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

ANNUAL INFORMATION FORM For the year ended December 31, 2020

Dated as of March 19, 2021

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#### GENERAL MATTERS

Unless otherwise noted or the context otherwise indicates, the terms "Company", "Karora", 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, 2020, unless otherwise indicated.

A glossary of technical terms is included starting on page 37 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 (defined below), HGO (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 updated mineral reserve and mineral resources estimate in respect of the Beta Hunt Mine and the 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 HGO,
- 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 duration and impact of the COVID-19 pandemic on the business, operations and financial condition of the Company, as well as the economy in general,
- health risks including outbreaks of communicable diseases, such as the novel coronavirus pandemic, and any impact of such outbreaks on operations,
- 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,
- 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,

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:

- future nickel and gold prices,
- 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-asset gold company primarily focused on growing production and reducing costs at its integrated Beta Hunt Mine Gold Mine (the "Beta Hunt Mine" or "Beta Hunt") and Higginsville Gold Operations ("HGO" or "Higginsville") in Western Australia. 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 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 RNC Holdings Australia Pty Ltd. In 2020, Karora also acquired the Spargos Reward Gold Project, a development project located in proximity to its Higginsville Mill in Western Australia. See "General Development of the Business" for further detail regarding these assets.

Karora also 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. This interest was received by Karora as partial consideration on the July 2020 sale of its remaining 28% interest in the project.

In addition, Karora owns the following minority interests: (i) approximately 11.2 million shares of Orford Mining Corporation ("**Orford**"), representing an approximate 9.6% 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 7.7% 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 in the TSX Venture Exchange under the stock symbol "SPC".

# **Three Year History**

#### 2020

- On January 8, 2020, the Company announced that it had to elected to pay down \$3 million in debt to reduce interest costs.
- On January 23, 2020, the Company announced the recently completed a 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 February 27, 2020, the Company announced initial results from the 2020 exploration program at its HGO operations. Recent drilling at Hidden Secret and Mousehollow has returned strong results, driving the expansion of proposed open pit dimensions at both projects. As part of an ongoing review of the historic drilling database at Higginsville, high grade drill intersections have been revealed at the Corona prospect which is located 2.5km from the Higginsville mill. Additionally, Karora was also pleased to announce the discovery of visible gold in a surface sample taken at the Hidden Secret project.
- On April 15, 2020, the Company announced a normal course issuer bid ("NCIB") to purchase up to 30,415,198 Common Shares commencing on April 17, 2020 and expiring on April 16, 2021.
- On April 20, 2020, the Company announced a strong consolidated gold production of 24,816 gold ounces for the first quarter of 2020 from the Beta Hunt Mine and HGO.
- On May 11, 2020, the Company announced that it entered into a purchase agreement to acquire the Spargos Reward Gold Project ("Spargos" or the "Spargos Project"), which contains a historical JORC1 (2012) Mineral Resource Estimate of 112,000 oz (785,800 tonnes @ 4.4 g/t) indicated resource and 19,000 oz (151,000 tonnes @ 4.0 g/t) inferred resource (a qualified person has not done sufficient work on behalf of the Company to classify as a current mineral resources or mineral reserves, and the Company does not treat the historical estimates as current mineral resources or mineral reserves). 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. (collectively, "Waterton") 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 November 18, 2020, the Company announced a very strong start to its 12,000 metre drill program at Spargos, with several high grade gold intercepts over broad widths intercepted in mineralization located within and on the margins of the interpreted high grade main zone.
- 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.

#### 2019

- On January 16, 2019, the Company closed a bought deal and concurrent private placement financing of a total of 19,565,000 Common Shares at a price of \$0.46 per common share for aggregate gross proceeds of \$8,999,900. Subsequently, on January 18, 2019, Karora announced that the underwriter's over-allotment option had been partially exercised and closed and that, as a result, the financing had been increased to an aggregate total of 19,891,165 Common Shares for gross proceeds of \$9,149,936.
- On January 22, 2019, the Company provided its first update regarding the previously announced 40,000 metre drill program at the Beta Hunt Mine. Highlights included:
  - First drilling at Western Flanks to test sediment layer illustrated the potential of sediment to generate high grade coarse gold intersected 1,017 g/t over 2.00 metres (true width) including 7,621 g/t over 0.27 metres (true width) in hole WFN-029; and
  - Resource definition drilling at A Zone targeting sediment layer and shear near the "Father's Day Vein" intersected 119.37 g/t over 6.4 metres (true width) including 1,406 g/t over 0.50 metres (true width) in hole AZ15-013, located just 7 metres below the "Father's Day Vein".
- On February 25, 2019, the Company announced it had implemented changes to its Board of Directors (the "Board"). Mr. Paul Andre Huet, who joined the Board on November 18, 2018, was appointed to the role of Executive Chairman of the Company. As Executive Chairman, Mr. Huet planned to take an active role working with management to deliver on the strategy of the Company, including the implementation of plans for the Beta Hunt Mine in Western Australia. Mr. Scott Hand, former Executive Chairman of the Board, became Lead Director. Mr. Warwick Morley-Jepson, previously an observer to the Board, joined the Board (replacing Donald McInnis, who retired) and was appointed to the role of Chairman of the Technical Committee.
- Also on February 25, 2019, the Company provided a second update regarding the previously announced 40,000 metre drill program at the Beta Hunt Mine. Highlights included:
  - Further illustration of the coarse gold-sediment association with drill hole WFN-063 yielding an intersection of 2,210 g/t over 0.85 metres (within 395.9 g/t over 4.75 metres) (true width) hosted by quartz-veined pyritic sediment located within 8 metres of the previously released drill intersection in WFN-029, 7,621g/t over 0.28 metres; and

- Thick drill intersections in the Western Flanks (including: 3.07g/t over 39.13 metres (including 5.24 g/t over 7.05 metres and 4.49 g/t over 10.09 metres) in hole WFN-065, 3.13 g/t over 16.86 metres (including 11.66 g/t over 2.67 metres) and 3.03 g/t over 18.89 metres (including 4.75 g/t over 4.61 metres) in hole WFN-058, and 4.17 g/t over 19.14 metres (including 8.92 g/t over 3.58 metres) and 4.63 g/t over 7.61 metres in hole WFN-045) illustrate the nature of the Western Flanks as a thick, variably mineralized shear zone. These intersections all lie to the north of and outside of the existing Western Flanks resource and provide strong potential for significant additions to the resource.
- On April 18, 2019, the Company closed its bought deal financing of 24,490,000 Common Shares at a price of \$0.49 per Common Shares for aggregate gross proceeds of \$12,000,100.
- On June 11, 2019, the Company announced that it had closed the previously announced acquisition of HGO, including all existing mining, milling and infrastructure, from Westgold Resources Limited ("Westgold") for A\$50 million, satisfied by way of a cash payment of A\$29 million and A\$21 million in Common Shares (for a total of issuance of 56.9 Common Shares).
- On June 27, 2019, the Company announced a 390% increase in measured and indicated gold mineral resources for the Western Flanks Zone at the Beta Hunt Mine to 71,0000k. A total of 16,876 metres of drilling in 144 drill holes were completed at Western Flanks during the current grade control, resource definition and exploration drilling program. Mineralization at Western Flanks was defined across a 1.2 km strike length and to a depth of 150 to 250 metres below the basalt contact. The increase in resource was achieved at a discovery cost of less than \$5 per ounce.
- On July 18, 2019, the Company announced that Mr. Mark Selby had resigned as Chief Executive
  Officer and Mr. Paul Andre Huet was appointed as interim Chief Executive Officer. In August 2019,
  Mr. Huet was appointed Chairman and Chief Executive Officer.
- On September 20, 2019, the Company announced it closed its bought deal financing, including the partial exercise of the over-allotment option, of an aggregate of 46,156,000 units of the Company (the "Units") at a price of \$0.40 per Common Share for aggregate gross proceeds of \$18,462,400. Each Unit consisted of one Common Share and one-half of one common share purchase warrant (each whole common share purchase warrant, a "Warrant"). Each Warrant is exercisable to acquire one Common Share (a "Warrant Share") at a price per Warrant Share of \$0.50 until September 20, 2021.
- On October 17, 2019, the Company announced that a high-grade coarse gold discovery was made at the Beta Hunt Mine. An estimated 3,200 ounces of coarse gold was recovered from the 15 Level A Zone approximately 30 metres north of the "Father's Day Vein".
- On December 19, 2019, the Company announced it had restructured its current royalty held by Morgan Stanley Capital Group Inc. over a number of tenements at HGO. Prior to these amendments, the royalty on these tenements was comprised of a 1.75% NSR plus a 50% participation payment on the difference between realized gold price and AUD\$1,340 per ounce (the "Legacy Rate"). The restructured royalty provides for a flat 2% NSR after payment of an adjusted Legacy Rate on the first 2,500 gold ounces per quarter which applies to a cumulative total of 110,000 ounces and after a flat 2% NSR on ounces sold in excess of 2,500 per quarter, which becomes payable after the first 37,500 ounces are sold from HGO production in excess of the first 2,500 per quarter.

#### 2018

• On January 12, 2018, the Company announced the completion of equity issuances described in its news release dated December 14, 2017, by issuing 29,750,312 common shares to Auramet International LLC ("Auramet") at a price of \$0.16 per share and 7,704,167 common shares to other stakeholders at a price of \$0.16 per share. Karora has also signed subscription agreements for an

additional ten million shares to be issued for cash at \$0.16 per share on or before January 17, 2018 as part of a previously announced restructuring.

- On March 22, 2018, the Company announced it had initiated a strategic alternatives process for its 100%-owned Beta Hunt Mine. PCF Capital Group, based in Perth, Western Australia, and Haywood Securities Inc. were retained as financial advisors for the Beta Hunt Mine strategic review process.
- On April 26, 2018, the Company announced an updated mineral resource estimate as at December 31, 2017 for its Beta Hunt Mine.
- On September 9, 2018, the Company announced a new high-grade gold discovery at its Beta Hunt Mine the "Father's Day Vein". To date, the Father's Day Vein discovery has yielded over 30,000 ounces of gold, including a 94 kg specimen containing an estimated 1,402 ounces of gold and a 63 kg specimen containing an estimated 893 ounces of gold.
- On November 28, 2018, the Company announced it had initiated a 40,000-metre drill program at its Beta Hunt Mine, focused on expanding the known coarse gold areas while expanding and increasing confidence in the bulk tonnage shear hosted resource. Karora also announced that, in order to focus on high grade coarse gold production and deliver the first phase of the exploration plan, it had temporarily ramped down bulk production mining to allow it to adequately drill off the main shear zone resources and complete an updated resource estimate.

# Development of the Business - Events Subsequent to December 31, 2020

- 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 prepared 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. Lake Cowan represents an exploration area for Karora in 2021 as part of its A\$20 million drilling and exploration budget.

The Company continues to monitor the COVID-19 outbreak and the potential impact at all of our operations and have put measures in place to ensure the wellness of all of our employees and surrounding communities where we work while continuing to operate. Currently, all corporate personnel travel has been restricted to absolute minimum requirements and employees have been encouraged to work remotely. At our operations in Australia, we have implemented many control measures for dealing with the outbreak of COVID-19. These include pre-screening for symptoms and travel history with possible COVID-19 exposure of any employees, visitors and contractors (site personnel) prior to any travel to or from a site and isolation, where necessary, from the general site population. Each site has implemented restrictions and isolation procedures that are particular to each region's situation and response capabilities. See "Risk Factors" for more information.

# **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 the Higginsville Gold Operations.

# 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. It was purchased from Consolidated Nickel Kambalda Operations ("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.. 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 includes a 1.4Mtpa processing plant, 192 mining tenements including Baloo, Fairplay North, Hidden Secret, Mousehollow, Corona, Pioneer, Mitchell, Wills, Mount Henry and Challenge deposits.

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 Gold completed the sale of its Australian Business Unit, which included HGO and its assets, to Westgold Resources Pty Ltd who was a wholly-owned subsidiary of Metals X Ltd at that 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 Ltd. Avoca remained a subsidiary of Westgold and was part of the resultant demerger.

# Consolidated Mineralization

The consolidated gold mineral resource estimates for each of the Beta Hunt Mine and HGO are effective as of September 30, 2020. Gold mineral resources at the Beta Hunt Mine comprise the Western Flanks and A Zone deposits. Gold mineral resources at HGO comprise the deposits associated with the Higginsville Central and Higginsville Greater areas. The Consolidated nickel mineral resource estimate is effective as of September 30, 2020. The nickel mineral resource is associated with Beta and East Alpha deposits at the Beta Hunt Mine.

# Karora Consolidated Gold Mineral Resources as at September 30, 2020 (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	630	2.4	49	11,436	2.8	1,006	11,999	2.7	1,055	6,146	2.7	537
HGO	13,362	1.4	604	16,633	1.6	862	29.995	1.5	1,466	4,581	2.1	310
Total	13,392	1.5	653	28,002	2.1	1,868	41,994	1.9	2,521	10,727	2.5	847

# Karora Consolidated Nickel Mineral Resources as at September 30, 2020 (1, 2, 3, 4, 5, 6, 7, 8 & 9)

	Measured			Indicated		Measu	Measured & Indicated			Inferred		
			Ni	' <u>-</u>		Ni			Ni			Ni
			Metal			Metal			Metal			Metal
Location	kt	Ni %	kt	kt	Ni %	kt	kt	Ni %	kt	kt	Ni %	kt
Beta Hunt Mine	-	-	-	561	2.9%	16.1	561	2.9%	16.1	314	2.8%	8.7

#### **Notes:**

- (1) 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.
- (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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- (5) Gold mineral resources were estimated using variable cut-off grades taking into account variable operational costs as follows: Beta Hunt and Higginsville Underground (Chalice and Trident) 1.3g/t; Higginsville Open Pits (excluding Mt Henry Project) 0.5g/t; and Mt Henry Project 0.4g/t.
- (6) To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimised pit shells at AUD\$2,285 (USD\$1,600) per oz and, for underground resources, areas considered sterilised by historical mining are removed from the mineral resource estimation.
- (7) The nickel mineral resource is reported above a 1% Ni cut-off grade.
- (8) Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- (9) Mineral resource estimates were prepared under the supervision "qualified persons" Mr Stephen Devlin (Group Geologist Exploration and Growth, Karora) and Mr Ian Glacken (Geologist & Geostatistician, Optiro Pty Ltd). Mr Glacken's responsibility is limited to The Mt Henry Project mineral resources.

#### Consolidated Production - 2020

The consolidated gold production was 99,249 ounces for 2020 from the Beta Hunt Mine and HGO, exceeding the mid-point of 2020 production guidance of 90,000 to 95,000 ounces by 7%.

# 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) 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 to: (i) the state government equal to 2.5% of recovered nickel; and (ii) 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 "Beta Hunt Mine" and "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) will 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 9.6% interest in Orford Mining Corporation and a 7.7% 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, 2020, Karora had a total of 210 employees.

# **Market Overview**

Karora's primary product is gold. Gold is traded on the world markets. Gold prices averaged US\$1,770 per ounce during 2020, 27% higher than the average price of US\$1,393 per ounce in 2019. 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

# **Health and Safety**

Safety is our number one priority at all operations. In 2020, the Corporation's Total Recordable Injury Frequency Rate ("TRIFR") continued to trend down to 17.8 a 14% reduction from the start of the year. A number of key initiatives were implemented of the back of a comprehensive safety and risk management audit. This work has continued into 2021 with a further decrease in the TRIFR. Karora remains focussed on continuous improvement of its health and safety performance. Among other initiatives, Karora has introduced an integrated program across both sites with a focus on safety leadership. We remain diligent and are constantly looking to implement further measures to prevent any accidents. See "Risk Factors" for more information.

# **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. The policy has realised in a change from a fly-in/flyout ("FIFO") dominated workforce 12 months ago, to a workforce that is now 70% residential. 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. The majority (55%) of the current workforce of approximately 181 direct employees (excluding contractors), working on our sites in the Goldfields-Esperance Region, is accommodated within these 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. At HGO, 26% of employees are residents from the local Goldfields region. The Ngadju people have traditional ownership over the Higginsville tenure. Karora regularly consult 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 interest 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, the identification and protection of indigenous sites, 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 allowing 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.

All of the current workforce, approximately 81 persons, is accommodated on site during their rotation periods. Most workers permanently reside in Perth and 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.

# **Corporate Governance**

In 2020, we continued to emphasize corporate responsibility by maintaining an unwavering focus on responsibly growing our business. With the support and oversight of our Board, we are committed to conduct our business in ways that are ethical, transparent and accountable to stakeholders, including the Company's shareholders. We believe a transparent culture of corporate governance and ethical behaviour in decision-making is fundamental to the way we do business. A description of Karora's corporate governance practices is included in the Company's management information circular filed on SEDAR on May 8, 2020 in respect of the annual and special meeting of shareholders held on June 11, 2020.

# **Environmental Impact & Sustainability**

#### **Environmental Protection**

The current and future operations of the Company, including development and mining activities, are subject to extensive federal, provincial and local laws and regulations governing environmental protection, remediation and other matters.

#### Beta Hunt Mine

The Beta Hunt Mine comprises a single underground mine with no associated processing infrastructure making for a limited disturbance footprint. Its environmental impact is correspondingly modest. Based on our experience, the key environmental considerations are waste rock, water management and mine rehabilitation and related activities to be undertaken when the mine is closed. Both waste rock management and mine dewatering is undertaken in accordance with relevant statutory permits and licence conditions. Closure costs for mine rehabilitation are estimated at approximately A\$0.9 (MBS Environmental, 2018 – the Beta Hunt Mine Closure Cost estimate – prepared for SLM) and form part of the Life-of-Mine plan. Please see Appendix A "the Beta Hunt Mine – Infrastructure, Permitting and Compliance Activities – Environmental".

### *HGO*

HGO comprises two operating open-pit mines, a mineral processing facility and tenement holdings of 1800km². As a consequence, HGO has a significant disturbance footprint including tailings storage facilities, historical (inactive) underground and open-pit mines and haul roads. To manage and monitor the impact of the environmental disturbance, the operation at HGO completed both flora and fauna baseline studies at mine start-up (historical - 2006). As part of its statutory commitments, Higginsville has in place all required licences and permits to mine, process, extract groundwater and dispose of processing waste (tailings). Karora is committed to ensuring all statutory requirements are met for the long-term sustainability of the environment where the company explores and develops its mines. Anun-audited mine closure estimate as at June 10, 2019 demonstrated a rehabilitation liability accruing to Higginsville for the disturbance of tenements at A\$22.3M. Please see Appendix A "Higginsville Gold Operations – Infrastructure, Permitting and Compliance Activities – Environmental".

# **Inaugural Sustainability Report**

Karora is taking a proactive approach on environmental and social governance ("ESG") and is in the process of establishing a roadmap to guide its ESG activities over the short, medium and longer-term. The Company recognizes

the potential impacts that ESG research and ratings can have on attracting new investors, its investors' perceptions of company value, as well as the implications for its cost of capital in the longer-term. Karora is intent on gaining a better understanding of the ESG landscape in order to establish its ESG priorities and approach, determine which ESG data and metrics will be gathered and report internally and externally. The Company will seek to demonstrate continued progress over time, linking with Karora's broader focus on responsible mining practices. As such, Karora has established a work plan to publish our Inaugural Sustainability Report in 2022.

# 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 the date of this AIF, there were 146,056,347 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 the date of this AIF, Karora has (i) outstanding options to acquire an aggregate of up to 4,352,534 Common Shares at a weighted average exercise price of \$1.68; and (ii) outstanding common share purchase warrants (issued as part of past financings) to acquire an aggregate of up to 5,171,708 Common Shares at an exercise price of \$2.25. Karora also has 289,998 Deferred Share Units and 2,868,253 Restricted Share Units, which includes Performance Share Units, outstanding. As of the date of this AIF, 4,352,534 Common Shares, 5,171,708 Common Shares and 3,158,251 Common Shares were reserved for issuance upon the exercise of such options, warrants and share units, respectively.

Karora's 2010 share incentive plan, as amended and restated on May 13, 2019 (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 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 current term of the facility expires in June 2021. Karora has two separate six-month extension rights, the first to December 2021 and the second to June 2022. The extensions are exercisable by Karora provided it remains in compliance with the terms and pays required extension fees. The facility does not require repayment of principal until the expiry of the term and bears interest at a rate of 10% per annum paid monthly. As of the date hereof, the Company has made early principal repayments of \$5,000,000, with the remaining principal balance being \$30 million.

# MARKET FOR SECURITIES

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

	Common Shares						
2020	High	Low	Volume				
January	\$2.30	\$1.85	4,933,816				
February	\$2.18	\$1.67	4,426,519				
March	\$1.96	\$0.88	16,558,709				
April	\$2.00	\$1.33	12,020,330				
May	\$2.57	\$1.85	12,006,849				
June	\$2.48	\$2.03	9,729,419				
July	\$3.80	\$2.21	15,929,967				
August	\$4.49	\$3.29	16,536,281				
September	\$4.46	\$3.30	17,787,073				
October	\$3.93	\$3.06	9,899,568				
November	\$3.64	\$3.00	11,656,106				
December	\$4.10	\$3.25	15,278,472				

# PRIOR SALES

There are no securities of the Company that were sold but not listed on the TSX during the most recently completed financial year of the Company.

# **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.

Name and Municipality of Residence and Date first became a Director/Officer	Position with the Company	Principal Occupation(s)
DIRECTORS		
Peter Goudie <sup>(1)(2)(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
Wendy Kei <sup>(1)(2)(3)</sup> Toronto, Ontario June 28, 2018	Director	Corporate Director
Warwick Morley- Jepson <sup>(2)(3)(4)</sup> South Africa February 25, 2019	Director	Corporate Director
Chad Williams Toronto, Ontario January 6, 2020	Director	Chairman and Chief Executive Officer, Blue Thunder Mining Inc. and the Chairman of Red Cloud Securities Inc.
OFFICERS		
Paul Huet Reno, Nevada, USA July 18, 2019	Chairman and Chief Executive Officer	Chairman and Chief Executive Officer, Karora
Barry Dahl <sup>(5)</sup> Toronto, Ontario March 2, 2020	Chief Financial Officer	Chief Financial Officer, Karora
Michael Doolin Reno, Nevada October 1, 2020	Senior Vice President, Technical Services	Senior Vice President, Technical Services, Karora
<b>Tim Hollaar</b> Oakville, Ontario January 1, 2015	Vice President, Finance	Vice President, Finance, Karora

Name and Municipality of Residence and Date first became a Director/Officer	Position with the Company	Principal Occupation(s)
Graeme Sloane Perth, Australia October 1, 2019	Managing Director, Australian Operations	Managing Director, Australia Operations, Karora
Oliver Turner Toronto, Ontario April 1, 2020	Executive Vice President, Corporate Development	Executive Vice President, Corporate Development, Karora

#### **Notes:**

- (1) Member of the audit committee of the Board (the "Audit Committee"). Ms. Kei is the Chair of the Audit Committee.
- (2) Member of the compensation committee of the Board (the "Compensation Committee"). Mr. Goudie is the Chair of the Compensation Committee.
- (3) Member of the corporate governance and nominating committee of the Board (the "Corporate Governance and Nominating Committee"). Mr. Hand is the Chair of the Corporate Governance and Nominating Committee.
- (4) Member of the technical, health, safety and environment committee of the Board (the "Technical, Health, Safety and Environment Committee"). Mr. Morley-Jepson is the Chair of the Technical, Health, Safety and Environmental Committee.
- (5) Mr. Dahl was appointed Chief Financial Officer on March 2, 2020.

As of the date of this AIF, the directors and executive officers of the Company and collectively beneficially own, directly or indirectly, or exercise control and direction over approximately 1,973,550 Common Shares representing, in the aggregate approximately 1.3% of the issued and outstanding Common Shares.

## **Biographies**

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. 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 in Morocco), Lead Director of Boyd Technologies LLC (services and products to the medical and life science industries), 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, a Juris Doctorate degree from Cornell University and an Honorary degree from Memorial University of Newfoundland and Labrador.

#### Paul Huet – Chief Executive Officer and Executive Chairman of the Board

Mr. Huet is the Chairman and Chief Executive Officer of the Corporation. 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.

# Wendy Kei - Director

Ms. Wendy Kei's principal occupation is corporate director. She currently serves on the boards of Ontario Power Generation Inc. (she joined in March 2017) where she is Chair of the Board, and Noranda Income Fund (TSX: NIF.UN) (she joined in June 2020) where she is the Chair of the Audit Committee. She also serves as a member of the Department of Audit Committee for Transport Canada (she joined in May 2019). Ms. Kei is an accomplished Finance Executive with over 25 years of business experience in a variety of industries. Ms. Kei previously served as Chief Financial Officer of Dominion Diamond Corporation. Ms. Kei is a Fellow Chartered Professional Accountants of Ontario (FCPA, FCA), holds an ICD.D designation from the Institute of Corporate Directors and holds a Bachelor of Mathematics from the University of Waterloo. Ms. Kei was named one of Canada's Top 100 Most Powerful Women in 2020 and was selected as a Diversity 50 2016 Candidate by the Canadian Board Diversity Council. Ms. Kei has completed over 200 hours of continuing education from 2018 to 2020 focused on, among other things, board governance, best practices for audit committees and various topics related to the mining sector.

# Warwick Morley-Jepson - Director

Mr. Morley-Jepson's principal occupation is Chairman of Wesdome Gold Mines (since June 2019; he joined the board in June 2017). He previously served as Executive Vice President and Chief Operating Officer of Ivanhoe Mines from August 2019 to May 2020 and Kinross Gold Corporation from October 2014 to December 2016, and as Senior Vice President, Operations, and Regional Vice President - Russia, between October 2009 and October 2014. Prior to joining Kinross, Mr. Morley-Jepson served as Chief Executive Officer of SUN Gold and was Managing Director of Barrick Africa, Barrick Platinum South Africa and three Russian-based companies in the Barrick group. He spent several years with Placer Dome leading their South African project and business development efforts. Mr. Morley-Jepson graduated in the faculty of Mechanical Engineering (HND) at the Technicon Witwatersrand now the University of Johannesburg. He has undertaken a number of technical, managerial and financial programs during his career, most notably the 'Management Development Program' at Graduate School of Business, Cape Town University and 'Management in the Mining Industry' at Witwatersrand School of Business, University of the Witwatersrand. Most recently, in February 2012, Finance for Senior Executives at Harvard Business School. Mr. Morley-Jepson is a member of the Canadian Institute of Corporate Directors.

# Chad Williams, P. Eng - Director

Mr. Williams has an extensive background in mining finance and business management. He is currently the Chairman and Founder of Red Cloud Securities and Blue Thunder Mining Inc. In addition to this, Mr. Williams is a director of several emerging mining companies and 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 Bank 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 Engineering degree from McGill University before going on to receive his MBA from the same alma mater.

# 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.

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.

Tim Hollaar, B.A., CPA, CA - Vice President, Finance

Mr. Hollaar is the Vice President, Finance of the Company. Prior to joining the Company in 2015, Mr. Hollaar was Corporate Controller of North American Palladium (2013-2014), prior to which he provided financial management consulting services to the Company (2010-2012). Mr. Hollaar was previously Group Financial Controller of Norilsk Nickel International (2008-2009). Before joining Norilsk, he worked sixteen years in senior nickel finance roles at Vale Canada, BHP, and WMC Resources Marketing Limited. Mr. Hollaar is a member of the Chartered Professional Accountants of Ontario and holds a B.A. (Business Administration) degree from Dordt College.

Graeme Sloane - Managing Director, Australian Operations

Mr. Sloane is the Managing Director, Australian Operations. He was the former Chief Executive Officer of Perseverance Corporation from 2002-2007 and was also the former Chief Executive Officer of Tanami Gold and Herencia Resources.

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 industy 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.

# **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 Royal Coal Corp. during the period from August 2010 until May 2012. On May 3, 2012, a cease trade order was issued against Royal Coal Corp. by the Ontario Securities Commission for failure to file annual financial statements. On May 17, 2012, Royal Coal Corp. announced that it received notice from the TSX Venture Exchange that the TSX Venture Exchange had suspended trading in Royal Coal Corp.'s securities as a result of the cease trade order.

# **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 NI 52-110, information with respect to the Company's audit committee is contained below.

#### **Audit Committee Charter**

A copy of the charter of the Audit Committee, which was approved by the Board on March 17, 2021, is attached hereto as Appendix B.

# **Composition of Audit Committee**

The Audit Committee is composed of Wendy Kei (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*". Additionally, the Audit Committee held a continuing education session with the Company's external auditor during its November 2020 Audit Committee meeting.

# **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:

		Audit Related		
Financial Year Ending	Audit Fees <sup>(1)</sup>	Fees <sup>(2)</sup>	Tax Fees <sup>(3)</sup>	All Other Fees <sup>(4)</sup>
2020	\$634,322	-	\$339,827	\$5,407
2019	\$1,210,403	\$391,912	\$142,503	\$9,050

#### **Notes:**

- (1) Fees charged for audit, review, prospectus work, NI 52-109 compliance and accounting matter consultation.
- (2) Fees charged for French translation of interim financial statements and financial due diligence.
- (3) Fees charged for preparation of income tax and mining duties returns and audit support.
- (4) CPAB.

#### **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.

The Company faces risks related to COVID-19 and other outbreaks of communicable diseases, which could significantly disrupt our operations and may materially and adversely affect our business and financial conditions.

Our business could be adversely impacted by the effects of the coronavirus or other epidemics. In December 2019, a novel strain of the coronavirus (COVID-19) emerged in China, and the virus has now spread to several other countries, including Canada, Australia and the U.S., and infections have been reported globally. Given the unforeseen conditions resulting from the ongoing evolution of the COVID-19 pandemic and its global impact, there can be no assurance that the Company's future response and business continuity plans will continue to be effective in managing the pandemic,

and changing conditions could result in a material adverse effect on the Company's business, financial condition and/or results of operations.

Travel restrictions implemented by governments, as well as quarantine, isolation and physical distancing requirements during the year, have had a negative impact on workforce mobility and, as a consequence, in some cases, on productivity.

It is difficult to assess the impact of a prolonged pandemic on headcount, and there can be no assurance that the Company's personnel will not be impacted by regional outbreaks.

The protective measures implemented by the Company may cause higher operating and capital costs related to containment efforts such as building quarantine rooms, limitations on mobility of people, disruption to the supply chain and increase in demand for financial support and aid from host governments. Potential higher operating costs, combined with a decrease in workforce productivity, lower production outputs and in some cases, temporary cessation of mining operations, could have a material adverse effect on the Company's business, financial condition and/or results of operations.

# **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.

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

The Company has realized operating profits in 2020 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, 2020, the Company had cash and cash equivalents of \$79.7 million. Management estimates that these funds in addition to operating cash flows from Beta Hunt Mine and HGO will be sufficient to fund the Company for the ensuing twelve months. The Company's ability to fund its exploration, evaluation, development 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 2020 but has experienced negative cash flow from operations. 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.

# The Company is subject to physical and financial risks associated with global, regional, and local weather conditions, and climate change.

Our operations and the operations of our suppliers are subject to climate variations. 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. Any of these natural disasters could also affect our operations or cause variations to our costs. Changes in precipitation could make wildfires more frequent or more severe, especially for our Australian operations, and could adversely affect our operations. The effects of global, regional, and local weather conditions, and climate change could also adversely impact our results of operations.

Australia was impacted by the bushfires that occurred in late 2019 and continued into the first quarter of 2020. While these bushfires did not materially impact our Australian operations, it is possible the affected areas may experience reduced economic activity as a result of future bushfires or similar events, which could negatively impact such operations.

# Climate Change/Greenhouse Gas ("GHG") Emissions

The federal government has repeatedly announced its intention to implement a regulatory framework that would require significant reductions of GHG emissions by Canada's largest industrial sectors. This includes the industrial sectors to which the Company may provide its products, the majority of the facilities in Canada from which the Company ultimately obtains power, and some of the Company's facilities.

In addition, various Canadian provincial governments and other regional initiatives are moving ahead with GHG reduction and other initiatives designed to address climate change. Given the present uncertainty around the practical application of specific provisions in any federal regulations and the impact of other provincial or regional initiatives, it is not yet possible to estimate with specificity the impact to the Company's operations. In addition, the Company's operations require large quantities of power and future taxes on or regulation of power producers or the production of oil and gas or other products may also add to the Company's operating costs.

#### 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.

#### **Operating History**

The Company has a limited operating history in the mineral exploration and development business. Prior to the acquisition of the Beta Hunt Mine and HGO, the Company had no history of producing metals from its mineral properties. As a result, the Company is subject to all of the risks associated with establishing new mining operations, business enterprises and operating assets including:

- the timing and cost, which can be considerable, of the construction of mining and processing facilities;
- the availability and costs of skilled labour and mining equipment;
- the availability and cost of appropriate smelting and/or refining arrangements;
- the need to obtain necessary environmental and other governmental approvals and permits, and the timing of those approvals and permits; and
- the availability of funds to finance construction and development activities.

It is common in new mining operations to experience unexpected problems and delays during construction, development and mine start-up. In addition, delays in the commencement of mineral production often occur. Accordingly, there are no assurances that the Company's activities will result in profitable mining operations at the Beta Hunt Mine and HGO, or at any of its other properties, or at all.

# **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 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.

# Decision to Mine not based on Feasibility Study

The decision by Karora to produce at the Beta Hunt Mine and HGO was not based on a feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, including increased risks associated with developing a commercially mineable deposit. Historically, such projects have a much higher risk of economic and technical failure. There is no guarantee that anticipated production costs will be achieved. Failure to achieve the anticipated production costs would have a material adverse impact on SLM's cash flow and future profitability.

# **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, Health, Safety & Environment 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 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 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 "The Beta Hunt Mine - Native Title".

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.

# Flow-Through Share Tax Issues

From time to time, the Company has agreed to incur, in respect of Common Shares issued by it from treasury and designated as "flow-through shares" ("Flow-Through Shares") under the *Income Tax Act* (Canada) (the "Tax Act"), Canadian exploration expenses ("CEE") in an amount usually equal to the gross proceeds raised by the Company from such issuance and to renounce CEE in accordance with the Tax Act. For certain purchasers of Flow-Through Shares, said CEE are also partially included under the *Taxation Act* (Québec) (the "Québec Tax Act") in the exploration base relating to "certain Québec exploration expenses" and the exploration base relating to "certain Québec surface mining or oil and gas exploration expenses" (the "Eligible Québec Expenses"), and the Company agrees to renounce the Eligible Québec Expenses to such purchasers of Flow-Through Shares in accordance with the Québec Tax Act. No assurance can be given that the Minister of National Revenue (Canada) and the ministre du Revenu (Québec) will agree with the Company's characterization of the expenditures incurred. A change in the characterization of the expenditures may affect the Company's ability to renounce CEE and, where applicable, Eligible Québec Expenses to the holders of Flow-Through Shares or the holders' ability to claim tax deductions.

# 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 LIBOR. Sensitivity to a plus or minus 1% change in the rates would affect the reported annual interest expense by approximately \$300,000.

#### **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.

# Risks Relating to Common Shares and Warrants

#### Liquidity of Common Shares and Warrants

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 and any securities convertible into 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, 2020, 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 Warrants, 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 (including economic analysis), scientific or technical nature regarding the Beta Hunt Mine and 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 "Beta Hunt Mine Technical Report"). The authors of the Beta Hunt Mine 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 9Geostatistics), Grad Dip Computing, (FAusIMM(CP), FAIG, MIMMM, CEng and Ross Cheyne B Eng (Hons) (FAusIMM. Stephen Devlin is an employee of SLM, a wholly-owned subsidiary 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 Beta Hunt Mine 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>.

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 18, 2021, in respect of Karora Resource Inc.'s consolidated financial statements as at December 31, 2020 and 2019 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 2020 that remain in effect:

- Royalty Buyout, Amendment and Restatement Agreement dated May 11, 2020 between Avoca Mining Pty Ltd. and Morgan Stanley Capital Group 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.

#### 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 financial statements and management's discussion and analysis for the 12-month period ended December 31, 2020.

# **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, 2020, 2019, and 2018, 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.

	2020 (\$)	2019 (\$)	2018 (\$)
Closing	1.2732	1.2988	1.3642
High	1.4496	1.3600	1.3642
Low	1.2718	1.2988	1.2288

Average	1.3415	1.3600	1.2957

As at March 18, 2021, the exchange rate for one US\$ expressed in Canadian dollars, based upon rates provided by the Bank of Canada was \$1.2458.

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, 2020, 2019, and 2018, 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.

	2020 (\$)	2019 (\$)	2018 (\$)
Closing	0.9835	0.9122	0.9616
High	0.9835	0.9582	1.0207
Low	0.8374	0.9228	0.9132
Average	0.9247	0.9228	0.9687

As at March 18, 2021, the exchange rate for one A\$ expressed in Canadian dollars, based upon rates provided by the Bank of Canada was \$0.9694.

## 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 diametre 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.

"PO" 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**

#### Overview

Unless otherwise indicated, information in this section is summarized or extracted the technical report titled: "NI 43-101 Technical Report Higginsville-Beta Hunt Operation, Eastern Goldfields, Western Australia" dated January 29, 2021 (the "Beta Hunt Mine Technical Report"). The authors of the Beta Hunt Mine 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 9Geostatistics), Grad Dip Computing, (FAusIMM(CP), FAIG, MIMMM, CEng and Ross Cheyne B Eng (Hons) (FAusIMM. Stephen Devlin is an employee of SLM, a wholly-owned subsidiary 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 Beta Hunt Mine 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>. 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 the 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 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 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 1.3 Mtpa HGO located 80 km by road to the south of the Beta Hunt Mine. 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°C to a mean maximum of 34°C. Temperatures during winter range from a mean minimum temperature of 6°C to a mean maximum of only 17°C, 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. 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 vacant Crown Land.

The main components of the existing surface infrastructure are situated on mineral leases M 15/1529 and M 15/1531.

The existing underground infrastructure for the Beta Hunt Mine is located within mineral leases M 15/1529, M 15/1531, M 15/1512, M 15/1516, M 15/1517, M 15/1526, M 15/1518, M 15/1527, M 15/1705, M 15/1702, and M 15/1628.

The gold mineral resource is located on mineral leases M 15/1529, M 15/1531, M 15/1512, M 15/1516, and M 15/1517.

6 600 000mN Beta Hunt Project Area Higginsville Gold Operations Active Gold Mill Kalgoorlie KCGM Superpit Lakewood Railway Greenfileds FMR Major Road Road Coolgardie Burbanks Mill Salt Lake Jubilee Jubilee Gold ★Silver Lake - Randals Kambalda BHP Nickel Concentrator Spargos Reward Beta Hunt Invincible Gold St Ives Gold: 14Moz Au Widgiemooltha Lanfranchi Ni Higginsville Cassini Ni Baloo Mine Challe 🔲 6 450 000mN Port Hedland Western Australia Norseman: 6Moz Au BOKATA Kalgoorlie Kambalda PERTH • 20km MGA Zone 51 400 000mE 300 000mE

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 <sup>(1)</sup>	Commitment <sup>(1)</sup>	Grant Date	Expiry Date
M 15/1512	SIGMC	121.35	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1513	SIGMC	121.20	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1516	SIGMC	121.35	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1517	SIGMC	121.45	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1518	SIGMC	121.35	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1526	SIGMC	121.45	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1527	SIGMC	121.35	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1529	SIGMC	121.40	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1531	SIGMC	121.35	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1628	SIGMC	121.35	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1629	SIGMC	121.35	ha	\$2,240	\$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1691	SIGMC	108.15	ha	\$2,180	\$10,900	Dec 24, 2004	Dec 23, 2025
M 15/1694	SIGMC	110.85	ha	\$2,220	\$11,100	Dec 24, 2004	Dec 23, 2025
M 15/1698	SIGMC	7.74	ha	\$160	\$10,000	Dec 24, 2004	Dec 23, 2025
M 15/1699	SIGMC	110.95	ha	\$2,220	\$11,100	Dec 24, 2004	Dec 23, 2025
M 15/1702	SIGMC	110.40	ha	\$2,220	\$11,100	Dec 24, 2004	Dec 23, 2025
M 15/1705	SIGMC	42.39	ha	\$860	\$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

# 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 authorises 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' 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).

# Indigenous Heritage Act 1972

The *Indigenous 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 ("Indigenous Sites"). 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 Western Australian Department of Indigenous Affairs maintains a register of sites that have been registered under the AHA.

A search of the Department of Indigenous Heritage Inquiry System ("AHIS") conducted on January 1, 2021 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 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).

SLM pays the following royalties on gold production:

- the state government equal to 2.5% of recovered gold; and
- third parties 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 A\$881,000. Karora advises that there are no other outstanding significant environmental issues.

## History

# 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 Mine 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 ("AIF") to access the Beta nickel deposit. By the time production was halted in 1998 due to the Asian crisis and associated collapse in Ni 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 4 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 Limited. SIGMC did not operate the Beta Hunt Mine.

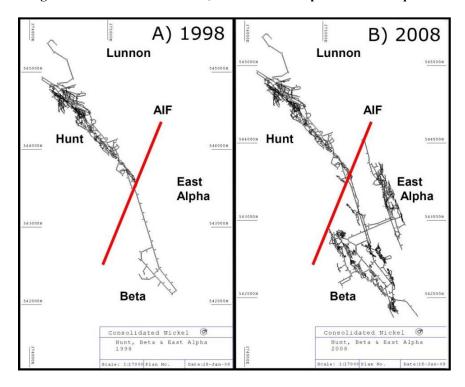


Figure 3: Plan view of the Hunt, Beta and East Alpha mine development

2003 - 2008 Reliance / CNKO Operation

Reliance Mining Limited 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 Reliance was taken over by Consolidated Minerals and the operating company was renamed Consolidated Nickel Kambalda Operations. The new owners invested heavily in infrastructure to access the deeper mineralization and increase the production rate, spending A\$15M on the Return Air Pass 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 (2008b).

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

	Decen			
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 Limited 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 December 31, 2020, the Beta Hunt Mine has mined 2,234 kt of gold mineralisation at average grade of 3.17 g/t Au (227 koz contained gold) and has delivered for processing 76 kt of nickel mineralization at an average grade of 2.7 % Ni (1.9 kt contained nickel).

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

Nickel was produced primarily from East Alpha and Beta areas.

#### 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 1,750m and comprises tholeiitic 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 to 1000 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 - 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 - 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 near 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 tale-carbonate and serpentine altered ultramafic rocks. The deposits are ribbon-like bodies of massive, matrix and disseminated sulphides varying from 0.5 - 4.0 m in true thickness but averaging between 1.0 - 2.0 m. Down dip widths range from 40 - 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 and 20% nickel while the range for contact ore is between 9 and 12% nickel. 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 orebodies on the Kambalda Dome, the Beta Hunt Mine system displays complex contact morphologies, which leads to irregular ore positions. The overall plunge of the orebodies is shallow in a southeast direction, with an overall plunge length in excess of 1 km. The individual ore positions have a strike length averaging 40 m and a dip extent averaging 10 m. The geometry of these ore positions vary in dip from ten 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 focussed 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

Ni 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 (2710 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 (2710

to 2670 Ma). The core of the dome is intruded by a granitoid stock (2662 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 ore bodies 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 ore bodies 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 has been completed on the property. The non-drilling exploration post WMC was conducted by Reliance Mining and Consolidated Minerals to 2008 and focused on nickel mineralisation using a three dimensional seismic survey and downhole EM 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 it's targeting to test for both nickel and gold mineralisation south of the Alpha Island Fault resulting in the discovery of the 30C Nickel Trough and the Larkin Gold Zone. Results of the drilling are designed to increase the company's Mineral Resources and Reserves as the basis for future organic growth.

## Gold

Exploration activity in 2020 was drill focused with the A Zone North and Western Flanks North areas targeted for both down/up-dip and strike extensions to the known mineralisation. Both these existing Mineral Resources are dextrally offset to the south by the late stage, AIF. South of the AIF, diamond drilling targeting the 30C nickel trough intersected high grade gold mineralization below the 30C nickel basalt/ultramafic contact. This mineralization, is similar in style to the A Zone and Western Flanks deposits north of the Alpha Island Fault and was intersected from the 1730 X-cut and 40 Access drill positions. The new discovery was named the Larkin Zone and is interpreted as the faulted southern offset of the Western Flanks Zone. Mineralisation associated with the Larkin Zone highlights the potential for additional offsets associated with the A Zone and Fletcher Zones south of the Alpha Island Fault. These positions, south of the Fault, are untested and represent significant future growth opportunities for the Beta Hunt Mine. Follow-up drilling in 2021 is planned to confirm and extend the mineralisation intersected in 2020.

#### Nickel

Exploration activity in 2020 was directed at testing nickel trough extensions and conceptual targets south of the AIF. All testing was undertaken by underground diamond drilling with non-drilling activity limited to a review of historical documents to assist in the re-interpretation of nickel targets for drilling.

As a result of this review nickel trough targets were developed along the major nickel trends – 10C, 20C, 25C, 30C, 40C, 50C and 55C – along the contact of the Lunnon Basalt and overlying Kambalda Komatiite. Specific targets included open contacts, western pinches, step contacts and thrust wedges.

## **Drilling**

Drilling at the Beta Hunt Mine has been carried out by Karora, CNKO, RML and WMC since 1970 to explore for and delineate nickel and gold resources using a variety of methods. As of December 31, 2020, the drill hole database holds 12,890 drill holes for approximately 547,000 m within the sub-lease boundary as presented in Table 4. Only diamond drilling was used to estimate the current mineral resources of Karora. Table 5 provides a summary of holes drilled by type.

Table 4: the Beta Hunt Mine Database – total metres

Drill Type	Pre-2016	2016-2019	2020	Total
AC	2,672			2,672
Diamond	459,005	82,725	31,420	573,150
Percussion	714			714
RAB	266			266
RC	1,269			1,269
Total	463,926	82,725	31,420	578,071

Table 5: Drilling by SLM and Previous Operators – number of holes

Drill Type	Pre-2016	2016-2019	2020	Total
AC	88			88
Diamond	12,003	755	254	13,012
Percussion	12			12
RAB	5			5

Drill Type	Pre-2016	2016-2019	2020	Total
RC	27			27
Total	12,135	755	254	13,144

Through 2020, Karora has drilled 31,420 metres of diamond drilling in 254 holes to define additional Au and Ni Mineral Resources and to upgrade the Mineral Resource classification to support ongoing production and define mineable material. A breakdown of 2020 diamond drilling:

Area	Holes	Metres	Au Assays	Ni Assets
HUNT	2	85	103	72
AZONE	51	7,429	6,351	
WF	126	15,945	15,777	1,255
BETA	67	6,854	5,975	1,912
GAMMA	4	1,098	Tba	Tba
Total	250	31,420	29,314	3,239

Drilling at the Beta Hunt Mine has provided key information to support Mineral Resource estimate 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 (2019) Mineral Resource testing. Drilling for gold in 2020 was focused on northern (and updip) extensions along both the A Zone and Western Flanks Mineral Resources and testing for mineralised off-set extensions south of the AIF. Drilling for nickel in 2020 was focused on the discovery of new nickel troughs south of the AIF. This drilling resulted in:

- extending the Western Flanks gold mineralisation to the north, including a new footwall zone;
- a new gold mineralised zone south of the Alpha Island Fault, named the Larkin Zone; and
- a new nickel trough above the Larkin Zone, named the 50C.

# Sampling, Analysis and Data Verification

# Sampling

Drill hole data for the Beta Hunt Mine gold and nickel mineralisation has been collected by Karora, SLM (prior to being acquired by Karora), CNKO, and WMC since 1966. 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 onsite 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 both wet and dry and the photos are stored on the network.

Karora gold sampling is non-selective to ensure gold assays are received to cover the full extent of gold related alteration.

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

Sample security involves two aspects: maintaining the chain of custody of samples to prevent inadvertent contamination or mixing of samples, and rendering active tampering as difficult as possible. No specific security safeguards have been put in place to maintain the chain of custody during the transfer of core between drilling sites, core library and sample preparation and assaying facilities. Samples are taken on site by Karora staff and contract employees, supervised by geology staff. 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 from site and driven to the Kalgoorlie laboratory, in line with the practice across the industry.

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 on-site core yard.

Pulps returned from laboratory sample preparation are stored in the core yard on pallets. These remain available for later re-check of assay programs.

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 core saw and sampling area.

Key details of Karora's sample preparation procedures as well as laboratory sampling and sub- sampling procedures follows.

#### Karora 2016-2019

Diamond drilling carried out by Karora is logged, sampled and analysed according to written procedures.

Logging is performed on field laptop computers in Datamine DHLogger and checked in to the Datamine Fusion drill hole database.

Gold and/or nickel mineralisation is 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 around 0.8m to reduce excessive sample weight.

Grade control holes in 2018-2020 were drilled in core size LTK60 and sampled as whole core.

Core is photographed wet and dry before sampling and stored electronically.

Sampling was performed by a technician in line with sample intervals marked up on the core by a geologist. Core is cut at the sample line and either full or ½ core is taken according to the geologist instructions and placed into numerically marked calico sample bags ready for dispatch to the laboratory, and quality assurance and quality control ("QAQC") standards and blanks inserted in series.

All diamond core was oriented, as far as possible, and oriented structures logged with alpha and beta angles.

# Laboratory Sampling and Sub-Sampling Procedures

All Beta Hunt Mine samples since March 2016 have been processed for gold at SGS Kalgoorlie. The subsampling process is as follows:

- Samples are dried if necessary;
- Samples are crushed to 3mm and split. Most samples weigh from 1 to 2.8 Kg;

- One split is forwarded to milling;
- Second split is kept as retained crushed sample; and
- Second split is also analysed at intervals generated by the laboratory computer.

Sample splits are pulverised to 90% passing 75µm. 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 taken:
  - 300g taken in scoop;
  - subsampled taking 25g to check screening (one sample in 20); and
  - excess retained.

#### **Analysis**

Since March 2016, all analyses for Beta Hunt Mine have been carried out by SGS Kalgoorlie (for Au) and SGS Perth (for Ni by multielement ICP).

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.

The basic 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, 50g subsample of pulverised material taken for fire assay in disposable container. The flux dispenser adds 170g of flux to 50g 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. QAQC then runs by the laboratory using internally supplied blanks duplicates, replicates and standards in every batch.

## Nickel Analysis

SLM changed to SGS Kalgoorlie for analysis in March 2016. Only fifteen batches were analysed for Ni by SGS Kalgoorlie to end 2019, using their Perth laboratory. For 2020, diamond drilling, a further 3,239 Ni assays in 93 batches have been received to date.

The SGS Kalgoorlie nickel samples were analysed by four-acid digest with ICP finish.

Previous to March 2016, Bureau Veritas (Kalassay) analytical method for nickel by multielement analysis by mixed acid digest / ICP-AES or ICP-MS (MA200, MA201, MA202) was calculated in the following manner. In order to determine assay weight, a sub-sample of 200 mg was taken from the pulped sample in the high wet strength paper packet. The actual weight is recorded and is included in the results calculation process. The ICP analysis took place by subjecting the diluted sample (mixed acid digest of a 200 mg (0.2 g)) solution to analysis by ICP-AES or ICP-MS. Commercially available and traceable standards are digested and analysed as part of the job. The performance of these standards within the analytical batch is used to validate the job data and are reported with the job results.

All stages of the process are tracked and controlled by the LIMS. Integral to this system are a range of internal checks and QAQC protocols. Each job is checked for: (i) analytical performance against known/client standards, (ii) analytical performance against internal standards, (iii) reproducibility of repeat samples, taking into account method limitations and agreed error bars, (iv) analytical performance of blank samples, and (v) distribution of anomalous elemental values.

Should there be any failures detected at this stage, an investigation is initiated and the results of that could be reanalysis of part or all of the samples in the batch. Only when the analysts are satisfied with all the results are results made available.

# **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.

QAQC 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 and therefore it is assumed that quality of laboratory work during this time has not impacted materially on the estimation of nickel mineral resources.

Documentation for WMC QAQC data is was not available. Reconciliation of nickel mining by SLM has generally been very good. It is worth noting that WMC were considered to be leaders in the mining industry and had a reputation as a company with high standards. Therefore it is assumed that the WMC data is reliable.

However, in the parts of the mineralized structures included in the present mineral resources, there are very few WMC holes and the authors of the Beta Hunt Mine Technical Report are of the view that their data makes little contribution to the estimates.

## Karora / SLM 2014-2020

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

- standards for gold and nickel were provided by Ore Research & Exploration Pty Ltd ("**OREAS**"). From June 2016 on, Geostats standards were procured for Au, and by November 2016 were exclusively used for Au assay batches;
- coarse Blank used by SLM is Bunbury Basalt sourced from Gannet Holdings Pty Ltd via Westernex Pty Ltd; and
- from March to December 2017, SLM made their own blank material for cost reasons. This was made up from crushed sample reject, by selecting samples with analyses of <0.01 g/t Au.

The SLM procedure for insertion of quality control samples is as follows. First, for drilling, start every batch with a blank. (Note: in the past this was under the assumption that the blank would clean the crusher and mill before our samples started. This does not take account of the cycling four-unit setup at the lab). Then, insert at least one blank and one CRM per batch, however small the batch of drill hole samples plus one CRM or blank every 20 samples. One blank and one standard may be inserted within a recognised ore zone, either added or by moving ones applied every 20 samples. In samples with observed visible Au, it is recommended to put a coarse blank in the fourth sample after the visible Au. This serves both as a coarse flush to prevent contamination of subsequent samples and a test for Au

smearing from one sample to the next due to inadequate cleaning of the crusher and pulveriser. Visible gold sample numbers should be notified on Lab dispatch sheet. The Laboratory have added feldspar flush and additional cleaning after those samples.

The SGS Kalgoorlie lab apply their own QAQC insertions by random insertion generated by their LIMS System & Software, which are:

- 4 internal standards per 84 samples;
- 2 repeats per 84 samples;
- 2 duplicates per 84 samples; and
- 1 blank per 84 samples.

Karora loads the laboratory splits and repeats in the Beta Hunt Mine's database, but do not use the laboratory standards and blanks data.

# Quality Control Analysis

To monitor quality from the SGS laboratory in Kalgoorlie there have been 7,000 certified standards and 6,240 certified blanks inserted into sample batches since March 2016. An additional 210 non-certified blanks were briefly used, made up from sample reject of <0.01 Au. Should 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 again and if passed the data is added to the database.

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 QAQC again.

#### Data Verification

The "qualified person" has, through examination of internal Karora documents, including monthly QAQC 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**

The Beta Hunt Mine uses the current HGO processing plant, 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 on line. As new production sources are delineated, testing is conducted to assess whether the metallurgy will vary significantly for the anticipated responses.

Mill feed characterisation, classification, and recovery test work is conducted on new production sources as require. Typical metallurgical testwork is comprised of:

- head assays determination;
- ball mill work index determination and Abrasion index testing;

- grind establishment to 75um;
- 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.

In addition to the above, 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. In May 2018, nickel mineralisation is currently being campaigned through BHP's Leinster Nickel Concentrator while KNC remains on care and maintenance.

The nickel mineralisation also contains limited quantities of both copper and cobalt. Copper was recovered by KNC in sufficient quantities for Karora to receive credit. Karora, as part of the amendment to the OTCPA, receives a credit for cobalt when the material is processed through the Leinster Nickel Concentrator.

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.

## **Gold Processing**

Gold mineralization is processed at HGO, located approximately 80km by road from the Beta Hunt Mine. Material is processed in either batches or mixed with other mineralization sources from HGO.

### **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 each of the Beta Hunt and HGO (which is divided into two geological regions being Higginsville Central and Higginsville Greater), as summarised in Table 6, are effective as of September 30, 2020. Gold mineral resources at the Beta Hunt Mine comprise the Western Flanks and A Zone deposits. Gold Mineral Resources at HGO comprise the deposits associated with the Higginsville Central and Higginsville Greater areas. The consolidated nickel mineral resource estimate at the Beta Hunt Mine is summarised in Table 7, effective as of September 30, 2020. The nickel mineral resources is associated with Beta and East Alpha deposits at the Beta Hunt Mine.

Table 6: Karora Consolidated Gold Mineral Resources as at September 30, 2020 (1,2,3,4,5,6,8 & 9)

	M	leasured		Indicated		Measured & Indicated			Inferred			
Location	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz
Beta Hunt Mine	630	2.4	49	11,436	2.8	1,006	11,999	2.7	1,055	6,146	2.7	537
HGO	13,362	1.4	604	16,633	1.6	862	29.995	1.5	1,466	4,581	2.1	310
Total	13,392	1.5	653	28,002	2.1	1,868	41,994	1.9	2,521	10,727	2.5	847

Table 7: Karora Consolidated Nickel Mineral Resources as at September 30, 2020 (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	-	-	-	561	2.9%	16.1	561	2.9%	16.1	314	2.8%	8.7

#### **Notes:**

- 1. 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.
- 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- Gold mineral resources were estimated using variable cut-off grades taking into account variable operational costs as follows: Beta Hunt and Higginsville Underground (Chalice and Trident) - 1.3g/t; Higginsville Open Pits (excluding Mt Henry Project) – 0.5g/t; and Mt Henry Project – 0.4g/t.
- 6. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimised pit shells at A\$2,285 (USD\$1,600) per oz and, for underground resources, areas considered sterilised by historical mining are removed from the mineral resource estimation.
- 7. The nickel mineral resource is reported above a 1% Ni cut-off grade.
- 8. Mineral Resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- 9. Mineral resource estimates were prepared under the supervision of qualified persons Mr Stephen Devlin (Group Geologist Exploration and Growth, Karora) and Mr Ian Glacken (Geologist & Geostatistician, Optiro Pty Ltd). Mr Glacken's responsibility is limited to the Mt Henry Project mineral resources.

In 2020, Karora completed a comprehensive verification and update of the:

- Historical (Westgold) Mineral Resources at HGO; and
- 2019 Beta Hunt Mineral Resource.

This work facilitated the establishment of Karora's first consolidated mineral resource (and mineral reserve) estimate across the Company's two primary mining projects at the Beta Hunt Mine and HGO. Both mining projects treat their production through the HGO processing facility and are considered a single operation. This section describes the preparation and estimation of mineral resources for the Beta Hunt Mine and HGO. The mineral resource estimates (excluding the Mt Henry Project mineral resources) reported herein were prepared under the supervision of Mr Stephen Devlin, FAusIMM. 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 ("JORC Code") and fulfils the requirements to be a "qualified person" for the purposes of NI 43-101. There are no material differences

between the definitions of Mineral Resources under the applicable definitions adopted by the CIM Standards and the corresponding JORC Code 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 (excluding the Mt Henry Project mineral resources) is a reasonable representation of the consolidated gold and nickel mineral resources found at the Beta Hunt Mine and HGO at the current level of sampling.

The Mt Henry Project (which forms part of the greater HGO area) mineral resources have been updated by Optiro Pty Ltd, Perth. Ian Glacken, FAusIMM (CP), FAIG, MIMMM, is the "Competent Person" for these mineral resources. Mr Glacken is a full-time employee of Optiro and a "qualified person" under NI 43-101.

In the opinion of the Mr Ian Glacken, the mineral resource estimation at the Mount Henry Project (which forms part of the Higginsville Greater area) reported herein is a reasonable representation of the consolidated gold and nickel mineral resources found at the Beta Hunt Mine and HGO at the current level of sampling.

# Resource Estimation Process

The 2020 resource estimation process involved updating the 2019 Western Flanks Mineral Resource only to take into account significant additional drilling to October, 2020. The 2019 A Zone Mineral Resource was not re-modeled for this update to the Beta Hunt Gold mineral resource. Gold resource estimation methodology involved the following procedures for the 2020 update: (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. 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 mineralised 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 1m 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.

As the Beta Hunt Mine is an operating mine, the assessment of "reasonable prospects for eventual economic extraction" and selection of 1.3 Au g/t as an appropriate cut-off grade, is based on the cutoff grade calculations contained in the Beta Hunt Mine Technical Report.

#### **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 with CIM 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 HGO 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

The Beta Hunt Mine is an operating underground gold mine allowing current design criteria, mining methods, and actual costs to form the basis for mine design, scheduling, and economic evaluation used in this estimation process. As an operating mine, costs, mining methods, metallurgical factors are well understood, providing confidence in their application as part of the mineral reserve estimation. all major infrastructure and permitting is also in place. 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 Entech and overseen by Karora. Entech's general conversion process is described in the following points:

- the two Mineral Resource models were provided by Karora to Entech; one for the Western Flanks mining area, and one for the A Zone mining area;
- stope optimizations were run on these two Mineral Resource models, using Datamine Software's Mineable Shape Optimiser® ("MSO") at, the calculated 2.0 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 sent 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 mine design was scheduled in Deswik 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, 2020 is shown in Table 8.

Table 8: Summary of the Beta Hunt Mine Mineral Reserves - September 30, 2020(1)(2)(3)(4)

	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	245	2.4	19	4,411	2.7	381	4,657	2.7	400
A Zone	84	2.5	7	1,039	2.3	75	1,123	2.3	82
Total	329	2.4	25	5,451	2.6	456	5,780	2.6	482

#### **Notes:**

- 1. The mineral reserve is reported at a 1.6g/t incremental cut-off grade
- 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 0.69 USD/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, 2020.

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:

- minimum footwall dip angles were set at 40°;
- minimum mining widths (excluding dilution) of 5.0 m and 2.5 m in the Western Flanks and A Zone respectively;
- 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
- 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 9.

**Table 9: Cut-off Grade Inputs** 

Factor	Unit	Assumption 1,400	Source
Gold price	\$US / oz	1,400	Karora Forecast
State Royalty	%	2.5	Site Actuals
Maverix Royalty	%	4.75	Site Actuals
Mill Recovery	%	93.5	Site Actuals
Milling Cost	\$A / t ore	36.00	Site Actuals
Mining Direct Operating Costs	\$A / t ore	35.16	Site Actuals
Mining Maintenance Costs	\$A / t ore	20.83	Site Actuals
Technical Services	\$A / t ore	6.90	Site Actuals
G&A	\$A / t ore	10.22	Site Actuals
Sustaining Capex	\$A / t ore	4.50	Site Actuals

When completing the initial stope optimization process a 1.6 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), 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. A 1.6 g/t cut-off grade was applied to incremental stopes on levels that had already covered capital costs. An ore development cut-off grade of 0.6 g/t was applied which covers the processing cost, as mining and haulage of this material is a sunk cost required for access for stopping. The cut-off grades, inputs and calculations are summarized in the following tables.

**Table 10: Cut-off Grades** 

Operating Cut-off Grade (g/t)	Incremental Cut-off Grade (g/t)	Ore Development Cut-off Grade (g/t)		
1.7	1.6	0.6		

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

Assumptions	Unit	Value						
Gold Price Calculation								
Gold Price	\$US / oz	1,400						
Exchange Rate	\$US : \$A	0.70						
Metallurgical Recovery (Au)	%	93.5						
Total Royalty	%	7.25						
Total Revenue per Ounce of Gold	\$A / oz	1,735						
Total Revenue per Gram of Gold	\$A / g	55.8						

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

Operating Costs	Unit	Operating Costs	Incremental Stoping Costs	Development Cut-off Grade	Mining Costs Including Capital
Mining Costs					
Direct Operating Costs	\$A / t	28.78	28.78		25.16
Maintenance Costs	\$A / t	17.05	17.05		20.83
Technical Services Cost	\$A / t	5.65	5.65		6.90
G&A Cost	\$A / t	8.37			10.22
Sustaining Capital Costs	\$A / t				6.74
Total Mine Operating Cost	\$A / t	59.85	51.48		79.85
Processing and Surface Haulage	\$A / t	36.00	36.00	36.00	36.00
Total Operating Cost	\$A / t	95.85	87.48	36.00	115.86
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	
Fully Costed cut-off grade	g/t				2.1

# **Mining Operations**

The Beta Hunt Mine is a mechanized underground mine accessed from a single decline. 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 commencing in 2015. Currently, the mine is producing at a rate of approximately 45,000 tonnes per month. Gold mine production is processed at HGO located 78 km south by road.

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 takes place in two mining areas, the Western Flanks and the A Zone. The strike of the deposit 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 deposit.

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 southern end of the mine covering the gold Mineral Reserves is shown in Figure 4.

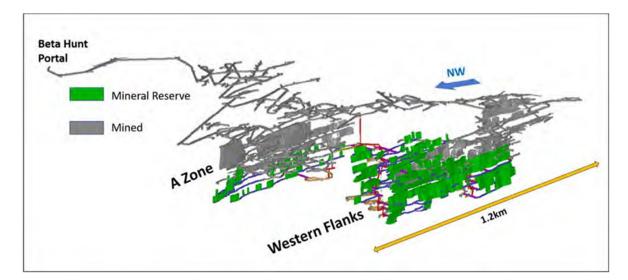


Figure 4: the Beta Hunt Mine Underground Plan

The Western Flanks mining area is shown in Figure 5.

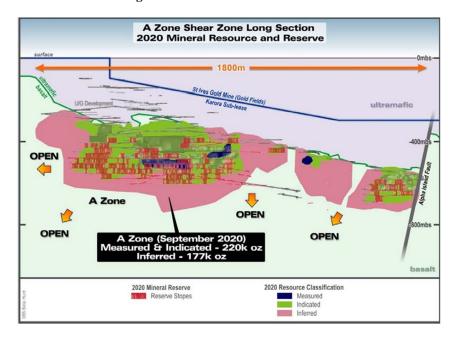


Figure 5: Western Flanks Mine Area

The A Zone mining area is shown in Figure 6.

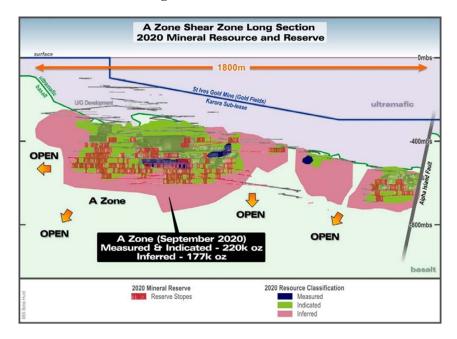


Figure 6: A Zone Mine Area

# **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 4.5 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 to surface.

The ventilation network currently supplies 220 m3/sec of fresh air to the underground, with capacity to increase to 250 m3/sec. 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 Beta Hunt Mine uses top down, mechanised long hole retreat stoping is the mining method. Current stope design dimensions are typically 25 m high, vary in width from 2.5 to 25 m and 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. Backfilling of stopes is not currently 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 the LHD 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 production drill rig.

# **Processing and Recovery Methods**

Karora treats gold mineralisation at HGO's 1.3Mtpa conventional CIL processing plant, built by GR Engineering in 2007 and commissioned in 2008, The processing plant 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 primary sections of the processing plant that are currently in use are:

- crushing and conveying;
- ore storage & reclaim and grinding;
- leaching and carbon adsorption;
- carbon stripping, electrowinning, refining and carbon re-generation;
- tailings thickening;
- tailings deposition and storage;
- reagent mixing and handling; and
- plant services.

#### **Process Description**

# Crushing

Mill feed is trucked to the run of mine ("**ROM**") pad from open pits in the immediate Higginsville area together with underground ore from the Beta Hunt Mine located 73km to the north. The mill feed 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 crushing circuit has a nameplate capacity of 1.0 Mtpa and consists of four stages of crushing:

- A 36 x 48 Jacques primary single-toggle jaw crusher;
- A 1.68 m Trio Turbocone TC66 (standard configuration) secondary cone crusher;
- A 1.68 m Trio Turbocone TC66 (short head configuration) tertiary cone crusher; and

• 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 1 x ramsey belt scale (CV02) for measuring mass of circuit ore.

## Grinding

Crushed mill feed 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 (discussed in the Gravity Recovery functional specification). The ball mill is a LMMP/CITIC-HMC 4.90 m diameter by 6.77 m EGL overflow ball mill.

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 1.5 m wide by 3.6 m long horizontal vibrating screen having an aperture of 0.80 mm. Undersize from the trash screen is directed to the leach feed distributor ahead of the 1,000 m3 leach tank.

# 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 1.2m wide by 2.4m long horizontal vibrating screen having an aperture of 3.25mm.

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.

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 consists of one 1,000m3 leach tank and six CIL carbon adsorption tanks, all with a 1,000m3 capacity.

All tanks mechanically agitated with dual, open, down-pumping impellor systems powered by 55kW 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.

Discharge from the leach tank 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.

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. Loaded carbon is pumped from adsorption tank one 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. 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 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. Steel wool cathodes from the Acacia cell are smelted in a similar manner to the gold produced by the Pressure Zadra circuit.

Barren carbon is reactivated using a liquid natural gas fired vertical kiln at around 700°C 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 having an aperture 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 tailings storage facility ("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 processing facilities. Raw water is sourced from the main production source at the disused Chalice open pit some 16 kilometers to the west.

Process water 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.

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 is generated in the diesel power station at 11 kV and distributed to various plant, the disused Trident mine area and the camp.

### Plant Performance

The Higginsville processing plant has been in operation since 2008 with historical throughput vs. recoveries for the past two years shown in Figure 7.

Recoveries have ranged from 84.6 to 94, since June 2019 with the average recovery over the eighteen-month period at 92%.

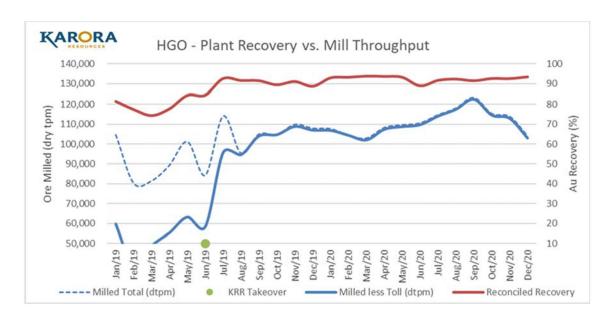
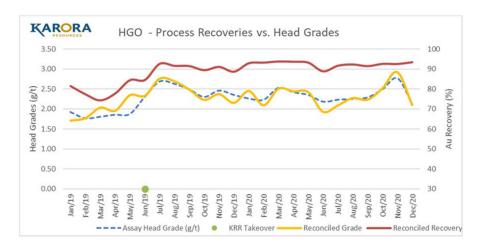


Figure 7: Higginsville – Process Recoveries vs. plant throughput

Figure 8 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.

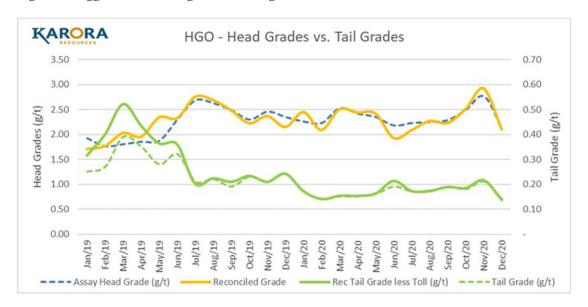
The tails grade during the same period of time has ranged from 0.14 g/t Au to 0.36 g/t Au during the period, with an average tail grade of 0.19 g/t Au.

Figure 8: Higginsville - Process Recoveries vs. head grade



As expected, and shown in Figure 9 below, there is a correlation between the head grade and the tails grade discharge from the mill to the TSF.

Figure 9: Higginsville - Head grades vs. tail grades



## Infrastructure, Permitting and Compliance Activities

The Beta Hunt Mine is an operating mine with all required infrastructure already in place. The main elements of this infrastructure include:

- 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;
- a surface workshop is available for major maintenance and weekly services for the mobile equipment fleet;
- 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;

- 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;
- a dewatering system which includes six stage pumps that discharge, via a 100 mm line, into Lake Lefroy; and
- the management and administration offices, which are portable buildings that will be easy to decommission at closure.

Utilities provided to the mine include:

- electricity that is supplied by SIGMC at a cost of A\$0.23/kWh;
- service water that 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
- potable water that is supplied by SIGMC and BHP.

#### 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 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.

The Beta Hunt Mine is a small mine with a limited disturbance footprint and the environmental impacts of the project are correspondingly modest. 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, however, 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). 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.

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 work on the existing mullock dump unless it disturbs the dump through removal of material. It is Karora's expectation that the rehabilitation that will be required to implement will be generally limited to closure and 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 DMP, 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 (prescribed day).

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 A\$10,000 annually.

It should be noted that levies paid into the MRF required under the *Mining Rehabilitation Fund Act 2012* and *the Mining Rehabilitation Fund Regulations 2013* are non-refundable and separate from the internal accounting provisions for closure and rehabilitation and should not be used to offset the costs for rehabilitation.

#### Social and Community

The nearest town to the Beta Hunt Mine is Kambalda, with a population of 2,539 (2016 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.

## **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

As an operating mine, major infrastructure capital is already in place at the Beta Hunt Mine. The operation plans to primarily incur sustaining capital costs, as the planned production rates are achieved with the infrastructure networks that are already in place.

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 13.

**Table 13: Sustaining Capital Costs Per Annum** 

Capital Cost Type	Units	Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Plant and Equipment	\$A M	26.0	0.8	5.0	5.0	5.0	4.7	3.0	2.5	0	0	0
Capital Development	\$A M	89.2	2.0	12.2	12.0	12.3	12.2	11.1	11.0	10.9	5.1	0.4
Total Mining Capital	\$A M	11.5	2.8	17.2	17.0	17.3	16.9	14.1	13.5	10.9	5.1	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"). 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 14.

**Table 14: Site Operating Costs** 

Operating Costs	Unit	<b>Operating Costs</b>
Mining Costs:		
Direct Operating	\$A / t	28.78
Maintenance	\$A / t	17.05
Technical Services	\$A / t	5.65
G&A Costs	\$ A / t	8.37
Total Mining Operating Cost	\$ A / t	59.54
Processing and Surface Haulage <sup>(1)</sup>	\$ A / t	36.00
Total Operating Cost	\$A / t	95.85

#### **Notes:**

1. Processing and surface haulage includes processing plant.

The operating costs per annum are detailed in Table 15.

**Table 15: Operating Costs per Annum** 

Туре	Units	Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Mining (incl G&A)	\$A M	377.8	8.2	49.0	47.9	49.4	49.8	49.9	49.6	49.3	23.0	1.7
Processing (incl G&A)	\$A M	208.1	4.5	27.0	26.4	27.2	27.4	27.5	27.3	27.1	12.7	1.0

Туре	Units	Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Total	\$A M	585.9	12.7	76.0	74.3	76.6	77.2	77.4	76.9	76.4	35.7	2.7

#### Closure

An independent audit and mine closure estimate prepared in 2018 by consultant MBS Environmental estimated the current rehabilitation liability accruing to Karora for the Beta Hunt Mine sub-lease at A\$881k.

## **Exploration, Development and Production**

The historical focus on nickel mining by previous owners has left much of the gold potential at Beta Hunt lacking any detailed evaluation. Karora's rejuvenated focus on the gold mineralisation has identified and, in part, realised the potential of this metal through extensive underground drilling programs and ongoing mining activity along the main shear zones.

An improved understanding of the mineralisation controls from the drilling and mining has led to the delineation of both new, parallel, mineralised shear zone targets – Fletcher, Larkin and East Alpha – plus extensions to the known mineralised shears – Western Flanks and A Zone.

#### A Zone North

A Zone remains open to the north, down and up-dip. A surface drilling program is planned to further test and extend the mineralisation to the north in 2021.

### Western Flanks North

Drilling in 2020 tested over 400 metres of strike and was aimed at upgrading the 2019 Inferred Mineral Resource at the top of northern end of the Western Flanks Resource model and extending the 2019 Mineral Resource along strike to the north. Results from the top of the north end confirmed the Mineral Resource model to be dominated by a steep west-dipping main shear and east-dipping hanging wall zones. In addition, drilling was successful in discovering new, parallel footwall zones of mineralization at the top of the existing resource (Karora news release, Sept 8, 2020). The Western Flanks mineralized system now extends continuously over 1.4km in strike to a depth of 200 m to 300 m below the basalt contact and remains open at depth and along strike to the north.

## Larkin Zone

Diamond drilling targeting the 30C nickel trough intersected high grade gold mineralization below the 30C nickel basalt/ultramafic contact. The mineralization is similar in style to the A Zone and Western Flanks deposits north of the Alpha Island Fault and was intersected from the 1730 X-cut and 40 Access drill positions. The new discovery is interpreted as the faulted southern offset of the Western Flanks zone (see Karora news release, Sept. 10, 2020)

Mineralisation associated with the Larkin Zone highlights the potential for additional offsets associated with the A Zone3 and Fletcher Zones south of the Alpha Island Fault. These positions, south of the Fault, are untested and represent significant future growth opportunities for Beta Hunt. Follow-up drilling in 2021 is planned to confirm and extend the mineralisation intersected in 2020.

#### Western Flanks

In 2016, an exploration drill hole, WF14-98, first intersected the Fletcher Shear Zone ("FSZ"). Drilling tested a conceptual gold target using the A-Zone and Western Flanks shear zones as structural analogues. Drilling confirmed the existence of a third significant mineralized shear zone within the Beta Hunt sub-lease with the discovery hole yielding two mineralized intervals within the FSZ - results reported below use estimated true thicknesses.

• WF14-98 (Lode A) - 2.67g/t Au over 6.2 m including 3.1g/t Au over 3.1 m; and

• WF 14-98 (Lode B) - 2.32g/t Au over 11.2 m, including 3.8 g/t Au over 4.8 m.

In July 2019, FZ350-001 (642.1 m), targeted the down-dip extension of the FSZ, 150 m down dip of the WF14-98 intersection (RNC announcement September 16, 2019). The follow-up hole was collared on the 350L crosscut of the Western Flanks. Drilling was successful in intersecting the extension of the FSZ in the targeted position. The FSZ comprised biotite-pyrite altered, foliated and irregularly quartz veined basalt – similar to that found at Western Flanks. Assay results confirmed a broad zone of gold mineralization of similar widths to the up-dip hole:

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

The lower gold grades compared to WF14-98 appear related to reduced quartz veining and a 4.5 m wide porphyry intruding into the FSZ at this location which carries an average grade of 0.3 g/t Au.

The confirmation that the FSZ comprises a broad mineralized zone provides added confidence and evidence that the FSZ is Beta Hunt's third major mineralized shear zone system. Drilling has confirmed it has over 150 m of down dip extent, while potential remains for the system to extend over 2km of strike. Follow-up drilling is planned to further test the extent of the mineralisation in 2021.

Potential also exists for nickel mineralization to occur along the basalt/ultramafic contact, directly above the Fletcher shear zone in a similar geological setting to the nickel trough mineralisation found directly above the A Zone and Western Flanks shear zones. This target is under consideration as part of the next phase of drilling at Beta Hunt.

#### East Alpha

This target represents the interpreted mineralised shear zone directly below the East Alpha nickel trough on the east side of the Kambalda Dome. The location of the Redoubtable open-pit directly above the nickel trough supported by anomalous gold assays from holes testing for nickel mineralization in the trough provide evidence of gold mineralization analogous to the steep, mineralised structures as at Western Flanks and A Zone.

Drill hole EA63-031 (318.1 m) was the first hole designed to specifically test the East Alpha shear zone interpreted to be associated with, and directly below, the East Alpha nickel trough. The hole was completed in August, 2019. Drilling targeted 100 m below the ultramafic/basalt contact and historic drill hole EA63-13 (4.8 m @ 5.9 g/t Au down hole). Best result recorded in the drill hole was 0.53 g/t Au over 3.3 m (est. true width) associated with sheared basalt and associated quartz breccia veining. The main East Alpha shear was intersected from 135 m to 161 m (down hole) and comprises sheared basalt hosting extensional quartz-carbonate veining and pyrite alteration. Early results (0.8 g/t Au from 157 m to 158 m down hole) although not showing mineable grade do highlight the need for further evaluation of East Alpha geology to fully understand the results of this initial hole.

# Nickel Exploration Potential

Significant potential exists for the discovery of additional nickel deposits at Beta Hunt along trend from known nickel shoots and in parallel structures north and south of the Alpha Island Fault. Potential also exists south of the Gamma Island Fault as indicated by results from widely spaced historical drilling.

Since the release of the 2016 PEA, there was no drilling activity dedicated to upgrading or growing the existing nickel resource. All drilling had been entirely focused on gold mineralization. This situation, changed in 2020 when Karora re-commenced drilling nickel targets, primarily focused on targets south of the AIF. This work was successful in discovering the 30C nickel trough.

#### 40C/Beta West

The Alpha Island Fault separates the Hunt shoot (D Zone) from the Beta mine on the western limb of the Kambalda dome. Beta contains three major, well-defined troughs: 20C, 25C and 40C, and minor associated hangingwall surfaces,

as well as a major hangingwall surface further west: Beta West. The 25C surface is interpreted to be the offset down plunge continuation of the D Zone/Q Fault/D Zone Deeps/05C trough from the Hunt deposit.

Excellent potential exists for exploration drilling to the west of the already mined surfaces in Hunt. Targets would include the up-plunge position of the 40C and Beta West (interpreted Fletcher trend). Existing drilling in this area is limited to surfaces holes with a spacing of a minimum of 300m up to several kilometres.

#### A Zone Trend

A Zone nickel mineralization was mined from Hunt and was recognized as the single most important ore surface with the highest grade-tonnage of any ore surface. Infill drilling has been completed from surface south of the last known occurrence in the 13 level and appears to cut off A Zone mineralization to the immediate south. However, 700 m further south along strike, hole WF14-14 was drilled in 2014 for Western Flanks gold and intersected a small amount of high tenor massive sulphide in the expected position of the A Zone surface. This nickel occurrence intersected 2.35 m grading 5.8% Ni including 0.65 m grading 14.4% Ni. This intersection was supported with additional intersections in 2020 resulting from drilling aimed at upgrading the existing Western Flanks Gold mineral resource. Drill holes from this program were extended through the basalt/ultramafic contact to test the continuity of the Western Flanks mineralization - historical referred to as the A Zone nickel trend - at this contact position. Drilling intersected both massive and matrix nickel sulphides on the contact position and a thrusted ultramafic (lower) position within the basalt. Results to date have highlighted the potential for discontinuous, high grade nickel sulphide shoots to occur within the Western Thrust system above the Western Flanks gold mineral resource. This mineralization is outside of any nickel mineral resources previously reported by Karora and occurs parallel to the historically mined D Zone nickel trough (above A Zone gold mineral resource) 150 metres to the east.

#### Western Flanks Nickel-Upper:

WFN-103A: 7.2% over 1.2 m;
WFN-096: 5.3% over 0.5 m;
WFN-135: 5.2% over 0.8 m;
WFN-134: 5.6% over 0.7 m; and
WFN-118: 4.1% over 2.2 m.

#### **Hunt East**

The potential exists for a nickel shoot to lie in poorly tested ground between the Hunt and Lunnon shoots named Hunt East, the target is conceptual, first identified in a global study of the Kambalda Dome undertaken by WMC in 1994. No work has been conducted on this target since, so the target remains largely conceptual. The 1994 study concurs with earlier studies on the Dome in correlating the Hunt shoot on the south side of the Dome with the Fisher shoot1. to the north, while a 1978 re-interpretation of the structurally complex Fisher ore environment recognized that the deposit in fact consists of two separate ore belts, the North Ore Belt ("NOB") and the South Ore Belt ("SOB"). It is the SOB which correlates with Hunt; if the NOB has a correlate then it remains undiscovered. Two intercepts of nickeliferous sediment on the contact to the east of Hunt, on either side of the prospective zone, add support to the hypothesis that potential exists here. Very few holes were drilled to the contact in this area. Drilling is planned for 2021.

## South of the AIF (Down Plunge Extension)

Drilling in 2020 has confirmed the potential for nickel trough extensions and new discoveries south of the AIF. The extensions south of the AIF represent down-plunge, dextral offsets from the Hunt mineralization (A and D Zone) mined by WMC from the 1970s to the late 1990s and are part of the Beta mineralization system mined by ConsMin and Karora. Karora are currently actively mining this part of the nickel mineralization system.

Review work undertaken late in 2019 identified a number of nickel targets along the major nickel trends south of the AIF associated with the Lunnon Basalt and overlying Kambalda Komatiite contact position. These targets included

the 10C, 20C, 25C, 30C, 40C, 50C and 55C trends. Specific targets included open contacts, western pinches, step contacts and thrust wedges.

Drilling of these targets commenced in May 2020 and marked the first nickel drill testing in 6 years. The interpreted 30C trough position was prioritised for drilling and intersected nickel sulphide mineralization, both massive and the matrix texture typical of adjacent mined nickel troughs, marking the first new nickel trough discovery at Beta Hunt in 13 years (see Karora news release September 10, 2020). Follow-up drilling in 2021 is planned to confirm and extend the mineralization intersected in 2020.

Assay intersection highlights from the 30C drilling are listed below:

BE30-001: 2.1% Ni over 2.4 m
BE30-002: 3.7% Ni over 0.8 m
BE30-007: 3.8% Ni over 2.3 m
BE30-009: 7.7% Ni over 1.3 m
BE30-010: 8.6% Ni over 1.0 m

Exploration potential remains open to the south. Historic WMC drilling intersected 9.5 m grading 11.4% Ni in hole LD4022 as part of the 10C trend and highlights the potential of the Beta Hunt nickel mineralization system to extend a further 3km to the south toward the boundary of the Beta Hunt sub-lease. No follow-up work in this area has been carried-out since WMC sold the property to Goldfields in 2001.

### HIGGINSVILLE GOLD OPERATION

#### Overview

Unless otherwise indicated, information in this section is summarized or extracted the Beta Hunt Mine Technical Report. The authors of the Beta Hunt Mine 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 9Geostatistics), Grad Dip Computing, (FAusIMM(CP), FAIG, MIMMM, CEng and Ross Cheyne B Eng (Hons) (FAusIMM. Stephen Devlin is an employee of SLM, a wholly-owned subsidiary 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 Beta Hunt Mine 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 the 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 www.sedar.com.

### **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
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

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
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
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

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
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
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

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
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
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

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
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				
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

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
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
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				

Mineral Lease	Status	Holder	Area ha (approx.)	Rent	Commitment	Grant Date	Expiry Date
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 Beta Hunt Mine 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 called Alacer Gold Corp. ("Alacer").

### Westgold

On the October 1, 2013, Metals X Limited ("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.

#### 2020 Gold Mineral Resource

On December 16, 2020, Karora announced mineral resources and reserves for HGO (and the Beta Hunt Mine) effective as of September 30, 2020.

Since June 10, 2019 to December 31, 2020, HGO has mined 844kt of gold mineralisation at average grade of 1.91 g/t Au (52koz contained gold). Gold Production was produced primarily from the Baloo and Fairplay North open pits.

## 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.

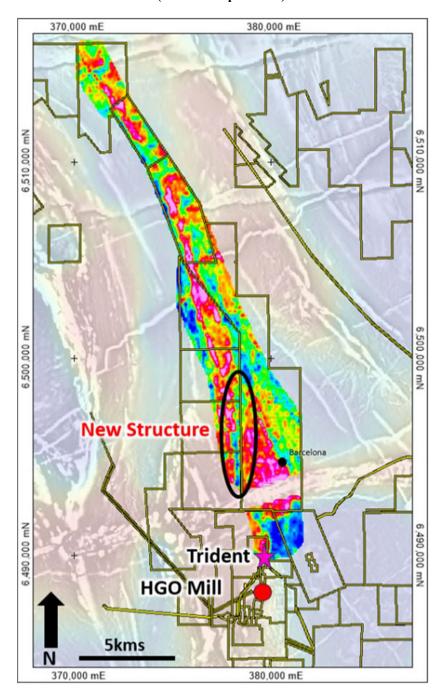
## Burke-Barcelona High Density Gravity Survey

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.

Follow-up RC bedrock drilling is planned to test the newly interpreted structure at depth for primary mineralization as part of HGO's 2021 exploration plans.

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).

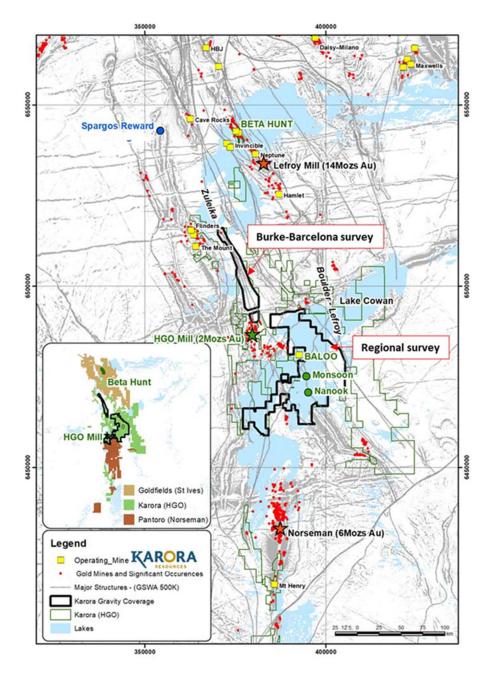


## Lake Cowan

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

regional 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

deterred 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 - 1.3M 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/cm3 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

Drill Type	Pre-Westgold	WestGold	Karora	Total
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
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° 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° 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 Beta Hunt Mine Technical Report, the description of the sampling method, sample analysis and QAQC 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 75µm 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 75µm 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

QAQC 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 QAQC 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**

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

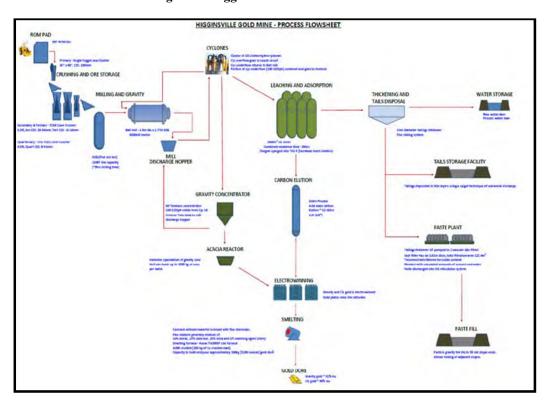


Figure 3: Higginsville Gold Mill Flowsheet

### **Mineral Resource Estimates**

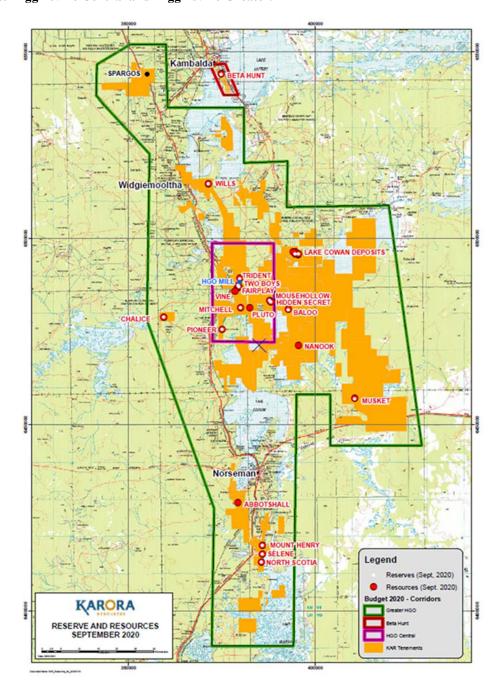
The consolidated gold mineral resource estimates for HGO (which is divided into two geological regions being Higginsville Central and Higginsville Greater), as summarised in Table 6 under the heading "*The Beta Hunt Mine – Mineral Resource Estimate*", are effective as of September 30, 2020. Gold mineral resources at HGO comprise the deposits associated with the Higginsville Central and Higginsville Greater areas.

The Mount Henry Project (which forms part of the greater HGO area) mineral resources have been updated by Optiro Pty Ltd, Perth. Ian Glacken, FAusIMM(CP), FAIG, MIMMM, is the "Competent Person" for these mineral resources. The mineral resources have been prepared and reported in accordance with the CIM Standards. Mr Glacken is a full-time employee of Optiro Pty Ltd. and a "qualified person" as defined by NI 43-101.

In the opinion of the Mr Ian Glacken, the mineral resource estimation at the Mount Henry Project (which forms part of the greater HGO area) reported herein is a reasonable representation of the consolidated gold and nickel mineral resources found at the Beta Hunt and HGO at the current level of sampling.

HGO is geographically divided into two areas. The subdivision was established to assist with distinguishing those Mineral Resources proximal to existing Karora infrastructure (i.e. Higginsville Central) and those "satellite" Mineral Resources (i.e. Higginsville Greater). See Figure 4 showing the Higginsville Central and Higginsville Greater areas.

Figure 4: Location of Karora Mineral Resources and Mineral Reserves effective September 30, 2020. Plan also depicts Higginsville Central and Higginsville Greater.



## Higginsville Central

Higginsville Central consists of deposits located within approximately 10km of the HGO gold processing facility and includes the Trident underground deposit, open pit deposits of Eundynie Group (Hidden Secret and Mouse Hollow), Two Boys, the Fairplay-Vine group (Fairplay North, Fairplay Main, Vine), Pioneer and Palaeochannels deposits.

Table 4: Karora Higginsville Central Gold Mineral Resources as at September 30, 2020

	Measured				Indicated		Measured & Indicated			Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Underground												
Trident	578	4.0	73	717	5.1	117	1296	4.6	190	1,176	3.1	116
Total underground	578	4.0	73	717	5.1	117	1296	4.6	190	1,176	3.1	116
Open pit	Open pit											
Eundynie Group	0	0.0	0	685	1.9	43	685	1.9	43	29	1.6	1
Two Boys	0	0.0	0	688	2.5	56	688	2.5	56	159	3.9	20
Fairplay - Vine Group	375	1.5	18	405	1.8	23	780	1.6	41	37	1.2	1
Pioneer	0	0.0	0	499	1.9	30	499	1.9	30	0	0.0	0
Paleochannels	0	0.0	0	271	2.6	22	271	2.6	22	54	3.3	6
Total open pit	375	1.5	18	2549	2.1	174	2923	2.0	192	280	3.2	29
Surface												
Stockpiles	0	0.0	0	293	0.8	7	293	0.8	7	0	0.0	0
Total	953	3.0	91	3559	2.6	299	4512	2.7	390	1,456	3.1	145

#### 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.
- 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.
- The gold mineral resources are estimated using a long term gold price of US\$1,600/oz with a USD/A exchange rate of 0.70.
- Gold mineral resources were estimated using variable cut-off grades taking into account variable operational costs Higginsville Underground (Chalice and Trident) - 1.3g/t, Higginsville Central Open Pits – 0.5g/t.
- 6. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimized pit shells at AUD\$2,285 (USD\$1,600) per oz and, for underground resources, areas considered sterilized by historical mining are removed from the Mineral Resource estimation.
- 7. Mineral resource estimates as of September 30, 2020.
- 8. Mineral Resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- 9. Mineral resource estimates for Higginsville Central were prepared under the supervision of a "qualified person" Mr. S. Devlin (Group Geologist Exploration and Growth, Karora).

### Trident Deposit

#### CIM Standards defines a mineral resource as:

"A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

The "reasonable prospects for eventual economic extraction" requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade that takes into account extraction scenarios and processing recoveries. At Trident, areas considered sterilised by historical mining activities were removed from the mineral resource estimation.

The Trident Mineral Resource is detailed below Table 5.

Table 5: Trident Mineral Reserve by area

		Measured			Indicated			red & Ind	icated	Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Poseidon	-	-	-	106	6.62	23	106	6.62	23	556	3.33	59
Eastern Zone	-	-	-	168	4.43	24	168	4.43	24	9	5.59	2
Athena	104	5.37	18	110	6.52	23	214	5.96	41	24	7.33	6
Western Zone	179	3.30	19	-	-	-	179	3.30	19	28	2.90	3
EOS & E-Veins	21	4.64	3	239	4.33	33	260	4.35	36	9	2.94	1
Apollo	190	2.98	18	25	3.28	3	215	3.02	21	29	4.95	5
Artemis	12	20.10	8	49	4.18	7	61	7.23	14	2	19.87	1
Helios	73	3.25	8	18	7.80	5	91	4.15	12	166	2.19	12
Ares	-	-	-	2	4.71	0	2	4.71	0	60	2.81	5
Pluto	-	-	-	-	-	-	-	-	-	293	2.49	23
Total Trident	578	3.95	73	717	5.07	117	1,296	4.57	190	1,176	3.08	116

#### Notes:

- 1. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that allor 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- The Trident gold mineral resource was estimated using a 1.3g/t cut-off grade taking into account variable operational costs associated with the Higginsville underground operations.
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020
- 8. To best represent "reasonable prospects of eventual economic extraction" the areas considered sterilised by historical mining are removed from the mineral resource estimation.
- Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- 10. Gold mineral resource estimates were prepared under the supervision of a "qualified person" S. Devlin, FAusIMM (GroupGeologist, Karora).

### Eudynie Group

The Eundynie Group deposits, including both the Hidden Secret and Mousehollow mineralised systems, are modelled as a set of roughly North-South striking, moderately to shallowly dipping narrow lodes. The selection of mineralised domains has used geological factors such as geological contacts, logged quartz in conjunction with a 0.4-0.5 g/t Au cut-off.

## (A) Data Conditioning

The coded drill hole database was composited to 1 m composites within each of the domains. All RC sampling was undertaken at a 1 m sample interval. This, along with consideration of the typical dimensions and attitudes of the mineralised structures and veins combined to deem a 1 m composite length appropriate. Samples were composited with parameters set such that, after compositing, there were no residuals (intervals < 1 m) for any of the domains.

Due to the absence of SG determinations at Hidden Secret and Mouse Hollow, bulk densities have been assumed from nearby comparable Karora operations with extensive mining history:

- oxide 1.8 g/cm3;
- transition 2.4 g/cm3;
- fresh basalt 2.7 g/cm3; and
- fresh gabbro 2.89 g/cm3.

Basic statistics for the 1 m Au composites for each of the mineralised domains was determined. Outlier investigations were also completed based on both distribution statistics (histograms, probability plots etc.), relative clustering of higher-grade data in spacing and investigations of metal at risk. From these analyses, high grade cuts or caps were selected.

## (B) Variography

Directional variograms were modelled by domain using traditional variograms. Nugget values are moderate to high (around 30-50%) and structure ranges up to 60m. The variograms were poorly formed and with domains 4 (Link Zone), 6 (Hidden Secret) and 21 (Mouse Hollow) containing the most samples, its modelled variography was applied to the remainder of the domains.

Table 6: Top Cuts applied to Eundynie Group domains (Au ppm)

Domain	No. Comps	Max.	Cut	Uncut Mean	Cut Mean	No. Data Cut	% Metal Reduction
1	5	2.24	N/A	0.89	0.89	-	-
2	17	0.45	N/A	0.19	0.19	-	-
3	8	4.1	N/A	1.44	1.44	-	-
4	318	89.2	15	1.94	1.69	2	12.7%
5	171	68.586	15	2.60	2.24	4	13.9%
6	153	35.6	15	2.73	2.39	6	12.3%
8	74	7.039	N/A	1.03	1.03	-	-
10	120	92.6	15	3.10	1.96	4	36.8%
11	19	1.84	N/A	0.54	0.54	-	-
12	30	7.31	N/A	1.80	1.8	-	-
13	22	2.25	N/A	0.73	0.73	-	-
14	20	15.28	10	2.24	1.97	1	12.0%
15	13	17.6	10	2.40	1.82	1	24.2%
16	12	5.37	N/A	1.24	1.24	-	-
21	685	67.4	20	1.61	1.54	1	4.2%
23	204	10.4	N/A	1.35	1.35	-	-
25	31	26.926	10	3.36	2.31	2	31.3%

Table 7: Variogram Model Parameters for Au

		A1 A2						vgrot	vgrot	vgrot		
Domain	C0	C1	X	Y	Z	C2	X	Y	Z	bearing	plunge	dip
41	0.3	0.35	14	25	2	0.33	40	30	9	155	0	-20
62	0.3	0.35	14	25	2	0.33	40	30	9	20	0	-40
213	0.5 0	0.30	30	30	3	0.20	60	60	12	20	0	-50

#### Notes:

- 1. Used for all Link Zone domains including 1, 2, 3, 4, 14, 15 and 16.
- 2 Used for all Hidden Secret domains including 5 to 13 (excluding 7 and 9).
- 3. Used for all Mouse Hollow domains including 21, 23 and 25.

### (C) Grade Estimation

Grade estimation was completed using Ordinary Kriging (OK) in GEOVIA Surpac™ software into the mineralised domains. The estimate was resolved into parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation.

A three-pass strategy was used for grade estimation. The maximum number of composites that can be utilised from any drill hole is 4 to ensure localised effects are minimized. The first pass ensures that each parent cell can 'see' at least two cross-sections in distance either side of the cell being estimated. A minimum of 6 and a maximum of 12 composites are used in each estimate. The major search distance used for the first pass was 30 m, the second pass was 60 m, and then expanded large enough in the third pass to ensure that the vast majority of cells are estimated.

## (D) Model Validation

Extensive visual and statistical validation of the grade estimates was completed. This process included:

- review of the block estimate and the composite data in cross section, long section and plan views;
- comparison of composite grades and block model grades broken down into Northing, Easting and/or RL zones; and
- comparison of the mean grade of the contributing composites versus the mean grade of the estimate.

The validation indicates that the mineral resource model replicates the source input data well in regions of higher density drilling. Swath plots were created and show that for the domains from Hidden Secret, Link Zone and Mouse Hollow, regions where data density is lower, smoothing is evident, however the estimate is considered appropriate as the trends in the data are adequately reproduced.

### (E) Mineral Resource Reporting

The mineral resource has been defined using definitive criteria determined during the validation of the grade estimates, with detailed consideration of the mineral resource classification guidelines.

The factors considered for the mineral resource classification for this deposit included:

- drill spacing (typical 15-20 m E x 20 m N with some infill in places);
- confidence in geological interpretation;

- confidence in mineralised zone interpretation;
- sample and geochemical analysis quality; and
- availability of bulk density data.

The lodes have been drilled on 15-25m easting by 20m northing spacing, with drill lines running approximately E-W. In part, the deposit is adequately drilled to have potentially been defined as higher confidence classification using only drilling density as a criteria. However, a number of issues remain unresolved with the base data and geological/structural models. Importantly, rock density is assumed – no actual measurements exist from Hidden Secret and Mouse Hollow, due to a lack of diamond core drill holes. Only one diamond core hole has been drilled at each of the Hidden Secret and Mouse Hollow areas – further core holes are suggested to confirm geological and structural interpretation assumptions.

The Hidden Secret and Mousehollow Mineral Resource was classified in accordance with the JORC Code 2012 guidelines. A reconciliation of this reporting and the CIM Definition Standards (2014) by the Qualified Person shows no material differences.

Table 8: Eundynie Group Mineral Resource using 0.5g/t g/t Au cut-off

	I	Measured	i	Indicated		Measured & Indicated			Inferred			
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Hidden Secret				474	2.05	31	474	2.05	31	29	1.57	1
Mousehollow				211	1.73	12	211	1.73	12			
Eundynie Group	0	0.0	0	685	1.9	43	685	1.9	43	29	1.6	1

### Notes:

- Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty thatall 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- 5. The gold mineral resource was estimated using a 0.5g/t cut-off grade taking into account variable operational costs associated with the Higginsville Open Pits.
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimized pit shells at A\$2,285 (US\$1,600) per oz.
- 9. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbersmay not add due to rounding.
- 10. Gold mineral resource estimates were prepared under the supervision of a "qualified person" S. Devlin, FAusIMM (GroupGeologist, Karora).

## Fairplay North

The Fairplay North deposit is part of Higginsville Central and is located approximately 130km south of the HGO plant and office. This deposit was actively mined in 2020.

## (A) Geological Model and Mineralization Domains

The Fairplay deposits occur within the Line of Lode trend which is bounded by the Poseidon Thrust to the east and Thrust A to the west.

Fairplay North has mineralisation hosted within a dolerite / gabbro mafic unit that sits parallel to the Poseidon Thrust. The mineralisation is associated with quartz veining, arsenopyrite and is heavily sheared due to being adjacent to the Poseidon Thrust. There is two types of quartz veining, massive and vuggy, with mineralisation only associated with the massive quartz veining. The mineralised quartz dips approximately 25° towards the east away from the Poseidon Thrust and steepens up and dips parallel (approximately 60° towards the east) closer to the Poseidon Thrust.

All the mineralised envelopes were modelled using an approximate 0.5g/t Au envelope and have been separated into structurally controlled primary plus supergene estimation domains. Wireframes were created in Leapfrog software for the supergene/oxide domains (1 to 3) and the main primary structural domains (1001 to 1020).

# (B) Data Conditioning

The coded drill hole database was composited to 1m composites within each of the domains. All RC (including grade control) sampling was undertaken at a 1m sample interval. This, along with consideration of the typical dimensions and attitudes of the mineralised structures and veins combined to deem a 1m composite length appropriate. Samples were composited with parameters set such that, after compositing, there were no residuals (intervals < 1m) for any of the domains.

Densities for Fairplay were assigned within the block model using historical production information from the Fairplay open pit. The bulk density values were assigned as an average value to the alluvial cover plus the three weathering domains, oxide, transition and fresh:

Table 9: Densities applied for the Fairplay North open pit model.

Material	Bulk Density (g/cm³)
Alluvial	1.40
Oxide	1.90
Transitional	2.40
Fresh gabbro	2.89

Basic statistics for the 1m Au composites for each of the mineralised domains were determined. Outlier investigations were also completed based on both distribution statistics (histograms, probability plots etc.), relative clustering of higher-grade data in spacing and investigations of metal at risk. From these analyses, high grade cuts or caps were selected as detailed in Table 10.

Table 10: Statistics and Top Cuts applied to Fairplay North domains (Au ppm).

Domain	No. Comps	Max.	Cut	Uncut Mean	Cut Mean	No. Data Cut	% Metal Reduction
1001	5200	145	40	1.50	1.45	6	2.8%
1002	527	16.6	-	0.89	-	-	-
1003	511	18.8	-	1.20	-	-	-
1004	112	9.23	-	0.86	-	-	-
1005	194	16.98	-	1.04	-	-	-
1006	1127	74.8	35	1.20	1.17	1	2.9%
1007	2373	80.52	25	1.17	1.13	6	3.8%
1008	155	34.4	15	1.57	1.44	1	8.0%

Domain	No. Comps	Max.	Cut	Uncut Mean	Cut Mean	No. Data Cut	% Metal Reduction
1009	110	31.4	10	0.96	0.77	1	20.1%
1010	134	138.67	10	2.27	1.22	2	46.5%
1011	324	18.1	-	1.32	-	-	-
1012	320	25.4	15	1.00	0.96	1	3.3%

Domain	No. Comps	Max.	Cut	UncutMean	Cut Mean	No. DataCut	% Metal Reduction
1013	39	9.53	-	0.98	-	-	-
1014	109	8.3	-	0.88	-	-	-
1015	37	4.315	-	1.01	-	-	-
1016	53	5.05	-	1.14	-	-	-
1017	83	45.6	20	2.08	1.77	1	14.8%
1018	141	18.7	10	1.02	0.94	2	7.7%
1019	27	14.5	-	2.30	-	-	-
1020	11	4.16	-	1.11	-	-	-
1	349	41.5	10	1.01	0.80	5	20.9%
2	45	15.004	-	1.71	-	-	-
3	4420	145	40	1.21	1.17	4	3.1%

# (C) Variography

Modelled directional variograms used log transformation of the data converting skewed grade distributions to a standard normal distribution, thereby limited the effect of extreme grades. The log variogram models were back transformed for use in the estimation.

The variograms were generally poorly formed with the exception of domain 1001, which contains the most samples. The oxide domains were modelled together as one with the results applied to all.

Table 11: Variogram Model Parameters for the Fairplay North estimation.

			A	.1			A2			vgrot	vgrot	vgrot
Domain	C0	C1	X	Y	Z	C2	X	Y	Z	bearing	plunge	dip
10011	0.35	0.35	10	7	5	0.3	53	26	12	40	0	-20
1006	0.42	0.34	5	5	7	0.24	14	9	17	343.5	9.4	69.7
1007	0.34	0.39	8	4	8	0.27	23	14	23	5.4	37.15	-16.0
1 to 32	0.57	0.26	12	15	11	0.17	63	33	62	339.4	-3.4	-19.7

### **Notes:**

- 1 Used for domains 1001 to 1005 and 1008 to 1020.
- 2. Used for all oxide domains including 1 to 3.

# (D) Grade Estimation

Grade estimation was completed using Ordinary Kriging (OK) in GEOVIA Surpac™ software into the mineralised domains. The estimate was resolved into parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation.

A three-pass strategy was used for grade estimation. The maximum number of composites that can be utilised from any drillhole is 4 to ensure localised effects are minimized. The first pass ensures that each parent cell can 'see' at least two cross-sections in distance either side of the cell being estimated. A minimum of 6 and a maximum of 12 composites are used in each estimate. The major search distance used for the first pass was 30 m, the second pass was 60 m, and then expanded large enough in the third pass to ensure that the vast majority of cells are estimated.

### (E) Model Validation

Extensive visual and statistical validation of the grade estimates was completed. This process included:

- review of the block estimate and the composite data in cross section, long section and plan views;
- comparison of composite grades and block model grades broken down into Northing, Easting and/or Elevation zones; and
- comparison of the mean grade of the contributing composites versus the mean grade of the estimate.

The validation indicates that the mineral resource model replicates the source input data well in regions of higher density drilling. Swath plots were created and show that for the regions of domains where data density is lower, smoothing is evident, however the estimate is considered appropriate as the trends in the data are adequately reproduced.

# (F) Mineral Resource Reporting

The mineral resource has been defined using definitive criteria determined during the validation of the grade estimates, with detailed consideration of the classification guidelines.

The factors considered for the resource classification for this deposit included:

- drill spacing (with grade control infill in places down to 5m by 5m);
- confidence in geological interpretation;
- confidence in mineralised zone interpretation;
- sample and geochemical analysis quality; and
- availability of bulk density data.

Previous mining by open pit methods has been coded into the resource block model and reporting of resources was depleted accordingly.

The Fairplay North Mineral Resource was classified in accordance with the JORC Code guidelines. A reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material differences.

Table 12: Fairplay North Mineral Resource using 0.5g/t g/t Au cut-off

	Measured			Indicated			Measured & Indicated			Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Fairplay North - Open Pit	191	1.7	10	27	1.6	1	218	1.7	12	0.4	2.3	0.03

### **Notes:**

- Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that allor 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- The Fairplay North Gold mineral resource was estimated using a 0.5g/t cut-off grade taking into account variable operational costs associated with the Higginsville Open Pits.
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The Mineral Resource is depleted for mining to September 30, 2020
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimised pit shells at AUD\$2,285 (USD\$1,600) per oz.
- Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- 10. Gold Mineral Resource estimate was prepared under the supervision of "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora).

## Fairplay Main

The Fairplay group deposits Fairplay, Fairplay East, Fairplay North and Two Boys form part of the Line of Lode within the HGO Central group of deposits. They are approximately 2km south of the Higginsville processing facility and are accessible via an unsealed haul roads.

The Fairplay Main indicated mineral resource stands at 221Kt at 1.83 g/t Au for 13 Koz.

Historic production from 1949 to 2017 was 885kt at 1.9 g/t Au for 55 koz. The last period of mining was by Metals X/Westgold from December 2015 to May 2017.

Table 13: Historical Production of the Fairplay Group deposits from 1980 to 2017

Deposit	Date	Company	Tonnes (t)	Grade (g/t)	Ounces (oz)	Comments	Reference
	Prior to 1949	Private Syndi	15,593	4.98	2,497		DMP
	March to June 1991  July to December 1991  Fairplay (main)  February to May 2010  December 2015 to May 2017		100,654	2.31	7,473	Million Elemen	Walsh 1994
			266,182	2.17	18,553	Milling Figures	waish 1994
1 .			103,890	2	6,680	Unreconciled	Coxon et al 2010
			399,205	1.57	20,127	Reconciled mined	Fieldgate 2018
	Sub Total		885,524	1.94	55,330		
Fairplay East	March to November 2017	Westgold	185,279	1.43	8,532	Reconciled mined	Pike et al 2018
Grand Total			1,070,803	1.85	63,862		

# (A) Deposit Type

From Westgold (2018a): The mineralisation at Fairplay main is hosted within the weakly differentiated gabbro unit within the Line of Lode zone between the Poseidon Thrust and Thrust A regional structures. The zone of mineralisation is defined either by the upper lithological contact of the gabbro or by the preferred horizon within the unit. The footwall contact of the mineralisation is highly irregular suggesting that gold bearing fluids are channelled through a series of steep SW dipping fluid conduits.

Within the Fairplay pit there are two types of mineralisation:

- main mineralisation which is hosted in the gabbro unit and lies directly under and is parallel to the Fairplay Shear; and
- minor mineralisation which is hosted with the basalt unit and is sub vertical. There is very little supergene enrichment overlying the Fairplay deposit.

The main mineralisation which is the primary source of the ore in the Fairplay pit lies directly under and is parallel to the Fairplay Shear. The mineralisation is characterised by disseminated arsenopyrite with minor quartz veining occurring in mostly fresh rock.

During the mining of the main mineralisation it was impossible to distinguish the ore from the waste as there was no defining colour change or attribute of the ore / waste material. The overall ore zone dips approximately 45° to 55° to the east, strikes approximately 170° and plunges approximately 15° to the south.

The upper mineralisation zone is defined by 0.5-1.0m thick quartz vein which parallels the Fairplay Shear. The body of the mineralisation is defined a 8-15cm quartz veins which are perpendicular to Fairplay Shear and the upper boundary quartz vein which dip towards the west.

The minor mineralisation occurs as thin (5-10m thick) sub-vertical (dipping 75 to 85° mainly towards the east) lodes. The lodes strike between 355° to the 010° and had a maximum strike distance of 70m. The mineralisation is characterised by orange iron oxides and can be easily distinguished from the green (waste) basalt host rock. The minor mineralisation occurs above and is truncated by the Fairplay Shear. No sulphides were found in the mineralisation due to the mineralisation occurring in the oxide/ transitional material.

# (B) Observations – Geology, Statistics and Interpretation

- The 2017 model was combined from separate models for Fairplay Main, Fairplay North, Fairplay East and Two Boys.
- The Fairplay Main drillhole data was extracted from the Datashed database to an MS-Access database for Surpac.
- All the mineralised envelopes were modelled using a 0.5g/t Au envelopes with a minimum downhole length of 2m and a maximum dilution of 2m internal dilution. Each separate wireframe was given a separate domain number.
- The interpretation methodology varies depending on the mineralisation style. At the Fairplay deposit there was no visual contrast or logging codes that guide the mineralisation. The lodes can be up to 360m along strike and up to 47m wide.
- Lithology models were interpreted for:
  - Felsic intrusive

- Mafic intrusive
- o Gabbro on the western side of the Line of Lode
- Ultramafic on the western side of Thrust A
- o Black Flag Beds on the eastern side of the Poseidon Thrust
- Geology interpretation of the oxidation boundaries was used to generate surfaces for:
  - Base of Transported materia
  - Base of Alluvial
  - Base of complete oxidation
  - Top of fresh rock
- Due to multiple generations of logging, the interpretations were first based on the Lit1\_Oxidation field, then Regolith, then weathering and lithology colour codes.
- No alteration interpretation was done.
- Structure models were already created for the Poseidon Thrust and the surface of Thrust A.
- The mineralisation includes 48 interpreted domains, which are grouped for statistical analysis. 100 series domains are the main Fairplay lodes, and 200 series are the smaller oxide lodes dipping 75° to 85° west.
- Variograms were analysed for grade continuity directions. Before calculating the variogram a
  normal scores transformation was performed to limit the influence of extreme grades, which are
  common in precious metal deposits of this type. For use in the estimation the normal score
  variogram models were back transformed.
- Where applicable, domains of similar orientation, geology and statistics were grouped for variography.

## (C) Modelling Method

- Kriging Neighborhood Analysis was used to test for the best model cell size and minimum and maximum number of samples for estimation.
- The block model created for Fairplay Main includes the adjoining deposits Fairplay East, Fairplay North and Two Boys.
- The block model has a parent cell size of 5m x 5m x 5m and subcells at 1.25m in each dimension (Table 14).

Table 14: Fairplay - Two Boys block model extents and cell sizes.

Axis	Minimum	Maximum	Extent	Parent size	Number of rows	Minimum subcell
Y	6,487,100	6,488,200	1,100	5	220	1.25

Axis	Minimum	Maximum	Extent	Parent size	Number of rows	Minimum subcell
X	378,800	380,000	1,200	5	240	1.25
Z	1,050	1,350	300	5	60	1.25

- Ordinary Kriging was applied to estimate all lodes. The benefit of a kriged model is that it uses information about the underlying variability of the data to guide the estimation process, declustering is done in process and the system corrects for the volume variance effect. Kriging is the preferred estimation method where there is enough data to allow for robust variography to be produced. The majority of the remaining in-situ resource has been estimated in this fashion.
- Estimation was validated by trend analysis plots of composites vs tonnage-weighted model grades, and by comparison with reconciled production figures.

## (D) Mineral Resource Classification

The Fairplay Main mineral resource was classified as follows:

- A measured mineral resource is that part of the Mineral Resource for which the quantity, shape, density, and grade are estimated with sufficient confidence to support detailed mine planning and application of economic viability. It is based on sufficient detail of information to confirm geological and grade continuity between data and samples. At Fairplay Main no material was classified Measured.
- An indicated mineral resource is that part of the mineral resource for which the quantity, shape, density, and grade are estimated with sufficient confidence to support detailed mine planning. Resource Category was set using wireframe envelopes for Indicated which enclosed areas of drill spacing of 20 x 25m or better and minimum sample distance around one search radius.
- An area was classified as inferred mineral resource where the data density was sufficient to imply but too sparse to verify geological and grade continuity. Where drill spacing was from 30m to 40m apart, or projected no more than 40m past a drill hole, the cells were assigned to Inferred.

The Fairplay Main mineral resource was classified in accordance with the JORC Code 2012 guidelines. A reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material differences.

# (E) Mineral Resource Statement

CIM Standards defines a mineral resource as:

"A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. To meet the "reasonable prospects for eventual economic extraction" requirement the resource model was constrained inside an optimised pit shell optimisation using a gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.

The Fairplay Main mineral resource is summarised in Table 15.

Table 15: Fairplay Main open pit Mineral Resource

	I	Measured			Indicated			Measured & Indicated			Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	
Fairplay (main)				221	1.8	13	221	1.8	13	5	1.5	0	

### Notes:

- Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that mineral resources that
  are not mineral reserves do not have demonstrated economic viability. There is no certainty that allor 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- 5. The Fairplay Main mineral resource was estimated using a 0.5 g/t cut-off grade taking into account variable operational costs associated with the Higginsville open pit operations.
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimized pit shells at A\$2,285 (USD\$1,600) per oz.
- Mineral Resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- The Fairplay Main Gold Mineral Resource estimates were prepared under the supervision of "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora).

### Two Boys

The Two Boys deposit lies 800m south of the HGO gold processing facility. It consists of several narrow shear and quartz vein structures and had a high-grade shallowly north-dipping quartz vein lode which was mined by Barminco from 1997 to May 1998 by decline and room and pillar stoping. The most prominent surface feature is the Barminco box cut for the portal of the decline. It produced 185,000t at 14.0 g/t for total recovered 82,063 oz.

The Two Boys deposits occur within the Line of Lode trend which is bound by the Poseidon Thrust to the east and Thrust A to the west.

The bedrock geology comprises ultramafic and sedimentary-dominated units metamorphosed under amphibolite to greenschist facies conditions.

The Two Boys area has three major rock types which strike north-south and dip approximately 45° east. The mineralisation is hosted in a medium grained weakly differentiated gabbro approximately 130m at its widest point. The footwall consists of a tremolitic ultramafic, and the hanging wall is a High MgO basalt uncomformably overlain to the east by a sedimentary package.

A possible komatiite unit with an extent of around about 50m in length (and unknown width) is believed to extend from the north wall between the gabbro and basalt units and be dragged into the major 030° trending shear zone (Coxon et al 2010).

The sequence is cut by a low angle shear zone formed as a low angle thrust, known as the Two Boy Shear zone ("TBSZ"). The TBSZ strikes towards the east and overall dips approximate 30° towards the north-northeast.

The mineralisation is hosted by TBSZ which occurs as lenses quartz-vein reef ranging from 1m to 5m in width with sheared, altered and mineralised selvages (Sheddon 1998).

The mineralisation at Two Boys is hosted within the TBSZ associated with quartz veining, shear selvage and wall rock alteration. Intense biotite-chlorite-carbonate-sericite-pyrite alteration occurs over serval metres into the wall rock

from the quartz vein. Gold is often visible occurring as coarse gold grains up to several millimetres in diameter (Sheddon 1998) and often occurring with pyrite, arsenopyrite and galena (Westgold 2018).

## (A) Drillhole Data

Drilling data was extracted from the Datashed database on 24 June 2020.

A number of issues were found and fixed in the data. Several coordinate systems are stored, and collar RLs may or may not have 1000m added to the RL for the Trident mine coordinate system, depending which set is used. Precision problems (64 bit vs 32 bit) in the export from Datashed to subset Access databases can truncate precision in the MGA northing system. Some RAB and aircore holes clearly had 'planned' nominal RL and had not been surveyed. These may have been sterilisation drilling as they did not intersect mineralisation.

Collars were checked for difference from the topo surface and differences investigated, surveys checked and inconsistencies resolved, and passed back to the database administrator. Azimuths of six 60° angled RC holes drilled in 1996 had been not recorded, and after investigation were assigned 270 azimuth.

Assays were checked for values outside range; 23 were found with laboratory codes in the Au assay field and fixed.

Drill samples were 89% RC chips, 9% diamond half core, and the remainder a few RC composite, grab or face samples.

Densities used the same as Poseidon 800m north, for the same rocktypes.

## (B) Geology Interpretation

The main mineralised structures at Two Boys are the 26° NNE-dipping Two Boys shear (Domain 5) with its mined-out high grade Quartz lode zone (Domain 1), the NW-dipping Eastern Lode, so far unmined, and the less-mineralised 47° east-dipping Swagman lode.

Smaller mineralised upper structures include Domain 7 sub-horizontal above the high grade quartz domain, Domain 4 parallel above Swagman, Domain 3 above the main Two Boys shear, west of the box cut. To the southeast is Domain 8, a south-east dipping extension of the Fairplay North structure.

The mineralised lenses were re-interpreted where a lower cutoff of 0.5 g/t could delineate increased resources, especially where 2019-20 new drilling in the oxidised zone up-dip of the main Two Boys shear and the Swagman domain, and in the less mineralised upper lenses.

Interpretation was carried out by digitising 3D strings snapped to drill hole sample boundaries, along drilled sections lines, and interpreted between multiple sections at linking.

Figure 5: Plan of Two Boys lenses

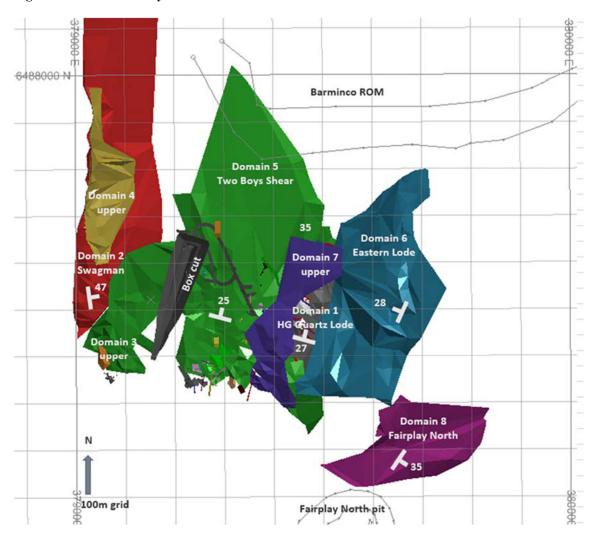
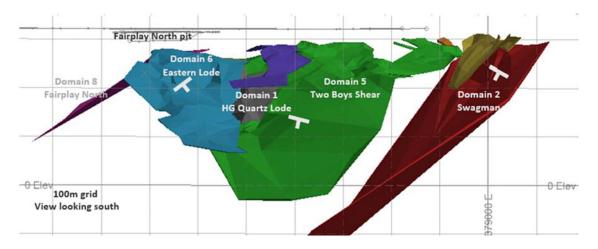


Figure 6: View of Two Boys lenses looking south



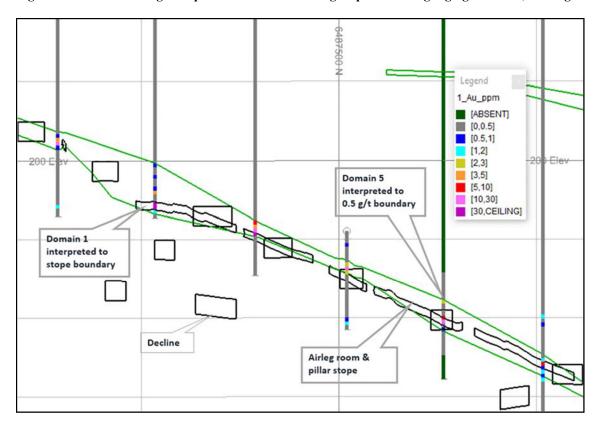


Figure 7: Section showing interpreted contact and airleg stopes following high grade lode, looking W.

Univariate stats for Au in the best mineralised domains 1, 5 and 6 show mean grades for mined-out Domain 1 of 15.7 g/t Au and a well formed lognormal distribution of grades. Domain 5 had a mean grade of 2.74 over 1142 samples and Domain 6 a mean for 332 samples of 2.66 g/t.

Variography did not return well-formed log transform variograms. A normal scores transform demonstrated some structure.

# (C) Modelling Method

Composite grades used for estimation were top cut, based on the grade at which the cumulative log frequency curve broke down from a relatively linear curve, i.e. the upper point at which the data can approximate to lognormality.

Gold grade was estimated by ordinary kriging within each domain. The main shear was estimated excluding the extremely high grades related to the mined-out high-grade quartz lode. Search ellipses were based on the variogram models for the key lodes.

Table 16: Top cuts applied to composites.

Domain	Top cut (Au g/t)	No. comps	No. cut	Uncut mean	Cut mean
2 Swagman	35.0	332	2 values	1.81	1.43
3 west of box cut	35.0	81	none	1.69	1.69
5 Main Two Boys shear	150.0	1566	11 values	4.96	4.21

Domain	Top cut (Au g/t)	No. comps	No. cut	Uncut mean	Cut mean
6	35.0	332	3 values	2.66	2.39
7	35.0	225	none	0.95	0.95
8	35.0	144	none	1.09	1.09

Estimated grades were visually validated against the top cut composites, slice plots were generated comparing model grades and composite grades, and grade distributions were compared for model cells between the ordinary kriged estimate and the nearest neighbour grades.

## (D) Mineral Resource Classification

The Two Boys mineral resource was classified as follows:

- A measured mineral resource is that part of the mineral resource for which the quantity, shape, density, and grade are estimated with sufficient confidence to support detailed mine planning and application of economic viability. It is based on sufficient detail of information to confirm geological and grade continuity between data and samples. At Two Boys no material was classified Measured.
- An indicated mineral resource is that part of the mineral resource for which the quantity, shape, density, and grade are estimated with sufficient confidence to support detailed mine planning. Resource Category was set using wireframe envelopes for Indicated which enclosed areas of drill spacing of 20 x 25m or better and minimum sample distance around one search radius.
- An area was classified as inferred mineral resource where the data density was sufficient to imply but too sparse to verify geological and grade continuity. Where drill spacing was from 30m to 50m apart, or distance to nearest drillhole was between one and 1.5 x search radius the cells were assigned to Inferred.
- Domain 5 main Two Boys shear material in contact with the old stopes was downgraded to inferred.

The Two Boys mineral resource was classified in accordance with the JORC Code. A reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material differences.

### (E) Mineral Resource Statement

CIM Standards defines a mineral resource as:

"A mineral resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

To meet the "reasonable prospects for eventual economic extraction" requirement the Two Boys resource model was constrained inside an optimised pit shell optimisation using a gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.

The Two Boys Mineral Resource is detailed by Area in Table 17.

Table 17: Two Boys Mineral Resource.

	Measured				Indicated	l	Measu	red & In	dicated	Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
2 Swagman				29	3.24	3	29	3.24	3			
3 Upper lens west of boxcut				17	2.03	1	17	2.03	1			
5 Two Boys Main Shear			417	2.77	37	417	2.77	37	141	4.20	19	
6 Eastern Lode				132	2.68	11	132	2.68	11			
7 Upper lens above HG quartz lode		94	1.07	3	94	1.07	3	18	1.80	1		
Total				688	2.53	56	688	2.53	56	159	3.93	20

#### Notes:

- 1. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that allor 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- 5. The Two Boys gold mineral resource was estimated using a 0.5 g/t cut-off grade taking into account variable operational costs associated with the Higginsville open pit operations.
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimized pit shells at AUD\$2,285 (USD\$1,600) per oz.
- Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- 10. The Two Boys Gold Mineral Resource estimates were prepared under the supervision of "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora).

### Pioneer

The Pioneer deposit, including both supergene and primary mineralised zones, are modelled as a set of roughly N-S striking, shallowly to moderately to dipping narrow lodes. The selection of mineralised domains has used geological factors such as geological contacts and logged quartz in conjunction with a 0.4-0.5g/t Au cut-off.

## (A) Geological Model and Mineralization Domains

The geological model currently understood is that the system is bounded by contacts with sediments both to the east and west. The sediment contacts are steeply dipping to the east with the eastern contact, toward the southern end having a significant flex or offset, which is an indication of a structural component.

The central host rock is Paringa Basalt, with high MgO basalts, basalts and a Gabbro unit present. A sediment wedge can be seen to be sheared into the central location.

The overall mineralised system has a shallow southern plunge and the mineralisation has a tendency to dip toward the east, and is overall striking N-S. There are 5 supergene and 23 primary mineralised wireframe domains defining gold mineralisation within an approximate 0.5g/t envelope.

There are also interpreted wireframes for a late ENE-WSW cross cutting dolerite dyke to the north of the mineralised wireframes, surfaces for bases of alluvial material, base of complete oxidation, top of fresh rock, and surface topography.

## (B) Data Conditioning

The coded drill hole database was composited to 1m composites within each of the domains. All RC sampling was undertaken at a 1m sample interval. This, along with consideration of the typical dimensions and attitudes of the mineralised structures and veins combined to deem a 1m composite length appropriate. Samples were composited with parameters set such that, after compositing, there were no residuals (intervals < 1m) for any of the domains.

Due to limited available SG determinations at Pioneer, the core bulk densities have been compared to downhole geophysical logging of a RC hole. Results are comparable and consistent with those from nearby Karora operations. Assigned bulk density are by oxidation and listed in Table 18.

Table 18: Density values applied at Pioneer.

Material	Bulk Density (g/cm3)
Oxide	1.90
Transitional	2.40
Fresh gabbro	2.89

Basic statistics for the 1m Au composites for each of the mineralised domains were determined. Outlier investigations were also completed based on both distribution statistics (histograms, probability plots etc.), relative clustering of higher-grade data in spacing and investigations of metal at risk. From these analyses, only one domain (primary domain 3) required a high grade cut selected at 10g/t.

# (C) Variography

Directional variograms were modelled by domain using traditional variograms. Nugget values are high (around 50%) in the supergene and moderate (15-20%) in the primary zones with structure ranges up to 60m. The variograms are generally poorly formed and with domains 35 (primary) and 99 (supergene) containing the most samples, its modelled variography was applied to the remainder of the domains.

## (D) Grade Estimation

Grade estimation was completed using Ordinary Kriging ("**OK**") in GEOVIA Surpac™ software into the mineralised domains. The estimate was resolved into parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation.

A three-pass strategy was used for grade estimation. The maximum number of composites that can be utilised from any drill hole is 4 to ensure localised effects are minimised. The first pass ensures that each parent cell can 'see' at least two cross-sections in distance either side of the cell being estimated. A minimum of 6 and a maximum of 12 composites are used in each estimate. The major search distance used for the first pass was 30m, the second pass was 60 m, and then expanded large enough in the third pass to ensure that the vast majority of cells are estimated.

## (E) Model Validation

Extensive visual and statistical validation of the grade estimates was completed. This process included: (i) review of the block estimate and the composite data in cross section, long section and plan views; (ii) comparison of composite grades and block model grades broken down into Northing, Easting and/or RL zones; and (iii) comparison of the mean grade of the contributing composites versus the mean grade of the estimate.

The validation indicates that the mineral resource model replicates the source input data well in regions of higher density drilling. Swath plots were created and show that, regions where data density is lower, smoothing is evident, however the estimate is considered appropriate as the trends in the data are adequately reproduced.

## (F) Mineral Resource Reporting

The Mineral Resource has been defined using criteria determined during the validation of the grade estimates, with detailed consideration of the classification guidelines.

The factors considered for the resource classification for this deposit included:

- drill spacing (typical 15-20m E x 20m N with some infill in places);
- confidence in geological interpretation;
- confidence in mineralised zone interpretation;
- sample and geochemical analysis quality; and
- availability of bulk density data.

The lodes have been drilled on 15-25m easting by 20m northing spacing, with drill lines running approximately E-W. In part, the deposit is adequately drilled to have potentially been defined as higher confidence classification using only drilling density as a criteria. However, a number of issues remain unresolved with the base data and geological/structural models. Importantly, rock density is limited due to a lack of diamond core drill holes. Only four diamond core holes have been drilled and are clustered close together (2 in the north and 2 in the south) – further core holes are suggested to confirm geological and structural interpretation assumptions.

The above factors considered, the Pioneer mineral resource was classified in accordance with the JORC Code guidelines. A reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material differences.

Table 19: Pioneer Mineral Resource using 0.5g/t g/t Au cut-off

	N	Measure	d	Indicated			Measured & Indicated			Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Pioneer	0	0.0	0	499	1.9	30	499	1.9	30	0	0.0	0

### **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.
- 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 categorised 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.
- The gold mineral resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- 5. The Pioneer Gold mineral resource was estimated using a 0.5g/t cut-off grade taking into account variable operational costs associated with the Higginsville Open Pits
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimised pit shells at AUD\$2,285 (USD\$1,600) per oz.
- 9. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.

10. The Pioneer Gold mineral resource estimates were prepared under the supervision of a "qualified person" S. Devlin, FAusIMM(Group Geologist, Karora).

### **HGO** Central Paleochannels

### Mitchell

Mitchell is the bulk of the Southern Paleochannels group with Graveyard, Aphrodite, Pluto and others covering an estimated 4km north-south extent, three kilometres south of the Trident underground mine and the HGO processing facility. Mitchell is divided into four zones.

Between 1998 and 2000 historical mining at Mitchell 1 and Mitchell 2 produced 227kt at 2.4 g/t for 17 koz Au. Graveyard North has also been mined but figures are not available.

Mining ceased in the Mitchell pit due to adversely wet weather in 2000 and has not resumed.

The Mitchell Mineral Resources have been reported at a lower cut-off of 0.50g/t Au by resourcecategory and lode.

# (A) Deposit Geology

The Graveyard North and Graveyard paleochannel directly overlies the Vine north-south trending shear. The basement rocks are mostly ultramafic and intrusive gabbros with minor chert and high Mg basalt.

The Mitchell paleochannel appears to directly overlie a major north-south treading shear. Underlying basement rocks to the Mitchell 1-3 are dominated by high-Mg basalts. These basalts are often well foliated with significant biotite, silica and carbonate hydrothermal alteration, suggesting that much of the anomalous gold at or near the base of the channel is derived by nearby primary mineralisation.

Mitchell 3 and 4 are at the lower reaches of the Mitchell South paleochannel, where the channel has shallow gradient margins and has flat to gently undulating bases over 200m wide. The base of the channel truncates the lower saprolite in the underlying Archaean basement, and is marked by a 0.3m - 3m thick quartzitic gravel lag overlain by several upward fining cycles of reduced Eocene sedimentary sands, silts and clays.

Mitchell 4 lies within a magnetic low within highly magnetic komatiitic and high Mg basalts immediately west of the Poseidon Thrust. This basalt is intruded by dacitic porphyries, with much of the gold mineralisation directly overlying sheared ultramafic / porphyry contacts.

The gold mineralisation occurs within 2-3m of the Tertiary sediments / weathered Archean boundary and is associated with sand, grits and conglomerates. Minor mineralisation occurs a couple of metres from the base of the Tertiary sediments, probably representing another influx of mineralisation transported from the primary source. Morphologies of gold grains suggest Placer gold (nuggets observed up to 1cm) and secondary gold (reduced sands and clays) are present.

There is also local supergene enrichment of the underlying weathered basement.

# (B) Data Used

Drillhole data was extracted from the Datashed database on March 14, 2018. It included holes drilled by Samantha, Resolute, WMC, and Avoca from 1988 over 17 different campaigns, in five drill types (Table 20). The bulk of the drilling is aircore, with some RAB and RC, and three deep stratigraphic diamond holes testing the basement geology.

Table 20: Summary of type, number and metres of drilling at the Mitchell deposit.

	Acı	tual	Percentage			
Drill Hole Type	Drill Holes	Metres	Drill Holes	Metres		
Auger	3	15.7	0.2%	0.0%		
RAB	276	17,257	14%	17%		
Aircore	1,636	69,983	83%	69%		
RC	51	12,370	3%	12%		
Diamond	3	1,818.80	0.2%	2%		
Total	1,969	101,445	100%	100%		

RAB and auger holes were used for interpretation but their assays were excluded from estimation due to the likelihood of smearing.

Fourteen drill holes from the XHGO-2016-116 drill program were excluded from estimation process due to drilling through back fill. The XHGO-2016-116 drill program was designed to determine remaining mineralisation that has been left by Resolute Ltd in the existing Mitchell pit as there was no final mining survey completed. This is made more difficult by the surround pitwalls which have caved in since 1999 when the pit was closed.

QAQC data was available only for more recent drilling. The earlier Samantha and Resolute data did not have associated QAQC data. Metals X/Westgold's program included:

- field duplicates every 75 samples (59 submitted, 22% had outliers);
- coarse reject duplicates;
- regular submission of CRM standards (377 submitted, 6% failed);
- regular submission of blanks, usually coarse sand or unmineralized RC chips (59, 4% outliers);
- regular monitoring and follow-up with the lab when acceptable parameters are exceeded;
- use of independent labs for surface diamond core; and
- onsite laboratory participation in Intertek monthly round robin analysis of blind CRM material.

The bulk densities were broken down by the weathering profile. The bulk density values were taken from the Lake Cowan Project. For the paleochannel the bulk density value was taken from the previous resource model completed by LBC Resources ("LBC"). According to LBC (2006) the paleochannel bulk density was taken from previous bulk density studies based upon the result of 4 diamond drill holes drilled in the Mitchell and Challenger deposits.

Table 21: Density values used in Mitchell model

Material	Bulk Density (g/cm3)	Source
Transported	1.50	Discussion and agreement from Exploration Department
Paleochannel	1.85	Mitchell Resource by LBC Resources (LBC 2006)
Oxide	2.10	From Lake Cowan Project
Transitional	2.40	From Lake Cowan Project

Material	Bulk Density (g/cm3)	Source
Fresh	2.70	From Lake Cowan Project
Waste Dumps /Infill	1.40	Discussion and agreement from Engineering Department

## (A) Modelling Method

Top cuts were applied by lode. Lodes with similar form and grade distributions were treated together. Top cuts were determined by inspection of log histograms and mean variance plots. They ranged from 5 g/t (1120 lode) to 22 g/t (1105 lode). The 1105 lode is the largest continuous lode with 1,809 samples and 10 samples were top-cut which reduced the mean from 1.94 to 1.03 g/t Au.

A block model was created to cover the extent of the group of deposits, with parent cells 10x10x2m and subcells to 2.5x2.5x0.5m reflecting the thin and flat-lying typical mineralised lens shapes.

The block model was coded from wireframes and string files with values for topo, mined pit and fill, density, oxidation, geology, tenement, metallurgical recovery, mineralised domain and mine area name.

**Table 22: Mitchell Resource Block Model Extents** 

Axis	Minimum	Maximum	Extent	Parent size	Number of rows	Minimum subcell
Y	6,480,000	6,485,000	5000	10	500	2.5
X	379,300	380,410	1110	10	111	2.5
Z	150	410	260	2	130	0.5

The block model was depleted with some care as the several pits and natural topo surfaces added up to ten surface models over the extent of the modelled area. The field mined was set to 1 above pits and topo, 0 below. A possible mined surface was created to allow for material believed to have been mined by Resolute, but which no surface model was available. This material was coded as mined=2.

All mineralised cells were estimated by Ordinary Kriging. The search was in three passes with the first based on variogram range and kriging neighbourhood analysis ("KNA") minimum and maximum samples. The second pass took un-estimated cells and used the same radii but half the minimum number of samples, and the third pass used the same number of samples as the second but doubled the search radii.

Kriging output fields for Au estimate, search pass, and other kriging parameters were stored in the model (Table 23).

**Table 23: Southern Paleochannel Block Model Variables** 

Variable	Type	Background	Description
res_au	Float	-99	Gold (cut) OK estimate (g/t)
geo_lith_c	Character	bv	bv=basalt; su=sediments; qt=quartz vein; go=gabbro; ou=mafic intrustive; gu=felsic intrusive; uu=ultramafic; gg=granite; fu=felsic volcanics; id=dolerite; gp=porphyry; ch=chert
eom_mined	Integer	0	mined code; 0=Insitu; 1=Mined; 2=Possible Mined
res_cat_n	Integer	99	0 = depleted; 1 = measured; 2 = indicated; 3 = inferred; 4 = unclassified; 5 = sterilised
res_density	Float	0	Bulk density

Variable	Туре	Background	Description
res_zone_n	Integer	8001	Domain Number
res_tenement	Character	m63/165	Tenement ID
res_recovery	Integer	88	Gold recovery percentage (default = 88%)
res_group	Integer	0	Zonecode Number;
res_au_pass_no	Integer	0	Au estimation pass number
res_area	Character	outside	Mit1=Mitchell 1; Mit2=Mitchell 2; Mit3=Mitchell 3;
			Mit4=Mitchell 4; del=Delta; aph= Aphrodite
res_au_asd	Real	-99	average distance to informing samples for au_cut_ok estimate
res_au_bv	Real	0	Block variance from au_cut_ok estimate
res_au_cbs	Real	0	conditional bias slope from au_cut_ok_estimate
res_au_dns	Real	-99	distance to nearest informing sample for au_cut_ok estimate
res_au_ndh	Integer	0	number of informing drill holes from au_cut_ok estimate
res_au_nos	Integer	0	number of informing samples from au_cut_ok estimate
res_ox_n	Integer	0	1 = cover; 2 = oxide; 3 = transitional; 4 = fresh; 5 = backfill/waste dump; 6 = Paleochannel

The estimated model was validated by:

- volume comparison between wireframes and cell volumes;
- comparison of overall mean grades and declustered mean sample grades;
- section and elevation validation profiles (swathplots) were created;
- comparison with previous resource model; and
- reconciliation of pit shape with reported production.

A comparison was completed between the Resolute claimed mined ore and mined digital surfaces. McEwan 2000 stated that ≥1.0g/t ore was carted to the Chalice mill for processing from the Mitchell pit. The flagged mined (includes possible mined material; mined attribute = 2) area in the current model is within 6% of the tonnes and 1% of the ounces of the claimed mined by Resolute. This suggests the mined area in the model is similar to what was processed and mined by Resolute.

# (B) Mineral Resource Classification

The Mitchell mineral resource was classified as follows:

 A measured mineral resource is that part of the mineral resource for which the quantity, shape, density, and grade are estimated with sufficient confidence to support detailed mine planning and application of economic viability. It is based on sufficient detail of information to confirm geological and grade continuity between data and samples. At Mitchell, no material was classified Measured.

- An indicated mineral resource is that part of the mineral resource for which the quantity, shape, density, and grade are estimated with sufficient confidence to support detailed mine planning. All material within the defined drilled-out portion of Mitchell 1-4 was classified as Indicated.
- An area was classified as inferred mineral resource where the data density was sufficient to imply but too sparse to verify geological and grade continuity. Inferred material is not interpolated or extrapolated past 40m grid spacing in all directions past the last data point.

The Mitchell mineral resource was classified in accordance with the JORC Code 2012. A reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material differences.

### (C) Mineral Resource Statement

CIM Standards defines a mineral resource as:

"A mineral resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

To meet the "reasonable prospects for eventual economic extraction" requirement the resource model was constrained inside an optimised pit shell optimisation using a gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.

The Mitchell mineral resources have been reported at a lower cut-off of 0.50g/t Au by resource category and lode, this is shown in Table 24.

Table 24: Mitchell Resource based on USD\$1600 per oz Au pit optimisation.

	1	Measure	d	Indicated			Measured & Indicated			Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Delta				8	3.19	1	8	3.19	1			
Mitchell 1				132	2.43	10	132	2.43	10	7	1.91	0
Mitchell 2				109	2.41	8	109	2.41	8	11	1.98	1
Mitchell 3				22	3.80	3	22	3.80	3			
Total Mitchell				271	2.55	22	271	2.55	22	18	1.95	1

### Notes:

- Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that 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.
- 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 normallyconsidered 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 throughfurther drilling, or into mineral reserves once economic considerations are applied.
- 4. The gold mineral resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- 5. The Mitchell gold mineral resource was estimated using a 0.5 g/t cut-off grade taking into account variable operational costs associated with the Higginsville open pit operations.
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimized pit shells at AUD\$2,285 (USD\$1,600) per oz.

- Mineral Resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- 10. The Gold Mineral Resource estimate was prepared under the supervision of a "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora).

### Pluto

Pluto is part of the HGO Central group of deposits, and like the Mitchell group is a paleochannel deposit.

Pluto is the southern end of the Challenge-Swordsman channel of the Southern Paleochannels group which also includes the Neptune, Saturn, Jupiter, Mars, Mercury, Venus and Bullseye areas, and is 8 kilometres SSW of the HGO gold processing facility.

# (A) Modelling Method

A block model was created with a 20m x 20m x 2m parent cell to match the drill spacing. The smallest sub-cells for modelling mineralised shapes were 5m x 5m x 0.5m.

Grade estimation was by Ordinary Kriging.

Parameters used were reviewed and deemed appropriate. Search ellipses were aligned parallel to the maximum continuity defined during the variographic analysis. The search dimensions approximated the ranges of the interpreted variograms and the minimum and maximum number of samples was 8, and 18 to 20, respectively.

Second and third pass search were implemented to fill the un-estimated cells / blocks if they were not estimated during the first or second pass searches.

All estimation domain boundaries were treated as hard boundaries.

Validation was carried out by trend plot analysis, Q-Q plots and box and whisker plots comparing composites and model grades.

### (B) Mineral Resource Classification

For Pluto, the resource was classified as all Inferred. Portions of the resource that are on 20m x 20m drill spacing were classified as Inferred due to topographic and collar survey concerns.

An area was classified as Inferred Mineral Resource where the data density was sufficient to imply but too sparse to verify geological and grade continuity. Inferred material is not interpolated or extrapolated past 40m grid spacing in all directions past the last data point.

Portions of the Pluto deposit directly below the pit, where there is poor data density, poor geological confidence or over estimation of high grade were unclassified and excluded from the Mineral Resource.

The Pluto Mineral Resource was classified in accordance with the JORC Code 2012 guidelines. A reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material differences.

# (C) Mineral Resource Statement

CIM Standards defines a mineral resource as:

"A mineral resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

To meet the "reasonable prospects for eventual economic extraction" requirement the resource model was constrained inside an optimised pit shell optimisation using a gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.

The Pluto mineral resource is summarised in Table 25.

Table 25: Pluto Mineral Resource based on USD1600 per ounce Au pit optimisation.

	N	Measure	d	]	Indicated			Measured & Indicated			Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	
Pluto							-		-	36	4.0	5	

#### Notes:

- 1. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that 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.
- 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 resources are estimated using a long term gold price of US\$1,600/oz with a US/A exchange rate of 0.70.
- The Pluto Gold mineral resource was estimated using a 0.5 g/t cut-off grade taking into account variable operational costs associated with the Higginsville open pit operations.
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pitshas been reported within an optimized pit shells at A\$2,285 (US\$1,600).
- 9. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- 10. The gold mineral resource estimate was prepared under the supervision of the "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora).

### Vine

Vine is one of the 'Line of Lode' deposits, 3km south of the Trident underground mine and the Higginsville treatment facility. The deposit was discovered and subsequently open pit mined in two stages from 2011-2012, producing a reconciled total of 183,297t of ore at a grade of 2.2g/t for 12,921 oz. Since the cessation of mining, the open pit has been used as a tailings storage facility.

## (A) Deposit Type

The Vine deposit consists of a series of N-S trending, steeply dipping quartz veins, hosted predominantly by the Vine gabbro. The main veins are evenly spaced apart from east to west by approximately 100m. The 550 and 650 veins are the dominant mineralized veins, and each main lode is named after the approximate MGA94 easting it is located on.

The deposit has shown very considerable depth extent in the 750 area series, made up of numerous relatively narrow steeply dipping quartz vein structures and sub-horizontal structures at modest grade, so presents challenges for developing an underground resource.

## (B) Modelling and Estimation

Westgold earlier reported based on the 2012 model in Vulcan, but this model had no written report except a model description summary table.

The model created in 2016 was therefore validated and accepted because it was better documented and very similar for the area classified as a Mineral Resource.

Topography, dumps and pits, regolith, base of complete oxidation, and top of fresh rock were modelled as DTM surfaces. Modelled geology included rocktypes gabbro, quartz vein, ultramafic and fill. The open pit model was updated to show the surveyed level of tailings fill before running the optimisation for limit of the Mineral Resource.

Modelling included 147 mineralised lenses as wireframes within 7 zones, some subvertical and some shallowly dipping.

Wireframes were modelled with parent cell size 10m x 10m x 2.5m, subcelled to 1.25m x 1.25m x 1.25m for detail in the mineralised lenses.

Grades were estimated using Ordinary Kriging with search radii based on variograms with a two- structure spherical variogram model.

Discretization points for estimating parent cells were set at 4 x 4 x 1, i.e. a 2.5m grid in each axis.

Estimation was run in four passes; the first two passes at search radii 85m-75m-10m, first with minimum samples 10 and maximum 30, second run with minimum 5 samples and maximum 30. The third pass then doubled the radii, and the fourth finally reduced the minimum samples to 2.

## (C) Model Validation

A flitch comparison of the new block model with reconciled Au ounces from the mined pit showed the estimation to be somewhat conservative. From 237.5 to 270 mRL, the ounces were about 25% understated in the model compared with production.

A flitch comparison of Reconciled, grade control and Reserve ounces and grade from the Vine pit showed close correlation of the estimates with the grade control and with actual production, with stronger variation at the deepest flitches 237-245mRL where grades were highest from supergene effects.

An optimised pit shape based on USD1600/oz Au was generated to limit the Mineral Resource Estimate to RPEEE.

### (D) Mineral Resource Classification

The Vine mineral resource was classified as follows:

- A measured mineral resource is that part of the mineral resource for which the quantity, shape, density, and grade are estimated with sufficient confidence to support detailed mine planning and application of economic viability. It is based on sufficient detail of information to confirm geological and grade continuity between data and samples. At Vine, in general material drilled on 10 x10m drill spacing was classified measured.
- An indicated mineral resource is that part of the mineral resource for which the quantity, shape, density, and grade are estimated with sufficient confidence to support detailed mine planning. Drill spacing of 20m x 20m or better was classified indicated.
- An area was classified as inferred mineral resource where the data density was sufficient to imply but too sparse to verify geological and grade continuity. Where drill spacing was 40m x 40m the mineralisation was classified inferred.
- The Vine mineral resource was classified in accordance with the JORC Code 2012 guidelines. A
  reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material
  differences.

## (E) Mineral Resource Statement

### CIM Standards defines a mineral resource as:

"A mineral resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

To meet the "reasonable prospects for eventual economic extraction" requirement the resource model was constrained inside an optimised pit shell optimisation using a gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.

The current Vine mineral resource is shown in Table 26.

Table 26: Vine Mineral Resource.

	Measured			Indicated			Measured & Indicated			Inferred		
Area	Kt	g/t	Koz	Kt g/t Koz		Kt	g/t	Koz	Kt	g/t	Koz	
Vine	184	1.28	8	157	1.70	9	341	1.30	16	32	1.12	1

#### Notes:

- Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that allor 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- 5. The Trident Gold mineral resource was estimated using a 1.3g/t cut-off grade taking into account variable operational costs associated with the Higginsville underground operations.
- 6. Classification is according to JORC Code and CIM Stanrads classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimized pit shells at AUD\$2,285 (USD\$1,600) per oz.
- Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- The Vine Gold mineral resource estimates were prepared under the supervision of the "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora).

# Higginsville Greater

The Higginsville Greater area includes those deposits outside a 10km radius from the HGO goldprocessing facility. Mineral Resources comprise the Mt Henry Project (Mount Henry, Selene, Abbotshall and North Scotia), Lake Cowan (Atreides, Josephine, Louis, Napoleon, Rose), Musket, Baloo and Paleochannels (Nanook, Wills).

Mineral resources as at September 30, 2020 belonging to Higginsville Greater broken down by deposits is summarised in Table 27.

Table 27: Karora Higginsville Greater Gold Mineral Resources as at September 30, 2020

	M	easured		]	Indicated		Measur	ed & Inc	dicated	Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Underground												
Chalice	406	3.2	42	1120	2.6	94	1526	2.8	135	655	2.6	56
Total underground	406	3.2	42	1120	2.6	94	1526	2.8	135	655	2.6	56
Open pit												
Mt Henry Group	11188	1.2	427	9301	1.2	353	20489	1.2	779	1716	1.3	72
Lake Cowan	269	2.0	18	1130	1.6	57	1400	1.7	75	350	1.4	16
Baloo	279	1.7	16	107	1.4	5	386	1.6	20	0	0.8	0
Paleochannels	0	0.0	0	137	2.4	11	137	2.4	11	305	1.7	16
Musket	91	2.3	7	298	2.3	22	389	2.3	28	99	1.6	5
Total open pit	11828	1.2	467	10974	1.3	446	22802	1.2	913	2471	1.4	109
Surface												
Stockpiles	175	0.8	5	980	0.7	23	1155	0.7	27	0	0.0	0
Total	12,409	1.3	513	13,074	1.3	563	25,483	1.3	1,076	3,126	1.6	165

#### Notes:

- Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that allor 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 resources are estimated using a long term gold price of USD\$1,600/oz with a US/A exchange rate of 0.70.
- 5. Gold mineral resources were estimated using variable cut-off grades taking into account variable operational costs as follows: Chalice Underground 1.3g/t; Higginsville Open Pits (excluding Mt Henry Project) 0.5g/t; and Mt Henry Project 0.4g/t.
- 6. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimised pit shells at AUD\$2,285 (USD\$1,600) per oz and, for underground resources, areas considered sterilised by historical mining are removed from the mineral resource estimation.
- 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
- 8. Mineral resource estimates for Higginsville Greater (excluding Mt Henry Project) were prepared under the supervision of the "qualified person" Mr. Stephen. Devlin (Group Geologist, Karora).
- 9. The Mt Henry Project mineral resources were compiled by the "qualified person" Mr I. Glacken (Optiro).

# Chalice

The Chalice gold deposit, which forms part of HGO Greater, was completed by the previous owner Metals-X Limited in November 2014 (Corin, Stokes, & Sieradzki, 2014 (November)). Chalice is divided into 6 main resource areas with a total of 75 different wireframed lodes/sub-lodes with differentiation based on the dominant style of mineralisation and the relative spatial distribution of each. The mineralised envelopes were intended to be modelled using nominal gold grade of 0.8 g/t Au envelope.

## (A) Data Conditioning

Analysis of raw sample lengths contained within mineralised wireframes determined that 79.5% of the samples taken at 1m intervals. 14.2 % are taken less than 1m and 6.3 % are taken at greater than 1m intervals within the defined mineralisation wireframes. A composite length of 1m was utilised for Chalice.

# (B) Variography

Directional variograms were modelled with a normal scores transformation of the data performed converting skewed grade distributions to a standard normal distribution, thereby limiting the effect of extreme grades. The normal scores variogram models were back-transformed for use in the estimation. Where appropriate, domains of similar orientation, geology and statistics were grouped to bulk out small populations for analysis.

Moderate to high nuggets were determined for most lodes/domains and structure ranges up to approximately 50m.

Table 28: Variogram Model Parameters for the Chalice estimation.

		Doi	mains			Struc	ture 1	Struc	ture 2	Struc	cture 3		
Orebody	Lode	Used for Analysis	Analysis Applied to	Directions	C <sub>0</sub>	Cı	Aı	C <sub>2</sub>	A <sub>2</sub>	C <sub>3</sub>	A <sub>3</sub>	Rota	ation
				Dir1			30		40			X	102
Atlas	Atlas	101	102 103	Dir 2	0.49	0.31	6	0.2	31			Y	54
				Dir 3			27		28			Z	166
			202 203	Dir1			36		41			X	166
	Olympus Steep	201	204 205 206 207	Dir 2	0.59	0.3	6	0.11	25			Y	18
			208 209	Dir 3			13		19			Z	116
				Dir1			20		29			X	18
	Olympus Steep	210	229	Dir 2	0.47	0.44	6	0.88	18			Y	40
	Steep			Dir 3			22		24			Z	-123
			223 223	Dir1			19		25			X	133
	Olympus Shallow	221	224 226	Dir 2	0.25	0.57	17	0.18	18			Y	28
			227 228	Dir 3			11		13			Z	131
Olympus			241 242	Dir 1			36		45			X	50
	Olympus	225	243 244 245 248	Dir 2	0.5	0.2	62	0.3	70			Y	35
	Shallow		249 251 253	Dir 3			1		6			Z	-150
				Dir 1			41		49			X	3
	Olympus Lower FW	247		Dir 2	0.48	0.11	21	0.42	40			Y	4
	201141111			Dir 3			16		23			Z	-120
				Dir 1			2		15			X	152
	Olympus Lower FW	250	246 252	Dir 2	0.51	0.3	2	0.19	13			Y	12
				Dir 3			1		8			Z	158
			401 402	Dir 1			11		54			X	73
Pit	Chalice Pit	403	404 405 406 407	Dir 2	0.51	0.36	15	0.13	34			Y	65
			408 409 410 411	Dir 3			14		24			Z	-169
			302 303	Dir 1			4		35			X	106
Grampians	Grampians	301	305 306 307 308	Dir 2	0.1	0.41	10	0.49	18			Y	43
Similpinis	Siumpiuns	301	309 310 311	Dir 3	0.1	0.11	3	0.15	6			X	165
			601 602	Dir 1			28		40			X	176
Kronos	Kronos	603	604 605 606 607	Dir 2	0.41	0.28	20	0.31	38			Y	3
			608 609	Dir 3			2		5			Z	140

# (C) Grade Estimation

Grade estimation utilised OK or Inverse Distance with power of two where sample counts were low. The estimate was resolved into a block model where parent cells had been sub-celled at the domain boundaries for accurate domain volume representation.

A three-pass strategy was used, with the first pass ensured that each parent cell can 'see' at least two cross-sections in distance either side of the cell being estimated. The major search distance used for the first pass was typically 30 m which equates to generally 1.5 drill scape (20 m). A minimum of 8 and a maximum of 30 composites was typically used – although for some domains the minimum was reduced as low as 2 or 3. The second pass was 60 m using a larger minimum number of samples (minimum of 10 and a maximum of 30). For the third pass, the search distances were expanded to 120 m to ensure that as many of the remaining cells as possible were estimated.

## (D) Model Validation

Visual and statistical validation of the grade estimates was completed. This process included:

- review of the block estimate and the composite data in cross section, long section and plan views;
- comparison of composite grades and block model grades broken down into Northing and Elevation zones; and
- comparison of the mean grade of the contributing composites versus the mean grade of the estimate.

Swath plots were generated in order to compare the average grades assigned to blocks against the input composite grades.

# (E) Mineral Resource Reporting

Resource classification was completed for each domain or part thereof, with consideration for the confidence in the tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data.

The Chalice mineral resource was classified in accordance with the JORC Code. A reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material differences.

Previous mining by both open pit and underground methods have been coded into the resource block model and reporting of resources was depleted accordingly.

The "reasonable prospects for eventual economic extraction" requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade that takes into account extraction scenarios and processing recoveries. At Chalice, areas considered sterilised by historical mining activities were removed from the mineral resource estimation.

The reported mineral resources were checked by re-reporting the block models using the criteria specified in the reports.

Table 29: Chalice Mineral Resource using 1.3g/t g/t Au cut-off

	I	Measured			Indicated			Measured & Indicated			Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	
Underground													
Chalice	406	3.2	42	1120	2.6	94	1526	2.8	135	655	2.6	56	
Total underground	406	3.2	42	1120	2.6	94	1526	2.8	135	655	2.6	56	

### **Notes:**

- 1. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that allor 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- 5. The Chalice gold mineral resource was estimated using a 1.3 g/t cut-off grade taking into account variable operational costs associated with an underground operation at HGO.
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" areas considered sterilized by historical mining are 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 due to rounding.
- Gold mineral resource estimates were prepared under the supervision of the "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora)

### Baloo

Baloo is part of the HGO Greater grouping of deposits and lies about 15km east southeast of the HGO processing facility and office. It is a recent mine, located on Lake Cowan, with some challenges from groundwater ingress and pumping. The revision of the model described here is intended to reconcile the Resource geology interpretation with the great volume of grade control drilling done to date.

### (A) Data Conditioning

The coded drill hole database was composited to composites within each of the domains. All RC sampling was undertaken at a 1m sample interval. This, along with consideration of the typical dimensions and attitudes of the mineralised structures and veins combined to deem a 1m composite length appropriate. Samples were composited with parameters set such that, after compositing, there were no residuals (intervals < 1m) for any of the domains.

Bulk density has been estimated from density measurements carried out on PQ3 core samples using the Archimedes method (immersion) of dry weight versus weight in water using clingwrap

to waterproof the core. The caliper method was also used in saprolitic oxide clay and showed good correlation with the immersion method. In total 86 oxide samples, 77 transition zone samples and 282 primary zone samples were collected from mineralized zones. The bulk density values were assigned as an average value to the alluvial cover plus the three weathering domains, oxide, transition and fresh:

Table 30: Densities applied to the Baloo model

Material	Bulk Density (g/cm³)
Alluvial	1.40
Oxide	1.90
Transitional	2.40
Fresh gabbro	2.89

Basic statistics for the 1m Au composites for each of the mineralised domains was determined. Outlier investigations were also completed based on both distribution statistics (histograms, probability plots etc.), relative clustering of higher-grade data in spacing and investigations of metal at risk.

Table 31: Statistics and Top Cuts applied to Baloo domains (Au ppm)

		No.					
Domain	Comps	Max.	Cut	Uncut Mean	Cut Mean	No. Data Cut	% Metal Reduction
1001	2310	72.2	45	2.29	2.25	8	1.8%
1002	618	27.4	20	0.96	0.94	1	1.3%
1003	445	28	15	1.00	0.95	2	4.7%
1004	168	6.403	-	0.95	-	-	-
1005	86	10.414	-	0.75	-	-	-
1006	35	10.631	-	1.61	-	-	-
2001	10980	87.3	50	1.60	1.59	6	0.7%
2002	4559	262	50	1.72	1.65	4	3.6%
2003	840	87.5	25	1.15	1.05	3	9.2%
3001	370	94.677	20	2.05	1.46	7	28.8%
3002	98	14	-	1.63	-	-	-
5000	100	23.7	15	1.45	1.34	2	7.7%
5001	992	20.5	-	0.94	-	-	-
5002	807	35.7	-	2.13	-	-	-
5003	516	14.1	-	0.82	-	-	-
5004	364	103	20	1.18	0.95	1	19.3%

# (B) Variography

Modelled directional variograms used log transformation of the data converting skewed gradedistributions to a standard normal distribution, thereby limited the effect of extreme grades. The log variogram models were back transformed for use in the estimation.

The variograms were generally poorly formed with the exception of domain 2001, which contains the most samples. The oxide domains were modelled together as one with the results applied to all.

Table 32: Variogram Model Parameters for the Baloo estimation.

			A	.1		A2			vgrot	vgrot	vgrot	
Domain	C0	C1	X	Y	Z	C2	X	Y	Z	bearing	plunge	dip
10011	0.30	0.370	5	2	2	0.33	13	8	5	32.7	-24.4	-32.7
20012	0.339	0.350	10	6	7	0.31	42	28	13	173.5	9.4	69.7
2002	0.377	0.416	7	5	4	0.21	69	51	44	330.0	0.0	-70.0
30013	0.48	0.220	15	4	10	0.30	40	25	26	80.0	10.0	-90.0
50004	0.321	0.350	14	12	4	0.33	57	41	24	300.4	6.4	-7.7

### **Notes:**

- 1. Used for domains 1001 to 1006.
- 2 Used for domains 2001 and 2003
- 3. Used for domains 3001 to 3003.
- 4. Used for all oxide domains including 5000 to 5004.

# (C) Grade Estimation

Grade estimation was completed using OK in GEOVIA Surpac™ software into the mineralised domains. The estimate was resolved into parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation.

A three-pass strategy was used for grade estimation. The maximum number of composites that can be utilised from any drill hole is 4 to ensure localised effects are minimized. The first pass

ensures that each parent cell can 'see' at least two cross-sections distance either side of the cell being estimated. A minimum of 6 and a maximum of 12 composites are used in each estimate. The major search distance used for the first pass was 30 m, the second pass was 60 m, and then expanded large enough in the third pass to ensure that the vast majority of cells are estimated.

### (D) Modal Validation

Extensive visual and statistical validation of the grade estimates was completed. This process included:

- review of the block estimate and the composite data in cross section, long section and plan views;
- comparison of composite grades and block model grades broken down into Northing, Easting and/or RL zones; and
- comparison of the mean grade of the contributing composites versus the mean grade of the estimate.

The validation indicates that the mineral resource model replicates the source input data well in regions of higher density drilling. Swath plots were created and show that for the regions of domains where data density is lower, smoothing is evident, however the estimate is considered appropriate as the trends in the data are adequately reproduced.

### **Mineral Resource Reporting**

The mineral resource has been defined using definitive criteria determined during the validation of the grade estimates, with detailed consideration of the classification guidelines.

The factors considered for the resource classification for this deposit included:

- drill spacing (with grade control infill in places down to 5m by 5m);
- confidence in geological interpretation;
- confidence in mineralised zone interpretation;
- sample and geochemical analysis quality; and
- availability of bulk density data.

Previous mining by open pit methods has been coded into the resource block model and reporting of resources was depleted accordingly.

The Baloo mineral resource was classified in accordance with the JORC Code. A reconciliation of this reporting and the CIM Stanards by the "qualified person" shows no material differences.

To meet the "reasonable prospects for eventual economic extraction" requirement the resource model was constrained inside an optimised pit shell optimisation using a gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.

The Baloo mineral resource is summarised in Table 33.

Table 33: Baloo Mineral Resource 0.5g/t g/t Au cut-off

	Measured			Indicated			Measured & Indicated			Inferred		
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Baloo	279	1.7	16	107	1.4	5	386	1.6	20	0.3	0.8	0.01

#### Notes:

- Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that allor 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- 5. The Baloo gold mineral resource was estimated using a 0.5g/t cut-off grade taking into account variable operational costs associated with the Higginsville Open Pits (excluding Mt Henry Project).
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimized pit shells at A\$2,285 (US\$1,600) per oz.
- Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- Gold mineral resource estimates were prepared under the supervision of the "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora Resources).

### HGO Greater Paleochannels

The Palaeochannel group of deposits of HGO Greater includes three main resource areas, including Nanook and Wills in the HGO Greater grouping of deposits, with differentiation based on the relative spatial distribution of each. The mineralised envelopes were intended to be modelled using mineralisation envelopes with nominal gold cut-offs of 0.3g/t Au (Nanook), and 0.7 g/t Au (Wills).

The Wills Prospect is located about 25km north of the Trident Gold Mine at Higginsville. Nanook is a bit over 20km southeast of the HGO plant.

The palaeochannel models where reported, including any depletion, by the previous owners, as per below:

- Nanook was completed by S2 Resources Limited in 2015 (Wolfe, Polar Bear Gold Project, Nanook Gold Deposit Mineral Resource Estimate for S2R Resources Limited, 2015 (June))
- Wills was completed by Avoca Resources Limited in 2008 (Le Brun (Wills), 2008 (December))

### (A) Data Conditioning

An analysis of the raw sample length statistics was undertaken to determine an appropriate composite interval length. The analysis was undertaken on all samples contained within mineralised wireframes. For all deposits, a 1m composite interval was selected. At Nanook, it is noted RC and Air Core samples were used.

Basic statistics were reviewed, and elevated Coefficient of Variation ("CV") noted for a number of the lodes/domains for all the deposits. Top cuts were reviewed to selected domains and are appropriate, even potentially somewhat

conservative. For example, at Nanook a maximum top- cut of 8ppm was applied, cutting two samples (203ppm and 74.7ppm Au) dropping the CV from 7.91 to 1.3.

For Nanook, no direct bulk density measurements exist to date within the deposit. A bulk density of 1.8gm/cm3 was assigned, determined from similar deposits nearby.

For Wills, density values were apparently derived from Challenge Palaeochannel open pit production records, (although different to those quoted above for Pluto), and assigned by oxidation state, as follows:

- Soil / Alluvial 1.4
- Laterite / Saprolite 1.6
- Oxide 1.8
- Transitional 2.30
- Fresh − 2.89

# (B) Variography

Variography from previous modelling was reviewed, generally only completed on those domains with enough samples to be viable for analysis.

For Nanook, variography produced a moderate nugget (0.25) with long ranges (structure 1 at 60m and max. range of structure 2 up to 400m).

For Wills, variography was attempted on all domains for both un-cut and cut Au. However, it was decided to use the variogram models generated for the 2007 model and to rescale the variogram variances to match the current data distributions. The nugget is high (0.57) with limited range (up to 45m).

## (C) Grade Estimation

For Nanook and Wills, grade estimation was by OK. Parameters used were reviewed and deemed appropriate. Search ellipses were aligned parallel to the maximum continuity defined during the variographic analysis. The search dimensions approximated the ranges of the interpreted variograms and the minimum and maximum number of samples was 8 and 18 to 20, respectively. Second and third pass search were implemented to fill the un-estimated cells / blocks if they were not estimated during the first or second pass searches.

All estimation domain boundaries were treated as hard boundaries.

### (D) Model validation

Estimation results were noted to have routinely been validated against primary input data, previous estimates and mining output. The estimations were validated using the following: a visual interrogation, a comparison of the mean composite grade to the mean block grade for each domain, a comparison of the wireframe volume to the block volume for each domain, Grade trend plots (moving window statistics), comparison to the previous resource estimate.

# (E) Mineral Resource Reporting

Resources were depleted for mining voids and subsequently classified in line with JORC guidelines utilising a combination of various estimation derived parameters and geological / mining knowledge.

For Nanook, in was specified to have been classified on the following basis:

- geological knowledge and interpretation;
- variogram models and the ranges of the first structure in multi-structure models;
- drilling density and orientation; and
- estimation statistics.

Applying these confidence levels of the key criteria and the robustness of the available information, a resource classification of Inferred has been applied to all defined mineralisation. While the geological model is of high confidence, certain key areas require additional work to improve the confidence in the mineralisation modelling and grade estimation and these include:

- bulk density measurements required;
- additional drilling in key high grade areas; and
- higher quality variogram (leads on from previous point).

Wills has been classified as a combination of Indicated and Inferred, with notes to the following points:

- rilling techniques: the bulk of the drilling within the mineralised zones is aircore (312 holes) plus; 2x RC & 1x Diamond;
- drill sample recovery: sample recoveries are not recorded for aircore drillholes;
- sub sampling methods: initial spear sampling of fixed 1m intervals;
- quality of assay data and laboratory test: limited QAQC information is available sampling, but results are satisfactory for this type of drilling for this type of deposit;
- data density and distribution: pierce points generally on 40 m x 40 m spacing with infill at 20 m x 20 m in 'high grade' zone. Drillhole spacing on 20m x 20m grid has been assigned to Indicated. Drillhole spacing on 40 m x 40 m grid has been assigned to inferred; and
- bulk density values: density values derived from Challenge Palaeochannel open pit production records.

The Paleochannel mineral resources were classified in accordance with the JORC Code 2012. A reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material differences.

To meet the "reasonable prospects for eventual economic extraction" requirement the resource model was constrained inside an optimised pit shell optimisation using a gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.

The reported mineral resources were checked by re-reporting the block models using the criteria specified in the reports, with outcomes described below.

The Higginsville Greater Paleochannel mineral resources are summarised in Table 34.

Table 34: Palaeochannels Mineral Resource (Nanook & Wills) 0.5g/t g/t Au cut-off

	Measured			Indicated Measured & Indicate				dicated	Inferred			
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Nanook	-	-	-	-	-	-	-	-	-	206	1.8	12
Wills	-	-	-	137	2.4	11	137	2.4	11	99	1.4	4

#### Notes:

- 1. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that allor 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD:AUD exchange rate of 0.70.
- 5. The Paleochannel gold mineral resources were estimated using a 0.5g/t cut-off grade taking into account variable operational costs associated with the Higginsville Open Pits.
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimized pit shells at A\$2,285 (US\$1,600) per oz.
- 9. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- The gold mineral resource estimates were prepared under the supervision of the "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora).

### Musket

Musket lies about 27km northeast of Norseman and is about 82km by road from the HGO processing facility. Access is via station tracks and fence lines.

## (A) Modelling Method and Grade Estimation

- The block modelling and estimation were carried out in local mine grid.
- The block sizes and minimum and maximum numbers of samples were selected based on Kriging Neighborhood Analysis.
- Parent cell size was 5m x 5m x 2.5m and subcells were a minimum 1.25m x1.25m x 1.25m (Table 35).

Table 35: Musket model extents (in local grid) and cell sizes

Axis	Minimum	Maximum	Extent	Parent size	Number of rows	Minimum subcell
Y	9,690	12,350	2,660	5	532	1.25
X	9,350	10,150	800	5	160	1.25
Z	100	350	250	2.5	100	1.25

Grade estimation was by OK.

- The search ranges were based on the variogram continuity. The first pass use search radii equivalent to of the variogram range with the number of samples and discretion based on the KNA results. A second search pass was subsequently run for the un-estimated cells by halving the minimum number of samples with the search radii equivalent to the variogram range. If the initial two searches failed to estimate any cells, a third pass was conducted using half the minimum number of samples and double the search radii. Finally a fourth search was used which used double the search radii and reduced the minimum number of samples to 2 for any un-estimated cells after the third pass.
- The model was validated by comparison of global statistics and volume weighted grade distributions for model and drillhole data by domain, checking cell volumes against wireframes, and grade trend plots.

## (B) Mineral Resource Classification

The Musket mineral resource was classified as follows:

- A measured mineral resource is that part of the mineral resource for which the quantity, shape, density, and grade are estimated with sufficient confidence to support detailed mine planning and application of economic viability. It is based on sufficient detail of information to confirm geological and grade continuity between data and samples. At Musket the area in the major lenses near the surface, with drill spacing approximately 10m x 10m was classified measured.
- An indicated mineral resource is that part of the mineral resource for which the quantity, shape, density, and grade are estimated with sufficient confidence to support detailed mine planning. All material within the defined drilled-out portion drill spacing approximately 20m x 20m was classified as indicated.
- An area was classified as inferred mineral resource where the data density was sufficient to imply but too sparse to verify geological and grade continuity. Inferred material is not interpolated or extrapolated past 40m grid spacing.
- The Musket mineral resource was classified in accordance with the JORC Code guidelines. A
  reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material
  differences.

## (C) Mineral Resource Statement

CIM Standards defines a mineral resource as:

"A mineral resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

To meet the "reasonable prospects for eventual economic extraction" requirement the resource model was constrained inside an optimised pit shell optimisation using a gold price of USD\$1,600/oz with a USD:AUD exchange rate of 0.70.

The Musket mineral resource is detailed by Area in Table 36.

Table 36: Musket Mineral Resource – 0.5g/t Au cut-off

		Measured	[	Indicated		Measured & Indicated			Inferred			
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Musket Central				6	4.05	1	6	4.05	1	7	1.66	-
Musket Main	83	2.38	6	285	2.22	20	368	2.26	27	84	1.52	4
Musket North	8	1.91	-	7	2.12	-	15	2.01	1	8	2.60	1
Total Musket	91	2.34	7	298	2.26	22	389	2.28	28	99	1.62	5

- Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that 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.
- 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 resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- 5. The Musket gold mineral resource was estimated using a 0.5g/t cut-off grade taking into account variable operational costs associated with the Higginsville open pit operations.
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits has been reported within an optimized pit shells at AUD\$2,285 (USD\$1,600) per oz.
- 9. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- Gold mineral resource estimates were prepared under the supervision of the "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora).

### Lake Cowan

The Lake Cowan deposits includes five main resource areas, including Atreidies, Josephine, Louis, Napoleon and Rose, with differentiation based on the relative spatial distribution of each. The mineralised envelopes were intended to be modelled using nominal gold grade of 0.7 g/t Au envelope.

# (A) Data Conditioning

An analysis of the raw sample length statistics was undertaken to determine an appropriate composite interval length. The analysis was undertaken on all samples contained within mineralised wireframes.

For the Atreides resource, 70% of the samples taken at 1m intervals and therefore composite length of 1m was utilised. Similar analyses were completed for Josephine, Louis, Napoleon and Rose with the majority of drill samples also at 1m - as such, a 1m composite interval was selected.

Basic statistics were reviewed, and elevated CV noted for a number of the lodes/domains for all the deposits. Top cuts were applied to selected domains and are appropriate, even potentially somewhat conservative.

For all Lake Cowan deposits, bulk density values were taken from previous mining work completed on deposits and assigned by oxidation state, as follows:

- Transported (Paleochannel) 1.8 t/m2
- Oxide -2.1 t/m2

- Transitional 2.4 t/m2
- Fresh -2.7 t/m2

# (B) Variography

Traditional variograms were analysed for grade continuity directions. Before calculating the variogram a normal scores transformation was performed on the data, converting the skewed grade distribution to a standard normal distribution, limiting the influence of extreme grades. For use in the estimation the normal score variogram models were back transformed. Where applicable, domains of similar orientation, geology and statistics were grouped for variography. This provided more data for analysis, especially where each individual domain has insufficient samples for derivation of variographic parameters. Variography was only completed on those domains with enough samples to be viable for analysis.

For Atreides, nuggets are generally high (0.41 and 0.69) with limited ranges (up to 27m)

For Josephine, Domain 1 has by far the most composites (1,090 vs. <150 for the remaining domains) thus was applied to all the other domains. The nugget is high (0.56) with limited range (up to 32m).

For Louis, Domain 101 has by far the most composites (6,019 vs. <200 for the remaining domains) thus was applied to all the other domains. The nugget is moderately high (0.44) with limited range (up to 27m).

For Napoleon, variography was completed for Domain 101 102 combined – and on the 200's as a group - and applied to all the other domains. The nuggets are moderate to high (0.28 to 0.50) with limited range (up to 20m).

For Rose, valid variographic analysis could only be determined for domain 9, which contains the largest number of composite samples; 49.5% of the dataset. The model emulated the overall strike and dip of the Rose Main lodes; no internal mineralisation continuity complexities were evident. A shallow plunge of -9 degrees towards the south was modelled.

## (C) Grade Estimation

For Atreides, Josephine, Louis and Napoleon, grade estimation was by OK. For Rose, grade estimation was by generally by Ordinary Kriging with some domains by Inverse Distance Squared.

Search ellipses were aligned parallel to the maximum continuity defined during the variographic analysis. The search dimensions approximated the ranges of the interpreted variograms and the minimum and maximum number of samples was 8 and 18 to 20, respectively. Second and third pass search were implement to fill the un-estimated cells / blocks if they were not estimated during the first or second pass searches.

The extrapolation was control through the interpreted estimation domains which were limited to half the drill hole spacing within section and half the section spacing between sections.

All estimation domain boundaries were treated as hard boundaries.

### (D) Mineral Resource Reporting

Resources were depleted for mining voids and resources categorised utilising a combination of various estimation derived parameters and geological / mining knowledge.

The Lake Cowan mineral resources were classified in accordance with the JORC Code. A reconciliation of this reporting and the CIM Standards by the "qualified person" shows no material differences.

To meet the "reasonable prospects for eventual economic extraction" requirement the resource model was constrained inside an optimised pit shell optimisation using a gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.

The Lake Cowan mineral resources are summarised below in Table 37.

Table 37: Lake Cowan deposits Mineral Resource using 0.5g/t g/t Au cut-off.

	]	Measure	i	Indicated		Measu	red & In	dicated	Inferred			
Area	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Atriedies	32	1.6	2	253	1.7	14	284	1.7	15	11	1.3	0
Josephine	25	1.6	1	122	1.6	6	147	1.6	8	10	2.0	1
Louis	207	2.2	14	624	1.5	30	832	1.7	45	88	1.3	4
Napoleon	6	1.6	0	131	1.6	7	137	1.6	7	85	1.7	5
Rose										157	1.2	6
Lake Cowan	269	2.0	18	1130	1.6	57	1400	1.7	75	350	1.4	16

#### 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.
- 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 speculativegeologically 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 andindicated categories through further drilling, or into mineral reserves once economic considerations are applied.
- 4. The gold mineral resources are estimated using a long term gold price of USD\$1,600/oz with a USD/A exchange rate of 0.70.
- 5. The Lake Cowan gold mineral resource was estimated using a 0.5g/t cut-off grade taking into account variable operational costs associated with the Higginsville Open Pits (excluding Mt Henry Project).
- 6. Classification is according to JORC Code and CIM Standards classification categories.
- 7. The mineral resource is depleted for mining to September 30, 2020.
- 8. To best represent "reasonable prospects of eventual economic extraction" the mineral resource for open pits hasbeen reported within an optimized pit shells at AUD\$2,285 (USD\$1,600) per oz.
- 9. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- 10. Gold mineral resource estimates were prepared under the supervision of the "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora).

### Mount Henry

Mineral Resources have been updated for the Mt Henry project area comprising Abbotshall, Selene, Mt Henry and North Scotia deposits, at the effective date of this Technical Report. IanGlacken, FAusIMM(CP), FAIG, MIMMM, is acting as the "qualified person" for these mineral resources. The resources have been prepared and reported in accordance with the CIM Standards. The resources reflect material which has reasonable prospects of eventual economic extraction via open pit mining.

The Mt Henry area mineral resources are summarised in Table 38.

Table 38: Mt Henry area Mineral Resource summary

	N	Measured		Indicated		Measured & Indicated			Inferred			
Resource area	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz
Abbotshall	-	-	-	-	-	-	-	-	-	170	2.4	10
Mt Henry	1,120	1.5	50	2,550	1.5	130	3,670	1.5	180	400	1.3	20
Selene	10,070	1.1	370	6,520	1.0	210	16,590	1.1	580	1,140	1.1	40
North Scotia	-	-	-	230	2.0	20	230	2.0	20	10	1.8	1

	N	Measured		Indicated		Measured & Indicated			Inferred			
Resource area	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz
Total	11,190	1.2	430	9,300	1.2	350	20,490	1.2	780	1,720	1.3	70

- 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.
- Mineral resources have been reported inside economic pit shells, reflecting RPEEE, which have been generated at a gold price of USD 1,600/oz, using a cut-off gradeof 0.4 g/t gold, apart from Abbotshall (0.5 g/t).
- 3. The mineral resource estimates include inferred mineral resources that are normally considered too speculativegeologically 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 andindicated categories through further drilling, or into mineral reserves once economic considerations are applied. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, andnumbers may not add due to rounding.
- 4. The mineral resources are based on information compiled by Ian Glacken, FAusIMM(CP), FAIG, MIMMM, who isan employee of Optiro.

### (A) Resource Estimation Workflow

A conventional mineral resource estimation workflow was followed for the Mt Henry resource estimates, using ordinary block kriging within geological and mineralisation wireframes. This is summarised in a visual flowsheet in Figure 8.

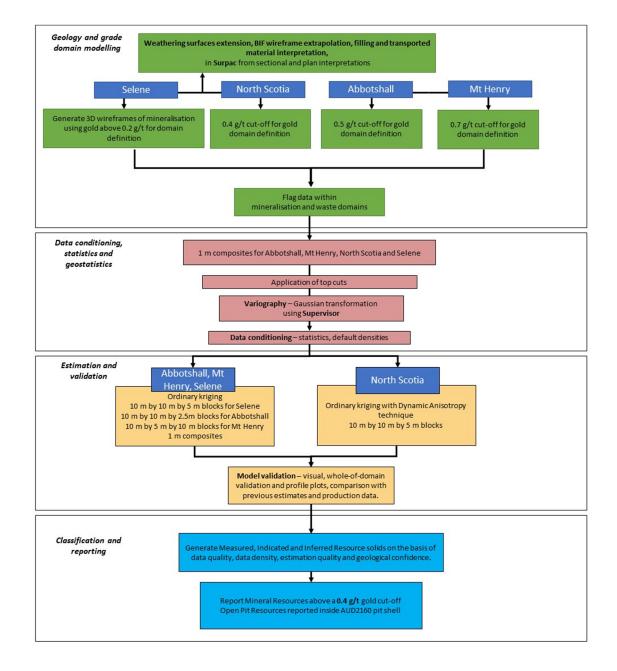


Figure 8: Generalised estimation workflow for the Mt Henry Mineral Resource estimates

The workflow for Selene involves the interpretation of weathering and transported material surfaces, mineralised zones and gold grade outlines within key lithological units. The lithological models from the previous estimate have been used as the basis for the generation of mineralisation domains. Following data conditioning, including compositing and capping, densities were applied on the basis of weathering and lithology. Estimation of gold into 17 of 27 separate domains at Selene is by ordinary block kriging, while 10 minor volumetric domains have gold values assigned using the composite average due to the lack of sampling data.

The workflow for the North Scotia area involves interpreting and extrapolating the base of alluvial material, generation, and extrapolation of banded iron formation (BIF) solids and interpretation of gold mineralisation domains, generally on the basis of grade and lithology. Data conditioning involved the application of caps and

statistical analysis. 23 individual mineralised domains were defined, and gold grades were estimated from composite data using a dynamic anisotropy technique. Classification of mineralisation at Selene and Mt Henry was based upon CIM Standards and considered data (drilling) density, the estimation quality, and geological confidence.

The resource estimates and classification of Abbotshall and Mt Henry was based upon earlier modelling by Westgold Resources, which was reviewed and endorsed by the "Competent Person". These follow the same workflow of definition of weathering surfaces and lithological models, generation of gold mineralisation domains constrained by lithology and cut-off grade, data conditioning and geostatistics followed by ordinary block kriging. The Competent Person considers the classification of Abbotshall and Mt Henry to be appropriate.

In all cases resource pit shells were generated to represent RPEEE using a gold price of USD\$1600/oz, with reporting above a cut-off grade of 0.4 g/t inside these economic pit shells. Note that although the Mt Henry grade zones were defined above a nominal cut-off of 0.7 g/t gold, mineralisation below this cut-off (and above 0.4) was reported for the 2020 estimate. Detailed pit design was not undertaken and material outside the economic shells has not been classified or reported.

The individual estimates at Selene and North Scotia, regenerated in 2020, are described in more detail below.

Selene

### (A) Geological Model and Mineralization Domains

Only diamond ("**DD**"), reverse circulation ("**RC**") and RC/DD holes were used for wireframing. An initial review of the Selene grade distribution based upon all data was undertaken to identify a natural grade cut-off for the onset of mineralisation. The log-probability grade distribution suggested possible cut-offs of 0.2 and 0.4 g/t. A cut-off of 0.2 g/t gold was selected to retain the continuity of mineralisation. Mineralisation at Selene area was modelled in GEOVIA Surpac<sup>TM</sup> mining software using conventional cross-sectional interpretation methods using a nominal 0.2 g/t Au threshold and the geological logging. The sectional interpretations were then compiled into three dimensional wireframes for use in the estimate. A certain amount of waste material was included in the mineralisation domain. To resolve this issue, 22 internal waste sub- domains were created based on the assumption that there should be at least two continuous intervals with less than 0.2 g/t, which could be connected either on the same section or across multiple sections; in other words, the waste has been treated as "mineralisation" during wireframing.

The available top-of-fresh and base of complete oxidation weathering surfaces extended to approximately 6411800 mN and did not extend to the southern margin of the North Scotia model area. The available lithology and oxidation data ('Lith1\_Code', 'Lith\_Plot' and 'LITH\_OXIDATION' fields) were reviewed and it was noted that only a small number of holes had relevant weathering data logged. It was also noted that the existing surfaces stopped approximately 100 m short of the western margin of the Selene and North Scotia model areas.

The existing weathering surfaces were extended horizontally 100m to the west to provide sufficient coverage for the model area. At the margins of the block model this is not considered a significant risk. For the southern extension Optiro digitised the base of complete oxidation and top of fresh contacts from the available drilling and constructed surfaces from the data. The southernmost string from the previous interpretation was extended to the southern limit of the model area and modified slightly on the basis of the closest available drillhole data. Although unlikely to be locally precise, the approach reflects the general knowledge of weathering in the area. The impact has been reflected in the resource classification.

It was noted that the previous interpretations did not truly reflect the weathering over Lake Dundas, with no deepening of weathering across the lake as would be expected. Assessment of weathering over recently transported lake sediments is difficult. Optiro constructed the base surface of transported material by digitising the outlines using the coastline in the georeferenced satellite image, control points aircore hole collars and the transported-bedrock contact from DD, RC and RC/DD lithology logging. The surface was then projected to 150 m higher in RL direction and connected to create a valid solid for coding the block model.

The Selene deposit is hosted by a silicate facies BIF unit within the Nogangyer Formation (BMGS, 2013). Three major mineralisation domains were created reflecting the geology of Selene. Gold mineralisation is predominantly hosted by the silicate facies BIF unit, but is also associated with minor meta-basalt and dolerite units that were mostly emplaced in the BIF prior to mineralisation. The footwall to the BIF is characterised by a sedimentary schistose unit with continuous mineralisation of 2 to 4 m width and the hangingwall by the overlying dolerites of the Woolyeener Formation, where the mineralisation is less continuous. The mineralisation is infrequently cut by flat lying, dilational barren pegmatite dykes and sills. Both BIF and pegmatite wireframes have been adapted from the previous estimate. The spatial relationship between mineralisation wireframes and BIF is very consistent, although the BIFs are not uniformly mineralised.

A different group of mineralised zones exist to the south of Selene area (Selene South), where the drilling density is much lower than the main Selene mineralisation area; the average drill spacing varies from 50 to 150 m in the north-south direction, and from 20 to 40 m in east-west direction. 24 minor lodes have been interpreted as Selene South. Most of the Selene South domains have been assigned to unclassified resources but do provide good exploration targets due to the current sparse drilling space and lack of geology continuity.

No major faults or other structures appear to be present in the Selene or North Scotia area.

### (B) Data Conditioning

Samples for the Mineral Resource estimate come from a combination of RC, DD and RC/DD drillholes. The dominant downhole sample length in the database is 1m. Optiro generated 1m composites for gold, with a minimum composite length of 0.5 m and maximum of 1.5m.

The application of caps was assessed using both graphical and disintegration techniques. The caps were primarily applied to restrict the impact of individual composites rather than to correct the grade distribution (skew). The caps are detailed in Table 39.

Table	39:	Selene	cans	(ton	cuts)	١

		U	Uncut data			Сарр		% Difference			
T . J.	Num	M	М	CV	Num	C (-//)	N	M	CV	M	CV
Lode	samples	Max	Mean	CV	cut	Cap (g/t)	Max	Mean	CV	Mean	CV
Main	8259	55.39	0.98	1.63	1	40	40	0.98	1.57	0.0	-3.7
Hangingwall	682	22.74	0.61	2.35	3	10	10	0.57	1.67	-6.6%	-28.9
Footwall	1257	42.3	0.58	2.35	1	20	20	0.57	1.58	-1.7%	-32.8
Sth2420	40	19.5	0.96	3.19	1	10	10	0.72	2.2	-25.0%	-31.0

Exploratory statistical analysis was carried out on the composited data in order to determine the most appropriate estimation techniques. All composites in the three major domains (main, hangingwall and footwall) show relatively low variability in grades and were therefore estimated using ordinary kriging. Due to the lack of data, variography could not be adequately generated for the domains in the south of the Selene area, and the search parameters from the main zone, with decreased sample numbers, were applied to 14 of the 24 Selene South domains. The other 10 domains, which contain less than 12 samples on average, and which could not be estimated with reasonable search parameters, were assigned with the average composite values.

## (C) Variography

17 domains in the Selene area were estimated using ordinary kriging. An example of the gold grade variogram for the main domain. The downhole variogram (top left) and the directional variograms for the principal direction (a shallow dip to the east), the intermediate direction (a shallow dip to the north) and the minor direction (a steep dip to the south). The nugget variance is moderate, at 43% of the sill. Overall, nuggets vary between 43% and 74% of the sill. Maximum ranges vary between 44 m and 92 m.

### (D) Grade Estimation

Previous lithology models at Selene were in a local grid. All data points were converted to MGA94 grid for this update estimation. The transformation points used are as follows:

- point 1: north 10880.00 to 6418937.30, east 5000.00 to 385922.10; and
- point 2: north 3040.00 to 6411115.60, east 4240.00 to 385015.00

The block size of 10 m (X) by 10 m (Y) by 5 m (Z) was selected based on KNA, with consideration of mining dimensions and selectivity, while the sub-blocking was set to make sure no material volumes were created or lost during the block model creation.

KNA was also used to optimise the estimation parameters, specifically the size of the search ellipsoid and the minimum and maximum number of samples required for estimation. In general, four search ellipsoids were used to estimate gold grades in each domain. The initial search ellipsoid was set to the size of the variogram ranges in each of the principal directions and used between 12 and 30 samples for the major lodes. The second search featured an expanded search ellipsoid (generally 100% larger) with same number of samples (between 12 and 30). The third and fourth searches were conducted with larger search ellipsoid (400% to 600% of first search distance) and decreased number of samples (between 6 and 15).

The direction 1 and 2 search distances were set to the same in the Selene South lodes, resulting in an effective estimation 'disc'. For the lodes with less than 18 but not less than 12 samples, a minimum of 4 and a maximum of 8 samples were used during estimation. The domains with more than 18 samples used a minimum of 8 and a maximum of 24 samples. Approximately 78% of the blocks were estimated by the first pass.

The available density data was reviewed, and the pycnometer density data was excluded. The bulk density values used in this estimate are summarised from both previous estimate (November 2017 by Cube) and the provided density database. The density assignment starts with the field "rock", and then ends up with "lode". In other words, for the blocks have two different densities, the "lode" will overwrite the "rock" value. The Competent Person considers this to reflect the difference between mineralisation and barren from the density perspective.

### (E) Model Validation

The block model was visually validated against the informing composites and the RPEEE pit shell. Validation was carried out in both plan and cross-section. In addition to the visual validation, numerical validation was carried out, both at the whole-of-domain level (comparing average cut and composited sample grades with volume-weighted model grades, Table 40) and via swath or profile plots. The swath plots compare the average volume weighted model grades against the capped and declustered drill hole grades and show the number of samples used in each slice. The swath plots were generated for the easting, northing, elevation and along strike dimensions and show that the broad grade trends in the drill hole data are reproduced in the block models, albeit with some smoothing inherent to the estimation approach.

Table 40: Selene whole-of-domain validation

Domain	Mean composite top- cut (g/t Au)	Declustered composite top-cut (g/t Au)	Block model estimate (g/t Au)	Estimate vs. composite %Diff	Estimate vs. declustered %Diff
Main	0.99	0.85	0.91	-7.94	8.12
Hangingwall	0.58	0.54	0.49	-14.72	-9.64
Footwall	0.57	0.57	0.56	-1.66	-2.18

### North Scotia

### (A) Geological Model and Mineralization Domains

The October 2020 North Scotia interpretations adjusted the pre-existing rock and weathering interpretations supplied by Karora. The existing North Scotia base of alluvial interpretation was extended north and south and adjusted for available drilling, being snapped to the transported-bedrock contact. All of the North Scotia mineralisation is located in the Selene hangingwall basalt unit. The Selene BIF extends into the North Scotia area at depth, but drilling south of Selene has not intersected the BIF south of 6411740 mN. The southernmost existing BIF section was extrapolated south to ensure appropriate coverage for the block model. Material stratigraphically above and below the BIF was then coded as either hangingwall basalt or footwall sediment, respectively. The BIF stratigraphy was significantly deeper than the North Scotia mineralisation.

The North Scotia pegmatite interpretation was used to code the North Scotia area samples and block model. The same extended weathering surfaces as used for the Selene update were used for the North Scotia area.

A graph of the North Scotia raw grade distribution was undertaken to identify a natural grade cut-off grade for the onset of mineralisation. The log-probability grade distribution suggested a cut-off between 0.3 to 0.4, which when reviewed spatially. A cut-off of a nominal 0.4 g/t gold was selected to define the onset of mineralisation. However, a significant amount of below 0.4 g/t material has been included, both as low grade internal to the mineralisation, as well as to derive up and down dip continuity in particular.

In preparing the interpretations, it was very difficult to reliably identify, in 3 dimensions, a steep, north-south strike continuity at North Scotia. Several attempts were trialled using the north-south orientation, but none were compelling. It was noted that there are numerous RC holes that had two or less downhole survey measurements, which exacerbate the relative geometric changes observed at North Scotia and result in inconsistencies in the interpretations, which is common in mixed datasets.

The option of using a categorical indicator approach was trialled, but also failed to deliver any along strike continuity. However, there was some evidence of a more oblique orientation which prompted further reviews of the data.

The data was reviewed again spatially, and an orientation of between of 335° and 350° provided evidence of greater along-strike continuity, with dips that ranged from steep to less than 45°. This orientation was tested, refined and gradually a series of anastomosing interpretations was built up which had a greater 3-dimensional continuity than previously observed. After completion of the interpretation of the continuous mineralised lodes, it was noted that there were numerous higher-grade intersections that could not be linked up in 3 dimensions, especially along strike. To provide some information for future exploration planning, 3 dimensional polygons that reflected the local geometry were constructed and extended half a section along strike. These isolated lodes have been termed 'polygon lodes'.

## (B) Data Conditioning

The interpreted solids were intersected with the available valid drilling at North Scotia and the intersections written to an MS Access table. The intersections were then used to create the composite files with a composite length of 1.0 m and a minimum composite value of 50%.

The composite length is 1.0 m with a minimum composite value of 50%. The caps were then reviewed for the individual continuous lodes and cap values selected primarily using the disintegration technique. Due to the lack of sample numbers, a global cap was applied to all polygonal lodes. Caps for the waste domain were also reviewed and a cap value selected primarily to restrict the variability and reduce the skew of the distribution.

## (C) Variography

Due to the relatively small number of available samples, variography was prepared for the consolidated continuous lodes only. This was undertaken by consecutively translating each individual continuous lode by 100 m in easting.

Normal-score variography was then prepared, using spherical models exclusively, and applying a normal-score backtransform to real world variances. The applied variogram model is presented in Table 41.

Table 41: North Scotia variogram model derived from continuous lodes

Variogram			Nugget	Structure 1		S	tructure 2
type	Direction	Rotations	(C0)	<b>C</b> 1	A1 m (ratio)	C2	A2 m (ratio)
D 1	-20°/174°	173.6164			5.3		51.8
Back transformed	68°/144°	-19.6835	0.85	0.083	(1.387)	0.068	(3.602)
transformed	10°/260°	-79.3724			(1.082)		(10.157)

The implication of a flat plunge to the south is similar to the overall mineralised geometry. The nugget structure was based on the downhole variogram, is extremely high but is not unexpected for Norseman style mineralisation. The implication is that there is limited confidence in any single sample and attempts to try and selectively mine the deposit at an elevated grade cut-off is considered a high-risk proposition.

## (D) Grade Estimation

The North Scotia model was constructed as a subset of the Selene block model and used the Selene block model origin and minimum sub-block sizes.

Table 42: North Scotia – block model versus solid volume comparison

Туре	Lode ranges	Solid volume	Block model volume	Volume difference	% difference
Continuous	NSC-1 to NSC-23	224,550	224,775	225	0.10%
Polygonal	NSC-101 to NSC-112	11,565	11,585	20	0.17%

As a function of the relatively low cap values, the low skew and the moderate CVs, grade estimation was by ordinary kriging, using the capped composite data.

Due to the variable geometry of the continuous lodes, a dynamic anisotropy method with a horizontal plunge was applied to the search and variogram. Dynamic anisotropy uses a local dip and dip direction to align the search ellipsoid with the orebody dip and strike for each block to be estimated.

For the continuous lodes, a wireframe centreline was created from the block model, which was then used to assign the dip and dip direction. For the polygonal lodes, the dip and dip directions were measured from the respective solids. To simplify the estimation process, dynamic anisotropy was also applied to the waste using the naive average dip and dip direction of the continuous lodes.

Because of the limited number of samples in each domain, equal distances were used for direction 1 and 2 of the search, resulting in an effective estimation 'disc'. A primary search of 25 m was trialled, but again, there were too few composites in each lode to reliably estimate a grade for a domain with such a high nugget.

As a function of the variable number of informing samples in each lode and hole spacing, a four-pass expanding search scheme was used for estimation. Any cells not receiving an estimate after the last estimation pass, is assigned the nearest block grade of that lode. Overall, more than 96% blocks of the continuous lodes were estimated during the first pass.

Table 43: North Scotia – dynamic anisotropy direction summary

Lada	T a.d.a		Dip Dire	ections		Dip	
Lode	Lode	Min.	Max	Average	Min.	Max	Average
	NSC-1	242	259	250	-69	-46	-57
	NSC-2	230	275	255	-74	-45	-60
	NSC-3	234	274	254	-71	-90	-53
	NSC-4	226	314	261	-70	-45	-55
	NSC-5	241	309	265	-74	-41	-55
	NSC-6	238	304	257	-67	-38	-47
	NSC-7	215	283	255	-70	-36	-50
	NSC-8	224	309	263	-71	-90	-52
	NSC-9	220	303	261	-68	-46	-62
	NSC-10	262	281	270	-69	-57	-65
	NSC-11	224	313	267	-73	-43	-60
Continuous	NSC-12	243	311	278	-68	-38	-55
Continuous	NSC-13	229	309	279	-73	-39	-59
	NSC-14	256	298	269	-54	-45	-51
	NSC-15	246	280	260	-52	-38	-46
	NSC-16	257	279	271	-60	-45	-54
	NSC-17	270	300	282	-70	-59	-64
	NSC-18	270	270	270	-42	-42	-42
	NSC-19	259	263	261	-72	-64	-68
	NSC-20	241	260	252	-74	-58	-68
	NSC-21	218	330	265	-73	-90	-46
	NSC-22	260	300	289	-64	-56	-59
	NSC-23	234	302	269	-73	-90	-62
	Average*	231	303	265	-71	-57	-55
	NSC-101	249	249	249	-74	-74	-74
	NSC-102	250	250	250	-68	-68	-68
	NSC-103	273	273	273	-88	-88	-88
	NSC-104	260	260	260	-32	-32	-32
	NSC-105	284	284	284	-60	-60	-60
	NSC-106	262	262	262	-64	-64	-64
Polygonal	NSC-107	257	257	257	-56	-56	-56
	NSC-108	262	262	262	-62	-62	-62
	NSC-109	260	260	260	-61	-61	-61
	NSC-110	258	258	258	-54	-54	-54
	NSC-111	252	252	252	-72	-72	-72
	NSC-112	240	240	240	-44	-44	-44
Average*		258	258	258	-65	-65	-65
Was	ite		264			-56	

<sup>\*</sup> average values are volume weighted

**Table 44: North Scotia – estimation parameter summary** 

	Estimation pass							
	1	4						
Min - max samples	8 - 36	8 - 36	4 - 18	1 - 18				
Search ranges 1-2-3	50 - 50 - 10	75 - 75 - 15	100 - 100 - 20	125 - 125 - 25				

The mineralisation at North Scotia is described as quartz veining withing the basalt and as such, Optiro elected to assign the densities as in Table 45.

Table 45: North Scotia – assignment of dry bulk density values

Rock	Weathering	Density (t/m³)
Transported	N/A	1.5
	Cox	2.1
HW Mb (incl mineralisation)	Partial	2.4
	Fresh	3.0
	Cox	2.1
Mineralisation	Partial	2.4
	Fresh	2.7
	Cox	2.6
BIF	Partial	2.9
	Fresh	3.1
	Cox	1.4
FW Sed	Partial	2.1
	Fresh	2.8
	Cox	2.2
Pegmatite	Partial	2.4
	Fresh	2.6

### (A) Model Validation

The North Scotia block model was visually validated against the informing composites and the RPEEE pit designn. Validation was carried out in both plan and cross-section. In addition to the visual validation, numerical validation was carried out, both at the whole-of-domain level (comparing average cut and composited sample grades with volume-weighted model grades, Table 46) and via swath or profile plots. The swath plots compare the average volume weighted model grades against the top cut and declustered drillhole grades, and show the number of samples used in each slice. The swath plots were generated for the easting, northing, elevation and cross strike dimensions and show that the broad grade trends in the drillhole data are reproduced in the block models, albeit with some smoothing inherent to the estimation approach.

Table 46: North Scotia - whole-of-domain validation for selected key zones

Domain	Mean composite top-cut (g/t Au)	Declustered composite top- cut (g/t Au)	Block model estimate (g/t Au)	Estimate vs. composite %Diff	Estimate vs. declustered %Diff
NSC-8	1.84	1.38	1.44	-21.93	4.15
NSC-13	5.29	3.85	3.93	-25.58	2.31
NSC-21	1.14	1.22	1.16	1.89	-5.23
NSC-23	4.39	2.77	2.46	-44.09	-11.46

#### Abbotshall

### (A) Geological Model and Mineralization Domaisn

Abbotshall is a structurally controlled mesothermal gold deposit. The current resource is hosted within a sequence of silicified, brecciated dacitic porphyry. A total of 12 mineralised lodes were constructed. All modelling and estimation work was undertaken by Westgold. A lower cut-off grade of 0.5 g/t Au was selected to define the mineralisation in the current estimate. The resource was previously reported with a cut-off grade of 0.7 g/t without the constraint of an RPEEE shell. The 2020 updated reporting has been conducted within the constraint of an RPEEE shell, and the reporting cut-off grade is 0.4 g/t.

## (B) Data Conditioning

1m composites were generated to reflect the majority downhole sample length in the database. Only domain 1009 (4 samples @16 g/t) and 1015 (1 sample @16 g/t) were subject to a cap. The overall CV is quite low (average 1.3), which does not necessarily require capping. The capping is more for constraining the influence of individual high-grade samples than adjusting reducing overall grade variability (Table 47).

Table 47: Abbotshall top cuts

		Uncut data				Cu		Diff%		
					Top-	No.	Cut			
Lode	Samples	Maximum	Mean	CV	cut	Cut	Mean	Cut CV	Mean	CV
1009	335	27.8	2.542	1.39	16	4	2.453	1.24	0.847	0.218
1015	145	22.5	2.135	1.245	16	1	2.091	1.124	2.091	1.124

## (C) Variography

A total of 13 domains in Abbotshall area were estimated using OK. An example of the gold grade variogram for lode 1009. The downhole variogram and the directional variograms for the principal direction (a shallow dip to the south), the intermediate direction (a steep dip to the north) and the minor direction (a shallow dip to the west). The nugget variances are moderate to low, at 21% of the sill. Overall, nuggets vary between 10% and 36% of the sill. Maximum ranges vary between 35 m and 95 m. The variogram parameters of three example lodes are summarised in Table 14-48.

Table 48: Abbotshall variogram parameters for selected domains

Doma in	No Structures	Nugget	Beari ng	Plunge	Dip	Sill 1	Range	Range 2	Range 3	Sill 2	Range	Range 2	Range 3
1002	2	0.22	0.00	0.00	70.0 0	0.3 7	15.0	5.0	2.0	0.4 1	45.0	10.0	3.0
1009	2	0.21	356.3 8	19.6 8	- 79.4	0.4 4	30.0	20.0	30.0	0.3 5	50.0	33.3	35.0
1014	2	0.21	356.3 8	19.6 8	- 79.4	0.4 4	30.0	20.0	30.0	0.3 5	50.0	33.3	35.0

(D) Grade Estimation

The most recent grade estimation at Abbotshall, reviewed by the "qualified person" and reported herein, was carried out on a local grid. The block model and extents are detailed in Table 49.

In general, three search ellipsoids were used to estimate gold grades in each domain. The initial search ellipsoid was set to the size of the variogram ranges in each of the principal directions and used between 4 and 25 samples for the gold domains. The second search featured an expanded search ellipsoid (generally 100% larger) and a reduced number of samples (2 to 20). A maximum of three or four samples per hole was used. For the 12 domains, over 82% of the blocks were estimated in the first search.

Densities for Abbotshall were assumed and taken from a lithologically similar deposit (Surprise at Meekatharra, another Westgold mine). Bulk density values were assigned to the geological model on the basis of weathering conditions and lithology. Oxide densities varied between 1.8 g/cm3 (mafic) to 1.9 g/cm3 (porphyry); transitional/partially oxidised densities varied between 2.4 g/cm3 (mafic) to 2.5 g/cm3 (porphyry); all densities in the transported/soil were set to 1.4 g/cm3, and 2.65 g/cm3 was used for all densities in the fresh material, irrespective of lithology.

Table 49: Abbotshall – block model origin and extents

Axis	Min	Max	Number of blocks	Parent	Sub-block
Y	15800	16800	100	10	1.25
X	4800	5200	40	10	1.25
Z	300	550	100	2.5	1.25

The block model was visually validated against the drillholes within the RPEEE shell. In addition to the visual validation, numerical validation was carried out, both at the whole-of-domain level (comparing average capped and composited sample grades with volume-weighted model grades) and via swath or profile plots. The swath plots compare, for example 30 m slices in North, the average volume weighted model grades versus the capped and declustered drillhole grades, and also show the number of samples used in each slice. The swath plots were generated for the easting, northing, elevation and cross-strike dimensions and show that the broad grade trends in the drillhole data are reproduced in the block models, albeit with some smoothing inherent to the estimation approach.

Table 50: Abbotshall – selected whole-of-domain validation

Domain	Mean composite capped (g/t Au)	Declustered composite capped (g/t Au)	Block model estimate (g/t Au)		Estimate vs. declustered %Diff
1002	1.67	1.53	1.58	-5.26	3.12
1007	2.36	1.99	2.25	-4.52	12.91
1009	2.45	2.13	2.20	-10.27	3.34

### Mount Henry

### (A) Resource Estimation Details

Mt Henry is the only deposit in this group which has been subject to recent mining, by Westgold. The Mt Henry interpretation and estimate were conducted by Westgold. The previously reported resource numbers were validated and reproduced for this declaration. Most of the following information has been summarised from the Westgold 2019 JORC report, apart from the "model validation" section, which have been independently generated under the guidance of the Qualified Person.

#### (B) Geological Model and Mineralization Domains

The deposit is essentially strata-hosted within a sheared Banded Iron Formation. The shear is generally contiguous along the upper contact of the BIF and an overlying mafic unit. The mineralisation wireframes were modelled above a gold lower grade cut-off of 0.7 g/t. The Mt Henry deposit has mined by conventional open pit mining methods, using excavators and trucks. Mineralisation wireframes were constructed based on minimum thickness of 2 m downhole in order to replicate the smallest possible mining selectivity.

## (C) Data Conditioning

Exploratory statistical analysis was carried out and 90% of the sampling was conducted on less than or equal to 1 m intervals for the total dataset. Approximately, 10% of the intervals are greater than 1 m and a composite length of 1 m was selected for all estimation domains. The coefficients of variation (CV) are generally low and do not necessarily require reduction through capping. Only the domains with high CV values had caps applied in order to restrict the influence of individual samples. For example, the maximum value in domain 1115 is 69.404 g/t and the mean grade is 2.2 g/t with CV of 1.5. With the cap of 25 g/t, mean value decreases to 2.15 g/t with CV of 1.27.

# (D) Variography

Five separate variogram models were created. For the lodes which were poorly informed, variogram and search parameters were borrowed from statistically similar ones.

#### (E) Grade Estimation

The Mt Henry Mineral Resource has been estimated on a local grid, which is rotated +1.079 degrees from MGA GDA 94 zone 51. Ordinary Kriging was applied to all lodes. All estimation boundaries were treated as hard boundaries. The block model extents (local co-ordinates) are shown in Table 51.

Kriging neighbourhood analysis was used to optimise the estimation parameters, specifically the size of the search ellipsoid, the minimum and maximum number of samples required for estimation, the maximum number of drillholes and the maximum samples per drillhole used to estimate a block. In general, three search ellipsoids were used to estimate gold grades in each domain. The initial search ellipsoid was set to the size of the variogram ranges in each of the principal directions and used between 12 and 24 samples for the main gold domains. The second search featured an expanded search ellipsoid (generally 50% larger) and a reduced number of samples (4 to 16).

Bulk density assignment for the Mt Henry resource was generated by grouping the 2501 recorded measurements by rock type to provide an average SG for each of the main lithological rock types. The assay table in the database was tagged with either the measured density or with an average value based on rock type grouped average. The density value was then extracted along with the gold grade in the 1m composite file. The densities were estimated using the variogram models and search parameters for the various domains.

Table 51: Mt Henry – block model extents (local grid) and block size

	Minimum Coordinates	Maximum Coordinates	User block size	Min. block size	Number of blocks
Y	8575	10905	10	2.5	233
X	4575	5225	5	1.25	130
Z	10	400	10	1.25	39

## (F) Model Validation

The block model was visually validated against the drillholes with the pit surface and RPEEE shell consistent bias has been detected. The extrapolation is constrained by the USD 1600 RPEEE shell.

### Classification

Classification of Abbotshall and Mt Henry was conducted by Westgold in accordance with the JORC Code 2012 guidelines. The Selene and North Scotia 2020 updated Mineral Resource was classified by Optiro in accordance with the JORC Code 2012 guidelines. A reconciliation of this reporting and the CIM Definition Standards (2014) by the Qualified Person shows no material differences.

The classification was based upon a number of criteria, including the quality of the input data, the support for density values, the thickness and continuity of the mineralisation, the geological confidence in the mineralisation, the estimation parameters used and the quality of the estimation, as measured by a number of parameters, such as the kriging efficiency and the slope of regression.

The RPEEE shell, defined using a gold price of USD \$1,600/oz (AUD\$2,160/oz) was used for reporting. The pit shell was defined using all resources and Karora provided the cost parameters. Only Measured, Indicated and Inferred resources were used for reporting inside the RPEEE shell, with a cut-off grade of 0.4 g/t gold. The Mineral Resources inside the pit shell and above a cut-off grade of 0.4 g/t gold. Comparison between the latest resources with the

previously published Westgold numbers (Table 52) is included below. It is worth noting that previous resource estimates for open pit material were not constrained by an RPEEE shell and were just reporting above a cut-off grade.

Table 52: Mt Henry deposits - comparison of 2020 and previous resource declarations

	2	2020			P	revious			Diff %	
			Gold			Gold			Gold	
		Tonnes	grade	Gold	Tonnes	grade	Gold	Tonnes	grade	Gold
Area	Classification	(kt)	g/t	koz	(kt)	g/t	koz	(kt)	g/t	koz
Abbotshal l	Inferred	170	2.4	10	400	2.0	30	-57%	16%	-50%
Mt Henry	Measured	1,120	1.5	50	660	1.8	40	69%	-16%	42%
	Indicated	2,550	1.5	130	440	1.8	30	480%	-15%	390
										%
	Measured+Indicate	3,670	1.5	180	1,100	1.8	60	233%	-15%	182
	d									%
	Inferred	400	1.4	20	140	1.7	10	188%	-20%	132
										%
Selene	Measured	10,070	1.2	370						
	Indicated	6,520	1.0	210	13,780	1.2	580	-53%	-17%	-64%
	Measured+Indicate	16,590	1.1	580	13,780	1.3	580	20%	-17%	0%
	d									
	Inferred	1,140	1.1	40	5,840	1.1	230	-80%	5%	-82%
North	Indicated	230	2.1	20	360	3.1	40	-34%	-34%	-57%
Scotia										
	Inferred	10	1.8	0	140	2.0	10	-95%	-8%	-95%
Measured+I	ndicated	20,260	1.2	760	14,880	1.4	650	36%	-13%	18%
Inferred		1,720	1.3	70	6,510	1.3	270	-74%	1%	-73%

### Stockpiles

Stockpiles generated from the mining of historical and active HGO open pits, are estimated as Measured and Indicated Mineral Resources using the cost assumptions for HGO at the time the stockpile material was dumped (Table 53). The estimates use data from grade control protocols during mining with the cut-off based on revenue and costs at the time of production. The grade control evaluation uses a combination of RC sampling to provide gold assays, dig-blocks defined by in-pit mapping of key structures and lithologies and grade interpolation.

Table 53: Stockpile Mineral Resource – HGO – as at September 30, 2020

	Measured				Indicated			Measured & Indicated			Inferred		
Sept-2020 Mineral Resource	k t	g/t Au	Koz	k t	g/t Au	Koz	k t	g/t Au	Koz	k t	g/t Au	Koz	
HGO Central Stockpiles	0	0	0	293	0.8	7	293	0.8	7	0	0	0	
HGO Greater Stockpiles	175	0.8	5	980	0.7	23	1155	0.7	27	0	0	0	
Total	175	0.8	5	1,273	0.7	30	1,448	0.7	35	0	0	0	

#### Notes

- No certainty that 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.
- 2. The measured and indicated mineral resources are inclusive of those mineral resources modified to produce mineral reserves.
- 3. The gold mineral resources are estimated using a long term gold price of USD\$1,600/oz with aUSD/A exchange rate of 0.70.

- 4. Classification is according to JORC Code and CIM Standards classification categories.
- Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of theestimate, and numbers may not add due to rounding.
- Gold Mineral Resource estimates were prepared under the supervision of the "qualified person" S. Devlin, FAusIMM (Group Geologist, Karora).

#### **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 designcriteria, 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. Commodity price movement is discussed in Section 14.

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, with further detail provided in subsequent sections.

- The mineral resource model (block model) described in Section 14 (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 54.

Table 54: 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°;
- 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 55.

**Table 55: 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 56 and cut-offgrade inputs and calculations are shown in Table 56 and Table 57.

**Table 56: Cut-off Grades** 

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

**Table 57: Cut-off Grade Inputs** 

Assumptions	Unit	Value
Revenue Calculation		
Gold Price	\$USD / oz	1,400
Exchange Rate	USD: AUD	0.7
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 58: 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	121.70
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	148.20
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

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.

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

### 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 restart 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, with further detail provided in subsequent sections.

- The mineral resource models (block models) described in Section 14 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"
  - o 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):
  - O 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 any potential geological loss not captured in the block models) 5%
- $\circ$  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 ensure economic 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 59.

Table 59: 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	Tonneskt	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 0.7 USD: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.
  - $(d) \quad Processing \ and \ G\&A \ costs \ of \ AUD\$33.56/t \ (excluding \ capital). \ Calculated \ average \ perore \ tonne \ for \ all \ the \ open \ pits.$
- 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.

#### (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 60: 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 61: 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

Assumptions	Unit	Value
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 62: 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	5	5
G&A Cost	\$AUD/t	3.9	3.9	3.9
Sustaining Capital Costs	\$AUD/t	n/a	n/a	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

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 the CIM 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.

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

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 multi-generational 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 reestablished. 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. Commodity price movement is outlined in Section 19.

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, with further detail provided in subsequent sections.

- The mineral resource model (block model) described in Section 14 (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 63.

Table 63: 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.
- 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°;

- 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 64.

**Table 64: 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 65: Cut-off Grades Summarised** 

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

**Table 66: 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 67: Cut-off Grade Calculation** 

Operating Costs <sup>(1)</sup>	Unit	Operating Costs (incl. Development)	Marginal Stoping Costs (with ore development)	DevelopmentCut- off Grade	Mining Costs Including Capital
Mining Costs	•				
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

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, with further detail provided in subsequent sections.

The mineral resource models (block models) described in section 14 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 reasonable minimum mining unit size of 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 68.

Table 68: Summary of HGO Open Pit Mineral Reserves – September 30, 2020

	Proven		Probable			Total			
Mining Area	Tonnes kt	Grade g/t	Ounceskoz	Tonneskt	Gradeg/t	Ounceskoz	Tonnes kt	Gradeg/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.
- 2. 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 67: 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. 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 68: 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

**Table 69: 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

<sup>1.</sup> 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.

changes in excess of 10% to any of these parameters may justify a rework of the 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 thereforecannot 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 actual data 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 estimate assumed 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). Refer also to Section 4.
- Heritage areas around Selene and North Scotia have been checked and the currentlayout for these areas is outside of the prescribed heritage exclusion zones (refer to Section 4).
- The economics of the Mineral Reserve estimate could be materially affected by a significant change to commodity price. Commodity price movement is discussed in Section 19.
- 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 and in the following sections.
- The following Mineral Resource models as described in Section 14 were provided by Optiro Consultants directly to Orelogy:
  - (a) Mt Henry mt henry 1109 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 resourcemodels. 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™ 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 2Mtpa 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 1.22Mtpa. Mining productivity was based on the first-principle model calculations which assumed 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 and not included in the MHG open pit Mineral Reserve estimate.

The resulting mineral reserve estimate as at September 30, 2020 is shown in Table 70.

Table 70: Summary of Mt Henry Group Project Mineral Reserves – 30 September 2020 1,2,3

	Proven				Probable		Total			
Mining Area	Tonneskt	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	

	Proven				Probable		Total		
Mining Area	Tonneskt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz	Tonnes kt	Grade g/t	Ounces koz
Total	7,415	1.2	297	3,991	1.4	178	11,406	1.3	476

- 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 73 below. The resulting variable cut-offs used to define the Mineral Reserve are detailed in Table 74 below.

Table 73: Mt Henry Group Open Pit Mineral Reserves – Net Gold Price Calculation

Pa	rameter	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%	
	Native Title	%	1.00%	
Net Price		AUD/oz.	\$1,930.00	
		AUD/g	\$62.05	

Table 74: Mt Henry Group Open Pit Mineral Reserves - Cut-off Grade Calculation

Parameter	Material	Unit	Selene	North Scotia	Mt Henry
	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%

Parameter	Material	Unit	Selene	North Scotia	Mt Henry
	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

#### 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 74 above. This is because the optimisation 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 74).

#### **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 75.

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 75: Stockpile Mineral Resource – 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 to 42.84/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 35m3/s to 40m3/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 130m3 to 140m3/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 76: 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
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

Reference	Approval	Issuer	Date Commenced	Expiry Date
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 is up to date with payment to end of June 2020. The next annual payment is due in July 2021.

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 77: 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 78: 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 79: 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 80: 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 81.

**Table 81: 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 82: Operating Costs per Annum** 

Operating Expense Table	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 83.

# Table 83: 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 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 84: 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 general and administrative ("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 85.

**Table 85: 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
Total Mining Operating Cost	\$ A / t ore	112.6
Processing and Surface Haulage	\$ A / t ore	26.5
TOTAL OPERATING COST	\$A / t ore	139.1

**Table 86: 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
Total	\$A M	\$52.4	\$2.5	\$21.6	\$17.6	\$8.0	\$2.7

#### 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 87 below details the Life of Mine operating cost estimate on a total cost and \$/t mined cost basis.

**Table 87: Mt Henry Group – Mine Operating Cost Estimate** 

	Cost Centre	\$/t Mined	\$M		
Contractor	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		
	Ancillary Works	\$0.03	\$1.8		
	Subtotal	\$4.00	\$210.6		
Con	Margin	\$0.20	\$10.5		
	Contractor Cost	\$4.20	\$221.1		
Owner Cost		\$0.42	\$22.1		
TOTAL		\$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 88.

Table 88: 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.

Exploration drilling planned for early 2021 includes:

• Lake Cowan Regional Gravity targets – 18,000 m of lake aircore drilling is planned as a first pass test. Drilling is comprised of reconnaissance drilling of up to 640 by 160 metre spaced lines across regionally

prospective shear zones and closer spaced drilling to test priority targets identified from the recently completed regional gravity desktop study. Drilling is underway with results expected in the first half of 2021.

Dundas Prospect east of Selene testing the Penneshaw Formation below the Selene deposit – 2,000 m of Lake RC is planned.

A 12,000 metres reverse circulation and 1,000 metres diamond drilling comprising infill and extensional drilling designed to support an updated Mineral Resource and Mineral Reserve is nearing completion. The drill results will be used to deliver of a NI 43-101 Mineral Resource suitable for the production of a Mineral Reserve. This reserve will form the basis of an initial mine plan with mining expected to commence at Spargos in the second quarter of 2021.

# APPENDIX "B" AUDIT COMMITTEE CHARTER

#### 1. PURPOSE

The Audit Committee (the "Committee") of Karora Resources Inc. (the "Company") has been established by the Board of Directors of the Company (the "Board") for the purposes of assisting the Board in its oversight and evaluation of:

#### 1.1 External Auditors

The external auditor's qualifications, independence and performance of, and recommending to the Board the appointment of, the Company's external auditor.

# 1.2 Risk Management

Risk management including the Company's major financial risks and financial reporting exposure.

#### 1.3 Financial Statements and Other Financial Information

The financial reporting process and the quality, transparency, integrity, timeliness and accuracy of the Company's financial statements and other financial information provided by the Company to securities regulators, governmental bodies and/or the public.

# 1.4 Internal Controls, Disclosure Controls and Reporting

The Company's internal controls over financial reporting. Reviewing any reports on internal control from the external auditors or third-party review of financial reporting.

# 1.5 Legal and Regulatory Compliance

The Company's compliance with legal and regulatory requirements with respect to financial statements and financial reporting.

#### 1.6 Non-Audit Services

Overseeing the non-audit services provided by the external auditor in accordance with the Company's Non-Audit Services Policy.

## 1.7 Evaluation

Annually evaluating the performance of the Committee in light of the requirements of this Audit Committee Charter (the "Charter").

#### 2. COMPOSITION

#### 2.1 Members

The Committee shall consist of as many members as the Board shall determine, but in any event, not fewer than three (3) members. The Board shall appoint the members of the Committee annually.

## 2.2 Qualifications

2.2.1 Each member of the Committee shall be an independent director of the Company within the meaning of National Instrument 52-110 - *Audit Committees*.

2.2.2 Each member of the Committee shall be financially literate, meaning each member, at the time of his/her appointment, as prescribed by applicable rules and regulations of securities regulatory authorities and/or stock exchanges.

#### 2.3 Chair

Unless a Chair is elected by the full Board, the members of the Committee may designate a Chair by majority vote of the full Committee.

## 2.4 Removal and Replacement

Any member of the Committee may be removed or replaced at any time by the Board and shall cease to be a member of the Committee on ceasing to be an independent director. The Board may fill vacancies on the Committee by election from among the Board. If, and whenever, vacancies shall exist on the Committee, the remaining members may exercise all its powers so long as a quorum remains or a Reduced Quorum (defined below) is present in respect of a specific Committee meeting.

## 3. OPERATIONS

# 3.1 Meetings

The Chair of the Committee, in consultation with the Committee members, shall determine the schedule and frequency of the Committee meetings, provided that the Committee shall meet at least four (4) times per year coinciding with the Company's financial reporting cycle. 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.

# 3.2 Independent Meetings

At each meeting of the Committee, the Committee members shall meet independently, with only members of the Committee, for at least a portion of the meeting. The Committee shall meet separately with the external auditor, at least quarterly. The Committee shall meet separately with management quarterly or as frequently as necessary or desirable. The Committee will keep minutes of its meetings which shall be available for review by the Board.

# 3.3 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 to the same hour on the next business day following the date of such meeting at the same place. If at the adjourned meeting a quorum as hereinbefore specified is not present within one hour of the time appointed for such adjourned meeting, such meeting shall stand adjourned to the same hour on the second business day following the date of such meeting at the same place. If at the second adjourned meeting 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 (a "**Reduced Quorum**").

#### 3.4 Notice

Meetings of the Committee may be called by any member of the Committee, the Executive 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.

# 3.5 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 Corporation

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.

# 3.6 Agenda

The Chair of the Committee, with the assistance of the 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.

#### 3.7 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.

## 3.8 Report to the Board

The Committee shall report regularly, which shall be at least quarterly, to the entire Board. 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.

#### 3.9 Assessment of 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.

#### 4. CHAIR

# 4.1 The Chair should:

- 4.1.1 provide leadership to the Committee and oversee the functioning of the Committee;
- 4.1.2 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 Chair considers advisable;
- 4.1.3 ensure that the Committee meets at least four times per financial year of the Corporation, and otherwise as is considered advisable;
- 4.1.4 in consultation with the Chairman of the Board, the Lead Director, if any, and the members of the Committee, establish dates for holding meetings of the Committee;
- 4.1.5 set the agenda for each meeting of the Committee with input from other members of the Committee, the Chairman of the Board, the Lead Director, if any, and any other appropriate individuals;
- 4.1.6 ensure that Committee materials are available to any director upon request;

- 4.1.7 act as a liaison, and maintain communication, with the Chairman 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;
- 4.1.8 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 Corporation;
- 4.1.9 assist the members of the Committee to understand and comply with the responsibilities contained in this mandate;
- 4.1.10 foster ethical and responsible decision making by the Committee;
- 4.1.11 oversee the structure, composition and membership of, and activities delegated to, the Committee from time to time;
- 4.1.12 ensure appropriate information is requested from the officers of the Corporation and is provided to the Committee to enable it to function effectively and comply with this mandate;
- 4.1.13 ensure that appropriate resources and expertise are available to the Committee;
- 4.1.14 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;
- 4.1.15 facilitate effective communication between the members of the Committee and the officers of the Corporation;
- 4.1.16 attend, or arrange for another member of the Committee to attend, each meeting of the shareholders of the Corporation to respond to any questions from shareholders that may be asked of the Committee; and
- 4.1.17 perform such other duties as may be delegated to the Chair by the Committee or the Board from time to time.

#### 5. RESPONSIBILITIES

## 5.1 Auditor Qualification and Independence

- 5.1.1 The Committee shall be directly responsible for overseeing the work of the external auditor for the purpose of issuing an auditor's report or performing other audit, review or attest services for the Company, including the resolution of disagreements between management and the external auditor regarding financial reporting.
- 5.1.2 The Committee shall review and evaluate the external auditor's independence, experience, qualification and performance and determine whether the external auditor should be appointed or re-appointed and make a recommendation to the Board for the external auditor to be nominated for appointment or re-appointment by the shareholders.
- 5.1.3 The Committee shall pre-approve or approve, if permitted by law, the appointment of the external auditor to provide any audit and audit-related services or non-prohibited non-audit services and, if desired, establish detailed policies and procedures for the pre-approval of audit and audit-related services and non-prohibited non-audit services by the external auditor, including procedures for the delegation of authority to provide such approval to one or more members of the Committee.
- 5.1.4 The Committee shall review the terms of the external auditor's engagement and the appropriateness and reasonableness of the proposed audit fees.
- 5.1.5 The Committee shall obtain and review with the lead audit partner of the external auditor, at least quarterly as the Committee considers appropriate, a report by the external auditor:

- (a) describing the external auditor's internal quality control procedures;
- (b) describing any material issues raised by the most recent internal quality control review, or peer review, of the external auditor, or by any inquiry, review or investigation by governmental, regulatory or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the external auditor, and any steps taken to deal with any issues raised in any such review;
- (c) describing all relationships between the external auditor and the Company in order to assess the external auditor's independence; and
- (d) confirming that the external auditor has complied with applicable laws with respect to the rotation of members of the audit engagement team.
- 5.1.6 The Committee shall review and evaluate the lead audit partner of the external auditor.
- 5.1.7 The Committee shall pre-approve the hiring of any partner, employee or former partner and employee of the external auditor who was a member of the Company's audit team during the preceding two fiscal years. In addition, the Committee shall pre-approve the hiring of any partner, employee or former partner or employee of the external auditor within the preceding two fiscal years for senior positions within the Company, regardless of whether that person was a member of the Company's audit team.

## 5.2 Financial Statements and Related Disclosure

- 5.2.1 The Committee shall meet with the external auditor as frequently as the Committee feels is appropriate to fulfill its responsibilities, which will not be less than quarterly, to discuss any items of concern to the Committee or the external auditor, including:
  - (a) planning and staffing of the audit;
  - (b) any material written communication between the external auditor and management;
  - (c) whether or not the auditor is satisfied with the quality and effectiveness of financial reporting procedures and systems;
  - (d) whether or not the external auditor has received the full co-operation of management;
  - (e) the external auditor's views as to management's competency in preparing the Company's financial statements:
  - (f) the items required to be communicated to the Committee in accordance with the generally accepted auditing standards;
  - (g) all critical accounting policies and practices to be used by the Company;
  - (h) all material alternative treatments of financial information within International Financial Reporting Standards (IFRS) that have been discussed with management, ramifications of the use of these alternative disclosures and treatments and the treatment preferred by the external auditor; and
  - (i) any difficulties encountered in the course of the audit or review work, any restrictions imposed on the scope of activities or access to requested information, any significant disagreements with management and management's response.

- 5.2.2 The Committee shall review and, where appropriate, recommend for approval by the Board, the following:
  - (a) audited annual financial statements;
  - (b) interim financial statements;
  - (c) annual and interim management discussion and analysis of financial condition and results of operation;
  - (d) annual and interim news releases respecting financial condition and results of operation; and
  - (e) all other audited or unaudited financial information contained in public disclosure documents;
- 5.2.3 The Committee shall review the effect of regulatory and accounting initiatives as well as off-balance sheet structures on the Company's financial statements.
- 5.2.4 The Committee shall review the effectiveness of management's policies and practices concerning financial reporting and any proposed changes in major accounting policies.
- 5.2.5 The Committee shall review with management, and any outside professionals as the Committee considers appropriate, important trends and developments in financial reporting practices and requirements and their effect on the Company's financial statements.
- 5.2.6 The Committee shall review with management any related party transactions and ensure such related party transactions are appropriately disclosed.

## 5.3 Internal and Disclosure Controls and Reporting

- 5.3.1 The Committee shall review the adequacy of the internal controls over financial reporting that has been adopted by the Company and any special steps adopted in light of significant deficiencies or material weaknesses.
- 5.3.2 The Committee shall review disclosures made to the Committee by the Company's Executive Chairman and CEO and CFO during their certification process for quarterly and annual securities law filings about any significant deficiencies or material weaknesses in the design or operation of the Company's internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information or disclosure controls, and any fraud involving management or other employees who have a significant role in the Company's internal control over financial reporting or disclosure controls.
- 5.3.3 The Committee shall review and confirm with management that material financial information about the Company that is required to be disclosed under applicable law and stock exchange rules is disclosed, and review the public disclosure of financial information extracted or derived from the Company's financial statements.
- 5.3.4 The Committee shall review and discuss with management the Company's major financial risk exposures and the steps management has taken to monitor and control such exposures.
- 5.3.5 The Committee shall oversee a whistleblower policy that provides an effective mechanism for the provision by employees and other applicable stakeholders of any concerns or other feedback, and for communication of any such concerns or feedback to the Board.

# 5.4 Legal and Regulatory Compliance

5.4.1 The Committee shall, as it determines appropriate, obtain reports from management that the Company is in compliance with applicable legal requirements and shall review with management any correspondence with regulators or governmental agencies and any published reports which raise material issues regarding the Company's financial reporting of which the Committee is made aware.

# 5.4.2 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.
- 5.4.3 The Committee shall review any required disclosure in public documents with respect to the Committee and its functions, including the disclosure required in the Annual Information Form under National Instrument 52-110.

The foregoing list of duties is not exhaustive, and the Committee may, in addition, perform such other functions as may be necessary or appropriate for the performance of its oversight function.

#### 6. **AUTHORITY**

# 6.1 Delegation

The Committee has the power to delegate its authority and duties to a subcommittee or individual members of the Committee, as it deems appropriate.

## 6.2 Advisors

The Committee may retain, and determine the fees of, independent counsel and other advisors, in its sole discretion.

# 6.3 Access to Records and Personnel

In discharging its oversight role, the Committee shall have full access to all Company books, records, facilities and personnel.

# 6.4 Clarification of Audit Committee's Role

The Committee's responsibility is one of oversight. It is the responsibility of the Company's management to prepare financial statements in accordance with applicable law and regulations and of the Company's external auditor to audit or review those financial statements. Therefore, each member of the Committee shall be entitled to rely, to the fullest extent permitted by law, on the integrity of those persons and organizations within and outside the Company from whom he or she receives information, and the accuracy of the financial and other information provided to the Committee by such persons or organizations.