# TULKUBASH GOLD PROJECT KARATOR PROSPECT & EXPLORATION AREA MAIDEN MINERAL RESOURCE ESTIMATE

#### **CHAARAT ZAAV CJSC**

Date: January 15<sup>th</sup>, 2024

#### Prepared by: Dimitar Dimitrov

*P. Geo, AIG member and a Competent Person as defined in the 2012 edition of the JORC Code* 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.'

## EXECUTIVE SUMMARY

Chaarat Gold Holdings (CGH), through its wholly owned subsidiary, Chaarat Zaav CJSC (Chaarat), is developing Tulkubash oxide gold deposit (Tulkubash) located in the western part of the Kyrgyz Republic. Karator exploration area (Karator or Project) is the northeastern extension of Tulkubash oxide gold mineralization, and subject of consistent exploration activities within the last 3 years.

Dimitar Dimitrov was engaged by Chaarat to complete a Maiden Mineral Resource Estimate (MRE) of Karator area, and to act as the Competent Person (CP) as defined in the JORC Code (2012)<sup>1</sup> reporting code.

All the workflow and conclusions reported herein were supervised by Mr. Dimitar Dimitrov, a former VP Exploration of CGH, MAIG and CP as defined in the 2012 edition of the JORC Code.

It is the CP's opinion that the reported JORC compliant Mineral Resource (Resource) is a reasonable representation of the available up to date technical data.

The effective date of this report is January 15<sup>th</sup>, 2024.

Karator, JORC compliant Resource, with applied assumption for Reasonable Prospects for Eventual Economic Extraction (RPEEE) is summarized in Table 1, below:

CLASS	DENSITY (t/m³)	Mt	Au (g/t)	Koz
INDICATED	2.60	2.5	0.96	77
INFERRED	2.60	4.2	0.97	130
TOTAL	2.60	6.7	0.96	207

Table 1 Karator, JORC compliant Mineral Resource table, cutoff grade 0.21 ppm Au, January 2024

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      Notes:
      The effective date of the reported Resource is 15<sup>th</sup> January 2024.

      The resource estimate is according the JORC Code (2012)

      Applied cutoff grade: 0.21 ppm Au.

      The Mineral Resources that are not Mineral Reserve do not demonstrate economic viability.

      Numbers may not sum due to rounding.

      Grade estimation completed via Ordinary Kriging, within block model with a parent block size of 5 m x 5 m x 5 m.

      Mineral Resources are constrained by manually designed Resource shell, within the area with denser drilling grid, in terms to apply Reasonable Prospects for Eventual Economic Extraction
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The geological interpretation, based on the available drilling and trenching data confirms that the currently reported Resource has sufficient potential for further advancing to Measured and Indicated.

Non JORC compliant mineral inventory (Mineral Inventory) has been outlined at Karator as additional exploration potential of 5 to 10Mt oxide gold material at 0.8 to 0.9g/t gold, subject of further exploration, resource definition and upgrade.

<sup>&</sup>lt;sup>1</sup> Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, The JORC Code 2012 Edition. Effective 20 December 2012 and mandatory from 1 December 2013. Prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australasian Institute of Geoscientists and Minerals Council of Australia (JORC).

Further systematic step out and infill drilling totaling about 9, 000 meters is planned to upgrade the current resource to Measured and Indicated and to delineate additional resource over the entire Karator exploration potential.

The Chaarat's anticipation is to develop the Karator resource and mineral inventory as potential extension of the Tulkubash mine life.

The signing of this statement confirms this report has been supervised and checked by Dimitar Dimitrov, P. Geo, AIG member and a Competent Person as defined in the 2012 edition of the JORC Code 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.'

Dimitar Dimitrov (MAIG # 4538)

..... Signature

January 15th 2024 Date



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# Glossary of Technical Terms

"Au"	The chemical symbol for the element gold.
"Cut-off-grade"	Lowest grade of mineralized material considered economic, used in the calculation and / or reporting of ore resources.
"g/t"	Grammes per tonne, equivalent to parts per million (ppm).
"Indicated Mineral Resource"	That part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade, and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.
"Inferred Mineral Resource"	That part of a Mineral Resource for which the tonnage and grade and mineral content can be estimated with a low level of confidence. It is inferred from the geological evidence and has assumed but not verified geological and/or grade continuity. It is based on information gathered through the appropriate techniques from locations such as outcrops, trenches, pits, working and drill holes which may be limited or of uncertain quality and reliability.
"JORC"	The Australasian Joint Ore Reserves Committee Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (the "JORC Code" or "the Code"). The Code sets out minimum standards, recommendations, and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves
"Measured Mineral Resource"	A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the

evaluation of the economic viability of the deposit.

application of Modifying Factors to support detailed mine planning and final



"Metallurgical" Describing the science concerned with the production, purification. and properties of metals and their applications.

"Mineral Inventory" Non formal quantification of concentration or occurrence of solid material of "Mineral Inventory" economic interest, estimated by variety of empirically or theoretically based procedures. Within the current report the term Mineral Inventory is considering the immediate oxide gold mineralization potential, outlined by the ore wireframing, but with lack of sufficient confidence to be referenced to JORC compliant Mineral Resource or Reserve.

- "Mineral Resource" Concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated, or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
- "Ore Reserves" Represents the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.
- "Probable Ore Represents the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.

"Proved Ore Represents the highest confidence category of reserve estimate and implies a high degree of confidence in geological and grade continuity, and the consideration of the Modifying Factors.

- "Recovery" Proportion of valuable material obtained in the processing of an ore, stated as a percentage of the material recovered compared with the total material present.
- "t" Tonne (= 1 million grammes)

## 1.0 INTRODUCTION

Two styles of mineralization have been identified at the Chaarat ZAAV property (Property), located in western Kyrgyzstan. The first style, known as Tulkubash-type, named after Tulkubash gold deposit, is oxidized gold mineralization, hosted within the Devonian silicified sandstones of the Tulkubash formation. This oxidized mineralization is amendable for heap leach gold extraction and represented by subvertical to steeply dipping, northeast striking lenses, controlled by a series of dilational jogs along the Sandalash shear zone.

The second style of mineralization is known as Kyzyltash-type mineralization, named after Kyzyltash gold deposit (Kyzyltash). This style of mineralization is characterized as mostly unoxidized, refractory gold mineralization, hosted along the same structural corridor, but in other lithological unit – Ordovician, intensely deformed, predominantly fine-grained sediments and schists of Chaarat formation. Kyzyltash type ore require a more complex processing route of flotation, BIOX and leaching of the oxidized flotation concentrates.

The Tulkubash oxide gold deposit lies adjacent to the Kyzyltash gold deposit but is distinct in terms of mineralization style, host rock and oxidation stage, and is currently being developed by Chaarat as an open pit, heap leach gold deposit. Tulkubash is a JORC compliant probable reserve with 107,000 meters drilled to date. The project is immediately available for mining activity with a JORC compliant reserve statement and comprehensive Bankable Feasibility Study (BFS).

The extension of Tulkubash oxide gold deposit in northeastern direction is presented by an exploration area named Karator prospect (Karator), which was subject of consistent field activities in the last 5 years and currently have available sufficient technical information for preparation of maiden, JORC compliant Mineral Resource Estimation. The predominantly oxidized Karator gold mineralization is located 2 km northeast of Tulkubash eastern zones and is traced on approximately 1 km strike with 30-80 meters width and 150 to 250 meters down dip extension. The Karator mineralized zone is deeply oxidized and considered as potential mine life extension of Tulkubash project, using the existing Tulkubash heap leaching pad.

This maiden Mineral Resource Estimate (MRE) is focused exclusively on the Karator oxide gold prospect, although a summary of the other deposits on the Property, including Tulkubash and Kyzyltash, is provided as well, aiming to achieve sufficient completeness of this report.

The key field activities in Karator, including drilling and trenching, carried out between 2021 and 2023, were planned and supervised by Mr. Dimitar Dimitrov, a Senior VP Exploration in CGH, at that time.

Since October 2023 Mr. Dimitrov is acting as independent consultant, engaged by Chaarat to complete a JORC compliant maiden Resource estimation for Karator prospect.

The current MRE workflow including data processing, design of ore wireframes, geostatistical analysis and resource modelling, was completed by Nikolay Pushev, a senior resource geologist, involved in the field activities, together with CGH geologists and technical staff since 2021. Nikolay is acting for Ridge Consultants consulting company, supervised by D. Dimitrov.

The preparation of this report is largely relay on the experience and knowledge, obtained together with Chaarat's geological department, headed by Janybek Baslakunov and Aleksey Savenkov, along with the provided technical information about the Property and the Project, including earlier technical reports.

Dimitar Dimitrov as Competent Person (CP) visited the field site operations several times during 2021 field season. The last visit was done on 12.01.2024, when had the opportunity to review the 2023 drill core, along with the applied procedures of core sampling and QAQC. The purpose of all visits, including the last one, was to guarantee that the implemented procedures, and the obtained data are meeting the best industry standards and are further correctly represented within this report.

It is the CP's opinion that the Mineral Resource reported herein is a reliable basis for further advancing to Measured and Indicated, and the recognized Mineral Inventory is having immediately potential for additional JORC compliant Resource extension and upgrade.

## 2.0 PROJECT

#### 2.1 Location

Karator oxide gold prospect as a part of the Chaarat ore field is in central Asia region, western Kyrgyz Republic, within Chatkal administrative district, Jalal –Abat province, approximately 300 km westsouthwest from the Kyrgyzstan capital – Bishkek.



Figure 1 Property, regional location



Figure 2 Karator prospect and CGH property

#### 2.2 Licenses and ownership

Chaarat Zaav CSJC, a wholly owned subsidiary of Chaarat Gold Holdings Ltd, currently hold two licenses controlling the property:

- Mining license (#3117AE) of 700.03 ha, valid to 2032, and covering a defined Mineral Reserves and Mineral Resources of Tulkubash and Kyzyltash gold deposits.
- Exploration license (#3319AP) of 2743.0 ha, valid till September 2026, covering prospective areas to the northeast of the mining license, including Karator oxide gold prospect and Ishakuldy exploration target. The exploration license is recently extended until 07.09.2026 and is subject of further extension or conversion to a Mining license.



Figure 3	Licenses	area,	plan	map
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point #	х	Y	point #	х	Y
1	12682757	4658554	7	12679035	4658419
2	12682728	4659261	8	12682571	4661982
3	12683150	4659556	9	12682571	4665177
4	12682604	4660152	10	12687993	4665261
5	12679264	4656711	11	12687993	4663632
6	12679035	4656875	12	12684990	4661285
			13	12683894	4660128

Table 2 License # 3319AP coordinates - Pulkovo 1942 Gauss Kruger zone 12, 2743.0 ha, valid till 09.2026

Key conditions for holding Exploration License 3319AP in good standing include:

- Paying taxes and other payments for subsoil use as per Kyrgyz Republic legislation.
- Informing State Committee on Industry, Energy and Subsoil (SCIES) on a quarterly basis about License retention fee payments and provide copies of all payment documents.

• Providing geological reports to the State Geological Fund, as required under Kyrgyz Republic legislation.

#### 2.3 Access

There are two main access road options between the capital of Bishkek and the Chaarat Property. The so called "summer route" has a total length of 520 km, including paved and unpaved roads (150 km of which are gravel) usually accessible between May and October, and taking between 10 - 12 hours travel time. The alternative "winter route" provides year-round access, but the travel time is longer - approximately 15 - 20 hours.



Figure 4 Property access roads, plan map

#### 2.4 Topography

The Chaarat Property is characterized by extreme topography variations. Sandalash valley (about 2100m, asl), is between 100 and 300m wide, with steep slopes on either side, reaching elevations of up to 3600m above sea level (asl).



Figure 5 Typical view from Sandalash valley, looking southwest

#### 2.5 Climate

In the lower elevation zones of the Project, the climate is classified as semi-arid to temperate humid. The highest alpine zones are subject of severe winter, frequent snowstorms, and avalanches. At the lower elevations, the snow free period lasts from March to December, at the higher elevation from June to October, although the mountain peaks are covered with snow throughout the year. The average annual precipitation is 460 mm, with snow falling between October and February and rain between March and May, followed by a dry season from June to September. The seasonal temperatures are highly variable. In Jalal – Abat province the averages range from + 26 degrees in the summer to minus 20 degrees in the winter. The prevailing winds are north westerly.

#### 2.6 Local Resources

Chatkal valley contains eight villages, with a total population of 13,000 people. The area is isolated and is economically poorly developed, with most people engaged in livestock breeding. There are no permanent residents in Sandalash Valley. The area is not used for cultivation. In the summer months the area is traversed by herders enroute to areas for livestock grazing.

#### 2.7 Infrastructure

The Property lies in the uninhabited Sandalash valley. Electrical power line is not yet available in the valley. A 110kV power transmission line runs from Talas to China Gold's Kuru-Tegerek mining

operation, located approximately 40km (17 km straight line) from the Property. Another 10 kV power transmission line, providing power to Chatkal valley villages is located 30km from the Chaarat Property.

Three potential sources of electricity were considered for the Project:

- Installation of a power line connecting the Property to the Kyrgyz national grid
- Diesel generating capacity installed close to the site.
- Hydropower station located in the Sandalsh river.

#### 2.8 Environmental liabilities

Chaarat is legally responsible for compliance with environmental requirements under Kyrgyz legislation, and the approved design solutions which include but are not limited to air protection, protection of water resources, land protection and rehabilitation. Chaarat is required to obtain the relevant environmental permits for the respective activities Environmental Impact Assessment (EIA, or OVOS), make quarterly payments for environmental pollution per Kyrgyz laws, and submit reports on compliance with environmental requirements.

#### 2.9 Conclusions

As per the CP's best knowledge, there are no factors or risks that may affect access, title, or ability to continue operation or development of the Karator oxide gold prospect as material potential for life of mine (LOM) extension of Tulkubash oxide gold project, using the Tulkubash leash pad. The driving distance between Karator deposit to the current Tulkubash leach pad is about 15km.

# 3.0 PROJECT HISTORY

#### 3.1 Early Exploration in the Property

Antimony mineralization in the Property was originally identified by Soviet-era geologists conducting a reconnaissance exploration program prior to 1992. The North Kyrgyz Geological Expedition subsequently completed a regional stream sediment sampling program which identified antimony, arsenic, gold, silver, and tungsten anomalies in the area. They identified significant antimony mineralization in Tulkubash and Kyzyltash areas.

Following the breakup of the Soviet Union, Apex Asia acquired control of the prospective area in 1996, and subsequently formed a joint venture with Newmont Overseas Exploration Limited. Newmont completed a geophysical survey over a portion of Tulkubash and Kyzyltash and drilled seven holes totaling 1,803 m. Newmont terminated the joint venture in 2000, after which Apex sold its interest.

At the end of 2002, Chaarat was formed and acquired what is now known as the Chaarat Mining License. In 2003, Chaarat compiled historic data into a digital database and conducted initial mapping and sampling evaluation, which managed to identified targets that were later followed up with additional mapping, trenching, and sampling.

Soil sampling in what is now known as Tulkubash gold deposit was initiated in 2004. The obtained results exceeded the expectations, generating large and extensive gold in soil anomalies over 1 ppm of gold over the sandstones of the Devonian Tulkubash Formation, with individual gold assays picking up to 73 g/t of gold. Additional trenches and rock chip sampling were further implemented in Tulkubash deposit.

In 2010, early metallurgical test work indicated that much of the Tulkubash mineralization was free milling and could potentially develop into a low-cost, open pit, heap leach operation. This motivated an extensive drilling campaign initially parallel with Kyzyltash refractory mineralization exploration, and after 2014 exclusively only in Tulkubash oxidized deposit.

The positive results throughout the years opened room for further regional prospecting in northeast direction, aiming to advance the potential for additional Tulkubash oxide gold economic mineralization along the Sandalash structural corridor.

#### 3.2 Recent exploration in Karator

The presence of promising gold mineralization within Karator area was first outlined by systematic soil sampling and trenching in 2018 and 2019.

At 2021 was completed maiden drilling, along with additional surface activities, including trenching and road cut sampling.

In 2023 was carried infill resource drilling, aiming to open room for the current maiden Mineral Resource Estimation

Туре	Year	Total length (m)
Trenching; Road cut sampling	2018 - 2019	1,724
DRILLING	2021	935.3
Trenching; Road cut sampling	2021	2,919
DRILLING	2023	1,601.3

Table 2 Summary of Karator drill holes and surface workings, by years

# 4.0 PROPERTY GEOLOGY

#### 4.1 Regional Geology

Chaarat Property is located within the Tien Shan Metallogenic Belt, a Hercynian fold and thrust belt, with length more than 2,500 km. The Tien Shan belt consists of three tectono-stratigraphic units, divided by major structural zones, and is thought to represent accretionary prisms, developed on the margin of the proto-Eurasian continent. The Chaarat Property is in the middle Tien Shan province, composed by tectonic fragments of Ordovician to Carboniferous ages.

The Middle Tien Shan strikes in a sub latitudinal direction, having wide between 20-100km Talas-Fergana transverse fault divides it into two separate parts: Naryn (eastern) and Chatkal (western). Nikolayev's fault is its northern boundary, and the Atbashy-Inylchek fault (in the Naryn sector), also Kara-Suu fault (in the Chatkal sector) are its southern boundaries.

Regarding the structural plan, the eastern and western sectors of the Middle Tien Shan differ from each other. Folded structures in the Naryn sector mainly have a latitudinal strike. Folded structures in the Chatkal region have a north-east strike evolving to a south-east strike in proximity of the Talas-Fergana fault.

Metallogeny of the Middle Tien Shan is diverse and includes some major deposits: gold (Kumtor, Makmal), molybdenum (Molo, Chaartash), tungsten (Kensu, Kumbel), ferrum (Gava, Jetym), uranium, molybdenum, and vanadium (Saryjaz), copper (Kuru-Tegerek, Bozymchak), polymetal (Sumsar), antimony (Terek, Kassan).

Genetically, the mineralization systems could be referenced to orogenic gold, hosted within northeastern striking shear zone, largely associated with structurally controlled late Carboniferous and Permian aged magmatism.



Figure 6 Regional structural plan map

#### 4.1.1 Local Structural Control

Structurally, the terrain is intensively deformed by pre and post mineralization structural activities, dominated by southeast and northwest verging fore and back thrusts, folds, oblique north – northeast strike-slip faults. The Chaarat mineralization field is controlled by the Sandalash Fault Zone (SFZ) and is located approximately 35 km southwest from the Talas – Fergana right shift fault, which is

the major regional sin- and post- mineralization structure. The SFZ is defined by a series of subparallel brittle and shear deformations that are the result of predominantly strike-slip displacement. Gold mineralization occurs in various extensional structures, related to pressure relief during faulting (Kramer 2009; Jakubiak 2017). The SFZ comprises three mineralized fault zones, named the Tulkubash Structural Zone, the Contact Fault, and the Main Zone Fault (last two part of Kyzyltash sulfide gold project), and one unmineralized zone called the Irisay Fault. The Karator oxide gold deposit is considered the northeastern extension of Tulkubash mineralization zone.



Figure 7 Chaarat ore field structural control, Sandalash Shear zone

**Talas-Fergana Fault** – the major regional sin to post mineralization right lateral strike slip fault with > 240 km of displacement.

Sandalash Fault Zone (Sandalash Shear Zone) – a zone of intensive shearing and structural dilatational extension over about 20-25km strike, hosting the, Tulkubash, Contact and Main fault zones as ore controlling and commonly ore hosting structures.

**Karator Structural control** - deep seated brittle deformation, producing series of mineralized dilatant jogs, representing the northeastern extension of Tulkubash, oxide gold deposit, and controlled by the same structural mechanism.

#### *4.1.1.1 Caledonian stage of tectonic activity (late Ordovician)*

Caledonian folding and granitoid intrusion occurred at the end of the Ordovician.

At the Chaarat ore field Caledonian structures are represented as linear folds with northeastern strike, intense faulting, and thrusting.

An example of such a structure is the Main Zone (MZ, Kyzyltash), represented by a large fault of complex shear-surge-thrust kinematics. Within the fault zone there are developed plastic, after brittle deformations, and intense Quartz (Qtz) veining.

#### *4.1.1.2 Hercynian stage of tectogenesis (early Carboniferous – late Perm-early Triassic)*

Folding in the early Carboniferous is presented by two phases of deformations of early folds and longitudinal reverse faults sub latitudinal stretch, and then crosscutting late folds and longitudinal breaks of sub meridional stretch.

The intersecting linear folding has formed a complex interference structure, which is characterized by a combination of linear and brachimorphic folds of various directions.

Shear tectonics was widely manifested in the late Paleozoic – middle Carboniferous – Permian. At this time, most ore deposits of the Chatkal region were formed.

Structural trends of mineralization and magmatism probably reflect hidden deep faults, expressed by increased fracturing and permeability of rocks, which contributed to the migration of magmas and ore-bearing hydrothermal solutions.

#### 4.1.2 Lithology

The Sandalash River valley down cuts a northeast-trending sequence of Cambro-Ordovician fine grained siliciclastic sediments, intensively deformed, locally metamorphosed into green-schist metamorphic facies, and considered as a member of the Chaarat Formation. The Chaarat formation unit is adjacent to a sequence of younger Devonian-age quartzites which make up the Tulkubash Formation, obtaining fault contact between both. Younger Permo-Triassic-age granodiorite and diorite phases intrude the sediments and are spatially and genetically associated with the gold mineralization and, in some areas, are themselves mineralized. Both sediment units are hosting gold mineralization, striking northeastern and dipping between 45° and 80° to predominantly to the northwest.

#### 4.1.2.1 Chaarat Formation:

The Chaarat Formation consists of three facies which exhibit a sequential sedimentary package of deformed, locally low- grade metamorphosed, dark colored sediments, including siltstones, shales, quartzites, and greywackes, with minor limestone interbeds. The lower part of the unit is up to 170 m thick, consisting of grey siliceous siltstone interbedded with minor dark siltstone and shales. The middle part is approximately 300 m thick. It consists of interbedded fine and medium-grained sandstones, greywackes, and siltstones, with a basal zone consisting of lenticular beds of polymictic gravelly conglomerates and sandstones. The upper zone is dominated by shales and rhythmically interbedded siltstones and fine-grained sandstones which commonly exhibit graded bedding. The thickness of the upper zone varies between 70 m and 90 m, whereas the thickness of individual beds ranges between 1 and 2 meters.

#### 4.1.2.2 Tulkubash Formation:

The Tulkubash Formation is up to 1,000 m thick and consists of medium to fine-grained quartzites and medium- to coarse-grained arkose sandstones, rarely alternating with thin interbeds of dark pyritic shales and siltstones. Quartzite beds range between 10 cm and 1 m in thickness, with the thicker beds predominating. Individual quartzite beds are generally massive and internally homogenous, with the occasional compositional layering of dark laminae alternating with lighter quartz-rich layers. The base of the Tulkubash Formation is generally identified as a conglomerate unit. Within the Chaarat Property area, the upper and lower contacts of the Tulkubash formation are tectonic, overthrust and strike-slip faults.



Figure 8 Geological map of Chaarat Property



Figure 9 Conceptional scheme showing Tulkubash and Kyzlyltash mineralization, and geological interpretation

# 4.2 Brief description of Tulkubash oxide gold and Kyzyltash sulfide gold mineralization types

The mineralization system has two advanced projects Tulkubash oxide gold and Kyzyltash sulfide gold. Both have potential for resource advancing and are planned to be developed as Stage 1 and Stage 2 accordingly, prioritizing Tulkubash.

Tulkubash is an oxide gold deposit suitable for open pit mining, and extraction using standard heap leach gold extraction technology. Kyzyltash is a larger resource which is refractory in nature and requires a more complex processing route of flotation, BIOX and leaching of the flotation concentrates. A total of approximately 190,000 meters of drilling has been completed on both deposits.

The exclusive subject of the current report is the Karator prospect, which is considered as potential Resource extension of Tulkubash oxide gold, within Stage 1. However, to provide sufficient completeness of the information about Karator, a brief geological summary about Tulkubash and Kyzyltash is provided herein as well.

Both are structurally controlled by regional-scale folding, overthrust and strike-slip faults, closely associated with Permian igneous intrusive rocks.

The proximity of the two types of mineralization and the common structural controls suggest that both are the product of a common hydrothermal event, but differ by host rock specifics, fracturing

intensity and level of oxidation. It is observed that the oxidized Tulkubash gold mineralization is progressing in depth into sulfide refractory zone.



Figure 10 Chaarat mineralization styles, conceptual cross section



Figure 11 Tulkubash oxide gold, conceptual structural plan map, geology and sub surface mineralization

The colloform textures in the Tulkubash mineralization type, along with widespread oxidation, silicification, and the geochemical association of gold with antimony and arsenic indicate a shallower epithermal setting. According to Groves et al. (1998) it could be referenced as an epizonal orogenic gold deposit.

The pervasive sericitization, disseminated sulfides and ankeritization within mineralized lodes, and the relative paucity of quartz veins (usually less than 5% of volume) in the Kyzyltash unoxidized mineralization style indicate that the prevalent mode of deposition was controlled by reduced hydrothermal fluids and more reactive wall rocks compared to Tulkubash, and could be referenced to mesozonal orogenic gold deposit. These deposits are formed in close to isothermal conditions and can extend to great depths. For example, the mineralization of the Kyzyltash's Contact zone has been drilled over a vertical extension of 1.3 km and is still open at depth and along strike.

Compressional/transpressional environments



Figure 11 Scheme of the orogenic gold deposit as a function of depth in the crust (Groves et al., 1997)

As per the scheme above, it is interpreted that Tulkubash and Kyzyltash deposits of the Chaarat property are situated in the transitional zone between "Epizonal Au-Sb" and "Mesozonal Au-As-Te" environments of the Orogenic Gold class gold deposits.

#### 4.3 Karator oxide gold deposit

The Karator zone is located on approximately two kilometres northeast from Tulkubash deposit and extends for approximately 1,000 metres along a southwest-northeast strike, with about 30 to 50 metres true width and southeast dipping. The oxidized mineralization is drill traced to depth of 150-200 metres and extending as sulphide mineralization in depth, not affected of the weathering and oxidation processes.



Figure 12 Karator typical view, looking northeast.



Figure 13 Karator regional location plan map and oblique view of the mineralization

The Karator oxide gold mineralization is hosted within the Devonian sandstones of the Tulkubash formation, adjacent to the faulted contact with the Ordovician Chaarat formation, Karator is representing the same geological environment as the southwestern main Tulkubash oxide gold deposit. The mineralization traps are determined by permeable, structurally controlled series of lenticular dilatant jogs striking northeastern and dipping subvertical, oxidized within the upper levels, and gradually transforming to predominantly unoxidized mineralization in the bottom of the sections on 150-200 meters depth.





Figure 14 Karator ore bodies, plan map

Figure 15 Karator typical section with oxide ore geometry and geology

The alteration of the mineralization zones is presented by silicification and pyritization, which later undergone process of oxidation. The gold content on both cases (oxidized / unoxidized) is consistent and generally comparable to the pyrite, and/or limonite gothite quantity. Locally the ore bearing zones are crosscut by later barren quartz and quartz – carbonate veinlets.

The only economic element is gold. There is relatively weak arsenic and antimony geochemical anomalism, associating, but not directly overlapping with the gold mineralization, and considered as separate mineralization phase. The overall sulfide content is in the range of between 3 and 5%, presented mostly by pyrite, trace arsenopyrite and antimonite.

The gold is non-refractory, fine grained, predominantly less than 10 microns, rare more than 0.01 mm. The most prominent gold hosts are micro cracks within the quartz and pyrite.



Figure 16 Core from DH21K601 (from 63.9 to 123.9 - 60m, with 1.323ppm), locally with patches of As & Sb oxides (assumed after field XRF analysing)

# 5.0 DRILLING AND TRENCHING

#### 5.1 Drilling

A total of 15 wireline, diamond drill holes of about 2,500m in predominantly HQ diameter (occasionally used PQ), were completed in 2021 and 2023. The drilling was carried out by local contractor "Stalker Drilling Company", with wide experience in central Asia region.

BHID	LOCATIONX	LOCATIONY	LOCATIONZ	LENGTH	YEAR
DH21K598	12682945	4661443	2901	158.9	2021
DH21K601	12682610	4660940	2768	251	2021
DH21K604	12682668	4661224	2731	180.2	2021
DH21K605	12682667	4661225	2731	185	2021
DH21K607	12682567	4661110	2667	160.2	2021
DH23K620	12682612	4660940	2767	97.8	2023
DH23K621	12682681	4661087	2747	90	2023
DH23K622	12682682	4661086	2748	100	2023
DH23K623	12682678	4661083	2748	100	2023
DH23K624	12682680	4661081	2748	210	2023
DH23K625	12682656	4661017	2756	253.5	2023
DH23K626	12682656	4661017	2756	150	2023
DH23K627	12682652	4661020	2756	150	2023
DH23K628	12682619	4660943	2766	200	2023
DH23K620bis	12682620	4660943	2767	250	2023
			Total	2,536.6m	

Table 3 Karator drill holes table

All diamond drilling holes have been downhole surveyed, via Reflex EZ shot <sup>™</sup> electronic single shot down hole survey equipment.

The Karator prospect data is reported in Pulkovo 1942 / Zone 12 coordinate system. Lecia Geosystem<sup>™</sup> with centimeter accuracy is used for collar location. Positive (+5) degrees magnetic declination is considered in the Property area workflow.



Figure 17 DH 21K604 and a view from it, looking west-southwest



Figure 19 Karator drill hole's location, plan and oblique view

### 5.2 Trenching and road cut sampling

About 4.6 km of trenching and road cut were logged, and partly sampled. The work was completed by local sub-contractor – Geocomplex, and / or Chaarat's geologists.



Figure 20 Karator surface workings, plan view



Figure 21 TR21T075 starting just beneath of DH21K598 and view from it, looking west - southwest to TR21T078



Figure 18 Karator drill pad access road, with logged and sampled road cut wall, next to it earthmoving equipment

# 6.0 CORE LOGGING, SAMPLE PREPARATION, ASSAYS, DATABASE AND SECURITY

#### 6.1 Core logging

- Core logging procedure includes lithology, hydrothermal alteration, oxidation stage, degree of fracturing, mineralization, structures, Rock-Quality Designation (RQD), core recovery.
- Core logging was done either by CGH geologist or sub-contractors under the supervising of CGH senior geologists.
- Each day the core was transported to the field core storage area for logging. The core trays are wooden, including wooden cover to prevent core losses or extra moving.
- Core logging is done electronically using AGR <sup>™</sup> 4.0 software as a base platform.
- Photo documentation is done on wet trays, and data is incorporated into the drilling database.
- Portable X-ray fluorescence (XRF) analyzer Niton<sup>™</sup> was used as well, helping geologist throughout the core logging process. None of the XRF results were further used for any aspect of the MRE grade interpolation or wireframe interpretation.



Figure 19 Core logging and core cutting in the field core shed



Figure 20 Field measurements with XRF analyser

#### 6.2 Sample Preparation

- All core samples are cut along its long axis using a core saw. In the case of intensively fractured zones, samples are taken with a trowel.
- The surface workings were sampled via ordinary hammer.
- Half core is packed in a labeled polyethylene bag, weighed, and transported to the "Stewart Assay and Environmental Laboratory" (SAEL) located in Karla Balta, Kyrgyz Republic.
- The average down-hole sample length is 1.5m. (for the surface workings 2.0m)
- Entire drilled core is sampled, except the initial diluvium / alluvium zones.
- Rock density measurements are carried out using field Archimedes' principal approach with wax. Density sampling in was designed to take one sample (approx. 10 cm) for each 5 meters.
- Density sampling was not conducted in areas of intensively fractured materials, which was often the case with Karator drill core.
- Density sampling was implemented only in 2021 drilling by the CGH geologists, but in 2023 this option was not available within the sub-contractor services, hence drilling 2023 have currently no density measurements.
- At the end of the field season all the core and samples are re-located into the base core storage Malovodnoye core shed, near Bishkek.



Figure 21 Sample preparation, prior the shipment to the laboratory



Figure 22 Field density sampling in 2021



Figure 23 Malovodnoye core shed, near Bishkek

#### 6.3 Assays

- Samples collected from 2017 to 2019 (only surface working activities) were prepared and assayed at ALS Global (Kara Balta), Kyrgyzstan.
- All the sampling after 2019 (including all drill holes) were prepared and assayed by Steward Assay and Environmental Laboratories LLC (Kara Balta, Kyrgyzstan).
- SGS Vostok Limited (Chita, Russia) was used as independent external control laboratory.

- Through the sample preparation process, the entire sample is crushed to 90% passing 2mm. Two pulps are made by pulverizing to 85% passing 0.075 mm. One pulp is returned to the company as a duplicate, the second one is analysed by:
  - Fire assay lead collection with AA.
  - Aqua Regia digestion with ICP-OES reading.
  - Analyses of total Sulphur, total sulphide Sulphur, sulphate Sulphur, by chemical treatment and LECO for certain selected samples (above 0.25 ppm Au).
  - LeachWELL analysis for certain selected samples (above 0.25 ppm Au).
- The obtained lower detection limit (LDL) for Au is 0.05ppm and for Ag is 1ppm.

#### 6.4 Database

- The field data is compiled on the field site and further combined, verified, and stored in AGR<sup>™</sup> 4.0 database platform and in Excel (Microsoft Office <sup>™</sup>) spread sheets.
- The access and the editing permissions of the database are restricted to only authorized company staff.

#### 6.5 Security

The samples are secured with security guards at the entry at both the field camp and Malovodnoye core shed.

#### 6.6 Conclusions

The applied procedures of drilling and trenching, core logging and sampling, assaying, core storage and database management meet the best industry standards and are considered representative for Mineral Resource Estimation.

# 7.0 QUALITY ASSURANCE AND QUALITY CONTROL

#### 7.1 Introduction

Chaarat has sufficient and well-organized Quality Assurance and Quality Control (QAQC) data is available for all the Property areas. Particularly for Karator is including approximately 750 QAQC samples, summarized below:

Туре	#
blank	238
SRM (Standart)	206
coarse (LAB duplicate)	126
pulp (LAB duplicate)	120
field duplicate	40
External Control samples	48
Total	778

Table 4 Karator QAQC sampling summary

Both the drilling and the surface workings have been regularly verified by different QAQC approaches including Certified Reference Material (CRM or Standards), blank material, field duplicates, pulp, and coarse duplicates (internal laboratory QAQC), along with external control sampling in different independent laboratory – SGS Vostok Limited- Chita, Russia

#### 7.2 Standards

The Karator drilling CRM includes about 200 samples (from 9 different types), relevant for oxide gold deposits, provided by Rocklabs <sup>™</sup>. The obtained data is rarely detecting outliers and is considered representable and meeting the industry standards. Some examples are provided below:



Figure 24 Examples of Karator CRM verification

#### 7.3 Blanks

About 240 blank samples (barren sediment from the area) were used. Only one sample is showing Au result above the lower detection limit. It is considered that this is due to unexpected anomaly within the blank sample, rather the failure laboratory result.


Figure 25 Blank verification

#### 7.4 Field Duplicates

Field duplicate samples were incorporated in the Chaarat QAQC scheme for first time in 2021y. A total of 40 field duplicate samples were assayed as quarter core field duplicate of the quarter core parent sample. Overall, the field duplicate samples return a sufficient correlation in terms of the gold deposit (often presented with high nugget effect) expectation.



Figure 30 Field duplicate verification

#### 7.5 Coarse and Pulp rejects

The coarse and pulp rejects are prepared internally by the laboratory and show sufficient correlation with their parent samples. This is presented by the graphic below, where the trendline is close to the "theoretical perfect" diagonal.



Figure 26 Coarse and pulp duplicates verification

#### 7.6 External control samples

The original assays were done in Stewart Assay and Environmental Laboratories LLC and about 50 samples from Karator (with gold > 0.25 ppm) were send to external control laboratory (SGS Vostok Limited- Russia), to confirm the results. The graphic below shows sufficient correlation between both, as the trendline is close the "theoretical perfect" diagonal.



Figure 27 External control sampling verification

#### 7.7 Conclusions

The Karator QAQC meets the best industry standards and is considered representative for JORC compliant MRE.

## **8.0 MINERAL RESOURCE ESTIMATES**

No previous MRE reports were done for Karator area, and the current is the maiden one. However, in terms of Tulkubash oxide gold mineralization a wide variety of comprehensive JORC compliant resource and reserves reports are available, but all these are not subject of the current work. Regularly published Tulkubash oxide gold information is available on the company website.

https://www.chaarat.com/

#### 8.1 Wireframe modelling

The Karator's ore wireframes (completed in Micromine  $^{\text{TM}}$ ) modelling was done via series of sections, as per step of 40m, using the drill holes and surface workings. A composite ore interval with cut-off grade of 0.2 ppm Au and maximal internal waste of 6m, were done and further used as a base for the ore interpretation. The lower border of the ore bodies was constrained by the interpreted oxidation contact, and the upper by the topography. The chosen ore body's striking, dipping and width was done taking into account all the knowledge obtained through field observations, along with the assumption for further open pit mining and heap leach processing.



The graphic below shows a sketch of the ore wireframe designing process.

Figure 28 Sketch of the wireframe interpretation process, using the composite intervals of cog 0.2 ppm and maximal internal waste of 6m



The graphics below illustrating the key steps of the Karator wireframing.

Figure 29 Key steps graphic of Karator wireframing process

#### 8.2 Sampling data, top cutting, compositing, and grade distribution

The lower detection limit of the gold analysis is 0.05ppm, and these samples (LDL) were further replaced with half of the LDL – 0.025ppm. The LDL of the Ag is 1 ppm. The silver grades are consistently low hence the Ag was not considered as element of interest. No other elements of interest, except Au were considered important.

Most of the used samples are part of the modeled oxidation portion, although in several areas were included samples located beneath the modeled oxidation break, in attempt to avoid the lack of sampling in these zones, and considering the fact that the oxidation break is not "ideal" surface.

The top cutting of 8 ppm Au was applied to the constrained within the ore wireframes samples (including drill holes and surface workings). The top capping achieved coefficient of variation of about 1.5, which is considered acceptable for a gold deposit. Further was completed sample compositing to 1.5m

The total regular Karator samples are about 1,300, and the total composite samples are about 1,200.



Figure 30 Top capping and sample compositing statistic

The top capped gold within the composites presents similar to log-normal distribution and is considered appropriate for further using in the grade interpolation, without needing to apply any additional correction within the wireframes.



Figure 31 Grade distribution of the sample composites, above 0.025

#### 8.3 Oxidation, recovery, and density

#### 8.3.1 Oxidation break modelling

The oxidation break was modeled considering the encoded within the drilling database data. The exercise of the 3D modeling was done via a series of sections. The oxidation stage encoded in the database has theree oxidized stage options and one unoxidized stage option, each of it chosen by the field geologists. The ultimate solid body (constraining the oxidized material) was further used to constrain the ore wireframe and block model.

The unoxidized continuation of the ore bodies is not subject of the current report as the planned heap leaching metal extraction is not considering that portion as economically viable.

## **CHAARAT**

Oxidation	
Oxidation	Code
No oxidation	0
Weak (5 - 20%)	1
Moderate (20 - 40%)	2
High (> 40%)	3

Table 5 Oxidation stages, logging in the drill hole database



Figure 32 Section 7080, showing the geology, oxidation break and drill holes



Figure 33 Section 7000, showing the geology, oxidation break and drill holes

#### 8.3.2 Expected gold recovery.

No comprehensive gold extraction test works were implemented for Karator up to date. However, it is considering reasonable to reference Karator recovery to Tulkubash recovery (due to the similarities between both) which itself is having available wide variety of detailed metallurgical test works (including bottle roll extractions) and have completed a detailed recovery model.

Along with that, the Karator data have available hot cyanide solution shake test (LeachWELL) data, completed by SAEL for the part of the regular core samples.

The two parameters have been considered to offer the best basis to predict gold recovery, including oxidation state and "% total Sulphur."

The intense fracturing of the ore zones in Karator (and in Tulkubash type, too) has allowed better water percolation along the fine lattice of fractures in the silica matrix leading to extensive oxidation of the primary sulfide gold mineralization. This process results in reasonable cyanide solubility of the gold even though sulfide levels in the host silica matrix may still be high.

As most gold-bearing mineralization occurs in cracks in the host rock - the degree of oxidation of the fracture surfaces is considered the primary indicator of leachability.

This relation was confirmed within Tulkubash deposit, where the bottom of the Resource returned reduced gold recovery due to the solid unoxidized domain presented there. The obtained average results in the constrained Resource in Tulkubash oxide gold deposit are between 71 and 76 %, with an average of 72.32% for the Indicated resource.

The leach well tests for Karator (approximately 250 samples) confirmed that the most often recovery results are between 60 and 80 %, and this trend is clearly increasing with the increasing the oxidation stage.

As a conclusion it is considered fair to believe that Karator could achieve recovery of about 70 -75%, in terms of open pit mining followed by crushing and stacking the ore onto a heap leach pad, and further leaching via standard cyanide solution irrigation.



Figure 34 Regular Karator DH samples, leach well results histogram, without applied oxidation filtering



Figure 40 Regular Karator DH samples, leach well results histogram, for samples with oxidation above 5 %



Figure 35 Regular Karator DH samples, leach well results histogram, for samples with oxidation above 20 %

#### 8.3.3 Density

The completed total of 32 field density measurement are not considered sufficient to be used for variable density interpolation within the block model, hence hard codded density of 2.60 g /cm<sup>3</sup>, calculated as an average from the tested samples was applied. As above is considered representative and is similar with Tulkubash deposit results.

It is not observed any obvious density difference between the waste and the ore zone, and the main reason is that both are having same lithology, similar oxidation.

#### 8.4 Block modelling

The block model (BM) was made in Micromine<sup>™</sup>, constrained within the ore wireframes, and using block size of 5\*5\*5m, with minimal sub-blocking of 1m. Such parameters are considered suitable for open pit operation and are the same as the main Tulkubash oxide gold deposit.

	Block Model Information			
	EAST	NORTH	RL	
Block size	5.00	5.00	5.00	
Block model extents	151	148	98	
Total number of cells	2190104			
Min centre	12682439.00	4660803.00	2525.00	
Max centre	12683189.00	4661538.00	3010.00	

Table 6 Block model basic information

	FIELD NAME	TYPE		FORMAT	WIDTH	DECIMALS	START	INCREMENT	OLD_NAME	Description
1	EAST	Real	•	Decimals 🔹		6			EAST	
2	NORTH	Real	•	Decimals •		6			NORTH	
3	RL	Real	٠	Decimals •		6			RL	
4	_EAST	Real	•	Decimals -		6			_EAST	
5	NORTH	Real	•	Decimals •		6			_NORTH	
6	_RL	Real	٠	Decimals •		6			_RL	
7	CLASS	Character	•	-	8				CLASS	
8	Az	Real	٠	Decimals •		2			Az	
9	Rotation	Real	٠	Decimals •		2			Rotation	
10	WRFR	Short	•	-					WRFR	wrfr codded
11	Plunge	Short	٠	v					Plunge	
12	Au_ppm_TC	Real	•	Decimals •		9			Au_ppm_TC	
13	AU_PPM	Real	•	Decimals •		9			AU_PPM	
14	KR_VAR	Real	٠	Decimals •		3			KR_VAR	
15	KR_STDERR	Real	•	Decimals -		3			KR_STDERR	
16	KR_EFF	Real	•	Decimals •		3			KR_EFF	
17	SLOPE	Real	٠	Decimals •		3			SLOPE	
18	PERC_NEG	Float	•	-		3			PERC_NEG	
19	RUN	Real	٠	Decimals •		2			RUN	
20	POINTS	Short	٠	×					POINTS	
21	DH	Short	•	-					DH	
22	AVERAGE DISTANCE	Real	٠	Decimals •		3			AVERAGE DISTANCE	
23	CLOSEST DISTANCE	Real	•	Decimals •		3			CLOSEST DISTANCE	
24	NN_Au_ppm_TC	Real	•	Decimals •		3			NN_Au_ppm_TC	
25	NUMSECT	Short	٠						NUMSECT	
26	SECTOR1	Short	•	-					SECTOR1	
27	OP_RPEEE	Short	-	Ŧ					OP_RPEEE	within_OP_RPEEE

Table 8 Key parameters of Karator resource model





Figure 36 Resource model, plan view



Figure 37 Resource model oblique view

#### 8.4.1 Grade interpolation

The ultimate grade interpolation was done via Ordinary Kriging (OK). Semi variogram map and further variogram model were used to define the OK interpolation parameters.



Figure 38 Variogram modelling

ax_1_m	ax_2_m	ax_3_m	Min_DH	Min_sampl_DH	Max_Samp_DH	max_per_sec	min_per_sec	run
50	40	30	2	1	10	15	4	1
90	80	70	2	1	20	15	4	2
130	110	90	2	1	30	20	4	3
160	140	120	1	4	40	20	4	4
200	180	160	1	3	40	40	3	5
250	250	250	1	3	40	40	3	6

The interpolation was done in 6 runs, with applied variable search, with gradually increasing of the search ellipses and reducing the minimal required samples and drill holes.

Table 7 Search ellipse and interpolation runs.

#### 8.4.2 Resource Classification

At the current stage of knowledge only Indicated and Inferred JORC compliant Resource could be reasonably outlined

The Resource model have Unclassified (non – JORC compliant) Inventory portion as well.

The Inferred Resource portion is constrained within the main drilling area manually, including only the bodies intercepted by drill holes (the plan distance between the holes there is between 60 and 80 meters).

The Indicated Resource are constrained as a portion from the Inferred, using only the blocks interpolated within the "Run1": search ellipse with dimensions of 50m\*40m\*30m; minimum 4 samples from 2 different drillholes (or surface workings).

All the rest portion (except Indicated and Inferred) of the Resource model is considered as not JORC compliant Unclassified material.

The Indicated and Inferred JORC Resources, have the potential for further advancing to Measured and Indicated resources via systematic infill and step out drilling.

Unclassified material is a base of predicted additional exploration potential, subject of further resource definition and resource upgrade, via systematic infill drilling in the 2024-2026 period.

**CHAARAT** 



Figure 40 Resource classification sketch

#### 8.4.3 Reasonable Prospect of Eventual Economic Extraction (RPEEE)

At the current stage of knowledge, the Reasonable Prospects for Eventual Economic Extraction (RPEEE) is considering open pit method of mining and transportation to Tulkubash heap leaching pad, located of about 15 km driving distance.

As there are not yet completed advanced geotechnical, hydrogeological, or other engineering and economical studies at Karator, the presented here RPEEE assumption is considered preliminary, but sufficient for the current purpose of maiden MRE.

The RPEEE assumption for constrained Resource was calculated via manually designed open pit, limited within the area of the major drilling, and having slope angles of between 50-60 degrees. Just for an example main Tulkubash pit is designed with bench face angle: 66° and 75°; Inter-ramp angle: 51° and 58°.

The current preliminary RPEEE is calculating strip ratio (SR) of approximately 1:3 ore (t) to waste (t).

The applied cutoff grade in Karator Resource reporting is the same as the used in the most recent Tulkubash project reporting – 0.21 ppm Au (from April 2022).

The Karator cutoff grade estimation with applied economic mining and metallurgical factors is shown in the table below.

Mining		\$/t ore
Mining		\$/t waste
Ore transport	1.5	\$/t ore
Processing	4.79	\$/t ore
G&A	1.25	\$/t ore
Total	7.54	\$/t ore
Recovery	70	%
Mining Losses	5	%
Price	1,900	\$/oz
Refining	9.78	\$/oz
Payable	95	%
Diluted COG	0.20	g/t Au
Dilution	5	%
Undiluted COG	0.21	g/t Au

Table 8 Key economic parameters and Karator Cutoff grade estimation.



Figure 41 Open pit for RPEEE assumption, plan map



Figure 42 Open pit for RPEEE assumption, oblique view

#### 8.4.4 Karator Resources

Karator, JORC compliant Resource, with applied assumption for Reasonable Prospects for Eventual Economic Extraction (RPEEE) is summarized in the table below:

CLASS	DENSITY (t/m³)	Mt	Au (g/t)	Koz
INDICATED	2.60	2.5	0.96	77
INFERRED	2.60	4.2	0.97	130
TOTAL	2.60	6.7	0.96	207

Table 9 Karator, JORC compliant Resource, cog 0.21 ppm Au

Notes: The effective date of the reported Resource is 15<sup>th</sup> January 2024.

The resource estimate is according the JORC Code (2012)

Applied cut-off grade: 0.21 ppm Au.

The Mineral Resources that are not Mineral reserve do not demonstrate economic viability.

Numbers may not sum due to rounding.

Grade estimation completed via Ordinary Kriging, within block model with a parent block size of 5 m x 5 m x 5 m x 5 m x 5 m. Mineral Resources are constrained by manually designed Resource shell, within the area with denser drilling grid, in terms to apply Reasonable Prospects for Eventual Economic Extraction

The reported JORC compliant Resource is constrained by a restricted area, where the available drilling grid is sufficient and has applied RPEEE criteria.

The geological interpretation, based on the available drilling and trenching data confirms that the Resource has sufficient potential for further advancing.

Non JORC compliant mineral inventory (Mineral Inventory) has been outlined at Karator as additional exploration potential in the range of 5 to 10Mt oxide gold material at 0.8 to 0.9g/t gold, subject of further exploration, resource definition and upgrade.

#### 8.4.5 Grade – Tonnage curve

The ore – tonnage curves show the relationship between the chosen COG, the average Au grade and the ore tonnage. In the graphics below is shown the grade – tonnage curve for the JORC compliant Resource.



Figure 43 Grade tonnage curve of Karator JORC compliant MRE

### 8.5 Resource Verification

The resource verification was done statistically and visually, summary and examples for both approaches are provided below.

#### 8.5.1 Statistical Resource Verification

It was done via swath plots, comparing the average ordinary kriging (OK) interpolation grades (used for the JORC compliant report within this document) of each block, along with the mean composite samples grades, and along with another simplified grade interpolation approach - Inverse Distance Weight (IDW) interpolation. As per the statistical analysis it is considered that the OK interpolation achieves optimal trade-off between accuracy and precision, providing reliable base for a Maiden Mineral Resource Estimation. Several examples are provided below.



Figure 44 Swath plot on elevation, BM\_KRIG\_Dec\_2023 is pointing the reported JORC compliant resource model



Figure 45 Swath plot on North direction, BM\_KRIG\_Dec\_2023 is pointing the reported JORC compliant resource model.



Figure 46 Swath plot on East direction, BM\_KRIG\_Dec\_2023 is pointing the reported JORC compliant resource model.

#### 8.5.2 Visual Resource Verification

The visual verification of the Resource was made section by section. Several examples are provided below. It is considered that the BM grades are achieving reasonable representation of Karator oxide gold mineralization.



Figure 47 Long section showing the Karator resource model grades and the composite samples.



Figure 48 Block model grades and composite samples in section 7000

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Figure 49 Block model grades and composite samples in section 7080



Figure 50 Block model grades and composite samples in section 7160

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#### 8.6 CP visit

Mr. Dimitar Dimitrov as Competent Person (CP) visited the field site operations several times during 2021 season. The last visit was completed on 12.01.2024, when he had the opportunity to review the 2023 drill core, and to discuss the workflow and the obtained results together with the CGH head geologists - Janybek Baslakunov and Aleksey Savenkov.



Figure 51 Core reviewing at 12.01.2024 in CGH core storage by Dimitar Dimitov, with the assistance of Janybek Baslakunov and Aleksey Savenkov.

The most recent visit, carried out in Malovodnoye coreshed, confirmed that the 2023 logging, sampling and core storage procedures are consistent with those obtained earlier, achieving sufficient quality, and meeting all international standards. It is a CP opinion that the data used within the current report is representative, and proper for JORC compliant Resource estimation.

## 9.0 CONCLUSIONS AND RECCOMENDATIONS

As per the CP's best knowledge, there are no factors or risks that may affect access and ability to continue operation at Chaarat property and development of the Karator deposit.

The applied procedures of drilling, core logging and sampling, assaying, core storage and database management are meeting the best industry standards and are considered representative for Mineral Resource Estimation.

The obtained Resource results and the assumed technical parameters for the planned mining and processing are strong base for further investment into Karator area, as part of the northeastern extension of Tulkubash oxide gold deposit.

Short to midterm recommendations for further exploration are including:

Year 1 & Year 2 - Further systematic step out and infill drilling totaling about 9, 000 meters to upgrade the current resource to Measured and Indicated and for additional resource definition and upgrade over the entire Karator exploration potential with a JORC compliant MRE update.

Year 3 - Comprehensive technical assessment of the Karator deposit, including field activities covering metallurgical, geotechnical, and hydrogeological test works, and further Feasibility Study (FS) report with confirmed JORC compliant Ore Reserves estimate.

# 10.0 REFFERENCES

Chaarat ZAAV "TULKUBASH GOLD PROJECT MINERAL RESOURCE ESTIMATE", April 2022

Chaarat ZAAV – internal, not published technical information.

Groves et al. "Orogenic gold deposits: A proposed classification in the context of their crustal distribution and relationship to other gold deposit types", Received 20 March 1997

Gustavson associates "Chaarat Gold Project Resource Estimation JORC Report" June 2014

IGT, "The Tulkubash Gold Project Mineral Resource Estimate", December 2020

IGT, "Geological and structural 3d-model characterization, analysis of database, wireframe and block models of the Tulkubash area, Chaarat deposits (Kyrgyzstan)", 2019

Joe Hirst "Tulkubash Recovery Model based on IGT Resource Model", August 2020

Mario E. Rossi, "Mineral Resource Update", October 2014

Solitech "FS-level hydrogeological report", January 2022

TetraTech, "Competent Persons Report for the Chaarat gold project Kyrgyz Republic", September 2018

# APPENDIX 1: JORC Code, 2012 Edition – Table 1 (Sections: 1 & 3)

# Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralization that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 mineralization types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Sampling comprises predominantly diamond core drilling, along with trenches sampling and channel sampling from the access roads.</li> <li>Core was drilled through the full expected mineralization intersection, as normal to the mineralization strike, as it is possible, considering the geological knowledge and the terrain conditions.</li> <li>The core samples are predominantly HQ, occasionally PQ diameter.</li> <li>The trenching and road cutting sampling were done via ordinary hammer, along marked intervals.</li> <li>The average down-hole sample length is about 1.5m and the average trench and road cut sample is about 2.0m</li> <li>The samples are taking in to account all major lithological breaks.</li> </ul>
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	<ul> <li>Diamond core wireline drilling</li> <li>HQ drilling diameter was used as a major drilling diameter, spare PQ diameter was used as well aiming to guarantee best drilling performance.</li> <li>The drilling was occasionally conducted via triple-tube aiming to advance the core recovery.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>Most of the drilling is inclined, targeting the expected mineralization strike as normal as possible.</li> <li>No drilling orientation was applied.</li> <li>Drilling equipment is in good condition, provided and operated by local subcontractor with wide experience in central Asia.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>The core recovery is logged as percent of the total length, measured directly from the core box.</li> <li>The core recovery is improved by using triple – core tube and additive drilling muds, when needed.</li> <li>The overall core recovery is above 90%</li> <li>There doesn't appear to be a relationship bias between the grade, the sample length or sample weight and the recovery.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Drill core logging was done by company's geologists, or subcontractor company but under the supervising of senior company's geologists.</li> <li>Road-cuts logging was done by company's geologists.</li> <li>Trench logging was done by sub-contractors, under the supervision of company's geologists.</li> <li>The total length of the logged drill holes is about 2540m.</li> <li>The total length of the logged surface workings is about 4640m.</li> <li>The samples from the logged drill holes used for the grade interpolation are about 62 % of the total, relatively with 38 % for the samples from the surface workings.</li> <li>Core logging is including lithology, hydrothermal alteration, oxidation stage, degree of fracturing, mineralization, structures, RQD, core</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>recovery.</li> <li>Each day, the core was transported to the field core storage area for logging. The core trays are wooden, including wooden cover as well, to prevent core losses or extra moving.</li> <li>Core logging is done in laptops, using AGR 4.0 software as a database platform.</li> <li>Photo documentation is done on wet trays, and data is also incorporated in the database.</li> <li>At the end of the field season all core is transported at the main core storage facility, in Malovodnoye village, located close to the Kyrgyzstan capital - Bishkek.</li> <li>Logging procedures meeting sufficient representativeness, and are considered suitable for Mineral Resource Estimation</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>All intact core samples are sawn along the long axis, using core saw, in case of intensively fractured zones, samples are taken with trowel.</li> <li>Half core is packed in labelled polyethylene bags, weighted, and further transported to "Stewart Assay and Environmental Laboratory", located in Karla Balta, Kyrgyzstan</li> <li>All the drilled core is sampled, except the initial diluvium / alluvium zones.</li> <li>The bedrock exposures, outcropped in trenches and new road cuts were selectively sampled as well, using ordinary hammer, and taking in to account the lithological and alteration breaks</li> </ul>
Quality of	• The nature, quality and appropriateness of the assaying and	All samples are transported to "Stewart Assay and Environmental

Criteria	JORC Code explanation	Commentary
assay data and laboratory tests	<ul> <li>laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Laboratory", located in Karla Balta, Kyrgyzstan, for further sample preparation and analysis.</li> <li>Through the sample preparation process, the entire sample is crushed to passing 90% at 2mm. Two pulps are made by pulverizing to 85% passing 0.075 mm. One pulp is return to the company as duplicate, the second one is analysed, including: Fire Assay and ICP - 35 elements.</li> <li>The applied Quality Assurance and Quality Control (QAQC) scheme is including about 15% of the core samples and 10% of the trench and road cut samples.</li> <li>QAQC sampling is including: <ul> <li>several types of certified reference material provided by RockLabs ™</li> <li>Blank material, collected from barren sediments located close to the filed camp</li> <li>Pulp and coarse duplicates, tested internally by the laboratory</li> <li>Field duplicates for the drill core</li> <li>Verification from independent laboratory - SGS Vostok Limited (Chita, Russia)</li> </ul> </li> <li>The applied QAQC procedures and the obtained results are meeting the industrial standards and are confirming the representativeness of the available results.</li> </ul>
sampling and	<ul> <li>The verification of significant intersections by either independent of alternative company personnel.</li> </ul>	verification of sample portion (48 samples)
	The use of twinned holes.	No twin holes were designed in the current assessment.
	<b>C2</b>	

Criteria	JORC Code explanation	Commentary
assaying	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>All the assay results are received electronically as an excel spreadsheets, and further incorporated in the database by company's database manager.</li> <li>The access of the database is limited, and only authorized employees can make corrections in it.</li> <li>Prior to data interpretation, the lower detection limits of Au (0.05 ppm) are changed to half of the detection limit (0.025ppm)</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All collar locations and surface workings are reported at Gauss Kruger Pulkovo 1942 Zone 12 coordinates.</li> <li>The survey is conducted, using Lecia Total Station (centimetre accuracy)</li> <li>All holes have a downhole survey, taken approximately at 25m interval, using REFLEX EZ SHOT tool.</li> <li>The topographic model is based on satellite data.</li> <li>Roads and drill sites have been added after on-the-ground survey</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Exploration holes collars are in accordance with existing profiles designed perpendicular to the mineralized zones.</li> <li>The average space of drilling is between 60 and 80m, with surface workings located between it. This is considered sufficient for maiden Mineral Resource Estimation (MRE) and confirming of JORC compliant Inferred and Indicated Mineral Resources, constrained within the most intense sampling zones.</li> <li>The Inferred Resource portion is constrained within the main drilling area manually, including only the bodies intercepted by drill holes.</li> <li>Within the Inferred portion additionally was selected indicated portion, using only the blocks interpolated within the "Run1":</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>search ellipse, with dimensions of 50m*40m*30m; minimum 4 samples from 2 different drillholes (or surface workings)</li> <li>No historical drilling is available in Karator area prior 2021 year.</li> <li>Sample compositing of 1.5m is applied within the process or Mineral Resource Estimate</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>All the holes were designed in attempt to intercept the expected northeastern striking mineralization as normal as possible, and to avoid sampling biases.</li> <li>The mineralization strike is northeastern direction, and the drill bearing is within two major directions - southeastern and northwestern.</li> </ul>
Sample security	• The measures taken to ensure sample security.	• The samples are sufficiently secure, with security guards in the entry, on both - field camp and Malovodnoye core shed
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No external field audit was implemented</li> </ul>

# Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial	<ul> <li>The field data is compiled on the site and after that combined, verified, and stored in AGR<sup>™</sup> 4.0 database platform</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul><li>collection and its use for Mineral Resource estimation purposes.</li><li>Data validation procedures used.</li></ul>	<ul> <li>Data verification is done one time on the field, second time in the within to AGR<sup>™</sup> 4.0 verification process, and third time prior the Resource Modelling</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>Last two field visits by Competent Person (CP) were done in September 2021 and January 2024, both times by Mr. Dimitar Dimitrov</li> <li>Mr. Dimitar Dimitrov P. Geo, AIG member and a Competent Person as defined in the 2012 edition of the JORC Code 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves', is former SVP Exploration of Chaarat, and currently independent consultant.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>Mineralization and associated hydrothermal alteration, developed along a system of regional structural deformations, is genetically associated with Permian magmatism.</li> <li>Karator mineralization zones are presented by series of dilational jogs, hosted in silicified sandstones.</li> <li>No clear hard contacts can be outlined between Karator mineralization and host rock. The transition between wase and ore is gradual, within relatively short interval (usually within 1-2 m)</li> <li>The ore interpretation is based on gold distribution and logged geology, using the database from the drilling and surface workings.</li> <li>Overall, there is a moderate level of confidence in the geological continuity, although detailed drilling is required to advance the interpretation of the different mineralization lenses.</li> <li>The wireframing process is using composites (0.2 ppm cut – off grades, and 6m maximal internal waste)</li> </ul>

Criteria	JORC Code explanation	Commentary
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.	• The Mineral Resource extends approx. 1000m along strike, with plan width between 100 and 250m, depth below surface of approx. 200m
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation dta if available.</li> </ul>	<ul> <li>The 2024 Maiden Mineral Resource Estimate (MRE) was supervised and confirmed by Dimitar Dimitrov (CP).</li> <li>The data processing and modelling was completed by Nikolay Pushev – senior geologist of Ridge Consulting company.</li> <li>The MRE is using both drill hole data and surface workings data for both ore interpretation and grade interpolation.</li> <li>Micromine ™ Software (under the license of Chaarat) was used for data processing, wireframing the resource modelling.</li> <li>The Mineral Resource was estimated into block model, using ordinary kriging for Au. No other element of interest was considered, except Au.</li> <li>Block model with parent block size of 5*5*5 (1m minimum subselling) was generated within the ore wireframe.</li> <li>Grade estimates was done by 1.5m composite sampling.</li> <li>Top cuts determination of 8 ppm Au was used, achieving coefficient of variation about 1.5.</li> <li>The variogram models were designed in Micromine ™</li> <li>Block model was verified statistically and visually, including swath plots (using as references the sample composites and simple IDW interpolation) and section by section review accordingly.</li> <li>The grade distribution within the block model is sufficiently corelating with the composite data.</li> <li>No estimation of deleterious elements was made.</li> <li>The Reasonable Prospects of Eventual Economic Extraction (RPEEE)</li> </ul>

Criteria	JORC Code explanation	Commentary				
		<ul> <li>assumption was calculated via manually designed open pit, constrained within the area of the major drilling, and having slope angles of between 50-60 degrees.</li> <li>The January 2024 constrained Mineral Resource is:</li> </ul>		g slope		
		CLASS	DENSITY (t/m <sup>3</sup> )	Mt	Au (g/t)	Koz
		INDICATED	2.60	2.5	0.96	77
		INFERRED	2.60	4.2	0.97	130
		TOTAL	2.60	6.7	0.96	207
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	All Mineral	Resource is estimate	ed and repor	ted on a dry bas	sis
Cut-off       • The basis of the adopted cut-off grade(s) or quality parameters applied.		<ul> <li>Mineral Res Au</li> <li>The applied as the used Au (from A)</li> <li>The Karaton and metallu</li> </ul>	sources have been re l cutoff grade in Kara in most recent Tulko oril 2022). r cutoff grade estima urgical factors is show	eported at cu ator Resource ubash projec tion with ap wn in the tab	it-off grade of 0 e reporting is th t reporting – 0.1 plied economic le below.	.21 ppm e same 21 ppm mining
		Mining			\$/t ore	
		Mining			\$/t waste	
		Ore transport	1.5		\$/t ore	
		Processing	4.79	9	\$/t ore	
		G&A	1.25	5	\$/t ore	
		Total	7.54	4	\$/t ore	

Criteria JORC Code explanation	Commentary			
	Recovery	70	%	
	Mining Losses	5	%	
	Price	1,900	\$/oz	
	Refining	9.78	\$/oz	
	Payable	95	%	
	Diluted COG	0.20	g/t Au	
	Dilution	5	%	
	Undiluted COG	0.21	g/t Au	
Mining factors or assumptionsAssumptions 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	<ul> <li>The RPEEE assumption for constrained Resource was calculated via manually de limited to the area of the major drilling, and having slope angles of between 50-for an example main Tulkubash area is designed with: Bench face angle: 66° and angle: 51° and 58°.</li> <li>No comprehensive gold extraction test works were implemented for Karator up Reliable assumption of between 70 – 75 % recovery shall be referenced to the r similar Tulkubash oxide gold deposit, which currently is having wide variety of d metallurgical test works (including bottle roll extractions)</li> <li>Along with that, the Karator data have available hot cyanide solution shake test data, completed by SAEL for the part of the regular core samples.</li> <li>As a conclusion it is considered fair to believe that Karator could achieve recover 75%, in terms of open pit mining followed by crushing and stacking the ore ontower in the part of the stacking the ore ontower in the stacking the ore ontower in the stacking the ore ontower in the part of the part of the result in the stacking the ore ontower in the part of the part of the result in the stacking the ore ontower in the part of the part o</li></ul>			ed open pit, egrees. Just Inter-ramp ate. from the ed hWELL) about 70 - eap leach

Criteria	JORC Code explanation	Commentary
	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 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.	<ul> <li>The intense fracturing of the ore zones in Karator (and in Tulkubash type, too) has allowed better water percolation along the fine lattice of fractures in the silica matrix leading to extensive oxidation of the primary sulphide gold mineralization. This process results in reasonable cyanide solubility of the gold even though sulphide levels in the host silica matrix may still be high.</li> <li>As most gold-bearing mineralization occurs in cracks in the host rock - the degree of oxidation of the fracture surfaces is considered the primary indicator of leachability.</li> </ul>
Environmental factors or assumptions	<ul> <li>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</li> </ul>	<ul> <li>There are not considered to be any environmental factors likely to affect the assumption that the deposit has reasonable prospects for eventual economic extraction.</li> </ul>

Criteria	JORC Code explanation	Commentary
	potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential 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	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Dry bulk density is measured using paraffin –coated immersion (Archimedes) method to evaluate the specific gravity (SG)</li> <li>The completed total of 32 field density measurement are not consider sufficient to be used for variable interpolation within the block model, hence hard codded density of 2.60 g /cm3, calculated as an average from the tested samples was applied. As above is considered representative and is similar with the Tulkubash deposit results, which was expected.</li> </ul>
Classification	• The basis for the classification of the Mineral Resources into varying	<ul> <li>Classification of Mineral Resources is based upon a review of geological continuity, quality of supporting data, spatial grade continuity and quality of a block model.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The Inferred Resource portion is constrained within the main drilling area manually, including only the bodies intercepted by drill holes (the plan distance between the holes there is between 60 and 80 meters, along with surface workings between it)</li> <li>Within the Inferred portion additionally was selected indicated portion, using only the blocks interpolated within the "Run1": search ellipse with dimensions of 50m*40m*30m; minimum 4 samples from 2 different drillholes (or surface workings)</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	No other external reviews have been made
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.	<ul> <li>The Karator Mineral Resource is considered appropriate representation of the Tulkubash oxide gold style of mineralization, and it is adequate to the available data.</li> <li>It is considered that the current drill hole spacing is sufficient to demonstrate geological continuity of the mineralization but requires addition infill drilling to increase the confidence.</li> <li>Accuracy of the Mineral Resource is sufficient to confirm the economic potential of the deposit.</li> <li>The Mineral Resource estimation methodology is deemed appropriate, based upon validation of the model, using visual, statistical, and graphical checks. Any alternative methods are likely to yield only minor changes to global Mineral Resource</li> <li>The designed mineralization bodies and estimated average grades are considered representative interpretation of the available technical data</li> </ul>
Criteria	JORC Code explanation	Commentary
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	<ul> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	

## APPENDIX 2: Exploration License 3319 AP, valid to 09.2026



## APPENDIX 3: AIG Annual Membership Certificate – Dimitar Dimitrov (#4538)

, illi	AUSTRALIAN INSTITUTE OF GEOSCIENTISTS Supporting All Geoscientists	
Annual Membership Certificate 2023/2024		
The Board of the Australian Institute of Geoscientists hereby certifies that		
Mr Dimitar Lazarov Dimitrov MAIG (# 4538)		
is a current, financial member of the Institute, as stipulated in the Articles of Association, has agreed to be bound by the Institute's Code of Ethics, and holds the membership level of Member.		
Leah Moore President	Dale Sims Director for Membership	
Current to 20th June 2024		
Joining date: 19th January 2011		
Australian Institute of Geoscientists www.aig.org.au		