# **MEDALLION METALS**

LIMITED

**ASX ANNOUNCEMENT** 

### 23 October 2023

ASX:MM8

# Prefeasibility Study demonstrates technical and commercial viability of Ravensthorpe Gold Project

92koz per annum AuEq production and pre-tax cash flow of \$85 million per annum over a 9 year mine life

## **PFS Highlights:**

All dollars are Australian Dollars (\$) unless stated otherwise.

Project Life	Production	Net Revenue
9 years	777koz Au, 16kt Cu	\$2,424m
Process plant operation	Metal recovered for sale	After treatment, refining & logistics
Capital	AISC	AIC
\$163m	\$1,577/oz	\$1,912/oz
Pre-production	Net of by-product credits	Net of by-product credits
Free Cashflow	NPV(7)	IRR
\$559m	\$309m	35%pa
Post tax	Post tax	Post tax

- Strong financial returns from low-risk development scenario
- Life of Mine (LOM) average annual production of 85koz Au and 1.8kt Cu (92koz AuEq), pre-tax cashflow of \$85 million per annum
- Further enhancements expected through ongoing resource conversion and schedule optimisation
- Multiple opportunities for Project production rate increase and Project life extension through growth of known Mineral Resources, near mine and regional discovery and tenure consolidation

#### **CAUTIONARY STATEMENT**

The production target and forecast financial information referred to in this announcement comprise Indicated Mineral Resources (approximately 73%) and Inferred Mineral Resources (approximately 27%). There is a lower level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target will be achieved.

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This announcement should be read in conjunction with the statements on pages 6 and 7, which form an integral part of this announcement.

#### Overview

Medallion Metals Limited (ASX:MM8, the Company or Medallion) is pleased to announce the results of a Prefeasibility Study (PFS) completed at its flagship Ravensthorpe Gold Project (RGP), located 550km southeast of Perth in Western Australia (Figure 1). All PFS results are reported from modelling of mining and processing of existing Mineral Resources situated at the Kundip Mining Centre (KMC and the Project).

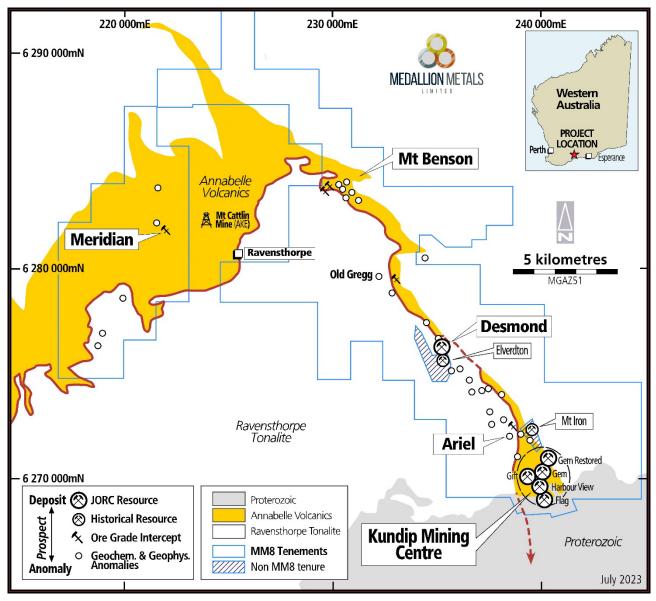


Figure 1: Location plan of the Ravensthorpe Gold Project showing the Kundip Mining Centre to the south.

Managing Director, Paul Bennett, commented:

"The study completion represents a significant milestone for the business and its shareholders as we continue to demonstrate that Ravensthorpe is an asset of scale and significance with enormous potential. After a period focussed on resource growth, the team has now demonstrated that the gold and copper opportunity at Ravensthorpe can be commercialised using industry standard processes and techniques. It is clear confirmation of Medallion's strategy to continue to both grow and de-risk project resources remaining at all times focussed on discovering and proving up economic metal. We expect further growth in the size and confidence of resources as we plan more drilling throughout 2023 and 2024 both at Kundip and across our highly prospective and undertested tenement package. The Company is now well advanced on a trajectory to achieve critical mass to support the development of a long-life, low-cost gold and copper business in Ravensthorpe."

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#### **Key PFS Outcomes & Assumptions**

Kundip Mining Centre – Project Statistics					
Parameter	Units	Base Case	Spot Pricing <sup>6</sup>		
Production					
Mill throughput rate (fresh rock) <sup>1</sup>	ktpa	1,500	1,500		
Life of mine <sup>2</sup>	years	9.2	9.2		
Ore mined and processed	kt	13,945	13,945		
Au grade	g/t	1.81	1.81		
Ag grade	g/t	1.71	1.71		
Cu grade	%	0.22	0.22		
Au contained	koz	813	813		
Ag contained	koz	768	768		
Cu contained	kt	30	30		
Metal recovered for sale					
Au	koz	777	777		
Ag	koz	400	400		
Cu	kt	16	16		
Overall metallurgical recovery	-				
Au	%	95.6	95.6		
Ag	%	52.1	52.1		
Cu <sup>3</sup>	%	54.0	54.0		
Financial					
Net Smelter Return - doré	US\$m	1,272	1,343		
Net Smelter Return - concentrate	US\$m	280	300		
Total	US\$m	1,551	1,644		
NSR	\$m	2,424	2,609		
Operating	\$m	(1,267)	(1,267)		
Royalties	\$m	(73)	(79)		
Capital (sustaining)	\$m	(134)	(134)		
AISC⁴	\$/oz sold	1,57Ź	1,558		
Capital (pre-production)	\$m	(163)	(163)		
Capital (non-sustaining)	\$m	(8)	(8)		
Pre-tax Cashflow	\$m	779	958		
Tax paid	\$m	(220)	(274)		
Post-tax Cashflow	\$m	559	684		
NPV(7)	\$m	309	392		
IRR	%pa	35	42		
Peak negative Cashflow	\$m	(178)	(176)		
Payback	years	<b>`</b> 3.Ó	2.6		
Assumptions					
Au price	US\$/oz	1,875	1,980		
Ag price	US\$/oz	20	23		
Cu price	US\$/t	7,275	7,915		
Exchange rate	A\$:US\$	0.64	0.63		
Discount rate	%pa	7.0	7.0		
Corporate tax rate	%	30	30		

#### Table 1: KMC PFS Key Outcomes & Assumptions

Notes:

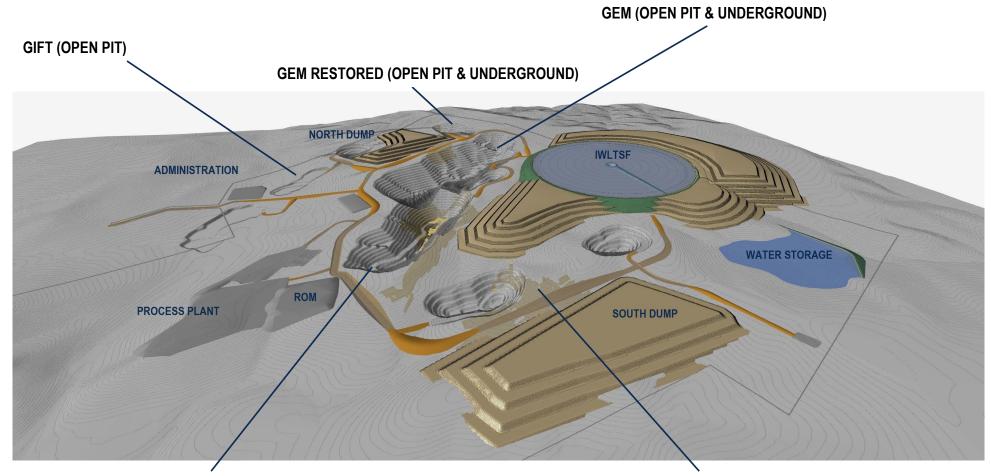
1: Basis 100% fresh ore feed to processing plant.

2: Life of Mine (LOM) is calculated as the period of time the processing plant is in operation.

3: LOM flotation recovery of Cu. No copper is recovered from low copper (< 0.3% Cu) ore that by-passes flotation.

4: All-In Sustaining Costs (AISC) and All-In Costs (AIC) are premised upon the World Gold Council guidance note issued in 2013 (as updated in 2018). AISC is presented net of by-product credits (Cu & Ag) and includes all onsite costs associated with mining, processing and administration, royalties and sustaining capital. AIC includes AISC, pre-production capital, non-sustaining capital and rehabilitation costs. Cu & Ag by-product credits are A\$191 million, representing A\$246/oz reduction in AISC/oz over the LOM.

6. Approximate spot pricing of Au, Ag, Cu and foreign exchange as at the finalisation date of the Study.



HARBOUR VIEW (OPEN PIT & UNDERGROUND)

FLAG (OPEN PIT & UNDERGROUND)

Figure 2: KMC Layout (Isometric looking NE) showing mine workings and surface infrastructure.



#### Next Steps

The completion of the PFS represents a significant de-risking milestone for the Ravensthorpe Gold Project. Study results confirm a technically and commercially robust development opportunity offering returns on investment which are attractive relative to the risks identified through the PFS process. The favourable cost structure both in AISC and AIC terms provides outstanding leverage to the Australian dollar gold price which is currently trading at or near record levels. Coupled with multiple opportunities to enhance Project returns through resource growth and new discovery, RGP is progressing into a unique greenfield gold development asset in a Tier 1 jurisdiction.

Critical work streams to advance KMC toward Final Investment Decision (FID) are as follows:

- 1) Conversion of production inventory derived from Inferred resources to Indicated category in order to maximise metal reporting to Ore Reserves;
- 2) Ongoing testwork including metallurgical, geotechnical and hydrogeological to support Bankable Feasibility Study (BFS) level assessments, and
- 3) Progression of environmental permitting with focus on primary approvals at State and Federal levels.

Mineral Resource conversion at KMC is estimated to require approximately 30-35,000m of new diamond and reverse circulation drilling (infill drill program) over a 12-month period leading to an updated MRE. Medallion expects the MRE would grow both in terms of size and confidence upon completion of the infill drill program. The updated MRE would then form the basis of a BFS which in combination with other factors would inform the Board's assessment of a FID.

Completion of all work streams to FID is dependent upon securing funding on terms acceptable to the Company. Using the PFS as a case to support funding options that are non-dilutive to shareholders, Medallion has initiated a process to identify funding alternatives that may either fully or partially fund the Company's progression to FID. This initiative is expected to extend over a period of approximately six months and the outcome of the process is not certain.

In the near term, Medallion anticipates releasing an updated Ore Reserve Estimate (ORE) underpinned by the findings of the PFS. An Exploration Target will also be released outlining the growth potential of KMC at depth and along strike for the known deposits within KMC. Both these initiatives are expected to be delivered prior to the end of the calendar year.

Medallion will also continue to pursue low capital intensity de-risking and growth activities that are achievable with existing financial resources. This includes advancing permits and progression of some elements of the additional testwork recommended by key consultants. A close spaced drill program will be undertaken over a constrained area at the Gem deposit to optimise grade control drill spacing and assay methodology for planning and budgeting purposes, whilst also providing advance data collection to support a future BFS and to improve confidence for capital providers. Priority extensional targets within KMC will be drill tested. Regional exploration targets will continue to be advanced and permitted.

In addition, the Company will continue to pursue options to realise value of its non-core assets.

This announcement is authorised for release by the Board of Medallion Metals Limited.

-ENDS-

For further information, please visit the Company's website <u>www.medallionmetals.com.au</u> or contact:

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#### EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES

References in this announcement may have been made to certain ASX announcements, including exploration results, Mineral Resources and Ore Reserves. For full details, refer to said announcement on said date. The Company is not aware of any new information or data that materially affects this information. Other than as specified in this announcement and other mentioned announcements, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement(s), and in the case of estimates of Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to apply and have not materially changed other than as it relates to the content of this announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement.

#### INCLUSION OF INFERRED MINERAL RESOURCES

The production schedule and forecast financial information referred to in this announcement is underpinned by Indicated Mineral Resources (approximately 73%) and Inferred Mineral Resources (approximately 27%). The Company draws attention to there being a lower level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production inventory will be achieved. Accordingly, the Company has scheduled production inventory such that Inferred Mineral Resources do not feature as a significant proportion of the first 5 years of the 9 year mine plan. Approximately 15% of the material mined over the first 5 years are represented by Inferred Mineral Resources. The Company is satisfied that the Inferred Mineral Resources included in production inventory are not the determining factors of the viability of the Project.

#### REPORTING OF GOLD EQUIVALENTS

The calculation of AuEq grades that are applied as cut-off criteria for the Mineral Resource Estimation and production inventory are as described on pages 20 and 22 respectively of the Executive Summary appended to this announcement. In respect of the expression of AuEq ounces for production and economic analysis, AuEq for Project by-products (Cu & Ag) has been calculated using the following formula: AuEq ounces = Au recovered ounces + ((Cu recovered tonnes x Cu price assumption) + (Ag recovered ounces x Ag price assumption)) / Au price assumption.

#### COMPETENT PERSONS STATEMENTS

The information in this announcement that relates to Exploration Results is based on, and fairly represents information and supporting documentation prepared by Mr Paul Bennett, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Bennett is an employee and security holder of Medallion Metals Ltd. Mr Bennett 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 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves' (the JORC Code). Mr Bennett consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to production targets, assumptions on Modifying Factors and evaluation of other relevant factors is based on, and fairly represents information and supporting documentation that has been compiled under the supervision of Mr Paul Bennett BEng (Mining), a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Bennett is an employee and security holder of Medallion Metals Ltd. Mr Bennett has reviewed and approved the technical content of this announcement. Mr Bennett 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 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves' (the JORC Code). Mr Bennett consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Mineral Resources underpinning the production target disclosed in this announcement have been prepared by Competent Persons in accordance with the 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves' (JORC Code). For further details regarding the Mineral Resources underpinning the production target refer to the Company's ASX announcements dated 16 January 2023 and 13 February 2023.

#### DISCLAIMER

No representation or warranty, express or implied, is made as to the fairness, accuracy, or completeness of the information, contained in this material or of the views, opinions and conclusions contained in this material. To the maximum extent permitted by law, the Company, and its respective directors, officers, employees, agents and advisers disclaim any liability (including, without limitation any liability arising from fault or negligence) for any loss or damage arising from any use of this material or its contents, including any error or omission there from, or otherwise arising in connection with it.



#### FORWARD LOOKING STATEMENTS

Some statements in this announcement are forward-looking statements. Such statements include, but are not limited to, statements with regard to capacity, future production and grades, projections for sales, sales growth, estimated revenues and reserves, the construction cost of a new project, projected operating costs and capital expenditures, the timing of expenditure, future cash flow, cumulative negative cash flow (including maximum cumulative negative cash flow), the outlook for minerals and metals prices, the outlook for economic recovery and trends in the trading environment and may be (but are not necessarily) identified by the use of phrases such as "will", "would", "could", "expect", "anticipate", "believe", "likely", "should", "could", "predict", "plan", "propose", "forecast", "estimate", "target", "outlook", "guidance" and "envisage". By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future and may be outside the Campany's control. Actual results and developments may differ materially from those expressed or implied in such statements because of a number of factors, including levels of demand and market prices, the ability to produce and transport products profitably, the impact of foreign currency exchange rates on market prices and operating costs, operational problems, political uncertainty and economic conditions in relevant areas of the world, the actions of competitors, suppliers or customers, activities by governmental authorities such as changes in taxation or regulation. Given these risks and uncertainties, undue reliance should not be placed on forward-looking statements which speak only as at the date of this announcement. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, the Company does not undertake any obligation to publicly release any updates or revisions to any forwardlooking statements contained in this material, whether as a result of any change in the Company's expectations in relation to them, or any change in events, conditions or circumstances on which any such statement is based.

The Company has concluded that it has a reasonable basis for providing forward looking statements included in this announcement and believes that it has a reasonable basis to expect that it will be able to fund its stated objectives for the Project. All material assumptions underpinning the production target and forecast financial information in this announcement are disclosed in the 'Executive Summary' which follows.

# KUNDIP MINING CENTRE – PREFEASIBILITY STUDY EXECUTIVE SUMMARY

#### Background

Medallion Metals Ltd (Medallion or "the Company") is the 100% legal and beneficial owner of the Ravensthorpe Gold Project (RGP). Since acquiring RGP, the Company has completed a substantial extensional drilling program and subsequent Mineral Resource Estimate (MRE) upgrade with the ultimate objective of establishing a long life, high margin gold and copper mining and processing operation.

In October 2023, Medallion completed a Pre-Feasibility Study (PFS or "the Study") evaluating the technical and commercial viability of developing the Mineral Resources within the Kundip Mining Centre (KMC, Kundip or "the Project"), a subset of the broader RGP. KMC represents approximately 2.5 km of strike length of an overall 40 km of prospective stratigraphy that forms RGP and is currently host to 1.3 Moz of gold and 59 kt of copper. Numerous opportunities exist to both extend Project life and increase production rates through new discovery both at KMC and across the highly prospective regional ground holding. The following summarises the assumptions, analysis and findings of the KMC PFS.

All references to \$, A\$ and AUD in this PFS represent Australian dollars, unless otherwise stated.

#### **Overview and Key Outcomes**

The PFS considers the development of a standalone gold and copper mining and processing operation at KMC. The Study assesses mining the KMC Mineral Resources from open pit and underground and processing that material utilising an industry standard processing flow sheet comprising gravity, flotation and cyanidation of flotation tailings to recover gold, copper and silver to saleable products (concentrate & doré).

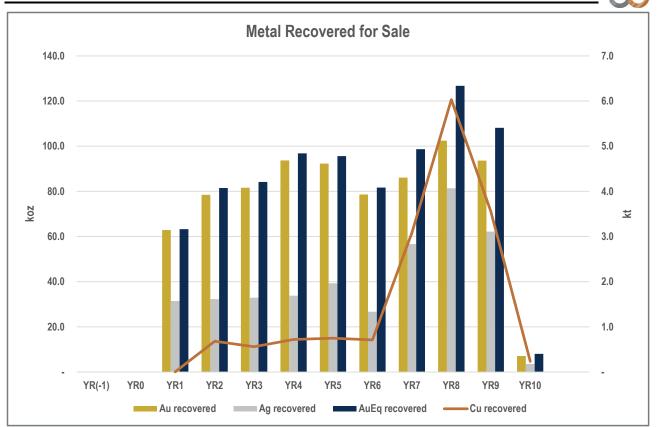
It is the conclusion of the PFS that KMC is both technically and commercially viable. The proposed development of KMC presents an opportunity for Medallion to establish and grow a gold and copper mining and processing business with an attractive risk-return profile and clear potential to further enhance Project returns through the expansion of production rates and extensions to Project life. Key Project statistics are shown below.

- Nameplate process throughput: 1.5Mtpa (Fresh)
- Production Inventory: 13.9Mt @ 1.8 g/t Au & 0.2 % Cu
- Metal recovered for sale: 777 koz Au & 16 kt Cu

Financial outcomes and assumptions are shown in Table 2 below.

Financial		Base	Spot
NSR	\$m	2,424	2,609
Operating	\$m	(1,341)	(1,347)
Capital (pre-production)	\$m	(163)	(163)
Capital (sustaining)	\$m	(134)	(134)
Capital (non-sustaining)	\$m	(8)	(8)
Pre-tax Cashflow	\$m	779	958
Tax paid	\$m	(220)	(274)
Post-tax Cashflow	\$m	559	684
NPV(7)	\$m	309	392
IRR	%pa	35	42
Payback	yrs	3.0	2.6
Assumptions			
Au price	US\$/oz	1,875	1980
Ag price	US\$/oz	20	23
Cu price	US\$/t	7,275	7,915
Exchange rate	AU\$:US\$	0.64	0.63

Table 2: KMC PFS Key Outcomes & Assumptions.



#### Figure 3: LOM metal recovered for sale.

Pre-production capital expenditure totals \$163 million. An additional \$142 million of sustaining and other capital expenditure will occur over the Project life during the production phase. All-In Sustaining Costs (AISC) are modelled at A\$1,577 per ounce of gold sold over the Life Of Mine (LOM) net of by-product credits (copper and silver). Approximate gross revenue split between gold, copper and silver is 91%, 8% and 1% respectively. Silver is immaterial to Project economics and is disregarded in much of the reporting. Copper is a minor contributor to Project economics over the LOM as currently conceived however is more prominent below the top of fresh rock, particularly as it relates to the underground production inventory.

Tax modelling assumes a projected carry forward tax-loss position of \$50 million at Final Investment Decision (FID) as being available for use. All subsequent capital expenditure is then depreciated over the Project life. The analysis is on an un-levered basis.

Mineral Resource Estimate for the Kundip Mining Centre – January 2023					
Classification	kt	Au g/t	Au koz	Cu %	Cu kt
Open Pit	16,860	1.8	980	0.2	38
Underground	2,350	4.1	310	0.7	17
Grand Total	19,210	2.1	1,290	0.3	56

Project Mineral Resources considered in the PFS are summarised in Table 3 below<sup>1</sup>.

Table 3: KMC MRE by open pit and underground subdivision.

KMC deposits are shallowly drilled and open in multiple directions. Potential extensions to the deposits considered in the PFS represent clear opportunities to increase the Project production profile.

<sup>&</sup>lt;sup>1</sup> Refer to the Company's ASX announcements dated 16 January and 13 February 2023 for further details of the KMC MRE.



The PFS considers open pit mining at Gem, Harbour View, Flag, Gem Restored and Gift deposits with underground mining continuing at depth at Gem, Harbour View, Flag and Gem Restored. The integrated production inventory schedule that forms the basis of the economic analysis of the Project is shown in Table 4.

	Production Inventory for the Kundip Mining Centre				
Classification	kt	Au g/t	Au koz	Cu %	Cu kt
Open Pit	11,660	1.5	556	0.15	17
Underground	2,285	3.5	255	0.62	14
Grand Total	13,945	1.8	811	0.22	31

Table 4: KMC production inventory by open pit and underground subdivision.

The production inventory contains Inferred Resources representing 27% of the overall tonnage mined and processed over the LOM.

An integrated Project schedule has been developed that sees conventional open pit and underground mining methodologies deliver ore to a gold and copper processing facility to be established at KMC. Ore will be processed at a rate of at least 1.5Mt per annum via a standard Gravity-Flotation-Carbon-in-Pulp (CIP) process route. Production inventory with copper grades of less than 0.3% will by-pass flotation and go direct to cyanide leach. LOM gold recovery is estimated at 95.6%. LOM copper recovery for material reporting to the flotation circuit is 85.1%. High copper material (>0.3% Cu) is preferentially treated due to a strong correlation to high gold grades.

The PFS assumes establishing both the CIP process plant and the flotation circuit during the pre-production phase in order to provide maximum processing flexibility whereby the process plant is capable of treating all material types (oxide/sulphide, high/low copper) from commissioning.

Study results confirm a technically and commercially robust development opportunity offering returns on investment which are attractive relative to the risks identified through the PFS process. It is recommended Medallion continue to advance the Project through additional study phases to support a FID.



# LOCATION, HISTORY & GEOLOGY

#### Location

Medallion's projects are located within the southern Goldfields-Esperance region of Western Australia, approximately 550 km southeast of Perth and 185 km west of Esperance, the nearest deep-water port (Figure 4). The region benefits from excellent infrastructure and a supportive community with other significant resource projects currently operating in the local government area. The proposed development at KMC is located 17km southeast of the regional centre of Ravensthorpe and 33km north of the coastal settlement of Hopetoun. All of the Company's tenure is situated within the Shire of Ravensthorpe.



Figure 4: Project location.

The projects comprise approximately 600km<sup>2</sup> of mineral tenure prospective for numerous styles of mineralisation. Medallion refers to the southern portion of the tenement package as the Jerdacuttup project (Jerdacuttup). The delineation of RGP (blue) and Jerdacuttup (red) loosely represents the surface expression of the Archean geology to the north and the Proterozoic geology to the south, with the Archean plunging beneath the Proterozoic. Jerdacuttup is host to the Trilogy polymetallic deposit which contains Joint Ore Reserve Committee (JORC) compliant Mineral Resources of 5.6Mt @ 0.9 g/t Au, 54.4 g/t Ag, 1.2 % Cu, 2.4 % Pb and 1.4 % Zn<sup>2</sup>. Development of the Trilogy deposit is not considered in this PFS.

<sup>&</sup>lt;sup>2</sup> Indicated: 4.6Mt @ 0.9g/t Au, 53.2 g/t Ag, 1.4%Cu, 2.7%Pb & 1.6%Zn, refer to the Company's Prospectus dated 18 March 2021 for further details relating to the Trilogy MRE.



#### History

The Ravensthorpe Greenstone Belt, and more specifically the Phillips River Mineral Field, has been actively mined and explored since the late 1800s. The Elverdton and Kundip mining centres are host to the most significant gold-copper deposits exploited during this period. Most of the mining at Kundip occurred between 1900 and the mid-1920s, with brief revivals in the 1930s and 1980s. Records indicate a total of 127kt of ore grading 18.2 g/t Au and containing 74 koz of gold has been mined from the proposed Project area, mostly from shallow workings above the water table.



Figure 5: Battery at Harbour View Mine, Kundip, 1907.

Since 1990, the Project has undergone numerous phases of ownership with tenure fragmented for much of the period until Tectonic Resources NL (Tectonic) consolidated ownership of the Archean and Proterozoic packages in 2003. At that time, Tectonic was operating the RAV8 nickel sulphide project (RAV8), located 25 km to the east of Kundip. In 2006, Tectonic produced a Feasibility Study that contemplated mining ore from Kundip and trucking the material to RAV8 for processing in a modified process plant.

As base metal prices increased through 2006–2007, Tectonic turned its attention to the Trilogy deposit located 9 km south of Kundip (part of the Jerdacuttup project). A Definitive Feasibility Study DFS was completed in 2011 that envisaged mining and processing Trilogy ore through a flotation plant to be constructed at Trilogy. Kundip ore was to be processed through the Trilogy process plant at the conclusion of the mine life. As equity markets for junior resources became challenging through 2011, Tectonic was unable to raise funds to develop Trilogy and eventually sold the Project to Silver Lake Resources Ltd (Silver Lake) in 2012. In December 2015, Silver Lake entered into a conditional Farm-In and Joint Venture Agreement with Medallion (formerly ACH Minerals Pty Ltd) in respect of the Project. Medallion exercised its option to acquire the Project outright shortly thereafter and the acquisition was settled in July 2016.

Over the intervening period, Medallion has completed approximately 62km of new drilling at RGP and of that approximately 55km within the KMC granted mining leases. As well as advancing the regional exploration targets, the drilling within KMC has provided sample for an extensive metallurgical testwork program completed in 2018 as well as data to update geotechnical studies, both of which inform the PFS. Since acquiring the assets, Medallion has also advanced the permitting of KMC substantially. Ministerial Statement 1143 was issued in July 2020 allowing the Project to proceed under certain conditions. The development that was the basis for the PER was based on the development of a smaller Project than that which is the basis of this PFS. The scale of the smaller development scenario was determined to be insufficient to attract the capital required to develop the Project notwithstanding the positive technical and commercial study outcomes. Medallion then embarked upon a substantial resource extensional drill program throughout 2021 and 2022. In early 2023, the Mineral Resource Estimate (MRE) for KMC was updated based on 44km of new drilling, taking the metal inventory of KMC to 1.3Moz Au and 56kt of Cu. Medallion's high degree of confidence that a substantial (>50%) proportion of Mineral



Resources would convert to production inventory led to the Company making the decision to commence the PFS in March 2023.

### **Regional Geology**

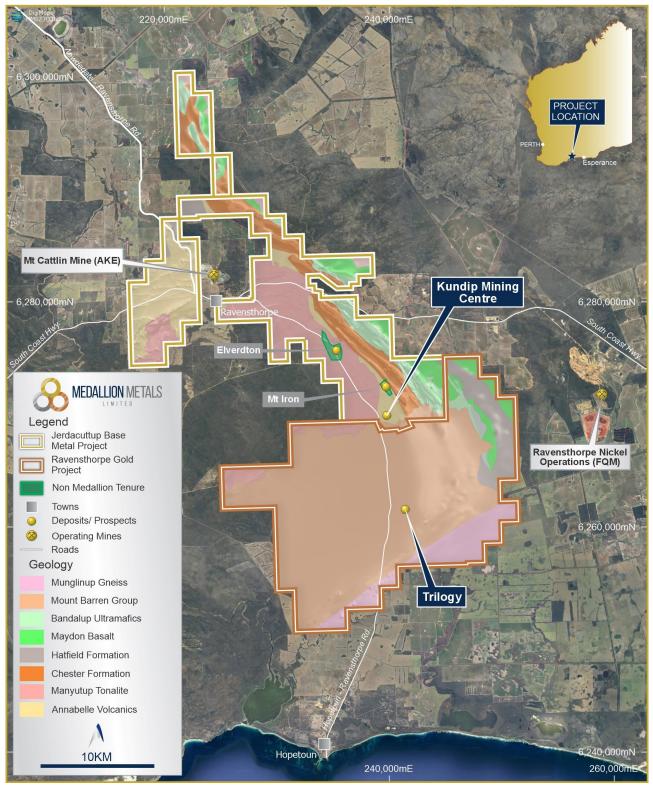


Figure 6: Regional Geology.

The Company's unique landholding contains the faulted intersections of two globally significant mineralised orogenic belts, the Archean Yilgarn Craton and the Proterozoic Albany-Fraser Province.

The Archaean Ravensthorpe Greenstone Belt is situated in the southeast of the Youanmi Terrane and is considered an extension of the Southern Cross Province. The Ravensthorpe Greenstone Belt forms a



wedge-shaped enclave (Figure 6) within granitoid gneiss (Witt, 1998). The Archaean greenstones are unconformably overlain in the south by the Mesoproterozoic Mount Barren Group metasediments.

Local geology within the Project area is comprised of a ~2km wide northwest trending steeply east-dipping, sequence of intermediate to acid volcaniclastic rocks of the Annabelle Volcanics, situated along the eastern boundary of the Ravensthorpe Terrane.

The eastern contact of the Annabelle Volcanics is structurally defined by the Chidnup Fault Zone, a major 40km long thrust fault which bounds the Ravensthorpe Terrane in the west and the Carlingup Terrane in the east. To the west is the Manyutup Tonalite Complex which occupies the central part of the Ravensthorpe Greenstone Belt.

#### Local Geology

Gold-copper mineralised sulphide rich shears in a greenschist facies environment at Kundip are associated with intense chloritization of volcanic wall rock. Alteration of volcanic rocks at both localities involved in enrichment of iron and magnesium, and the depletion of calcium and sodium, which is interpreted as the product of sea floor alteration followed by metamorphism. These and other base metal-rich deposits in the Ravensthorpe Terrane are interpreted as deformed and metamorphosed stringer zones that formed within an Archaean, syn-volcanic, submarine hydrothermal system of the type that is commonly linked to massive sulphide deposits. Sulphide and base metal-poor, gold-quartz vein deposits are also present in the Ravensthorpe Terrane. These probably formed at a later stage, during regional deformation. Low-potassium calc-alkaline rock, such as those that comprise the Ravensthorpe Terrane, are uncommon in the Yilgarn Craton, as is syn-volcanic gold-copper mineralisation (Witt, 1999).

The mineralised trends identified at Kundip are shown in oblique view in Figure 7. The PFS is based on the JORC 2012 compliant resources at Gem, Harbour View, Flag, Gem Restored and Gift as described in subsequent sections of this announcement and as listed in Annexure 2.

Mineralogy of the lodes in the oxide zones is gossanous hematite-goethite-quartz and microscopic gold veining replacing pyrite-chalcopyrite, as well as traces of azurite and malachite. There tends to be copper depletion in the oxide zone with secondary copper hypogene minerals within the saprock environment. Gold occurs as free gold and as inclusions within pyrite.

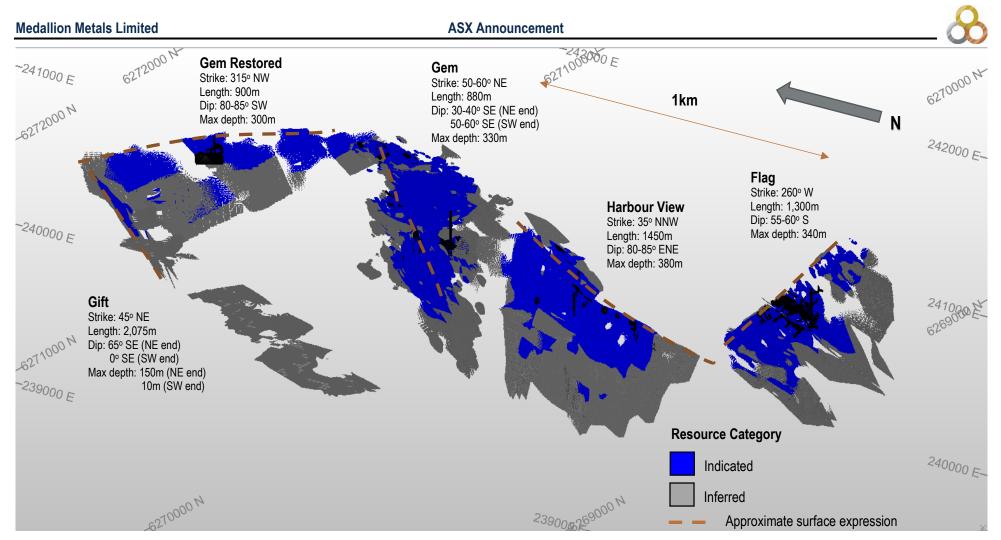


Figure 7: Kundip mineralised structures.

# **MINERAL RESOURCES**

KMC Mineral Resources that are the basis of the PFS are provided below.

The following statements of Mineral Resources by classification and by mining method (Tables 5 and 6 respectively) conform to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition (JORC Code). All tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding to appropriate significant figures.

Mineral Resource Estimate for the Kundip Mining Centre – January 2023					
Classification	kt	Au g/t	Au koz	Cu %	Cu kt
Indicated	12,110	2.0	790	0.3	36
Inferred	7,110	2.2	510	0.3	20
Grand Total	19,220	2.1	1,300	0.3	56

Table 5: KMC MRE by classification.

Mineral Resource Estimate for the Kundip Mining Centre – January 2023					
Classification	kt	Au g/t	Au koz	Cu %	Cu kt
Open Pit	16,860	1.8	980	0.2	38
Underground	2,350	4.1	310	0.7	17
Grand Total	19,210	2.1	1,290	0.3	56

Table 6: KMC MRE by open pit and underground subdivision.

Grade-tonnage curves for open pit and underground resources at KMC are shown in Figures 8 and 9 respectively. Grade-tonnage curves include only those blocks that have been classified as either Indicated or Inferred Mineral Resources.

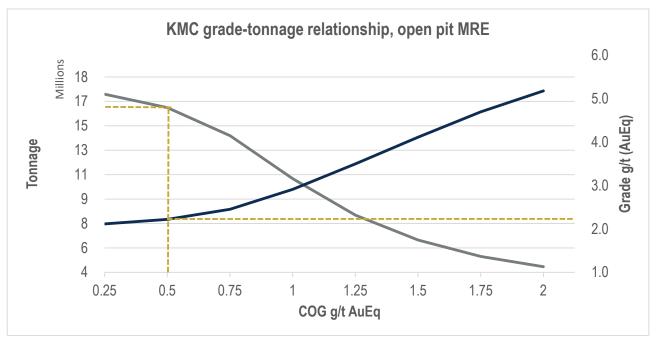


Figure 8: KMC Open pit MRE grade tonnage relationship between 0.0-2.0g/t AuEq lower cut-offs.



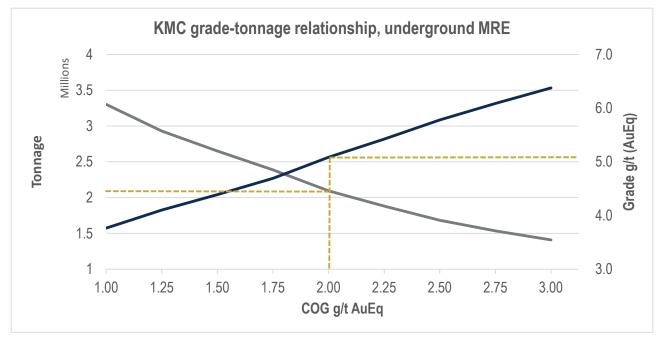


Figure 9: KMC Underground MRE grade tonnage relationship between 1.0-3.0g/t AuEq lower cut-offs.

#### Resource Modelling

Medallion's in-house geology team were responsible for maintaining validated databases and generating mineralisation domains for all KMC deposits and act as Competent Persons for those aspects of the MRE.

The Company engaged independent consultants Snowden Optiro Pty Ltd (Snowden Optiro) to assist in the development of MREs for each of Gem, Harbour View, Flag, Gem Restored and Gift being the deposits considered in the PFS. This involved high-level review and validation of the databases and wireframes, followed by data conditioning, generation of block models, resource estimation, resource reporting, validation and classification. Ordinary Kriging (OK) was selected as the preferred grade interpolation methodology for all deposits. Snowden Optiro personnel are acting as Competent Persons for the purposes of estimation, reporting and classification for Gem, Harbour View, Flag, Gem Restored and Gift (KMC deposits).

#### **Drilling Techniques**

Drilling techniques used in the MRE include Reverse Circulation (RC), Surface Diamond (DD), Underground Diamond (UGDD) and Aircore (AC) drilling (at the Gift deposit only) and holes were completed both by Medallion and numerous previous companies. AC, Rotary Air Blast (RAB) and Vacuum drill holes were used to aid in geological interpretation at Gem, Harbour View, Flag and Gem Restored, however, samples collected by AC and RAB were not used in the MREs for those deposits.

RC drilling carried out by Medallion during 2021-22 was by Precision Exploration Drilling Pty Ltd (PXD) utilising an ATLAS COPCO 220 drill rig with a truck mounted 2400cfm auxiliary and 900psi booster. The sampling hammer had a nominal 143mm diameter hole.

Medallion diamond core in 2021 was drilled by PXD utilising a DRA 800 drill rig. Diamond holes were drilled from surface using HQ3 (61mm) diameter in weathered, broken ground before casing off and drilling NQ2 (51mm) to end of hole. Diamond holes with an RC pre-collar were drilled from the end of the RC pre-collar using NQ2 (51mm) core to the end of hole. Diamond core was orientated by the drill contractor using the Boart Longyear TRUORE™ UPIX Orientation tool.

Medallion diamond core drilled in 2022 was completed by West Core Drilling Pty Ltd (West Core) utilising a Boart Longyear LF90D drill rig. Diamond holes were drilled from surface using HQ3 (61mm) diameter core in weathered, broken ground before casing off and drilling NQ2 (51mm) to end of hole. Diamond holes with RC pre-collar were drilled from the end of the RC pre-collar using NQ2 (51mm) core to the end of hole. Diamond core was orientated by the drill contractor using the IMDEX Reflex ACT 3 Orientation Tool.



PXD downhole surveys were taken using a Downhole Surveys' DeviGyro continuous Rate Gyro tool. West Core downhole surveys were collected using a north-seeking REFLEX GYRO SPRINT-IQ<sup>™</sup>. Collar surveys for Medallion drill holes were determined by an independent licensed surveyor.

The portion of the MRE classified as Inferred is supported by drill collar spacing of generally 40m x 40m. The portion of the mineral resource classified as Indicated is generally supported by drill spacings of 20m x 40m.

Diamond holes were used to obtain representative measurements of bulk density within the mineralised zones and surrounding lithologies.

For historical drilling techniques, the Company has interrogated and validated the drill database and is satisfied that the AC, RC, DD and UGDD historical drilling is appropriate for use in an MRE. For further information, refer to the Company's Prospectus released on the ASX on 18 March 2021 for details relating to the drillhole database that supports the KMC MREs.

Not all historical drilling has been used in resource estimations owing to lack of confidence in some data.

#### Sampling and Assaying

Samples used in the MRE were collected by AC, RC and DD drilling.

All dry AC samples were riffle split at one metre intervals. Samples were collected at one metre intervals in zones of interest. RC samples were passed through an in-line cone splitter and collected in 1m intervals. Samples comprised 2-3kg samples. Diamond core samples were collected from HQ3/NQ2 diamond drill core at mostly 1m intervals with closer spaced sampling around specific mineralized zones or structures. Drill core was cut in half and half core sampled. RC and diamond samples were submitted to SGS laboratory at Perth Airport and assayed by fire assay methods for gold. Copper, silver, and other elements used a four-acid digest (hydrofluoric, nitric, perchloric and hydrochloric acids), suitable for silica-based samples with an ICP-MS or ICP-AES finish.

Field blanks and industry certified standards are inserted by Medallion at a rate of 1 per 20 samples and Field Duplicates are collected by Medallion at a rate of 1 every 60 samples. Quarter core drill core duplicates were completed in 2018. Certified Reference Materials (CRM's) and/or in-house controls, blanks, splits and replicates are analysed with each batch of samples by the laboratory. These quality control results are reported along with the sample values in the final report. Selected samples have also been re-analysed to confirm anomalous results.

For historical sampling, assaying and QAQC techniques, the Competent Person has interrogated and validated the drill database and is satisfied that the RC, DD and UGDD historical drilling is appropriate for use in a Mineral Resource Estimate. For further information, refer to the Company's Prospectus released on the ASX on 18 March 2021 for details relating to the historical drillhole database that supports the current KMC MREs.

Not all historical drilling completed has been used in resource estimations owing to lack of confidence in some data.

#### Bulk Density

The Kundip bulk density dataset contains 5,289 values. Diamond core which was submitted for density analysis included ore zones, various rock types and weathering state. The vast majority of these are in fresh rock. Specific gravity values have been measured by the Archimedean Principle using the immersion method for individual core samples.

Global data collected in the KMC area have been used as the basis of the block model bulk densities. Dry bulk density factors have been applied to generate resource tonnages.

A clear relationship between weathering and density has been observed. Elevated densities have been established for the two different types of mineralisation observed in the Kundip project area.

A default bulk density of 2.20 t/m<sup>3</sup> was assigned to completely oxidised (CO) material.

A default bulk density of 2.50 t/m<sup>3</sup> was assigned to significantly oxidised (SO) material.

A default bulk density of 2.60 t/m<sup>3</sup> was assigned to partially oxidised (PO) material.

In fresh (volcanic) rock, a default bulk density of 2.70 t/m<sup>3</sup> was assigned.

In fresh (tonalite) rock, a default bulk density of 2.65 t/m<sup>3</sup> was assigned.

Mineralised domains described as breccia lodes were assigned a density of 2.75 t/m<sup>3</sup> in fresh rock only.

Mineralised domains described as low-grade lodes were assigned a density of 2.78 t/m<sup>3</sup> in fresh rock only.

Mineralised domains described as gold and copper lodes have been assigned a density of 2.95 t/m<sup>3</sup> in fresh rock only.

#### Estimation Methodology

#### All deposits

Mineralisation wireframes were interpreted using Leapfrog Geo 3D, with graphical selection of intervals used to form vein models of the mineralised domains for all deposits. Where this approach did not reflect the Competent Persons' interpretation of the mineralisation, a categorical interpolant approach using a structural trend was applied (Gem low grade domains). Exploratory Data Analysis (EDA) indicated that a nominal grade cut-off of 0.5 g/t for gold and a 1,000 ppm cut-off grade for copper defined significant mineralisation in discrete packages of 1 m to 5 m thickness for the high grade domains, and up to 30 m thickness for the low grade and copper domains. Continuity and plunge orientations were established by applying the vein orientation structural measurements collected from oriented diamond core, regional interpretation of the structural setting and exploratory data analysis.

Wireframes of weathering boundaries and structure were constructed using a cross-sectional interval selection method in Leapfrog; these wireframes were validated in a range of orientations. Bulk density values have been applied according to material type (weathering) and mineralisation style and are based on diamond core measurements taken from the projects and within the greater Kundip Mining Centre.

Assay data was selected within the wireframes, composited to one metre lengths and appropriate top-cuts were applied according to domain and grade statistics. The selection methodology to derive the top-cut value combines interrogation of disintegration points on the histogram with detailed analysis of the cumulative distribution plots.

Variograms, and the resultant search ellipses for estimation of the mineralised domains, are oriented parallel to the observed dip and strike of the mineralisation. All models were estimated using 1 m top cut Ordinary Kriging (OK) into parent blocks.

#### Validation of Estimates

A number of validation checks were applied to each of the MREs. Visual validation of the block model was carried out by examining cross-section and plan views of the top-cut composite data and the estimated block grades. The block estimate was statistically validated against the informing composites on a whole-of-domain basis (global validation). Grade trend plot analyses were created for grouped domain sets, and where applicable, individual domains. These plots compared the estimated top cut model grade to the naïve mean and the declustered top cut mean of the input composite data, to ensure minimal (local) bias.

#### Mineral Resource Classification

Mineral Resource classification criteria are based upon the level of data informing both the geological model and the grade estimation and the quality of the estimation. The classification criteria were assigned based on the robustness of the drillhole spacing, geological confidence and grade continuity. The classification reflects the Competent Persons' views of the deposit.

There are no Measured Mineral Resources.

The Indicated Mineral Resource is of moderate confidence. These areas are considered to be well informed by drilling with nominal 20 mN x 20 mRL up to 40 mN x 40 mRL spacings, with suitable drillhole intersection angles.



Grade and geological continuity have been demonstrated by the geological interpretation, pit and underground mapping and mining (where applicable).

The Inferred Mineral Resource has been defined where there was a low to moderate level of geological confidence in the geometry, continuity of grade, and where the drill spacing was wider than 40 mN x 40 mRL. Geological supporting information has been defined to a lower level of confidence in terms of continuity and extent.

#### **Reasonable Prospects of Eventual Economic Extraction**

The MRE update has been reported under conditions where the Company believes there are Reasonable Prospects of Eventual Economic Extraction (RPEEE) through standard open pit and underground mining methods along with the recovery of economic elements (gold, copper and silver) to saleable products through the application of industry standard process routes (gravity, flotation and cyanidation). Resources available for open pit mining have been reported above a cut-off grade of 0.5 g/t AuEq and within 150 vertical metres of surface topography. Underground resources have been reported above a cut-off grade of 2.0 g/t AuEq at depths greater than 150 metres below surface topography.

Costs determined from the 2020 Feasibility Study (FS) were used to set cut-off grades. The FS considered open pit mining by truck and shovel and underground mining by top-down sub level benching with processing of mined ore onsite at KMC as well as allowances for tailings placement and waste rock disposal. The open pit cut-off grades accounts for metallurgical recovery and covers the cost associated with ore mining, processing, general and administration and royalties. The underground cut-off incorporates the same factors and costs as determined in the FS, in addition to underground capital development.

No allowance for dilution or mining recovery has been made in the MRE.

#### Gold Equivalent Cut-Off Grade

Gold Equivalent (AuEq) grades that are applied as cut-off criteria for reporting the MRE were calculated using the following formula: AuEq g/t = Au g/t + (Cu  $\% \times 1.61$ ) + (Ag g/t  $\times 0.01$ ). Cu equivalence to Au was determined using the following formula: 1.61 = (Cu price x 1% per tonne x Cu recovery) / (Au price x 1 gram per tonne x Au recovery). Ag equivalence to Au was determined using the following formula: 0.01 = (Ag price x 1 gram per tonne x Au recovery) / (Au price x 1 gram per tonne x Au recovery) / (Au price x 1 gram per tonne x Au recovery).

Metal prices applied in the calculation were: Au = 2,946 AUD per ounce, Cu = 16,768 AUD per tonne, Ag = 42 AUD per ounce.

	Inputs			Outputs			
	Realised price	Unit	Met. Recovery		Unit	In-situ value	AuEq factor
Au	2,946	A\$/oz	94.6%		1.0 t @ 1 g/t Au	89.60	1.00
Cu	16,768	A\$/tonne	86.1%		1.0 t @ 1 % Cu	144.37	1.61
Ag	42	A\$/oz	73.3%		1.0 t @ 1 g/t Ag	0.99	0.01

Metallurgical recoveries applied were Au = 94.6%, Cu = 86.1%, Ag = 73.3%.

#### Table 7: Gold equivalent cut-off grades

It is the Competent Persons' opinion that the application of the different cut-off grades meet RPEEE principles as described in the JORC Code.

For further details regarding the Mineral Resources that are the basis of the PFS, refer to the Company's ASX announcements dated 16 January 2023 and 13 February 2023.



# **MINING & PRODUCTION INVENTORY**

#### Overview

Medallion engaged Mining Plus Pty Ltd (Mining Plus) to study the potential of mining both the surface and underground gold-copper deposits at the Project (Mining Study). Gem, Harbour View, Flag, Gem Restored and Gift will be exploited by surface mining. Underground mining will extend beneath the Gem, Harbour View, Flag and Gem Restored pits. The general arrangement of surface and underground workings is shown in Figure 10.

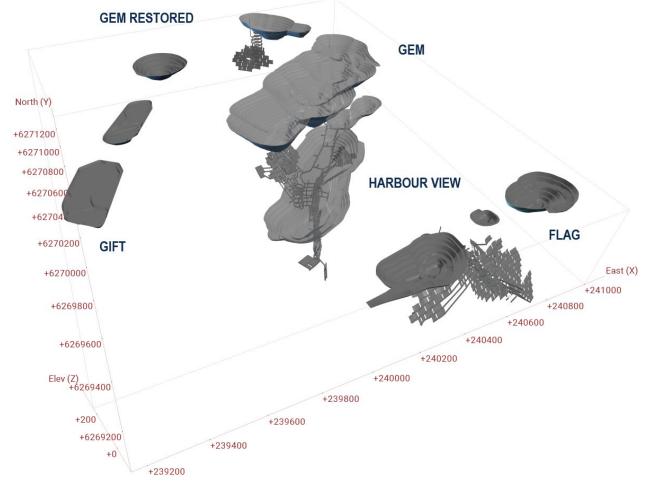


Figure 10: KMC surface and underground mine workings (Plunge +46, Azimuth 024).

Grade estimation block models for each deposit are the basis of the Mining Study. The Mining Study considers Measured, Indicated and Inferred Mineral Resources which leads to the estimation of a production inventory from KMC deposits.

The open pit mines contribute ~84% of the ore tonnes, ~69% of gold ounces and 55% of copper tonnes to the overall mine plan. The open pit mining method, mine design and schedule are based on the use of conventional open pit mining methods and equipment (excavator and truck). Mine equipment selection was based upon annual movement requirements to meet the planned process plant throughput rate of 1.5 Mt per year.

The underground mines contribute ~16% of the ore tonnes, 31% of gold ounces and ~45% of copper tonnes to the overall mine plan. All ore planned to be extracted from the mines is contained within fresh rock. The applied mining method is long-hole benching. Stoping will follow a top-down sequence, commencing at the extremities of each level and retreating to the centrally located level access. Rib pillars will remain between adjacent stopes to maintain hangingwall stability. No backfilling of the stope voids is planned. Development and stoping excavations have been designed to enable mining with standard high-productivity mobile underground mining equipment.



#### Geotechnical

The geotechnical input parameters for the Mining Study were determined in an independent geotechnical study, conducted by Green Geotechnical Pty Ltd (Green Geotechnical) in August 2019. Their assessment was based on a review of previous work undertaken by Peter O'Bryan and Associates (2010, 2017) (O'Bryan), visual inspection of existing open pit workings in the Gem area (Western Gem, Two Boys and Kaolin), visual inspection of existing underground workings (as they can be observed daylighting at surface) and physical property data obtained from twelve additional diamond drill holes not included in previous assessments.

The level of geotechnical data is sufficient for assessment of pit wall stability and to determine the slope angle parameters for the purposes of open pit mine design at a PFS level.

Assumptions from the Green Geotechnical Report were used for underground mine designs for all the deposits and included:

- a 5 m rib pillar required per 40 m of strike length;
- rib pillars offset between levels;
- standard galvanised weld mesh and split sets were for all development ground support, and
- a minimum crown pillar of 10 m between pit floor and leading stope backs.

The selected underground level intervals (varying from 15m to 20m floor-to-floor) matches geotechnical requirements, as well as operating parameters of the proposed mining fleet.

#### Gold Equivalent Cut off Grade

Mining Plus has applied an AuEq Cut-off Grade (COG) for reporting purposes. The methodology differs from that applied for MRE reporting. Block models were coded by weathering profile and for high and low copper thresholds (0.3% Cu) to match metallurgical domains. AuEq formulas applied in block models are based on PFS assumptions for commodity prices, metallurgical recovery and payabilities. Formulas for each metallurgical domain are shown in Table 8 below.

Domain	AuEq formular
Fresh – high Cu	AuEq (g/t) = Au (g/t) + (Cu (%) x 1.20) + (Ag (g/t) *0.01)
Fresh – Iow Cu	AuEq (g/t) = Au (g/t) + (Cu (%) x 1.04) + (Ag (g/t) *0.01)
Trans – high Cu	AuEq (g/t) = Au (g/t) + (Cu (%) x 0.59) + (Ag (g/t) *0.01)
Trans – Iow Cu	AuEq (g/t) = Au (g/t) + (Cu (%) x 0.00) + (Ag (g/t) *0.01)
Oxide – high Cu	AuEq (g/t) = Au (g/t) + (Cu (%) x 0.39) + (Ag (g/t) *0.01)
Oxide – Iow Cu	AuEq (g/t) = Au (g/t) + (Cu (%) x 0.00) + (Ag (g/t) *0.01)

 Table 8: AuEq calculations by metallurgical domain

#### **OPEN PIT**

#### **Dilution and Ore Loss**

The mining dilution and ore loss factors were estimated through two methods;

- Selective Mining Unit (SMU) block model regularisation, and
- Mine Stope Optimiser (MSO) process.

For Gem, Harbour View, Gem Restored and Gift deposits (steeply dipping or paleochannel in the case of Gift), the resultant factors were applied to their respective regularised SMU block models by increasing the block size.

The resource model for the Flag deposit (dipping less than 60 degrees) was recreated through mineable MSO shapes derived from the minimum mining width (3 m) and COG of 0.5 g/t AuEq.

No additional dilution and ore losses were considered for the pit optimisation process. These factors are summarised in Table 9.



Metal	SMU	COG	∆ tonnes	∆ metal
Gem/Harbour View/Gem Restored	2.5x2.5x2.5m (X, Y, Z)	0.5g/t Au	+18%	-10%
Gift	2.5x2.5x2.5m (X, Y, Z)	0.5g/t Au	+15%	-16%
Flag	MSO (3m)	0.5g/t Au	+107%	-3%

 Table 9: Forecast recoveries to saleable products

#### Costs

Mining cost estimates were prepared using first principles for load and haul, mining services and overhead costs for the open pit operations. Drill and blast costs were estimated using contract service provider quotations for a similar drill and blast practice at another operation in Western Australia. The costs have been validated and adjusted where necessary to align with similar sized Australian gold projects. The surface mining costs are grouped in the following major categories:

- Fixed Costs & Technical Overheads
- Load and Haul
- Drill and Blast
- Grade Control

The mining cost estimation for each deposit is based on the selected mining fleet and supporting resources required to extract the orebody, which in turn relies on the mineralisation characteristics and potential size of the mineable resource. A diesel price of \$0.85/litre is considered for fuel usage as supplied by Medallion (Starting 1 February 2021, 2-year average weekly formular price ex. Esperance inclusive of freight and net of Diesel Fuel Excise).

The mining cost for pit optimisations was estimated for each 5 m bench height increment.

#### Pit Optimisations

Open pit optimisations were carried out using modifying factors and estimated mining, processing and administration costs. A gold price of A\$2,700 per ounce was selected as the base case. Revenues were adjusted for metallurgical recoveries, payabilities and royalties as applicable. Pit optimisations were then performed for various revenue factors based on a gold price ranging from A\$1,800 to A\$3,200 per ounce. The optimum pit shell was selected for the final open pit limit and used as the guideline for LOM design. Selection of the final pits was determined by analysing multiple pushback options to execute the best value in terms of strip ratio, All-in Cost, ounces produced and free cashflow.

The outline for the selected final pit shell was established through a minimum mining width of 20 m. This avoids large material movement variation when designing life of mine pits by removing impractical working areas.

Deposit	Selected Pit Shells	Stages
Flag	\$2700 MII	Two satellite stages
Gift	\$2350 MII	Multiple satellite shallow stages
Com// Jankeur \/iou//Com Dectored	\$1850 MII	Intermediate stages
Gem/Harbour View/Gem Restored	\$2450 MII	Final Life of Mine

Table 10 summarises the preferred pit optimisation outcomes for all deposits.

 Table 10: Forecast recoveries to saleable products.

#### Pit Design

Pit designs were completed using standard pit design parameters to optimise the pit stage layouts to support the LOM operation. Pit designs were constructed using double-lane ramps (width 27 m) from the pit crest down to ~30 m from the base of pit where the ramp converts into a single-lane (width 15 m) with passing bays incorporated. The selected bench height and ramp width is suitable for 100 t to 200 t capacity excavators and up to 180 t payload haul trucks.



The selected pit design parameters are summarised in Table 11.

Pit Design Parameters	Value
Mining Method	Conventional Load and Haul mining practice with flitch mining options. Drill and Blast
	will be performed using combination of 5 m and 10 m bench blasts
Bench Height (m)	Combination of 10 m and 15 m depending on Geotechnical guidelines
Berm Width (m)	Combination of 5 m to 8 m depending on Geotechnical guidelines
Batter Angle (deg)	50 deg to 80 deg depending on Geotechnical guidelines
Double Lane Ramp Width	27 m
Single Lane Ramp Width	15 m (Approximately last vertical 30 m of the pit)
Ramp Gradient	1 in 9
Goodbye Cut	Maximum 5 m

#### Table 11: Pit design parameters.

#### Break-even COG

The break-even COG calculated for mine production scheduling and inventory estimation was determined through assessment of processing costs, G&A, royalties and metallurgical recovery.

Once the pit design is finalised, it is expected that all blocks within the final pit limits will be mined as the pit optimisation process has found those blocks to be economically viable to mine. Therefore, the break-even COG is estimated excluding mining cost but still has to account for processing cost (including sustaining capital). G&A and the selling costs for it to be categorised as "ore". Blocks within the final pit with revenue that does not breakeven are categorised as "waste".

The break-even COG is determined by the following formula:

PC + GA**BCoGinpit** =  $REC \times SP$ 

Where:

- PC: Processing Cost (\$/t ore)
- GA: G&A Cost (\$/t ore)
- REC: Recovery (%)
- SP: Net Selling Price (\$/g)

Using the above equation, the estimated break-even COG for Kundip open pits are summarised in Table 12 by rock type. For the open pit PFS work a COG of between 0.45 and 0.62 g/t AuEg was assumed for the mine production scheduling and production inventory estimation.

Material	PC + GA (\$/t)	Mill Recovery	Gold Price (\$)	COG AuEq (g/t)
Oxide	35.21	92.95%	2,700	0.45
Transitional	40.47	94.0%	2,700	0.51
Fresh	49.74	95.80%	2,700	0.62

Table 12: COG calculation by weathering profile.

#### Mining Method

The preferred mining method for the KMC open pits will utilise conventional drill and blast, as well as conventional load and haul practices. The preferred mining fleet will utilise 100 t to 200 t capacity backhoe configuration excavators along with 100 t to 140 t payload capacity haul trucks with associated additional ancillary machines to support the surface mining operation. The unit number and size of the excavators and trucking fleet rely on the scale and nature of the mineable deposits. Flitch mining has been considered for the production inventory where the dimension of the mineralisation and geology continuity is critical, whereas double flitch mining can be an option for pre-stripping and removal of the bulk waste material where feasible. Selective



drill and blast practices will be performed on a combination of 5 m and 10 m benches to optimise the blast result and improve selective ore mining.

#### **Mine Scheduling**

Mine scheduling work was undertaken using the Deswik CAD and Schedule packages. The mine production schedule was developed using benchmark machine utilisation, machine availability and work calendar hours. The input parameters were assumed for dig rate, machine productivity, drill and blast requirements, production delays and haul truck requirements.

Multiple scenarios were assessed in conjunction with the underground operation to develop a preferred open pit mine schedule that met mill feed requirements, target metal production rates, improved mining cost and optimum operational cash flow. Out of these multiple production scenarios one preferred scenario was selected as the base case for the KMC open pit.

Physical mining constraints were applied to improve the open pit production output whilst operational efficiency, productivity and utilisation rates were still maintained. The mill capacity, stripping ratio and mining fleet utilisation were considered as physical constraints to maintain the balance between ore tonne production and waste removal, including waste pre-strip. Maintaining the preferred level of ore stockpile balance at approximately four to five months of mill feed is the key aspect in determining the preferred mining sequence and production rate.

#### UNDERGROUND

#### Mining Method Trade-off

A mining method trade-off was undertaken to determine the economics of different underground mining methods and configurations, considered most suitable for the Kundip deposits. Different scenarios considered in the trade-off study are shown in Table 13.

Option	Sublevels (floor to floor)	Ore Drives	Loaders	Fill
1A	15-20 metres	4.0 mW x 4.0 mH	10 t	None
1B	15-20 metres	4.5 mW x 4.5 mH	15 t	None
1C	15-20 metres	4.0 mW x 4.0 mH	10 t	Wastefill Avoca with CRF sill pillar
1D	15-20 metres	4.5 mW x 4.5 mH	15 t	Wastefill Avoca with CRF sill pillar
2A	20-25 metres	4.5 mW x 4.5 mH	15 t	None
2B	20-25 metres	5.0 mW x 5.0 mH	17 t	None
2C	20-25 metres	4.5 mW x 4.5 mH	15 t	Wastefill Avoca with CRF sill pillar
2D	20-25 metres	5.0 mW x 5.0 mH	17 t	Wastefill Avoca with CRF sill pillar

 Table 13: Underground trade off study scenarios.

The trade off analysis was conducted on underground production inventories at Flag and Harbour View. In each scenario, the application of rib pillars for hangingwall stability was the superior option therefore backfill options were discounted. All non-fill options delivered significantly positive outcomes. Medallion selected Option 1A to preserve head grade. Underground mine planning proceeded on that basis.

#### Mining Method

Option 1A utilises 15m to 20 m sublevels depending on orebody dip. In all cases, 64 mm production drillholes are used. The approach plans for 0.15 m of hanging wall (HW) and 0.15 m of foot wall (FW) dilution.

The drill patterns are based on stope width, as per Figure 11, using:

- A zipper pattern for stopes 0.7 1.2 m wide
- A dice 5 pattern for stopes 1.2 2.4 m wide
- Rings for stopes wider than 2.4 m



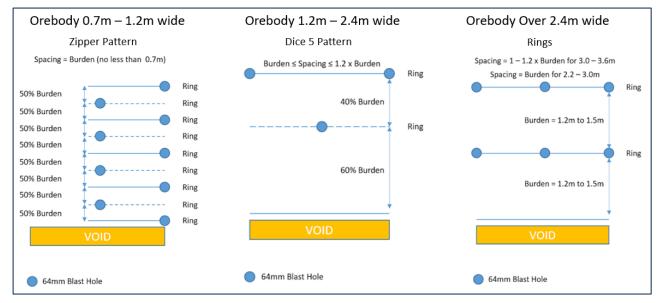
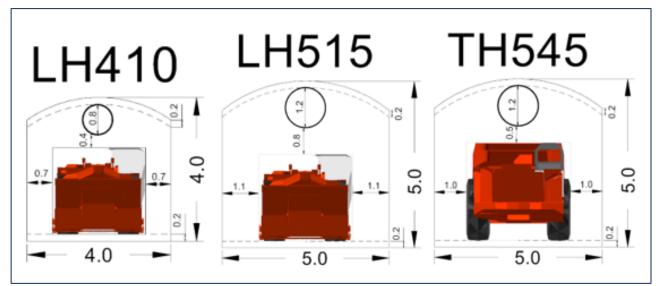


Figure 11: Blast pattern for width of orebody.

The 4.0 mW x 4.0 mH ore drives will use LH410 boggers (10t capacity) or equivalent to move ore from the stopes to the stockpiles. From the stockpiles a larger LH515 (15t capacity) or equivalent will be used to load TH545 (45t capacity) trucks for transport. The equipment dimensions can be observed in Figure 12.



#### Figure 12: Equipment selection.

For underground development, a Sandvik DD321 jumbo or equivalent will be used. Ground support consists of rings of 2.1 m bolts as per the geotechnical recommendations in Table 14. A DL431 top hammer longhole rig will drill a 64 mm hole for stope drilling and to mine slot rises.

Drive Width	Drive Height	Bolt Type/Length	Bolt Spacing	Row Spacing	Mesh Height
5.0 m	5.0 m	2.4 m Friction Bolt	1.1 m	1.4 m	2.6 m
4.5 m	4.5 m	2.1 m Friction Bolt	1.1 m	1.4 m	3.0 m
4.0 m	4.0 m	2.1 m Friction Bolt	1.0 m	1.4 m	2.6 m
3.5 m	3.5 m	1.8 m Friction Bolt	1.1 m	1.4 m	2.2 m

Table 14: Ground support regime per Green Geotechnical 2020

Figures 13 and 14 show schematics and dimensions for the selected mining method.



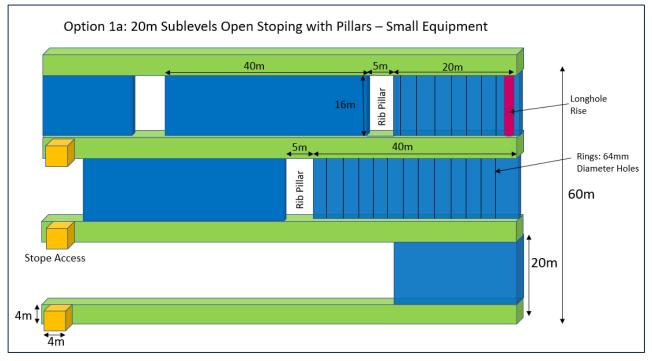


Figure 13: Schematic (approximate long section) of underground mining sequence.

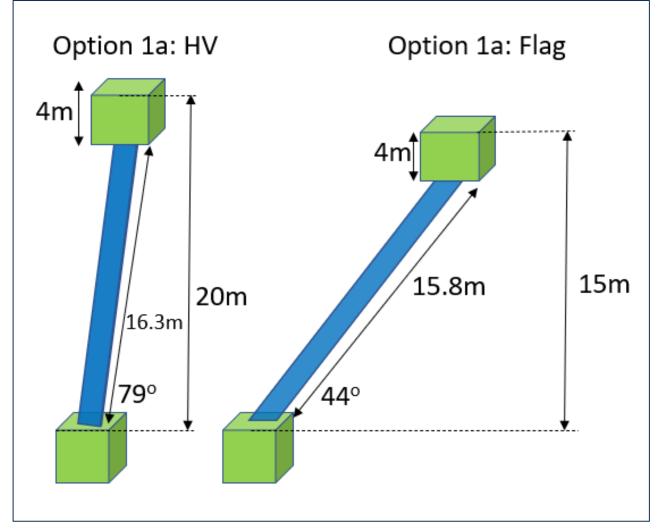


Figure 14: Schematic (approximate cross section) showing underground level spacing selection based on deposit dip.

#### Underground Mine Design

The initial underground mine design process was conducted along the following steps:

- a) Create mineable shapes (stopes) for the deposits above the minimum cut-off grade
- b) Design tunnels to all appropriate MSO shapes in Deswik
- c) Import the tunnels and shapes into Deswik CAD and Deswik Scheduler
- d) Input unit costs into Deswik Scheduler for the purposes of Deswik Pseudoflow economic analysis
- e) Link the tunnels and Stope Shapes in Deswik Pseudoflow
- f) Run Deswik Pseudoflow to determine which areas are cashflow positive and remove areas which are cashflow negative.

MSO shapes were created at the minimum COG determined to be 1.5g/t Au.

The initial underground mine design work was required to then feed into the initial schedule for Pseudoflow analysis, detailed later in this report. Post Pseudoflow analysis, stope shapes were removed from the design, and mine designs were cleaned up to suit the final stope set for each separate underground mine.

In addition to the geotechnical considerations, the following mine planning guidelines were followed:

- Capital and operating development in the footwall of the orebody
- A 10 m crown pillar, underneath the pit to the top level of the underground workings for the life of the underground operation. As the underground mining strategy is a non-fill top-down method, the crown pillar is permanent.
- 30 m minimum decline standoff from the orebody
- Production sequence as a descending "upside down V" shape rather than a flat production front to manage the effect of stress and unforeseen, detrimental changes in ground conditions.

Once the final pit shells were selected and designed, the underground MSO shapes were then trimmed to be 10 m from the edge of each of the pit shells, so that a 10 m crown pillar existed for all underground mine designs.

#### **Primary Development**

For all of the underground mines, access to the underground workings were via portals located within the nearest and most suitable open pit. This has the advantage of reducing decline development lengths and generally positions the underground portals in transitional or fresh rock types, which then typically leads to reduced ground support requirements for each portal. The portal positions were chosen based on many factors, with the key factors including ramp design and location, pit depth below the portal (for water storage/catchment) and distance to the underground stopes.

The primary decline for each of the mines was designed to suit the level spacing and orebody geometry. All declines have a gradient of 1:7 down and will be the primary access way for each underground mine. Haulage of ore and waste for each mine will be via the underground decline and then onto the open pit haulage ramp to the top of the associated pit. Each underground level contains an access drive to connect it to the decline, truck loading stockpiles for ore/waste rock handling, return air drive development, escapeway development and ore drives to access the stopes on each level.

#### Secondary Development

The overarching level design for each of the four underground orebodies was based on an uphole, open stoping mining method in which the stoping retreats to a central access. The ore drives were designed at 4.0 mW x 4.0 mH, which was considered suitable given the average orebody widths. These ore drive dimensions were considered suitable to adequately fit the selected mining equipment, while also keeping development sizes to a minimum so as to minimise the volume of waste being mined, within practical limits.



#### Dewatering

The mine dewatering design consists of two overarching phases for the purpose of the PFS. The primary mine dewatering phase consists of staged underground pump stations, which transfer the mine water up to upper-level pump stations, then out of the mine and into the nearest pit sump. Secondary dewatering involves collecting the mine water from each mining area and transferring it to the nearest primary pumping station.

#### Ventilation

Each of the underground mines have a primary ventilation circuit designed in them, whereby fresh air is drawn down the decline and exhausted through the return vent system and out of the mine. All primary ventilation connections to the mine are through the return air drives, which connect to every level access drive. No direct connections between the decline and exhaust vent system are designed, as these mines are not considered to have a production rate large enough to require such connections.

Ventilation development has been designed with a profile size of 4.5 mW x 4.5 mH arched, as this was considered suitable for the planned ventilation flow requirements and pressures while not being excessive as to unnecessarily increase waste volumes mined nor associated costs.

Ventilation connections between levels is via vertical ventilation rises. These rises are 4 mW x 4 mD in cross sectional area, square in profile and are planned to be excavated using long-hole drill and blast techniques.

All three underground mines have an exhaust ventilation connection to direct the contaminated mine air out of the mine. Flag and Gem Restored mines use a vertical ventilation rise of 3.5 m diameter, which is planned to be excavated using a raisebore machine on the surface.

Harbour View and Gem underground have an exhaust ventilation drive which daylights into the Harbour View Stage 4 pit. This drive is in place of a surface ventilation raise and also acts as an escapeway access drive for this mine.

To ensure personnel are not exposed to hazards to health or safety in underground workplaces and travel ways, air velocity and subsequently air flow must fall within certain ranges. The "Work Health and Safety (Mines) Regulations 2022" was referred to for these values in addition to "Mine Ventilation - A Practitioners Manual" and "Subsurface Ventilation Engineering for the mine and ventilation design". The key criteria applied included:

- Diesel-engine exhaust emission (DEE) dilution rate of 0.05 m³/s/kW of operating diesel power
- Minimum air velocity of 3.5 m<sup>3</sup>/s in all workplaces
- Leakage allowance of 20% of total airflow
- A maximum of 6 m/s in travel ways, 12 m/s in dedicated ventilation airways, 15 m/s in intake air pass and 18-25 m/s in return passes

#### Escapeways

The escapeway design used for all of the Kundip underground mines in the MP study work involves mining dedicated escapeway longhole rises at small (1.5 mW x 1.5 mH) profile with Safescape ladderways being installed. Flag and Gem Restored also require a ladderway to be installed in the surface ventilation raise to allow personnel access from the upper level in each of these mines to the surface. In both of these cases the surface vent raise is planned to be excavated with a raisebore rig, therefore resulting in a smooth wall raise which isn't expected to require surface ground support.

Harbour View and Gem underground mines use a return ventilation adit instead of a surface raisebore to allow the exhaust ventilation to exit the mine. This drive will likely have ventilation fans installed within it and will therefore need a personnel door adjacent to the fans to allow personnel to walk down the drive and around the primary fans.

Level to level escapeway rises are planned to be mined using longhole open stoping similar to the Flag and Gem Restored longhole escapeway rises.



#### **Underground Scheduling & Modifying Factors**

Each of the different underground mines had a similar mining sequence applied, being a descending "upside down V" shape where possible rather than a flat production front to manage stress and unforeseen, detrimental changes in ground conditions. This worked to complement the stope extraction methodology, which utilised uphole drilling and blasting techniques. No paste nor any other fill is planned to be used in any of the open voids post mining, meaning that the "upside down v" mining sequence helped to ensure that mining fronts advanced ahead of open holes being created in the floor.

The schedule tasks by default are split into parent and derived tasks. Parent tasks are those which are linked directly to the physical design solids and control which derived tasks (if any) are generated for each task. In this schedule, the parent tasks include stopes and development (including vertical) tunnel solids. Derived tasks include production longhole drilling for stopes only.

The development and production rates used in the schedule are summarised in Table 15.

Development Rates	Value	Unit
Decline Development	100-160	m/month
Capital Development (ACC, SP, RAD, EWD)	100	m/month
Operating Development	100	
Escape way rise development (airleg)	100	m/month
Long Hole Drilling in RAR	100	m/month
RAR drill factor	20	Drill metres per metre length
Stoping Rates and Factors		
Stope Long Hole Drilling	190	m/d
For Stoppe <= 1.2m wide	2.5	t/drill metre
For Stopes <= 1.2m wide	800	t/d
For Stones > 1.2m and < 2.5m wide	3.3	t/drill metre
For Stopes > 1.2m and < 2.5m wide	800	t/d
For Stoppe >= 2 Em wide	5.9	t/drill metre
For Stopes >= 2.5m wide	800	t/d
Stope Bogging	800	MrT/d*

#### \*MrT = scheduled recovered tonnes

#### Table 15: Development and production rate assumptions.

Modifying factors were applied to some of the raw design solids physicals to account for unplanned dilution in stopes and overbreak in development. Dilution was applied with zero grade assigned, to represent a worst-case scenario.

Waste lateral development has a 15% dilution factor applied to account for unplanned overbreak in waste development during scheduling and cost modelling.

Ore development has no overbreak applied, since generally overbreak in ore drives results in the same volume of ore being removed from the associated stope shapes. Hence, the ore will still be accounted for within the mining schedule and cost model.

Stopes have no additional overbreak applied as they already have planned dilution incorporated within the shapes, which has been designed and interrogated to reflect block model dilution grades.

Recovery factors were applied to all stopes within the schedule, to account for ore left behind in each stope, which could occur for a number of reasons. A flat factor of 0.95 recovery was applied to stopes, meaning that 95% of the contained tonnes and 95% of the contained ounces were recovered and counted during schedule reporting and therefore cost modelling. This recovery estimation took into account a number of factors including geotechnical recommendations, fresh/weathered rock types, stope geometry, and equipment selection.



Due to the level of detail required during this mining study, some development was not considered necessary to be designed. This included capital infrastructure such as pump stations, electrical sub-station cuddies, electrical starter box and distribution-board cuddies, sumps, refuge chamber cuddies, workshops, service bays and other similar development chambers. However, many of these development excavations will likely be required to be mined and therefore should be allowed for during scheduling and cost modelling.

Hence, a development factor of 1.15 was applied to all lateral development, excluding ore drive development. This means that for every metre of physically designed lateral development included in the schedule, the scheduler treated it as a 1.15 m length unit for resourcing and costing purposes.

Ore drives were designed based on the economic stope shapes, so are not considered required to include the development factor allowance. Additionally, given that this development often contains ore, artificially increasing these drives by a factor could incorrectly add ore to the schedule. A summary of the key mining physicals for the KMC underground design and schedule are as shown in Table 16.

Mining Physicals	FLAG	HV + GEM	GRS	TOTAL	Unit
Mine Life	36	57	28	98	months
Total Mined Ore	709,727	1,335,333	240,020	2,285,081	t
Mined Ore Grade	4.52	3.76	6.10	4.24	AuEq g/t
Mined AuEq Ounces	103,243	161,323	47,082	311,647	Ounces
Mined Waste	361,449	348,130	236,270	945,849	t
Waste / Ore Ratio	0.51	0.26	0.98	0.41	t waste / t ore
Capital Development (Lateral)	5,249	4,567	3,465	13,281	m advance
Operating Development (Lateral)	8,271	9,428	1,808	19,507	m advance
Development Ore	304,742	362,323	67,907	734,971	t
Stope Ore	404,985	973,011	172,114	1,550,109	t
Stone / Development are	4 00	2.69	2.53	2.11	t (Stope ore) / t (dev
Stope / Development ore	1.33				ore)
Stope Production Drill Metres	126,891	225,704	36,953	389,547	m
Stana Tannaa / Drill Matroa	3.19	4.31	4.66	3.98	stope ore tonnes /
Stope Tonnes / Drill Metres	5.19			3.90	prod drill m

 Table 16: Underground mining physicals.

#### COMBINED MINE SCHEDULE

An integrated scheduling exercise was undertaken as part of the Mining Study. Open pit mining commences 3 months in advance of process plant commissioning and continues for 103 months at an average rate of 420 thousand bank cubic meters (bcm) per month (8.6 years) over that period. Open pit mining commences at Gem and is ongoing for a period of 7 years forming the base production source for the Project over the LOM. Access to the Gem and Harbour View underground mines is established from the Gem pit. Stage 1 of the Flag pit commences in year 2 of the schedule to enable access to Flag underground to be established. The relatively small pits at Gift, Gem Restored, Harbour View and Flag Stage 2 are mined in the final four years of the Project life upon completion of the Gem pit.

Underground mining commences at Flag in month 24 of the mine plan and continues at an average rate of 27kt of ore per month (320ktpa) over a period of 82 months (6.8 years). Underground mining then progresses to Gem/Harbour View and concludes at Gem Restored.

The integrated mine schedule is optimised to minimise inferred material presented to the process plant in the early years of the Project life as well as deferring underground mining for 2 years while open pit mining ramps up and stabilises and underground access can be established. The mine schedule creates a stockpile that averages 830kt of ore over the LOM. As mining rates wind down at the back end of the schedule, the stockpile is drawn down and leaving a minimal processing tail where the plant is not operating at full capacity. The mine schedule enables the process plant to run at an average throughput rate of 127kt/mth over 110 months (9.2 years).



# METALLURGY

Mining and treatment of ore in the Kundip area has occurred since the early 1900s using amalgamation, gravity, cyanidation, and flotation processes to successfully produce gold, silver and copper. The extraction of gold by cyanidation from the Kundip deposits has been influenced by the presence of cyanide soluble copper (CNsolCu) above the top of fresh rock, which increases operating costs due to the consumption of cyanide and the subsequent destruction of cyanide in leach tailing prior to discharge to tailings storage or additional processing by flotation.

A significant amount of metallurgical testwork has been carried out on Kundip ore. Tectonic completed metallurgical testwork programs from 2002 to 2005. During 2018, Medallion extended the metallurgical testwork database with a leaching and flotation test program at ALS Limited's (ALS) laboratory in Perth. In 2019, Medallion also conducted assessments of CNsolCu levels across the Kundip deposits and weathering profiles.

Testwork program	2005	2018	2019
Laboratory	Ammtec/IML/Optimet	ALS	Bureau Veritas
Aggregate sample	1,613kg	658kg	306kg

Table 17: Laboratory & sample mass submitted for historical KMC metallurgical testwork programs

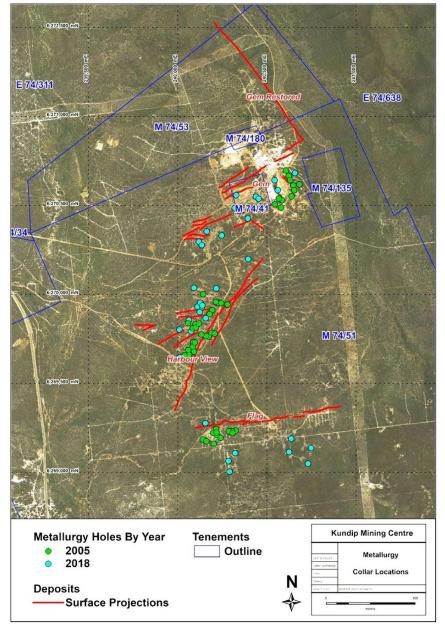


Figure 15: Collar locations for drill holes used in 2005, 2018-19 metallurgical testwork programs



Testwork results demonstrate that high copper and precious metal recoveries can be achieved using a combination of gravity, flotation and cyanidation.

Sequential flotation and leach processing is a widely used and conventional process route utilised globally for the processing of gold ore bodies which contain significant copper and silver by-product credits, in Australia of note this includes the Deflector project owned and operated by Silver Lake.

GR Engineering Services Limited (GRES) was engaged by Medallion to complete a metallurgical review and PFS into processing KMC deposits to maximise recovery of gold, silver and copper to saleable products, in the form of gold doré and copper/precious metal concentrates. The KMC production inventory consists of oxide, transitional and primary ore types with mineralogy exhibiting variability in oxidation state and metal grades.

Due to this variability, the primary lithological ore types (oxide, transition and fresh) have been divided into material containing high and low copper values with the threshold being 0.3% copper (3,000ppm).

The high copper ore types will be treated using flotation and cyanidation leaching processes to recover a saleable copper concentrate and produce a precious metal bullion. In order to float the oxidised copper minerals from the oxide and transitional ore types, these ore types will need to undergo a sulphidisation step prior to flotation. The high copper, sulphide ores will undergo flotation using a more conventional type process and reagent scheme.

The lower copper ore types will undergo conventional gold recovery techniques including gravity, leach and adsorption, and refining techniques. The presence of cyanide soluble copper within the feed will require careful management in the process.

Metallurgical test work on the oxide and transitional ore types to date has been limited with substantially more test work to be undertaken. Representative composites covering the variability of the MRE will be required to validate the assumptions made within this document.

The preliminary ore comminution characteristics indicate the primary sulphide ore has a bond ball mill work index of 18.8 kwh/t. A grind size of 80% passing 75 microns has been used for the transitional and primary ore types with the softer oxide ore types using a grind size of 80% passing 106 microns. These assumptions will require validation with future metallurgical test work.

Metallurgical Recovery		Oxide		Transitional		Fresh	
		Low Cu	High Cu	Low Cu	High Cu	Low Cu	High Cu
Au recovery – gravity	%	25.0	30.0	35.0	25.0	35.0	35.0
Ag recovery - gravity	%	30.0	30.0	30.0	10.0	15.0	25.0
Cu recovery - flotation	%	-	30.0	-	45.0	-	88.0
Concentrate Cu grade	%	-	22.0	-	22.0	-	21.0
Au recovery - flotation	%	-	35.0	-	25.0	-	40.0
Ag recovery - flotation	%	-	30.0	-	5.0	-	30.0
Au recovery - leach	%	67.6	30.9	57.3	43.6	60.5	23.3
Ag recovery - leach	%	38.7	15.3	47.6	33.2	14.5	7.7
Au recovery – total	%	92.6	95.9	92.3	93.6	95.5	98.3
Ag recovery – total	%	68.7	75.3	77.6	48.2	29.5	62.7
Cu recovery - total	%	-	30.0	-	45.0	-	88.0

The overall recoveries used in the process design and economic modelling for gold and copper are as presented in Table 18. The recoveries stated have been derived by GRES from historical test work.

 Table 18: Gold, copper and silver recoveries by process stage and metallurgical

GRES has recommended a future test work program should include the following list below completed on suitable composites of each of the six ore types to further validate the recoveries and processing assumptions. Future variability test work and test work on ore blends are:

- Comminution test work including Unconfined Compressive Strength (UCS), Crushing Work Index (CWi), Abrasion Index (Ai), Bond rod mill work Indices (BRMWi) and Bond ball mill work Indices (BBMWi) determinations;
- Test work to determine JK and SMC comminution design parameters;
- Gravity concentration and intensive cyanidation test work to determine recoveries and confirm treatment methodology;
- Flotation test work to optimise recoveries, confirm grind sizes, circuit configurations, kinetics, reagent schemes and subsequent reagent consumptions;
- Cyanidation leach test work to determine extractions and reagent consumption and influence of cyanide on soluble copper;
- Carbon adsorption, cold cyanide wash (for the removal of copper and elution testing);
- Mineralogical work to determine gold and copper occurrences;
- Detailed analysis of feed samples;
- Thickening test work on flotation tailings samples;
- Thickening and filtration test work on concentrate samples; and
- Detailed concentrate analysis including chemical and handling characteristics.

For further details regarding the GRES metallurgical review and process recoveries for gold, silver and copper, refer to the Company's ASX announcement 28 March 2022.



# PROCESSING

#### **Process Design**

The KMC processing facility has been designed by GRES to process ore from the Kundip at a rate of 1.5Mtpa basis 100% fresh feed. Throughput rates for oxide and transitional material is modelled at 1.6Mtpa. The processing facility is designed to operate 24/7 at an effective mill utilisation of approximately 91% and includes the following design criteria:

- Primary crushing of ROM sized feed to a product size of 80% passing 115 mm using a single jaw type crusher;
- Storage and transfer of crushed ore using a surge bin and standby stockpile arrangement;
- Grinding of crushed feed ore using both a SABC Circuit. Oxide type ores will be ground to a product size of 80% passing 106 microns using the installed SAG mill only. Grinding of the transitional and sulphide ore types will be achieved with operation of both mills to a product size of 80% passing 75 microns;
- Gravity gold recovery using batch type centrifugal concentrator coupled with intensive cyanidation leach reactor. The efficiency of intensive cyanidation will require validation in the future test work;
- Treatment of the high grade copper ore types to produce a suitable copper concentrate using flotation consisting of roughing and three (3) stages of cleaning;
- Thickening and filtration of copper concentrate using a conventional high rate thickener and plate and frame pressure filter;
- Thickening of the flotation tailings for the high grade copper ores using a conventional type high rate thickener;
- Processing of the thickened flotation tailings, or cyclone overflow, by cyanide leaching and subsequent adsorption using a hybrid CIL circuit containing two leach and six adsorption tanks;
- Cyanide detoxification of the leach tailing pulp using an Air/SO2 process;
- Tailings disposal using a Tailings Storage Facility (TSF) contained within waste dump, referred to as an Integrated Waste Landform (IWL), together the IWLTSF;
- Desorption of precious metals from loaded carbon using a split Anglo type process and subsequent refining to doré using electrowinning and smelting. A cold cyanide wash has been allowed to remove copper;
- Reagent storage, mixing and distribution systems for hydrated lime, sodium cyanide, caustic, hydrochloric acid, flotation and cyanide detoxification reagents;
- High, low pressure and instrument air generation and distribution systems; and
- Raw, process, fresh and potable water generation, storage and distribution systems.

Figures 16 shows a simplified block flow diagram for the KMC process plant. Figure 17 shows a more detailed process flow schematic for the full process plant.

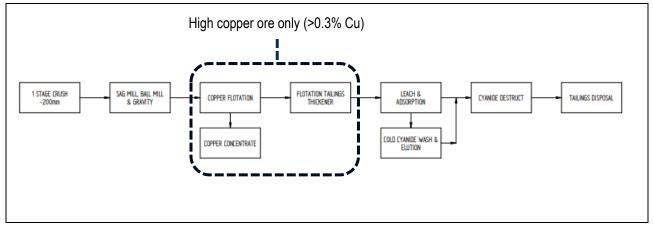


Figure 16: KMC process plant, simplified block flow diagram

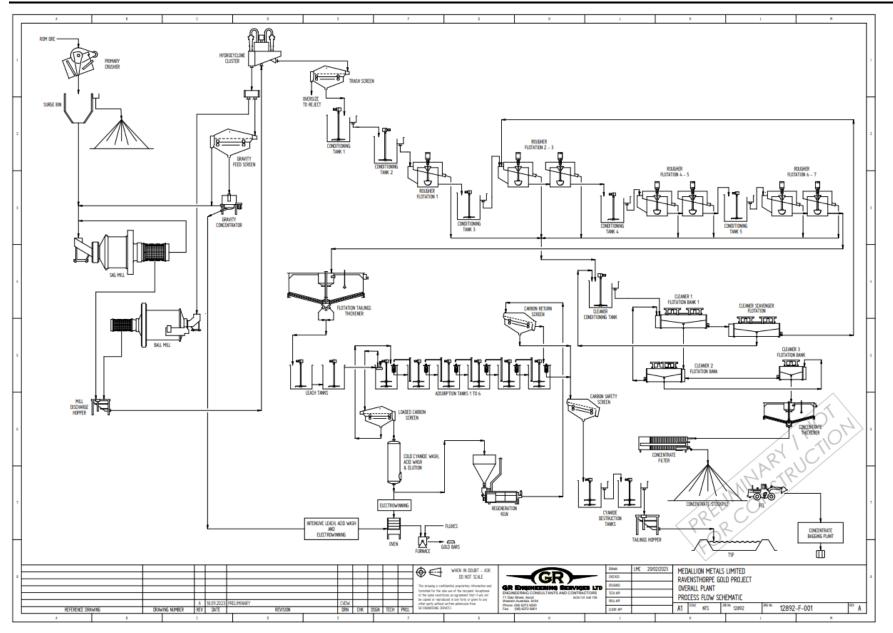


Figure 17: KMC process plant, schematic diagram



## **Process Schedule**

Process plant design throughput rates for different material types are provided by GRES (Table 19).

		Oxide		Transiti	Transitional		Fresh	
		Low Cu	High Cu	Low Cu	High Cu	Low Cu	High Cu	
Annual	tpa	1,600,000	1,600,000	1,600,000	1,600,000	1,500,000	1,500,000	
Monthly	tpm	133,333	133,333	133,333	133,333	125,000	125,000	
Daily	tpd	4,384	4,384	4,384	4,384	4,110	4,110	

Table 19: Throughput rates by material type

Medallion has modelled the processing schedule based on the hierarchy shown in Table 20. The hierarchy preferences higher grades into the process plant. There is a strong correlation between higher gold and higher copper grades.

Hierarchy	Material type	Tonnes	% of overall feed
1	Fresh – high copper	2,552,987	18
2	Transitional – high copper	117,607	1
3	Oxide – high copper	124,250	1
4	Fresh – low copper	6,467,178	46
5	Transitional – low copper	1,247,328	9
6	Oxide – low copper	3,435,741	25
Totals		13,945,091	100

### Table 20: Production inventory by material type

Process feed by material type is shown in Figure 18.

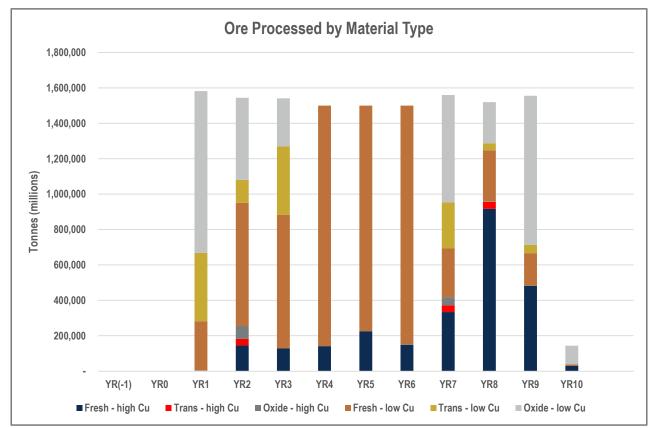


Figure 18: Processing inventory by material type.

The processing schedule is driven largely by the mine plan. Low copper ores dominate the mine and processing schedule in the early years of the Project as the mine plan advances through the oxidation profile and into fresh rock. Mill feed tonnes and grade (gold and copper) are shown in Figure 19, metal recovered for sale in Figure 20.

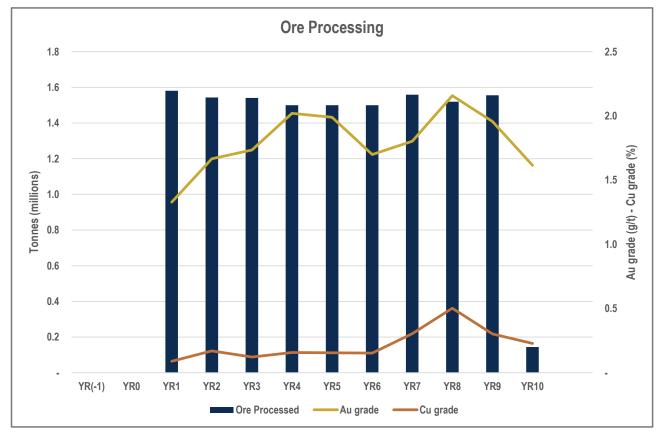


Figure 19: LOM process inventory tonnes and grade.

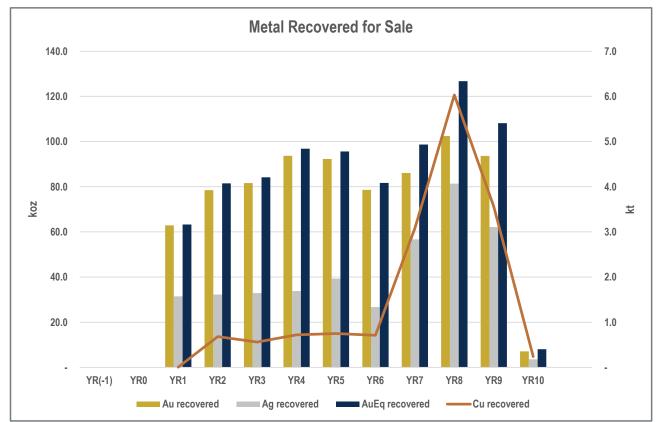


Figure 20: LOM metal recovered for sale.



Consideration was given to deferring capital associated with the flotation plant and prioritising treatment of low copper ores for as long as possible. This approach would limit the ability to treat higher grade underground ore and limit flexibility were high copper ore to present in the mine plan earlier than anticipated. The PFS assumes establishing the flotation plant during the pre-production phase in order to generate copper by-product credits and to provide maximum processing flexibility, whereby the process plant is capable of treating all material types (oxide/sulphide, high/low copper) from commissioning. Accordingly, capital expenditure is modelled on that basis.



# CIVILS, EARTHWORKS AND SUPPORT INFRASTRUCTURE

The proposed layout of the Project and associated infrastructure is shown below in Figure 21. Topography and the availability of the groundwater have a significant influence on the Project layout and the requirement for ancillary infrastructure.

The site water balance shows the Project in deficit at the commencement of production then moving to surplus as mine workings deepen, with net neutrality with respect to water consumption and production over the LOM. The forecast deficit over the first period of the Project life will be supplemented by water either pumped or trucked from the Desmond shaft located 7km to the north of KMC on a Medallion granted Mining Lease (M74/163). Historical dewatering records indicate recharge rates into the Desmond workings will be supplement process water demand in the early stages of mine life. The Company will confirm this with a future program of pump testing the shaft.

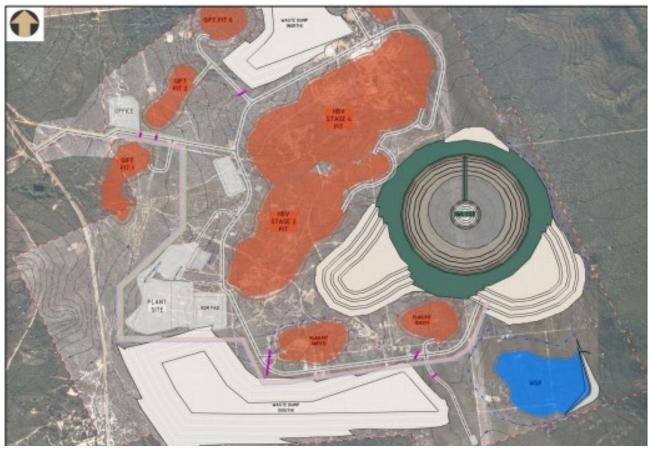


Figure 21: KMC surface layout

# **Civil and Geotechnical Engineering**

Resource Engineering Consultants Pty Ltd (REC) was engaged by Medallion to prepare the PFS level Civil-Geotechnical design at KMC based on the revised site layout (including bulk earthworks and non-process infrastructure). REC has previously executed extensive investigative, design and reporting programs for KMC as part of the development and approval of the Project. On the basis of an increased reserve and changes to the production schedule, the new design considers an Integrated Waste Landform Tailings Storage Facility (IWLTSF) and associated infrastructure, including the development of the water balance, update to the surface water management and diversion infrastructure design, update design of the waste dump to support the IWLTSF design, and bulk earthworks costs estimation based on the designs.

Geotechnical investigation works previously undertaken at KMC identified that the ground conditions are suitable for:



- Construction of a typical mine processing plant. No laboratory testing has been carried out for the plant site
  as part of the PFS. Compressibility parameters for the in-situ soils and rocks were evaluated from visual and
  tactile assessment of materials encountered in test pits and exploration boreholes. It is recommended that
  further drilling and testing be completed as part of the detailed design to determine the geotechnical
  properties for foundation materials at the plant site;
- Construction of typical mine roads; and
- Borrow materials are available from within the site for use in construction.

## Waste Deposition

The Project schedule envisages a total wet tailings production of 14.1 Mt over approximately 9 years. Mine waste material will be stockpiled within the IWLTSF (waste dump east) during operation from Stage 1 to Stage 7 of the IWLTSF, while the remainder of waste material is proposed to be tipped in the north (waste dump north) and south sites (waste dump south) of the IWLTSF facility.

The proposed above ground IWLTSF is planned and constructed whereby the TSF is located within a mine waste dump and central to the open pits. Each staged embankment is proposed to be constructed using waste rock to form the bulk of the embankment. The upstream batter of each raise will be compacted to form a low permeability zone comprising material won from within the base of the IWL or borrow locations. These embankments will be constructed progressively as waste is produced and hauled to the IWLTSF. The IWLTSF design conservatively assumes an average dry density of 1.15 t/m3 for the first 4 years and 1.45 t/m3 for the remaining 5 years. The required tailings storage capacity is 13.9 Mt. The proposed IWL configuration is shown in plan on Figure 1.

In accordance with the DMP Code of Practice (CoP) (DMP, 2013), the IWLTSF attracts a 'Medium' hazard rating. Construction of the IWLTSF will be undertaken in accordance with drawings and an earthworks specification. Furthermore, operation of the IWLTSF will be in general accordance with the intent of the DR and Operating Manual (OM). Tailings are to be deposited from the perimeter embankments of the IWLTSF in a sub-areal manner in thin lifts and beaching towards the rock ring at the centre of the facility to form a decant pond away from the main embankment. The configuration and location of the rock rings and the maximum decant pond size provides capacity for the 1:100 annual exceedance probability (AEP) 72-hour storm event and DMP required freeboard. It is envisaged that a detailed closure plan will be developed in conjunction with a site wide closure plan (by others).

The proposed IWL has been developed with closure in mind, taking into consideration the DMIRS principal closure objectives for rehabilitated mines and the Environmental Protection Authority's (EPA) objective for Rehabilitation and Decommissioning to ensure that premises are decommissioned and rehabilitated in an ecologically sustainable manner.

# Supporting Infrastructure

The Shire of Ravensthorpe (Shire) has excellent access and community infrastructure making it an extremely amenable jurisdiction for the proposed development. Two major resource projects are currently underway in the Shire; Allkem Ltd's Mt Cattlin Lithium/Tantalum Project and First Quantum Ltd's Ravensthorpe Nickel Operations. The combined workforces of the two projects numbers in the many hundreds many of whom reside locally in the Shire with the balance flying or driving in and out of the region based on shift rosters.

High quality sealed roads link the Shire to Perth (approximately 550km) and to Esperance the nearest deep water port (approximately 185km).

The Company will make use of the Ravensthorpe Airport located 12 km south of the Project area to support flyin/fly-out (FIFO) operations. The airport is a sealed 1,680 m strip with global positioning system (GPS) approach at both ends to enable instrument approaches.

Medallion owns and operates a worker accommodation village (Camp) located in the township of Ravensthorpe. The Camp comprises 89 single rooms with kitchen/dining facilities and associated infrastructure. The Study assumes a pre-production camp expansion to 133 rooms and a secondary expansion to 175 rooms, prior to the



commencement of underground mining. The pre-production construction workforce is anticipated to average approximately 65 individuals over the construction period, peaking at approximately 110 individuals. The production operational workforce is expected to average approximately 140 individuals, peaking at an average of approximately 180 for 12 months during the commencement of underground mining. It is likely that a material proportion of the RGP workforce will be resident in the Shire, thereby reducing peak Camp capacity requirements. Where peak accommodation requirements exceed the Camp capacity, it is anticipated that overflow will be housed at one of the numerous established accommodation options within the Shire.

For the purposes of the Study analysis, it is assumed the Project will operate on a 100% Fly In Fly Out (FIFO) basis. Medallion has a stated objective to achieve 25% of the workforce resident in the Shire of Ravensthorpe within one year of declaring commercial production.

The Project is situated midway between two separate mains power grids, neither of which has capacity to meet the demand requirements of the Project. Power generation will be under a build-own-operate (BOO) contract with a suitable provider with liquid natural gas (LNG) the preferred fuel type as described in the Processing and Cost Estimation sections of the PFS.

# IMPLEMENTATION

A Project implementation plan has been developed and assumes an Engineering, Procurement and Construction Management (EPC) based project implementation strategy for the construction of the process plant and associated infrastructure. Medallion will be responsible for engaging contractors to complete bulk earthworks, installation of ancillary infrastructure, preparation for the commencement of mining and all preparations for the transition from construction to operations. This is consistent with the approach used in development of the Project capital cost estimate.

Medallion will establish a small "Owner's Team" to manage the development of the Project. The Owner's Team will include key members of the study team. Medallion will ensure that its in-house skills (may be third parties) include all aspects of Project management, operations management and accounting, as well as sufficient technical capability to review and approve engineering performed by Medallion consultants and contractors.

The Company has based cost estimation around a hybrid contractor and owner-operator strategy with respect to the management and operation of the Project. Costing is based on Medallion securing contractor services, particularly as it relates to mining. Medallion will employ its own people to operate and maintain the Process Plant, in senior management and site services positions. Medallion will take responsibility for the sourcing and supplying of flights, accommodation and fuel for its own people and any contractors it engages.

# ENVIRONMENT, SOCIAL AND REGULATORY SETTING

The Project is located near Ravensthorpe in Western Australia. Ravensthorpe has a Mediterranean climate with cool, wet winters and hot summers. KMC occurs in an area of low relief to the west of the locally-significant Ravensthorpe Range. The population of the Shire of Ravensthorpe is approximately 2,000. The biggest employer is mining, closely followed by agriculture (pastoral and grazing). There are two significant mining operations near Ravensthorpe (lithium and nickel laterite) and the area has a long history of mining activity.

There have been two successful Native Title claims in the Shire of Ravensthorpe. Neither claim extends over the Project area. With regard to Aboriginal heritage, surveys have been conducted and there are no known sites of significance in the Project area. Nevertheless, the Company has a claim wide Noongar Standard Heritage Agreement (NSHA) in place to manage any heritage considerations. There are some sites of interest in terms of European heritage, mostly at the former township of Kundip which is located outside the proposed development area. The Hopetoun - Ravensthorpe Railway Heritage trail passes through KMC and development planning will have to take this into account.

The Ravensthorpe area has significant biodiversity values with respect to flora, vegetation communities and fauna listed as threatened under biodiversity legislation. The community has a high level of awareness of these values and there is an annual wildflower show held in the town.

Medallion is committed to operating in total alignment with the Shire of Ravensthorpe's mining objective which is to *"facilitate on-going exploration, development and protection of mineral resources and basic raw materials while ensuring that the environment and amenity in the locality of operations are adequately safeguarded"* (Land Insights, 2015).

The Project tenements that will host the proposed development are located on Vacant Crown Land which does not have park or reserve status of any kind. The Project tenements have been extensively worked for over a century and are heavily degraded in many areas. The Kundip Nature Reserve occurs immediately to the south of the Project area.

Biological surveys have recorded the following:

- No species of flora listed as Threatened under State or Commonwealth legislation with numerous species identified as near threatened or poorly known ('Priority species') by the State Government;
- One floral Threatened ecological community listed under Commonwealth legislation, and two floral ecological communities identified as potentially threatened or poorly known ('Priority' ecological communities); and
- Several species of fauna as Threatened under State and/or Commonwealth legislation and a number of other species identified as near threatened or poorly known ('Priority species') by the State Government.

Impacts to biodiversity can be mitigated using the mitigation hierarchy – avoid disturbance where possible, minimise disturbance where it is unavoidable, rehabilitate disturbed areas to agreed criteria and offset the residual impacts.

Dieback is present in the broader area and the Project will require dieback and weed control protocols during construction and operations. These protocols have already been introduced for exploration activities.

Bushfires occasionally occur and can be significant. The Project area has a substantial firebreak on the northern, western and southern sides with the Ravensthorpe-Hopetoun Road on the western side.

Co-ordination with local emergency services will be undertaken on a routine basis.

# **Legislative Framework**

The development of the Kundip Mining Centre will require the following key environmental approvals:

• Ministerial approval under Part IV of the Western Australian Environmental Protection Act 1986 (EP Act);



- Ministerial approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act);
- A letter of approval of a Mining Proposal and Mine Closure Plan under the Western Australian Mining Act 1978 (Mining Act); and
- A Works Approval and Operating Licence under Part V of the EP Act.

Medallion already holds a Ministerial approval under the EP Act (Ministerial Statement 1143). This approval relates to an earlier version of the Project and not to the expanded development as currently proposed. This will require the compilation of additional survey data and the submission of a referral under Section 38 of the EP Act. The Environmental Protection Authority (EPA) will assess the revised proposal and issue a report and recommendations for the Minister. If approved, an amended Ministerial Statement will be issued.

The main issues for consideration will be flora, fauna and ecological communities of conservation significance. The current approval includes a requirement to offset environmental impacts on flora and fauna and a review of the offsets requirements is likely given the expanded footprint associated with the revised development.

An earlier version of the Project, the Phillips River Project, was referred under the EPBC Act to the then Department of Environment and Heritage in 2005. It was determined to be "not a controlled action". Medallion intends to refer the current development proposal as conceived in the PFS under the EPBC Act given the time that has elapsed since the previous determination. Approval under the Commonwealth EPBC Act will relate to Matters of National Environmental Significance (MNES) - in this case, threatened flora, fauna and communities.

There is no current approval in place under the EPBC Act. An assessment under the EP Act can be accredited under the EPBC Act meaning that a separate assessment under the EPBC Act is not required, and that the Commonwealth department, Department of Climate Change, Energy, the Environment and Water (DCCEEW) will use the EPA's report to make its assessment and recommendation to the Commonwealth Minister. DCCEEW may request additional information as part of this process.

The other key environmental approvals relate to the Mining Act and Part V of the EP Act. These approvals cannot be granted where a project is under assessment under Part IV of the EP Act so the approvals cannot be sought in parallel. However, consultation with these departments – the Department of Mines, Industry Regulation and Safety (DMIRS) and the Department of Water and Environmental Regulation (DWER) respectively, will occur during the Part IV process.

Other subsidiary approvals and legislation relevant to the revised project include a requirement for groundwater abstraction licences (Rights in Water and Irrigation Act 1914), managed by the Department of Water and Environmental Regulation and any local government requirements. Aboriginal heritage is managed by the Department of Planning, Lands and Heritage (DPLH) under the Western Australian Aboriginal Heritage Act 1972 but no requirements under this act have been identified to date.

Medallion believes there is strong likelihood the Project will be approved under both the EP Act and the EPBC Act and will subsequently receive all necessary secondary approvals. The PFS is prepared on the basis that those approvals are in hand.

# Mine Rehabilitation Fund (MRF) Liability and Closure

Under the Western Australian Mining Rehabilitation Fund Act 2012, all tenement holders are required to report disturbance date and contribute annually to the Mine Rehabilitation Fund (MRF). The following table outlines the maximum annual contributions required to the MRF if the full Project footprint was implemented and no rehabilitation had been undertaken.

Tenement	Area (Ha)	Annual MRF Liability (AUD)
E74/311	4.4r	1,185
M74/135	4.9	1,308
M74/41	3.4	1,031



M74/51	297.3	118,431
M74/53	37.6	14,688
Totals	347.6	136,644

Table 21: Total disturbance and associated MRF liability.

Annual MRF contributions are modelled in PFS cashflows based on the percentage of LOM production inventory mined pro-rated against the total disturbance liability and discounted by 20% under the assumption that some rehabilitation will be undertaken progressively during the Project life.

Closure costs are modelled based on the Rehabilitation Liability Estimate (RLE) that is the basis of the MRF liability calculation (1% of the RLE). Medallion's current approval does not contemplate full rehabilitation of open pit voids and the Company does not expect this to be a condition of any amended or future approvals. Closure costs are modelled as that portion of the RLE that does not include the open pit void which is \$10.6 million. The Company has offset salvage value of Project infrastructure against the gross closure costs modelled. Salvage value is modelled as 5% of the replacement value of Processing Infrastructure.

The Company notes a small portion of the planned development footprint encroaches upon an Exploration Licence. Medallion is the 100% legal and beneficial owner of the Exploration Licence and believes that it is reasonable to expect this tenure can be converted to a Mining Lease, Miscellaneous Licence or General Purpose Lease as required to facilitate this aspect of the proposed development.



# COST ESTIMATION

The estimation of costs associated with the development, operation and closure of KMC has been a collaborative effort between Medallion and its partner consultants, principally Mining Plus and GRES, who have estimated the mining and processing costs respectively to a nominal accuracy of +/- 30%. Medallion has provided inputs for labour, diesel fuel, flights and accommodation that feed into the third-party estimates of capital and operating costs as they relate to the financial analysis of the Project.

# **Open Pit Mining Cost**

Open pit mining cost estimation assumes a full contractor model with the exception of the provision of technical and owner senior management positions. Costs were developed from first principles and a contractor margin applied where applicable.

The open pit mine plan involves the movement of approximately 43.2 million bank cubic meters (bcm) of ore and waste at an average rate of 420kbcm per month over a period of 103 months (8.6 years).

Open pit capital costs consider mobilisation, site establishment and surface clearance requirements as carried out by the preferred contractor. Mobilisation-related costs include transport of equipment, machinery parts and assembly. Site establishment costs cover infrastructure construction and service installation to support the mining operation. Clear and grubbing costs include clearing and windrowing of native vegetation and stripping and stockpiling of topsoil (to a depth of 200mm) across all planned active mining areas including adequate clearance areas.

Description	\$ millions
Mobilisation	0.7
Establishment	2.4
Clear & Grub	1.2
Total	4.3

### Table 22: Open pit mining capital cost

The open pit operating mining unit rate is estimated to be \$4.45/t for total surface material movement (\$41.17/t of open pit ore mined). It is noted that 48% of the total open pit material movement is oxide material requiring less blasting than more competent material types. The total mining operating cost is estimated to be approximately \$480 million. A summary of the operating cost estimate is presented in Table 22.

Description	\$/t rock	\$/t ore	\$ millions
Load & Haul Fixed	0.77	7.15	83.4
Load & Haul Variable	0.75	6.98	81.4
Production Labour	0.82	7.56	88.1
Workshop Operating	0.49	4.50	52.5
Drill & Blast	0.84	7.74	90.3
Mining Services	0.28	2.57	30.0
Mining Overheads	0.50	4.66	54.3
Total	4.45	41.17	480.0

## Table 22: Open pit mining operating cost

For the purposes of the financial model approximately 3 months (\$15.4 million) of open pit operating costs were capitalised as pre-production mining.



# **Underground Mining Cost**

As with open pit mining, underground cost estimation assumes a full contractor model with the exception of the provision of technical and owner senior management positions. Costs were developed from first principles and a contractor margin applied where applicable.

The underground mine plan involves the extraction of approximately 2.3 million tonnes of ore at an average rate of 27kt per month (320ktpa) over a period of 82 months (6.8 years). The underground cost modelling reflects the costs associated with establishing and running mining operations and direct support services to achieve the mine plan.

Underground mine infrastructure capital costs include all surface support infrastructure (offices, changerooms, access and services reticulation), mine surface infrastructure (portal prep, ventilation and escape raise stabilisation and collar prep and magazines) and ongoing capital for extension of underground services (surface HV MCC/Switch Room, HV cable drop) over the life of the Project.

Description	\$ millions
Equipment	1.4
Utilities, Fuel & Consumables	7.3
Capital Items	10.6
Total	19.3

 Table 23: Underground infrastructure capital cost.

Underground capital development and operating costs over the underground mine life are shown in Table 24.

Description	Capital Development	Operating
	\$ millions	\$ millions
Equipment	14.4	39.3
Personnel	40.1	99.5
Utilities, Fuel & Consumables	20.8	45.8
Capital Items	0.9	-
General	11.4	26.3
Total	87.6	210.9

Table 24: Underground mining capital and operating costs

Total capital development and operating underground mining costs equate to \$130.6 per tonne of ore mined (excluding infrastructure capital). Of the total capital development cost, \$44.5 million is assigned as sustaining capital development and contributes to All in Sustaining Cost (AISC) calculations.

# **Processing Cost**

A capital cost estimate for the processing plant and associated infrastructure was prepared by GRES. The estimate currency is AUD and the base date is Q3, 2023 and includes a contingency of 7.5% on all elements.

Element	\$ millions
Earthworks	2.4
Roads	0.5
Crushing & Screening	9.8
Grinding & Classification	15.5
Gravity Circuit	0.7



Flotation Tails Thickening	2.4
Flotation	8.8
Concentrate Thickening	1.3
Leaching & Adsorption	10.9
Concentrate Filtration & Storage	5.4
Gold Recovery	5.5
Reagents	3.1
Power Reticulation - Plant	11.9
Water Services Supply & Reticulation	1.3
Water Storage & Reticulation	0.4
Raw Water Supply	0.6
Tailings Thickening & Disposal	2.4
Tailings Process Return Water	0.3
Plant Waste Tailings Disposal	0.1
Air Services Supply & Reticulation	0.5
Administration Buildings & Offices	1.0
Workshop & Stores	1.2
Laboratory	0.5
Sewage	1.0
Plant Piping	8.0
Project Management	3.1
Engineering & Drafting	9.3
Site Supervision & Management	7.3
Site Construction Cranes & Equipment	6.5
Site Construction Facilities	1.5
Commissioning	1.5
Mobilisation & Demobilisation	1.3
Construction Indirect Costs	6.4
Securities & CTL	0.7
Total	133.4

### Table 25: Process plant and associated infrastructure – capital cost estimate

Areas exclude from the capital cost estimate include the TSF and fuel storage and distribution (captured through Build Own Operate assumption for the power station).

The Project is a "greenfields" development using new equipment and infrastructure throughout. The operating cost estimate is modelled on one year of operating the new processing plant at a capacity of 1.6Mtpa on oxide and transitional material and 1.5Mtpa for fresh material.



Material Type	\$ millions per annum	\$ per tonne processed
Oxide – high copper	58.2	36.4
Oxide – low copper	50.5	31.6
Transitional – high copper	63.3	39.6
Transitional – low copper	59.7	37.3
Fresh – high copper	61.3	40.9
Fresh – low copper	58.1	38.8

#### Table 26: Process plant operating costs

The unit power cost of 29 cents per kilowatt-hour (kWh) was calculated based on a cost of \$23 per Gigajoule (GJ) trucked Liquid Natural Gas (LNG) and a gas usage of 9.2 GJ/MWh including 6 cents per kWh for the power station operating cost under the Build Own Operate (BOO) assumption.

# Civils & Bulk Earthworks

REC generated a Bill of Quantities (BoQ) associated with site civils and bulk earthworks including establishment of the IWLTSF and subsequent staged lifts of the IWLTSF of the Project life.

Medallion sought cost estimates based on the BoQ from an industry recognised Civil and Mining contractor operating in the local government area. Site civils and bulk earthworks as well as stage 1 of the IWLTSF are modelled as completed prior to first production. Subsequent IWLTSF lifts occur in the months ahead of the IWLTSF reaching each stage capacity.

Element	\$ millions
Preliminary and General	2.9
Admin/Offices	0.3
Pit Maintenance Laydown	0.5
Plant Site	Accounted for in Plant Capex
ROM Pad	0.1
MSA	0.6
Settlement Ponds	0.2
Plant Site Ramp West	Accounted for in Plant Capex
Plant Site Ramp East	Accounted for in Plant Capex
Turkey Nest	0.03
Culverts	0.9
LV Roads	0.3
HV Roads	6.2
Mixed Use Roads	1.6
Open Drains	0.7
Water Storage Dam	3.3
Magazine Pad	0.02
Ramps (from MSA to Plant Site)	Accounted for in Plant Capex
Total	17.7

Table 27: Site civils and bulk earthworks cost estimate



The bulk earthworks component of the cost estimate assumes that the preferred mining contractor is able to source and deliver 75% of required fill material which does not require compacting other than through trafficking.

Element	\$ millions
Establishment – Stage 1	5.3
Stage 2	2.3
Stage 3	1.6
Stage 4	1.4
Stage 5	1.0
Stage 6	0.6
Stage 7	0.7
Total	12.2

### Table 28: IWLTSF establishment and staged lift cost estimate

## **Project Services & Administration**

Project services and general and administrative (G&A) operating costs include on-site general and administrative salaries, insurances, OHS & mine emergency, environmental monitoring, MRF Levy, information technology (IT) and flights, accommodation and messing for G&A staff and other expenses of a G&A nature.

G&A operating costs have been estimated from a Medallion cost model and benchmarked against actual G&A costs of Australian gold mines of a similar scale and configuration as the operation contemplated in this PFS and also operating mines in the Ravensthorpe region. Cost estimates were sought from suitably experienced industry contractors and consultants in relation to material expenditure estimates. Operating costs in relation to accommodation and messing, tenement management and infrastructure maintenance were premised upon Medallion's historical operating costs.

The G&A operating costs are summarised in Table 29.

ltem	\$ millions per annum <sup>#</sup>	\$ per tonne processed
G&A Operating Costs	6.7	4.4

#Approximate average per annum over LOM

### Table 29: G&A operating cost

G&A capital costs primarily relate to the establishment of IT infrastructure and the expansion of the existing worker accommodation camp (Camp). The Camp expansion scheduled in two phases, the first during the preproduction period consisting of refurbishment of the existing Camp and expansion to 133 rooms. The second Camp expansion occurs in the post-production period consisting of an expansion to 175 rooms. The Camp expansion has been scheduled in accordance with estimated headcount requirements over the life of the Project. Capital costs were based upon cost estimates form suitably experienced industry contractors and consultants and escalated as necessary to reflect current pricing.

The G&A capital costs are summarised in Table 30.

Item	\$ millions
IT Establishment	0.8
Phase 1 Camp Refurbishment and Expansion	4.5
Phase 2 Camp Expansion	3.0
Total	8.4

Table 30: G&A capital cost

# Project Cost Summary, AISC and AIC

## **Development & Non-Sustaining Costs**

Project development & non-sustaining costs are summarised in Table 31.

	Pre-production#	Post-production	Total
Item	\$ millions	\$ millions	\$ millions
Mine establishment	3.5	20.2	23.7
Open pit mining##	15.4	-	15.4
Underground mining###	-	87.6	87.6
Bulk earthworks	17.6	12.2	29.9
Process plant	121.0	12.4	133.4
Project services	5.4	3.0	8.4
Mine closure	-	6.0	6.0
Total	162.9	141.4	304.3

\* Production being first gold poured

## Pre-production mining

### Underground capital development

Table 31: Project development & non-sustaining costs

### **Project Sustaining Costs**

Project sustaining costs are summarised in Table 32. Project sustaining costs include all onsite costs associated with mining, processing, administration, royalties and sustaining capital incurred during the production phase (being from first gold poured). Sustaining costs are presented on a gross basis and do not consider the application of by-product credits from the sale of copper and silver. The effects of the application of by-product credits are a reduction in sustaining costs of \$191 million over LOM (\$246/oz Au) as shown in Table 33.

ltem	\$ millions	\$/t processed	\$/t mined <sup>#,##</sup>
Open pit mining	465	33	40
Underground mining	211	15	92
Processing	531	38	
Administration	61	4	
Marketing, Logistics, TC/RCs	31	2	
Royalties	73	5	
Total	1,372	98	

# Per tonne of open pit ore mined

## Per tonne of underground ore mined

Table 32: Project sustaining costs (gross basis, excluding by-product credits)

## Al-In Sustaining and All-In Costs

Project costs on an AISC and AIC basis are summarised in Table 33, in aggregate and on a per gold ounce basis (\$/oz). Allocations are premised upon the World Gold Council guidance note issued in 2013 (as updated in 2018). AISC is presented net of by-product credits (Cu & Ag) and include all onsite costs associated with mining, processing and administration, royalties and sustaining capital. AIC includes AISC, pre-production capital, non-sustaining capital and rehabilitation costs.



AISC & AIC	\$ millions	\$/oz
Mining <sup>#</sup>	720	927
Processing	531	683
Administration	61	79
Marketing, Logistics, TCs/RCs	31	40
Royalties	73	95
By-product credits	(191)	(246)
AISC	1,225	1,577
Mine establishment	4	6
Open pit mining##	15	20
Underground mining###	62	80
Bulk earthworks	30	38
Process plant	133	172
Project services	8	11
Mine closure	6	8
AIC	1,485	1,912

\*Open pit and underground operating and sustaining costs

## Pre-production mining

#### Underground establishment and non-sustaining capital development

Table 33: AISC and AIC in aggregate and on a per gold ounce basis

# **ECONOMIC ANALYSIS**

The KMC production inventory schedule (inclusive of Inferred Resources) is the basis of the economic analysis of the Project. Summary Project statistics are shown in Table 34 below.

## Key PFS Outcomes & Assumptions

Kundip Mining Centre – Project Statistics			
Parameter	Units	Base Case	Spot Pricing <sup>6</sup>
Production			, v
Mill throughput rate (fresh rock) <sup>1</sup>	ktpa	1,500	1,500
Life of mine <sup>2</sup>	years	9.2	9.2
Ore mined and processed	kt	13,945	13,945
Au grade	g/t	1.81	1.81
Ag grade	g/t	1.71	1.71
Cu grade	%	0.22	0.22
Au contained	koz	813	813
Ag contained	koz	768	768
Cu contained	kt	30	30
Metal recovered for sale			
Au	koz	777	777
Ag	koz	400	400
Cu	kt	16	16
Overall metallurgical recovery	in the second se		
Au	%	95.6	95.6
Ag	%	52.1	52.1
Cu <sup>3</sup>	%	54.0	54.0
Financial	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0110	0110
Net Smelter Return - doré	US\$m	1,272	1,343
Net Smelter Return - concentrate	US\$m	280	300
Total	US\$m	1,551	1,644
NSR	\$m	2,424	2,609
Operating	\$m	(1,267)	(1,267)
Royalties	\$m	(1,237)	(79)
Capital (sustaining)	\$m	(134)	(134)
AISC <sup>4</sup>	\$/oz sold	1,577	1,558
Capital (pre-production)	\$m	(163)	(163)
Capital (non-sustaining)	\$m	(8)	(8)
Pre-tax Cashflow	\$m	779	958
Tax paid	\$m	(220)	(274)
Post-tax Cashflow	\$m	559	684
NPV(7)	\$m	309	392
IRR	%pa	35	42
Peak negative Cashflow	\$m	(178)	(176)
Payback	years	3.0	2.6
Assumptions			
Au price	US\$/oz	1,875	1,980
Ag price	US\$/oz	20	23
Cu price	US\$/t	7,275	7,915
Exchange rate	A\$:US\$	0.64	0.63
Discount rate	%pa	7.0	7.0
Corporate tax rate	%	30	30

Table 34: KMC PFS Key Outcomes & Assumptions

Notes:

1: Basis 100% fresh ore feed to processing plant.

2: Life of Mine (LOM) is calculated as the period of time the processing plant is in operation.

3: LOM flotation recovery of Cu. No copper is recovered from low copper (< 0.3% Cu) ore that by-passes flotation.



4: All-In Sustaining Costs (AISC) and All-In Costs (AIC) are premised upon the World Gold Council guidance note issued in 2013 (as updated in 2018). AISC is presented net of by-product credits (Cu & Ag) and includes all onsite costs associated with mining, processing and administration, royalties and sustaining capital. AIC includes AISC, pre-production capital, non-sustaining capital and rehabilitation costs. Cu & Ag by-product credits are A\$191 million, representing A\$246/oz reduction in AISC over the LOM. 6. Approximate spot pricing of Au, Ag, Cu and foreign exchange as at the finalisation date of the Study.

### Net Smelter Return

Gold and silver recovered to doré are assumed to attract payabilities of 99.98 and 99.85% respectively based on discussions with Australian based refiners. Gold and silver turned out is subject to a refining charge of \$0.30 per ounce.

GRES has estimated that flotation concentrate grades will be in excess of 20% for copper and 39g/t for gold. As part of the 2018 metallurgical testwork programme, a bulk fresh flotation test was undertaken on a 59kg sample of KMC ore under optimised flotation conditions. The flotation test yielded 3.1kg of concentrate grading 53.6g/t Au and 19.3% Cu (gold and copper recovery to concentrate 67.6% and 90.7% respectively). An extended assay suite was undertaken on a sub-sample of the bulk flotation concentrate. This assay suite was conducted to identify the contained levels of analytes that may incur penalties for sale. All analytes were significantly less than penalty levels. A summary of potential penalty analytes and their values is provided in Table 35 below.

BULK FRESH	H CONCENTRATE ASSAY: SUMMARY	OF RESULTS
Analyte	Penalty Level	Bulk Fresh Concentrate
As	2,000 ppm	190 ppm
Bi	500 ppm	30 ppm
Cd	300 ppm	10 ppm
CI	0.05 %	0.01 %
Co + Ni	E 000 mm	Co: 1,190 ppm
CO + NI	5,000 ppm	Ni: 270 ppm
F	300 ppm	50 ppm
Hg	10 ppm	0.6 ppm
Pb	30,000 ppm	2,160 ppm
Sb	2,000 ppm	2.5 ppm
Zn	30,000 ppm	4,600 ppm

 Table 35: Bulk fresh concentrate penalty analytes

Penalty analytes and their values were provided by Cliveden Trading AG (Cliveden) who were engaged by the Company to undertake a concentrate marketing analysis during 2019. Cliveden reported that the KMC concentrate would be attractive to smelters that primarily seek copper concentrate (as opposed to gold roasters) and are efficient in their recovery of precious metals in their smelting and refining processes. Cliveden estimated payment terms at the time. Medallion had these terms refreshed for the purposes of the PFS by a globally significant metals trader. Recommended KMC concentrate terms are provided in Table 36.

Element	Sale Terms	Recommended
Cu	Payable %	96.5
	Treatment Charge (US\$/dmt conc.)	88.0
	Refining Charge (US\$/lb of payable Cu)	0.08
Au	Payable %	96.0
	Refining Charge (US\$/oz payable Au)	5.0
Ag	Payable %	88
	Refining Charge (US\$/oz payable Ag)	0.5

Table 36: Recommended payment terms

Assuming constant gold, copper and silver prices over the life of the Project of US\$1,875 per ounce, US\$3.30 per pound and US\$20 per ounce respectively, and a flat foreign exchange rate of 0.64 (AUD:USD), the Project generates net revenue from sale of doré and concentrate of \$2,424 million.



Nominal pre-tax cash flows over the Project life total \$779 million. The effect of corporate tax on free cash flow to shareholders has been modelled. Tax modelling assumes a projected carry forward tax loss position of \$50 million as being available for use at the decision to develop with open depreciable assets of \$1 million. All subsequent capital expenditures are depreciated over the remaining Project life once incurred. Under this scenario, the Project is forecast to pay \$220 million in corporate tax over its life (rate 30%). Post-tax cash flows over the Project life total \$559 million. Post-tax NPV(7) is \$309 million and the post-tax IRR is 35.0% per annum.

Peak negative cashflow of \$178 million occurs 20 months after commencing the development. Payback is determined from the point of peak negative cashflow and is achieved 36 months after that point.

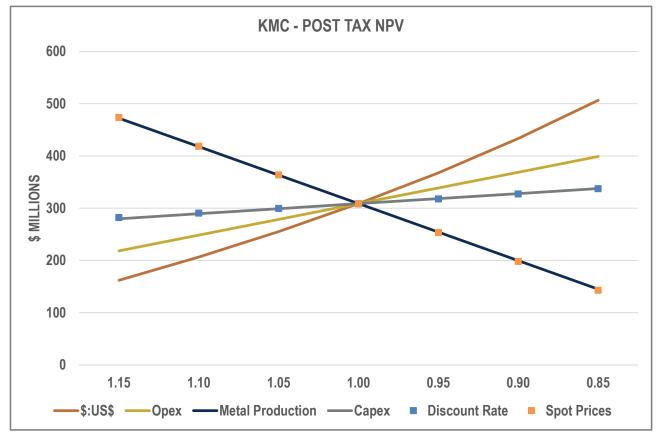


Figure 22: Post tax NPV sensitivities, +/- 15% in isolation

A sensitivity analysis was conducted where a number of factors that could affect Project value are varied (+/-15%) in isolation. The results of the sensitivity analysis are summarised in Figure 22. The Project is most sensitive to changes that impact revenue. To the downside, the most significant impact is from variations to spot prices and metal production (head grade and metallurgical recovery). To the upside, the AUD:USD foreign exchange rate has a slightly higher impact due to some concentrate treatment and refining charges being incurred in USD which partially offset some gains in terms of trade when the local currency depreciates. Operating costs have the potential to have a material impact on value both positive and negative. The Project is least sensitive to changes in capital costs and discount rate.

The relationships are typical for pre-development resource developments. With respect to all factors assessed, a 15% adverse move maintains a post-tax NPV in excess of \$100 million.

This analysis is on an un-levered basis. The Project's strong margins under the base case scenario indicate a likelihood that significant portion of the overall funding requirement will be able to be supported by a debt facility(s) of some form.



# **KEY OPPORTUNITIES**

## Mine Schedule Optimisation

Ongoing optimisation of the mine schedule and refinement of the transition from open pit to underground mining may further enhance payback and Project returns. In particular, Gift paleo-channel production inventory has been deferred in the mine plan due to it being derived from Inferred Mineral Resources. The Gift paleo-channel represents high margin mill feed given it is shallow, free digging and has a low strip ratio. If further drilling led to an improvement in classification of this material to Indicated, it would be advantageous to schedule this material early in the mine plan to enhance Project returns. The Company notes that there is a lower level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production inventory will be achieved.

## **Open Pit Geotechnical Parameters**

Further geotechnical drilling and testwork has the potential to enable pit wall angles to be steepened thereby reducing overall strip ratio. A reduction in overall strip ratio from approximately 8 to 7 would reduce total material movement by approximately 12 million tonnes to access the same ore. Based on modelled open pit mining costs this would reduce overall mining costs by approximately \$53 million. Improved geotechnical parameters also have the potential to improve pit optimisation outcomes.

## **Production Rate**

The Company notes the average production rate of 92kozpa on a gold equivalent basis over the LOM given the modelled minimum mill throughput rate of 1.5Mtpa for fresh material. While somewhat arbitrary, a production rate of 100kozpa either on a gold only or a gold equivalent basis could be achieved by increasing the process plant throughput rate and adjusting the mine plan accordingly. An increase in plant capital would be required to account for the increased plant capacity. Medallion has not sought to model an increased production rate scenario, the combination of grade, by-product credits and the shallowness of the deposits modelled in the PFS yield an attractive cost profile both on an AISC and AIC basis. The relatively low cost profile generating attractive returns relative to the risks identified in the Study.

## New Discovery and Mine Life Extension

Medallion has completed 54km of new drilling at the RGP since listing on the ASX in March 2021. 49km of this total was carried out at KMC with the remainder completed at the Company's highly prospective regional targets. New drilling at KMC yielded substantial MRE upgrades which are the basis of this PFS. Additionally, numerous projects are well advanced reviewing the data gathered which will form the basis of planning for future drill programmes, which seek to achieve two specific goals;

- 1) increase the confidence in the Mineral Resources at KMC, such that the volume and grade of material reporting to PFS mine plant is maximised in the Indicated category, and
- 2) growth of the global Mineral Resources, both at KMC and regional prospects.

One of the most significant outcomes of Medallion's drilling campaigns to date is confirmation that the KMC deposits are open in multiple directions, while remaining relatively shallowly drilled. In addition, numerous opportunities have been identified to uncover new mineralised lodes in close proximity to the known deposits. Combined with significant regional discovery potential within Medallion's dominant land position across the Annabelle Volcanics, the Company sees multiple opportunities to grow resources at RGP beyond those contemplated in this PFS. Further growth in minable resources will enhance Project returns through extensions to mine life, potential increases in production rate or both.

The Company intends to release an Exploration Target for Kundip during 2023.



# **KEY RISKS**

### **Economic Assumptions**

Project economics are most sensitive to those economic assumptions that affect Project revenues. Approximately 90% of gross revenue is generated from gold sales. A prolonged suppression of the gold price or a substantial strengthening of the AUD has the potential to significantly reduce the Project NPV and free cash flow generation of the Project. The financial model is based on flat USD denominated commodity prices and AUD:USD exchange rate that at the time of Study completion represented an approximate 10% discount to spot prices in AUD terms. Multiple factors may impact on the AUD denominated price of saleable products and other assumptions in the financial model.

### Mineral Resources and Production Inventory Estimates

Mineral Resource and production inventory estimates are expressions of judgement based on knowledge, experience and industry practice at the time of the estimate. Estimates which were valid when originally calculated may alter significantly when new information or techniques become available. In addition, by their very nature, MREs are imprecise and depend to some extent on interpretations, which may prove to be inaccurate, in particular the grade or tonnage of payable commodities estimated in the MRE. As further information becomes available through additional drilling, mining, or analysis, the estimates are likely to change. This may result in alterations to development and mining plans which may, in turn, adversely affect the Company's operations.

The production inventory and forecast financial information referred to in the PFS comprise Indicated Mineral Resources (approximately 73%) and Inferred Mineral Resources (approximately 27%). The production inventory has been scheduled such that approximately 15% of the material mined and processed over the first 5 years of the Project life is represented by Inferred Mineral Resources. The Inferred Mineral Resources included in the production inventory does not have a material effect on the technical or commercial viability of the Project. There is a lower level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production inventory will be achieved.

## Mining Risks

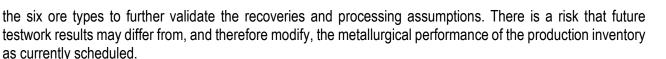
The operational aspects of development and production as they relate to mining at KMC are generally considered low risk. Geotechnical and hydrogeology assessments and how those conditions may affect the mining process are considered adequate for this PFS level of Study however further work is required to inform more advanced studies.

Mining is intended to be undertaken by selected mining contractor(s) for both open pit and underground mining which brings a layer of complexity and risk as the mining contractor is biased by its own profitability and may have competing demands from other clients. The terms of the contract(s) to manage unforeseen issues will be considered by Medallion, in particular any incentives to deliver production, manage dilution and to enable sufficient flexibility in the mining schedule.

The mining costs are material in value and are derived from a first principles cost model based on a ground-up build approach considering key physical drivers, volumes and consumption rates with a contractor margin applied in addition to first principal costs. The mining costs were verified against a database supplied by a reputable mining consultancy firm specialising in mine design and mine cost estimation. There is a risk that these rates may not reflect market rates, or market rates may change before rates are negotiated into a contract. There is a risk that key physical drivers, volumes or consumption rates may vary from that anticipated.

### Metallurgical Risks

Medallion has completed a range of metallurgical testwork and mineralogical analysis in addition to a significant bank of historical testwork carried out by former owners of the Project. This work has been summarised and reported to the ASX on 28 March 2022 following a review conducted by GRES. As part of this PFS, GRES has recommended a future metallurgical test work program should be completed on suitable composites of each of



### Laws, Regulations, Rules, Approvals, Licences and Permits

The Company's operations will be subject to various Federal, State and local laws and plans, including those relating to mining, development permit and licence requirements, industrial relations, environment, land use, taxation, royalties, water, native title and cultural heritage, mine safety and occupational health. No assurance can be given that new rules and regulations will not be enacted or that existing rules and regulations will not be applied in a manner which could limit or curtail exploration, production or development.

Approvals, licences and permits required to comply with such rules and regulations are subject to the discretion of the applicable government officials. No assurance can be given that Medallion will be successful in obtaining any or all of the various approvals, licences and permits or maintaining such authorisations in full force and effect without modification or revocation. To the extent such approvals are required and not retained or obtained in a timely manner or at all, the Company may be curtailed or prohibited from continuing or proceeding with mining or development. There can be no assurance that the costs involved in retaining or obtaining such approvals will not exceed those estimated by Medallion.

Mining operations can be subject to public and political opposition. Opposition may include legal challenges to development permits or approvals, political and public advocacy, electoral strategies, media and public outreach campaigns and protest activity, all which may delay or halt development or expansion.

### **Operational Risks**

The Company's planned operations will be subject to uncertainty with respect to (among other things): ore tonnes, mined grade, ground conditions, metallurgical recovery or unanticipated metallurgical issues, infill resource drilling, the level of experience of the workforce, operational environment, regulatory changes, accidents and other unforeseen circumstances such as unplanned mechanical failure of plant or equipment, or the health and safety of its workforce, storms, floods, bushfires or other natural disasters. Mining operations could also suffer from poor design or poor reliability of equipment, impacts to supply chain, and transport of plant equipment and the workforce to and from site.

The occurrence of any of these circumstances could result in Medallion not realising its operational or development plans, or plans costing more than expected or taking longer to realise than expected. Any of these outcomes could have an adverse effect on the Company's financial and operational performance. As the Project is the only planned operating asset at this stage, any operational risks which materialise at the Project will have a greater effect on Medallion than a diversified company with multiple operations.

### Amount of Capital, and Timing, to Commercial Production

The majority of the pre-production capital is associated with processing plant construction costs. The construction and commissioning schedule is conservatively assumed to be executed over a 21-month period. A key risk to the pre-production capital expenditure estimate is ensuring the Project engages a capable and experienced EPC contractor when required. For plant construction costs, a contingency of 7.5% has been assumed.

Another key risk is a delay in ramp-up from first production due to the inability to access capable and experienced mining staff, inability to achieve estimated productivity rates or other operational issues which may affect production (including geotechnical, hydrogeology, health and safety). An increase in the amount of capital to commercial production or a delay in achieving commercial production levels will result in additional funding requirements, and if adequate funding requirements are not available, the cost of the additional funding or dilutionary impacts of equity funding could be significant.

### **Financing Risks**

Medallion is yet to seek to secure financing for the development of the Project. The Company is confident that with additional drilling and testwork to inform more advanced studies, that it will be able to obtain financing on



acceptable terms. Notwithstanding, there is no guarantee that funding will be available or that it will be available on acceptable terms. Financing will be dependent on numerous factors, including the quantum of funding required, equity market sentiment; the share price of Medallion; interest rates; the cost, availability and terms of debt; the outcomes of further studies and the outcomes of the approvals process. Obtaining sufficient financing for the development of the Project may result in the dilution of the Company's shareholders in the event that equity financing is required.

### Availability of Labour

The resources sector is experiencing limited availability of skilled and professional staff, especially following the lifting of restrictions on travel during following the COVID-19 pandemic. Since lifting of these restrictions, the labour market has eased somewhat, however, there remains a risk that suitable and adequately trained and experienced staff cannot be recruited in a timely fashion prior to Project development and commissioning and/or when needed in the future as a result of normal staff turnover. Availability of labour is particularly an issue in the Shire of Ravensthorpe. Given low unemployment rates that have persisted for a number of years, the majority of labour required to build and operate the Project will be required to come from outside the local government area. The Project's location and amenity, proximal on a relative basis to Perth and the regional centres of Albany and Esperance, and the relatively small size of the required workforce are both factors that mitigate and limit these risks.

### Climate Change

Climate change risk to Medallion principally relates to the emergence of new or expanded regulations associated with the transitioning to a lower carbon economy and market changes related to climate change mitigation. The Company may be impacted by changes to local or international compliance regulations related to climate change mitigation efforts, or by specific taxation or penalties for carbon emissions or environmental damage.

Climate change may cause certain physical and environmental risks that cannot be predicted by Medallion, including events such as increased severity of weather patterns and the possibility of extreme weather events.



# **NEXT STEPS**

Medallion's forward work plan for KMC and the broader Ravensthorpe Gold Project will comprise:

- Release of an updated Ore Reserve Estimate (ORE) to follow the release of the PFS targeted in calendar 2023;
- Release of an Exploration Target outlining depth and strike extension potential for the known deposits within KMC, targeted in calendar 2023;
- Completion of a trial reverse circulation Grade Control (GC) drill program at the Gem deposit within KMC to refine MRE parameters and to confirm optimal GC drill spacing for budgeting and planning purposes;
- Ongoing technical de-risking activities for KMC, with further data collection and testwork scheduled for 2023 and 2024. This will include geotechnical, hydrogeological and metallurgical data collection, testwork and analysis on the KMC deposits that are the subject of the PFS;
- Maintenance of base line monitoring programs including flora and fauna surveys, surface and ground water sampling and testing and dust collection and analysis to support approval applications; and
- Referral of the Project under the EP Act (WA) and EPBC Act (Cth) based on PFS designs.



### **ANNEXURE 1: Ravensthorpe Gold Project Mineral Resources, February 2023**

					Mi	neral Re	source	Estimat	te for the <b>k</b>	Kundip N	/lining (	Centre -	Februar	y 2023								
				In	dicated						Total Resources											
	Deposit	kt	Au	Au	Ag	Ag	Cu	Cu	kt	Au	Au	Ag	Ag	Cu	Cu	kt	Au	Au	Ag	Ag	Cu	Cu
			g/t	koz	g/t	koz	%	kt		g/t	koz	g/t	koz	%	kt		g/t	koz	g/t	koz	%	kt
	Gem	7,840	1.6	400	1.5	380	0.1	10	2,820	1.9	170	1.5	140	0.1	4	10,650	1.7	570	1.5	520	0.1	14
Open pit	Harbour View	2,180	2.0	140	3.1	220	0.6	13	1,010	1.5	50	2.8	90	0.4	4	3,190	1.8	190	3.0	310	0.6	18
COG 0.5g/t	Flag	730	4.4	100	4.4	100	0.5	4	220	2.4	20	2.7	20	0.2	1	950	3.9	120	4.0	120	0.4	4
AuEq	Gem Restored	470	2.0	30	2.7	40	0.2	1	340	1.3	10	2.1	20	0.2	1	800	1.7	40	2.5	60	0.2	2
	Gift	190	1.6	10	1.7	10	0.3	1	1,070	1.4	50	1.1	40	0.1	1	1,260	1.4	60	1.2	50	0.1	1
	Gem	-	2.9	-	2.4	-	0.2	0	300	6.4	60	3.1	30	0.4	1	300	6.4	60	3.1	30	0.4	1
Underground	Harbour View	470	3.7	60	6.8	100	1.2	6	770	2.1	50	7.3	180	0.8	6	1,240	2.7	110	7.1	280	1.0	12
COG 2.0g/t	Flag	140	5.2	20	4.9	20	0.4	1	410	5.0	70	5.1	70	0.4	1	550	5.1	90	5.0	90	0.4	2
AuEq	Gem Restored	80	7.2	20	9.0	20	1.0	1	180	5.6	30	7.1	40	0.7	1	260	6.1	50	7.7	60	0.8	2
	Gift	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gr	randTotal	12,110	2.0	790	2.3	900	0.3	36	7,110	2.2	510	2.7	620	0.3	20	19,210	2.1	1,290	2.5	1,520	0.3	56
0	pen pit	11,400	1.9	690	2.0	750	0.3	29	5,460	1.7	290	1.7	300	0.2	10	16,860	1.8	980	1.9	1,060	0.2	38
	lerground	710	4.4	100	6.7	150	1.0	7	1,650	4.0	210	6.0	320	0.6	10	2,350	4.1	310	6.2	470	0.7	17
	andTotal	12,110	2.0	790	2.3	900	0.3	36	7,110	2.2	510	2.7	620	0.3	20	19,210	2.1	1,290	2.5	1,520	0.3	56

	Mineral Resource Estimate for the Desmond Deposit - December 2022																				
	Indicated								Inferred								Total	Resourc	ces		
Deposit	kt	Au	Au	Ag	Ag	Cu	Cu	kt	Au	Au	Ag	Ag	Cu	Cu	kt	Au	Au	Ag	Ag	Cu	Cu
		g/t	koz	g/t	koz	%	kt		g/t	koz	g/t	koz	%	kt		g/t	koz	g/t	koz	%	kt
Open pit	-	-	-	-	-	-	-	160	0.9	-	3.1	20	1.4	2	160	0.9	-	3.1	20	1.4	2
Underground	-	-	-	-	-	-	-	110	0.8	-	2.2	10	1.3	1	110	0.8	-	2.2	10	1.3	1
GrandTotal	-	-	-	-	-	-	-	270	0.9	10	2.7	20	1.4	4	270	0.9	10	2.7	20	1.4	4

	Mineral Resource Estimate for the Kundip Mining Centre - February 2023																				
			Inc	dicated					Inferred								Total	Resour	ces		
Deposit	kt	Au	Au	Ag	Ag	Cu	Cu	kt	Au	Au	Ag	Ag	Cu	Cu	kt	Au	Au	Ag	Ag	Cu	Cu
		g/t	koz	g/t	koz	%	kt		g/t	koz	g/t	koz	%	kt		g/t	koz	g/t	koz	%	kt
Open pit	11,400	1.9	690	2.0	750	0.3	29	5,620	1.7	300	1.8	320	0.2	12	17,020	1.8	980	2.0	1,070	0.2	41
Underground	710	4.4	100	6.7	150	1.0	7	1,760	3.8	210	5.8	330	0.7	12	2,460	4.0	310	6.0	480	0.8	19
GrandTotal	12,110	2.0	790	2.3	900	0.3	36	7,370	2.2	510	2.7	650	0.3	23	19,480	2.1	1,300	2.5	1,550	0.3	59

#### Table 37: RGP Global Mineral Resources, February 2023

The preceding statement of Mineral Resources conforms to the JORC Code. All tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding to appropriate significant figures.