Oct-20
E63/1756	Live	Polar Metals Pty Ltd	1,120	\$1,300	\$20,000	9-Feb-16	8-Feb-21
E63/1757	Live	Polar Metals Pty Ltd	560	\$650	\$20,000	9-Feb-16	8-Feb-21
E63/1763	Live	Avoca Mining Pty Ltd	3,360	\$2,856	\$30,000	8-May-17	7-May-22
E63/1876	Live	Avoca Mining Pty Ltd	1,960	\$1,666	\$20,000	2-Jul-18	1-Jul-23
E63/1881	Live	Avoca Mining Pty Ltd	2,520	\$2,142	\$20,000	1-Jun-18	31-May-23
E63/1900	Live	Avoca Mining Pty Ltd	1,680	\$846	\$20,000	20-Mar-19	19-Mar-24
E63/1901	Live	Avoca Mining Pty Ltd	560	\$282	\$15,000	20-Mar-19	19-Mar-24
E63/856	Live	Avoca Resources Pty Ltd	6,440	\$14,145	\$70,000	6-Sep-04	5-Sep-21
G15/19	Live	Avoca Mining Pty Ltd	66	\$1,181		3-Oct-07	2-Oct-28
G15/23	Live	Avoca Mining Pty Ltd	3	\$72		2-Jun-15	1-Jun-36
G15/26	Live	Avoca Mining Pty Ltd	94	\$1,701		9-Nov-16	8-Nov-37
G15/27	Live	Avoca Mining Pty Ltd	146	\$2,631		9-Nov-16	8-Nov-37
G15/29	Live	Avoca Mining Pty Ltd	6	\$0		27-Jan-17	26-Jan-38
G63/6	Live	Avoca Mining Pty Ltd	281	\$5,030		28-Aug-15	27-Aug-36
G63/7	Live	Avoca Mining Pty Ltd	183	\$3,294		27-Apr-16	26-Apr-37
L15/233	Live	Avoca Mining Pty Ltd	89	\$1,593		16-Sep-02	15-Sep-23
L15/244	Live	Avoca Mining Pty Ltd	5	\$90		14-Apr-03	13-Apr-24
L15/259	Live	Avoca Mining Pty Ltd	28	\$501		2-Jun-06	1-Jun-27
L15/261	Live	Avoca Mining Pty Ltd	3	\$54		2-Jun-06	1-Jun-27
L15/272	Live	Avoca Mining Pty Ltd	12	\$215		9-Aug-06	8-Aug-27
L15/282	Live	Avoca Mining Pty Ltd	73	\$1,325		13-Mar-08	12-Mar-29
L15/288	Live	Avoca Mining Pty Ltd	35	\$627		27-Nov-08	26-Nov-29
L15/298	Live	Avoca Mining Pty Ltd	51	\$931		24-Jun-09	23-Jun-30
L15/302	Live	Avoca Mining Pty Ltd	8	\$161		17-Dec-10	16-Dec-31
L15/308	Live	Avoca Mining Pty Ltd	44	\$806		17-Dec-10	16-Dec-31
L15/322	Live	Avoca Mining Pty Ltd	26	\$465		6-Oct-11	5-Oct-32
L15/346	Live	Avoca Mining Pty Ltd	33	\$609		13-May-14	12-May-35
L15/347	Live	Avoca Mining Pty Ltd	12	\$215		25-Jul-14	24-Jul-35
L15/368	Live	Avoca Mining Pty Ltd	103	\$1,844		7-Jun-19	6-Jun-40
L15/377	Live	Avoca Mining Pty Ltd	8	\$143		26-Apr-19	25-Apr-40
L15/381	Live	Avoca Mining Pty Ltd	24	\$430		25-Oct-18	24-Oct-39

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
L15/382	Live	Avoca Mining Pty Ltd	15	\$269		27-Sep-18	26-Sep-39
L15/386	Live	Avoca Mining Pty Ltd	275	\$4,923		29-Aug-18	28-Aug-39
L15/389	Live	Avoca Mining Pty Ltd	12	\$215		8-Feb-19	7-Feb-40
L15/393	Live	Avoca Mining Pty Ltd	92	\$1,647		29-May-19	28-May-40
L15/410	Pending	Avoca Mining Pty Ltd	74				
L15/411	Pending	Avoca Mining Pty Ltd	29				
L15/415	Pending	Avoca Mining Pty Ltd	10				
L26/281	Live	Salt Lake Mining Pty Ltd	1	\$36		17-Aug-17	16-Aug-38
L63/58	Live	Avoca Mining Pty Ltd	32	\$573		19-Jul-07	18-Jul-28
L63/64	Live	Avoca Mining Pty Ltd	7	\$125		29-Apr-10	28-Apr-31
L63/72	Live	Avoca Mining Pty Ltd	3	\$54		7-Oct-15	6-Oct-36
L63/73	Live	Avoca Resources Pty Ltd	38	\$698		1-Sep-15	31-Aug-36
L63/76	Pending	Avoca Mining Pty Ltd	64				
L63/82	Pending	Avoca Mining Pty Ltd	251				
M15/1132	Live	Avoca Mining Pty Ltd	919	\$18,400	\$92,000	2-Oct-02	1-Oct-23
M15/1133	Live	Avoca Mining Pty Ltd	792	\$15,860	\$79,300	2-Oct-02	1-Oct-23
M15/1134	Live	Avoca Mining Pty Ltd	599	\$12,000	\$60,000	2-Oct-02	1-Oct-23
M15/1135	Live	Avoca Mining Pty Ltd	905	\$18,120	\$90,600	2-Oct-02	1-Oct-23
M15/1790	Live	Avoca Mining Pty Ltd	623	\$12,460	\$62,300	8-Jul-13	7-Jul-34
M15/1792	Live	Avoca Resources Pty Ltd	1,088	\$21,760	\$108,800	25-Jul-13	24-Jul-34
M15/1806	Live	Corona Minerals Pty Ltd	338	\$6,760	\$33,800	24-Dec-12	23-Dec-33
M15/1814	Live	Polar Metals Pty Ltd	1,146	\$22,920	\$114,600	12-Jul-18	11-Jul-39
M15/1828	Live	Corona Minerals Pty Ltd	1,004	\$20,080	\$100,400	15-Dec-16	14-Dec-37
M15/1872	Pending	Avoca Resources Pty Ltd	433				
M15/1873	Live	Avoca Mining Pty Ltd	80	\$1,620	\$10,000	6-Aug-20	5-Aug-41
M15/225	Live	Avoca Mining Pty Ltd	17	\$0	\$10,000	28-Jan-87	27-Jan-29
M15/231	Live	Avoca Mining Pty Ltd	19	\$400	\$10,000	3-Nov-87	2-Nov-29
M15/289	Live	Avoca Mining Pty Ltd	10	\$200	\$10,000	3-Nov-87	2-Nov-29
M15/31	Live	Avoca Mining Pty Ltd	10	\$200	\$10,000	24-Aug-83	23-Aug-25
M15/325	Live	Avoca Mining Pty Ltd	2	\$60	\$5,000	9-Mar-88	8-Mar-30
M15/338	Live	Avoca Mining Pty Ltd	129	\$2,600	\$13,000	14-Mar-88	13-Mar-30
M15/348	Live	Avoca Mining Pty Ltd	495	\$9,900	\$49,500	25-Mar-88	24-Mar-30
M15/351	Live	Avoca Mining Pty Ltd	343	\$6,860	\$34,300	2-May-88	1-May-30
M15/352	Live	Avoca Mining Pty Ltd	23	\$480	\$10,000	2-May-88	1-May-30
M15/375	Live	Avoca Mining Pty Ltd	397	\$7,960	\$39,800	22-Apr-88	21-Apr-30
M15/506	Live	Avoca Mining Pty Ltd	779	\$15,580	\$77,900	7-May-90	6-May-32
M15/507	Live	Avoca Mining Pty Ltd	347	\$6,940	\$34,700	7-May-90	6-May-32
M15/512	Live	Avoca Mining Pty Ltd (90%)Paynter, Noel Arthur (10%)	19	\$400	\$10,000	2-Apr-90	1-Apr-32
M15/528	Live	Avoca Mining Pty Ltd	10	\$220	\$10,000	21-Mar-91	20-Mar-33
M15/580	Live	Avoca Mining Pty Ltd	962	\$19,240	\$96,200	1-Aug-91	31-Jul-33

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
M15/581	Live	Avoca Mining Pty Ltd	480	\$9,620	\$48,100	1-Aug-91	31-Jul-33
M15/597	Live	Avoca Mining Pty Ltd	595	\$11,920	\$59,600	6-Jan-92	5-Jan-34
M15/610	Live	Avoca Mining Pty Ltd	174	\$3,480	\$17,400	10-Dec-91	9-Dec-33
M15/616	Live	Avoca Mining Pty Ltd	667	\$13,340	\$66,700	18-Nov-92	17-Nov-34
M15/620	Live	Avoca Mining Pty Ltd	120	\$2,400	\$12,000	20-Oct-92	19-Oct-34
M15/629	Live	Avoca Mining Pty Ltd	120	\$2,420	\$12,100	20-Oct-92	19-Oct-34
M15/639	Live	Avoca Mining Pty Ltd	847	\$0	\$84,700	25-Jan-93	24-Jan-35
M15/640	Live	Avoca Mining Pty Ltd	726	\$0	\$72,700	25-Jan-93	24-Jan-35
M15/642	Live	Avoca Mining Pty Ltd	934	\$0	\$93,500	25-Jan-93	24-Jan-35
M15/651	Live	Polar Metals Pty Ltd	137	\$2,760	\$13,800	11-Feb-93	10-Feb-35
M15/665	Live	Avoca Mining Pty Ltd	875	\$17,520	\$87,600	14-Oct-93	13-Oct-35
M15/680	Live	Avoca Mining Pty Ltd	686	\$13,720	\$68,600	1-Mar-94	28-Feb-36
M15/681	Live	Avoca Mining Pty Ltd	943	\$18,880	\$94,400	1-Mar-94	28-Feb-36
M15/682	Live	Avoca Mining Pty Ltd	876	\$17,540	\$87,700	30-Mar-94	29-Mar-36
M15/683	Live	Avoca Mining Pty Ltd	784	\$15,700	\$78,500	1-Mar-94	28-Feb-36
M15/684	Live	Avoca Mining Pty Ltd	799	\$15,980	\$79,900	1-Mar-94	28-Feb-36
M15/685	Live	Avoca Mining Pty Ltd	840	\$16,800	\$84,000	1-Mar-94	28-Feb-36
M15/710	Live	Polar Metals Pty Ltd	666	\$13,340	\$66,700	10-Aug-94	9-Aug-36
M15/748	Live	Avoca Mining Pty Ltd	9	\$180	\$10,000	8-Feb-95	7-Feb-37
M15/757	Live	Avoca Mining Pty Ltd	418	\$8,360	\$41,800	3-Mar-95	2-Mar-37
M15/758	Live	Avoca Mining Pty Ltd	892	\$17,840	\$89,200	3-Mar-95	2-Mar-37
M15/786	Live	Avoca Mining Pty Ltd	954	\$19,100	\$95,500	27-Apr-95	26-Apr-37
M15/815	Live	Avoca Mining Pty Ltd	944	\$18,880	\$94,400	8-Jan-97	7-Jan-39
M15/817	Live	Avoca Mining Pty Ltd	919	\$18,380	\$91,900	23-Sep-96	22-Sep-38
M15/820	Live	Avoca Mining Pty Ltd	968	\$19,360	\$96,800	19-Aug-96	18-Aug-38
M63/165	Live	Avoca Mining Pty Ltd	202	\$4,040	\$20,200	16-Feb-88	15-Feb-30
M63/230	Live	Polar Metals Pty Ltd	497	\$9,940	\$49,700	19-Nov-90	18-Nov-32
M63/236	Live	Avoca Mining Pty Ltd	9	\$200	\$10,000	9-Aug-91	8-Aug-33
M63/255	Live	Polar Metals Pty Ltd	369	\$7,400	\$37,000	22-Oct-92	21-Oct-34
M63/269	Live	Polar Metals Pty Ltd	649	\$12,980	\$64,900	1-Oct-93	30-Sep-35
M63/279	Live	Polar Metals Pty Ltd	13	\$260	\$10,000	23-Mar-94	22-Mar-36
M63/329	Live	Avoca Resources Pty Ltd (93.33%)Stehn, Trent Paterson (6.67%)	79	\$1,580	\$10,000	23-Jul-01	22-Jul-22
M63/366	Live	Avoca Mining Pty Ltd	54	\$1,080	\$10,000	30-Jul-10	29-Jul-31
M63/368	Live	Avoca Resources Pty Ltd (93.33%)Stehn, Trent Paterson (6.67%)	331	\$6,620	\$33,100	23-Jul-01	22-Jul-22
M63/515	Live	Avoca Mining Pty Ltd	709	\$14,180	\$70,900	29-Aug-07	28-Aug-28
M63/516	Live	Avoca Mining Pty Ltd	710	\$14,220	\$71,100	29-Aug-07	28-Aug-28
M63/647	Live	Avoca Resources Pty Ltd	998	\$19,960	\$99,800	6-Aug-13	5-Aug-34
M63/660	Pending	Avoca Resources Pty Ltd (93.33%)Stehn, Trent Paterson (6.67%)	277				

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
M63/662	Pending	Polar Metals Pty Ltd	971				
P15/5772	Live	Corona Minerals Pty Ltd	65	\$195	\$2,600	3-Sep-13	2-Sep-21
P15/5791	Live	Corona Minerals Pty Ltd	24	\$72	\$2,000	26-Nov-13	25-Nov-21
P15/5958	Live	Polar Metals Pty Ltd	41	\$123	\$2,000	22-Dec-15	21-Dec-23
P15/5959	Live	Polar Metals Pty Ltd	21	\$63	\$2,000	22-Dec-15	21-Dec-23
P15/5960	Live	Avoca Resources Pty Ltd	131	\$396	\$5,280	24-Aug-15	23-Aug-23
P15/5961	Live	Avoca Resources Pty Ltd	187	\$564	\$7,520	24-Aug-15	23-Aug-23
P15/6179	Live	Avoca Mining Pty Ltd	21	\$63	\$2,000	11-Oct-18	10-Oct-22
P15/6229	Pending	Avoca Mining Pty Ltd	200				
P15/6230	Live	Avoca Mining Pty Ltd	129	\$387	\$5,160	28-Mar-19	27-Mar-23
P15/6231	Pending	Avoca Mining Pty Ltd	198				
P15/6234	Pending	Avoca Mining Pty Ltd	121				
P15/6239	Pending	Avoca Mining Pty Ltd	121				
P15/6240	Pending	Avoca Mining Pty Ltd	121				
P15/6582	Pending	Avoca Mining Pty Ltd	3				
P63/1468	Live	Avoca Resources Pty Ltd (93.33%); Stehn, Trent Paterson (6.67%)	13	\$39	\$2,000	3-Jun-08	2-Jun-16
P63/1587	Live	Polar Metals Pty Ltd	121	\$366	\$4,880	10-Jun-09	9-Jun-17
P63/1588	Live	Polar Metals Pty Ltd	120	\$363	\$4,840	10-Jun-09	9-Jun-17
P63/1589	Live	Polar Metals Pty Ltd	121	\$366	\$4,880	10-Jun-09	9-Jun-17
P63/1590	Live	Polar Metals Pty Ltd	120	\$360	\$4,800	10-Jun-09	9-Jun-17
P63/1591	Live	Polar Metals Pty Ltd	121	\$366	\$4,880	10-Jun-09	9-Jun-17
P63/1592	Live	Polar Metals Pty Ltd	121	\$366	\$4,880	10-Jun-09	9-Jun-17
P63/1593	Live	Polar Metals Pty Ltd	121	\$366	\$4,880	10-Jun-09	9-Jun-17
P63/1594	Live	Polar Metals Pty Ltd	121	\$366	\$4,880	10-Jun-09	9-Jun-17
P63/1977	Live	Avoca Resources Pty Ltd	88	\$264	\$3,520	3-Mar-15	2-Mar-23
P63/2011	Live	Avoca Mining Pty Ltd	170	\$510	\$6,800	8-May-17	7-May-21
P63/2012	Live	Avoca Mining Pty Ltd	164	\$492	\$6,560	8-May-17	7-May-21
P63/2013	Live	Avoca Mining Pty Ltd	181	\$543	\$7,240	9-May-17	8-May-21
P63/2014	Live	Avoca Mining Pty Ltd	147	\$441	\$5,880	9-May-17	8-May-21
P63/2015	Live	Avoca Mining Pty Ltd	117	\$354	\$4,720	9-May-17	8-May-21
P63/2021	Pending	Avoca Mining Pty Ltd	198				
P63/2022	Pending	Avoca Mining Pty Ltd	198				
P63/2023	Pending	Avoca Mining Pty Ltd	148				
P63/2024	Pending	Avoca Mining Pty Ltd	177				
P63/2025	Live	Avoca Mining Pty Ltd	144	\$432	\$5,760	8-May-17	7-May-21
P63/2050	Live	Avoca Mining Pty Ltd	182	\$549	\$7,320	8-May-17	7-May-21
P63/2051	Live	Avoca Mining Pty Ltd	151	\$453	\$6,040	8-May-17	7-May-21
P63/2064	Live	Avoca Mining Pty Ltd	21	\$63	\$2,000	20-Jul-17	19-Jul-21
P63/2067	Live	Avoca Mining Pty Ltd	172	\$516	\$6,880	9-May-17	8-May-21
P63/2080	Live	Avoca Mining Pty Ltd	19	\$60	\$2,000	13-Apr-18	12-Apr-22

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
P63/2094	Live	Avoca Mining Pty Ltd	168	\$0	\$6,760	18-Jan-18	17-Jan-22
P63/2095	Live	Avoca Mining Pty Ltd	183	\$0	\$7,360	18-Jan-18	17-Jan-22
P63/2097	Live	Avoca Mining Pty Ltd	149	\$0	\$6,000	18-Jan-18	17-Jan-22
P63/2100	Live	Avoca Mining Pty Ltd	182	\$546	\$7,280	5-Jun-18	4-Jun-22
P63/2101	Live	Avoca Mining Pty Ltd	102	\$306	\$4,080	6-Jun-18	5-Jun-22
P63/2102	Live	Avoca Mining Pty Ltd	91	\$273	\$3,640	6-Jun-18	5-Jun-22
P63/2119	Live	Avoca Mining Pty Ltd	102	\$306	\$4,080	10-Oct-18	9-Oct-22
P63/2120	Live	Avoca Mining Pty Ltd	106	\$318	\$4,240	10-Oct-18	9-Oct-22
P63/2121	Live	Avoca Mining Pty Ltd	121	\$363	\$4,840	10-Oct-18	9-Oct-22
P63/2122	Live	Avoca Mining Pty Ltd	130	\$390	\$5,200	10-Oct-18	9-Oct-22
P63/2125	Live	Avoca Mining Pty Ltd	197	\$591	\$7,880	9-Apr-19	8-Apr-23
P63/2126	Live	Avoca Mining Pty Ltd	194	\$582	\$7,760	9-Apr-19	8-Apr-23
P63/2203	Pending	Avoca Mining Pty Ltd	194				
P63/2204	Pending	Avoca Mining Pty Ltd	200				
P63/2205	Pending	Avoca Mining Pty Ltd	111				
P63/2206	Pending	Avoca Mining Pty Ltd	171				
P63/2207	Pending	Avoca Mining Pty Ltd	199				
P63/2208	Pending	Avoca Mining Pty Ltd	200				
P63/2209	Pending	Avoca Mining Pty Ltd	182				
P63/2210	Pending	Avoca Mining Pty Ltd	198				
P63/2211	Pending	Avoca Mining Pty Ltd	194				
P63/2232	Pending	Avoca Mining Pty Ltd	117				
P63/2233	Pending	Avoca Mining Pty Ltd	90				
P63/2234	Pending	Avoca Mining Pty Ltd	177				
P63/2235	Pending	Avoca Mining Pty Ltd	189				
P63/2236	Pending	Avoca Mining Pty Ltd	189				
P63/2237	Pending	Avoca Mining Pty Ltd	183				
Total			192,201	\$861,180	\$5,569,820		

## Notes:

1. Rent and commitment are for 2020/2021 and are given on 100% basis. Karora share of rent is 20%.

## Royalties

Lithium Rights Agreement – Liontown Resources Limited - Karora has granted exclusive rights to LRL (Aust) Pty Ltd, a wholly owned subsidiary of ASX listed Liontown Resources Limited, to mine and explore for lithium and accessory minerals, including grant of an irrevocable licence to conduct activities on tenements owned by its wholly owned subsidiary Avoca Resources Pty Ltd being E63/856, P63/1977 and M63/647.

Nickel Rights Agreement – S2 Resources Limited - Karora has granted Southern Star Exploration Pty Ltd, a wholly owned subsidiary of ASX listed S2 Resources Limited, nickel rights on those tenements owned by its wholly owned subsidiary Avoca Polar Metals Pty Ltd.

Karora pays the following royalties on gold production to:

• traditional land owners have production payments of up to 1% of gross gold revenue over various

tenements;

- state government royalty equal to 2.5% of recovered gold; and
- various royalties across the tenements to third parties on recovered gold less allowable deductions.

### Permits and Authorizations

An application for a mining lease must be accompanied by a Mining Proposal ("MP") and Mine Closure Plan ("MCP") in accordance with the Mining Act. A mining lease, MP and MCP are required to carry out mining activities on a site. There are a number of MPs and MCPs applicable to HGO. Listed below are the permits that cover HGO's active mining operations:

- Mine Closure Plan Higginsville Gold Operations Reg ID: 61112 dated August 2016;
- Revised Fairplay East In-pit TSF Mining Proposal Reg ID: 75834;
- Mining Proposal Mt Henry Gold Operation Revision A Version 2 Reg ID: 71989 ("Mt Henry MCP"). Approval was given on April 12, 2018 for AMG to carry out the activities outlined in the Mt Henry MCP. Conditions were varied on April 18, 2018 as set out in a letter from DMIRS dated 23 April 2018;
- Baloo Project Mine Closure Plan Reg ID: 75377 ("**Baloo MCP**"). Approval was given by DMIRS on February 11, 2019 for AMG to carry out the activities outlined in the Baloo MCP; and
- Baloo Project: Mining Proposal Version 2 Reg ID 84014. Approval was given by DMIRS on January 24, 2020 for AMG to carry out the activities outlined in the Mining Proposal.

## Effect of Native Title on HGO Mining Tenements

The HGO tenements are subject to native title determinations and claims. As of the date of the HGO Technical Report, the status of Native Title determinations is as follows:

- (a) **Ngadju Claim** (WCD2014/004, WAD6020/1998) and **Ngadju B Claim** (WCD2017/002, WAD6020/1998)): the Federal Court of Australia has determined that the Ngadju people have native title rights and interests in relation to an area of land that includes a large number HGO tenements.
- (b) Marlinyu Ghoorlie Claim (WC2017/007, WAD647/2017)): the Federal Court of Australia has accepted for registration a claim by the Marlinyu Ghoorlie people over an area of land that includes a number of HGO tenements. This claim has not yet been determined.
- (c) **Maduwongga Claim** (WC2017/001, WAD186/2017): the Maduwongga people have registered a native title claim over an area of land that includes a number of HGO tenements. This claim has not yet been determined.
- (d) **Nyalpa Pirniku Claim** (WC2019/00, WAD91/2019): the Nyalpa Pirniku people have lodged a native title claim over an area of land that includes a number of HGO tenements. This claim is currently identified for a registration decision.

The existence of a native title determination or a claim does not impact directly on the validity of mining tenements, nor does it impact on existing operations.

The relevant mining legislation in Western Australia contains provisions that may make a tenement holder liable for the payment of compensation for the effect of mining and exploration activities on any native title rights and interests that may still exist in the area covered by a tenement.

Karora have inherited three active mining agreements with native title groups for the grant of tenements:

- (a) **2002 Mining Agreement**: with the Ngadju People dated May 20, 2002;
- (b) **2013 Mining Agreement**: with the Ngadju People dated June 30, 2013; and
- (c) **2018 Mining Agreement**: with Ngadju Native Title Indigenous Corporation dated June 12, 2018.

### Indigenous Heritage Act 1972

A search of the AHIS conducted on January 1, 2021 shows there are a number of Indigenous sites within the HGO tenements. Based on records held by HGO, prior to the area being developed and mined, ethnographic and archaeological surveys were commissioned over the HGO tenements. No sites of ethnographic or archaeological significance were recorded.

Karora is a party to a number of heritage protection agreements with the Ngadju Claimant Group across HGO's tenements.

# History

Samantha Gold NL commenced exploration activities in and around the historic mining centres of Higginsville and Eundynie in 1983 after acquiring the grounds from local prospectors. From 1987 to 1993 extensive use of soil geochemistry led to the early discovery of the Poseidon South, Graveyard and Aphrodites deposits and later the Tertiary sediment hosted Challenger-Swordsman deep-lead deposit.

Resolute Samantha Limited ("**Resolute**") gained control of Samantha Gold NL in July 1994 and continued an intensive exploration approach that yielded additional discoveries. In 1996 exploration focus changed to examining the depth potential of the Higginsville Belt. Underground mining from the base of the Poseidon South Pit was undertaken from 1997 to 1998. From 1989 to 1997 HGO plant processed a total of 6.7 million tonnes to produce 613,000 oz.

In July 1999, WMC entered into a joint venture with Resolute to explore the area for nickel and gold. Gold Fields Australia ("GFA") purchased WMC's interest in the project as a part of the purchase agreement for WMC's Western Australian gold assets in November 2001, and acquired interest in the Higginsville joint venture on February 22, 2002. GFA took over full control of the project in October 2003, with Resolute retaining the nickel rights which were subsequently sold to Bullion Minerals Limited ("Bullion"). Over the period of WMC's involvement in the project area, the ground holding has reduced by over 50%, from 400 square km to 178 square km.

Avoca reached an agreement with Gold Fields to acquire 100% of HGO on June 30, 2004, with subsequent settlement occurring on December 3, 2004. The Nickel rights to particular tenements are held by Bullion. Equinox Gold Corporation commenced a joint venture arrangement with Bullion on these tenements to explore for nickel (the "Cowan Nickel Joint Venture"). Bullion subsequently transferred the nickel rights to Liontown Resources Limited.

Avoca discovered the Trident Deposit in October 2004, with an initial resource statement of 450,000 oz completed in August 2005. A pre-feasibility study was completed in December 2005. Additional drilling resulted in an updated resource statement released in May (to 870,000 oz) and August 2006 (to 1.1 million ounces).

The procurement and construction of a new 1 Mtpa CIL processing plant at HGO commenced in late 2007. The plant was commissioned in the first half of 2008 with the first official gold pour on July 1, 2008. The plant is designed to treat 1.3 Mtpa. The Trident mine was the base load of the Operation, supplemented by feed coming from paleochannels and open pits. A paste plant delivering paste to the underground was completed in October 2009. On February 18, 2011, Anatolia Minerals Development Limited and ARS merged, resulting in a new company, Alacer.

## Westgold

On the October 1, 2013, Metal X acquired all of Alacer's Australian gold operations through Westgold, Metal X's wholly-owned subsidiary. The acquisition included HGO.

In July 2015, Metals X acquired the Mt Henry Gold Project from Panoramic Resources Ltd. and Matsa Resources Limited. The Mt Henry Gold Project is located approximately 15 km south of Norseman and 75 km south of HGO. The Mt Henry Gold Project consists of three known deposits: North Scotia, Selene and Mt Henry. All the deposits are located on granted mining leases.

In February 2018, Westgold acquired the Polar Bear and Norcott projects, together with the Eundynie Joint Venture, for A\$9 million from S2 Resources Limited ("S2"), with S2 retaining nickel rights.

The Polar Bear project abuts the main HGO historic gold deposits and provides short term mineralized material sources for the Higginsville treatment plant from mining of the Baloo deposit and further exploring with a view to development of the nearby Monsoon, Bindy, Nanook and Ear Lobe prospects.

On October 2, 2018, Westgold published a gold mineral resource estimation and mineral reserve update effective June 30, 2018. HGO includes a 367,000 ounce historical reserve within a 1.2 million ounce historical measured & indicated gold resource, along with a further 0.7 million ounce historical inferred resource. A qualified person has not done sufficient work on behalf of the Company to classify the historical estimates noted above as current mineral resources or mineral reserves. The Company is not treating the historical estimates as current mineral resources or mineral reserves.

## Geological Setting, Mineralization, and Deposit Types

Regional Geology

The HGO is located in the Eastern Goldfields Superterrane of the Archean Yilgarn Craton of Western Australia. The Eastern Goldfields Superterrane is comprised of metavolcanic and metasedimentary rocks, granites and granitic gneiss, and is divided into a number of terranes, namely the Kalgoorlie, Kurnalpi and Burtville Terranes. These tectono-stratigraphic terranes are defined on the basis of distinct volcanic facies, geochemistry and geochronology with the Eastern Goldfields Superterrane, and range in age from 2.81 to 2.66 Ga.

The Higginsville tenement package are located almost entirely within the well-mineralised Kalgoorlie Terrane, between the gold mining centres of Norseman and Saint Ives. This region is made up predominantly of younger (2.71

- 2.66 Ga) and minor older (>2.73 Ga) greenstone successions.

The structurally complex Archaean geology is rarely observed in outcrop, being obscured by well-developed ferruginous and carbonate soils, aeolian sands, tertiary palaeo-sediments and salt lake sediments. Many areas are also overprinted by deep lateritic profiles, which have resulted in extensive chemical remobilisation and deposition. The Archaean stratigraphy has a general northward trend comprising multiply deformed ultramafic (gabbro) basalt successions adjoined by sediments to the west and east. Shearing and faulted contacts are common. The units have been structurally repeated by east over west thrust faulting.

HGO can be sub-divided into seven major geological domains:

- Trident line-of-lode;
- Chalice;
- Lake Cowan:
- Southern Palaeochannels;
- Mount Henry;
- Polar Bear Group; and
- Spargos Project area.

Trident line-of-lode

The majority of mineralization projects along the Trident line-of-lode are hosted within the Poseidon Gabbro and high-MgO dyke complexes in the south.

Chalice

The Chalice deposit is located within a north south trending, two to three km wide greenstone terrane, flanked on the west calc-alkaline granitic rocks of the Boorabin Batholith and to the east by the Pioneer Dome Batholith. The maficultramafic rocks of the greenstone terrane comprise upper greenschist to middle amphibolite facies metamorphosed, high-magnesium basalt, minor komatiite units and interflow clastic sedimentary rocks intruded by a complex network of multi-generational granite, pegmatite and porphyry bodies.

Lake Cowan

The Lake Cowan Project is located on the northwest shore of the Lake Cowan salt pan, 19 km northeast of the historic Higginsville town site.

The area is situated near the centre of a regional anticline between the Zuleika and Lefroy faults, with the local geology of the area made more complex by the intrusion of the massive Proterozoic Binneringie dyke. The anticlinal system is in a rift-phase portion of the greenstone belt, comprising a complex succession of mafics and ultramafics, sulphidic carbonaceous shales, felsic volcanics and volcaniclastic sediments. These have been intruded by several younger felsic granitoids.

### Southern Palaeochannels

Throughout HGO, a significant proportion of gold deposits are hosted by sediments within the Southern Palaeochannel network. Mineralised zones comprise both placer gold, normally near the base of the channel-fill sequences, and chemically-precipitated secondary gold within the channel-fill materials and underlying saprolite. These gold concentrations commonly overlie, or are adjacent to, primary mineralised zones within Archaean bedrock.

Outcrop is generally poor, due to extensive ferruginisation, calcareous soils, aeolian sands and extensive areas of remnant lacustrine and fluvial sediments. The result is a complex, layered regolith, with considerable chemical remobilisation and re-deposition.

### Mount Henry

The Archean rocks in the Norseman area have historically been classified into a series of formations. The stratigraphic sequence for the area is:

- the Penneshaw Formation forms the greenstone sequence on the eastern side of the belt. It consists of predominantly mafic volcanic rocks with inter layered units of felsic volcaniclastic and sedimentary rocks, and is intruded by dolerite sills and dykes. Units of the formation host the gold mineralization at Everlasting and Mildura prospects.
- the Noganyer Formation forms a distinct sedimentary sequence of siliclastic rocks, principally silicate facies banded iron formations ("**BIF**"), chert, sandstones and shales. Intrusions of dolerite dykes and sills are common throughout. An age of 2,706 (+/-5) Ma has been obtained from a chert bed; and
- the Woolyeenyer Formation both dips and faces west and consists of a sequence of mafic volcanic rocks with minor ultramafic and sedimentary units. Syn-volcanic dolerite dykes and sills intrude the strata and the Noganyer Formation below. One dyke in the lower part of the sequence has an age of 2,714 (+/-5) Ma which is the same age (within error) as the chert in the lower Noganyer Formation.

The Mount Henry and Selene gold deposits are hosted in the Noganyer Formation. The Noganyer Formation is conformably overlain by the Woolyeenyer Formation in the west.

# Polar Bear Group

The geology at Polar Bear is dominated by complexly deformed Achaean greenstone assemblages of the Norseman-Wiluna Greenstone Belt which have been metamorphosed to upper greenschist facies. The major regional structures in the area are the Boulder-Lefroy Fault, located approximately 10 km northeast of the project area, the Mission Fault located in the southern portion of the package, and the Black Knob Fault that transects the central portion of the project.

The Mission Fault merges with the Black Knob Fault in the southwest portion of the project area. Both the Boulder-Lefroy and the Black Knob faults strike north-northwest. The Black Knob Fault is interpreted to be the southern extension of the Zuleika Shear.

The characteristics of the Western Flanks and A Zone gold lodes at the Beta Hunt Mine and the gold deposits at Higginsville are consistent with the greenstone-hosted quartz-carbonate vein (mesothermal) gold deposit.

# Spargos Project Area

The Spargos Project occurs within Coolgardie Domain of the Kalgoorlie Terrane. The western boundary of the Coolgardie Domain is marked by the Ida Fault, a crustal-scale suture that separates the eastern goldfields from older terranes to the west. Its eastern margin is marked by the Zuleika Fault. The geological setting comprises tightly-folded north-south striking ultramafic and mafic volcanic rocks at the northern closure Widgiemooltha Dome.

The volcanic sequence contains interbedded black shale horizons and is overlain by felsic volcanoclastic rocks, arenites and siltstones. The entire sequence has been intruded by granite and pegmatites, and cut by Proterozoic dolerite dykes. The area bounded by the Zuleika Shear to the east and the Kunanulling Shear to the west is characterised by middle to upper amphibolite facies metamorphism.

Structurally the area is complex with early thrust faulting and recumbent folding followed by tight isoclinal folding and strike slip faulting resulting in multiple repetitions of individual units. Locally the anticlinal positions are occupied by granite bodies with the Archean stratigraphy wrapping around the domal structures. The project lies on the general trend of the Kunanalling/Karramindie Shear corridor, a regional shear zone that hosts significant mineralisation to the north at Ghost Crab (Mt Marion), Wattle Dam to the south, the Penfolds group and Kunanalling. The regional prospective Zuleika Shear lies to the east of the project.

Deposit Types

From Westgold (2017):

Throughout HGO, a significant proportion of gold deposits are hosted by sediments within Southern Palaeochannel networks. Mineralised zones comprise both placer gold, normally near the base of the channel-fill sequences, and chemically-precipitated secondary gold within the channel-fill materials and underlying saprolite. These gold concentrations commonly overlie, or are adjacent to, primary mineralised zones within Archaean bedrock. Outcrop is generally poor, due to extensive ferruginisation, calcareous soils, aeolian sands and extensive areas of remnant lacustrine and fluvial sediments. The result is a complex, layered regolith, with considerable chemical re-mobilisation and re-deposition (Lintern et. al., 2001).

The regional palaeodrainage system has incised several fault-bounded greenstone sequences, which comprise high-Mg basalt, komatiite and minor interflow sedimentary rocks, intruded by dolerite and gabbro. The orientation of palaeochannels is largely controlled by major faults and shear-zones, that trend north-northwest, parallel to lithological contacts (Swager, 1989; Griffin, 1990).

The Cowan palaeodrainage system that includes the Challenge / Swordsman and Mitchell palaeochannels, comprises up to 100m of Cainozoic sediment overlying Precambrian basement. Clarke (1993) divided the sedimentary sequence into the Eundynie Group, comprising a succession of Eocene sedimentary rocks, and the overlying Redmine Group, comprising Oligocene to Recent deposits.

Within oxidised basal sediments gold distribution is typically irregular and sparse. Placer gold is confined to quartzitic sand and gravel lag adjacent to a Tertiary / Archaean unconformity (autochthonous style), and is absent from clay and sand units throughout the upper part of the basal sand facies (allochthonous style). Placer gold may be preferentially concentrated according to palaeotopography where highly-elevated concentrations, commonly incorporating nugget-sized gold grains, occur at stream junctions, particularly in the upper reaches of channel systems. Elevated concentrations may also occur with particular orientations of the channel base, defined by regional bedrock structures.

## **Exploration**

Exploration for gold mineralization on the HGO tenements has been completed primarily by drilling which is described under the heading "*Higginsville Gold Operation – Drilling*". Since the sale of the asset by Alacer to Westgold in 2013, limited non-drilling exploration has been completed on the property.

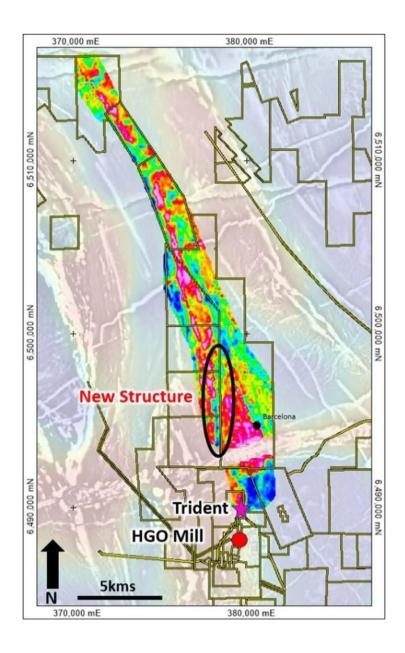
Burke-Barcelona High Density Gravity Survey

As part of the renewed focus on exploration at HGO, a high density gravity survey was conducted over a 60 square km area covering the Burke-Barcelona mineralised corridor, 5km north of the previously mined 1.0 Moz Trident gold deposit and HGO mill. The survey area had previously been the focus of reconnaissance aircore drilling and limited bedrock drilling as part of a regional approach by previous owners. The aim of the survey was to define both shearhosted and paleochannel structures on 200 m X 100 m line spacings. The survey was conducted in December, 2019.

Results from the gravity survey highlight a new 5km long north-south structure (Figure 1) interpreted to be a splay off the main Burke-Barcelona mineralised shear which lies parallel and west of the regionally significant Zuleika Shear. The new gravity defined structure, combined with historical shallow aircore drilling (including a best

intersection of 4 m of 1.7 g/t in HIGA157, from 16m), highlights the prospectivity of the full 5 km length of the structure and enhances the potential for mineralization at depth.

Figure 1: High density gravity image (overlying a 1VD aeromagnetic image) covering the Burke-Barcelona mineralised corridor highlighting newly interpreted north-south structure west of the Barcelona prospect. (CNW Group/Karora).



## Lake Cowan

As part of Karora's HGO strategy, a high density (200m X 100m) survey was conducted in April/May 2020 over a 400km2 area east of the central HGO area (Figure 2). The area has little to no historic exploration yet is situated over prospective ground that covers the eastern margin of the Kalgoorlie Terrane. The area contains a number of the main egional faults and has similar geology to many of the major gold deposits within the Kalgoorlie-Kambalda-Norseman area.

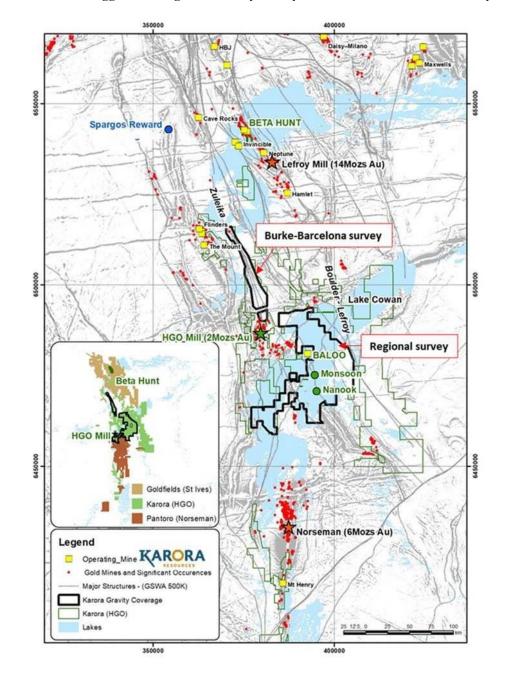


Figure 2: Location of the Higginsville Regional Gravity Survey and the Burke-Barcelona Gravity Survey

The gravity survey covered large areas of the Zuleika shear zone and the western margin of the Boulder Lefroy shear zone. The Zuleika and Boulder Lefroy shear zones and associated subsidiary faults host most of the deposits mined at HGO and the adjacent and along strike St Ives gold operation to the north, which has produced over 14M oz. since 1980.

The bulk of the eastern margin of the HGO project area is largely unexplored, sitting under the Lake Cowan salt lake. The impact of the salt lake on the location of historical mining at HGO shows a clear bias to land-based deposits compared to deposits located on salt lakes (under-cover). The higher cost and drill-access difficulties have previously eterred explorers from assessing the potential for new gold deposits under the salt lake. Recent salt lake discoveries in the region which include Karora's Baloo deposit (2015 - 264,000oz) and St Ives' Invincible deposit (2012 - 1.3 M oz), highlight the potential that exists under this terrain.

Preliminary observations from the images produced to date show significant, and well-recognised structural trends and fault-offsets known to be associated with economic primary mineralization plus substantial paleochannel systems linked with known resources.

A desktop targeting study was completed with targets defined for follow-up lake aircore drill testing in late 2020/2021.

The regional gravity survey was designed to cover the eastern margin tenements covering Lake Cowan to the east of Higginsville gold processing facility. Data collection was undertaken by Atlas Geophysics Pty Ltd on a 200m by 100m grid using a Scintrex CG-5 gravity meter. The gravity data were reduced to the sea-level datum by standard reductions (Tide, drift, height, temperature, pressure, tilt, free air, and bouguer corrections) using a bouguer density of 2.67 g/cm<sup>3</sup> to reflect the underlying geology. The collected data was processed by Resource Potentials Pty Ltd.

# **Drilling**

Drilling at HGO has been carried out by a number of companies since the 1970's to explore for and delineate nickel and gold resources using a variety of methods. In 2020, Karora have drilled 4,070 holes other than grade control holes totalling 144,689m. The total drill holes and metres by type are shown in Table 2 and Table 3.

Table 2: Higginsville Drill Hole Database (excludes grade control drilling) - Number of Holes as of December 31, 2020

Drill Type	Pre-Westgold	WestGold	Karora	Total
RC/DDH	65	11	21	97
PERC	108	2		110
DDH	2,772	33	21	2,826
RC	9,686	2,314	782	12,782
AC	26,151	1,953	404	28,508
RAB	10,515	261		10,776
RAB/RC	64			64
UNK	348			348
AC/RC		7		7
Total	49,709	4,581	1,228	55,518

Table 3: Higginsville Drill Hole Database (excludes grade control drilling) - Number of Metres as of December 31, 2020

Drill Type	Pre-Westgold	WestGold	Karora	Total
RC/DDH	9,210	2,793	4,930	16,933
PERC	1,578	30		1,680
DDH	480,766	4,837	3,187	488,790
RC	719,064	107,556	54,755	881,375
AC	1,001,849	66,045	18,540	1,086,434
RAB	324,812	5,811		330,623
RAB/RC	2,768			2,768
UNK	11,435			11,435
AC/RC		345		345

Drill Type	Pre-Westgold	WestGold	Karora	Total
Total	2,551,482	187,417	81,412	2,820,311

#### Results and Drill Sections

Interpretation of results from key projects drilled in 2020, is detailed below.

### Hidden Secret and Mousehollow

Hidden Secret and Mousehollow are located within the Eundynie historical mining centre 10km east of the HGO processing plant with mine workings dating back to the early 1900s.

Following the re-negotiation of the Morgan Stanley royalty at HGO, Karora completed a total of 204 reverse circulation ("RC") drill holes for 8,108 metres at Hidden Secret and Mousehollow. The drilling has confirmed the high grade nature of the mineralization (approximately 2.0 to 2.5 g/t) at both projects and has also extended mineralization along strike and down dip.

Highlights from the drilling are listed below and show that mineralization extends to surface (MOHR0075), while also indicating that it is open at depth. Tables showing complete results and drill hole locations can be found at the end of this release.

Hidden Secret (drillhole intervals are estimated true widths)

• HDSR0076: 5.2 g/t over 3m from 22m

• HDSR085: 24.8 g/t over 4m from 17m, including 92.6 g/t over 1m

• HDSR086: 5.6 g/t over 3m from 8m

HDSR098: 6.0 g/t over 7m from 45m, including 12.2 g/t over 3m
 HDSR0136: 15.1 g/t over 4m from 24m, including 47.8 g/t over 1m

• HDSR055: 4.0 g/t over 3m from 24m

Mousehollow (drillhole intervals are estimated true widths)

MOHR0055: 26.1 g /t over 3m from 22m
MOHR0075: 3.3 g/t over 19m from 0m
MOHR0078: 8.4 g/t over 4m from 13m
MOHR0111: 7.9 g/t over 3m from 30m
MOHR0106: 2.8 g/t over 8m from 49m

Baloo

Grade control drilling and follow-up RC drilling (6 holes for 262 metres) in the Baloo pit extended the high-grade mineralization beyond the pit design at the southern end of the pit. Results from the grade control drilling and the deeper follow-up holes were used to extend the existing pit design. Drill intersection 1 gold result highlights from the March RC program are listed below (drillhole intervals are estimated true widths)

BLOR0044: 5.5 g/t over 3.0 m from 21 m
 BLOR0048: 7.3 g/t over 2.0 m from 16 m

Mineralisation at Baloo is located on the Buldania Fault, a north north-west striking fault dipping shallowly approximately 30 degrees to the east. Alteration comprises biotite +/-pyrite-arsenopyrite with multiple generations of veining present within the Fault zone. Gold mineralization is associated with quartz-arsenopyrite-pyrite veining.

#### Pioneer

The Pioneer gold deposit is located 13km south south-east of the HGO processing plant. Karora commenced drilling at Pioneer late 2019 with the aim of upgrading and increasing the historical mineral resource. The work involved a two-stage RC drill program totaling 86 drill holes for 7,953 metres. Results from the 2019 - 2020 drilling have extended the mineralization along strike to the south and down dip and identified a shallow, south plunging high-grade shoot.

Highlights of gold results from the drilling are listed below (drillhole intervals are estimated true widths)

- PORR0138: 6.7 g/t over 9 m from 57 m
- PORR0141: 2.0 g/t over 15 m from 50 m
- PORR0142: 5.4 g/t over 17 m from 67 m, including 10.7 g/t over 6 m
- PORR0143: 5.5 g/t over 7 m from 59 m
- PORR0144: 3.5 g/t over 9 m from 66 m
- PORR0145: 4.6 g/t over 8 m from 80 m
- PORR0184: 8.5 g/t over 5 m from 97 m, including 16.0 g/t over 2 m
- PORR0186: 3.9 g/t over 18 m from 60 m
- PORR0209: 2.4 g/t over 12 m from 64 m

Mineralisation at Pioneer is interpreted to dip approximately 30 degrees towards the east and is hosted within a mafic package comprised mainly of silicified basalt with narrow, cherty interflow sediments. Mineralization is interpreted as bounded by steeply east dipping, north northeast trending regional shears.

Spargos Project

A total 12,500m of RC and 770m of diamond drilling were completed at the recently acquired Spargos Project.

### Sampling, Analysis and Data Verification

## Sample Preparation

A detailed description of sample preparation, analysis and security can be found in NI 43-101 Technical Report of the Mining Operations and Exploration Tenements of Avoca Resources Limited Western Australia (SRK 2010). The SRK report covers relevant procedures and methods used on its projects to 15 December, 2010, including those employed (historically and at the time of the report) at HGO. The Qualified Person's statement concluded that the sampling, sample preparation, sample analysis and sample security procedures at Higginsville are adequate and the data derived from the analyses of these samples can support resource estimation.

From February 2011 to September, 2013, HGO was owned by Alacer. During this period, the process of sample preparation, analysis and security is described in ASX releases, the latest one with reference to their December 31st, Resources and Reserves Statement by Alacer (Alacer, 2013). According to the authors of the HGO Technical Report, the description of the sampling method, sample analysis and QA/QC methods employed were consistent with industry standards.

#### Surface

Reverse circulation drilling is a form of percussion drilling utilizing a (nominally) 5¼" face-sampling hammer which is designed to eliminate downhole contamination. Drill cuttings are extracted from the reverse circulation return via cyclone. Prior to 2016, the underflow from each 1m interval was transferred via bucket to a four tiered riffle splitter, delivering approximately three kilograms of the recovered material into calico bags for analysis. The residual material is retained on the ground near the hole. Post-2016 a cone splitter has typically been used located directly below the cyclone, delivering approximately three kilograms of the recovered material into calico bags for analysis. Samples that are too wet to be split through a splitter are taken as grabs and are recorded as such. The use of a cone splitter is much more accommodating for wet samples.

Diamond drilling (HQ/NQ2) holes are used to better define resource and exploration prospects, with other core sizes used b both geologically and geotechnically logged, and subsequently halved for sampling.

Sample Security

For samples assayed at the on-site laboratory, samples were delivered to the facility by company staff. Upon delivery the responsibility for sample security and storage fell to the independent third party operator of the of the facility. The third party operator at HGO was Bureau Veritas Minerals Pty Ltd ("**Bureau Veritas**"). The on-site laboratory was removed in June 2019.

For samples assayed off-site, samples are delivered to a third party transport service, who in turn relay them to the Bureau Veritas' Kalgoorlie laboratory. Samples are stored securely until they leave site.

Sample Analysis

Fire Assay

All geological samples requiring assaying are sent off site to a commercial laboratory for analysis. The entire dried sample is jaw crushed ("JC2500" or "Boyd Crusher") to a nominal 85% passing 4mm with crushing equipment cleaned between samples. The sample is then split using an Integral RSD to produce a product <3kg, the remainder of the sample is stored as the coarse reject. The sample is then pulverised in a LM5 ring mill to grind the sample to a nominal 90% passing 75 $\mu$ m particle size. A charge of 40g is taken and flux added, and fired in a reduction furnace to produce a button. It is then further fired in a muffle furnace to produce a dore bead. The dore bead is then dissolved and silver separated from the gold in solution. The resulting liquor is then analysed for gold content by organic extraction with flame AAS finish, with an overall method detection limit of 0.01 ppm Au content in the original sample.

## PAL 1000 (Leachwell Technique)

In Leachwell analysis, the entire dried sample is jaw crushed to a nominal 85% passing 2mm with crushing equipment cleaned between samples. An analytical sub-sample of approximately 500-750g is split out from the crushed sample using a riffle splitter, with the coarse residue being retained for any verification analysis. The accurately weighed sub-sample is further processed utilising a PAL1000B to grind the sample to a nominal 90% passing  $75\mu m$  particle size, whilst simultaneously extracting any cyanide amenable gold liberated into a Leachwell liquor. The resulting liquor is then analysed for gold content by organic extraction with flame AAS finish, with an overall method detection limit of

0.01 ppm Au content in the original sample.

Quality Control Analysis

QA/QC consists of regular submission of blank and certified standard material, as well as regular repeat analysis of the course reject material. Internal laboratory standard reference material is also regularly analysed at a rate of 1 in every 20 samples.

These are reviewed by the geologist in charge of each prospect as the assays returned to site. In addition, monthly reports are generated by the database administrator for the geology team, including control charts for assays returned for standards and blanks, and comparison plots of duplicate assays.

Data Verification

The "qualified person" has, through examination of internal Karora documents - including monthly QA/QC site reporting, the implementation of routine, control checks and personal inspections on site and discussions with other Karora personnel, verified the data in the HGO Technical Report and satisfied himself that the data is adequate for the purpose of the HGO Technical Report.

# **Mineral Processing and Metallurgical Testing**

Gold Processing

Gold mineralization is processed at HGO. Material is processed in either batches or mixed with other mineralization sources from HGO.

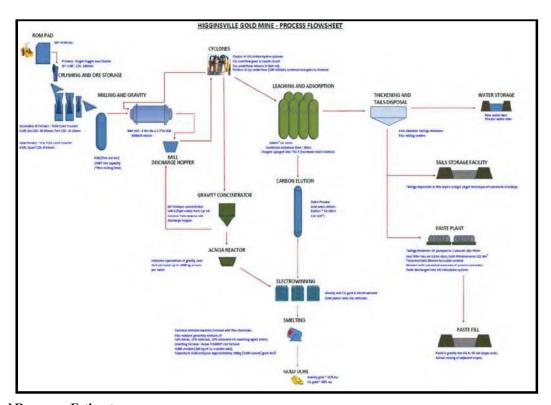


Figure 3: Higginsville Gold Mill Flowsheet

# **Mineral Resource Estimate**

On April 7, 2022, Karora provided an updated consolidated gold mineral resource estimate in respect of HGO, which is effective as of January 31, 2022. Gold mineral resources at HGO comprise the deposits associated with the Higginsville Central and Higginsville Greater areas.

HGO Gold Mineral Resources as at January 31, 2022

_	M	easured		In	Indicated		Measured & Indicated			Inferred		
	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz
	15,449	1.3	657	16,262	1.8	930	31,711	1.6	1,587	6,372	2.1	428

## Notes:

- (1) Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mineral Reserves.
- (2) The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce Mineral Reserves.
- (3) The Mineral Resource estimates include Inferred Mineral Resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is also no certainty that Inferred Mineral Resources will be converted to Measured and Indicated categories through further drilling, or into Mineral Reserves once economic considerations are applied.
- (4) The Gold Mineral Resource are estimated using a long term gold price of US\$1,600/oz with a US:AUD exchange rate of 0.70.

- (5) Gold Mineral Resources were estimated using variable cut-off grades taking into account variable operational costs: Higginsville Underground (Chalice, Trident and Aquarius) 1.3g/t, Higginsville Open Pits (excluding Mt Henry Project) 0.5g/t, Mt Henry Project 0.4g/t, Spargos uses a 0.5 g/t Au cut-off grade above 300mRL and 1.6g/t below 300mRL.
- (6) To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within optimized pit shells at A\$2,285 (US\$1,600) and, for underground resources, areas considered sterilized by historical mining are depleted from the Mineral Resource.
- (7) Mineral Resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.

Stephen Devlin, FAusIMM, the Group Geologist of the Company and a "Qualified Person" as defined in NI 43-101, has reviewed and approved the disclosure of the technical information for the HGO Gold Mineral Resource included in this Appendix "A" – "Material Mineral Projects – Higginsville Gold Operation – Mineral Resource Estimate".

## **Mineral Reserve Estimates**

Higginsville Central

The gold mineral reserve estimates for Higginsville Central set out in this report were calculated by ABGM Pty Ltd ("ABGM") of Perth, Western Australia, who were employed by Karora to undertake the Gold Mineral Reserve estimate. The Gold Mineral Reserve estimate has been prepared using accepted industry practice and classified in accordance with the 2014 CIM Definition Standards by Anton von Wielligh, FAusIMM, an employee of ABGM. Anton von Wielligh, FAusIMM of ABGM accepts responsibility as Qualified Person for this Mineral Reserve estimates.

Higginsville Central Mineral Reserves comprise the deposits of Trident, Hidden Secret, Mousehollow, Two Boys, Pioneer, Fairplay North and the Mitchell Group.

Trident (Underground)

The underground Trident deposit has three distinct mineralised zones called Western Zone, Eastern Zone and Athena Lodes. Access is gained from the previously mined Poseidon South open pit and underground workings.

Trident features narrow, mineralised zones. Air leg room and pillar stoping is proposed and planned for these zones, as a well-known and practiced mining method in various underground gold mines of Western Australia. The Trident Mineral Reserves were optimised, designed and scheduled by mineral zone and mining method.

Trident has a number of developed areas and some remnant mining potential. These developed areas will require rehabilitation and other areas will require access and ore drivedevelopment. The development to ore tonnes ratio remains attractive for Trident.

### (A) Mineral Reserve Estimation Process

Trident has been planned to operate as an underground gold mine allowing current design criteria, mining methods, and actual costs to form the basis for mine design, scheduling, andeconomic evaluation used in this estimation process. As an historic operating undergroundmine, costs, mining methods and metallurgical factors are well understood, providing confidence in their application as part of the Mineral Reserve estimation process. Althoughsurface infrastructure (some) will be required the key major infrastructure and permitting isin place with access to a well-established decline portal. The economics of the mineral reserve estimate could be materially affected by a significant change to commodity price.

A process has been followed to convert the mineral resources to mineral reserves which isunderpinned by design, schedule, and economic evaluation completed by ABGM and overseen by Karora Resources. ABGM's general conversion process is described in the following points.

- The mineral resource model (block model) (Trident Mineral Resource model "trident\_mar17\_trim.dm") were provided by Karora to ABGM. The block model contains attributes identifying the different zones of mineralisation and thenecessary grade (au grade) field and the Mineral Resource Classification field.
- Stope optimisations (considering two possible stoping methods) were run on the supplied block model for Trident, using Datamine Software's Mineable Shape Optimiser® ("MSO") at, the

- calculated 2.2 g/t Break-even cut-off grade and a secondary (Marginal) cut-off grade of 1.5g/t (modified/diluted grade). The resulting stope shapes were reviewed forpracticality of mining, with unpractical mining shapes removed.
- Modifying factors were applied to these stope shapes including dilution and recovery using reviewed/historic performances as measured on the old Trident stopes. For the Mechanised Longhole Open Stoping ("LHOS"), the minimum stope width was 4.5 m with aoverbreak/waste dilution skin added to the stope shapes of 2 m (1 m waste overbreak on either side of each stope). The second method used/considered at Trident is airleg roomand pillar stoping. ABGM recently completed a significant airleg room and pillar stopingstudy in Western Australia and visited two mines where this method is employed. An on-line meeting was also held with the Department of Mines, Industry Regulation and Safety where air leg stoping was discussed, and risk assessed. The air leg stoping zones proposed in some areas of Trident used a minimum true width of 1.7m with a maximum width of 2m and overbreak assumption of 10%.
- A development design was produced to align with the resulting stope shapes that tied into the existing underground as-builts. The development design follows current site designcriteria and a development ore dilution factor of 5% and recovery factor of 100% has been applied.
- Stope shapes were depleted with development drives.
- The mine design was then depleted with current site as-builts provided by Karora.
- All stope and development designs (the mine design) were evaluated with mineral resource models and any Inferred material within the mine design was assumed as waste grade (0 g/t).
- Levels were evaluated using the cost and revenue assumptions applied in the cut-off grade estimation and sub-economic levels were removed from the mineral reserve.
- The mine design was scheduled in Datamine Studio ("**Studio UG**") software to produce amine plan, using current Karora productivity rates and following the appropriate miningsequence.
- The resulting mining schedule was evaluated within a financial model based on the simulated operation costs to ensure economic viability.

The resulting mineral reserve estimate as at September 30, 2020 is shown in Table 4.

Table 4: Summary of Trident Mineral Reserves as at September 30, 2020

	Proven			Probable			Total		
Mining Area	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz
Trident Total	226	2.3	17	281	3.5	32	506	3.0	49

#### Notes:

- 1. The mineral reserve is reported at a marginal cut-off grade of 1.5g/t and break-even stoping areas cut-off of 2.2g/t Au.
- 2. Key assumptions used in the economic evaluation include:
  - (a) a metal price of USD\$1,400 per oz gold and an exchange rate of 0.70 USD: AUD.
  - (b) Metallurgical recovery of 95%.
- 3. Operating mining costs (combined for both methods), processing and G&A costs of A\$139.1/t(A\$, excluding capital).
- 4. The mineral reserve is depleted for all mining to September 30, 2020.
- 5. The tonnes and grades are stated to several significant digits reflecting the confidence of the estimate. Since each number is rounded individually, the table may show apparent inconsistencies between the sum of rounded components and the corresponding rounded total.
  - (B) Stope Design Parameters

The following stope design parameters were applied within the mine design:

- minimum footwall dip angles were set at 42 degrees;
- minimum mining widths (excluding dilution) of 4.5m and 1.7m for the LHOS and airleg stoping methods respectively;
- dilution of 1m on the footwall and hangingwall of each stope shape (total of 2m of dilution) applied as part of the stope optimisation process for the LHOS and 10% so 0.2madditional overbreak for the airleg stoping. The dilution is evaluated with the Mineral Resource model; and therefore, dilution carries the evaluated grade from the Mineral Resource Model; and
- natural low-grade rock pillars have been included in the mine design per the economicstope shapes

developed. Proximity to old mined out areas were also considered. An additional mining recovery factor of 90% has been applied to account for ore extractionand ore losses and bogging recovery losses.

## (C) Cut-off Grade Derivation

Cut-off grades are based on revenue inputs and current site actual costs as stated in Table 5.

**Table 5: Cut-off Grade Inputs** 

Factor	Unit	Assumption	Source
State Royalty	%	2.5	Site Actuals
Total Royalty (Inc. State Royalty)	%	4	Site Actuals
Mill Recovery	%	95	Site Actuals
Milling Cost	\$A / t ore	26.5	Site Actuals
Mining Direct Operating Costs	\$A / t ore	89.1	Simulated in PFS Cost model
Mining Maintenance Costs	\$A / t ore	8.7	Simulated in PFS Cost model
Mine Management & Technical Services	\$A / t ore	10.9	Simulated in PFS Cost model
G&A	\$A / t ore	3.9	Estimate - Karora
Sustaining Capex	\$A / t ore	9.1	Simulated in PFS Cost model

Two MSO optimisations were completed to develop stope shapes, the first used a gold grade cut-off (diluted cut-off grade) of 2.2 g/t. The secondary optimisation/shape definition used acut-off grade of 1.5 g/t. Stopes where both provided the same stoping areas, used the higher ounces stope formed (of the two). The key optimisation and design focus were to increaseounces (as there would be re-commencement work and cost) and getting the best ounce profile was deemed key. When completing the initial stope optimisation process an overall diluted stope cut-off grade of 1.6 g/t was applied to define potential stopes/areas. After depletion of stope shapes with development and setting of Inferred material to waste grade(0 g/t), levels were evaluated using the cost and revenue assumptions applied in the cut-offgrade estimation and sub-economic levels were removed from the mineral reserve. The initial stopes were run but then only stopes grading 2.1 g/t Au or more (diluted/modified stope grades) were first designed and then a 1.5 g/t cut-off grade was applied to all underground design areas provided the areas have development and all potential capital costs covered (marginal cut-off grade). An ore development cut-off grade of 0.5 g/t was applied which covers the processing cost, as mining and haulage of this material is a sunk cost required for access for stoping. The cut-off grades are summarised in Table 6 and cut-offgrade inputs and calculations are shown in Table 7 and Table 8.

**Table 6: Cut-off Grades** 

Breakeven Cut-off Grade (g/t)	Marginal Cut-off Grade (g/t)	Ore Development Cut-off Grade (g/t)
2.1	1.5	0.5

**Table 7: Cut-off Grade Inputs** 

Assumptions	Unit	Value
Revenue Calculation		
Gold Price	\$USD / oz	1,400
Exchange Rate	USD: AUD	0.7

Assumptions	Unit	Value
Metallurgical Recovery (Au)	%	95
Total Royalty	%	4
Total Revenue per Ounce of Gold (account for recovery)	\$AUD / oz	1,900
Total Revenue per Gram of Gold (account for recovery)	\$AUD/g	61.08

**Table 8: Cut-off Grade Calculation Inputs** 

Operating Costs	Unit	Operating Costs (incl Development)	Marginal Stoping Costs (with ore development)	Development Cut-off Grade	Mining Costs Incl Capital
Mining Costs					
Direct Operating Costs	\$AUD/t	89.1	42	-	89.1
Maintenance Costs	\$AUD/t	8.7	8.7	-	8.7
Management & Technical Services Cost	\$AUD/t	10.9	10.9	-	10.9
G&A Cost	\$AUD/t	3.9	3.9	3.93	3.9
Sustaining Capital Costs	\$AUD/t	-	-	-	9.1
Total Mine Operating Cost	\$AUD/t	112.6	65.5	3.93	121.7 0
Processing and Surface Haulage	\$AUD/t	26.5	26.5	26.5	26.5
Total Operating Cost	\$AUD/t	139.10	92.00	30.43	148.2 0
Economic Stope cut-off grade (Calculated)	g/t	2.2	-	-	-
Incremental Stope cut-off grade	g/t	-	1.5	-	-
Incremental Development cut-off grade	g/t	-	-	0.5	-
Fully Costed cut-off grade	g / t	-	-	-	2.4

#### Notes:

1. Cut-off calculations table numbers were rounded.

There were minor differences in the initial MSO cut-off grades used and the final mine design, schedule and resultant mining cost model. The differences were minor, and the overall cut-off strategy is certainly deemed reasonable for Trident. Trident is sensitive to revenue factors so changes to recovery or gold price may impact economic areas as designed for this mineral reserve.

# Open Pits

The Higginsville Central deposits comprise a series of open pit deposits as follows:

- Hidden Secret
- Mousehollow
- Two Boys
- Pioneer
- Fairplay North
- Mitchell Group

# (A) Mineral Reserve Estimation Process

The Higginsville Central deposits were grouped together into the mineral reserves and mining chapters due to the mining methods and location – close to infrastructure. Some ofthese deposits are actively mined or have recently been operated with the view to restartthem as part of HGO's LOM.

A process has been followed to convert the mineral resources to mineral reserves which isunderpinned by design, schedule, and economic evaluation completed by ABGM andoverseen by Karora. ABGM's general conversion process is described in the following points.

- The mineral resource models (block models) were provided by Karora to ABGM. The block model contains attributes identifying the different zones of mineralisation and the necessary grade (au grade) field and the mineral resource classification field). The following list summarises the list of block models:
  - Hidden Secret & Mouse Hollow utilised one combined block model "hs mh v5 reg222trim2-m.dm"
  - O Two Boys used the block model "2b reg2220 skin-m.dm"
  - Pioneer used the block model "pio\_reg22525-m.dm"
  - Fairplay North used the block model "krr\_fairplay\_nth\_2020\_11\_v1.mdl"
  - Mitchell (Mitchel Group) used the block model "mit\_20180317-m"
- Open Pit Optimisations were developed (in either Whittle or NPVS software) to determine the open pit economic limits
- The Revenue Factor 1 (100% Revenue Factor) open pits as defined by Whittle or NPVSwere selected for the basis of the open pit design work
- Modifying factors applied to the open pit ore and metal content as follows (as part of thepit design and economic evaluation processes):
  - $\circ$  Planned & unplanned dilution (even if the model blocks had a reasonable minimummining unit size of 2.5 m by 2.5 m by 2.5 m or greater) 10%
  - $\circ$  Ore loss (due to drill and blast and load and haul mining activity (inclusive of anypotential geological loss not captured in the block models) 5%
  - Further metal/grade loss 0%
  - O Dilution assumed 0 g/t Au
- Only measured and indicated mineral resource material were considered ore and couldcontribute to the evaluations and mineral reserves.
- Inferred resources could be included as dilution but at 0 grade.
- The bill of quantities (for each open pit) were evaluated within a basic valuation excel spreadsheet with the typical contractor costs applied (using the existing basis of open pit mining contractors costs of Karora's neighbouring/similar open pit operations) to ensureeconomic viability of the respective open pit mine plans and ultimately to report mineral reserves.

The resulting mineral reserve estimate as at September 30, 2020 is shown in Table 9.

Table 9: Summary of HGO Open Pit Mineral Reserves – 30 September 2020

		Proven			Probable			Total		
Mining Area	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz	
Hidden Secret	0	0.0	0	752	1.5	37	752	1.5	37	
Mousehollow	0	0.0	0	395	1.4	18	395	1.4	18	
Two Boys	0	0.0	0	748	2.4	58	748	2.4	58	
Pioneer	0	0.0	0	519	1.6	27	519	1.6	27	
Fairplay North	115	1.9	7.0	25	1.3	1	140	1.8	8	
Mitchell Group	0	0.0	0	297	2.3	22	297	2.3	22	
Total Mineral Reserve	115	1.9	7	2,735	1.8	162	2,850	1.8	169	

### Notes:

- 1. The mineral reserve is reported at a marginal cut-off grade of 0.5g/t.
- 2. Key assumptions used in the economic evaluation include:
  - (a) a metal price of USD\$1,400 per oz. gold and an exchange rate of 0.7 USD/A wereused (exceptions: open pits commenced in 2019/20 Fairplay North. Hidden Secret/Mousehollow applied USD\$1,750 per oz and an exchange rate of 0.7USD:AUD)
  - (b) Metallurgical recovery of 92% for all the open pits with the Mitchell Group using ametal recovery assumption of 88%.

- (c) Contractor Mining Costs (overall average for all the open pits) of A\$59.53/t (A\$, excluding capital) Calculated average per ore tonne. This includes the overall stripping ratio's of the pits.
- (d) Processing and G&A costs of AUD\$33.56/t (excluding capital). Calculated average perore tonne for all the open pits.
- 3. The mineral reserve is depleted for all mining to September 30, 2020.
- 4. The tonnes and grades are stated to several significant digits reflecting the confidence of the estimate. Since each number is rounded individually, the table may show apparent inconsistencies between the sum of rounded components and the corresponding rounded total.

## (A) Cut-off Grade Derivation

Open pit mining involves open pit optimization runs to develop economic open pit shells and ultimately economic open pit designs. The open pit mining cost environment is highly variable and change with depth and slope angles, therefore a calculation of a single Break-even cut-off value is possibly misleading. It is generally acceptable practice to calculate a minimum block cut-off, which largely assumes if a block is mined within an economic open pit, and thisblock contains metal which is modelled within a reasonable geological confidence, that block has sunk costs applied to get it out of the pit in the first place. If that block or rock parcel canthen be rehandled, transported to the processing plant, processed and yield a positive cashflow through the recovery of its metal, that block is deemed ore. This is the basis of a marginal economic cut-off calculation for an open pit operation.

Cut-off grades were calculated to understand what minimum ore grade will be sent for processing from these various open pit areas. The following tables depict these calculations with the marginal ore grade cut-off typically used to determine (once a block is mined and taken out of the pit) if it should be processed or taken to the waste rock dump.

Table 10: Cut-off Grade Inputs (Typical calculations and inputs used)

Factor	Unit	Assumption	Source
Gold Price	\$US / oz	1,400	Karora Forecast
State Royalty	%	2.5	Site Actuals
Total Royalty (Inc. State Royalty)	%	4	Site Actuals
Mill Recovery	%	92	Site Actuals
Milling Cost	\$A / t ore	26.5	Site Actuals
Mining Costs (Typical Contractor Cost) – Oxide Waste	\$A / t bcm	7.2	General Contractor cost (at pit surface)
Mining Costs (Typical Contractor Cost) – Oxide Ore	\$A / t bcm	7.5	General Contractor cost (at pit surface)
Mining Costs (Typical Contractor Cost) – Transition Waste	\$A / t bcm	8.1	General Contractor cost (at pit surface)
Mining Costs (Typical Contractor Cost) – Transition Ore	\$A / t bcm	8.3	General Contractor cost (at pit surface)
Mining Costs (Typical Contractor Cost) – Fresh Waste	\$A / t bcm	9.2	General Contractor cost (at pit surface)
Mining Costs (Typical Contractor Cost) – Fresh Ore	\$A / t bcm	9.5	General Contractor cost (at pit surface)
Typical Strip Ratio (Waste tonnes: Ore Tonnes)	Ratio	7	Varies for each open pit
Mining Costs (Typical average) in A\$/t ore	\$A / t ore	60	Varies (reasonable average)
Mining Maintenance Costs (included in mining cost)	\$A / t ore	n/a	Included in contractor cost
Mine Management & Technical Services	\$A / t ore	5	Estimate for the open pits
G&A	\$A / t ore	3.9	Estimate - Karora
Sustaining Capex	\$A / t ore	n/a	Contractor costs included

Each open pit had a unique open pit optimisation analysis, pit design and schedule completed. The differences between the various open pits are typically grade but also strip ratio and operational depth.

The mining costs and parameters depict the typical factors, each open pit had unique parameters applied, but these are reasonable to produce a marginal open pit cut-off calculation.

The mining costs were contractor costs, applied per mining bench and per rock volume. The application of the mining costs by bench therefore enabled mine operating cost calculations well within the PFS study levels of detail and it is highly unlikely that the mining cost accuracies will not be well within the acceptable margins of error.

**Table 11: Cut-off Grade Inputs** 

Assumptions	Unit	Value
Revenue Calculation		
Gold Price	\$USD / oz	1,400
Gold Price (Mousehollow-MH,Hidden Secret-HS, Fairplay North)	\$USD / oz	1,750
Exchange Rate	USD: AUD	0.70
Metallurgical Recovery (Au)	%	92
Total Royalty	%	4
Total Revenue per Ounce of Gold (account for recovery) – MH & HS	\$AUD / oz	2300
Total Revenue per Gram of Gold (account for recovery) – MH & HS	\$AUD/g	73.95
Total Revenue per Ounce of Gold (account for recovery) – other pits	\$AUD / oz	1,840
Total Revenue per Gram of Gold (account for recovery) – other pits	\$AUD/g	59.16

**Table 12: Cut-off Grade Calculation** 

Operating Costs	Unit MH & HS		Other Pits	Marginal Open Pit Cut- off	
Mining Costs					
Mining Costs	\$AUD/t	60	60	1.5	
Maintenance Costs	\$AUD/t	included	included	-	
Management & Technical Services Cost	\$AUD/t 5 \$AUD/t 3.9		5	5	
G&A Cost			3.9	3.9 n/a	
Sustaining Capital Costs	\$AUD/t	\$AUD / t n/a			
Total Mine Operating Cost	\$AUD/t	68.9	68.9	10.4	
Processing and Surface Haulage	\$AUD/t	26.5	26.5	26.5	
<b>Total Operating Cost</b>	\$AUD/t	95.4	95.4	36.9	
Break-even cut-off (Calculated) – MH & HS	g/t	1.3			
Break-even cut-off (Calculated) - Other pits	g/t		1.6		
Marginal cut-off grade	g/t			0.5	

#### Notes:

The ore/rock evaluated above 0.5 g/t Au (modified grade) and which was within the measured and indicated resource categories were therefore scheduled and reported as ore. It is understood that each open pit operation will have unique economic parameters and conditions and the cut-off calculation istherefore believed reasonable and general for the Higginsville Central open pit operations planned. Aswith most precious metals projects, changes to the recoveries or gold price will seriously impact the project or open pit economics and changes in excess of 10% to any of these parameters may justify arework of the optimisations, pit design and open pit production schedules.

## Higginsville Greater

The gold mineral reserve estimates for Higginsville Greater set out in this report, excluding the Mt Henry open pits, were calculated by ABGM who were employed by Karora to undertake the gold mineral reserve estimate. The Gold Mineral Reserve estimate has been prepared using accepted industry practice and classified in accordance with

<sup>1.</sup> Cut-off calculations table numbers were rounded.

the CIM Standards by Anton von Wielligh, FAusIMM, an employee of ABGM. Anton von Wielligh, FAusIMM of ABGM acceptsresponsibility as "qualified person" for this mineral reserve estimates.

The gold mineral reserve estimates for the Mt Henry open pits set out in this chapter were calculated by Orelogy Consulting Pty Ltd ("Orelogy"). who were employed by Karora to undertake the gold mineral reserve estimate. The gold mineral reserve estimates have been prepared using accepted industry practice and classified in accordance with the CIM Standards by Aleks Mihailovic, under the supervision of Ross Cheyne, FAusIMM. Both are employees of Orelogy. Ross Cheyne, FAusIMM of Orelogy accepts responsibility as "qualified person" for this Mineral Reserve estimates. The mine plan developed for this study has been developed to a Preliminary Feasibility Study ("PFS") level of confidence and can therefore be considered to reflect a level of accuracy of 20% to 25%.

Higginsville Greater mineral reserves comprise the deposits of Chalice, Mt Henry, Musket, Wills, Baloo and the Lake Cowan deposits of Atreides and Louis.

#### Chalice

The Higginsville Greater deposits include the Chalice open pit (depleted) and remaining Chalice underground mine.

The Chalice Gold Deposit is situated 22km west-southwest of the Higginsville mining camp within the southwestern portion of the Archaean Norseman-Wiluna granitoid-greenstone belt, Yilgarn Craton, Western Australia. Access is via the Coolgardie-Esperance Highway.

The terrane immediate to the Chalice Deposit is lightly wooded, essentially flat, but for waste dumps to the west of the open pit (orthophoto of the Chalice pit and surrounds). Access is good.

The Chalice deposit is located within a NNW-striking, west dipping sheared package of ultramafic and mafic rock which is sandwiched to the west by granitic bodies of the Woolgangie Supersuite, of which the eastern margin (the Boorabin Batholith) is exposed in the western wall of the Chalice open pit, and to the east by the Pioneer Dome granitic batholiths. This 'greenstone' sequence is 2-3km wide and has been metamorphosed to mid-to upper amphibolite facies, (higher than that for Trident atHigginsville) and intruded by a complex network of multigenerational granite, pegmatite and porphyry bodies. The main zone of Chalice ore lies close to the western granite-greenstonecontact. The major granite- ultramafic contact is often strongly sheared.

## (A) Mineral Reserve Estimation Process

Chalice mine is planned as an operating underground gold mine allowing current design criteria, mining methods, and actual costs to form the basis for mine design, scheduling, andeconomic evaluation used in this estimation process. As an historic operating undergroundmine, costs, mining methods and metallurgical factors are well understood, providing confidence in their application as part of the mineral reserve estimation process. From the site visit concluded for Chalice, it was evident that Chalice require most of the mining infrastructure to be re- established. The underground is planned to be accessed from insidethe Chalice open pit, but the site visit revealed that rehabilitation of the portal/entrance andthe Chalice decline will be required and was planned and costed as part of the scheduling and cost estimation. The economics of the mineral reserve estimate could be materially affected by a significant change to commodity price.

A process has been followed to convert the mineral resources to mineral reserves which isunderpinned by design, schedule, and economic evaluation completed by ABGM andoverseen by Karora. ABGM's general conversion process is described in the following points.

- The mineral resource model (block model) (Trident Mineral Resource model "Chalice\_res\_nov14.bmf") were provided by Karora to ABGM. The block model contains attributes identifying the different zones of mineralisation and thenecessary grade (au grade) field and the Mineral Resource Classification field).
- Stope optimisations considering LHOS and were run on the supplied block model for Chalice, using Datamine Software's Mineable Shape Optimiser® ("MSO") at, the calculated 1.8 g/t Break-even cut-off grade and a secondary (Marginal) cut-off grade of 1.5g/t (modified/diluted grade). The resulting

- stope shapes were reviewed for practicality of mining, with unpractical mining shapes removed.
- Modifying factors were applied to these stope shapes including dilution and recovery using reviewed/historic performances as measured on the old Chalice stopes. For the Mechanised LHOS, the minimum stope width was 4.5m withan overbreak/waste dilution skin added to the stope shapes of 2m (1m waste overbreakon either side of each stope).
- A development design was produced to align with the resulting stope shapes that tied into the existing underground as-builts. The development design follows current site designcriteria and a development ore dilution factor of 5% and recovery factor of 100% has been applied.
- Stope shapes were depleted with development drives.
- The mine design was then depleted with current site as-builts provided by Karora.
- All stope and development designs (the mine design) were evaluated with the Mineral Resource model and any Inferred material within the mine design was assumed as wastegrade (0 g/t).
- Levels were evaluated using the cost and revenue assumptions applied in the cut-off grade estimation and sub-economic levels were removed from the Mineral Reserve.
- The mine design was scheduled in Studio UG software to produce amine plan, using current Karora productivity rates and following the appropriate miningsequence.
- The resulting mining schedule was evaluated within a financial model based on the simulated operation costs to ensure economic viability.

The resulting mineral reserve estimate as at September 30, 2020 is shown in Table 13.

Table 13: Summary of Mineral Reserves – September 30, 2020

	Proven			Probable			Total		
Mining Area	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz
Chalice Total	224	2.2	16	550	2.2	39	774	2.2	55

### Notes:

- 1. The mineral reserve is reported at a marginal cut-off grade of 1.5g/t and Break-even stoping areas cut-off of 1.8g/t Au.
- 2. Key assumptions used in the economic evaluation include:
  - (i) a metal price of USD\$1,400 per oz gold and an exchange rate of 0.7 USD/A;
  - (ii) Metallurgical recovery of 95%; and
  - (iii) Operating Mining Costs (combined for both methods), processing and G&A costs of A\$109.4/t (A\$, excluding capital).
- 4. The mineral reserve is depleted for all mining to September 30, 2020.
- 5. The tonnes and grades are stated to several significant digits reflecting the confidence of the estimate. Since each number is rounded individually, the table may show apparentinconsistencies between the sum of rounded components and the corresponding rounded total.

# (B) Stope Design Parameters

The following stope design parameters were applied within the mine design:

- Minimum footwall dip angles were set at 42 degrees;
- Minimum mining widths (inclusive of planned dilution) of 4.5m;
- Dilution of 1m on the footwall and hangingwall of each stope shape (total of 2m of dilution) applied as part of the stope optimisation process for the LHOS;
- The dilution is evaluated with the Mineral Resource model; and therefore, dilution carries the evaluated grade from the Mineral Resource Model (provided it is within the Measured or Indicated Mineral Resource categories); and
- Natural low-grade rock pillars have been included in the mine design per the economicstope shapes developed. Proximity to old mined out areas were also considered. An additional mining recovery factor of 90% has been applied to account for ore extractionand ore losses and bogging recovery losses.
  - (C) Cut-off Grade Derivation

Cut-off grades are based on revenue inputs and current site actual costs as stated in Table 14.

**Table 14: Cut-off Grade Inputs** 

Factor	Unit	Assumption	Source
Gold Price	\$US / oz	1,400	Karora Forecast
State Royalty	%	2.5	Site Actuals
Total Royalty (Inc. State Royalty)	%	4	Site Actuals
Mill Recovery	%	95	Site Actuals
Milling Cost	\$AUD/t	26.5	Site Actuals
Mining Direct Operating Costs	\$AUD/t	52	Simulated in PFS Cost model
Mining Maintenance Costs	\$AUD/t	7	Simulated in PFS Cost model
Mine Management & Technical Services	\$AUD/t	13.7	Simulated in PFS Cost model
G&A	\$AUD/t	3.9	Estimate - Karora
Initial & Sustaining Capex	\$AUD/t	10	Simulated in PFS Cost model

Two MSO optimisations were completed to develop stope shapes, the first used a gold grade cut-off (diluted cut-off grade) of 1.8g/t. The secondary optimisation/shape definition used acut-off grade of 1.5g/t. Stopes where both provided the same stoping areas, used the higherounces stope formed (of the two). The key optimisation and design focus were to increaseounces (as there would be re-commencement work and cost) and getting the best ounce profile was deemed key.

When completing the initial stope optimisation process an overall diluted stope cut-off grade of 1.6 g/t was applied to define potential stopes/areas. After depletion of stope shapes with development and setting of Inferred material to waste grade (0 g/t), levels were evaluated using the cost and revenue assumptions applied in the cut-off grade estimation and sub- economic levels were removed from the Mineral Reserve. The initial stopes were run but then only stopes grading 1.8g/t Au or more (diluted/modified stope grades) were first designed and then a 1.5 g/t cut-off grade was applied to all underground design areas provided the areas have development and all potential capital costs covered (marginal cut-off grade). An ore development cut-off grade of 0.5 g/t was applied which covers the processing cost, as mining and haulage of this material is a sunk cost required for access for stoping.

**Table 15: Cut-off Grades Summarised** 

Breakeven Cut-off Grade (g/t)	Marginal Cut-off Grade (g/t)	Ore Development Cut-off Grade (g/t)				
1.8	1.5	0.5				

**Table 16: Cut-off Grade Inputs** 

Assumptions	Unit	Value		
Revenue Calculation				
Gold Price	\$USD / oz	1,400		
Exchange Rate	USD:AUD	0.7		
Metallurgical Recovery (Au)	%	94.5		
Total Royalty	%	4		
Revenue per Ounce of Gold (account for recovery)	\$A / oz	1,890		
Total Revenue per Gram of Gold (account for recovery)	\$A / g	60.7		

Table 17: Cut-off Grade Calculation

Operating Costs <sup>(1)</sup>	Unit	Operating Costs (incl. Development)	Marginal Stoping Costs (with ore development)	Development Cut- off Grade	Mining Costs Including Capital
Mining Costs		1			
Direct Operating Costs	\$AUD/t	54	40	-	54
Maintenance Costs	\$AUD/t	7	7	-	7
Management & Technical Services Cost	\$AUD/t	14	14	-	14
G&A Cost	\$AUD/t	4	4	4	4
Initial and Sustaining Capital Costs	\$AUD/t	-	-	-	10
Total Mine Operating Cost	\$AUD/t	79	65	4	89
Processing and Surface Haulage	\$AUD/t	26.5	26.5	26.5	26.5
Total Operating Cost	\$AUD/t	105.5	91.5	30.5	115.5
Economic Stope cut-off grade (Calculated)	g/t	1.8			
Incremental Stope cut-off grade	g/t		1.5		
Incremental Development cut-off grade	g/t			0.5	
Fully Costed cut-off grade	g/t				1.9

#### Notes:

#### 1. Cut-off calculations were rounded.

There were minor differences in the initial MSO cut-off grades used and the final mine design, schedule and resultant mining cost model. The differences were minor, and the overall cut-off strategy is certainly deemed reasonable for Chalice. The Chalice mine design and schedule is extremely sensitive to revenue factors so changes to recovery or gold price may impact economic areas as designed for this Mineral Reserve.

## Open Pits

This section covers the calculation of the open pit mineral reserves for: (i) Wills, (ii) Musket, (iii) Atreidies, ouis and Baloo.

## (A) Mineral Reserve Estimation Process

The Higginsville Greater deposits (with open pit potential) was grouped together into the mineral reserves and mining chapters due to the mining methods, locations and overall sizeof potential mineral reserves for these deposits.

A process has been followed to convert the mineral resources to mineral reserves which isunderpinned by open pit optimization, pit design, schedule, and economic evaluation completed by ABGM and overseen by Karora Resources. ABGM's generalconversion process is described in the following points.

The mineral resource models (block models) were provided bykarora to abgm. the block model contains attributes identifying the different zones of mineralisation and the necessary grade (au grade) field and the Mineral Resource Classification field. The following list summarises the list of block models:

- Wills Block model: "wls\_fmod\_1.dm"
- Musket block model: "musket\_20170524\_m.dm"
- Atriedies block model: "atriedes\_1701\_depl.mdl"
- Louis block model: "mit\_20180317-m"
- Baloo block model: "krr\_baloo\_2020\_11\_v1\_ALL\_ATTS.mdl"

- Open Pit Optimisations were developed (in either Whittle or NPVS software) to determine the open pit economic limits
- The Revenue Factor 1 (100% Revenue Factor) open pits as defined by Whittle or NPVS were selected for the basis of the open pit design work
- Modifying factors applied to the open pit ore and metal content as follows (as part of the pit design and economic evaluation processes):
  - (a) Planned & unplanned dilution (even if the model blocks had a reasonableminimum mining unit size of 2.5m by 2.5m by 2.5m or greater) 10%
  - (b) Ore loss (due to drill and blast and load and haul mining activity (inclusive of any potential geological loss not captured in the block models) 5%
  - (c) Further metal/grade loss 0%
  - (d) Dilution assumed 0g/t Au
- Only measured and Indicated Mineral Resource material were considered ore and couldcontribute to the evaluations and Mineral Reserves.
- Inferred resources could be included as dilution but at 0 grade.
- A development design was produced to align with the resulting stope shapes that tied into the existing underground as-builts. The development design follows current site designcriteria and a development ore dilution factor of 5% and recovery factor of 100% has been applied.
- Stope shapes were depleted with development drives.
- The mine design and block models were then depleted and accounted for current site/ pit surveys provided by Karora.
- Mining and processing quantities (for each of the open pits) were evaluated within a basic valuation excel spreadsheet with typical contractor costs applied (using the existing basis of open pit mining contractors costs of Karora' neighbouring/similar open pit operations) to ensure economic viability of the respective open pit mine plans and ultimately to report Mineral Reserves.

The resulting mineral reserve estimate as at 30 September 2020 is shown in Table 18.

Table 18: Summary of HGO Open Pit Mineral Reserves - September 30, 2020

Prover			Probable			Total			
Mining Area	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz
Wills	0.0	0.0	0.0	74	3.0	7	74	3	7
Musket	86	2.2	6	138	2.5	11	224	2.4	17
Atreidies	33	1.4	2	166	1.8	10	199	1.8	11
Louis	10	1.7	1	430	1.3	19	440	1.4	19
Baloo	220	1.7	12	106	1.2	4	326	1.5	16
Total Mineral Reserve	349	1.8	20	913	1.7	51	1,262	1.7	71

#### Notes:

- 1. The mineral reserve is reported at a marginal cut-off grade of 0.65g/t.
- Key assumptions used in the economic evaluation include:
  - (i) a metal price of US\$1,400 per oz gold and an exchange rate of 0.7 US\$: A\$ were used
  - (ii) Metallurgical recoveries varied for each of the Higginsville Greater deposits. Each open pit optimisation used variable recoveries for oxide, transition and fresh ore. The following bullets summarise the typical fresh ore metal recoveries per pit/area:
    - (a) Wills: 88% (fresh ore recoveries for marginal cut-off calculations)
    - (b) Musket: 86% (fresh ore recoveries for marginal cut-off calculations)
    - (c) Atreidies: 75%
    - (d) Louis: 75%
    - (e) Baloo: 88%
  - (iii) Contractor Mining Costs (overall average for all the open pits) of A\$43.5/t ore (A\$,excluding capital) Calculated average per ore tonne. This includes the overall stripping ratios of the pits. Each pit will have a unique stripping ratio and thereforethese contractors' costs can vary between A\$ 25/t ore to A\$ 90/t ore.
  - (iv) Processing and G&A costs of A\$34.6/t (A\$, excluding capital) Calculated averageper ore tonne for all the open pits (including the additional ore haulage cost)
- 3. The mineral reserve is depleted for all mining to September 30, 2020.
- 4. The tonnes and grades are stated to several significant digits reflecting the confidence of the estimate. Since each number is rounded

individually, the table may show apparentinconsistencies between the sum of rounded components and the corresponding rounded total.

### (B) Cut-off Grade Derivation

Open pit mining involves open pit optimization runs to develop economic open pit shells and ultimately economic open pit designs. The open pit mining cost environment is highly variable and change with depth and slope angles, therefore a calculation of a single Break-even cut-off value is possibly misleading. It is generally acceptable practice to calculate a minimum block cut-off, which largely assumes if a block is mined within an economic open pit, and thisblock contains metal which is modelled within a reasonable geological confidence, that block has sunk costs applied to get it out of the pit in the first place. If that block or rock parcel canthen be rehandled, transported to the processing plant, processed and yield a positive cashflow through the recovery of its metal, that block is deemed ore. This is the basis of a marginal economic cut-off calculation for an open pit operation.

Cut-off grades were calculated to understand what minimum ore grade will be sent for processing from these various open pit areas. The following tables depict these calculations with the marginal ore grade cut-off typically used to determine (once a block is mined and taken out of the pit) if it should be processed or taken to the waste rock dump.

Table 19: Cut-off Grade Inputs (Typical calculations and inputs used)

Factor	Unit	Assumption	Source
Gold Price	\$USD / oz	1,400	Karora Forecast
State Royalty	%	2.5	Site Actuals
Total Royalty (Inc. State Royalty)	%	4	Site Actuals
Mill Recovery	%	86	reasonable average for all the Greater pits
Milling Cost	\$AUD/t	26.5	Site Actuals
Additional Trucking cost (ore)	\$AUD/t	5	Actual costs per trucking contractor
Mining Costs (Typical Contractor Cost) – Oxide Waste	\$AUD/t	6.84	General Contractor cost (at pit surface)
Mining Costs (Typical Contractor Cost) – Oxide Ore	\$AUD/t	6.61	General Contractor cost (at pit surface)
Mining Costs (Typical Contractor Cost) – Transition Waste	\$AUD/t	6.39	General Contractor cost (at pit surface)
Mining Costs (Typical Contractor Cost) – Transition Ore	\$AUD/t	6.2	General Contractor cost (at pit surface)
Mining Costs (Typical Contractor Cost) – Fresh Waste	\$AUD/t	5.49	General Contractor cost (at pit surface)
Mining Costs (Typical Contractor Cost) – Fresh Ore	\$AUD/t	5.33	General Contractor cost (at pit surface)
Typical Strip Ratio (Waste tonnes: Ore Tonnes) – All pits	Ratio	8.1	Varies for each open pit
Mining Costs (Typical average) in A\$/t ore	\$AUD/t	43.5	Varies (reasonable average)
Mining Maintenance Costs (included in mining cost)	\$AUD/t	n/a	Included in contractor cost
Mine Management & Technical Services	\$AUD/t	5	Estimate for the open pits
G&A	\$AUD/t	3	Estimate - Karora
Sustaining Capex	\$AUD/t	n/a	Contractor costs included

### **Notes:**

- Each open pit had a unique open pit optimisation analysis, pit design and schedule completed. The differences between the various open
  pits are typically grade but also strip ratio and operational depth.
- 2. The mining costs and parameters depict the typical factors, each open pit had unique parameters applied, but these are reasonable to produce a marginal open pit cut-off calculation.
- 3. The mining costs were contractor costs, applied per mining bench and per rock volume. Theapplication of the mining costs by bench

therefore enabled mine operating cost calculations well within the PFS study levels of detail and it is highly unlikely that the mining cost accuracies will not be well within the acceptable margins of error.

**Table 20: Cut-off Grade Inputs** 

Assumptions	Unit	Value
Revenue Calculation		
Gold Price	\$USD/oz	1,400
Exchange Rate	USD:AUD	0.70
Metallurgical Recovery (Au)	%	86
Total Royalty (varied per deposit)	%	4
Revenue per Ounce of Gold (account for recovery) – other pits	\$A / oz	1,700
Total Revenue per Gram of Gold (account for recovery) – other pits	\$A / g	54.66

#### **Notes:**

 The recoveries (from some test work) have shown that the bulk of the Higginsville Greaterdeposits have a mixed average recovery (oxide, transition and fresh ore) of approximately 88%. The exception is the Lake Cowan Deposits which is around the mid-70% metal recovery. Alternate processing and possibly pre-concentration techniques might be important whenexploiting the Lake Cowan deposits.

**Table 21: Cut-off Grade Calculation** 

Operating Costs (1)	Unit	Baloo,Wills & Musket	Lake Cowan Pits	Marginal Open Pit Cut-off
Mining Costs				
Mining Costs	\$AUD/t	43.5	43.5	1.5
Additional Trucking Cost (Ore)	\$AUD/t	5	6	5
Maintenance Costs	\$AUD/t	included	included	-
Management & Technical Services Cost	\$AUD/t	5	5	
G&A Cost	\$AUD/t	3.1	3.1	3.1
Sustaining Capital Costs	\$AUD/t	n/a	n/a	n/a
Total Mine Operating Cost	\$AUD/t	56.6	57.6	9.6
Processing and Surface Haulage	\$AUD/t	26.5	26.5	26.5
Total Operating Cost	\$AUD/t	83.1	84.1	36.1
Break-even cut-off (Calculated) – Baloo	g/t	1.5	-	-
Break-even cut-off (Calculated) – Wills	g / t	1.8	-	-
Break-even cut-off (Calculated) – Musket	g/t	1.7	-	-
Break-even cut-off (Calculated) – Lake Cowan (Louis & Atriedies)	g / t	-	1.3	
Marginal cut-off grade	g / t	-	-	0.65

#### Notes:

1. Cut-off calculations table numbers were rounded.

The ore/rock evaluated above 0.65g/t Au (modified grade) and which was within the Measured and Indicated resource categories were therefore scheduled and reported as Mineral Reserve. It is understood that each open pit operation will have unique economic parameters and conditions and the cut-off calculation is therefore believed reasonable andgeneral for the Higginsville Central open pit operations planned. As with most precious metals projects, changes to the recoveries or gold price will seriously impact the project or open piteconomics and changes in excess of 10% to any of these parameters may justify a rework ofthe optimisations, pit design and open pit production schedules.

#### Mount Henry

The Mineral reserve estimates has been carried out for the Mt Henry, Selene and North Scotiadeposits, as the Abbotshall deposit contains only inferred mineral resources and therefore cannot be consider for conversion to a mineral reserve. Mt Henry has had historical miningactivity with previous owner Metals X commencing mining in 2016. Mining ceased in 2019and there is an abandoned open pit, whereas Selene and North Scotia are both greenfield mining areas. Mining at Mt Henry was undertaken by Westgold and commenced in August2016 and ceased in June 2019. Karora obtained the MHP tenements as part of the HGO acquisition in June, 2019. Total mine production is 2.3Mt @ 1.7g/t for 127 kozs (contained). Prior to Westgold, Australis Mining NL mined 112kt @ 1.1g/t from the Mt Henry pit 2 area in the 1980s.

The mineral reserve estimate assumes mill feed from the Mount Henry open pits is trucked and treated at the existing Higginsville processing facility. The Mineral Reserve estimate calculations are based on a first-principle mining cost estimate developed by Orelogy, with road transport, production rates, processing costs and metallurgical factors based on actualdata from the Karora.

### (A) Mineral Reserve Estimation Process

The MHG open pits have been the subject of previous studies. Consequently, parameters such as geotechnical design parameters, overland haulage costs and processing parameters through the Higginsville plant have already been evaluated and these outcomes were utilised for the generation of this Mineral Reserve estimate. As an operating gold project, the Higginsville based costs and metallurgical factors can be considered to provide a level of confidence in these parameters. The mining costs were developed by Orelogy from first principles assuming a conventional truck and shovel mining methodology. The cost estimateassumed a contract mining model and utilised up to date equipment operating and capitalcosts from original equipment manufacturers.

These parameters and assumptions form the basis for mine design, scheduling, and economic evaluation used in the mineral reserve estimation process. In addition:

- The appropriate mining tenure status is up-to-date for the open pits for Mt Henry (M63/515) and Selene/Nth Scotia (M63/516). The waste dumps for Mt Henry and Selene/Nth Scotia may also require use of adjacent General Purpose leases (G63/0007 and G63/0006 respectively).
- Heritage areas around Selene and North Scotia have been checked and the currentlayout for these areas is outside of the prescribed heritage exclusion zones.
- The economics of the Mineral Reserve estimate could be materially affected by a significant change to commodity price.
- A process has been followed to convert the Mineral Resources to Mineral Reserves which is underpinned by design, schedule, and economic evaluation completed by Orelogy. This process is described below.
- The following Mineral Resource models were provided by Optiro Consultants directly to Orelogy:
  - (a) Mt Henry mt\_henry1109\_201026.mdl
  - (b) Selene / North Scotia selene\_nthscotia\_201103\_engineer.mdl
- Mining ore loss and dilution were applied on a block-by-block basis within the resource models. This was carried out using a bespoke Orelogy developed script which identifiedblocks on the edge of the mineral resource and applied specific ore loss and dilution parameters to generate a positional "edge dilution" rather than a single variable globalapproach. While the resulting ore loss/dilution varies by block, the global ore loss and dilution approximates:
  - (a) Mt Henry: Ore Loss = 1% / Dilution = 11.8%
  - (b) Selene / North Scotia: Ore Loss = 2.1% / Dilution = 4.6%
- Open pit optimisations were run on the diluted models described above using Geovia Whittle<sup>TM</sup> software (Whittle). Modifying factors including mining costs, processing costs, selling costs, metallurgical recoveries and gold price were applied within the Whittle software and optimal geometries or "shells" were then selected as the basis for subsequent designs.
- Mine designs were then completed for the three mining areas.
  - (a) Mt Henry A northern and southern pushback around the existing Mt Henry pit. The Whittle shell took out the central saddle of the existing pit but the shell geometry proved too narrow to design in practical access without adding excessive waste so this area was excluded from the design. Mt Henry also included a smallnorthern satellite pit.
  - (b) Selene An ultimate pit was designed around the large Selene optimisation shell, and then

two internal stage designs were developed to allow access to nearer surface material at a reduced strip ratio.

- (c) North Scotia A single ultimate pit design was developed for this deposit
- A LOM production schedule was then developed for the MHP open pits, which assumed the 2 Mtpa throughput rate for the Higginsville plant was reduced by 0.78 Mtpa sourced from the Beta Hunt underground, resulting in a target ore production of 1.22 Mtpa. Mining productivity was based on the first-principle model calculations whichassumed a Caterpillar 6020 excavator matched to Caterpillar 777 haul trucks.
- The resulting mining schedule was evaluated by re-applying the modifying factors to themining schedule physicals to ensure the designs and associated ore presentation was still economically viable. As a result, it was determined that the southern Mt Henry pushback was marginal due to the additional waste incurred to gain access and maintain acceptable mining widths in this area. Consequently, this area was dropped from the schedule andnot included in the MHG open pit Mineral Reserve estimate.

The resulting mineral reserve estimate as at September 30, 2020 is shown in Table 22.

Table 22: Summary of Mt Henry Group Project Mineral Reserves – 30 September 2020 1,2,3

	Proven			Probable			Total		
Mining Area	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz
Mt Henry				1,124	1.7	63	1,124	1.7	63
Selene	7,415	1.2	297	2,718	1.2	106	10,133	1.2	404
North Scotia				149	1.9	9	149	1.9	9
Total	7,415	1.2	297	3,991	1.4	178	11,406	1.3	476

### Notes:

- 1. The mineral reserve is reported at a varying cut-off grade in the range 0.7g/t to 0.81g/tas ore haulage costs, processing costs and metallurgical recovery vary by mining area and material weathering (i.e. oxide, transition and fresh material types).
- 2. The mineral reserve is depleted for all mining to September 30, 2020.
- The tonnes and grades are stated to a number of significant digits reflecting the confidence of the estimate. Since each number is rounded
  individually, the table may show apparent inconsistencies between the sum of rounded components and the corresponding rounded
  total.

# (B) Cut-off Grade Calculation

The Whittle optimisation tool was run utilising the "Cash flow" option which effectively assesses the net value of each individual block. However, for the purposes or reporting a Mineral Reserve, the breakeven cut-off grade was calculated utilising the accepted calculation below:



The Ore Cost is a combination of the processing cost, any mining specific Mineral Reserve costs (e.g. rehandle, grade control etc.) and the road haulage to the Higginsville plant. Mining dilution is not included in this calculation as it has been applied within the model and therefore the tonnes and grade are already diluted.

The net price calculation is detailed in Table 23 below. The resulting variable cut-offs used to define the Mineral Reserve are detailed in Table 24 below.

**Table 23: Mt Henry Group Open Pit Mineral Reserves – Net Gold Price Calculation** 

Parameter		Unit	Value	
Exchange Rate		USD:AUD	0.7	
Base Price		USD/oz.	\$1,400.00	
		AUD/oz.	\$2,000.00	
Royalties	WA. Govt	%	2.50%	

Parameter		Unit	Value	
	Native Title	%	1.00%	
Net Price		AUD/oz.	\$1,930.00	
		AUD/g	\$62.05	

Table 24: Mt Henry Group Open Pit Mineral Reserves - Cut-off Grade Calculation

Parameter	Material	Unit	Selene	North Scotia	Mt Henry
One Cost	Oxide	\$/dmt ore	\$41.08	\$34.67	\$40.67
Ore Cost	Transition	\$/dmt ore	\$41.53	\$35.89	\$42.19
	Fresh	\$/dmt ore	\$41.77	\$36.86	\$43.20
Processing	Oxide	%	94.0%	94.0%	94.0%
Recovery	Transition	%	88.6%	88.0%	86.2%
	Fresh	%	88.6%	82.0%	86.2%
	Oxide	g/t1	0.70	0.59	0.70
Cut-off Grade	Transition	g/t1	0.76	0.66	0.79
	Fresh	g/t1	0.76	0.72	0.81

#### Notes:

#### 1. Diluted grade

# (C) Mineral Reserve Financial Analysis

As final confirmation of the ore reserve, a detailed project cashflow was developed for themining schedule based on:

- mine operating and capital inclusive of site establishment, owners and contractmining costs and progressive rehabilitation;
- road haulage of ore to the Higginsville processing plant;
- processing costs by pit location and weathering zone, including fixed and variable components, sustaining capital allowances, G&A etc. They vary from the costs used for the optimisation as detailed in in Table 24 above. This is because theoptimisation costs included allowances for mining related ore costs such as ore overhaul, ore rehandle and grade control. The detailed mining cost developed for the project cashflow included these components and therefore they were removed from the processing cost; and
- variable processing recoveries pit location and weathering zone (refer to Table 24).

# Stockpiles

Stockpile mineral reserves are derived from measured and indicated mineral resource stockpiles associated with the mining of historical and active hgo open pits. Recovery (mining) of stockpiles will be by front-end loader and trucks and, in places, excavator and trucks. Loading, haulage and processing costs are applied to the Measured and Indicated Mineral Resource to determine Mineral Reserves. Haulage costs are aligned with to the distance the stockpile is away from the HGO processing plant.

The Mt Henry Group stockpiles included in the HGO Greater Stockpiles mineral reserve have been determined using cut-off grades provided by Orelogy. Orelogy undertook the mineral reserve estimate for the Mt Henry open pit and the cut-off grade calculation is detailed below in Table 25.

The Higginsville Central and Greater Stockpiles mineral reserve, excluding Mt Henry, havebeen determined using cut-off grades as derived from mineral reserve calculations by ABGM.

Table 25: Stockpile Mineral Reserve – HGO – as at September 30, 2020

Sept-2020 Mineral		Proven		Probable			Proven & Probable		
Reserve	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
HGO CentralStockpiles	0	0.0	0	293	0.8	7	293	0.8	7
HGO GreaterStockpiles	175	0.8	5	485	0.9	13	660	0.8	18
Total	175	0.8	5	778	0.8	21	953	0.8	25

#### Notes:

- The Mount Henry mineral reserve is reported at variable cut-off grade of 0.7g/t for oxidematerial and 0.8g/t for transition and fresh material
- 2. Key assumptions used in the cut-off grade calculation for Mt Henry include:
  - (i) a metal price of US\$1,400 per oz gold and an exchange rate of 0.7 US\$: A\$
  - (ii) Metallurgical recovery for Mt Henry of 94.0% for oxide and 86.2% for transition and fresh material.
  - (iii) Processing and G&A costs varying by material type: Mt Henry from A\$40.84 to42.84/t (excluding capital);
- 3. For mineral reserves excluding mt henry, cut-off grades determined derived from mineral reserve calculations
- 4. The mineral reserve is effective as of September 30, 2020.
- The tonnes and grades are stated to appropriate significant digits reflecting the confidence of the estimate. Since each number is rounded individually, the table may show apparent inconsistencies between the sum of rounded components and the corresponding rounded total

# **Mining Operations**

Higginsville Central

Trident

The Trident deposit has three distinct mineralised zones called Western Zone ("WZ"), Eastern Zone ("b") and Athena Lodes ("AL"). The Trident deposit is to be exploited by underground mining methods with access gained from the previously mined Poseidon South open pit and underground workings.

Trident has some key, narrow mineralised zones yet LHOS will not be feasible due to the flat dipping nature of these zones. Air leg room and pillar stoping is proposed and planned in these zones as it is a well-known and practiced mining method in various underground gold mines of Western Australia. The Trident Mineral Reserves were therefore optimised, designed and scheduled by mineral zone and mining method. The Trident mine also has several established mining areas and some remnant mining potential. These developed areas will require development/access rehabilitation and other areas will require new access and ore drive development.

The development to ore tonnes ratio is still quite attractive for Trident though but mining in various areas whilst also considering remnant mining will be reasonably challenging.

The Trident underground mine is accessed via an established portal and declines within the open pit, located close to the Higginsville plant and mining offices. Pumping, ventilation, power and mine service infrastructure will be partly new and some existing equipment will be utilised.

# (A) Underground Infrastructure

The mine is accessed by portals and a series of declines throughout the mine. The declines are typically 5.5 m width (W) x 5.8 m height (H), with a standard ore drive size of 4.5 mW x 4.5 mH. Lateral development profiles are well matched to the mobile fleet. Ore is hauled from the underground to surface via the decline where it is then transported via a separate surface haulage fleet to the processing facility.

As an established mine, key infrastructure such as underground communications, electrical reticulation, pumping, and ventilation will be re-established but some of this infrastructure is available. Most of the primary development is interconnected for ventilation and ease of access.

There is a radio communications system throughout the mine and underground extensions of communications will have to be re-established. Electrical power is available via mains power to site and is distributed throughout the mine at 11 kV. The 11 kV power is transformed to 1 kV for use as required for the mine equipment. The primary pumping system will be re- established and will service the relatively dry mine workings expected. A secondary network of pumps will then remove water from work areas back to the primary pumping system to be removed to surface.

The Trident orebody will be ventilated utilising two intake shafts located at the southern and northern extents of the orebody and an exhaust shaft located centrally to the development. The decline also acts as an intake. The primary exhaust shaft is a 4 m diameter ventilation rise. The northern intake rise is a 3 m diameter hole. The southern intake rise is a 2.4 m diameter rise. Each intake rises will have ladderways allowing for egress.

# (B) Mining Methods

The Trident mine planning considered two distinctly different mining methods. The main method will be a top down, mechanised LHOS is the primary stoping method proposed for Trident whilst some flatter dipping, high-grade zones, can be exploited by air leg room and pillar stoping (mechanised access and oredrive development). Current LHOS stope design dimensions are typically 20 m to 25 m high (following the typical historic level spacings) and vary in width from 4.5 m to 6 m with 15 m stope strike lengths (15 m strike lengths will ensure excellent stope dilution control).

Backfilling of stopes is not currently considered for the Trident mine plan. The air leg stopes will follow the typical stope design criteria as used at King of The Hill and Daisy Milano gold mines (Western Australia). This will be a typical room and pillar stoping method (also known in Western Australia as a slot and holing method) with scraping into the oredrives located down-dip. The ore will then be bogged with a small LHD within these oredrives. The room and pillar design criteria used is based on sound geotechnical room/pillar design criteria where the pillar sizes are approximately square and consider a width to height ratio of 2:1 (3.5m by 3.5m pillars) on a 1.7m to 1.8m stope width. The pillars can then be stripped at the (retreat pillar stripping at the end of these sections) back to 2 m by 2 m pillars and a 3.5m wide room and holing. The air leg stoping areas at Trident is reasonably small and surrounded by in-situ rock so the regional stability is considered excellent.

The typical long hole open stope ore cycle post ore drive development is:

- drilling of blast holes using a longhole drilling rig;
- charging and firing of blast holes;
- bogging (mucking) of ore from the stope using conventional and tele-remote loading techniques;
- loading of trucks with an LHD;
- trucks haul ore to surface via the portal; and
- surface trucks haul ore to the processing facility or the same trucks simply running to the ROM location at the plant.

The typical air leg room and pillar stope ore cycle post ore drive development is:

- drilling of blast holes using handheld pneumatic drills and 1.5m drill steels (32mm diameter drill bits);
- charging and firing of blast holes at the end of each shift (shift change);
- support of the roof and pillars by bolting and in some areas mesh;
- scraping of the ore down into the oredrive (located down-dip) of the slots and holings;
- bogging (mucking) of ore within the oredrives with a small LHD and hauled (by LHD) to ore stockpiles;
- loading of trucks with an LHD at the ore stockpiles;
- trucks haul ore to surface via the portal; and
- surface trucks haul ore to the processing facility or the same trucks simply running to the ROM location at the plant.

• Generally, the ground conditions at Trident (historically) are good to very good. The site has an extensive history of mining performance and has developed guidelines to respond local conditions. A ground control management plan will be put in place on site and will be used during mine planning, mine development, and production.

Lateral development drives are excavated using mechanised twin boom jumbos, with vertical development excavated using production drill rig.

Higginsville Greater

Chalice

The development to ore tonnes ratio is very attractive for Chalice but mining in various areas whilst also considering remnant mining will be reasonably challenging.

The Chalice underground mine is accessed via an established portal and decline from within the Chalice open pit. Pumping, ventilation, power, and mine service infrastructure will mostly require re-establishment as there are limited infrastructure present at Chalice.

### (A) Underground Infrastructre

The Chalice underground mine will once again be accessed through an existing portal and the main decline throughout the mine. The decline is typically 5.5 m width (W) x 5.8 m height (H), with a standard ore drive size of 4.5 mW x 4.5 mH. Lateral development profiles are well matched to the mobile fleet. Ore is hauled from the underground to surface via the declinewhere it is then transported via a separate surface haulage fleet to the processing facility.

Chalice is not an active underground mine and therefore key infrastructure such as underground communications, electrical reticulation, pumping, and ventilation will need to be re-established. The Chalice Site visit uncovered that there is some useful building at the open pit and slabs are still present for other (relatively inexpensive Sched buildings) that can be erected quickly and at low cost to service additional storage, workshops and equipment bays.

There was a generator (situated inside the pit area). There are also pipes and cables which seem to run to the underground mine. The planning of Chalice assumed re-establishment and installation of new pipes, cables and ventilation ducting.

Chalice will be ventilated through a series of intake airways. the portal as the main intake airway provides for the ability to bring  $35 \, \mathrm{m}^3/\mathrm{s}$  to  $40 \, \mathrm{m}^3/\mathrm{s}$  of air, then Chalice has the Resolute 1200 airway used as a second intake airway and finally the ATL 1123 RAD. A total amount of  $130 \, \mathrm{m}^3$  to  $140 \, \mathrm{m}^3/\mathrm{s}$  of intake air will be possible and from the Chalice equipment models this will be sufficient to ventilate the Chalice underground operations (three loaders and three trucks which drives the biggest air flow requirements.

Equipment is maintained and serviced at a surface workshop (which will be erected as part of some additional mining infrastructure that needs to be established at Chalice).

### (B) Mining Methods

The mine planning of Chalice (underground only) considered top down, mechanised long hole retreat stoping (LHOS). The Current LHOS stope design dimensions are 20 to 25 m high (following the typical historic level spacings) and vary in width from 4.5 m to 6 m with 15 m stope strike lengths (15 m strike lengths will ensure excellent stope dilution control).

Backfilling of stopes is not currently considered for the Chalice mine plan and based on the geotechnical analyses and studying the historical mined out stopes, it is believed that a retreat stoping sequence with natural low grade pillars and at reasonably shallow depths should prove to be reasonably easy to stable excavations. Chalice will require various areas and access development ends to be rehabilitated. The rehabilitation will be some stripping and removing of loose rock and rusted or damaged mesh and bolts and the re-supporting of these development ends. This is a reasonably fast and inexpensive task but should be planned within the jumbo efficiencies and cycles to optimise access development and new stope zones.

The typical long hole open stope ore cycle post ore drive development is:

- drilling of blast holes using a longhole drilling rig;
- charging and firing of blast holes;
- bogging (mucking) of ore from the stope using conventional and tele-remote loading techniques;
- loading of trucks with an LHD;
- trucks haul ore to surface via the portal; and
- surface trucks haul ore to the processing facility or the same trucks simply running to the ROM location at the plant.

Higher grade ore positions are named as Atlas and Olympus. The Atlas-Olympus line defines a shallow north plunging shoot trend that extends for 700 m in length with widths up to 50m. These mineralised positions are beneath the pit and further north down-plunge (Atlas in the south, Olympus to the north).

Down-dip of the Olympus 'pipe' the grades often split into discrete fingers of mineralisation. Generally, ore widths taper up-dip. The high-grade position of Olympus is largely free of felsic intrusives but for 0.5-3 m scale dykes (of variable directions) that at times increase grade immediate to them.

Central to Olympus, a hangingwall felsic intrusive is adjacent to ore but northwards it increasingly diverges. Coincidently south of that position, the high-grade shoot shifts significantly east and up-dip.

Low grades of greater dimensions essentially shell the high-grade position. This includes up and down-plunge south and north respectively. Grades are sharply lower, often <2 g/t. It extends for over 500 m in length from 6478875N-6479335mN, is up to 50 m wide and up to 150 m high. It essentially abuts the Atlas position up-plunge in the south. Down-plunge to the north, the shoot is smaller with increasing influence of felsic intrusives but also is less well defined.

### Open Pits

The Higginsville Greater deposits comprise largely of shallower, lower grade deposits, typically conducive to open pit, truck and shovel or truck and excavator mining methods.

There are five open pit operations planned for the Higginsville Greater deposits, all followed the industry standard approach for developing an open pit drill, blast, loading by excavator and transported by haul truck mine planning approach. The mining and therefore mining costs varied in each pit based on the cost per cubic meter (in-situ) of the rock and with significant density variations (particularly in the oxide rocks and in or near any lakes (Lake Cowan deposits – Louis and Atriedies). The cost per tonne of rock may seem higher than expected but is in line with the contractor rates per volume of rock mined.

As most of these open pits are routine drill, blast, load and haul operations, located close to the Higginsville Greater infrastructure and processing plant, no additional mining infrastructure will be required. As part of the stripping costs and contractor costs, equipment parking areas and small/fit-for-purpose maintenance areas will be allocated. Housing of mining contractors are possible within the town of Norseman for the Higginsville Greater deposits located close to Norseman.

# (A) Mining Methods

The mining method for these open pits are drill, blast loading by excavator and trucking the waste rock to a dedicated waste rock dump area close to the pit and ore trucked to a local pit stockpile or directly trucked to the Higginsville processing plant.

Mining will take place in benches with flitch loading (on either 2.5 m or 3 m high flitches). The open pit operations require diligent ore control/grade control procedures and resources. When ore drilling and blasting is performed, the drilling chips are assayed and in combination with the planning block model, zones within the ore bench is demarcated (by coloured tape/spray or a combination of the two) to define if a parcel of ore is low grade, medium or high-grade.

The post loading grade control process is just as important, to ensure the reconciliation is in- line with planning and to ensure ore modifying factors are reasonable and follow due process.

The typical open pit mining cycle involves:

- Demarcation (on each bench level) of ore/waste and low-grade zones
- RC drilling (grade control drilling prior to mining to refine/update waste/ore zones)
- Bench drilling floor preparation and survey depths for each blast hole (depth/lengths of each blast hole are key to ensure bench floor controls)
- Drilling of blast holes
- Review and QA/QC of blast holes to ensure they are drilled to design
- Re-drilling of any holes not deemed correct/appropriate
- Charging and firing of blast holes
- Loading of the heave
- Loading of the flitches, loading to be supervised in ore blocks to ensure correct truck destinations
- Trucks haul ore to either a lower grade stockpile close to the open pit or directly to the Higginsville processing plant

### Mount Henry

The Mount Henry project consists of the Mt Henry, Selene, North Scotia and Abottshall areas. A mine plan and associated Mineral Reserve has been developed for Mt Henry, Selene, North Scotia. Abottshall was not assessed as it comprises Inferred Mineral Resources only and therefore cannot be considered for conversion to a Mineral Reserve. The mine plan developed for this study has been developed to a Preliminary Feasibility Study level of confidence and can therefore be considered to reflect a level of accuracy of 20% to 25%.

The Mt Henry deposit lies approximately 23km south of Norseman, Western Australia, with the HGO and associated gold processing facility lying a further 60km north of Norseman. There is an existing open pit at Mt Henry that extends for a length of approximately 1.4km and to a depth of 80m below surface. A waste dump was developed approximately 100m to the west of the pit and extends to a maximum height of approximately 30m above surface. There is also a small satellite pit (~175m in length) to the north of the main pit with its own smaller waste dump approximately 350m to the west of this pit. The site is connected to the Coolgardie – Esperance Hwy via 2km of unsealed road. There is an existing ore stockpile area and access roads.

Selene and North Scotia are greenfield projects that lie respectively 3,500 m and 5,600 m further south of Mt Henry.

The Mount Henry mining study adopted a conventional truck and shovel open pit mining methods as the preferred mining method due to the following:

- the method is typical for the commodity and utilises established technologies proven at other locations throughout region;
- the ore presentation is sufficiently close to surface;
- there is space to build waste dumps; and
- it will generate the best project value with the greatest likelihood of success.

The study assumes that all mining related operations will be undertaken by a suitably qualified and experienced mining contractor. The work to be carried out under the mining contract includes the following:

- mobilisation and demobilisation of equipment and consumables;
- maintenance and operation of all equipment necessary for undertaking the works;
- provision of all personnel for the works;
- construction and ongoing maintenance of the contractor's infrastructure;
- clearing and grubbing of pit, dump and road areas. Topsoil will be segregated and stockpiled separately, to be used for subsequent progressive rehabilitation activities;
- construction and maintenance of all haul roads used primarily by the contractor;
- drill and blast, including presplit drilling as necessary;

- excavate, load, haul and dump of all materials to the designated destinations;
- stockpiling and dumping of all materials as required;
- rehandle of stockpiled ore to road trucks for transport to the Higginsville processing plant;
- the provision and control of surface drainage;
- the management of water within the open pit area and associated surface activities, including removal of stormwater and groundwater; and
- progressive rehabilitation work.

Karora will be responsible for mine design, mine planning, grade control, survey, statutory safety and environmental compliance and to carefully supervise and manage the mining contractor. As such, Karora will have the own supervisory and technical team.

The mining already undertaken at Mt Henry by previous owners indicated:

- benches were mined as free dig where possible whilst drill and blast was utilised once hard rock was encountered; and
- the ore in all pits is shallow-dipping in the supergene enrichment progressing to sub-vertical, steeply-dipping lodes within the main BIF unit located in the transitional / fresh material. The nature of the lodes at depth allowed the ore blocks to be faced up with ease when mining.

The current mine plan assumes:

- the mining of the ore zone is planned at a nominal 5 m bench height using a back-hoe excavator mining on two 2.5 m flitches. This will facilitate selective mining between ROM grade ore, potential low-grade ore and waste boundaries:
- waste will be blasted on 10 m benches where possible, typically in continuous waste zones from the HW of the pit to the HW edge of the ore zone;
- grade control will be based on an advanced RC grade control program in 20m 30m vertical campaigns across the various working areas; and
- wherever possible blasting will consist of either separate waste and ore blasts to free faces parallel
  to the deposit, or the ore will be chock blasted within the waste zones to minimise excessive dilution of
  ore, or loss of ore to waste.

# **Processing and Recovery Methods**

For details on processing and recovery methods for gold mill processing, please see "The Beta Hunt Mine – Processing and Recovery Methods" for more information.

# Infrastructure, Permitting and Compliance Activities

Infrastructure

The Higginsville operation is a well-established mine which has services and infrastructure consistent with an isolated area operating mine.

Key Infrastructure includes:

- 1.3Mtpa Processing plant and supporting infrastructure;
- Power station;
- Gatehouse:
- Medical facilities;
- Accommodation village;
- Administration block and training buildings;
- Contractors Mine Facilities;
- Underground administration building and facilities;
- Underground and heavy vehicle maintenance workshop;

- Light vehicle servicing workshop;
- HV & LV washdown pad facility;
- Fuel storage and dispensing facility;
- Corefarm;
- Mine dewatering;
- Muster/Crib Room and Ablutions;
- Waste Water treatment Plant:
- Water storage and distribution and Tailings facilities; and
- Explosive magazine compound.

### Permitting and Compliance Activities

HGO is a multi deposit operating mine with a gold processing facility that is in possession of all required permits. Environmental permitting and compliance requirements for mining and processing is the responsibility of Karora. HGO covers over 1,900km2 and has a significant disturbance footprint including tailings storage facilities, an operating processing facility, open pits, underground mines, and haul roads. The summary in this chapter for HGO is based on information provided by Karora or sourced from publicly accessible sources and government databases.

#### **Environmental Studies**

In August 2006, a Flora study was conducted on the following tenements M15/351, M15/289, M15/225, M15/325 and P15/47. No Priority Species as defined by the Department of Environment and Conservation (" **DEC**") were located during the survey. Furthermore, in August 2006 ATA Environmental conducted a fauna survey of tenements M15/351, M15/289, M15/225, M15/325 and P15/478. The Carpet Python is the only herpetofauna species of conservation significance that was identified in these tenement areas. Given that there is the potential for some rare and endangered species to occur on the leases Avoca will prior to any clearing activity assess for the following:

- A grid search for Malleefowl and their breeding mounds;
- Inspection of large hollow bearing trees for Major Mitchell cockatoo nests; and
- Personnel are made aware of the presence of Carpet Pythons so that they can be relocated to suitable
  habitat

The Baloo pit, which commenced in July 2019, required the following studies to be undertaken:

- Level 1 Vertebrate Fauna Risk Assessment for the Baloo Project Area (2015) prepared by Terrestrial Ecosystems
- Baloo Project: Salt Lake Ecological Survey (2016) prepared by Bennelongia Environmental Consultants
- Level 1 Flora and Vegetation survey of the Baloo Gold Project Prospect Proposed Access Corridor (2015) prepared by Vegetation Solutions
- Baloo Project Waste Rock Characterisation (2016) prepared by MBS Environmental

The recently approved mining activities for Hidden Secret and Mousehollow (August 2020), required the following studies to be undertaken:

- Reconnaissance Flora and Vegetation Survey of the Eundynie Gold Project, Higginsville- June 2019 prepared by Native Vegetation Solutions;
- Level 1 Vertebrate Fauna Risk Assessment for the Eundynie Project (2019) prepared by Terrestrial Ecosystems;
- Eundynie Gold Deposit Surface Water Assessment (2019) prepared by Rockwater Hydrogeological and Environmental Consultants;
- Eundynie Gold Deposit Results of Permeability Tests and Groundwater Modelling (2019) prepared by Rockwater Hydrogeological and Environmental Consultants; and
- Eundynie Material Characterisation Assessment Report (2020) prepared by Karora Resources.

The mining proposal for the expansion of tailings storage facilities at Higginsville required the following studies to be undertaken:

- An Interpretation of the Moving Loop Electromagnetic Survey using the Loupe System (2020) prepared by Newexco.
- Higginsville TSF2-4 Seepage Recovery Investigation (2020) prepared by Rockwater Hydrogeological and Environmental Consultants.

The mining proposals currently under assessment by DMIRS for Aquarius and Two Boys, required the following studies to be undertaken:

- Level 1 Flora and Vegetation Survey of the Proposed Fairplay Pit and Waste Landform expansion and Development Higginsville (2015) prepared by Native Vegetation Solutions;
- Level 1 Vertebrate Fauna Risk Assessment for the Fairplay Pit and Waste Landform expansion and Development (2015) prepared by Terrestrial Ecosystems;
- Aquarius Boxcut Surface Water Assessment (2020) prepared by Rockwater Hydrogeological and Environmental Consultants;
- Aquarius Boxcut and Underground Assessment of Dewatering (2020) prepared by Rockwater Hydrogeological and Environmental Consultants;
- Two Boys Boxcut Surface Water Assessment (2020) prepared by Rockwater Hydrogeological and Environmental Consultants;
- Two Boys Gold Deposit Results of Pit Dewatering Modelling (2020) prepared by Rockwater Hydrogeological and Environmental Consultants; and
- Aquarius and Two Boys Material Characterisation Report (2021) prepared by Karora Resources.

### Additional, recently completed studies include:

- Annual Monitoring and Proposed Additional Dewatering Discharge for Baloo Pit (2020) prepared by Actis Environmental Services;
- Monitoring of Chalice West Lake (2020) prepared by Actis Environmental Services;
- Vine in-pit TSF, Results of Groundwater Modelling (2019) prepared by Rockwater Hydrogeological and Environmental Consultants; and
- Desktop Biological Assessment and Broadscale Vegetation Mapping (2010) prepared by GHD.

### Permitting and Compliance Activities

HGO is an operating mine with a mineral processing facility and in possession of all required permits. HGO covers over 1,800 square km and has a significant disturbance footprint including tailings storage facilities, an operating processing facility, open pits, underground mines and haul roads.

A licence under the *Environmental Protection Act*, 1986 ("**EP Act**") is required to operate certain industrial premises, known as "prescribed premises". In addition, a works approval is required for any work or construction that will cause the premises to become prescribed premises, or for work or construction which may cause, or alter the nature or volume of, emissions and discharges from an existing prescribed premises. Key licences and approvals are listed below.

Table 26: Summary HGO Key Licence and Approvals

Reference	Approval	Issuer	Date Commenced	Expiry Date
L9155/2018/1 (Higginsville)	Licence relating to category 5 - Processing or beneficiation or metallic or non- metallic ore, 06 - mine dewatering, 054 - sewerage facility operations and 64 - Class I or II putrescible landfill	DWER	Sep 18, 2018	Sep 17, 2024

Reference	Approval	Issuer	Date Commenced	Expiry Date
GWL160795 (6) (Higginsville)	Licence to take water under section 5C of the Rights in Water and Irrigation Act 1914 (WA). Annual water entitlement 3,150,000 kL for the purpose of mineral processing, dewatering and dust suppression.	DER	Apr 1, 2020	May 5, 2029
GWL 202728(1) (Baloo and Eundynie)	Licence to take water under section 5C of the Rights in Water and Irrigation Act 1914 (WA). Annual water entitlement 2,100,000 kL for the purpose of dewatering, mineral processing and dust suppression.	DWER	Jul 24, 2020	May 5, 2029
GWL181866 (2) (Mt Henry and Selene)	Licence to take water under section 5C of the Rights in Water and Irrigation Act 1914 (WA). Annual water entitlement of 1,030,000 kL for the purpose of dewatering and dust suppression.	DWER	Apr 16, 2016	Jun 22, 2026
GWL180185(2) (Lake Cowan)	Licence to take water under section 5C of the Rights in Water and Irrigation Act 1914 (WA). Annual water entitlement of 1,400,000 kL for the purpose of dewatering and dust suppression.	DWER	Apr 1, 2020	May 5, 2029
GWL181652(2) (Wills)	Licence to take water under section 5C of the Rights in Water and Irrigation Act 1914 (WA). Annual water entitlement of 500,000 kL for the purpose of dewatering, mineral processing and dust suppression.	DWER	Apr 1, 2020	May 5, 2029
CPS8152/3 (Higginsville)	Clearing of Native Vegetation for the purpose of mineral production and associated activities of up to 1,000 hectares	DMIRS	Oct 27, 2018	Jul 31, 2025
CPS6823/4 (Mt Henry)	Clearing of Native Vegetation for the purpose of mineral production and associated activities of up to 546.35 hectares	DMIRS	Jan 16, 2016	Jan 31, 2026

The HGO licences, issued under the EP Act (Part V) provides for the processing and beneficiation of metallic and non-metallic ore up to 1.5 Mt per year. Conditions such as groundwater level and limits, monitoring, discharge and reporting requirements are set in the licences.

Karora amalgamated several licences to take water in 2020 to reduce regulatory commitments and reporting requirements. There was a total of nine active permits in place around HGO and these have been reduced down to five active permits. The HGO groundwater licence has an allocation of 3,150 ML per year and allows for the dewatering of the Chalice open pit. The water is pumped 30km to the Aphrodites' pit from which it is stored prior to pumping to the process mill. The HGO groundwater licence allows for dewatering of open pits and underground operations in close vicinity to the Higginsville processing plant.

Karora also amalgamated five active native vegetation clearing permits in 2020 down to a single permit for HGO. CPS8152/3 permits the clearing of up to 1,000 hectares of native vegetation and includes the pits Baloo, Hidden Secret, Mousehollow, Fairplay and the proposed underground mines Aquarius and Two Boys. CPS6823/4 permits the clearing of up to 546.35 hectares native vegetation at the Mt Henry project.

### Environmental Aspects, Impact and Management

HGO, under operation of the previous owners Westgold, went through a period of non-compliance from April 2016 to Jan 2019. The non-compliance related to high standing water levels in a number of monitoring boreholes adjacent to active tailings storage facilities (TSF 1,2,3 and 4). In 2020, Karora applied to recommission TSF 2-4 to provide a further five years of tailings storage capacity under the current production rate at HGO. Studies were undertaken on the hydrogeology beneath the tailings facility to develop a seepage recovery plan that would ensure the facility remained compliant with the Premises Licence conditions if the facility were to be recommissioned. DMIRS accepted the groundwater recovery plan and approved the mining proposal that included an initial raise of TSF 2 and three subsequent stage raises of TSF 2, 3 and 4 into one supercell. DWER has also issued an amended Premises Licence that approved the recommissioning of the facility.

The HGO site has a detailed Environmental Management Plan that includes site specific processes and procedures. The site has a detailed record of the applicable legislation and legal requirements as well as various management and monitoring programs required to ensure compliance with legal and legislative compliance.

Karora has in place the appropriate processes and plans to meet its environmental requirements and commitments.

Mining Rehabilitation Fund

The MRF is a pooled fund, established under the MRF, that is used to rehabilitate abandoned mine sites in Western Australia. All tenement holders (with the exception of tenements covered by State Agreements not listed in the Mining Rehabilitation Fund Regulations 2013 (WA), are required to participate in the MRF. The HGO tenements are subject to the MRF Act.

A 1% levy is paid annually by tenement.

HGO's MRF mine closure is estimated at AUD\$27.3M. Annual MRF contributions payments are approximate AUD\$270k.

Social and Community

The HGO region has a substantial history of exploration and mining. Gold was first discovered in 1905 with gold mining operations continuing sporadically throughout the 20th century and then recommencing in earnest in 1989. Additional mining activities included salt mining at Lake Lefroy during the 1960s to 1980s and nickel mining from the 1970s to the present. HGO operates within an environment of strong local community support.

The nearest town to HGO is Norseman, with a population of 581 (2016 Census), 52km south of the Higginsville process facility. Kambalda with a population of 581 (2016 Census), is located 68km via the Goldfields Highway to the north.

Kalgoorlie-Boulder has a population of 29,875 (2016 Census) and is located 60km north of north of Kambalda. Kalgoorlie is the regional centre for the Eastern Goldfields and is a regional hub for transport, communications, commercial activities and community facilities.

The current workforce at HGO (Karora employees and contractors), comprising approximately 83 personnel, is accommodated on site during their rostered-on periods. Most workers permanently reside in Perth and FIFO from Perth to HGO on either an 8 days-on/6 days-off, 12 days-on/9 days-off or 14 days-on/7 days-off rotation. The FIFO workers are supplemented by workers who reside in closer regional towns such as Norseman, Kambalda, Kalgoorlie and Esperance, Western Australia.

The nearest port is Esperance, 260km south of HGO.

### **Capital and Operating Costs**

Higginsville Central

Capital Costs

As all the Higginsville Central open pit operations are relatively small and planned for contract mining, there are no specific Capital Costs associated with each deposit/open pit.

# Operating Costs

Karora has established open pit (contract mining) operations at Higginsville and therefore has a good understanding of its costs and has a functioning cost management system.

Each open pit used/assumed the typical mining contract rates as they are all located in the same area and have reasonably similar rock and ore properties. The following table depicts cost on a per annum basis:

**Table 27: Operating Costs per Annum** 

Operating Expense Table	Units	Total	2021	2022	2023
Mining Cost – Mouse Hollow	\$A M	16.43	16.43		
Mining Cost – Hidden Secret	\$A M	30.98	5.96	20.07	4.95
Mining Cost - Two Boys	\$A M	70.77	18.34	24.81	27.62
Mining Cost – Pioneer	\$A M	25.02	25.02		
Mining Cost – Fairplay North	\$A M	4.05	4.05		
Mining Cost – Mitchel Group	\$A M	22.42	5.92	11.33	5.17
Processing & G&A Cost - Mouse Hollow	\$A M	13.64	13.64		
Processing & G&A Cost – Hidden Secret	\$A M	25.99	4.37	16.23	5.39
Processing & G&A Cost - Two Boys	\$A M	22.9	0.97	5.96	15.97
Processing & G&A Cost - Pioneer	\$A M	17.85	17.85		
Processing & G&A Cost – Fairplay North	\$A M	4.87	4.87		
Processing & G&A Cost – Mitchel Group	\$A M	10.39	2.24	5.37	2.78
Total	\$A M	\$265.31	\$119.66	\$83.77	\$61.88

The G&A is A\$3.93/t ore (included in the Processing & G&A Cost) and the processing cost also includes the different transportation distances of ore from the open pit operations to the Higginsville processing plant.

### Closure

The Open Pits closure cost simply involves dozing and profiling of the waste rock dumps a cost included in the waste cost. Should additional waste rock profiling be required, that will be at an additional cost of A\$ of 0.45/m2 or A\$1.35/t of rock. No closure costs have been applied to any of the open pits as there might still be potential to expand the open pits. Karora will (as part of the mining licence requirements) hold a closure guarantee for each of the mining sites.

Higginsville Greater - Open Pits

Capital Costs

As all the Higginsville Central open pit operations are relatively small and planned for contract mining, there are no specific Capital Costs associated with each deposit/open pit.

### Operating Costs

Karora has established open pit (contract mining) operations at Higginsville and therefore has a good understanding of its costs and has a functioning cost management system.

Each open pit used/assumed the typical mining contract rates as they are all located a fair distance away from the Higginsville area and plant, however, significantly higher ore transportation costs were added to each planned open pit operation, dependant on its location and distance from the Higginsville processing plant.

**Table 28: Operating Costs per Annum** 

Operating Expense Table	Units	Total	2021	2022
Mining Cost – Wills	\$A M	7.14	5.76	1.37
Mining Cost – Musket	\$A M	16.24	10.12	6.12
Mining Cost – Atriedies	\$A M	8.57	8.57	
Mining Cost – Louis	\$A M	11.36	7.95	3.41
Mining Cost - Baloo	\$A M	11.69	11.69	
Processing & G&A Cost – Wills	\$A M	2.80	2.07	0.73
Processing & G&A Cost – Musket	\$A M	8.64	1.50	7.15
Processing & G&A Cost – Atriedies	\$A M	6.94	6.94	
Processing & G&A Cost - Louis	\$A M	15.30	6.42	8.88
Processing & G&A Cost - Baloo	\$A M	11.28	11.28	
Total	\$A M	99.96	72.29	27.67

The G&A is A\$3.1/t ore (included in the Processing & G&A Cost) and the processing cost also includes the different transportation distances of ore from the open pit operations to the Higginsville processing plant which is around the A\$5/t ore or more.

### Closure

The Open Pits closure cost simply involves dozing and profiling of the waste rock dumps a cost included in the waste cost. Should additionally waste rock profiling be required, that will be at an additional cost of A\$ of 0.45/m2 or A\$1.35/t of rock. No closure costs have been applied to any of the open pits as there might still be potential to expand the open pits. Karora will (as part of the mining licence requirements) hold a closure guarantee for each of the mining sites.

Chalice Underground

Capital Costs

Chalice has good existing development and established areas and infrastructure, however, the site visit revealed that most of the surface mining infrastructure is no longer present and needs to be acquired/replaced. It is advised to obtain new ventilation fans, pumps and electric equipment (sub-stations, cables etc.) but a significant amount of piping can be used from old/existing areas. Key surface infrastructure needs to be re-established. These can be in the form of scheds and smaller semi-rigid construction. There are communication towers and cables (seen on the site visit) and various areas has good constructed foundations/slabs that can still be utilised.

Chalice will therefore have a reasonable initial Capital spend requirement and most of the other/ongoing services installation costs are included in the Capitalised mining cost and ongoing operating costs.

The sustaining capital expenditure is allocated for on-going capital development, mining equipment costs (replacements, rebuilds and major overhauls), and other underground infrastructure refurbishment. Sustaining capital requirements also include extensions to the ventilation, pumping, and electrical networks that follow capital decline development as the mine goes deeper. It should be noted that the Total mine operating cost tables will include the capital development costs to avoid confusion as capitalised mining is simply a taxation function.

Table 29: Initial Capital Costs per Annum

### Initial

Capital Cost Type	Units	Total	2022	2023	2024	2025	2026
Plant and Equipment	\$A M	7.8	7.8	0.0	0.0	0.0	0.0
Capital Development	\$A M	22.6	22.6	0.0	0.0	0.0	0.0
Total Mining Capital	\$A M	30.3	30.3	0.0	0.0	0.0	0.0

Capital Development is the first year of mine development operating costs capitalised.

Table 30: Sustaining Capital Costs per Annum

# **Sustaining**

Capital Cost Type	Units	Total	2022	2023	2024	2025	2026
Plant and Equipment	\$A M	0.1	0.0	0.0	0.0	0.0	0.0
Capital Development	\$A M	4.7	0.0	4.1	0.6	0.1	0.0
Total Mining Capital	\$A M	4.8	0.0	4.1	0.6	0.1	0.0

Operating Costs

The mine planning at Chalice also developed a minimum PFS level cost model based on the mine planning completed. The typical unit cost rates for all the functions were again compared to good existing cost numbers as available within the Karora group (mostly based on the actual costs at Beta Hunt). Chalice is unique however in that Chalice has a low access development meters ratio to ore tonnes (which boasts well for a reasonably low-grade, marginal underground operation as planned at Chalice).

The mine plans targeted as much ounces as possible and optimised the production schedule insofar possible as Chalice 'economic performances will be extremely sensitive to ounces produced per fixed cost and Capital requirements. The operating costs per annum are detailed in Table 31.

**Table 31: Site Operating Costs** 

Operating Costs	Unit	<b>Operating Costs</b>
Mining Costs:		

Direct Operating Costs	\$A / t ore	54
Maintenance Costs	\$A / t ore	7
Technical Services Costs	\$A / t ore	14
G&A Costs	\$ A / t ore	4
Total Mining Operating Cost (incl. all development cost)	\$ A / t ore	79
Processing and Surface Haulage <sup>1</sup>	\$ A / t ore	26.5
TOTAL OPERATING COST	\$A / t ore	105.5

**Table 32: Operating Costs per Annum** 

<b>Operating Expense Table</b>	Units	Total	2022	2023	2024	2025
Mining	\$A M	\$31.2	\$0.0	\$18.5	\$11.1	\$1.6
Processing	\$A M	\$21.0	4.61	12.18	3.97	0.21
General and Administrative	\$A M	\$3.1	0.68	1.81	0.59	0.03
Total	\$A M	\$55.3	\$5.3	\$32.5	\$15.6	\$1.9

#### Closure

Chalice's closure would involve the closing-off of the portal and other ventilation access holes. These will be done by cement plugging the vertical holes and a locked gate located at the Chalice portal. Some other infrastructure should also be removed but the closure cost will be shared by other deposits. An estimate of the closure cost for the Chalice underground mine is approximately AUD100k. If equipment and infrastructure is removed (should Chalice be mined and depleted) should be utilised elsewhere and might therefore generate a salvage value.

Trident Underground

Capital Costs

As an historic gold mine but with very good existing development and other infrastructure, major infrastructure capital is already in place although additional allowances were made for piping, ventilation, dewatering and power distribution underground. Trident will therefore have a reasonably low initial capital outlay and most of the costs will be ongoing capitalised costs and some sustaining capital cost.

The sustaining capital expenditure is allocated for on-going capital development, mining equipment costs (replacements, rebuilds and major overhauls), and other underground infrastructure refurbishment. Sustaining capital requirements also include extensions to the ventilation, pumping, and electrical networks that follow capital decline development as the mine goes deeper. This is in addition to sustaining costs associated with ongoing processing plant infrastructure maintenance as required which are included in operating cost details. The sustaining capital costs per annum are detailed in Table 33.

Table 33: Initial Capital Costs per Annum

#### Initial

Capital Cost Type	Units	Total	2022	2023	2024	2025	2026
Plant and Equipment	\$A M	3.8	3.8	0.0	0.0	0.0	0.0

Capital Cost Type	Units	Total	2022	2023	2024	2025	2026
Capital Development	\$A M	16.0	16.0	0.0	0.0	0.0	0.0
Total Mining Capital	\$A M	19.8	19.8	0.0	0.0	0.0	0.0

Table 34: Sustaining Capital Costs per Annum

# **Sustaining**

Capital Cost Type	Units	Total	2022	2023	2024	2025	2026
Plant and Equipment	\$A M	0.1	0.0	0.0	0.0	0.0	0.0
Capital Development	\$A M	4.1	0.0	1.3	2.8	0.0	0.0
Total Mining Capital	\$A M	4.1	0.0	1.3	2.8	0.0	0.0

# Operating Costs

Karora has an established operation at Beta Hunt and therefore has a good understanding of its costs and has a functioning cost management system considered for Trident. An independent mining cost model was however developed for the Trident planning and compared to the typical costs observed at Beta Hunt. Operating cost inputs are based on simulated and then benchmarked actual costs in addition to recent supplier quotes as obtained for Beta Hunt. The mining operating costs are split into direct operating costs, maintenance costs, technical services costs and G & A costs. Direct operating costs include mining operator labour and consumable costs. Maintenance costs include maintenance labour and maintenance consumables. Technical services costs include engineering, geology and geotechnical labour and consumables. G & A costs include administration labour and consumables in addition to safety department labour and consumables. The operating costs are detailed in Table 35.

**Table 35: Site Operating Costs** 

Operating Costs	Unit	Operating Costs
Mining Costs:		
Direct Operating Costs	\$A / t ore	89.1
Maintenance Costs	\$A / t ore	8.7
Technical Services Costs	\$A / t ore	10.9
G&A Costs	\$ A / t ore	3.9
<b>Total Mining Operating Cost</b>	\$ A / t ore	112.6
Processing and Surface Haulage	\$ A / t ore	26.5
TOTAL OPERATING COST	\$A / t ore	139.1

**Table 36: Operating Costs per Annum** 

Operating Expense Table	Units	Total	2022	2023	2024	2025	2026
Mining	\$A M	\$37.0	\$0.0	\$16.1	\$11.8	\$6.9	\$2.3
Processing	\$A M	\$13.5	2.19	4.83	5.09	1.02	0.34
General and Administrative	\$A M	\$2.0	0.32	0.72	0.75	0.15	0.05

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### Closure

Trident's closure would involve the closing-off of the portal and other ventilation access holes. These will be done by cement plugging the vertical holes and a locked gate located at the Trident portal. Some other infrastructure should also be removed but the closure cost will be shared by other deposits. An estimate of the closure cost for the Trident underground mine is approximately AUD\$100k.

Mt Henry Group

### Capital Costs

An estimate has been made of the initial site establishment capital requirements for the Mt Henry Group operation. These total AU\$6m. It includes an allowance for the development of a mine haul road from Selene to the proposed ore stockpiling area at Mt Henry. As the mining equipment is not fully utilised through the schedule it is assumed that the other site development works (i.e. stripping, clearing, roadbuilding etc.) can be completed during the period in which they are required, and do not require to be brought forward to Year-1 as a capital expense.

The cost of mining equipment replacement has been allowed for as part of a fixed equipment fee in the mining contractor operating cost.

An allowance for process plant sustaining capital is built into the processing operating costs. These costs total A\$40m.

# Operating Costs

A detailed mine operating cost model has been built up for the MHG operation from first principles. Table 37 below details the Life of Mine operating cost estimate on a total cost and \$/t mined cost basis.

Table 37: Mt Henry Group – Mine Operating Cost Estimate

	Cost Centre	\$/t Mined	\$M
	Heavy Equipment	\$0.76	\$40.3
	Dayworks	\$0.06	\$2.9
	Drill and Blast	\$0.53	\$28.1
	Personnel And Fixed	\$2.06	\$108.3
	Fixed Equipment Charges	\$0.55	\$29.2
Contractor	Ancillary Works	\$0.03	\$1.8
tra	Subtotal	\$4.00	\$210.6
Con	Margin	\$0.20	\$10.5
	Contractor Cost	\$4.20	\$221.1
Owner Cost		\$0.42	\$22.1
TO	ΓAL	\$4.62	\$243.3

Ancillary Works includes allowances for, clearing / grubbing and topsoil storage, roadbuilding and waste dump rehabilitation.

The total operating cost breakdown over time is shown in Table 38.

Table 38: Mt Henry Group – Mine Operating Cost by Year

Cost Centre		\$/t Mined	\$M	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Contractor	Heavy Equipment	\$0.76	\$40.3	\$4.3	\$5.6	\$5.8	\$6.3	\$7.0	\$4.0	\$2.1	\$1.9	\$2.0	\$1.3
	Dayworks	\$0.06	\$2.9	\$0.3	\$0.4	\$0.4	\$0.4	\$0.4	\$0.3	\$0.2	\$0.2	\$0.2	\$0.1
	Drill and Blast	\$0.53	\$28.1	\$3.8	\$4.8	\$4.6	\$4.6	\$5.0	\$2.4	\$0.9	\$0.8	\$0.8	\$0.4
	Personnel And Fixed	\$2.06	\$108.3	\$11.9	\$12.7	\$12.7	\$13.1	\$13.3	\$11.3	\$9.8	\$9.4	\$9.4	\$4.9
	Fixed Equipment Charges	\$0.55	\$29.2	\$3.4	\$3.7	\$3.7	\$4.0	\$4.0	\$3.0	\$2.2	\$1.8	\$1.8	\$1.8
	Ancillary Works	\$0.03	\$1.8	\$0.6	\$0.4	\$0.0	\$0.0				\$0.3	\$0.3	\$0.3
	Subtotal	\$4.00	\$210.6	\$24.3	\$27.5	\$27.1	\$28.4	\$29.7	\$20.9	\$15.1	\$14.4	\$14.4	\$8.7
	Margin	\$0.20	\$10.5	\$1.2	\$1.4	\$1.4	\$1.4	\$1.5	\$1.0	\$0.8	\$0.7	\$0.7	\$0.4
	Contractor Cost	\$4.20	\$221.1	\$25.6	\$28.8	\$28.5	\$29.9	\$31.2	\$22.0	\$15.9	\$15.1	\$15.1	\$9.2
Owner Cost		\$0.42	\$22.1	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$1.5
TOTAL		\$4.62	\$243.3	\$27.9	\$31.2	\$30.8	\$32.2	\$33.5	\$24.3	\$18.2	\$17.3	\$17.3	\$10.6

#### Closure

The Open Pits closure cost simply involves dozing and profiling of the waste rock dumps a cost included in the waste cost. Should additionally waste rock profiling be required, that will be at an additional cost of A\$ of 0.45/m2 or A\$1.35/t of rock. No closure costs have been applied to any of the open pits as there might still be potential to expand the open pits. Karora will (as part of the mining licence requirements) hold a closure guarantee for each of the mining sites.

# **Exploration, Development and Production**

The HGO project area also overlies three of the richest mineralised regional shear zones in the Eastern Goldfields – Boulder-Lefroy, Zuleika and Speedway. The Boulder Lefroy controls the Golden Mile deposit of Kalgoorlie (60Mozs) and the St Ives gold camp (14Mozs). The newly discovered Invincible deposit (1.3Mozs) found in 2012 is controlled by the poorly explored Speedway shear, while the Zuleika is associated with the Kundana and Mt Marion (1.2Mozs) deposits to the north. In the last 20 years, the Project area has delivered significant discoveries – Trident in 2004 (1Mozs) and the Polar Bear deposits, including Baloo, in 2015. Trident was discovered testing down plunge extensions to a known deposit (Poseidon Sth) while Baloo was discovered by S2 using reconnaissance aircore, highlighting the potential for early stage exploration to still deliver new discoveries in a "mature" goldfield. The area of the Baloo discovery remains relatively unexplored due to it being largely concealed by the shallow salt lake sediments.

The Project has a large number of prospects at various stages of progress to deliver a resource. The exploration team at HGO has used a milestone based system to rank and target these prospects. Very little greenfields exploration has occurred in recent years with drilling focusing on upgrading existing resources.

Under a rejuvenated exploration program there is the opportunity to follow-up on numerous targets already identified and develop new targets.

# APPENDIX "B" AUDIT COMMITTEE CHARTER

### **PURPOSE**

- 1. The Audit Committee (the "Committee") is a standing committee appointed by the board of directors (the "Board") of Karora Resources Inc. (the "Company"). The Committee is established to fulfill applicable public company obligations respecting audit committees and to assist the Board in fulfilling its oversight responsibilities with respect to financial reporting including responsibility to, among other things as may be delegated by the Board from time to time, oversee:
  - a. the integrity of the Company's financial statements and financial reporting process, including the audit process and the Company's internal controls over financial reporting, disclosure controls and procedures, and compliance with other related legal and regulatory requirements;
  - b. the qualifications and independence of external auditors;
  - c. the work of the Company's financial management, internal auditors and external auditors;
  - d. enterprise risk management, privacy and data security and to monitor the same; and
  - e. the auditing, accounting and financial reporting process generally.
- 2. In addition, the Committee shall prepare, if required, an audit committee report for inclusion in the Company's annual management information circular, in accordance with applicable laws and regulations.
- 3. The function of the Committee is oversight. It is not the duty or responsibility of the Committee or its members to: (a) plan or conduct audits; (b) determine that the Company's financial statements are complete and accurate and are in accordance with generally accepted accounting principles; or (c) conduct other types of auditing or accounting reviews or similar procedures or investigations. The Committee, the Audit Committee Chair (the "Committee Chair") and its audit committee financial expert are members of the Board, appointed to the Committee to provide broad oversight of the financial, risk and control related activities of the Company, and are specifically not accountable or responsible for the day-to-day operation or performance of such activities.
- 4. Management is responsible for the preparation, presentation and integrity of the Company's financial statements. Management is also responsible for maintaining appropriate accounting and financial reporting principles and policies and systems of risk assessment and internal controls and procedures designed to provide reasonable assurance that assets are safeguarded and transactions are properly authorized, recorded and reported and to assure the effectiveness and efficiency of operations, the reliability of financial reporting and compliance with accounting standards and applicable laws and regulations. Management is also responsible for monitoring and reporting on the adequacy and effectiveness of the system of internal controls over financial reporting and disclosure controls and procedures. The external auditors are responsible for planning and carrying out an audit of the Company's annual financial statements in accordance with generally accepted auditing standards to provide reasonable assurance that, among other things, such financial statements are in accordance with generally accepted accounting principles.

# **PROCEDURES**

- 1. *Number of Members* The members of the Committee shall be appointed by the Board. The Committee will be comprised of not less than three (3) Board members.
- 2. *Independence* The Committee shall be constituted at all times of "**independent directors**" who are "independent" within the meaning of National Instrument 52-110 *Audit Committees* ("**NI 52-110**").
- 3. Financial Literacy and Other Related Experience Each member shall be able to read and understand fundamental financial statements, and shall otherwise be "financially literate" within the meaning of applicable requirements or guidelines for audit committee service under securities laws or the rules of any applicable stock

exchange, including NI 52-110. Each member should have reasonable sufficient experience in such other economic, financial, investment or business matters as the Board may deem appropriate.

- 4. Appointment and Replacement of Committee Members Any member of the Committee may be removed or replaced at any time by the Board and shall automatically cease to be a member of the Committee upon ceasing to be a director. The Board shall fill any vacancy if the membership of the Committee is less than three directors. Whenever there is a vacancy on the Committee, the remaining members may exercise all its power so long as a quorum remains in respect of a specific Committee meeting. Subject to the foregoing, the members of the Committee shall be appointed by the Board annually and each member of the Committee shall remain on the Committee until the next annual meeting of shareholders after his or her appointment or until his or her successor shall be duly appointed and qualified.
- 5. Committee Chair Unless a Committee Chair is designated by the full Board, the members of the Committee may designate a Chair by majority vote of the full Committee. The Committee Chair shall be responsible for leadership of the Committee assignments and reporting to the Board. If the Committee Chair is not present at any meeting of the Committee, one of the other members of the Committee who is present shall be chosen by the Committee to preside at the meeting. The Committee will report through the Committee Chair to the Board following meetings of the Committee on matters considered by the Committee, its activities and compliance with this Charter.
- 6. Conflicts of Interest If a Committee member faces a potential or actual conflict of interest relating to a matter before the Committee, other than matters relating to the compensation of directors, that member shall be responsible for alerting the Committee Chair. If the Committee Chair faces a potential or actual conflict of interest, the Committee Chair shall advise the Chair of the Board. If the Committee Chair, or the Chair of the Board, as the case may be, concurs that a potential or actual conflict of interest exists, the member faced with such conflict shall disclose to the Committee the member's interest and shall not participate in consideration of the matter and shall not vote on the matter.
- 7. *Meetings* The Committee shall meet regularly and as often as it deems necessary to preform the duties and discharge its responsibilities described herein in a timely manner, but not less than four (4) times a year and any time the Company proposes to issue a press release with its quarterly or annual earnings information or disclose any other material financial information of the Company. The Committee shall meet within forty-five (45) days following the end of each of the first three financial quarters and shall meet within ninety (90) days following the end of the financial year. The Committee shall maintain written minutes of its meetings, which will be filled with the meeting minutes of the Board.
- 8. Agenda The Committee Chair, with the assistance of the Chief Financial Officer ("CFO"), shall develop and set the Committee's agenda, in consultation with other members of the Committee, the Board and management. The agenda and information concerning the business to be conducted at each Committee meeting shall be, to the extent practical, communicated to members of the Committee sufficiently in advance of each meeting to permit meaningful review. The Committee will keep minutes of its meetings which shall be available for review by the Board. Except in exceptional circumstances, draft minutes of each meeting of the Committee shall be circulated to the Committee for review within 14 days following the date of each such meeting.
- 9. Separate Executive Meetings The Committee shall meet periodically, but no less than quarterly, with the CFO, the head of internal audit function and the external auditors in separate executive sessions to discuss any matters that the Committee or any of these groups believes should be discussed privately and such persons shall have access to the Committee to bring forward matters requiring its attention. However, the Committee shall also meet periodically without management present.
- 10. *Quorum* Quorum for the transaction of business at any meeting of the Committee shall be a majority of the number of members of the Committee. If within one hour of the time appointed for a meeting of the Committee, a quorum is not present, the meeting shall stand adjourned for one hour unless a quorum is present before that time. If following such one hour period, a quorum as hereinbefore specified is not present, then, at the discretion of the members then present, the quorum for the adjourned meeting shall consist of the members then present.
- 11. *Meetings* Meetings of the Committee may be called by any member of the Committee, the Chairman and CEO, the Lead Director of the Board (the "**Lead Director**") (if appointed) or the CFO of the Company. Not less than

twenty-four (24) hours notice shall be given, provided that notice may be waived by all members of the Committee.

- 12. Voting Any matter to be determined by the Committee shall be decided by a majority of the votes cast at a meeting of the Committee called for such purpose. Any action of the Committee may also be taken by an instrument or instruments in writing signed by all of the members of the Committee (including in counterparts, by facsimile or other electronic signature) and any such action shall be as effective as if it had been decided by a majority of the votes cast at a meeting of the Committee called for such purpose. In case of an equality of votes, the matter will be referred to the Board for decision.
- 13. Participation Members may participate in a meeting of the Committee in person or by means of telephone, web conference or other communication equipment. The Committee may invite such other directors, officers and employees of the Company and such other advisors and persons as is considered advisable to attend any meeting of the Committee. For greater certainty, the Committee shall have the right to determine who shall and who shall not be present at any time during a meeting of the Committee.
- 14. Reliance Absent actual knowledge to the contrary (which shall be promptly reported to the Board), each member of the Committee shall be entitled to rely on: (a) the integrity of those persons or organizations within and outside the Company from which it receives information; (b) the accuracy of the financial and other information provided to the Committee by such persons or organizations; and (c) representations made by management and the external auditors as to the permissible non-audit services provided by the external auditors to the Company and its subsidiaries.
- 15. *Self-Evaluation* The Committee shall conduct a self-evaluation at least annually to determine whether it and its members are functioning effectively, and report its conclusion to the Board.

### **AUDIT RESPONSIBILITIES**

### Selection and Oversight of the External Auditors

- 1. The external auditors are ultimately accountable to the Committee and the Board as the representatives of the shareholders of the Company and shall report directly to the Committee and the Committee shall so instruct the external auditors. The Committee shall evaluate the performance of the external auditors and make recommendations to the Board on the reappointment or appointment of the external auditors of the Company to be proposed in the Company's management information circular for shareholder approval and shall have authority to terminate the external auditors. If a change in external auditors is proposed, the Committee shall review the reasons for the change and any other significant issues related to the change, including the response of the incumbent auditors, and enquire on the qualifications of the proposed auditors before making its recommendation to the Board
- 2. The Committee shall be directly responsible for the appointment, compensation, retention and oversight of the work of an registered public accounting firm engaged (including resolution of disagreements between management and the external auditor regarding financial reporting) for the purposes of preparing or issuing and audit report or performing other audit, review or attest services of the Company, and each such registered public accounting firm must report directly to the Committee.
- 3. The Committee will approve policies and procedures for the pre-approval of services to be rendered by the external auditors, which policies and procedures shall include reasonable detail with respect to the services covered. All permissible non-audit services to be provided to the Company or any of its affiliates by the external auditors or any of their affiliates that are not covered by pre-approval policies and procedures approved by the Committee shall be subject to pre-approval by the Committee. The Committee shall have the sole discretion regarding the prohibition of the external auditor providing certain non-audit services to the Company and its affiliates. The Committee shall also review and approve disclosures with respect to permissible non-audit services.
- 4. The Committee shall review the independence of the external auditors and shall make recommendations to the Board on appropriate actions to be taken that the Committee deems necessary to protect and enhance the independence of the external auditors. In connection with such review, the Committee shall:

- a. actively engage in a dialogue with the external auditors about all relationship or services that may impact the objectivity and independence of the external auditors;
- b. require that the external auditors submit to it on a periodic basis, and at least annually, a formal written statement delineating all relationships between the Company and its subsidiaries, on the one hand, and the external auditors and their affiliates on the other hand and to the extent there are relationships, monitor and investigate them;
- c. ensure the rotation of the lead (and concurring) audit partner having primary responsibility for the audit and the audit partner responsible for reviewing the audit as required by applicable law;
- d. consider whether there should be a regular rotation of the external audit firm itself; and
- e. consider the auditor independence standards promulgated by applicable auditing regulatory and professional codes.
- 5. The Committee shall establish and monitor clear policies for the hiring by the Company of employees or former employees of the external auditors.
- 6. The Committee shall require the external auditors to provide to the Committee, and the Committee shall review and discuss with the external auditors, all reports which the external auditors are required to provide to the Committee or the Board under rules, policies or practices of professional or regulatory bodies applicable to the external auditors, and any other reports which the Committee may require. Such reports shall include:
  - a. a description of the external auditors' internal quality-control procedures, any material issues raised by the most recent internal quality-control review, or peer review, or Canadian Public Accountability Board (CPAB) review, of the external auditors, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent auditors carried out by the external auditors and any steps taken to deal with any such issues; and
  - b. a report describing: (i) the proposed audit scope, approach and independence of all critical accounting polices and practices to be used in the annual audit; (ii) all alternative treatments of financial information within generally accepted accounting principles related to material items that have been discussed with management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the external auditors; and (iii) other material written communication between the external auditors and management, such as any management letter or schedule of unadjusted differences.
- 7. The Committee shall (i) annually review the experience and qualifications of the independent audit team and review the performance of the independent auditors, including assessing their professional skepticism, effectiveness and quality of serve, and (ii) every five (5) years perform a comprehensive review of the performance of the independent auditors over multiple years to provide further insight on the audit firm, its independence and application of professional standards.

### **Appointment and Oversight of Internal Auditors**

- 8. The appointment, terms of engagement, compensation, replacement or dismissal of the internal auditors shall be subject to prior review and approval by the Committee. When the internal audit function is performed by employees of the Company, the Committee may delegate responsibility for approving the employment, term of employment, compensation and termination of employees engaged in such function (other than with respect to the head of the Company's internal audit function).
- 9. The Committee shall obtain from the internal auditors, and shall review, summaries of the significant reports to management prepared by the internal auditors, or the actual report if requested by the Committee, and management's responses to such reports.
- 10. The Committee shall, as it deems necessary or appropriate, communicate with the internal auditors with respect to their reports and recommendations, the extent to which prior recommendations have been implemented and

- any other matters that the internal auditor brings to the attention of the Committee. The head of the internal audit function shall have unrestricted access to the Committee.
- 11. The Committee shall, annually or more frequently as it deems necessary or appropriate, evaluate the internal auditors, including their activities, organizational structure, independence, objectivity, qualifications and effectiveness.

### **Oversight and Monitoring of Audits**

- 12. The Committee shall review with the external auditors, the internal auditors and management the audit function generally, the objectives, staffing, locations, coordination (reduction of redundant efforts) and effective use of audit resources, reliance upon management and internal audit and general audit approach and scope of proposed auditors of the financial statements of the Company and its subsidiaries, the overall audit plans, the responsibilities of management, the internal auditors and the external auditors, the audit procedures to be used and the timing and estimated budgets and staffing of the audits.
- 13. The Committee shall meet periodically with the internal auditors to discuss the progress of their activity, any significant findings stemming from internal audits, any changes required in the planned scope of their audit plan and any difficulties or disputes that arise with management in the course of their audits, including any restrictions on the scope of their work or access to required information, and the adequacy of management's responses in correcting audit-related deficiencies.
- 14. The Committee shall review with management the results of internal and external audits.
- 15. The Committee shall provide an open avenue of communication between the external auditors, the internal auditors, the Board and management and take such other reasonable steps as it may deem necessary to satisfy itself that the audit was conducted in a manner consistent with all applicable legal requirements and auditing standards of applicable professional or regulatory bodies.

# Oversight and Review of Accounting Principles and Practices

- 16. The Committee shall, as it deems necessary or appropriate, oversee, review and discuss with management, the external auditors and the internal auditors (together and separately as it deems necessary), among other items and matters:
  - a. the quality, appropriateness and acceptability of the Company's accounting principles, practices and policies used in its financial reporting, its consistency from period to period, changes in the Company's accounting principles or practices and the application of particular accounting principles and disclosure practices by management to new or unusual transactions or events;
  - b. all significant financial reporting issues, estimations and judgements made in connection with the preparation of the financial statements, including the effects of alternative methods within generally accepted accounting principles on the financial statements and any "second opinions" sought by management from an independent auditor with respect to the accounting treatment of a particular item;
  - any material change to the Company's auditing and accounting principles and practices as recommended by management, the external auditors or the internal auditors or which may result from proposed changes to applicable generally accepted accounting principles;
  - d. the extent to which any changes or improvements in accounting or financial practices, as approved by the Committee, have been implemented; and
  - e. the effect of regulatory and accounting initiatives on the Company's financial statements and other financial disclosures.
- 17. The Committee will review and resolve disagreements between management and the external auditors regarding financial reporting or the application of any accounting principles or practices.

# Oversight and Monitoring of Internal Control Over Financial Reporting ("ICOFR")

- 18. The Committee shall, as it deems necessary or appropriate, exercise oversight of, review and discuss with management, the external auditors and the internal auditors (together and separately, as it deems necessary):
  - a. the adequacy and effectiveness of the Company's ICOFR and disclosure controls and procedures designed to ensure compliance with applicable laws and regulations;
  - b. any significant deficiencies or material weaknesses in ICOFR or disclosure controls and procedures;
  - c. the risk of management's ability to override the Company's internal controls;
  - d. any fraud, of any amount or type, that involves management or other employees who have a significant role in the ICOFR:
  - e. the adequacy of the Company's internal controls and any related significant findings and recommendations of the external auditor and internal auditors together with management's responses thereto; and
  - f. management's compliance with the Company's processes, procedures and internal controls.
- 19. The Committee shall establish procedures for: (a) the receipt, retention, and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and (b) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

# Oversight and Monitoring of the Company's Financial Reporting and Disclosure

### 20. The Committee shall:

- a. review with the external auditors and management and recommend to the Board for approval the audited financial statements and the notes thereto and Management's Discussion and Analysis ("MD&A") accompanying such financial statements, the Company's annual information form and any financial information of the Company contained in any registration statement, prospectus, information circular or any other disclosure document or regulatory filing of the Company;
- review with the external auditors and management each set of interim financial statements and the notes thereto and MD&A accompanying such financial statements and any other disclosure documents or regulatory filings of the Company containing or accompanying financial information of the Company; and
- c. review the disclosure regarding the Committee required to be included in any publicly filed or available document by applicable securities laws or regulations or stock exchange rules or requirements.

Such reviews shall be conducted prior to the release of any summary of the financial results or the filing of such reports with applicable regulators.

- 21. Prior to their distribution or public disclosure, the Committee shall discuss earnings press releases, as well as financial information and earnings guidance, it being understood that such discussions may in the discretion of the Committee, be done generally (i.e., by discussing the types of information to be disclosed and the type of presentation to be made) and that the Committee need not discuss in advance each earnings release or each instance in which the Company gives earnings guidance.
- 22. The Committee shall oversee compliance with the requirements of applicable securities laws or rules for disclosure of auditors' services, engagements and independence of external auditors and audit committee member qualifications and activities.

- 23. The Committee shall receive and review the financial statements and other financial information of material subsidiaries of the Company and any auditor recommendations concerning such subsidiaries.
- 24. The Committee share oversee compliance with legal and regulatory requirements with respect to financial statements and financial reporting.

# **Oversight of Finance Matters**

### 25. The Committee shall:

- a. periodically review matters pertaining to the Company's material policies and practices respecting cash management and material financing strategies or policies or proposed financing arrangements and objectives of the Company;
- b. periodically review the Company's major financial risk exposures (including foreign exchange and interest rate) and management's initiatives to control such exposure, including the use of financial derivatives and hedging activities;
- c. review and discuss with management all material off-balance sheet transactions, arrangement, obligations (including contingent obligations), leases and other relationships of the Company with unconsolidated entities, other persons, or related parties, that may have a material current or future effect on financial condition, changes in financial condition, results of operations, liquidity, capital resources, capital reserves, or significant components of revenues or expenses;
- d. review and discuss policies, procedures and practices with respect to risk identification, assessment and management, including appropriate guidelines and policies to govern the process, as well as the Company's major enterprise risk exposures and the steps management has undertaken to control them; and
- e. review and discuss with management the Company's effective tax rate, adequacy of tax reserves, tax payments and reporting of any pending tax audits or assessments, and material tax policies and tax planning initiatives.

# Risk Oversight, Privacy and Cybersecurity

- 26. The Committee shall annually or as the Committee deems necessary or appropriate:
  - a. review and discuss with management and as the Committee deems necessary or appropriate, the Chair of the Board or other committees of the Board, and monitor the adequacy and effectiveness of: (i) management's program, including policies and guidelines, to identify, assess, manage, and monitor major enterprise risks of the Company, including financial, operational, privacy, security, business continuity, legal and regulatory, and reputational risk, as well as those risks that would threaten the Company's business, future performance, solvency or liquidity; (ii) management's risk-management decisions, practices and activities; (iii) reports from management and others, including without limitation internal audit, regarding compliance with item (i) above; and (iv) the adequacy and appropriateness of management's response to, including the implementation thereof, the matters and findings, if any, in the reports referenced in item (iii) above;
  - b. review, discuss with management and assess the Company's privacy and cybersecurity risk exposures; and
  - c. review and discuss with management the adequacy of the Company's insurance coverage.

### **Committee Reporting**

27. The Committee shall report regularly, which shall be at least quarterly, to the entire Board regarding the execution of the Committee's duties, responsibilities and activities, as well as any issues encountered and related recommendations and recommend to the Board that the audited financial statements be included in the Company's

- annual filings. The Chair of the Committee shall prepare and deliver the report to the Board. The Committee's report by the Chair may be a verbal report delivered to the Board at a duly called Board meeting.
- 28. The Committee shall also report to the Board quarterly and/or annually regarding the oversight and receipt of certifications from applicable management confirming compliance with certain applicable laws, regulations or rules and certain Company policies and practices, in each case as the Committee deems necessary or appropriate.

### **Additional Authority and Responsibilities**

- 29. The Committee shall have the authority to engage independent counsel and other advisers, hire and terminate special legal, accounting, financial or other consultants to advise the Committee at the Company's expense, in each case, as it determines necessary or appropriate to carry out its duties and without consulting with, or obtaining prior approval from, any officer of the Company or the Board. The Committee may ask members of management, including, without limitation, the applicable member of management responsible for enterprise risk management, or others, including, without limitation, Company employees or the Chair of the Board or any committee, to attend meetings or provide information as necessary. The Committee shall also have the authority to ask the Company's independent auditors to attend meetings or provide information as necessary, and the Company's independent auditors will have direct access to the Committee at their own initiative.
- 30. The Committee shall provide for appropriate funding for payment: of (a) compensation to any registered public accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company; (b) compensation to any advisers engaged or employed by the Committee under subsection 29 above; and (c) ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.
- 31. The Committee shall review and/or approve any other matter specifically delegated to the Committee by the Board and undertake on behalf of the Board such other activities as may be necessary or desirable to assist the Board in fulfilling its oversight responsibilities with respect to financial reporting and perform such other functions as assigned by law or the Company's constating documents.
- 32. The Committee shall review and approve in advance any proposed related-party transactions and required disclosure of such in accordance with applicable securities laws and regulations and consistent with any related-party transaction policy of the Company, to the extent such policy exists, and report to the Board on any approved transactions.

### **Audit Committee Chair**

# The Committee Chair should:

- 1. provide leadership to the Committee and oversee the functioning of the Committee;
- 2. chair meetings of the Committee (unless not present), including in-camera sessions, and report to the Board following each meeting of the Committee on the activities and any recommendations and decisions of the Committee and otherwise at such times and in such manner as the Committee Chair considers advisable;
- 3. ensure that the Committee meets at least four times per financial year of the Company, and otherwise as is considered advisable;
- 4. in consultation with the Chair of the Board, the Lead Director, if any, and the members of the Committee, establish dates for holding meetings of the Committee;
- 5. set the agenda for each meeting of the Committee with input from other members of the Committee, the Chair of the Board, the Lead Director, if any, and any other appropriate individuals;
- 6. ensure that Committee materials are available to any director upon request;
- 7. act as a liaison, and maintain communication, with the Chair of the Board, the Lead Director, if any, and the Board to co-ordinate input from the Board and to optimize the effectiveness of the Committee;

- 8. report annually to the Board on the role, mandate, and effectiveness of the Committee, in respect of contributing to the objectives of the Board and the Company;
- 9. assist the members of the Committee to understand and comply with the responsibilities contained in this mandate;
- 10. foster ethical and responsible decision making by the Committee;
- 11. oversee the structure, composition and membership of, and activities delegated to, the Committee from time to time;
- 12. ensure appropriate information is requested from the officers of the Company and is provided to the Committee to enable it to function effectively and comply with this mandate;
- 13. ensure that appropriate resources and expertise are available to the Committee;
- 14. ensure that the Committee considers whether any independent counsel or other experts or advisors retained by the Committee are appropriately qualified and independent in accordance with applicable laws;
- 15. facilitate effective communication between the members of the Committee and the officers of the Company;
- 16. attend, or arrange for another member of the Committee to attend, each meeting of the shareholders of the Company to respond to any questions from shareholders that may be asked of the Committee; and
- 17. perform such other duties as may be delegated to the Committee Chair or the Board from time to time.

### **THIS CHARTER**

The Committee shall review and reassess the adequacy of this Charter on an annual basis or as required and recommend any proposed changes to the Board for approval. This Charter shall be posted on the Company's website.