6 January 2022

KEFI Gold and Copper plc

("KEFI" or the "Company")

Update to Hawiah Mineral Resource

KEFI Gold and Copper (AIM: KEFI), the gold and copper exploration and development company with projects in the Federal Democratic Republic of Ethiopia and the Kingdom of Saudi Arabia, is pleased to announce an update to the Mineral Resource Estimate ("MRE") at the Hawiah Copper-Gold Project ("Hawiah" or the "Project"), part of the KEFI-operated Saudi Arabian joint-venture Gold and Minerals Limited ("G&M").

Highlights

- Hawiah Mineral Resource Estimate has increased by 5.6 million tonnes ("Mt") to 24.9 Mt at 0.90% copper, 0.85% zinc, 0.62 g/t gold and 9.81 g/t silver, representing a tonnage increase of 29%.
- The total contained metal content now stands at 223,000 tonnes of copper (up 33% from 168,000 tonnes), 210,000 tonnes of zinc (up 34% from 157,000 tonnes), 497,000 ounces of gold (up 42% from 349,000 ounces) and 7.8 million ounces of silver (up 22% from 6.4 million).
- An upgrade in key areas from the previous Inferred category Mineral Resource with 10.9Mt now an Indicated category Mineral Resource at 0.96% copper, 0.86% zinc, 0.64 g/t gold and 9.98 g/t silver, paving the way for the completion of the Preliminary Feasibility Study ("PFS") in 2022.
- Total Mineral Resource (Indicated and Inferred) reporting to the Open-Pit Scenario have increased from 0.1 Mt to 8.4 Mt, raising the possibility of an initial open-pit mining operation and a lower start-up capital requirement.
- The Hawiah deposit remains largely open at depth and drilling programmes are commencing in January 2022 with a view to further increasing the Hawiah Mineral Resource, raising the likelihood of further increases to the MRE in 2022.

Harry Anagnostaras-Adams, Executive Chairman of KEFI, commented:

"The updated Mineral Resource Estimate for the Hawiah Copper-Gold Project achieves our key objectives: a tonnage increase of approximately 30% and a slightly higher overall increase in metal content due to overall improved grades, plus 10 million tonnes of the total of 25 million tonnes is now classified as an Indicated Mineral Resource, facilitating the estimation and reporting of initial Ore Reserves as part of the Preliminary Feasibility Study for potential development.

"In addition, we are also pleased to report that the Mineral Resource reporting to the Open-Pit Scenario have increased from the 0.1 Mt reported in 2020 to a total of 8.4 Mt at 0.93% copper 0.72% zinc, 0.74 g/t gold and 10.05 g/t silver. This presents as a clear opportunity for lower cost development during the early years of the Project, further strengthening the economic case.

"KEFI now has a platform of three advanced projects for development in the next few years: the Tulu Kapi Gold Project in Ethiopia which is development ready for when security and other normal conditions precedent to finance closing are satisfied; the now larger Hawiah Copper-Gold Project in Saudi Arabia; and the Jibal Qutman Gold project, also in Saudi Arabia. The Hawiah work programme will also incorporate the previously announced works that will start at the proximal Al

Godeyer licence granted to G&M in December 2021. This could also be a significant potential contributor.

"We are very pleased with the updated Hawiah MRE and the priorities for the field work in Saudi Arabia will be determined this month and then commenced immediately."

Background

Following the commencement of major exploration works at the Hawiah Copper-Gold Project ("Hawiah") in early 2019, KEFI announced in August 2020 a maiden MRE of 19.3 Mt at 0.87% copper, 0.81% zinc, 0.56 g/t gold and 10.25 g/t silver.

Diamond drilling has since continued with an additional 29,892m completed, bringing the Project total to 41,841m. This latest drilling had three main objectives:

- Upgrade existing resources in key areas of the deposit to Indicated category classification for use in the PFS for potential development;
- Expand the known resource areas to increase the global tonnage; and
- Increase drilling density within the copper-rich Transition Zone to demonstrate grade continuity and allow for better evaluation of an open-pit scenario.

Following the conclusion of the 2021 drilling programme, G&M appointed SRK Consulting (UK) Ltd ("SRK") as the Independent Consultants and Competent Person for the preparation of the updated MRE for the Hawiah Project. This MRE is reported in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves, The JORC Code, 2012 Edition ("JORC Code 2012").

The G&M geological team have been pleased with the results of the programmes, having achieved all its objectives and with the deposit remaining open are confident that despite already presenting as a robust multi-commodity deposit, the Hawiah deposit has additional potential for further expansion.

Work programmes including reverse-circulation and diamond drilling are now being finalised to help define additional near surface material to expand the MRE and to finalise the PFS in 2022. These programmes are alongside the exploration commencing in January 2022 at the recently granted proximal Al Godeyer Exploration Licence, which is also very prospective for volcanic massive sulphide ("VMS") mineralisation.

Updated Hawiah MRE

The updated MRE for the Hawiah deposit is detailed in **Table *1*** below and now the total stands at:

- 24.9 Mt at 0.90% copper, 0.85% zinc, 0.62 g/t gold and 9.81 g/t silver.

Resources are classified as:

- **Indicated** - 10.9 Mt at 0.96% copper, 0.86% zinc, 0.64 g/t gold and 9.98 g/t silver
- **Inferred** - 14.0 Mt at 0.85% copper, 0.83% zinc, 0.61 g/t gold and 9.67 g/t silver

Based on this resource the Hawiah Project is estimated to contain a total of 223,000 tonnes or 491 million lbs of copper, 210,000 tonnes or 463 million lbs of zinc, 497,000 gold ounces and 7.84 million silver ounces.

Table 1 : SRK Mineral Resource Statement for the Hawiah Project, Effective Date 16 December 2021 (see notes 1,2,3,4,5,6,7)

Mineral Resource Classification Category	Mining Type	Material Type	Million Tonnes (Mt)	Grade				Metal Content			
				Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)	Cu (kt)	Zn (kt)	Au (koz)	Ag (koz)
Sub-Total Indicated	***Open-Pit***	***ALL***	***7.0***	***1.03***	***0.78***	***0.66***	***10.03***	***72***	***55***	***149***	***2,271***
	Underground	***ALL***	***3.9***	***0.83***	***1.00***	***0.61***	***9.89***	***32***	***39***	***76***	***1,230***
	ALL	**ALL**	**10.9**	**0.96**	**0.86**	**0.64**	**9.98**	**104**	**94**	**225**	**3,501**
Sub-Total Inferred	***Open-Pit***	***ALL***	***1.4***	***0.43***	***0.41***	***1.17***	***10.14***	***6***	***6***	***52***	***446***
	Underground	***ALL***	***12.6***	***0.89***	***0.88***	***0.55***	***9.61***	***113***	***111***	***221***	***3,892***
	ALL	**ALL**	**14.0**	**0.85**	**0.83**	**0.61**	**9.67**	**118**	**116**	**273**	**4,338**
Total	***Open-Pit***	***ALL***	***8.4***	***0.93***	***0.72***	***0.74***	***10.05***	***78***	***61***	***200***	***2,717***
	Underground	***ALL***	***16.5***	***0.88***	***0.91***	***0.56***	***9.68***	***145***	***149***	***297***	***5,122***
	ALL	**ALL**	**24.9**	**0.90**	**0.85**	**0.62**	**9.81**	**223**	**210**	**497**	**7,839**

Notes on SRK Mineral Resource statement:

(1) Mineral Resources are not Ore Reserves and do not have demonstrated economic viability.

(2) All figures are rounded to reflect the relative accuracy of the estimate and have been used to derive sub-totals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

(3) G&M is a joint venture partnership between ARTAR and KEFI. The Exploration Licence is held by ARTAR, under the terms of the G&M Joint Venture agreement. ARTAR currently has a 68% share of the Project, with the remainder (31.2%) owned by KEFI, where KEFI is the operating partner. The MRE is given on 100% basis.

(4) The standard adopted in respect of the reporting of Mineral Resources for the Project is in accordance with the guidelines of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).

(5) SRK reasonably expects portions of the Hawiah deposit to be amenable to both underground and open-pit mining methods:

a. Open pit Mineral Resources include the oxide, transition and fresh material/domains, reported within an optimised open-pit shell and reported based on a Mineral Resource Net Smelter Return (NSR) cut-off of USD12/t for oxide and USD20/t for transition and fresh. Open-pit slope angles within the oxide were defined from geotechnical parameters provided by G&M and their Advisors and set to 43° in the oxide, 46° in the transition and 52° in the fresh. A revenue factor (RF) of 0.8 of the Mineral Resource commodity prices was used for selecting the final MRE open-pit shell used for reporting, as this is likely to be closer (compared with RF1.0) to the potential Ore Reserve-case pit design that will be developed as part of G&M's PFS study. The Mineral Resource is not sensitive to reporting by mining methodology.

b. Underground Mineral Resources are constrained to the transition and fresh domains, reported from within an underground reporting volume derived from underground stope optimisation wireframes (with 2m minimum

mining width, and appropriate stope dimensions) and a NSR cut-off which considers mining, processing and G&A costs and 15% total dilution, totalling USD54/t for both transition and fresh material. Oxide material is currently excluded from the underground Mineral Resource reporting due to it being close to surface, its highly-weathered nature and associated uncertainty with respect to geotechnical stability during underground mining.

(6) The Mineral Resource NSR cut-off calculation has been determined based on metal price forecasts, metallurgical testwork results and assumptions **, mining costs, processing costs, general and administrative (G&A) costs, and other NSR factors. The final Mineral Resource NSR calculation is based on average assumptions for the deposit and applied using the following formulae:*

*a. Mineral Resource NSR (USD) for oxide material = (CU_PCT*0) + (ZN_PCT*0) + (AU_PPM*43.6528) + (AG_PPM*0.1217)*

*b. Mineral Resource NSR (USD) for transition and fresh material = (CU_PCT*71.9407) + (ZN_PCT*14.4408) + (AU_PPM*41.7501) + (AG_PPM*0.6582)*

** Metal price forecasts (with appropriate uplift for assessing Mineral Resources) considered for the calculation of Mineral Resource NSR (USD): Gold (USD1,820/oz), Silver (USD26/oz), Copper (USD9,200/t), Zinc (USD3,000/t).*

** Resource NSR cut-off calculations assume average metallurgical recoveries of Copper (0%), Zinc (0%), Gold (75%), Silver (15%) for oxide, and Copper (92%), Zinc (71%), Gold (74%), Silver (84%) for transition and fresh (sulphide) material.*

(7) Initial metallurgical testwork has been completed for the transitional and fresh (sulphide) mineralisation at Hawiah, comprising flotation and cyanide leach methods. No metallurgical testwork results are available for the oxide mineralisation; however, metallurgical parameters have been approximated based on similar deposit types/styles located within Saudi Arabia and SRK's experience. Once additional testwork is completed, if the metallurgical recovery results change significantly from the current values, this would impact the parameters used to report the Mineral Resource, which, in turn, could also impact the tonnages and grades considered to have 'reasonable prospects for eventual economic extraction' for reporting in the Mineral Resource Statement.

Mineral Resource Estimation comparison and future expansion

The updated MRE represents a significant increase to the tonnage from 19.3 Mt to 24.9 Mt, an increase in copper and zinc grades from 0.87% Cu to 0.90% Cu and from 0.81% Zn to 0.85% Zn, an increase in gold grade from 0.56 g/t Au to 0.62 g/t Au and a reduction in silver grade from 10.3 g/t Ag to 9.8 g/t Ag (**Error! Reference source not found.**) .

Table 2 – 2020 MRE and Updated MRE comparison - Grade and Tonnage.

	2020 MRE	Updated MRE	Difference (%)
Tonnage (Mt)	19.3	24.9	+29%
Copper (%)	0.87	0.9	+3%
Zinc (%)	0.81	0.85	+5%
Gold (g/t)	0.56	0.62	+11%
Silver (g/t)	10.25	9.81	-4%

The additional resource tonnage is largely driven by:

- expansion of the Camp Lode at depth
- expansion of Crossroads Extension at depth

- inclusion of a greater portion of the oxide material based on updated optimisation parameters used to generate the open-pit Resource open-pit shell

As predicted by the geological model, the depth extension of the Camp Lode portion of the orebody has an elevated copper grade, on average 1.2% Cu, making it the highest copper grade area outside of the copper enriched transition zones. The final and deepest drillhole into the mineralisation within this area (HWD 092) intersected 5.45m (estimated true width of 4.4m) at approximately 1.6% copper, demonstrating that this high-grade area of the Hawiah deposit remains open at depth (down plunge) in the Camp Lode.

Whilst the lower limits of the Crossroads Extension present with a lower average copper grade, when combined with the zinc, gold and silver grades, this results in the majority of the additional mineralisation defined in this area of the Hawiah deposit reporting to the underground Mineral Resource reported under the parameters of the resource estimation model (and underground stope optimisation), again demonstrating the potential for expansion in this area.

The early phases of exploration in 2022 will focus on resource definition within the Central Zone portion of the orebody (see Figure 1 in Appendix B), where only limited drilling has currently taken place, as well as resource classification upgrade drilling within the oxide portions of the deposit to aid with the open-pit study as part of the PFS.

Open-Pit Scenario

G&M is also pleased to report that the Mineral Resource reporting to the Open-Pit Scenario have been expanded from the previous 0.1 Mt reported in 2020 to a total of 8.4 Mt at 0.93% copper 0.72% zinc, 0.74 g/t gold and 10.05 g/t silver (see Figure 2 in Appendix B).

This presents as a clear opportunity for lower cost development during the early years of the project, further strengthening the economic case. This Open-Pit Scenario will be fully evaluated during the PFS. Drilling programmes are set to start in January 2022 to increase drilling density in the areas of the Inferred Resource that report to the Open-Pit Scenario.

Market Abuse Regulation (MAR) Disclosure

This announcement contains inside information for the purposes of Article 7 of the Market Abuse Regulation (EU) 596/2014 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 ("MAR"), and is disclosed in accordance with the Company's obligations under Article 17 of MAR.

Enquiries

KEFI Gold and Copper plc	
Harry Anagnostaras-Adams (Managing Director)	+357 99457843
John Leach (Finance Director)	+357 99208130
SP Angel Corporate Finance LLP (Nominated Adviser and Joint Broker)	+44 (0) 20 3470 0470
Jeff Keating, Adam Cowl	
Tavira Securities Limited (Joint Broker)	+44 (0) 20 7100 5100
Oliver Stansfield, Jonathan Evans	
WH Ireland Limited (Joint Broker)	+44 (0) 20 7220 1666

Adrian Hadden, Andrew de Andrade

IFC Advisory Ltd (Financial PR and IR)

Tim Metcalfe, Florence Chandler +44 (0) 20 3934 6630

Competent Person Statement

The information in this announcement that relates to Mineral Resources is based on information reviewed and compiled by a team of consultants from SRK, overseen by Mr Mark Campodonic who is a Member with Chartered Professional Status (Geology) of the Australian Institute of Mining and Metallurgy ("AusIMM"). Mr Campodonic is a full-time employee of SRK and is the Competent Person for this Mineral Resource estimate. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Campodonic consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to exploration results is based on information compiled by Mr Tomos Bryan, Exploration Manager G&M. Mr Bryan is a member of the AusIMM. Mr Bryan is a geologist with sufficient relevant experience for Company reporting to qualify as a Competent Person as defined in the JORC Code 2012. Mr Bryan consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

Notes to Editor

KEFI Gold and Copper plc

KEFI is focused primarily on the development of the Tulu Kapi Gold Project in Ethiopia and its pipeline of highly prospective exploration projects in the Arabian-Nubian Shield. KEFI targets that production at Tulu Kapi will generate cash flows for capital repayments, further exploration and dividends to shareholders.

KEFI Gold and Copper in Ethiopia

Ethiopia is currently undergoing a remarkable transformation both politically and economically.

The Tulu Kapi gold project in western Ethiopia is being progressed towards development, following a grant of a Mining Licence in April 2015.

The Company has now refined contractual terms for project construction and operation. Estimates include open pit gold production of c. 140,000oz pa for a 7-year period. All-in Sustaining Costs (including operating, sustaining capital and closure but not including leasing and other financing charges) remain c. US$800/oz. Tulu Kapi's Ore Reserve estimate totals 15.4Mt at 2.1g/t gold, containing 1.1Moz.

All aspects of the Tulu Kapi (open pit) gold project have been reported in compliance with the JORC Code (2012) and subjected to reviews by appropriate independent experts.

A Preliminary Economic Assessment has been published that indicates the economic attractiveness of mining the underground deposit adjacent to the Tulu Kapi open pit, after the start-up of the open pit and after positive cash flows have begun to repay project debts. An area of over 1,000 square kilometres adjacent to Tulu Kapi has been reserved for exploration by KEFI upon commencement of development, with a view to adding satellite deposits to development and production plans.

KEFI Gold and Copper in the Kingdom of Saudi Arabia

In 2009, KEFI formed Gold & Minerals Limited ("G&M") in Saudi Arabia with local Saudi partner, ARTAR, to explore for gold and associated metals in the Arabian-Nubian Shield. KEFI has a 31.2% interest in G&M and is the operating partner.

ARTAR, on behalf of G&M, holds over 16 Exploration Licence ("EL") applications currently subject to approval from the various ministries as required under the new Mining Law. ELs are renewable for up to fifteen years and bestow the exclusive right to explore and to obtain a 30-year exploitation (mining) lease within the area.

The Kingdom of Saudi Arabia has announced policies to encourage mineral exploration and development, and KEFI Minerals supports this priority by serving as the technical partner within G&M. ARTAR also serves this government policy as the major partner in G&M, which is one of the early movers in the modern resurgence of the Kingdom's minerals sector.

Background – Hawiah VMS deposit

The Hawiah deposit is located within the Wadi Bidah Mineral District ("WBMD") in the southwest of the Arabian Shield. The WBMD is a 120-kilometre-long belt which hosts over 20 Volcanic Massive Sulphide ("VMS") known occurrences and historic workings for copper and gold.

G&M commenced drilling at Hawiah in September 2019 and quickly confirmed that large-scale VMS style of mineralisation underlies the gossanous ridgeline at surface.

A total of 193 diamond drillholes have led to the definition of the following three copper-zinc-gold-silver massive sulphide lodes that remain largely open at depth (see Figure 3 in Appendix B):

- The deepest massive sulphide intersection at the Camp Lode is at a vertical depth of 590m where 4.4m true width of massive sulphide was intersected, this extends the total plunging strike length of mineralisation to 1.2km from the surface, with mineralisation remaining open. The average true width of the 'Camp Lode' is 7m with the widest intersection of 20m found at a depth of 90m;

- The 'Crossroads Lodes': 1.1km long, with an average width of 5m with the widest intersection being 10m true width; and

- The 'Crossroads Extension Lode': 0.7km long, with an average width of 5m with the widest intersection being 13m true width. This lode has been explored to a maximum vertical depth of 390m where 5.4m of massive sulphide was intersected, open at depth.

Drilling spans over 5 kilometres of strike length at a drill spacing on the Camp and Crossroads Lodes at approximately 40-60m within areas reporting to Indicated classification and 120-140m for areas reporting to Inferred classification.

Drilling within the Central Area is limited and yet to be fully defined – as such only the oxide potions of this area qualify for Inferred classification.

Summary of Resource Estimate Parameters and Reporting Criteria

In accordance with the JORC Code (2012 Edition), a summary of the material information used to estimate the Mineral Resource is detailed below (for further information please refer to Table 1 in Appendix C).

Geology and Geological Interpretation

The Hawiah VMS deposit is located on the eastern limb of a regional-scale antiform in within the locally know, 'Group 2' mafic volcanics of the Wadi Bidah Mineral Belt.

The Hawiah deposit forms a prominent north-south trending ridgeline, exposed over a total length of approximately 4,500m with a thickness that typically varies from 1-15m. The ridge has been interpreted by G&M as the modern-day expression of the original VMS palaeohorizon. The rock package comprises a suite of gossanous ex-massive sulphides, chert breccias, banded ironstones and intermediate volcanic breccias. The deposit has been subject to varying degrees of supergene alteration as a result of groundwater interactions.

The deposit comprises of three main weathering/alteration domains; oxide, transitional and fresh, within which different resulting facies are described. The oxide domain typically shows supergene gold enrichment, while large portions of the transitional domain shows copper enrichment. The fresh mineralised domain appears to be a dominantly pyritic stratiform massive sulphide body.

Sampling Techniques and Hole Spacing

A total of 193 diamond drillholes (41,841) and 53 trenches (1,622m) have been used for this Mineral Resource Estimate. Drillhole spacing is typically 40-60m (Indicated classification) and 120-140m (Inferred classification).

Drillholes were logged for a combination of geological and geotechnical attributes. The core has been photographed and measured for RQD and core recovery.

Sampling and Sub-Sampling Techniques

Diamond drilling and surface trenching was used to obtain sample intervals that typically range from 0.3-3m for drilling and 1-3m for trenching.

Whole core was split using a core saw by G&M personnel and then submitted for preparation at ALS Jeddah, during which material was crushed to 2mm, pulverised to ~75µm, with 250g split sent for analysis. The sample preparation procedures used for trench samples is consistent with the drillcore samples.

Sampling Analysis Method

Samples have undergone analysis at the ALS Laboratory, located in Jeddah., Saudi Arabia.

- Gold - *Fire assay digest with AAS instrumentation*
- Copper, Zinc, Silver: *Four acid digest ICP-AES*

Estimation Methodology

In summary, for this Mineral Resource Estimate, the following approach has been utilised:

- modelling of the mineralised lode and weathering domains in 3D, in conjunction with the G&M geological team;
- composited the sample data to 2m intervals;
- applied high grade caps per estimation domain from log histograms;
- undertaken geostatistical analyses to determine appropriate interpolation parameters;
- created a block model with parent block dimensions of 2 x 25 x 25 m, (sub-blocked to a minimum of 0.5 x 1.5 x 3.0 m);
- interpolated Cu, Zn, Au and Ag grade into the block model using ordinary kriging (or IDW where adequate variogram models where not possible);

- assigned average or lithology-weighted average density values by weathering domain; and
- visually and statistically validated the estimated block grades relative to the original sample results.

Classification Criteria

The Hawiah resource has been classified in the Inferred and Indicated Mineral Resource classification category, as defined by JORC 2012.

Mineral Resource Statement Parameters and Cut-off Grade

SRK has applied basic economic considerations based on initial metallurgical testwork results and assumptions provided by the Company, similar deposit types located within Saudi Arabia and SRK's experience to determine which portion of the block model has reasonable prospects for eventual economic extraction by underground and open-pit mining methods.

To achieve this, the Mineral Resource has been subject to an underground floating stope optimisation and open-pit optimisation studies, based on long-term metal price forecasts (with appropriate uplift to reflect potential for assessing Mineral Resources) for copper, zinc, gold and silver, to assist in determining the material with potential for underground and open pit mining and reporting above a suitable Resource Net Smelter Return ("NSR") USD/t cut-off value ("Resource NSR").

The Resource NSR cut-off calculation has been determined based on metal price forecasts, initial metallurgical recovery results and assumptions, mining costs, processing costs, general and administrative (G&A) costs, and other NSR factors. The final Resource NSR value calculation is based on average assumptions for the deposit and applied to the block model using the following formulae:

*Resource NSR (USD) value for oxide material = (CU_PCT*0) + (ZN_PCT*0) + (AU_PPM*43.6528) + (AG_PPM*0.1217)*

*Resource NSR (USD) value for transition and fresh material = (CU_PCT*71.9407) + (ZN_PCT*14.4408) + (AU_PPM*41.7501) + (AG_PPM*0.6582)*

The cut-off values determined for reporting the Mineral Resource on a Resource NSR USD/t basis, are given below and were based on the technical and economic inputs presented in Table 3 below:

- USD12/t for open pit material reported from within the oxide mineralisation domain;
- USD20/t for open pit material reported from within the transition and fresh mineralisation domains; and
- USD54/t for underground material reported from within the transition and fresh mineralisation domains.

Table 3 – Summary of key assumptions for conceptual underground stope optimisation, open pit optimisation and cut-off grade calculation

Parameters	Units	
Production Rate		
Production Rate – Ore	(mtpa)	1.8 - 2.2
Geotechnical		
Overall Slope Angle (Oxide)	(Deg)	43
Overall Slope Angle (Transition)	(Deg)	46
Overall Slope Angle (Fresh)	(Deg)	52
Open Pit Mining Factors		
Dilution	(%)	Included in regularised Block Model 5x5x2.5 m
Recovery	(%)	

Underground Mining Factors		
Minimum stope dimension	(m)	2m width x 25 m height x 20 m length
Dilution	(%)	15%
Processing (Oxide: Heap Leach)		
Recovery – Cu	(%)	0%
Recovery – Zn	(%)	0%
Recovery – Au	(%)	75%
Recovery – Ag	(%)	15%
Processing (Transition and Fresh: Floatation and Cyanide Leach)		
Recovery – Cu	(%)	92%
Recovery – Zn	(%)	71%
Recovery – Au	(%)	74%
Recovery – Ag	(%)	84%
Commodity Prices		
Cu	(USD/t)	9,200
Zn	(USD/t)	3,000
Au	(USD/oz)	1,820
Ag	(USD/oz)	26
Operating Costs		
Open Pit Mining (Oxide)	(USD/t rock)	1.9
Open Pit Mining (Transition)	(USD/t rock)	2.2
Open Pit Mining (Fresh)	(USD/t rock)	2.1
Underground Mining (Transition and Fresh)	(USD/t ore)	27.0
Processing (Oxide: Heap Leach)	(USD/t ore)	6.0
Processing (Transition and Fresh: Floatation and Cyanide Leach)	(USD/t ore)	13.9
G&A (incl. corporate, sales/ marketing)	(USD/t ore)	5.6

Mining and Metallurgical Methods and Parameters

Initial metallurgical testwork has been completed for the transitional and fresh (sulphide) mineralisation at Hawiah, comprising flotation and cyanide leach methods. No metallurgical testwork results are available for the oxide mineralisation; however, metallurgical parameters have been approximated based on similar deposit types/styles located within Saudi Arabia and SRK's experience. Once testwork is completed, if the metallurgical recovery results change significantly from the current approximated values, this would impact the parameters used to report the Mineral Resource, which, in turn, could also impact the tonnages and grades considered to have 'reasonable prospects for eventual economic extraction' for reporting in the Mineral Resource Statement.

Appendix A – Glossary of Technical Terms

Ag	Silver
AAS	Atomic Absorption Spectroscopy
AIC	All-in Costs
Arabian-Nubian Shield or ANS	The Arabian-Nubian Shield is a large area of Precambrian rocks in various countries surrounding the Red Sea
ARTAR	Abdul Rahman Saad Al Rashid & Sons Company Limited
Au	Gold
Cu	Copper
DFS	Definitive Feasibility Study
g/t	Grams per tonne
Gossan	An iron-bearing weathered product overlying a sulphide deposit
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectroscopy
IDW	Inverse Distance Weighted

IP	Induced polarisation - a ground-based geophysical survey technique measuring the intensity of an induced electric current, used to identify disseminated sulphide deposits
JORC	Joint Ore Reserves Committee
JORC Code 2012	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
m	Metres
Massive sulphide	Rock comprised of more than 40% sulphide minerals
Mt	Million tonnes
Mtpa	Million tonnes per annum
MRE	Mineral Resource Estimate
NSR	Net Smelter Return
oz	Troy ounce of gold
PCT	Percent
PEA	Preliminary Economic Assessment
PFS	Pre-Feasibility Study
PPM	Parts per million
Precambrian	Era of geological time before the Cambrian, from approximately 4,600 to 542 million years ago
VMS deposits	Volcanogenic massive sulphides; refers to massive sulphide deposits formed in a volcanic environment with varying base metals (copper, lead and zinc) often with significant additional gold and silver
Zn	Zinc

Appendix B – Diagrams

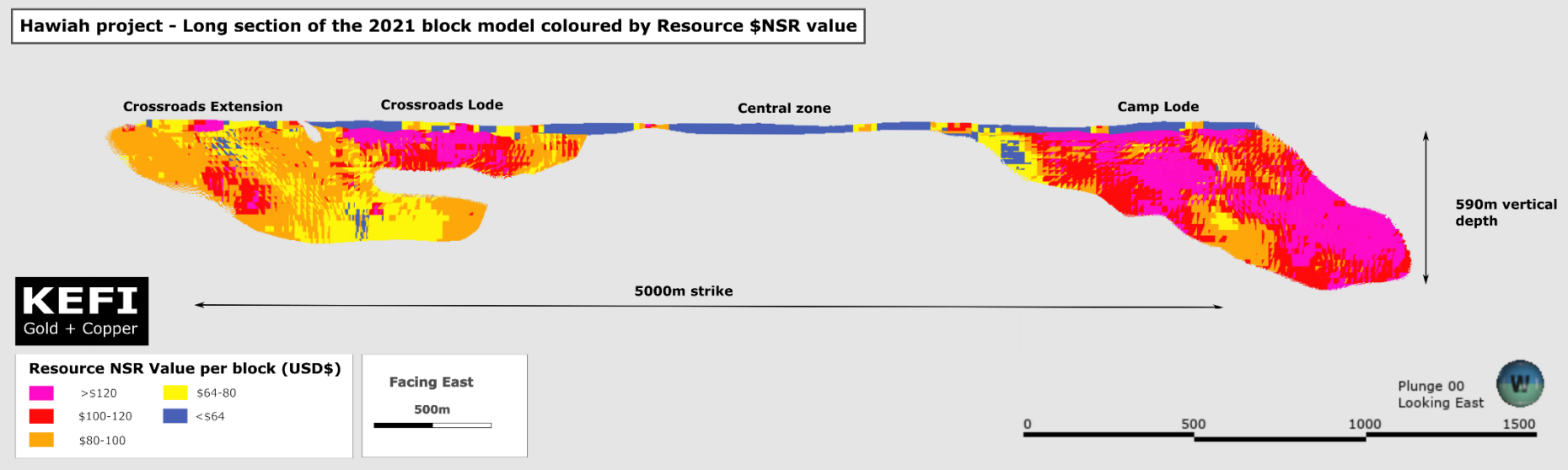

Figure 1 – Long section of the Hawiah deposit displaying Resource NSR values within the Block Model

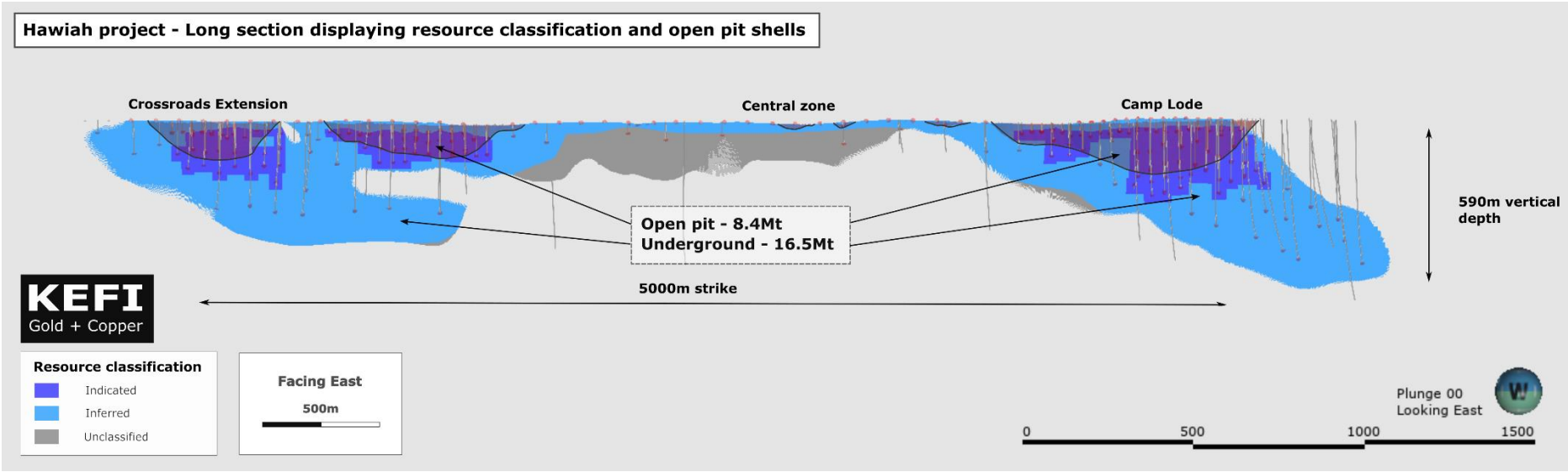

Figure 2 - Hawiah deposit in Long section displaying resource classification and the open pit locations

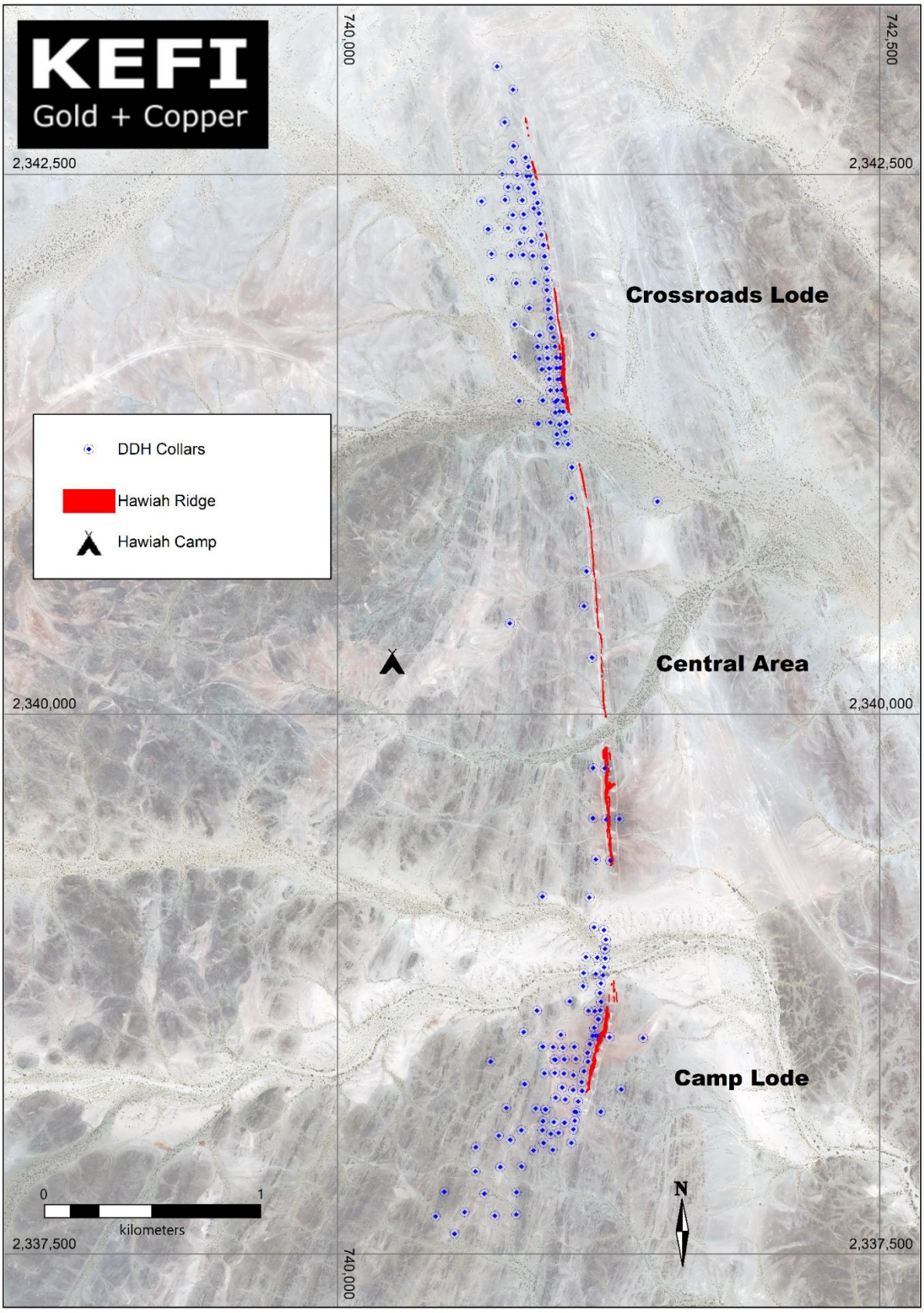

Figure 3 - Collar locations of diamond drilling across the Hawiah project.

Appendix C – JORC Table 1

JORC TABLE 1
Section 1: Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Project Description
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	A total of 193 surface diamond drillholes for 41,919 m and 53 surface trenches for 1,669 m have been completed at the Hawiah site, within the Project Licence area. Diamond drilling and surface trenching was used to obtain sample intervals that typically range from 0.3-3m for drilling and 1-3m for trenching from which a split was pulverised to produce a charge for fire assay digest with AAS instrumentation for gold and 4-acid digest ICP-AES for silver, copper and zinc.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	All drilling at the Project was completed using diamond drilling techniques, taking mostly HQ diameter using double tube core barrels. HQ3 diameter core (with triple tube core barrels) was used for early drillholes HWD_001 - HWD_025 and then in zones where poorer ground conditions were anticipated, for example in the highly weathered oxide domain.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	SRK has reviewed the drill core recovery results and found that in general the core recovery in the transition (where away from the immediate oxide contact) and fresh mineralised zone is reasonably good with an average recovery of 93.0% and 99.7%, respectively.

Criteria	JORC Code explanation	Project Description
		Within the oxide domain (and at the immediate oxide-transition contact), core recoveries are relatively poor, on average 27%, which is due to a combination of interpreted (sulphide) weathering cavities and soft friable/ clay material within this highly weathered zone. The low core recovery values in the oxide domain mean that the geological confidence and data quality associated with the position of the mineralisation hangingwall and footwall contacts, assay and density sampling results is also low. This is reflected in the (Inferred) Mineral Resource Classification for the oxide domain.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	HQ3 diameter core (with triple tube core barrels) was used zones where poorer ground conditions were anticipated, for example in the highly weathered oxide domain. No clear relationship is noted between Au, Ag, Cu or Zn grade and recovery.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	All drillcore and trench samples have been geologically logged. Geotechnical (RQD and core recovery) logging has been completed for all drillholes.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Both quantitative (geotechnical logging of RQD and core recovery) and qualitative (lithology) logging was carried out. All core has been photographed.
	The total length and percentage of the relevant intersections logged.	100% of diamond core and trench sampling has been logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Whole core was split using a core saw by Project personnel and then submitted for preparation, during which material was crushed to 2mm, pulverised to ~75 µm, with 250g split sent for analysis. The sample preparation procedures used for trench samples in consistent with the drillcore samples.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field	

Criteria	JORC Code explanation	Project Description
	duplicate/second-half sampling.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Certified Reference Materials ("CRM"), field duplicates, and blank samples were inserted into the sample stream, equating to a Quality Assurance Quality Control ("QAQC") sample insertion rate of approximately 18% for gold and 16% for silver, copper and zinc. For trench sampling, QAQC samples were limited to CRM samples for gold and were inserted at a rate of approximately 3%. Assessment of the available QAQC data indicates that, with the exception of a limited number of anomalies and potential CRM sample mix-ups, the assay data for the drilling and sampling to date appears both appropriately accurate and precise.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	SRK completed a visit to the Project during October 2021. The site visit allowed SRK to review exploration procedures, examine new drill core, inspect the site, interview G&M personnel and collect relevant information.
	The use of twinned holes.	No twin drilling has been completed. All drillholes have been completed by G&M in accordance with their protocols, during 2019-2021.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	SRK was provided the Hawiah database in Microsoft Access format on 18 October 2021. SRK performed validation checks on the entire digital sample database and excluded data where appropriate. The Company validated sample assays during 2015 trench sampling and 2019-2021 drilling and by routinely submitting QAQC samples into each batch submitted for analysis at the ALS Jeddah Laboratory.
	Discuss any adjustment to assay data.	SRK excluded the following sample data within the digital sample database: • All early-exploration surface rock chip sampling completed by the Company (namely HoleID's HWTR001- HWTR0018), due to their low accuracy (handheld GPS) survey, lack of QAQC protocol support and superseded nature, with systematic trench sampling completed over the same area during 2015; • Reconnaissance trench sampling completed on adjacent prospects, namely HAT054 and HAT055.

Criteria	JORC Code explanation	Project Description
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	The topographic survey for drillhole collars at Hawiah has been completed by using a Topcon ES-103 total station survey tool which provides a high degree of accuracy in terms of x, y and z coordinates. All trenches were surveyed using differential GPS or land surveyor.
	Specification of the grid system used.	UTM coordinate grid.
	Quality and adequacy of topographic control.	A topographic survey was completed by a G&M surveyor using Topcon ES-103 total station. The Resolution of topo-station points is considered to better than 0.5m, across the Project site.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drillhole spacing typically ranges between 40 to 180 m.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied	The drilling pattern is sufficiently dense to establish geological and grade continuity for the Mineral Resource at a reasonable level of confidence.
	Whether sample compositing has been applied.	SRK created 2.0m composites throughout samples in the modelled zones to regularise the grade data/ sample lengths whilst retaining grade variability at a visually representative scale.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Drillholes have been completed from surface at inclinations typically ranging from 50 – 60°, providing intersection angles with the mineralisation that typically range from ~65° to ~30°.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The orientation of the drilling is not considered to have introduced any material bias to the sample data or MRE.
Sample security	*The measures taken to ensure sample security.*	Transport of core from drill site to core storage was supervised by G&M personnel. Samples are driven to the analytical laboratory in Jeddah by a G&M driver. Sampled half and quarter core is kept in core stacks at G&M's core storage area. Analytical pulps are retained by the laboratory until the end of the drilling program; these are then then returned to G&M's core storage yard by a G&M driver and stored in sealed barrels.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	SRK performed validation checks on the digital sample database and excluded data where appropriate. Based on the verification work completed, SRK considers that the digital sample and logging database is an appropriate reflection of the drilling and sampling data.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Project Description
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	G&M is a joint venture partnership between ARTAR and KEFI. The Exploration Licence is held by ARTAR, under the terms of the G&M Joint Venture agreement. ARTAR currently has a 68.8% share of the Project, with the remainder (31.2%) owned by KEFI, where KEFI is the operating partner. The Exploration Licence was granted by order of the Ministry of Energy, Industry and Mineral Resources and Deputy Ministry of Mineral Resources of Kingdom of Saudi Arabia. The Licence was originally awarded in 2014 and then renewed in October 2018. The Licence is due to expire on 21 October 2022.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	There are no known litigations potentially affecting the Hawiah Project.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Modern exploration at the Project commenced in 1936, with exploration activities including surface mapping, sampling and geophysics undertaken under the ownership of Saudi Arabian Mining Syndicate and (following 1956 and through to 1987) the KSA Directorate General of Mineral Resources as part of cooperative agreements. Most notably, the BRGM undertook a trench sampling program at the Hawiah prospect during 1987, which followed up on the results of earlier (1986-1987) rock chip sampling, mapping and geophysics, also undertaken by the BGRM. G&M subsequently acquired the Project in 2014.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Hawiah VMS deposit is located on the eastern limb of a regional-scale antiform in the Group 2 mafic volcanics of the Wadi Bidah Mineral Belt (WBMB). The Hawiah deposit forms a prominent north-south trending ridgeline, exposed over a total length of approximately 4,500m with a thickness that typically varies from 1-15m. The ridge has been interpreted by the Company as the modern-day expression of the original VMS palaeohorizon. The rock package comprises a suite of gossanous ex-massive sulphides, chert breccias, banded iron stones and intermediate volcanic breccias. The deposit has been subject to varying degrees of supergene alteration as a result of groundwater interactions. The deposit comprises of four weathering domains; oxide, oxide-transition, transition and fresh, within which different resulting facies are described. The oxide and oxide-transition domain typically shows supergene gold enrichment, while

Criteria	JORC Code explanation	Project Description
		certain parts of the transitional domain shows copper enrichment. The fresh mineralised domain appears to be a dominantly pyritic stratiform massive sulphide body.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	Listing this material would not add any further material understanding of the deposit and Mineral Resource. Furthermore, no detailed Exploration Results are specifically reported.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated	
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	

Criteria	JORC Code explanation	Project Description
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	SRK consider that there may be some potential to increase tonnage in the reported Mineral Resource at Hawiah with additional drilling at depth, within the central, northern and southern (down plunge) parts of the model, and also within the unclassified (transition and fresh) material within the central part of the deposit.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Project Description
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	SRK performed a number of database validation checks on the Company's digital sample data and found no material issues in the final database.
	Data validation procedures used.	
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	SRK completed a visit to the Project during October 2021 to review exploration procedures, examine new drill core, inspect the site, interview G&M personnel and collect relevant information.
	If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Mineralisation wireframes have been defined primarily based on lithology logging, elevated copper and gold grades (relevant to zones of anticipated grade enrichment or depletion, as described below) and visual assessments of geological and grade continuity. Selected mineralised intervals for oxide, oxide-transition, transition and fresh zones were typically based on visually distinguishable boundaries between the mineralised zones and background host rock, with lower grade samples and interburden incorporated where necessary
	Nature of the data used and of any assumptions made.	
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	
	The use of geology in guiding and controlling Mineral Resource estimation.	

Criteria	JORC Code explanation	Project Description
	The factors affecting continuity both of grade and geology.	to honour geological continuity. For the oxide domain, mineralisation is primarily modelled based on a combination of gossan, saccharoidal silica and hematitic chert lithologies (i.e. weathering products of the massive sulphide), relative enrichment of gold (Au) grade (and depletion in copper (Cu) and zinc (Zn) grade) and typical red/ orange colour observed in core photos. The oxide-transition zone occurs in certain areas between the oxide and transition zones and represents material considered to be chemically similar to the oxide (elevated gold, depleted Cu) however with density and physical (logging) characteristics similar to the transition. In the transition, mineralisation is mainly modelled based on massive sulphide logging, relative enrichment of Cu and Au (similar to the fresh) and core photo observations, where (in proximity to the oxide contact) transition material typically has a dark-grey to black colour (which clearly contrasts with the oxide zone). The boundary with the fresh rock is generally less distinct based on logging observations and appears to be gradational based on sample grade distributions. Within the fresh rock, mineralisation is primarily modelled based on massive sulphide logging and relative enrichment of Cu and Au; typically, these features are closely correlated in the fresh. Zinc (Zn) and silver (Ag) are also generally coincident with the fresh massive sulphide mineralisation and were used as a secondary modelling criteria.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Mineralisation modelled for 2021 comprises a mineralised lode which is geologically continuous along strike for ~5 km, with down-plunge extents of up to 900 m and an average thickness normally between 1 m and 15 m.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	In summary, for this Mineral Resource Estimate, SRK has completed the following: • modelled the mineralised lode and weathering domains in 3D, in conjunction with the G&M geological team; • composited the sample data to 2m intervals; • applied high grade caps per estimation domain from log histograms; • undertaken geostatistical analyses to determine appropriate interpolation algorithms; • created block models with block dimensions of 2 x 25 x 25 m

Criteria	JORC Code explanation	Project Description
		• interpolated Cu, Zn, Au and Ag grade into the block model using ordinary kriging (or IDW where variograms where not achieved); • assigned average or lithology-weighted average density by modelled weathering domain; • visually and statistically validated the estimated block grades relative to the original sample results
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	In comparison to the previous 2020 SRK MRE, which was reported in only the Inferred Mineral Resource category, targeted infill drilling at the Project has resulted in the reporting a portion of the 2021 Mineral Resource in the Indicated category, comprising some 10.9 Mt at 0.96% Cu, 0.86% Zn, 0.64 g/t Au and 9.98 g/t Ag. On a combined Indicated and Inferred basis, SRK note the following changes for the Hawiah deposit, compared with the 2020 MRE Statement: • Increase in tonnage from 19.3 Mt to 24.9 Mt, slight increase in copper and zinc grades from 0.87% Cu to 0.9% Cu and from 0.81% Zn to 0.85% Zn, increase in gold grade from 0.56 g/t Au to 0.62 g/t Au and slight reduction in silver grade from 10.3 g/t Ag to 9.8 g/t Ag. SRK consider the changes outlined above for Hawiah to be a due to a combination of the following key factors: • infill drilling resulting in increased drillhole coverage; • exploration drilling at the southern down-plunge extents of the deposit (at the Camp Lode), extending modelled mineralisation wireframes to depth; • new drilling and sampling results at the deposit for 2021 resulting in slightly higher overall mean sample grades for Cu, Zn and Au (and slightly lower mean grades for Ag), mainly due to of addition of new intercepts at depth; • refinements to the mineralisation model and estimation parameters; • changes to the RPEEE parameters for 2021, including (with the exception of Zn) slightly higher overall metal prices and metallurgical recoveries, based on initial metallurgical testwork results and updated assessment of long-term metal price forecasts
	The assumptions made regarding recovery of by-products.	No by-products have been estimated as part of this MRE.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No deleterious elements have been estimated as part of this MRE.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search	Block dimensions are 2 x 25 x 25 m (x, y and z). These dimensions were chosen to reflect the average drillhole spacing and to appropriately reflect the grade

Criteria	JORC Code explanation	Project Description
	employed.	variability within the modelled mineralised domains.
	Any assumptions behind modelling of selective mining units.	Selective mining units have not been modelled as part of this MRE.
	Any assumptions about correlation between variables.	No significant correlation relationships were found between modelled variables during raw statistical analysis.
	Description of how the geological interpretation was used to control the resource estimates	The limits of the block model domains are constrained by wireframes that represent the mineralised lode.
	Discussion of basis for using or not using grade cutting or capping.	High-grade capping was applied based on histogram plots for each mineralisation wireframe domain and spatial (visual) assessment of high-grade sample support
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Visual checks were carried out along sections and in 3D to compare model block grades with drillhole data. Mean model grades were compared to mean sample grades per domain and spatially assessed along a series of pre-defined sections using SWATH plots. Based on the visual, sectional and statistical validation results SRK has accepted the grades in the block model.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	SRK has applied basic economic considerations based on initial metallurgical testwork results and assumptions provided by the Company, similar deposit types located within Saudi Arabia and SRK's experience to determine which portion of the block model has reasonable prospects for eventual economic extraction by underground and open-pit mining methods. To achieve this, the Mineral Resource has been subject to an underground floating stope optimisation and open-pit optimisation studies, based on long-term metal price forecasts (with appropriate uplift to reflect potential for assessing Mineral Resources) for copper, zinc, gold and silver, to assist in determining the material with potential for underground and open pit mining and reporting above a suitable Resource NSR USD/t cut-off value. The parameters used for the underground stope optimisation and open pit optimisation exercise are summarised below.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral*	

Criteria	JORC Code explanation	Project Description
	Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	**Summary of key assumptions for conceptual underground stope optimisation, open pit optimisation and cut-off grade calculation**

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Project Description</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Parameters</th><th>Units</th><th></th></tr>
<tr><td>Production Rate</td><td></td><td></td></tr>
<tr><td>Production Rate - Ore</td><td>(ktpa)</td><td>1.8 - 2.2</td></tr>
<tr><td>Geotechnical</td><td></td><td></td></tr>
<tr><td>Overall Slope Angle (Oxide)</td><td>(Deg)</td><td>43</td></tr>
<tr><td>Overall Slope Angle (Transition)</td><td>(Deg)</td><td>46</td></tr>
<tr><td>Overall Slope Angle (Fresh)</td><td>(Deg)</td><td>52</td></tr>
<tr><td>Open Pit Mining Factors</td><td></td><td></td></tr>
<tr><td>Dilution</td><td>(%)</td><td>Included in regularised Block Model 5x5x2.5 m</td></tr>
<tr><td>Recovery</td><td>(%)</td><td></td></tr>
<tr><td>Underground Mining Factors</td><td></td><td></td></tr>
<tr><td>Minimum stope dimension</td><td>(m)</td><td>2m width x 25 m height x 20 m length</td></tr>
<tr><td>Dilution</td><td>(%)</td><td>15%</td></tr>
<tr><td>Processing (Oxide: Heap Leach)</td><td></td><td></td></tr>
<tr><td>Recovery - Cu</td><td>(%)</td><td>0%</td></tr>
<tr><td>Recovery - Zn</td><td>(%)</td><td>0%</td></tr>
<tr><td>Recovery - Au</td><td>(%)</td><td>75%</td></tr>
<tr><td>Recovery - Ag</td><td>(%)</td><td>15%</td></tr>
<tr><td>Processing (Transition and Fresh: Floatation and Cyanide Leach)</td><td></td><td></td></tr>
<tr><td>Recovery - Cu</td><td>(%)</td><td>92%</td></tr>
<tr><td>Recovery - Zn</td><td>(%)</td><td>71%</td></tr>
<tr><td>Recovery - Au</td><td>(%)</td><td>74%</td></tr>
<tr><td>Recovery - Ag</td><td>(%)</td><td>84%</td></tr>
<tr><td>Commodity Prices</td><td></td><td></td></tr>
<tr><td>Cu</td><td>(USD/t)</td><td>9,200</td></tr>
<tr><td>Zn</td><td>(USD/t)</td><td>3,000</td></tr>
<tr><td>Au</td><td>(USD/oz)</td><td>1,820</td></tr>
<tr><td>Ag</td><td>(USD/oz)</td><td>26</td></tr>
<tr><td>Operating Costs</td><td></td><td></td></tr>
<tr><td>Open Pit Mining (Oxide)</td><td>(USD/t rock)</td><td>1.9</td></tr>
<tr><td>Open Pit Mining (Transition)</td><td>(USD/t rock)</td><td>2.2</td></tr>
<tr><td>Open Pit Mining (Fresh)</td><td>(USD/t rock)</td><td>2.1</td></tr>
<tr><td>Underground Mining (Transition and Fresh)</td><td>(USD/t ore)</td><td>27.0</td></tr>
<tr><td>Processing (Oxide: Heap Leach)</td><td>(USD/t ore)</td><td>6.0</td></tr>
<tr><td>Processing (Transition and Fresh: Floatation and Cyanide Leach)</td><td>(USD/t ore)</td><td>13.9</td></tr>
<tr><td>G&A (incl. corporate, sales/ marketing)</td><td>(USD/t ore)</td><td>5.6</td></tr>
</table>
</td></tr>
<tr><td>Environmental factors or assumptions</td><td>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential</td><td>SRK is unaware of any environmental factors which would preclude the reporting of Mineral Resources.</td></tr>
</table>

Criteria	JORC Code explanation	Project Description
	environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Density measurements were taken from drill core during the 2019-2021 diamond drilling programmes. The immersion method (Archimedes principal) was used, measuring dry versus immersion in water weights. A piece of core typically measuring 10-15 cm in length was selected and weighed in air and then again while submerged in water. Prior to 2021, almost all samples were covered in a wax coating before immersion in water. Since then, core density measurements (for drilling targeted on transition and fresh mineralisation) has been based on unsealed core, based on largely non-porous core material. *Transition and Fresh Density* Based on density histogram assessment within the transition and fresh mineralisation domains, SRK noted the presence of a bimodal population, with higher and lower populations relating to massive sulphide and interburden (manly Greenschist) lithologies, respectively. The variability between the typically thin, interburden intervals and massive sulphide, within the mineralisation zone, is generally not evenly distributed downhole and often occurs at a resolution finer than the frequency of density sampling (typically 1 sample every 1-2m). This means that direct interpolation of density samples may result in local overestimation of block model density Instead, to appropriately reflect the two populations in the block model, SRK has derived a % massive sulphide field ("MS%") for every drillhole intercept within the mineralisation domain (derived based on lithology logging) and used this to assign a lithology-weighted density field for each block in the model. MS% was interpolated into the block model using an ID2 algorithm, with density for the transition and fresh mineralisation domains derived based on average sample densities and the following formulas: **Transition Density g/cm^3 = [MS%*4.5] + [(1-MS%)*2.6]** **Fresh Density g/cm^3 = [MS%*4.6] + [(1-MS%)*3.3]**

Criteria	JORC Code explanation	Project Description
		Oxide Density Given the relatively limited density sample coverage within the oxide, SRK has applied block model density according to average values. Within the oxide domain, where weathering cavities are currently interpreted to occur, SRK has accounted for these in the density estimation by applying a 'cavity factor' to the average value determined from drillhole samples. The cavity factor was determined for the previous SRK 2020 MRE based on the following observations within the mineralisation wireframe: • Total intercepted length within drillholes in the oxide domain: 28.3 m; • Total intercepted length within the drillholes in the oxide domain that returned zero core recovery (interpreted as cavities): 9.4 m; • Total % core with zero recovery within the oxide domain (i.e. the cavity factor): 9.4 / 28.3 = 33% (or 30%, to apply appropriate rounding and reflect the current low level of confidence associated with the density of the oxide material) Limited new information is available for oxide zone for 2021; therefore, the cavity factor outlined above remains current, with oxide density for the model determined using the formula below: **Oxide density g/cm^3 = [2.4 * (1-30%) = 1.7]**
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factor (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*	The following guidelines apply to SRK's classification: Indicated Mineral Resources are where SRK has a reasonable level of confidence in the geological interpretation and grade continuity, within relatively well drilled areas of the model with 60m coverage or better, limited to the transition and fresh mineralisation domains. Inferred Mineral Resources are in domains that display reasonable to low geological confidence, where blocks are typically within 100-120 m of sample data. These areas require support from targeted infill drilling to improve the quality of the local block grades and geological interpretation before they can be used for long term mine planning. This classification was prepared by, and reflects the views of, the Competent Person.

Criteria	JORC Code explanation	Project Description
	Whether the result appropriately reflects the Competent Person's view of the deposit.	
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	SRK is not aware of any previous audits or reviews
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Hawiah deposit is an Advanced Exploration Property that is predominantly an underground target however with open-pit potential in certain thicker and higher-grade areas nearer to surface. The Project is at a moderate stage of exploration and geological understanding, particularly within better drilled areas. In areas of wider spaced drilling and increased geological uncertainty, notably at depth and in the oxide zone, additional targeted infill is required to improve geological confidence and quality of the local block estimates before these areas are considered suitable for use for long-term mine planning. Areas of lower geological confidence will require more drilling and verification work and may be subject to further revision in the future.