TULKUBASH GOLD PROJECT MINERAL RESOURCE ESTIMATE

CHAARAT ZAAV CJSC

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'

Date: April 2022

EXECUTIVE SUMMARY

Chaarat Gold Holdings (CGH), through its wholly owned subsidiary, Chaarat Zaav CJSC (Chaarat), is developing the Tulkubash gold deposit (Tulkubash) located in the western region of the Kyrgyz Republic. This Mineral Resource Estimate has been prepared by Chaarat's geological department, under the guidance of Dimitar Dimitrov, VP Exploration of Chaarat Gold Holdings, and MAIG and CP as defined in the 2012 edition of the JORC Code. The effective date of this report is December 2021.

The current resource estimate is based on all-available data up to the time of writing.

It is the CP's opinion that the reported Mineral Resources (Resource) are 'JORC compliant' and are a reasonable representation of the exploration data.

Pit shell optimization was applied to constrain reasonable prospects for eventual economic extraction. The table below summarizes the constrained Mineral Resource that demonstrates eventual economic viability:

Classification	Tonnes (mt)	Density	Au (g/t)	AuEq (koz)
Measured				
Indicated	25.11	2.66	0.98	789
M & I	**25.11**	**2.66**	**0.98**	**789**
Inferred	11.23	2.56	0.62	222

Table 1 Tulkubash Mineral Resource Estimate 2021 Year End, constrained by Pit Shell 1800 $, cut-off grade 0.21 ppm Au

Notes: ***The effective date of the resource is December, 2021. The Mineral Resources that are not Mineral reserve do not demonstrate economic viability. Numbers may not sum due to rounding.***

The resource estimate is according the JORC Code (2012) reporting code.

Wireframes defined by a mineralized cut-off with a parent block size of 5 m x 5 m x 5 m, Grades interpolation is by Ordinary Kriging method.

Mineral Resources are constrained by Resource shell defined as per 1800 $ Au price, and applied variable recovery estimations

The constrained Tulkubash Mineral Resource is differentiated by zones as below:

Tulkubash Constrained MRE, by zones, 2021 EOY								
	Indicated				Inferred			
Target	Mt	Au, g/t	Recovery, %	Au, Koz	Mt	Au, g/t	Recovery, %	Au, Koz
Main Pit	21.905	1.01	71.91	711	3.623	0.62	74.47	72
Mid Zone	2.764	0.66	75.01	59	5.785	0.58	76.14	108
East Zone	0.442	1.37	75.97	19	1.818	0.73	75.49	43
Tulkubash Total	25.111	0.98	72.32	789	11.226	0.62	75.50	223

Table 2 Tulkubash Mineral Resources 2021 EOY by zones, constrained by Pit Shell 1800 $, cut-off grade 0.21 ppm Au

The previous mineral resource estimate is from November 2020:

Classification	Tonnes (mt)	Density	Au (g/t)	AuEq (koz)
Measured				
Indicated	28.505	2.67	0.86	789
M & I	**28.505**	**2.67**	**0.86**	**789**
Inferred	21.412	2.56	0.56	388

Table 3 Tulkubash Mineral Resources (2020, IGT), constrained by Pit Shell 1800 $, cut-off grade 0.21 ppm Au

The deviation of tonnage and grade in the 2021 EOY Mineral Resource Estimate compared to 2020 IGT estimate is due to inclusion of the 2021 drilling data, modification of the wireframes based on new data, application of variable recovery model and improved interpretation of the sulphide contact.

It is the CP's opinion, that the pit shell constrained Mineral Resources are a reasonable base for the Tulkubash Reserve update, planned in 2022.

The signing of this statement confirms this report has been supervised and checked by Dimitar Dimitrov, SVP exploration of Chaarat Gold Holdings, 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	....

Contents

List of Tables

List of Figures

1 INTRODUCTION

Two styles of mineralization have been identified at the Chaarat property (Property) located in western Kyrgyzstan. The first style, known as Tulkubash-type is named after the Tulkubash gold deposit is oxidized gold mineralization hosted in Devonian silicified sandstones of the Tulkubash formation. This mineralization is represented by subvertical to steeply dipping, northeast striking lenses, controlled by a series of dilatational jogs along the Chaarat Shear zone. Tulkubash oxide mineralization further extends to the northeast.

The other style of mineralization is known as Kyzyltash-type mineralization, named after the Kyzyltash gold deposit (Kyzyltash). This style of mineralization is characterized as mostly unoxidized refractory gold mineralization.

The Tulkubash gold deposit lies adjacent to the Kyzyltash gold deposit but is distinct in terms of mineralization style, host rock and oxidation status, and is currently being developed by Chaarat as an open pit, heap leach gold deposit.

This Mineral Resource Estimate (MRE) report is concentrated exclusively on the Tulkubash deposit, although a brief summary of the other deposits on the Property, including Kyzyltash is provided to achieve sufficient completeness of this report.

The previously available MRE was prepared by ‘’Institute of Geotechnologies” (IGT) at the end of 2020. In the 2021 exploration season, a wide range of exploration activities were completed on the Property including additional infill drilling at Tulkubash, which is the reason for the current mineral resource update. At the date of issue, there are no pending assays or services from third parties in regard to Tulkubash data, which could influence the results provided here.

The field activities carried out in 2021, were supervised by Dimitar Dimitrov as Senior VP Exploration at Chaarat Gold Holdings. Dimitar Dimitrov as Competent Person (CP) visited the field site operations several times during the season, last visit was between 25.08.2021 to 05.09.2021 aiming to guarantee that the implemented procedures, and the obtained data were meeting the best industry standards and correctly represented in this report.

The 2021 EOY Mineral resource update included upgrading of the Tulkubash ore wireframes, geostatistical analysis, variable recovery model incorporating all the 2021 technical data prepared by the Chaarat technical team, headed by Nikolay Dimitrov.

Dimitar Dimitrov has undertaken a review of the technical data and Mineral resource estimate presented herein and takes responsibility for the Mineral Resource Estimate update. The Mineral Resources are reported with an effective date of 31 December 2021.

It is the CP's opinion that the Indicated Mineral Resource herein is a reliable basis for the Ore Reserve Estimate update, planned for the second quarter of 2022.

This report and Mineral Resource update have been produced in accordance with the standards of JORC Code (2012). The mineral resources reported in this document have been developed and classified according the JORC Code (2012)

2 PROJECT

2.1 Location

Tulkubash gold deposit as part of Chaarat Property, is located in Chatkal district, Jalal –Abat province, in Western Kyrgyzstan, approximately 300 km southwest from the capital – Bishkek, in the southeastern portion of Sandalash mountain range, northwest of the Sandalash River.

Figure 1 Chaarat Property location

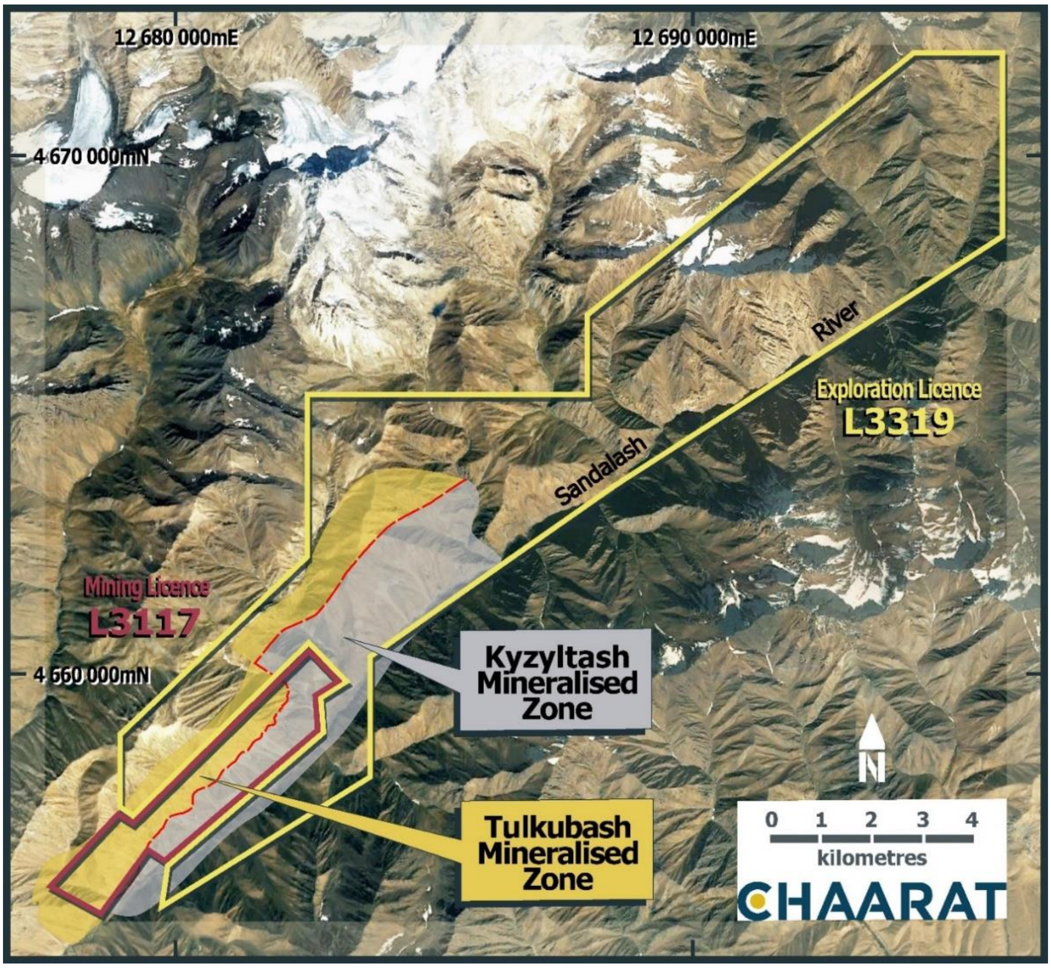


Figure 2 Chaarat tenement map, two mineralization zones and styles

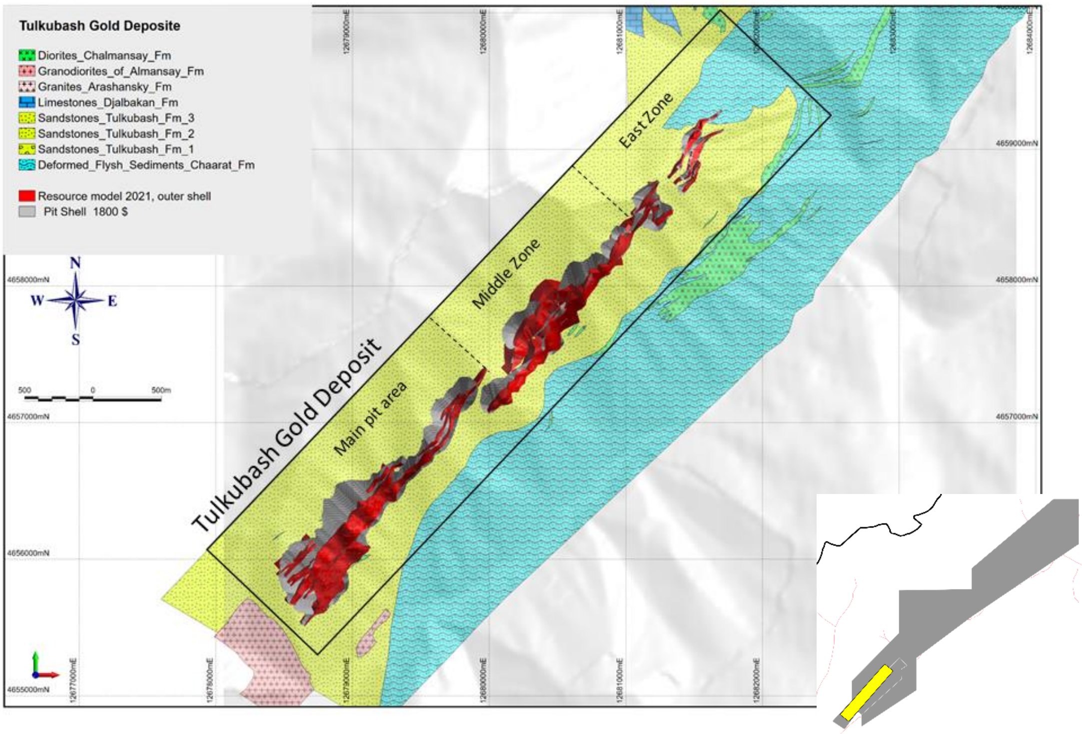


Figure 3 Tulkubash gold deposit in Chaarat Property

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, covering a defined Mineral Resources. The Mining Licence 3117AE was renewed on 7th September 2017 and is valid until 25th June 2032.

- Exploration license (#3319AP) of 6776 ha, covering prospective ground to the northeast. The Exploration Licence 3319AP was renewed on 29th July 2016 and is valid until 7 October 2023, with options for extensions.

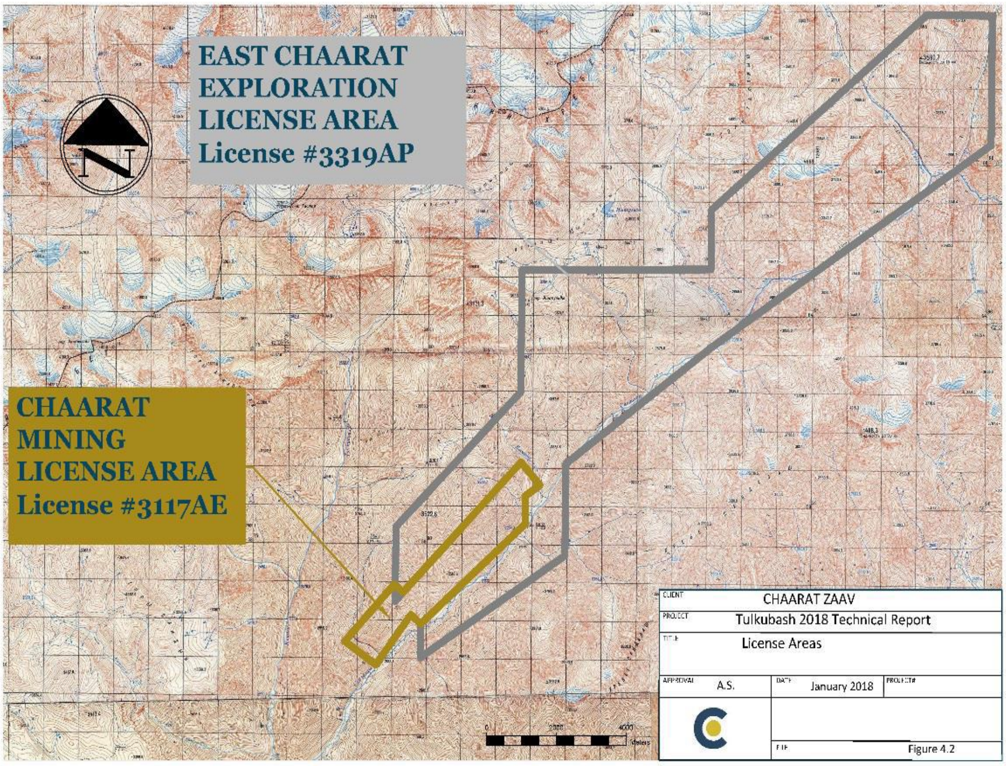


Figure 4 Chaarat Property

Mining License #3117AE / Gauss Krueger Pulkovo 1942 Zone 12					
Point No	X	Y	Point No	X	Y
1	12677600	4655400	6	12682728	4659261
2	12679000	4656900	7	12682757	4658554
3	12679264	4656711	8	12679776	4655887
4	12682604	4660152	9	12679487	4656116
5	12683150	4659556	10	12678500	4654800

Table 4 Chaarat Mining License coordinates

Prospecting License #3319AP / Gauss Krueger Pulkovo 1942 Zone 12								
Point No	X	Y	Point No	X	Y	Point No	X	Y
1	12679776	4655000	7	12679035	4656474	13	12694126	4672000
2	12679776	4655887	8	12679035	4658419	14	12696000	4672000
3	12682757	4658554	9	12682571	4661982	15	12696000	4668608
4	12682728	4659261	10	12682571	4665177	16	12688029	4663212
5	12683150	4659556	11	12687993	4665261	17	12683894	4660128
6	12682604	4660152	12	12687993	4666817	18	12683894	4657718

Table 5 East Chaarat Exploration License coordinates

There are certain conditions that need to be met to hold Mining License 3117AE:

- Deposit development according to the Technical Project for the Chaarat Gold Project Development (Ken-Too 2015), which was approved by the State Committee for Industry, Energy and Subsoil Use of the Kyrgyz Republic (SCIES);
- Continuous work on development, detailed design and cost estimate documentation;
- Paying taxes on the right to use subsoil within the terms stipulated by Kyrgyz Republic legislation;
- Submitting a social package to SCIES, including an investment programmer for improving conditions for local community development, which consists of training, providing jobs for residents of the local communities, and infrastructure development;

- Opening a disturbed land rehabilitation account and accumulating funds defined by the Technical Project Report (Ken-Too 2015) for the Chaarat Gold Deposit Development.

The main conditions to hold Exploration License 3319AP include:

- Paying taxes and other payments for subsoil use per Kyrgyz Republic legislation;
- Informing 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;
- Opening a disturbed land rehabilitation account and accumulate the amount of funds as defined by the Technical Project Report (Ken-Too 2015) for the Chaarat Gold Deposit Development;

2.3 Access

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

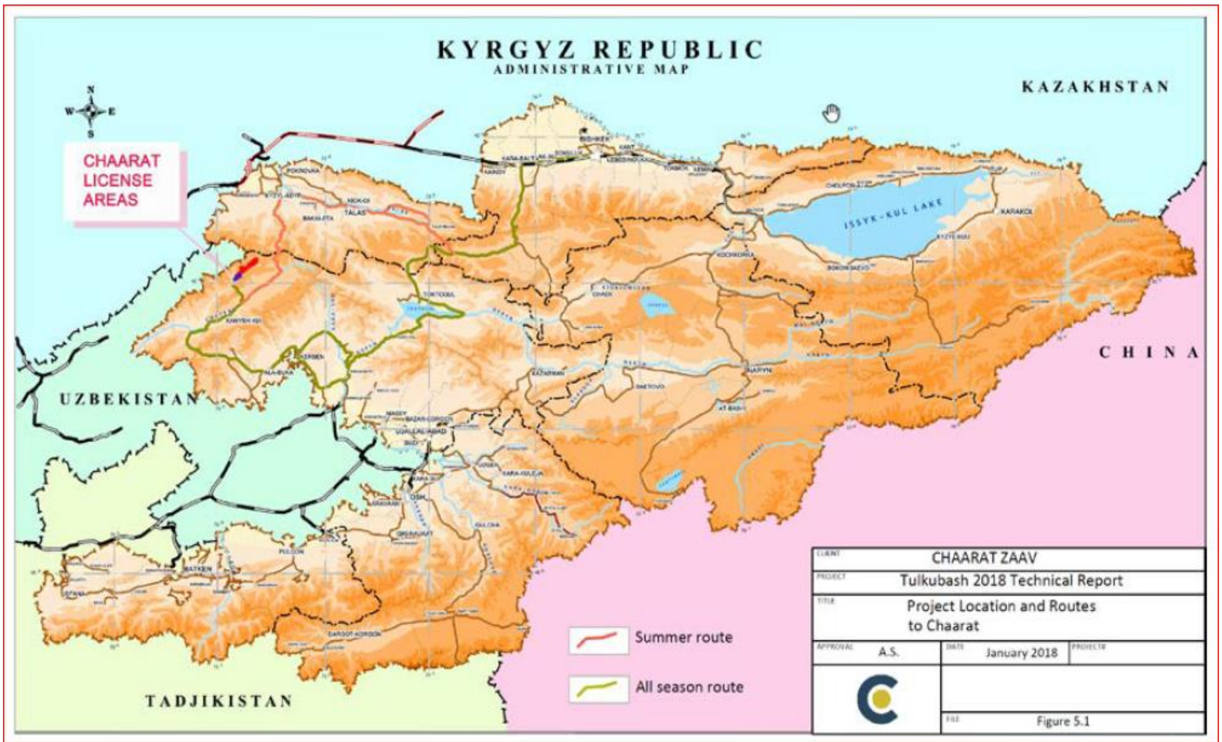


Figure 5 Property access

2.4 Topography

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

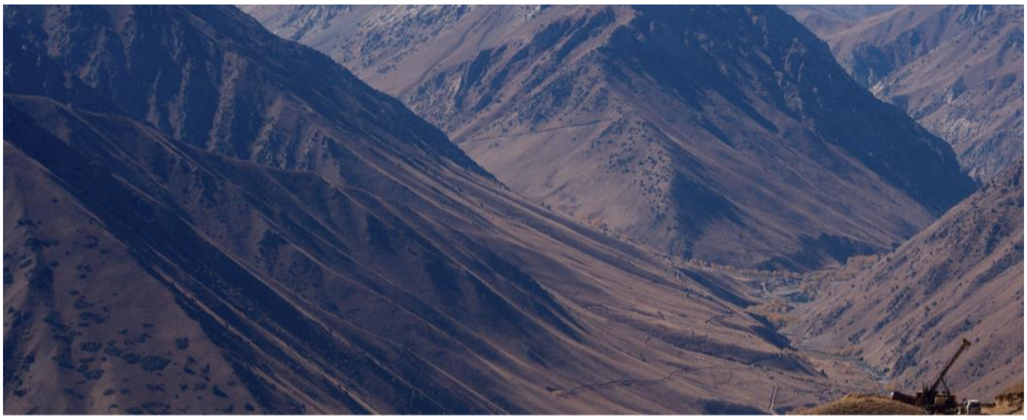


Figure 6 Sandalash valley, looking north-east

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. Currently electrical power is not available in the valley. A 110kV power transmission line runs from Talas to China Gold's Kuru-Tegerek mining operation, located approximately 40km 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

The current project design utilizes diesel generators located on site.

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 (EIA/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 at Chaarat property and development of the Tulkubash deposit.

3 PROJECT HISTORY

3.1 Early Exploration in the Property

Antimony mineralisation in the Chaarat Property was originally identified by Soviet-era geologists conducting a reconnaissance exploration programme prior to 1992. The North Kyrgyz Geological Expedition subsequently completed a regional stream sediment sampling programme which identified antimony, arsenic, gold, silver, and tungsten anomalies in the area. They identified significant antimony mineralisation in Tulkubash and Kyzyltash's Main zone areas, leading to the development of three drifts totalling 660 m (Anon. 2004).

Following the breakup of the Soviet Union, Apex Asia acquired control of the Licence in 1996, and subsequently formed a joint venture with Newmont Overseas Exploration Limited. Newmont completed a geophysical survey over a portions of Tulkubash and Kyzyltash, and drilled seven holes totalling 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 Licence. In 2003, Chaarat compiled historic data into a digital database and conducted initial mapping and sampling evaluation.This work identified targets that were followed up with additional mapping, trenching, and sampling in 2004. Five core holes totalling 857 m were carried out during the 2004 field season. All the holes intersected significant gold mineralisation with drillhole CCH003 returning 8.3 m of 7.0 g/t of gold.

Building on the success of the 2004 programme, drilling continued through 2006 to develop the Kyzyltash's Main zone and Contact zone mineralisation areas. In addition, in 2006 Chaarat collared an exploration adit (currently now known as adit 4) to develop Contact zone area in its down-dip extension and to provide sufficient data for metallurgical testing. Systematic drilling of the Main and Contact zones (Kyzyltash mineralisation) continued through 2013, culminated with underground Mineral Resource estimate within nine ore bodies (the M2400, M3000, M3400, M3900, M4400, M5000, CP, C4000 and M6000) along the Main and Contact zones. At the best explored central part of the Contact zone, extensive surface and underground drilling identified continuous and consistent gold mineralisation from the surface exposure at about 2,790 m elevation to lowest tested level of 1,740 m, a vertical extension of over 1 km.

Soil sampling in what is now known as Tulkubash 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 (also known as T0700 or the North zone), which succeed to outline a large, coherent geochemical anomaly. In 2005, a single initial hole was drilled in this area which intersected 17.1 m that assayed 4.61 g/t of gold.

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

3.2 Recent exploration in Tulkubash

Exploration and development programmes were modest from 2013 through 2016, with no drilling occurring in 2015.

Approximately 17,400 m of drilling were completed in 2017 and around 20,000 m of drilling completed in 2018, and in 2019.

The Covid restrictions in 2020 significantly reduced the options for field activities, and only 2,434 m of RC drilling, located in the south western part of Tulkubash (so called Main Pit) area was implemented.

The last available Tulkubash Mineral resource estimate was prepared in November 2020.

In 2021 a wide variety of field activities were carried out in the Property at Tulkubash and Kyzyltash deposits, and northeastern exploration targets – Karator and Ishakuldy. Particular in Tulkubash were conducted 24 infill drill holes, with total length of 2,760.3, located in so-called Middle and East zones, aiming to upgrade the existing Resource in these areas. Approximately 5,418 m of trenching were completed as well, to advance the surfaces contact tracing and the ore modeling process.

Total of 13 geotechnical (12 of which were used for hydrogeological assessment), orientated drill holes with a total length of 1,549.9m were completed aiming to upgrade the geotechnical and hydrogeological knowledge, and to provide additional numerical data for the Main Pit area geotechnical and hydrogeological model.

4 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 located in the middle Tien Shan province, composed by tectonic fragments of Ordovician to Carboniferous ages.

The Middle Tien Shan stretches in a sub latitudinal direction (20-100km wide) to the south of the Northern Tien Shan. Talas-Fergana transverse fault divides it into two separate parts: Naryn (eastern) and Chatkal (western). Nikolayev's fault is its northern boundary, the Atbashy-Inylchek fault (in the Naryn sector) and Kara-Suu fault (in the Chatkal sector) are its southern boundary. 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, porphyry and scarn styles, that are thought to be closely related with structurally controlled late Carboniferous and Permian aged magmatism.

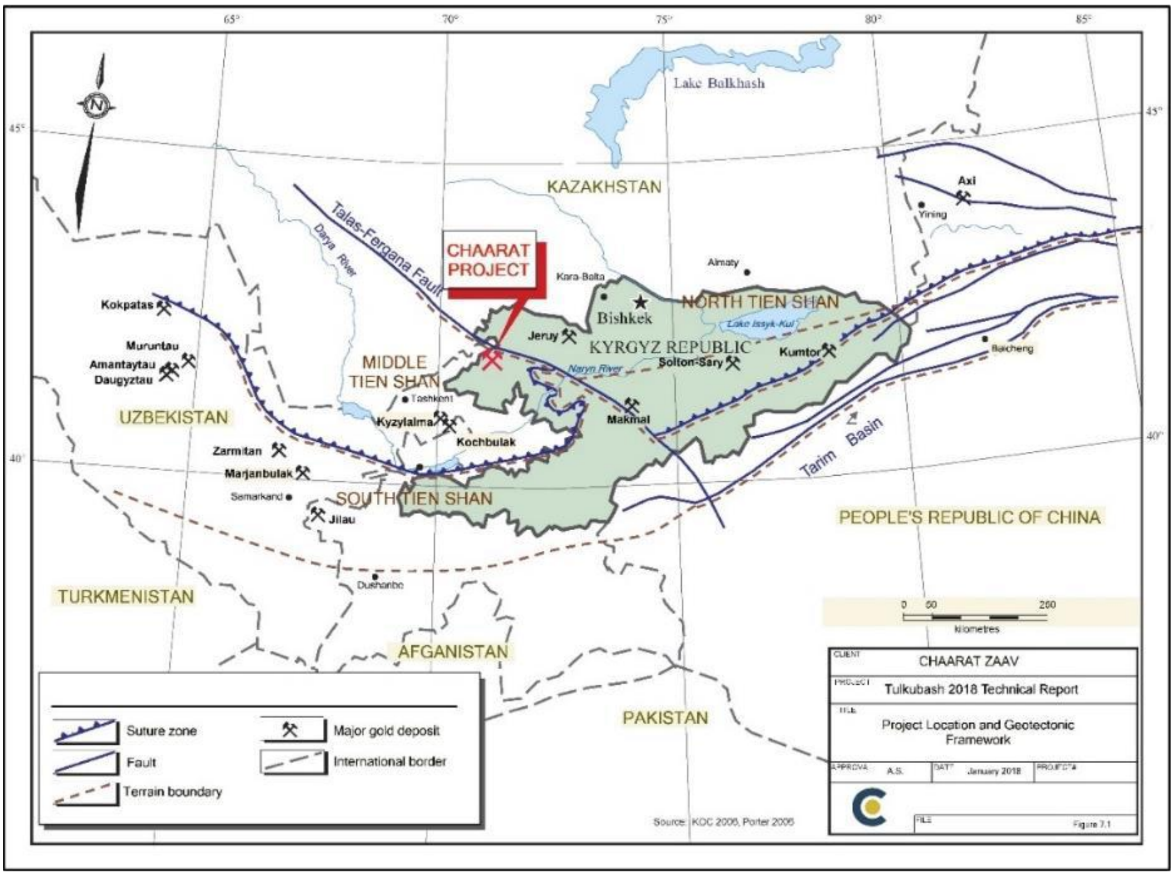
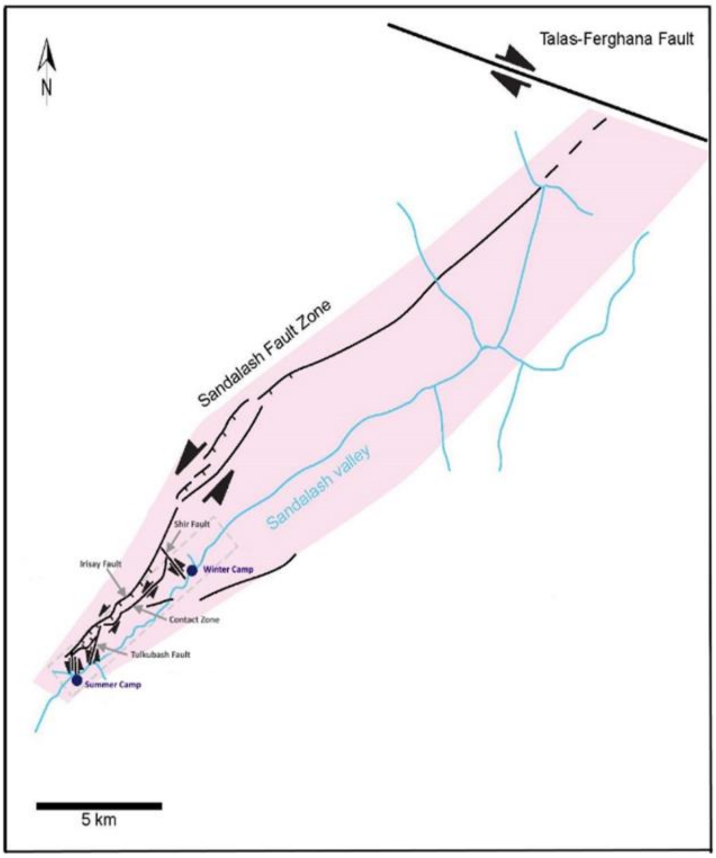


Figure 7 Chaarat property, regional structural map

4.1.1 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. The gold mineralisation occurs in various extensional structures, related to pressure relief during faulting (Kramer 2009; Jakubiak 2017). The SFZ comprises three mineralised fault zones, named the Tulkubash Structural Zone, the Contact Fault and the Main Zone Fault, and one unmineralized zone called the Irisay Fault.



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 of the Sandalash fault zone, hosting the Irisay, Contact and Main individual faults as ore controlling and commonly ore hosting structures.

Chaarat and Tulkubash Structural control - deep seated brittle deformation, producing series of mineralized dilatant jogs

Figure 8 Chaarat ore field structural control, Sandalash Shear zone

Previously (Chitalin, Tikhomirov Dr, 2019) when analysing the distribution of ore deposits it was assumed that they were formed as echelon tensile structures in the zone of the dextral shear of the NE-SW direction

The structural analysis (Chitalin, Tikhomirov Dr, 2019) of the deposit data and analysis of regional data allow recreation of the history of the structural evolution of the region and the Chaarat deposits, folding-discontinuous structures of the Caledonian and Hercynian stages of tectogenesis, and activated at the Alpine stage (Milanovsky, 1996).

<u>Caledonian stage of tectonic activity (late Ordovician)</u>

Caledonian folding and the introduction of granitoid plutons occurred at the end of the Ordovician.

At the Chaarat deposit Caledonian structures are represented as linear folds with North-East strike, longitudinal reverse faults and meridional dextral thrusts and reverse faults, as well as sinistral latitudinal thrusts.

An example of such a structure is the Main ore zone, represented by a large fault of complex shear-surge-thrust kinematics. In the fault zone developed viscous tectonite SC-type and a later brittle tectonite – cataclasite and mylonites.

The fault is ore-controlling. Mineralization is hosted by sandstones and siltstones, marked by foliation and quartz veins with sulphides forming micro linear stockworks.

It is possible that the rich gold-bearing quartz-sulphide vein-stockwork mineralization of the Main zone of the Chaarat Deposit could initially have been formed in the late Ordovician, whereas at the Hercynian stage in Perm it could have been partially or completely remobilized and localized within the structural traps in Devonian sandstones and Permian diorites.

<u>Hercynian stage of tectogenesis (early Carboniferous – late Perm-early Triassic)</u>

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.

At the Tulkubash deposit, the two Hercynian deformation stages interference is developed.

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

Ore mineralizations, as well as stocks of late Carboniferous and Permian granitoids are placed along broad structural mineralization trends in three directions: WNW, ENE and NNE strikes. Trends of mineralization cross folds and tears of the Caledonian basement and the Hercynian cover and mostly coincide with the direction of thrusts and and strike slip faults.

With respect to gold deposition and associated mineralization, the controlling shears are pre-, syn- and post-mineral.

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.

The Chaarat Deposit is located at the intersection of the mineralized trends striking NE and NNE.

4.1.2 Lithology

The Sandalash River valley down cuts a northeast-trending sequence of Cambro-Ordovician fine grained siliciclastic sediments, intensively deformed, and metamorphosed in green-schist metamorphic facies and considered as a member of the Chaarat Formation. The

Chaarat formation unit is over thrusted by a sequence of younger Devonian-age quartzites which make up the Tulkubash Formation. The sedimentary rocks hosting mineralisation strike north-easterly and exhibit dips between 40° and 75° to the northwest. Younger Permo-Triassic-age granodiorite and diorite phases intrude the sediments and are spatially and genetically associated with the gold mineralisation and, in some areas, are themselves mineralised.

4.1.2.1 Chaarat Formation:

The Chaarat Formation consists of three facial units which exhibit a sequential sedimentary package of alternating, moderately to well-bedded dark coloured siltstones, shales, quartzites, and greywackes, with minor limestone interbeds (Cats et al. 2012). The lower unit is up to 170 m thick, consisting of grey siliceous siltstone interbedded with minor dark siltstone and shales. The middle unit 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 unit is dominated by shales and rhythmically interbedded siltstones and fine-grained sandstones which commonly exhibit graded bedding. The thickness of the upper unit 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 by a conglomerate unit. Within the Chaarat Property area, the upper and lower contacts of the Tulkubash formation are tectonic, over trust and strike-slip faults.

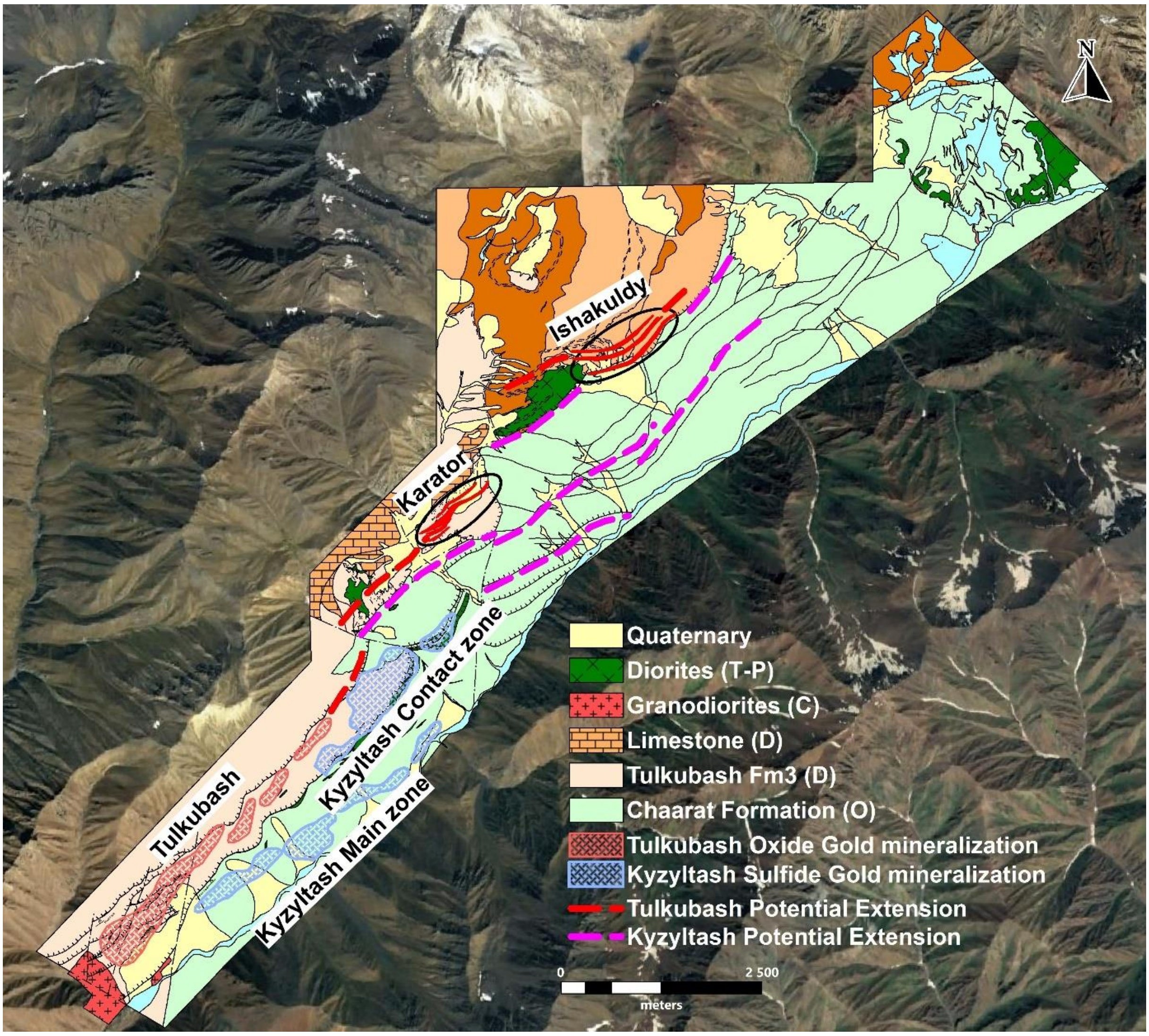


Figure 9 Chaarat ore field, Sandalash Shear zone, geology and mineralization

4.2 Other Mineral Deposits and Genetic Class

The Tulkubash gold deposit (presented by Tulkubash mineralization style) is the primary subject of this report, however for sufficient completeness, a brief description of the other mineralisation targets and styles presented in the Property are summarized here as well as they are an inseparable part of the whole mineralisation system.

The mineralisation at Chaarat Property is genetically associated with Permian igneous intrusive rocks controlled by regional-scale trust and strike-slip faults. Within this setting, there are two distinct types of gold mineralisation: the Tulkubash-type (oxidized) and the Kyzyltash-type (sulphide, refractory).

The proximity of the two types of mineralisation and the common structural controls suggest that both are the product of a common hydrothermal event and differences are due to some host rock specifics, fracturing intensity and level of oxidation. It is recorded that the oxidized Tulkubash gold mineralization is progressing in depth into sulphide refractory ores, and that on the top of Kyzyltash a shallow zone of oxidized mineralization is observed.

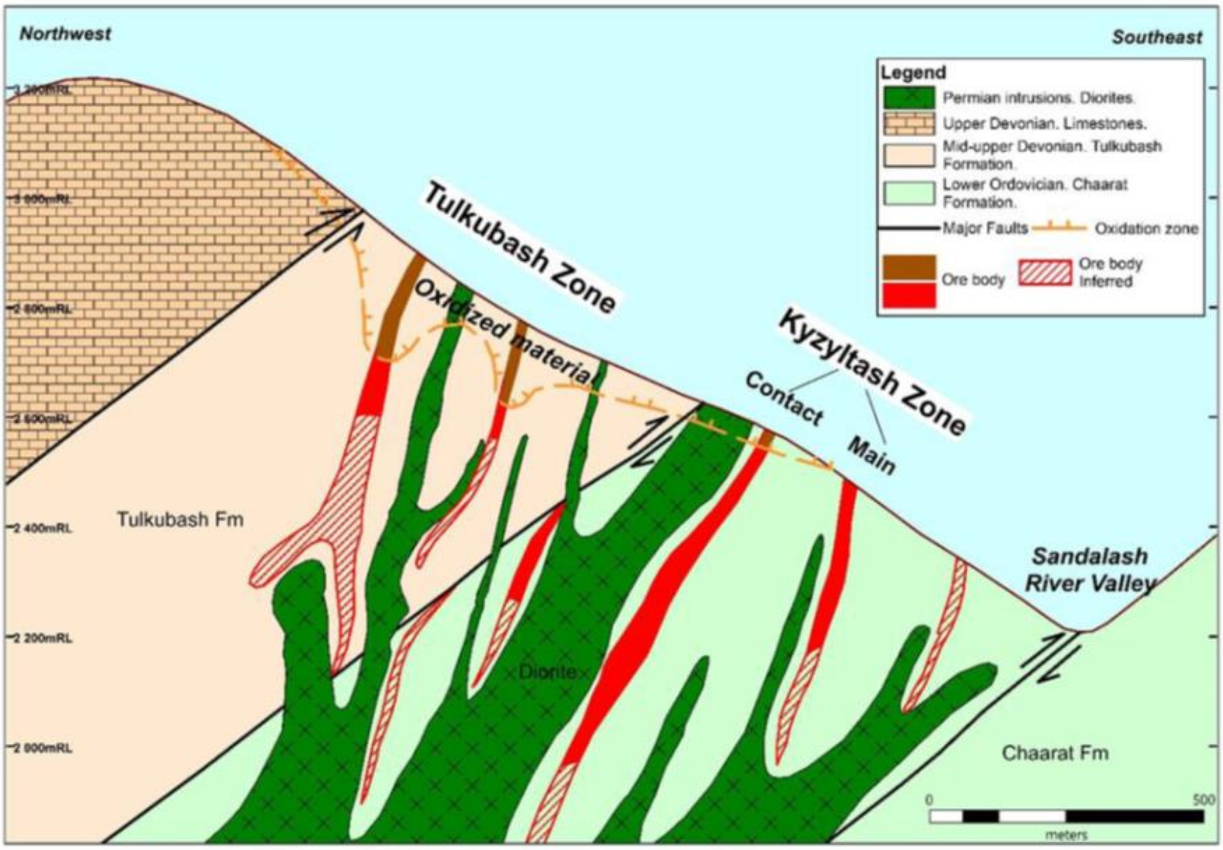


Figure 10 Chaarat mineralization styles, Conceptual cross section

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 sulphides and ankeritization within mineralised 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 characterized as a mesozonal orogenic gold deposit. These deposits are formed in nearly isothermal conditions and can extend to great depths. For an example, the mineralisation of the Kyzyltash Contact zone has been drilled over a vertical extension of 1.3 km and is still open at depth and along strike.

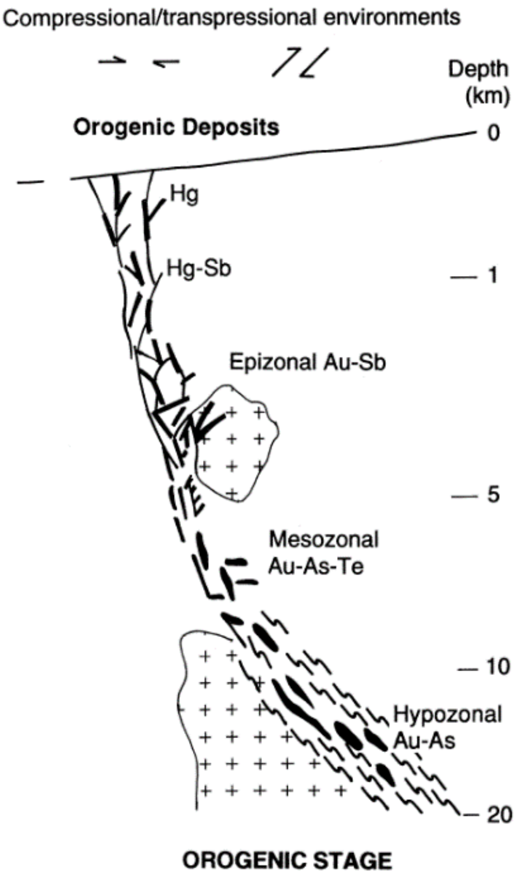


Figure 11 Scheme of the orogenic gold deposit as a function of depth in the crust (Groves et al., 1998)

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.

The Kyzyltash gold deposit (Kyzyltash mineralisation style) is composed of two orebodies known as the Contact Zone and Main Zone. The deposit is planned to be developed by a combination of open pit and underground methods. Almost all the gold mineralization in the Kyzyltash deposit is refractory. A detailed metallurgical study to define the most appropriate processing scheme is underway to be followed by a Feasibility Study update in the next few years.

The Karator (Tulkubash mineralisation style) zone is located approximately 2 kilometres to the northeast of the Tulkubash deposit and extends for more than 800 metres on strike, with approximately 30 to 50 metres true width. The Karator zone is interpreted as a potential northeast extension of Tulkubash.

Ishakuldy (transitional mineralisation style) is a well-defined exploration target, that consists of at least three parallel zones, traced on about 1.5 kilometres strike with 20 to 50 meters widths.

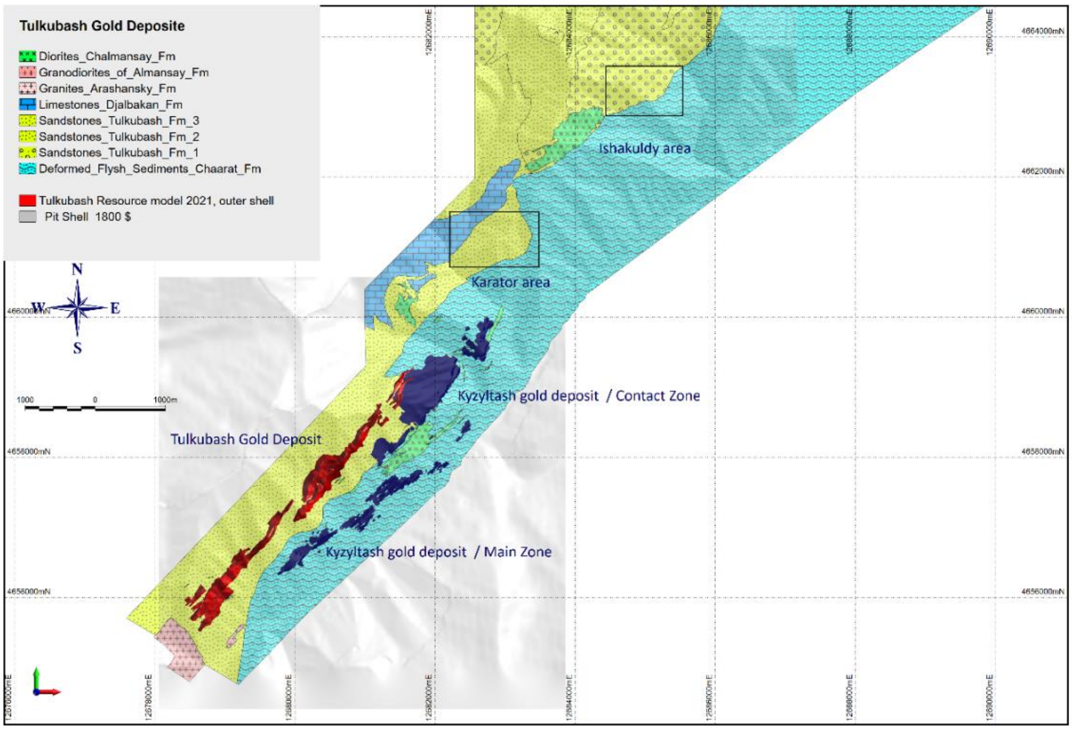


Figure 12 Chaarat deposits and exploration targets

4.3 Tulkubash gold deposit

4.3.1 Summary

Tulkubash gold deposit is developed within the Devonian silicified sandstones of the Tulkubash formation and consists of steeply dipping (55 -75 deg.) dilatational jogs developed in brittle environment within the Sandalash Fault Zone, and currently being developed by CGH as an open pit, heap leach gold operation.

The determined gold mineralisation within the Tulkubash zone occurs within lenses that can range from 1 – 2 m to more than 45 m in true thickness and hundreds of meters in length. Resource drilling of the Tulkubash deposit indicates that the zone is remarkably continuous, however pinches and breaks along strike are common.

4.3.2 Host Rock and Alteration

The host rock (Tulkubash formation) is presented predominantly by silicified sandstones, locally brecciated or alternating with relatively thin interceptions of black shales. This could be considered as due of proximity to fault shearing along the contact with the Chaarat formation facies. Some examples are shown in figures 13 to 17 below. Rare, relatively small porphyry bodies are observed as well, most often logged as diorites and interpreted as dykes, or lenses proximal to nearby intrusive. Quartz-diorites, granodiorites or monzodiorites are also observed in the logging documentation.

More detailed study is required for more reliable information on their petrological variety, and correlation with the mineralisation.

The major alteration type is quartz- sericite – carbonate (referred to "berezites" in the Russian classification), with variable content of white –mica, carbonates and rare chlorite.

Argillitization is presented as well, and is thought to be structurally controlled, usually in narrow zones (up to 2 -3 m thick) and associated with intensively oxidized material (figure 15).

Intensively silicified quartzite and quartzite breccia with numerous hairline quartz veinlets are also observed.

The gold mineralization often correlating with intensive silicification, shearing and As and Sb oxides (figures 14 and 17).

Figure 13 Low oxidized and undeformed outcrop of Tulkubash Formation

Figure 14 Intensively oxidized and deformed outcrop of Tulkubash Formation

Figure 15 Structurally controlled zone of increased oxidation and alteration

Figure 16 Bleached areas of quartz-sericite alteration

Figure 17 DH18T385: 209.5 -215.5m 6.0m @ 5.5g/t Au

4.3.3 Structural Control

The conceptual structural control on Chaarat property and the Tulkubash gold deposit is summarized in figure 18 below.

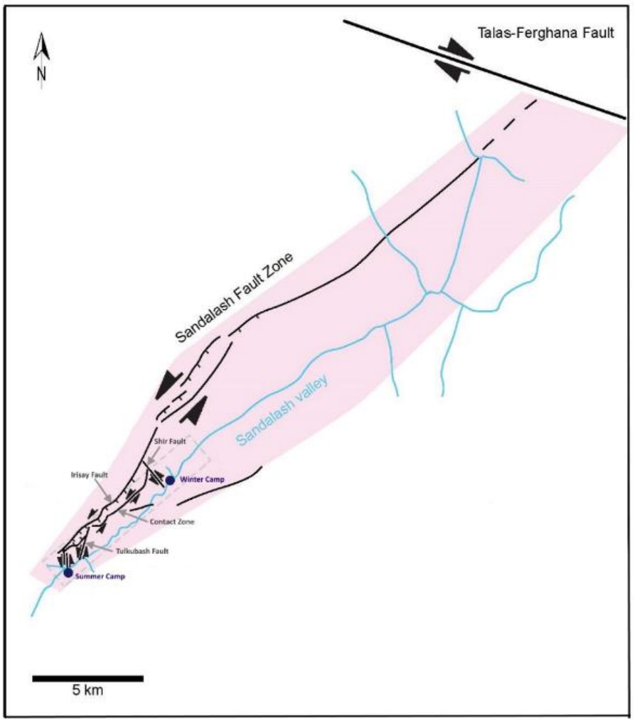


Figure 18 Conceptual structural scheme

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) – including postmineralisation Irisay fault and pre-sin mineralization Main and Contact Zone faults

Tulkubash Structural control - deep seated brittle deformation, producing series of mineralized dilatant jogs

The orientation of the folds in the sandstones of the Tulkubash formation coincides with the orientation of the regional folds shown on large-scale and medium-scale geological maps. The age of the selected folds is probably early Carboniferous.

It can be assumed that the folds of meridional strike at the Chaarat area were formed as echelon during dextral shear displacements along steeply dipping reverse faults and the strike slip faults striking NE-SW. The dextral shears are associated with the meridional sinistral shears also (fig 19).

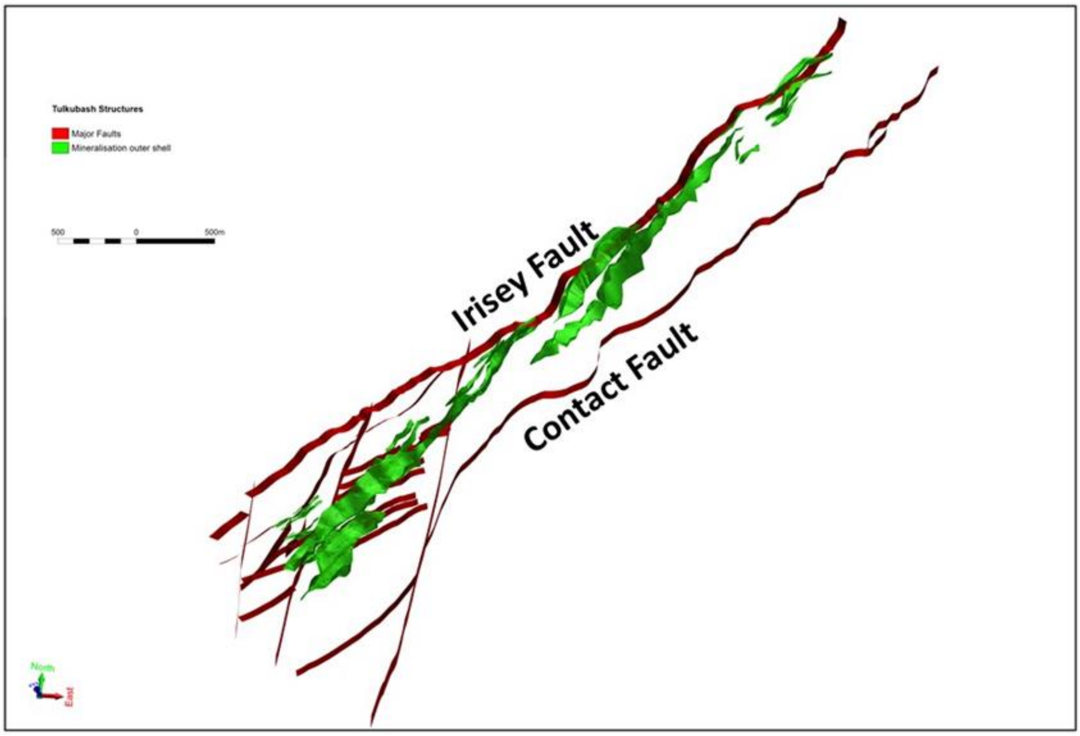


Figure 19 Tulkubash Structural plan and mineralized zones

Based on regional and deposit scale geological and structural analysis of the Tulkubash zone, it is thought that the Tulkubash gold mineralization is controlled by a dextral-thrust structural model of localization of gold-bearing sulphide mineralization. An important role was played by the pre-mineral structures of the early Carboniferous.

Following the early Carboniferous and folding in middle Carboniferous, a series of granodiorite plutons were introduced coincident with skarn, porphyry and epithermal manifestations.

In the late Carboniferous - Permian times, a broad and extensional shear environment is formed, characterized with decompression faulting, shearing and fracturing, which led to the introduction of granitoid magmas and ore-bearing hydrothermal solutions.

Various combinations of ore-controlling structural elements caused development of the linear stockwork character of the gold mineralization distribution at the Tulkubash zone. It is characterized by the development of conjugated local mineralized shear and tensile structures of NE, ENE, NNW - NNE directions (fig 20).

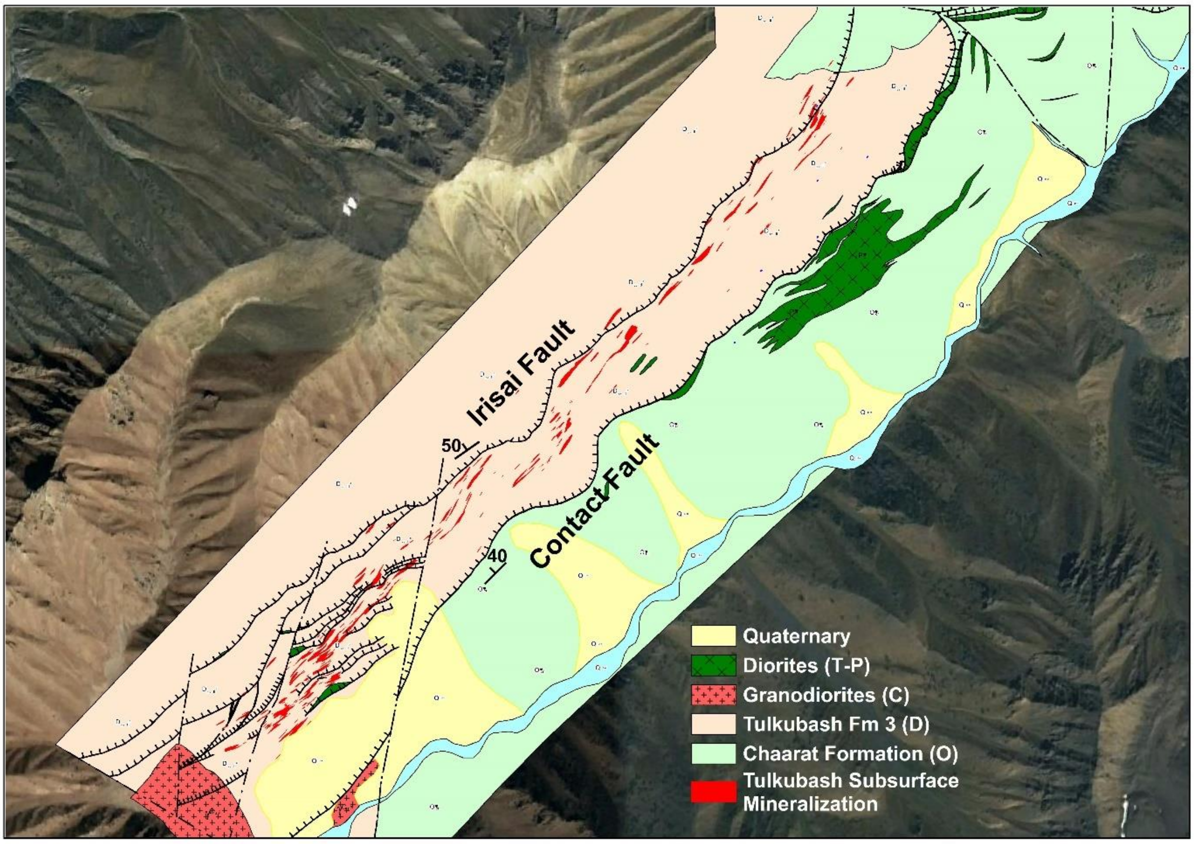


Figure 20 Tulkubash structural plan, geology and sub surface mineralization

It is the CP's opinion that the Tulkubash resource block model is dominated predominantly by longitudinal subvertical ore bodies, which is accepted as generally representative of the complex structural control (fig 21).

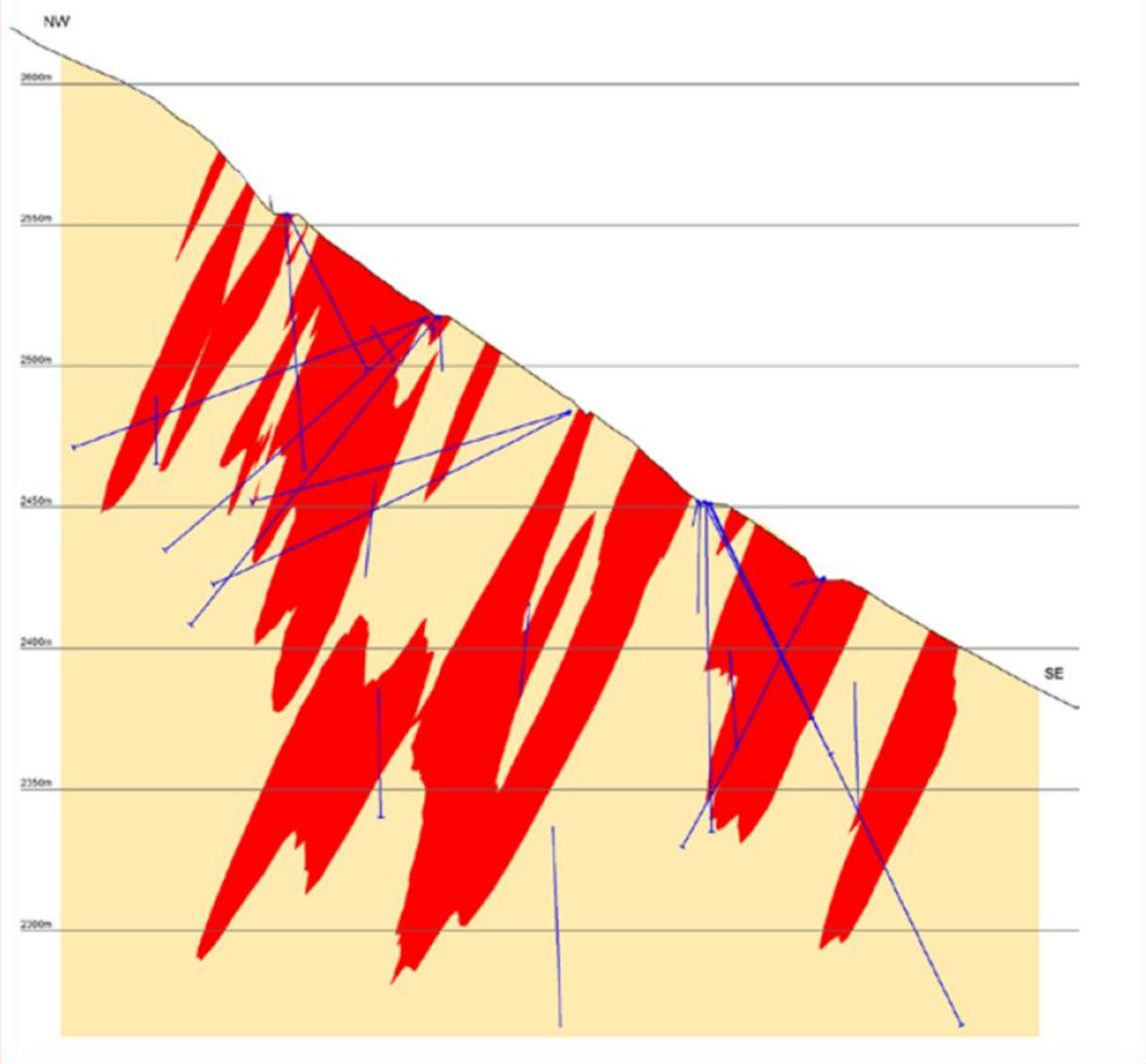


Figure 21 Tulkubash mineralization, conceptual interpretation

4.3.4 Mineralization and oxidation

The Tulkubash zone compared to the Kyzyltash Main and Contact zones is intensively oxidized with weakly oxidized to fresh material occurring in the deeper levels and more advance oxidation in the upper parts of the deposit. The oxide-sulphide contact is mostly gradational although some sharp boundaries are observed, suggesting some of the oxidation might be structurally controlled.

The gold-bearing lodes, contain free milling gold and are typically coloured by red and red-brown hematitic iron oxides, including minor yellow-brown limonite, and locally scorodite, jarosite and stibiconite.

Bulk flotation test work conducted on the Tulkubash sulphide mineralization indicates that the main sulphide mineral is pyrite with subordinated arsenopyrite. All other sulphides occur in trace amounts, presented mainly by stibnite, molybdenite, sphalerite and galena (Sehlotho and Bryson 2012). The main gangue mineral is quartz with subordinated mica, dolomite, and ankerite.

The gold occurs as electrum with a low silver content, typically ranging between 4% and 8%, picking 16% silver. Silver was also observed as silver-rich tetrahedrite and within a silver-rich lead-antimony-sulfosalt. Silver is not considered as an element of interest for the economic assessment of the Tulkubash deposit due to its low concentration, typically less than 1ppm.

The widespread silicification and deep oxidation is in distinct contrast to the Kyzyltash zone, where minor quartz occurs in thin veinlets with no significant oxidation.

Metallurgical testing and cyanide soluble gold assays in Tulkubash indicate that most of the mineralization is amenable to extraction via heap leach. Currently the sulphide portion of the Tulkubash gold deposit is not of economic interest due to the dominance of refractory gold (fig 22).

Figure 22 Tulkubash oxidized and sulphide mineralization, DH21T606 and DH21T609

4.3.4 Tulkubash Zones

Three different zones (Main Pit Area, Middle Zone and East Zone) are outlined in the Tulkubash deposit. Without showing any significant differences, these zones are referenced mainly to the mineralization geometry and its intensity, thought to be structurally separated (fig 23).

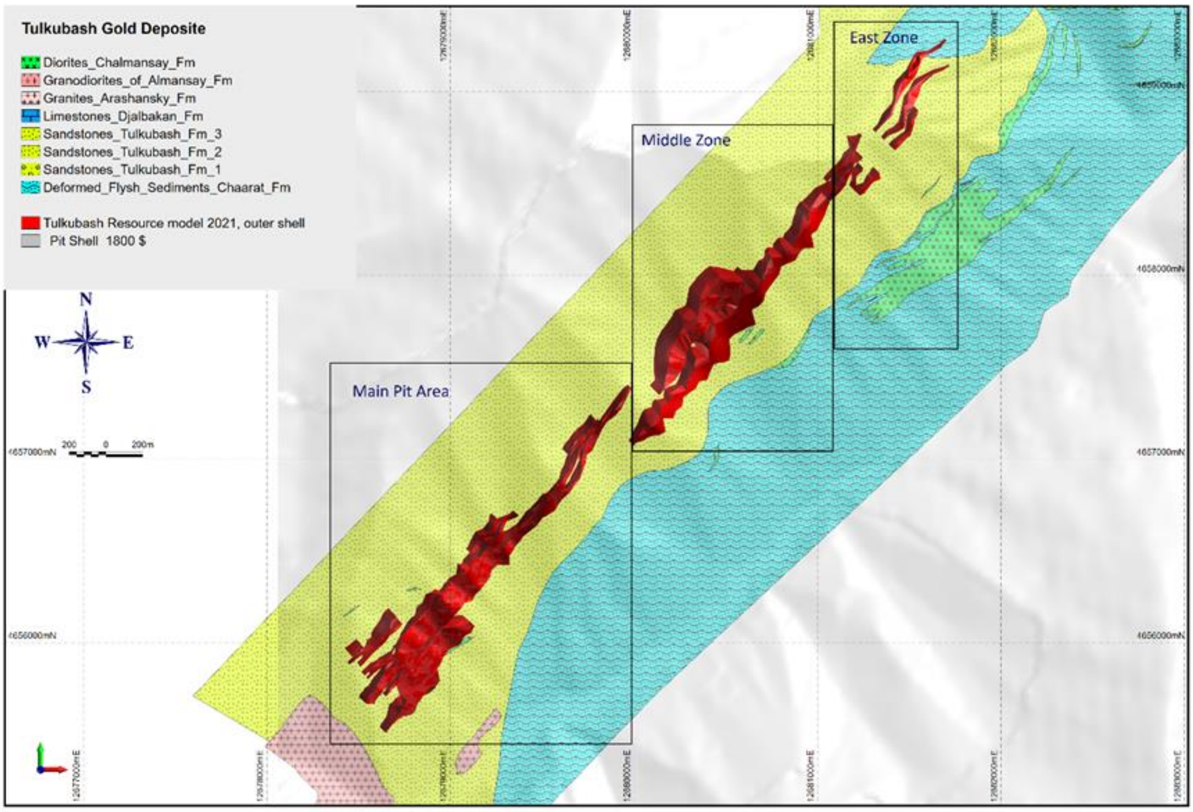


Figure 23 Tulkubash zones, plan view

5 DRILLING AND TRENCHES

5.1 Drilling in 2005-2021 period

A total of 708 diamond drilling holes totalling 99,972 metres and 21 RC holes totalling 2,434 metres were completed in the period between 2005 and 2020, table 6.

Type of drilling			2005	2006	2007	2009	2010	2011	2012	2013
Length	m	DD	150,6	1393,6	2374,8	802,6	4271,8	15984,2	6842	1781,2
Drill Holes	pcs	DD	1	7	12	5	37	128	39	14
Length	m	RC	na	na	na	na	na	Na	na	na
Drill Holes	pcs	RC	na	na	na	na	na	Na	na	na

Type of drilling			2014	2016	2017	2018	2019	2020	2021	Total
Length	m	DD	5813,6	1185,8	17420,4	19934,8	19256,7	0	2760,3	99972,4
Drill Holes	pcs	DD	48	12	135	122	124	0	24	708
Length	m	RC	na	na	na	na	na	2434,3	na	2434,3
Drill Holes	pcs	RC	na	na	na	na	na	21	na	21

Table 6 Tulkubash drill holes for the period 2005 - 2021

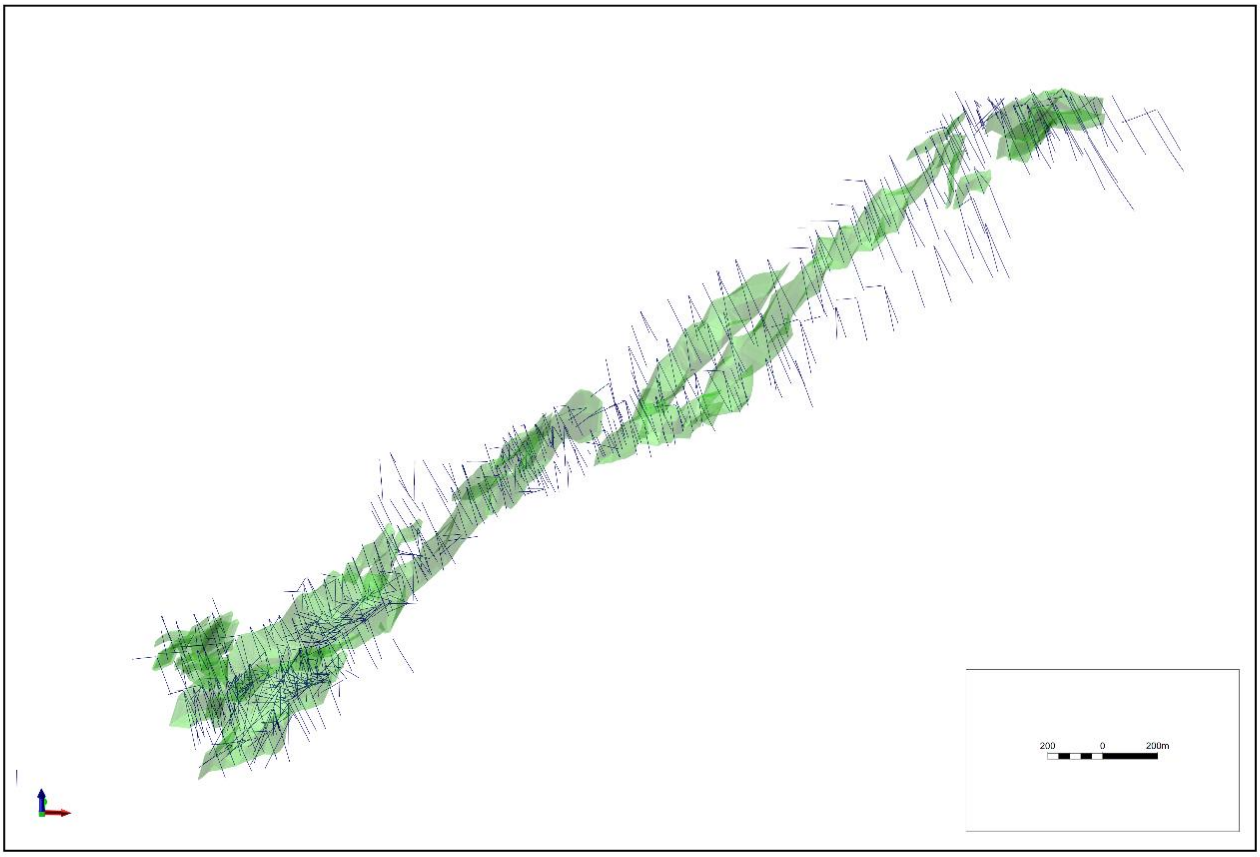


Figure 24 Tulkubash Drilling and mineralized wireframes

Figure 25 Tulkubash diamond drilling 2021 and RC drilling at 2020

5.2 Down- hole Survey methodology

All diamond drilling holes have been downhole surveyed, recently via Reflex EZ shot ™ electronic single shot down hole survey equipment. The RC survey was made using Auslog DLS W450 survey tool.

5.3 Collar survey methodology

The Tulkubash gold deposit is located using the Pulkovo 1942 / Zone 12 coordinate system. Lecia total station with centimeter accuracy is used for collar location. Positive (+5) degrees magnetic declination is taken into account in the Property area

5.4 Tulkubash 2021 drilling campaign

The last drilling campaign was implemented between June and September 2021 and included a variety of activities. These can be summarized as follows:

- 24 infill diamond drill holes, with a total length of 2,760.3m, aiming to upgrade the last available MRE 2020, particularly in the Middle and East zones
- 13 geotechnical, orientated drill holes with a total length of 1,549.9m (12 drill holes were later used for hydrogeological assessment as well) aiming to update the geotechnical and hydrogeological knowledge, and to provide additional numerical data for the Main Pit area
- Surface geological data obtained in 2021 at Tulkubash includes approx. 5,418 m trenching, and 1,180 m of new road cuts, and was used in the process of the MRE update (only for the wireframing process) but excluded from the grade estimation.

5.5 Trenches, dozer cuts and adits

For the period between 2000 and 2021, approximately 16.7 km of trenching and 23 km of roads and profiles have been logged geologically and partly sampled in Tulkubash. The obtained data was used in the process of ore body interpretation but was excluded from the composite samples involved for Resource estimation.

Two adits (251.9m) were built in the Soviet era exploring for antimony. Both adits are currently closed but they were partly used in the early stages of Tulkubash exploration. No assay data from them was included in the current resource estimation.

Figure 26 Tulkubash Trench 21T065 (2021), above the field camp

Figure 27 Tulkubash Adit 2 entrance. Currently closed

6 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, RQD, core recovery
- 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 4.0 software as a base platform
- Photo documentation is done on wet trays, and data is incorporated into the drilling database

Figure 28 Core logging and sampling in the field core shed

6.2 Sample Preparation

- All marked 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
- Half core is packed in a labeled polyethylene bag, weighed, and transported to the "Stewart Assay and Environmental Laboratory" (SAEL) located in Karla Balta
- The average down-hole sample length is 1.5m
- All of the 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 the last drilling campaign was designed to take 1 sample (approx. 10 cm) for each 5 meters. Earlier the approach was 1 sample per each 20 meters. Density sampling was not conducted in areas of intensively fractured materials

Figure 29 Field density sampling

Figure 30 Sample preparation, prior shipment to laboratory

Figure 31 Malovodnoye core shed, near Bishkek

6.3 Assays

- Samples collected from 2007 to 2014 were prepared and assayed at IRC Laboratory in Karla Balta, Kyrgyzstan.
- Samples collected from 2017 to 2019 were prepared and assayed at ALS Global (Kara Balta), and referee check samples were sent to SGS Vostok Limited (Chita, Russa)
- 2020 (RC drilling) and 2021 campaigns were prepared and assayed by Steward Assay and Environmental Laboratories LLC (Kara Balta, Kyrgyzstan). SGS (Chita, Russia) was used for an external control laboratory for the 2021 campaign
- 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 including:
    - 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)
- Lower detection limit for Au is 0.05ppm and for Ag is 1ppm

6.4 Database

- The field data is compiled on the site and further combined, verified, and stored in AGR 4.0 database platform and in Excel spread sheets.
- The access and the editing permissions of the database are restricted to only authorized company staff
- The database used for the Mineral Resource update report has been previously audited by Gustavson and Associates (2014), by GeoSystems International (2018), by Sound Mining (2019) and by IGT (2020)

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, core logging and sampling, assaying, core storage and database management meet the best industry standards, and are considered representative for Mineral Resource Estimation.

7 METALLURGY AND RECOVERY MODELS

The 2021 recovery model adopted the 2020 recovery model developed by Joe Hirst (BSc, MSc, FGS, CGeol) and modified it based on new data and improved understanding of the sulphide contact.

7.1 Recovery Model 2020

The Tulkubash resource is an oxidized gold deposit that will be exploited by open pit mining followed by crushing and stacking the ore onto a heap leach pad. Leaching will be a standard cyanide solution irrigation followed by ADR processing to recover the gold.

- During the Tulkubash exploration, attention was paid to the recoverability of gold and silver, and the understanding of the key driving factors on recovery along with the geological understanding of the deposit. The crackled nature of the Tulkubash breccia 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.
- Four oxidation states are observed and coded in the geological logging process based on a semi quantitative assessment of the sulphide weathering and oxidation level. In general terms, the greater the iron staining observed, the higher the code recorded where 0 = unoxidized rock and 3 = completely weathered rock.
- Bottle roll leach tests were used to develop a database of recovery information in addition to the normal assay data. Hot cyanide solution shake test was also carried out on most of regular core sample as well.
- The extraction data was matched to the drill hole samples to predict recovery. This allows gold extraction to be correlated with a number of different geological parameters. The two parameters which have been considered to offer the best basis to predict gold recovery were “% total Sulphur” and “oxidation state”. Sulphur is highly correlated with recovery but produces poor recovery estimates. Oxidation is poorly correlated with recovery but produces good recovery estimates.
- A total of 78 metallurgical composites comprised of 991 individual samples were used in this analysis.
- This exercise allowed the Chaarat geological team to confirm that the influence of the oxidation state on gold recovery is the major driving factor on recovery. This confirmation enabled the team to fully develop a working recovery model based on oxidation states rather than Sulphur correlation, which would be the case for more normally weathered oxide deposit.

- Micromine ™ software was used to define two domains using the oxidation states from the DH sample data. These are a "Sulphide domain" based on Oxide code "0" and a "Mixed Oxide domain" based on Oxide codes 0, 1, 2, and 3. By separating the unoxidized material into its own domain, the very low extraction for this material does not influence the higher estimated extraction in the mixed domain:

Domain	Average of Extraction (%)
Sulphide	11.9
Ox 0	62.90
Ox 1	66.24
Ox 2	74.71
Ox 3	77.67

Table 7 Tulkubash average Au extraction per oxidation state

Program	Year	Samples	Composites	Composite (% of total)
WAI	2017	135	8(1)	10
MLI	2018	640	48	62
SAEL	2019	216	22	28
Total		991	78	

(1) WAI program tested 24 composites, only 8 were deemed representative to heap leach feed

Table 8 Tulkubash metallurgical sampling campaigns and metallurgical composites

7.2 2021 Recovery Estimation

The 2021 updated recovery model and recovery estimation is based on new data and improved understanding of the oxidation factors, and modelling of the sulphide contact zone.

7.2.1 Recovery Drivers

7.2.1.1 Total % Sulphur

MLI and WAI test work showed that in general, material with total Sulphur of more than 0.5% exhibits extractions of less than 50%. Results indicate a mathematical relationship between % Total Sulphur and bottle roll extractions as shown in Figure 32. However, modelling based on this relationship invariably returns extraction estimates which do not reflect the test data.

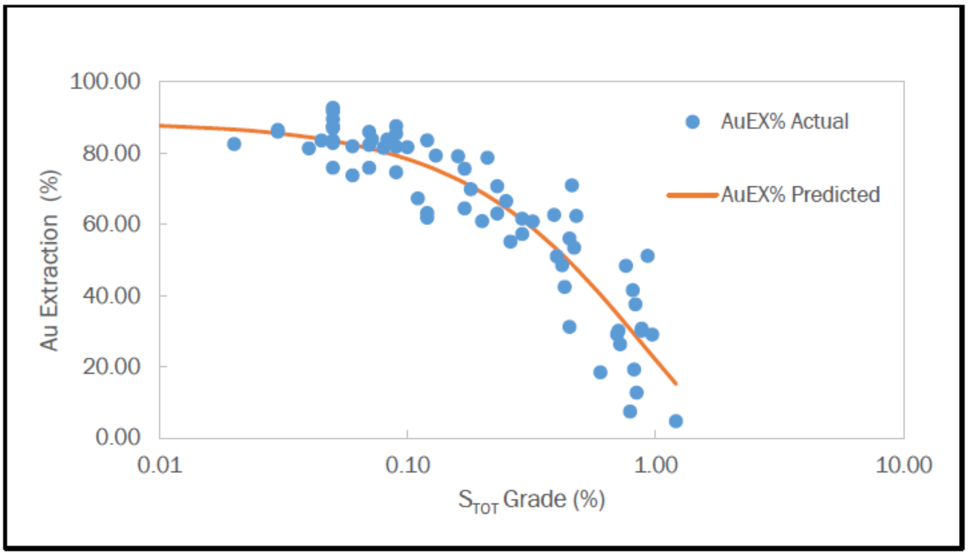


Figure 32 MLI – Gold Extraction vs % Total Sulphur

7.2.1.2 Oxidation

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 is notwithstanding the absence of an identified mathematical correlation between oxidation state and extraction. The results of the metallurgical tests support this hypothesis which shows that as the observed degree of oxidation, indicated by the oxidation state, increases, so does the average gold extraction.

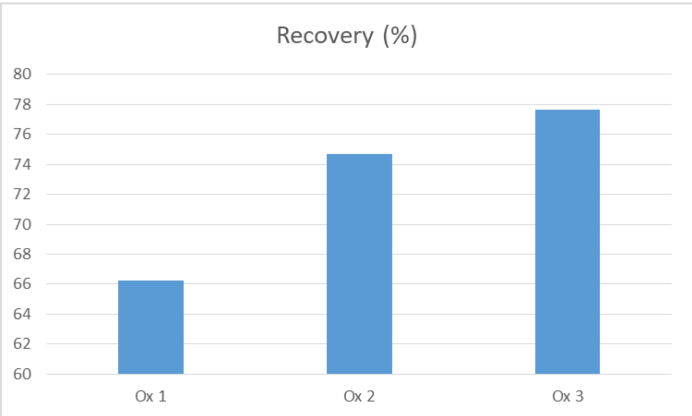


Figure 33 Gold extraction per oxidation stage

All the oxidation states exhibit a broad range of values. This is due, in part, to the qualitative nature of the oxidation state assessment, to the assignment of the same extraction to all samples in mixed composites, and to other factors as described below.

7.2.1.3 Other Factors

The range of extractions for a given oxidation state indicates that other factors may have a modifying effect on the recovery. These factors may include but are not limited to silicification, mineralogy, grain size, the presence of sulfide Sulphur, fracture density and size, and the deportment of gold.

Additional metallurgical and mineralogical studies would be required to define these other recovery-modifying factors. Such work will help explain why a small number of oxidized samples have poor recovery while other unoxidized and high sulfur samples prove leachable. This understanding will enhance grade control effectiveness but will not have a material effect on the overall estimated recovery. This work will be carried out during the operational phase of Tulkubash.

7.2.2 Recovery Modelling

Based on the above, the premise for the modelling of recovery on a block-by-block basis consisted of the following:

- Oxidation is the primary driver of leachability
- The degree of oxidation can be distinguished qualitatively, not quantitatively
- Oxidation intensity for samples based on oxidation code can be related to bottle roll extraction results
- Oxidation states in the deposit are mixed making traditional domaining impractical
- Sample data is representative of potential ore in the deposit

This approach to modelling acknowledges that there is no identified correlation between oxidation and extraction in the data, but oxidation of gold associated with sulphide mineralization is essential for heap leaching to be possible.

7.2.2.1 Oxide Boundary Modelling

Unoxidized composites and composites with very low extractions (< 15%) were used to define the boundary between the oxide (heap leachable) zones in the upper parts of the deposit and the un-weathered sulfide (refractory) below. The process was automated using Leap Frog TM and Micromine TM software.

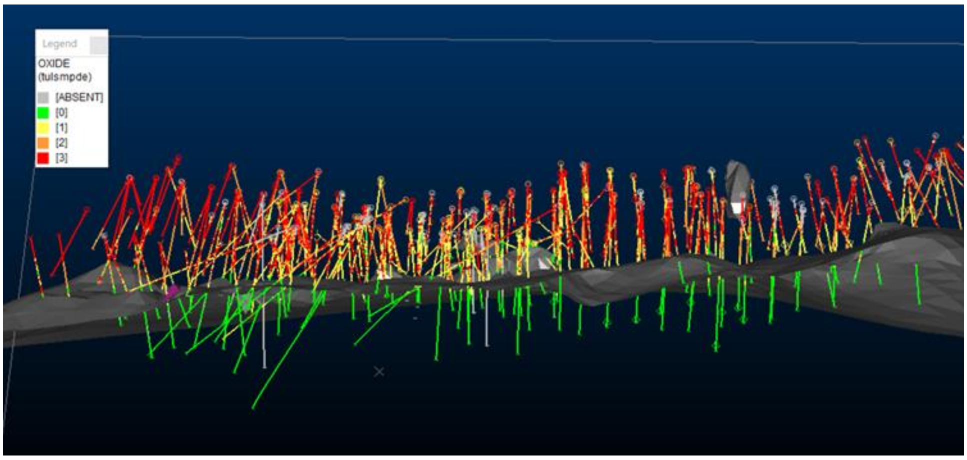


Figure 34 Oxide-Sulphide Boundary with Drill holes showing the oxidation state

Figure 34 shows how oxide states for drillhole samples were used to define the oxide-sulphide boundary. Blocks below the sulphide boundary were assigned the average extraction achieved for refractory material during test work, 11.9%.

7.2.2.2 Oxide Domains

The mixed nature of the material in the upper oxidized zone made it impractical to define “hard” boundaries for potentially leachable material. Instead, a simple indicator-type methodology was applied. Each sample in the same oxidation class was assigned the average extraction for that oxidation state. For example, if the mean extraction for Ox2 was 74.71%, every Ox2 sample was assigned an extraction of 74.71%.

7.2.3 Estimation

Once average extractions were assigned to samples based on oxidation state, recovery was estimated for each block in the model using the assigned values as source data and an inverse distance weighting squared (IDW2) method.

The results of the recovery modelling compare favourably with the average extraction from the source data. The weighted average sample extraction for oxidation states Ox1, Ox2, and Ox3 was 75.2% while the average estimated block recovery (open pit constrained and COG 0.21 Au ppm applied) is 73.3%

Examples of the Tulkubash oxidation states and differentiated Unoxidized and Oxidized domaining and the 2021 variable recovery block model is seen in figures 35 to 37 below.

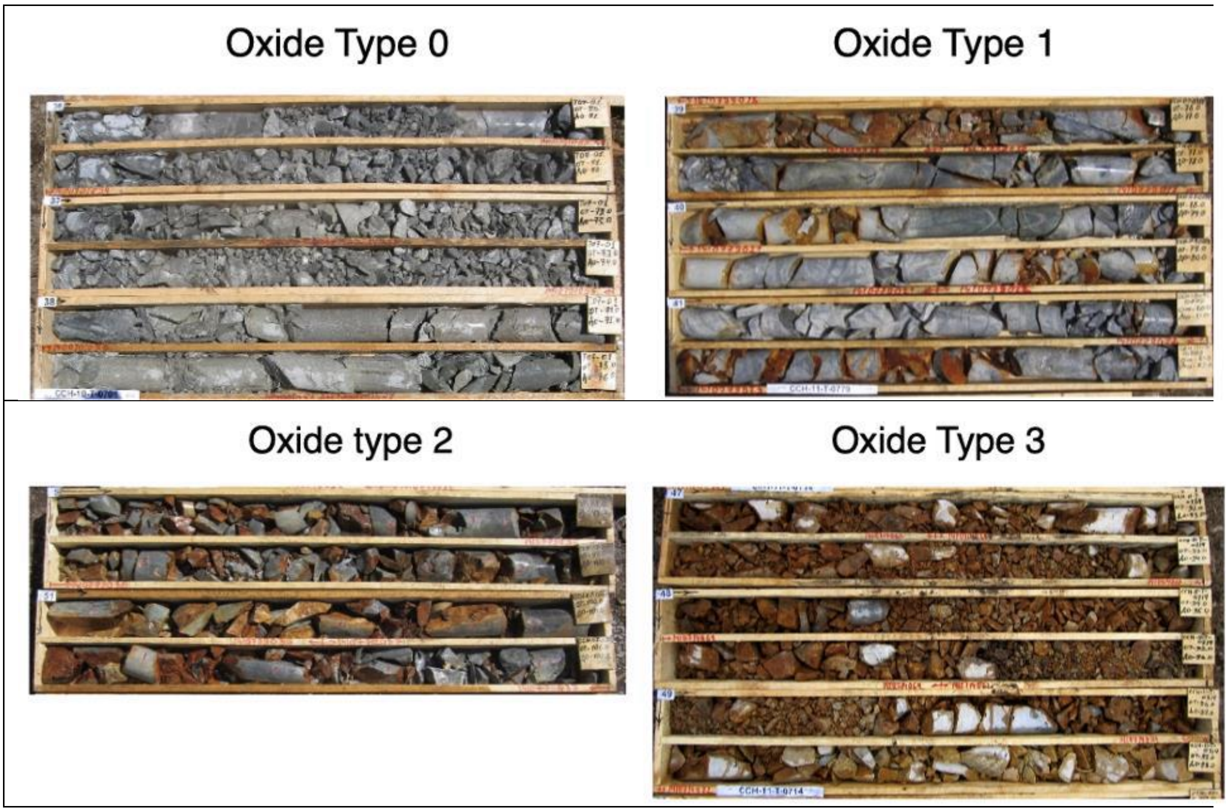
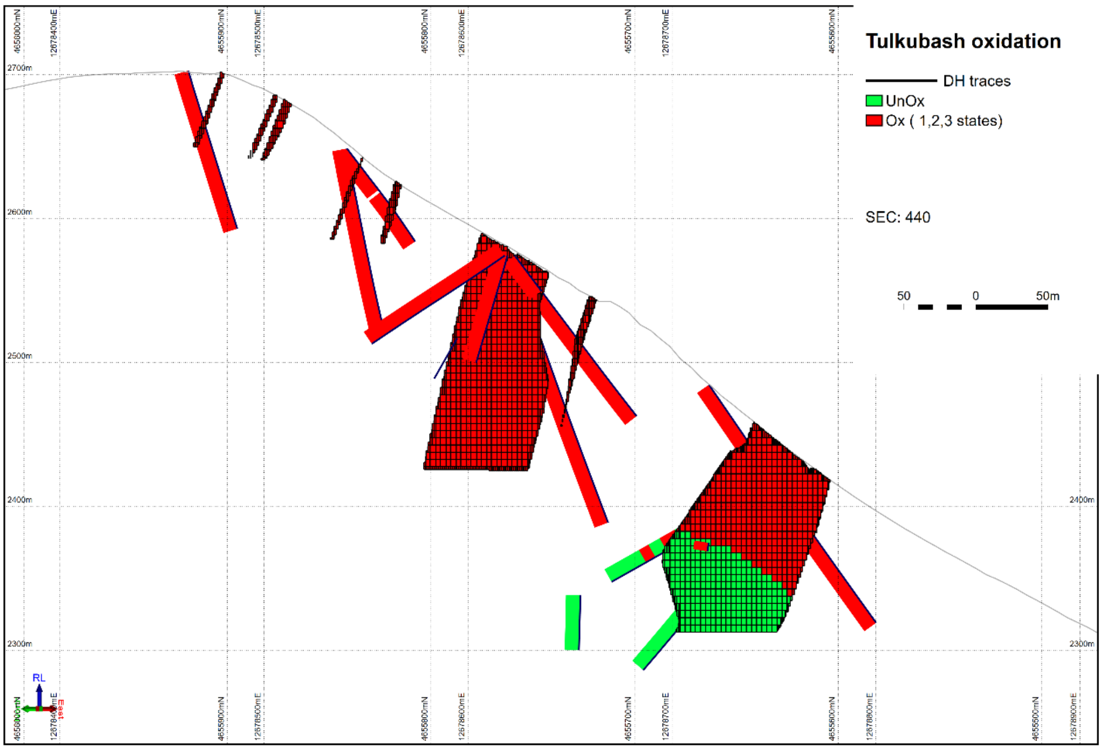


Figure 35 Tulkubash Oxidation Stages (States)



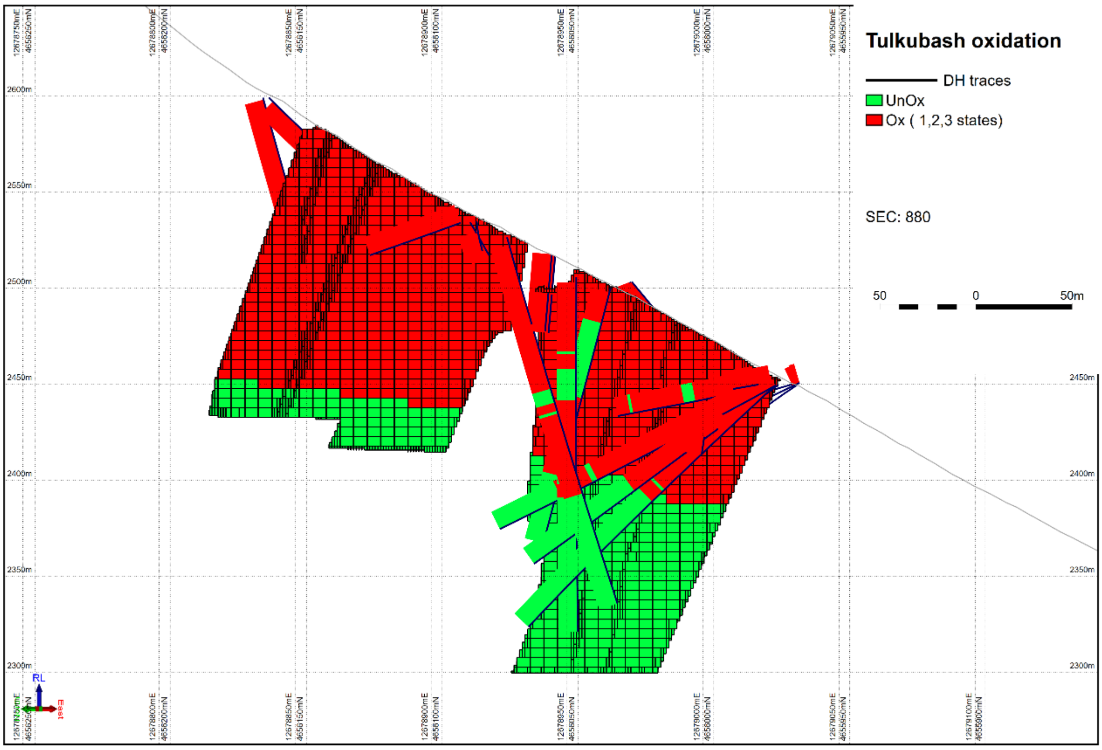


Figure 36 Tulkubash oxidation domains, typical cross sections

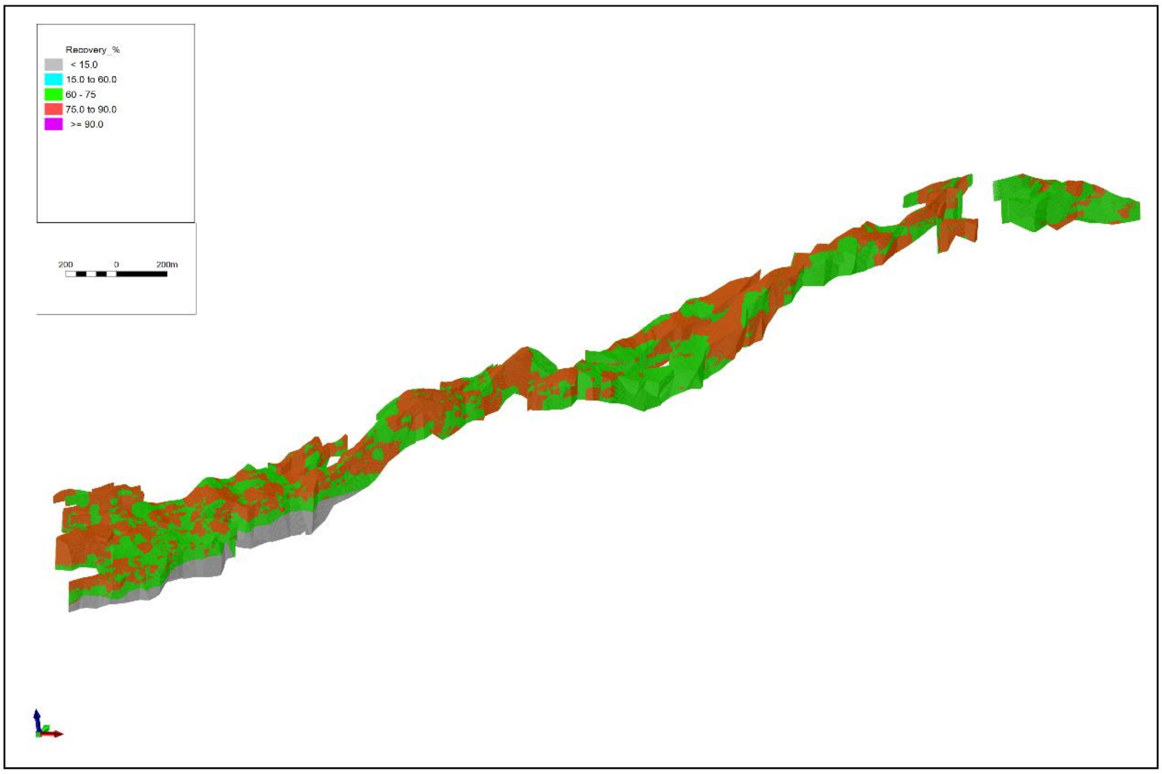


Figure 37 Recovery block model

The obtained average recoveries in the 2021 recovery model as per constrained resource and excluding the Unoxidized (sulphide) domain are shown below in table 11, distributed by zones and resource class.

Recovery Au (%)	Class	Zone
71.91	Indicated	Main_Pit
75.97	Indicated	East_zone
75.01	Indicated	Mid_zone
74.47	Inferred	Main_Pit
75.49	Inferred	East_one
76.14	Inferred	Mid_zone

Table 11 Obtained average recoveries on the pit shell constrained resource, cut-off 0.21 ppm Au

7.3 Conclusions

The bottom of the main pit area returned reduced gold recovery due to the solid Unoxidized domain in the zone. Excluding this low recovery domain from the constrained resource has almost entirely eliminated that effect. The obtained average results in the constrained Resource are between 71 and 76 %, with an average of 72.32% for the Indicated resource. This is considered to be representative and corresponding with the average gold extraction from the historical leaching tests.

It is the CP's opinion that the 2021 recovery model is a reliable and reasonable way to predict and estimate the gold recovery within the current resource model.

8 QUALITY ASSURANCE AND QUALITY CONTROL

8.1 Introduction

Chaarat has sufficient and well-organized Quality Assurance and Quality Control (QAQC) data available for all the Property areas and activities caried out between 2005 to 2021, including more than 17,000 QAQC samples. Both the drilling and the surface workings have been regularly verified by different QAQC approaches as implementation including certified reference material (CRM or Standards), blank material, pulp and coarse duplicates, field duplicates applied in 2021, and external control sampling and testing in different independent laboratories. The QAQC scheme has some variations over the years and currently represents approximately 10 % QA/QC samples from all the regular samples. The laboratories used by Chaarat for regular assaying and QAQC assays are as follows:

Cod	Laboratory name	Location	Notes	Period
IRC	Information Research Center LTD	Kara Balta, Kyrgyz Republic		from 2008
CSRL	The Central Scientific Research Laboratory	Kara Balta, Kyrgyz Republic		2004-2008
ALS	ALEX STEWART ASSAY AND ENVIRONMENTAL LABORATORIES LTD	Kara Balta, Kyrgyz Republic	Same laboratory under different names	
SAEL	Stewart Assay and Environmental Laboratories LLC	Kara Balta, Kyrgyz Republic		from 2019
GA	Genalysis Laboratory Services PTY LTD	Australia	external control	2004-2014
SGS	SGS Vostok Limited	Chita, Russia	external control	2018-2021

Table 9 Chaarat laboratories for regular assaying

8.2 Tulkubash Drilling QAQC

The scope of this section is presenting the QAQC results constrained only in the drilling data of Tulkubash gold deposit and implemented into the Tulkubash Resource Modelling. The channel samples from trenches, adits and road cuts are used for interpretation but are excluded from the grade interpolation procedures.

The involved standard, blank and duplicate samples average 20% of the total samples, meeting international best practices.

8.2.1 Standards

The Tulkubash drilling CRM includes: 39 unique Certified Reference Material (CRM) assayed in 4 different laboratories through the exploration activities. The frequency of implemented standard samples is 5% of the total samples. The observed results meet international industry standards. The list of standards and some examples of the gold distribution are shown in figures 38 and 39 below.

Descriptive Statistics

File

Selected file standart_Tulk_dh.DAT

Selected field Standart (CHARACTER)

Unique values 39

Records

Total records 2707 Blank Records 0

Filter Filtered Records

Standart	Frequency
OxF14	410
OxD12	409
OxH13	284
SG84	260
SE86	219
OxH14	208
OxD15	161
OxF16	143
SJ80	123
SK93	63
SG31	33
SJ53	33
OxE56	32
SN50	30
SN38	23
SJ39	20
OREAS	20
SN26	19
OxL63	19
OxI54	18
G9002	18
G9011	17

Descriptive Statistics

File

Selected file standart_Tulk_dh.DAT

Selected field LAB (CHARACTER)

Unique values 4

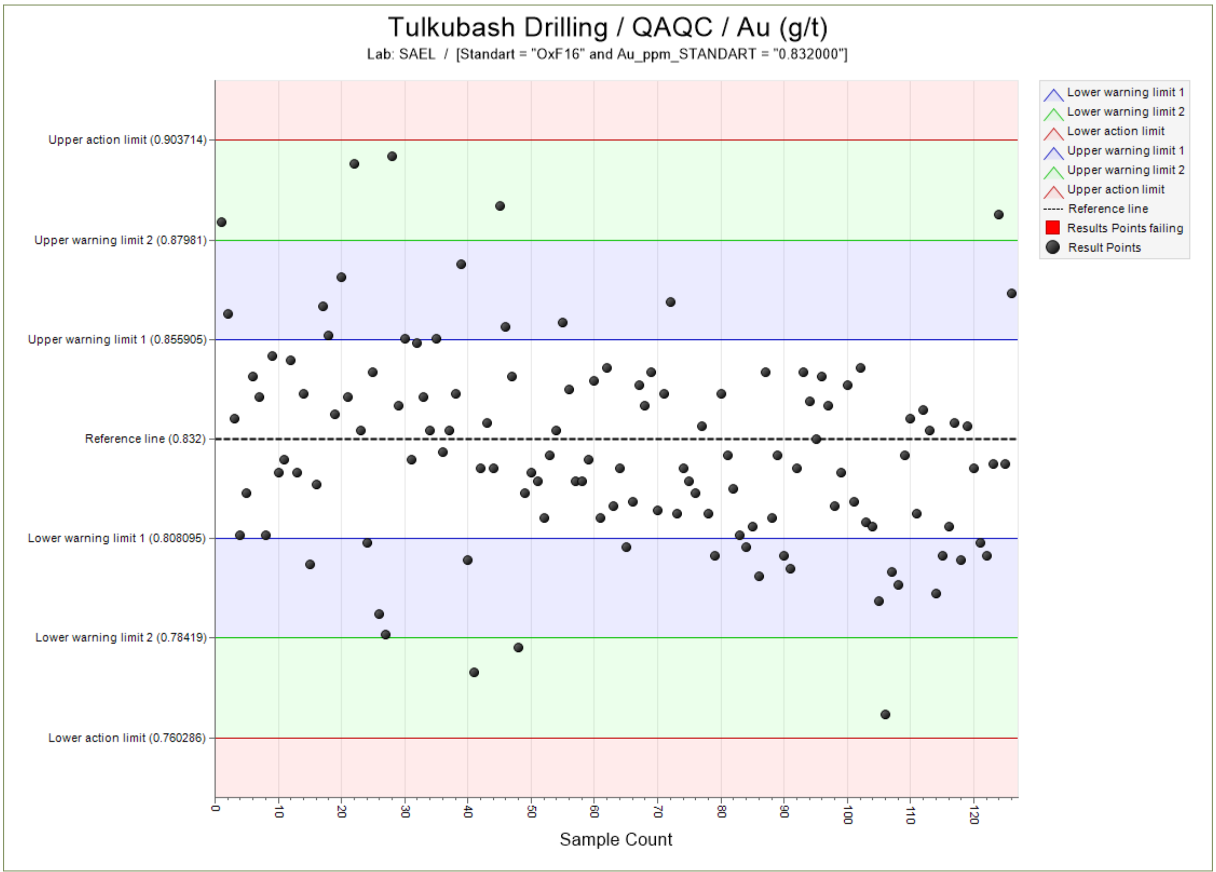
Records

Total records 2707 Blank Records 0

Filter Filtered Records

LAB	Frequency
ALS	1561
SAEL	994
CSRL	118
IRC	34

Figure 38 Tulkubash drilling CRM information



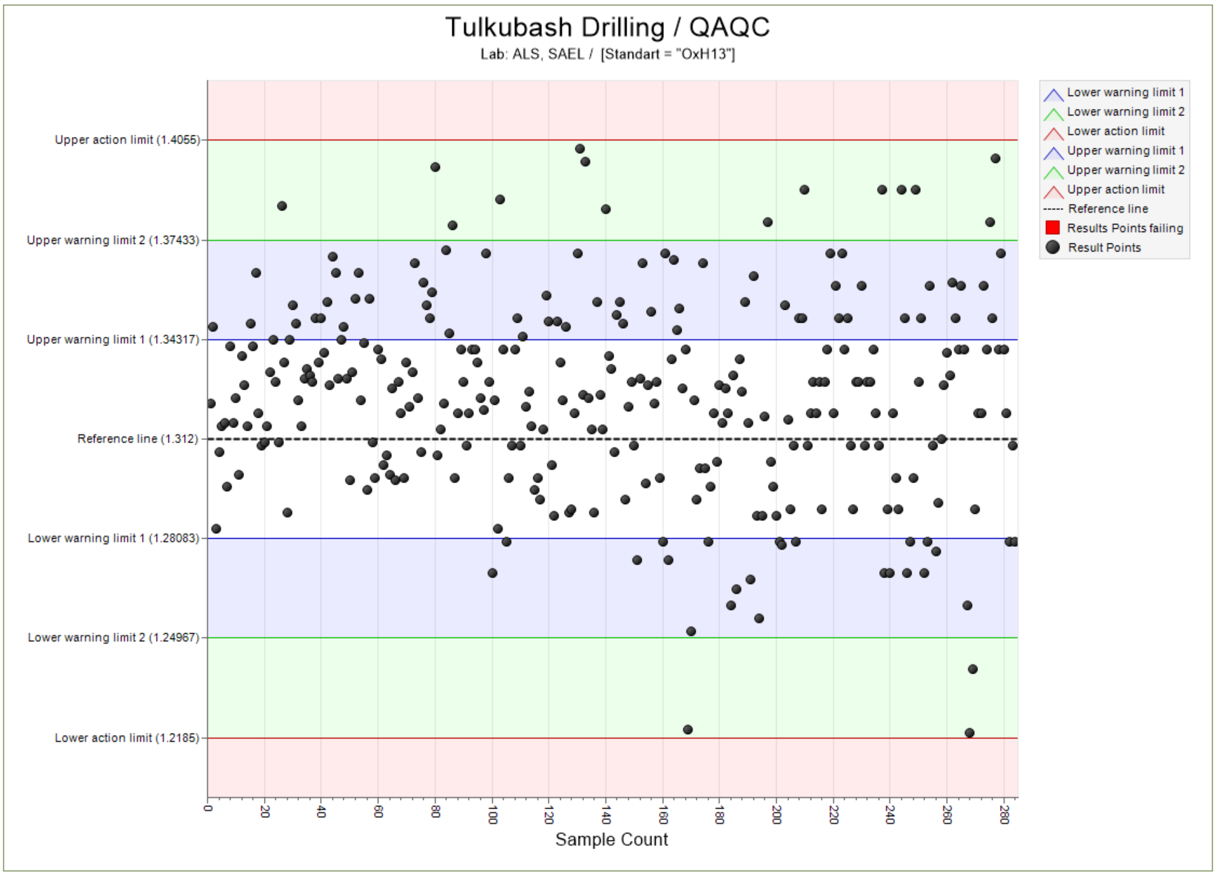


Figure 39 Tulkubash drilling Example CRM plots, Au ppm

8.2.2 Blanks

A total of 2,466 blank samples are available in the Tulkubash drilling database. The observed anomalies above the lower detection limit are less than 1 %. The observed results meet industry standards (fig 40).

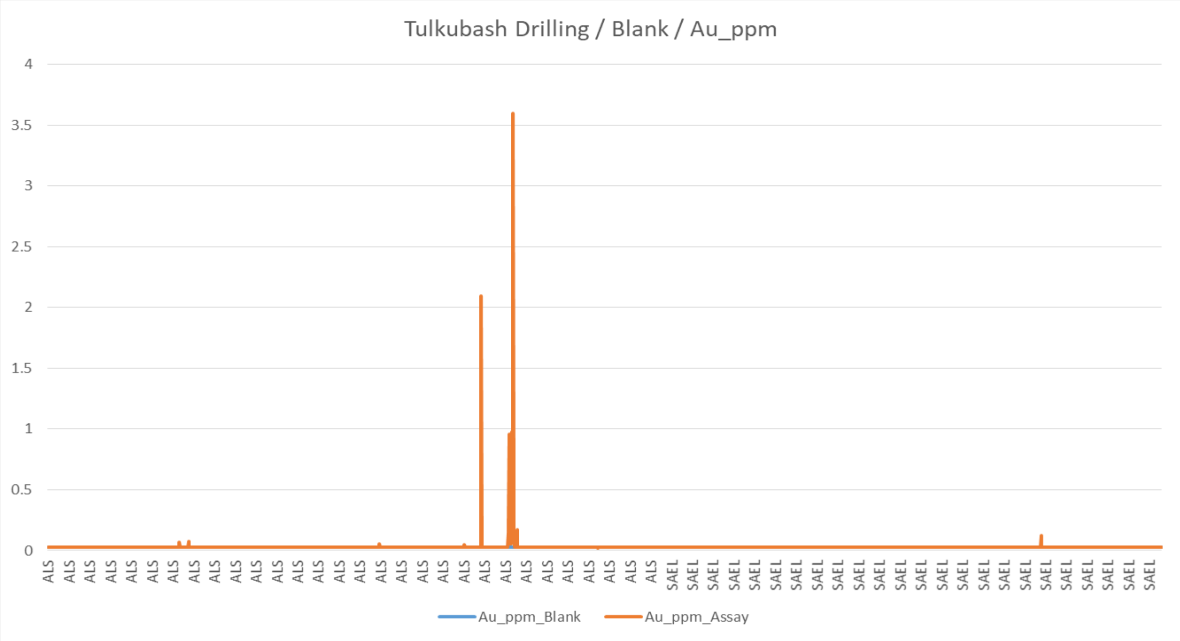


Figure 40 Tulkubash drilling, blank assays, Au ppm

8.2.3 Pulp and Coarse duplicates

More than 9,000 Pulp and Coarse duplicates return reasonable correlation with its parent samples, as represented by a linear distribution trend in the graphics below (figures 41 to 44).

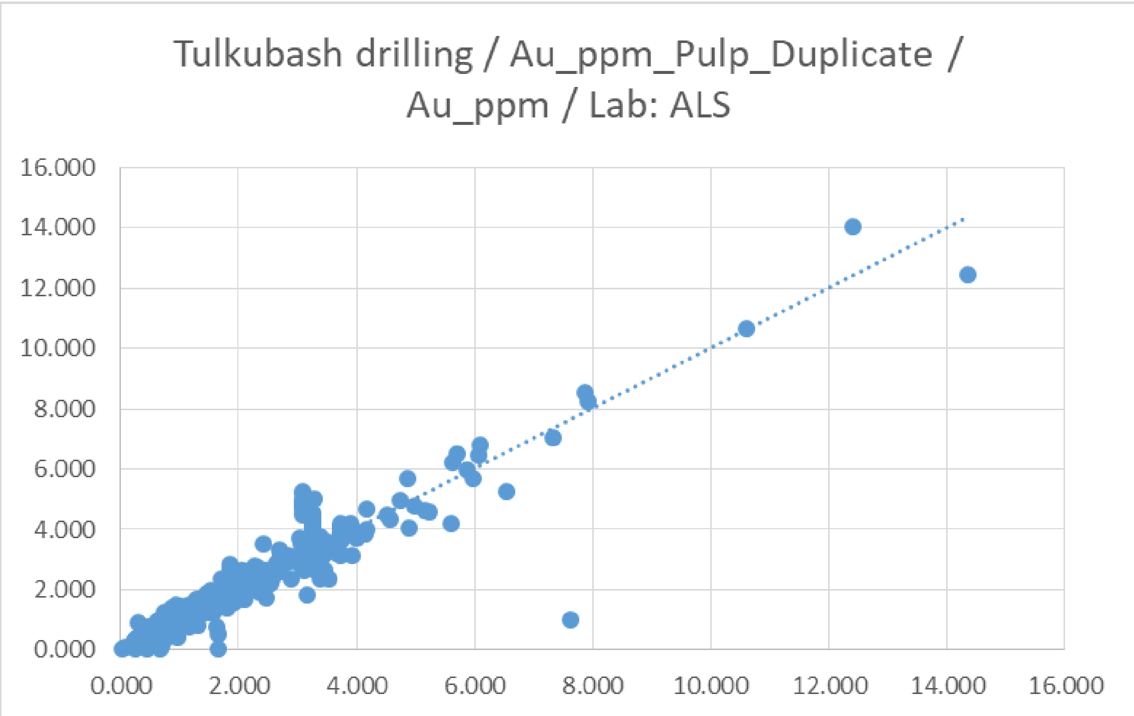


Figure 41 Tulkubash Pulp duplicates, Au ppm

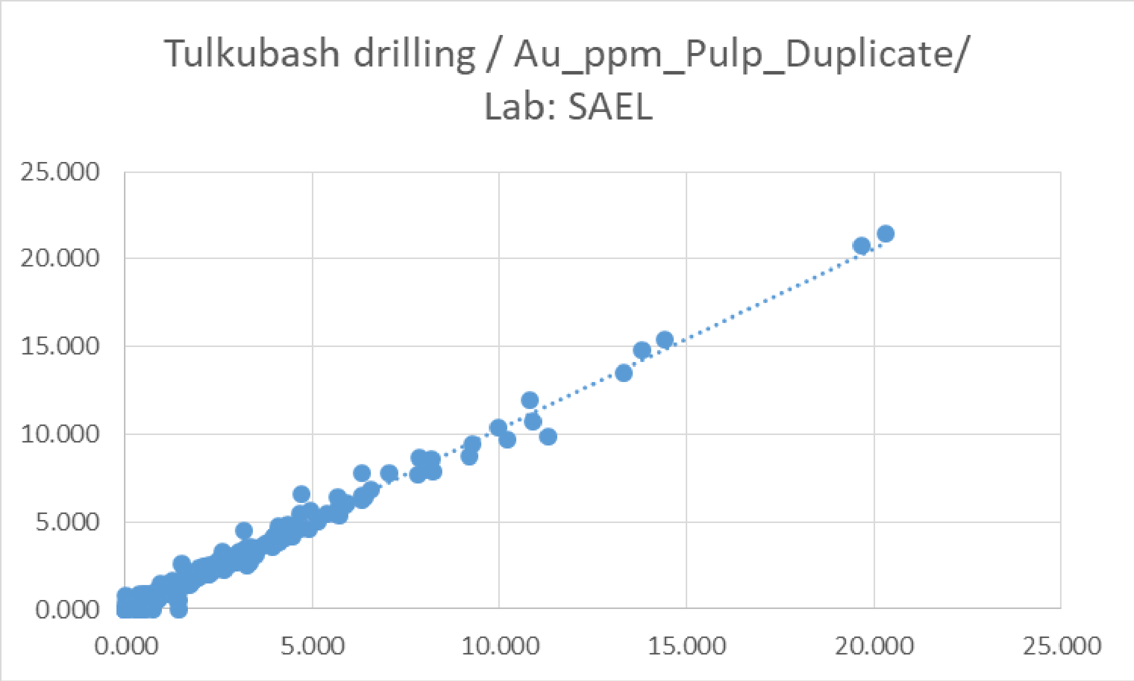


Figure 42 Tulkubash Pulp duplicates, Au ppm

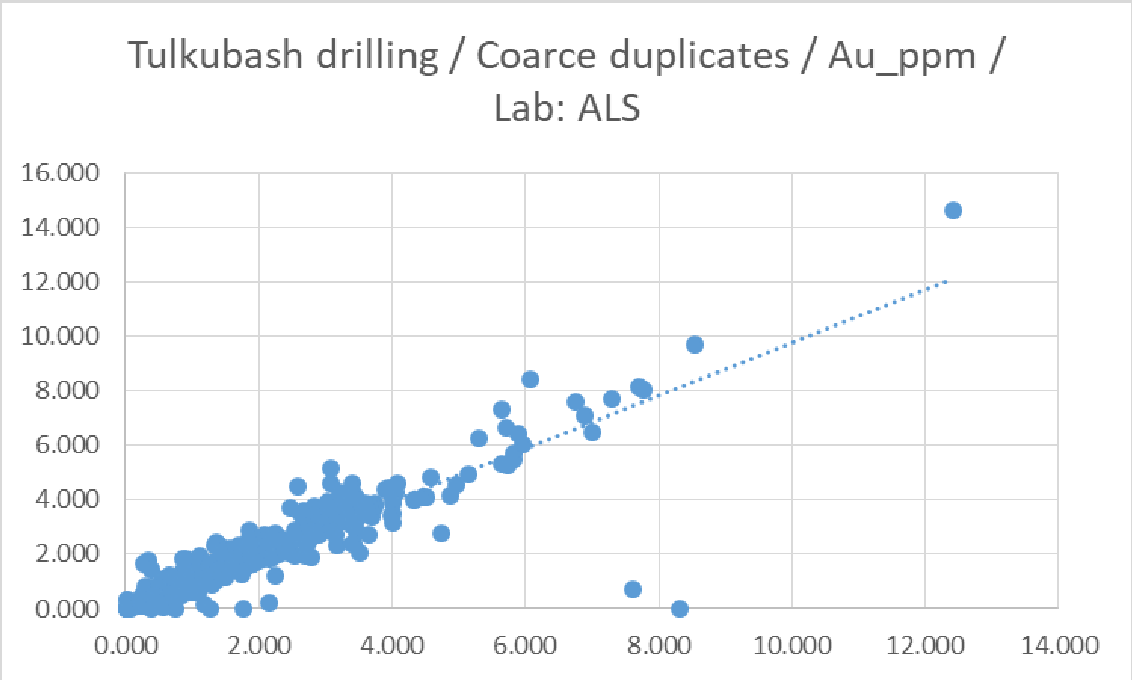


Figure 43 Tulkubash Coarse duplicates, Au ppm

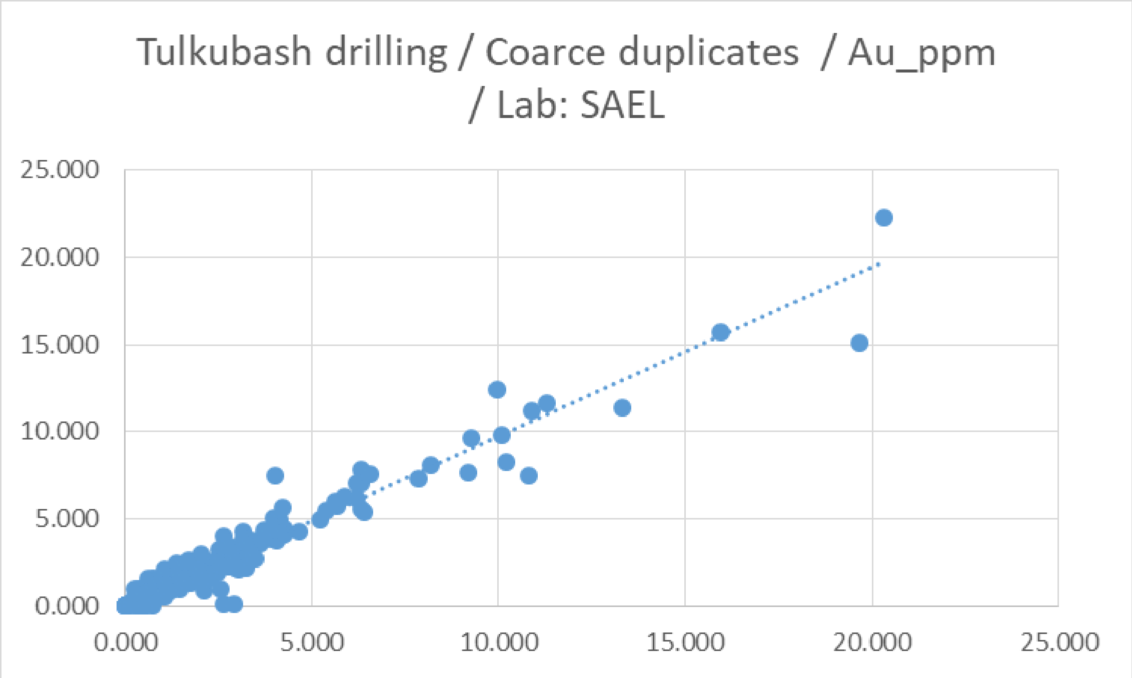


Figure 44 Tulkubash Coarse duplicates, Au ppm

8.2.4 Field Duplicates

Field duplicate samples were incorporated in the Chaarat QAQC scheme in 2021 the first time. A total of 188 field duplicate samples were assayed as quarter core field duplicate of the quarter core parent sample. Overall, the field duplicate samples return a pretty good reproductively for such a highly variable gold deposit as Tulkubash (fig 45).

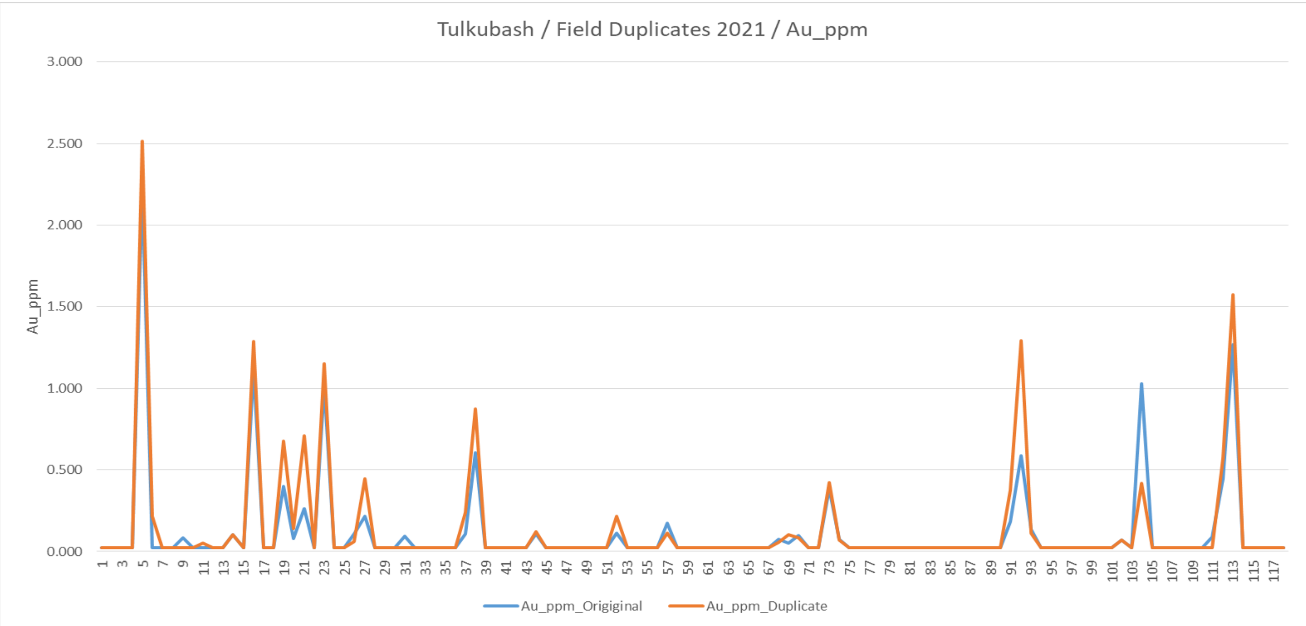


Figure 45 Tulkubash drilling, field duplicate, Au ppm

8.2.5 External Control

More than 850 External Control samples, assayed in 4 different laboratories show reasonable correlation, represented by a linear trend distribution between the original and the external control assay (fig 46).

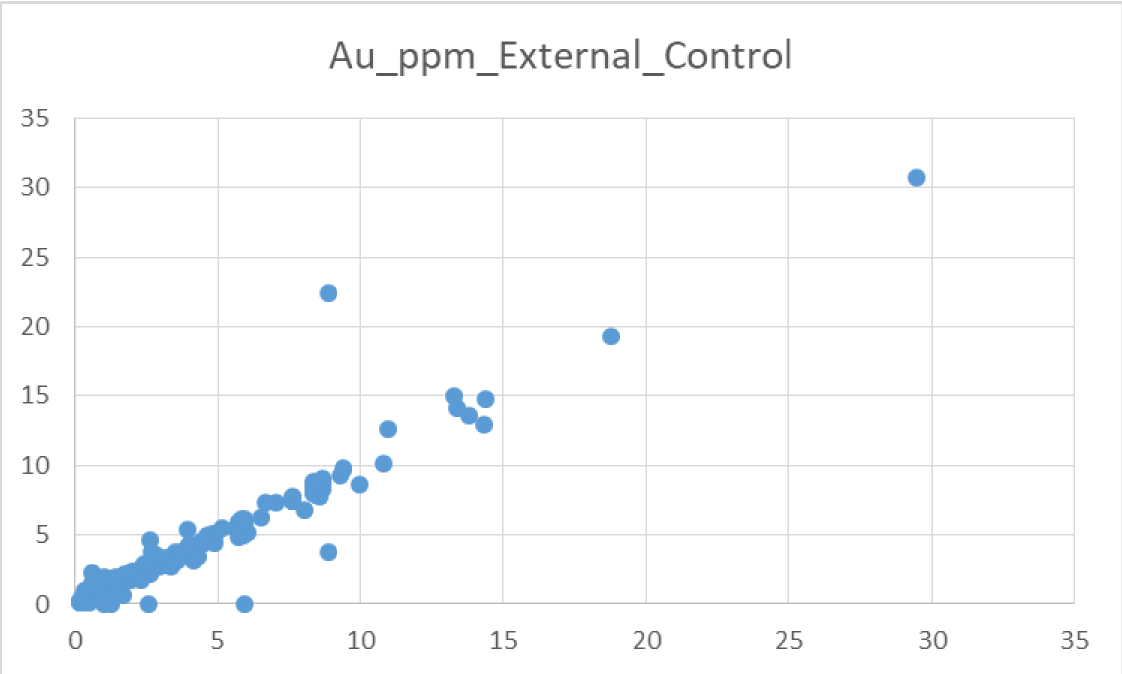


Figure 46 External Control, Au ppm

8.3 Conclusions

The Tulkubash QAQC is considered to be representative and meets best industry standards.

9 MINERAL RESOURCE ESTIMATES

9.1 Historical review

The following independent Mineral Resource estimates and independent audits have been carried out during the period of exploration works at Tulkubash project:

- SRK consulting (Update of Mineral Resource Estimates, for Chaarat Gold Project, Kyrgyzstan, Feb. 2010)
- Wardell Armstrong (Tulkubash Resource Modelling, Apr.2011)
- Gustavson Associates (Chaarat Gold Project Resource Estimation, June 2014)
- GeoSystems International (Mineral Resource Update, Jan.2018)

- Tetra Tech (Competent Person Report for Chaarat Gold Project, Kyzrgyz Republic, Dec.2018)
- Sound Mining (Competent Person's Report on Tulkubash Gold Project, for Chaarat Gold Holdings Limited, Jan 2019)
- LogiProc (Tulkubash Gold Project Bankable Feasibility Study Update Report, Aug.2019)
- Wardell Armstrong (Review of Modelling Estimation and Classification, based on Resource Model, provided by IGT up to June 2020)
- Roscoe Postle Associates Inc. (RPA), part of SLR Consulting (RPA Due Diligence of Tulkubash Resource Model, based on Resource Model provided by IGT)
- Institute of Geotechnologies (IGT) (The Tulkubash Gold Project Mineral Resource Estimate, for Chaarat ZAAV SJSC, Dec. 2020)

9.1.1 MRE 2020 Summary

Institute of Geotechnologies (IGT) was engaged, by Chaarat ZAAV, to complete full Mineral Resource Estimation (MRE_2020) for Tulkubash area;

The IGT 2020 report (here available as: *"The Tulkubash Gold Project Mineral Resource Estimate_November_2020_fin"*) was provided at November 2020 and including all the available data up to this date;

The Mineral Resource Estimate for Tulkubash deposit was prepared in accordance with the Australian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves – The JORC code 2012;

The grades in the final Resource Model were derived, using Ordinary Kriging (OK) interpolation method for Au, and Inverse Distance Weighting (IDW) for density interpolation;

High grade (COG 0.7 ppm) and low grade (COG 0.2 ppm) domains were used for interpretation of the mineralization, in both cases with included internal dilution, where is appropriate, to ensure best grade continuity in accordance with the structural trend of the mineralization;

Both, drill holes (DH) and surface workings were used in the ore zone interpretation process, but in the grade interpolation process the surface workings were excluded;

Low-grade domains are the external shells of Tulkubash Resource model, meanwhile some samples were left outside of the domain, to prevent exaggerated interpretation.

High-grade domains should be within the low-grade domain;

High-grade clusters could be presented in the low-grade domain, but not constrained by high-grade domain, due to lack of sufficient level of confidence for that;

The analysed QAQC approach includes reference material (standards), blank material, pulp duplicates, external control samples sent to other laboratories.

Log probability plots are used to determine the top cuts for each domain separately, showing top capping Au grades between 1ppm up to 12 ppm;

Compositing of 1.5m for all drill holes (except RC drilling 2020, composed on 1m length) was applied;

The block model is not regularized, with parent block size of 5 X 5 X 5m, and applied sub-blocking (1m minimal block size);

Two different variogram models were applied separately, for the low-grade and high-grade domains;

Constant ellipse parameter (40.6 x 18.5 x 27.1), 1 sector, with applied different radii factor, along with different interpolation parameters (6 runs) were used;

Resource classification was undertaken by IGT manually from section to section;

IGT considered that measured Mineral Resources could not be classified for Tulkubash deposit due to insufficient exploration drillhole sample density, but indicated and inferred were outlined;

The total extension of Mineral Resource classification (for inferred) is considered 80m along strike and up to 80m down dip, from the last drill hole;

In the constraining of indicated Resource was used criteria of 40m distance along strike.

Two independent reviews were done on the 2020 Mineral Resource (November 2020) by RPA (part of SLR) and Wardell Armstrong International (“WAI”) (on the July 2020 version), and both found no fatal flaws within the Resource Model. Some opportunities for improvement were outlined in these reports and relate to grade over-smoothing which could be caused by wireframing issues (quite broad domains, containing large amount of internal waste) and insufficient adjustment of the interpolation parameters, including misaligned variography and search ellipsoid orientation;

The constrained Resource 2020 reported by IGT was based on applied fixed recovery of 73.3% along with certain optimisation parameters described below :

c	**Item**	**Unit**	**2020 MRE**
Econ.	Initial Capital Cost	$'000	99,016.42
	Selling Cost	$/oz	9.89
	Royalty	%	18.00
	Discount Rate	%	5.00

Metal Price	Au	$/oz	1,800.00
	Ag	$/oz	21.70
OP. Costs	Mining	$/t mined	1.89
	Extra Ore Mining /Haulage	$/t ore	0.84
	Processing	$/t ore	4.25
	Stacking	$/t ore	0.54
	Owner's Mining Cost	$/t ore	0.34
	G/A	$/t ore	1.27
Other Par.	Recovery Au	%	73.3
	Refining Recovery-Au	%	99.80
	Refining Recovery-Ag	%	60.00
	Internal Cut-off	g/t	0.21
Pit Slopes			Variable by location
Op. Limits	Mining	t/year	27,000,000
	Processing	t/year	5,000,000

Table 10 MRE 2020, pit optimization parameters

The MRE 2020 pit shell constrained resource is tabulated below in table 11.

Resource	COG: Au_ppm	Density g/cm3	Mt	Au_ppm	Class	Koz_Au
MRE_2020	0.21	2.67	28.505	0.86	indicated	789
MRE_2020	0.21	2.59	21.412	0.56	inferred	388

Table 11 MRE 2020

9.2 Mineral Resource Update 2021

9.2.1 Common Assumptions

The 2021 infill drilling conducted at the Tulkubash Central and East zones provided the basis for the current Resource update. The MRE adopted the IGT wireframes and modified them based on new data and an improved understanding of the deposit

- The approaches applied to the MRE and described below are consistent overall with MRE 2020 (IGT) methodology to provide a single coherent Resource Model updated with the last available drilling results. In this regard no significant changes were made in the ore domains modelling, although in the areas where new data is available certain modifications were applied.

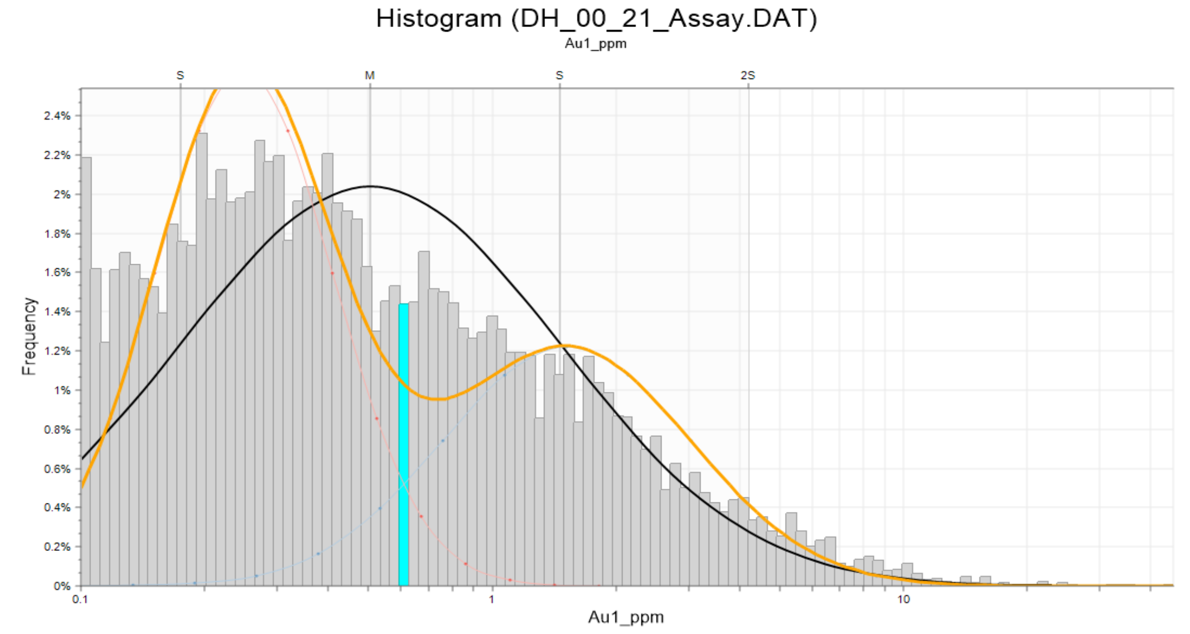
- New resource classification wireframing was implemented in the current work considering the recent drilling results in Central and East areas. The 2021 resource model is consistent with the 2020 model except where new data, methodologies, or interpretations dictated adjustment.
- The grade and density interpolation were updated over the entire resource model, supported by new geostatistical modelling, including: variography; top-capping; interpolation parameters.
- A new recovery model was developed and applied to the resource block model (described in detail in section 8 of this report).

9.2.2 Ore domain modelling

No lithological or well defined and continued structural controlling features could be outlined in the Tulkubash gold deposit. A wide variety of low scale and separated mineralisation clusters, often overlapping between each other make the definition of clear hard contacts of the mineralisation impractical. In this regard, the scope of ore interpretation was to achieve the optimal shape and the trend of the major disseminated mineralisation clusters, taking into account reasonable economical perspective.

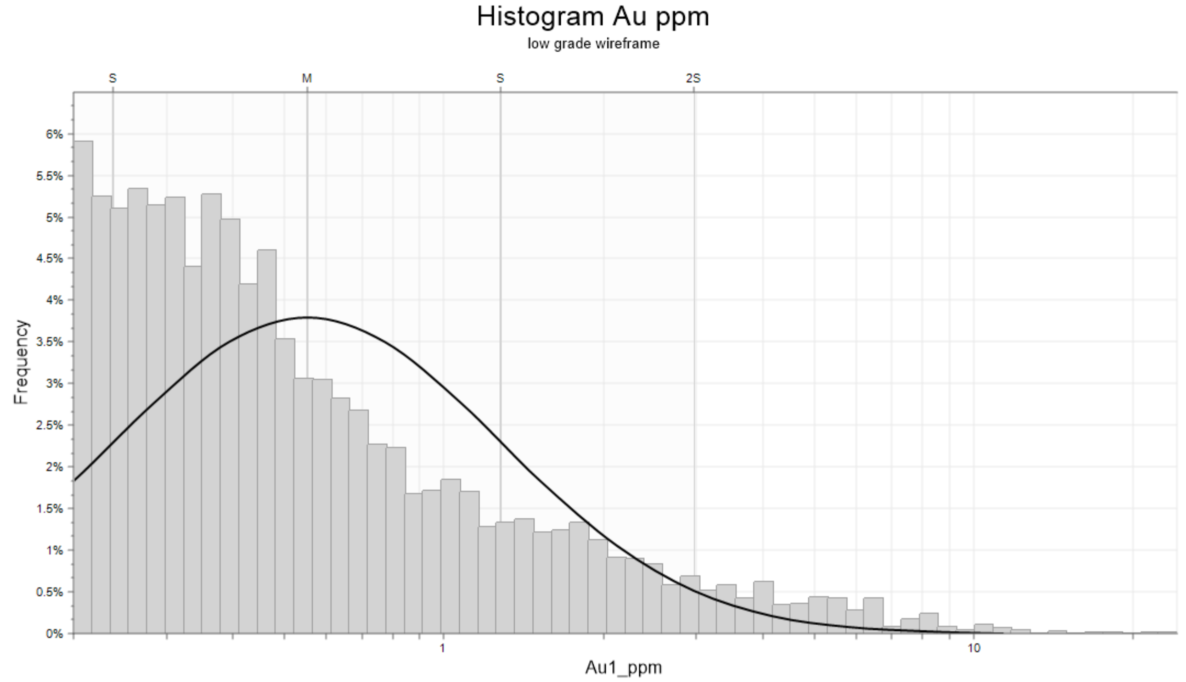
This approach is inherited and consistent with the MRE 2020 methodology provided by IGT.

The visual interpretation of the mineralisation confirmed that a boundary of 0.7 ppm Au could be considered as reasonable separation between low-grade and high-grade domains. Cut-off grade of 0.20 ppm was used as a lower boundary in the process of ore domaining. A total of 24 low grade and 6 high grade wireframes were modelled. The high-grade domains are incorporated within the low-grade domains, which define the boundary of the economic mineralization. Both high- and low-grade wireframes include internal dilution, where appropriate, to ensure reasonable grade continuity in accordance with the overall mineralization trend. The low- and high-grade constrained grades, are showing positive skewness for both, but without obvious signs for mixed populations.



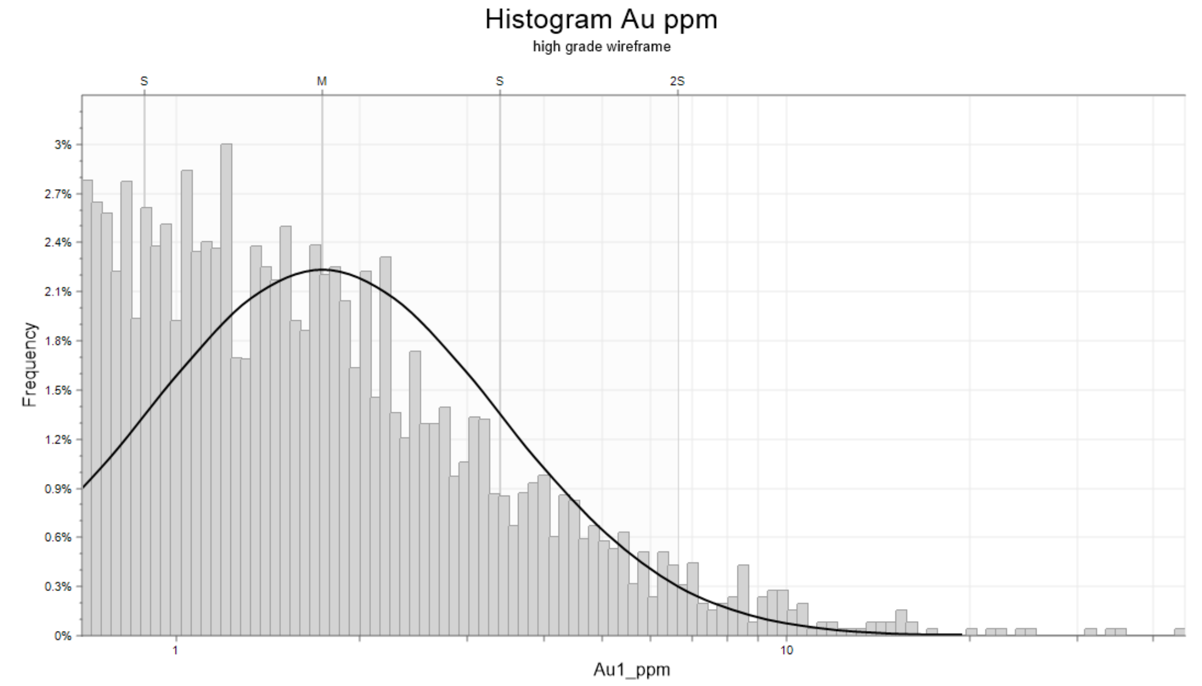
Au1_ppm		Mean	0.969606947	Coeff. of Variation	1.706717155	Sichel's V	1.119944209
Minimum Value	0.100000000	Variance	2.738511348	Median	0.425000000	Sichel's Gamma	1.750582238
Maximum Value	45.002000000	Sum of Weights	19595.150000000	Lognormal Mean	-0.682913475	Experimental Chi²	2697.544
2nd Highest	35.300000000	Weighted Mean	0.971136703	Lognormal Std Deviation	1.058314109	Degrees of Freedom	90
3rd Highest	33.933000000	Weighted Variance	2.754625049	Geometric Mean	0.505143124		
4th Highest	32.150000000	Weighted Std. Dev.	1.659706314	Geometric Std Dev	2.881508981		
N	13248	Standard Deviation	1.654844811	Sichel's Estimator	0.884294581		

Figure 47 Tulkubash, unconstrained Au histogram



Au1_ppm		Mean	0.884934518	Coeff. of Variation	1.504042646	Sichel's V	0.707063530
Minimum Value	0.200000000	Variance	1.771505775	Median	0.438000000	Sichel's Gamma	1.424062185
Maximum Value	24.167000000	Sum of Weights	10068.430000000	Lognormal Mean	-0.594609907	Experimental Chi²	3762.372
2nd Highest	21.400000000	Weighted Mean	0.884957547	Lognormal Std Deviation	0.840932226	Degrees of Freedom	44
3rd Highest	18.095000000	Weighted Variance	1.772428123	Geometric Mean	0.551777769		
4th Highest	17.410000000	Weighted Std. Dev.	1.331325701	Geometric Std Dev	2.318527360		
N	6834	Standard Deviation	1.330979254	Sichel's Estimator	0.785765855		

Figure 48 Tulkubash, low-grade domain Au histogram



Au1_ppm		Mean	2.296797286	Coeff. of Variation	1.124193343	Sichel's V	0.449360330
Minimum Value	0.700000000	Variance	6.666952345	Median	1.531500000	Sichel's Gamma	1.251897687
Maximum Value	45.002000000	Sum of Weights	3825.450000000	Lognormal Mean	0.550288969	Experimental Chi²	1057.837
2nd Highest	35.300000000	Weighted Mean	2.301090233	Lognormal Std Deviation	0.670473796	Degrees of Freedom	69
3rd Highest	33.933000000	Weighted Variance	6.703044441	Geometric Mean	1.733753947		
4th Highest	32.150000000	Weighted Std. Dev.	2.589023839	Geometric Std Dev	1.955163449		
N	2572	Standard Deviation	2.582044218	Sichel's Estimator	2.170482557		

Figure 49 Tulkubash high-grade domain Au histogram

Illustration of the Tulkubash low grade wireframes hosting high grade wireframes is shown on some typical cross sections in figures 50 and 51.

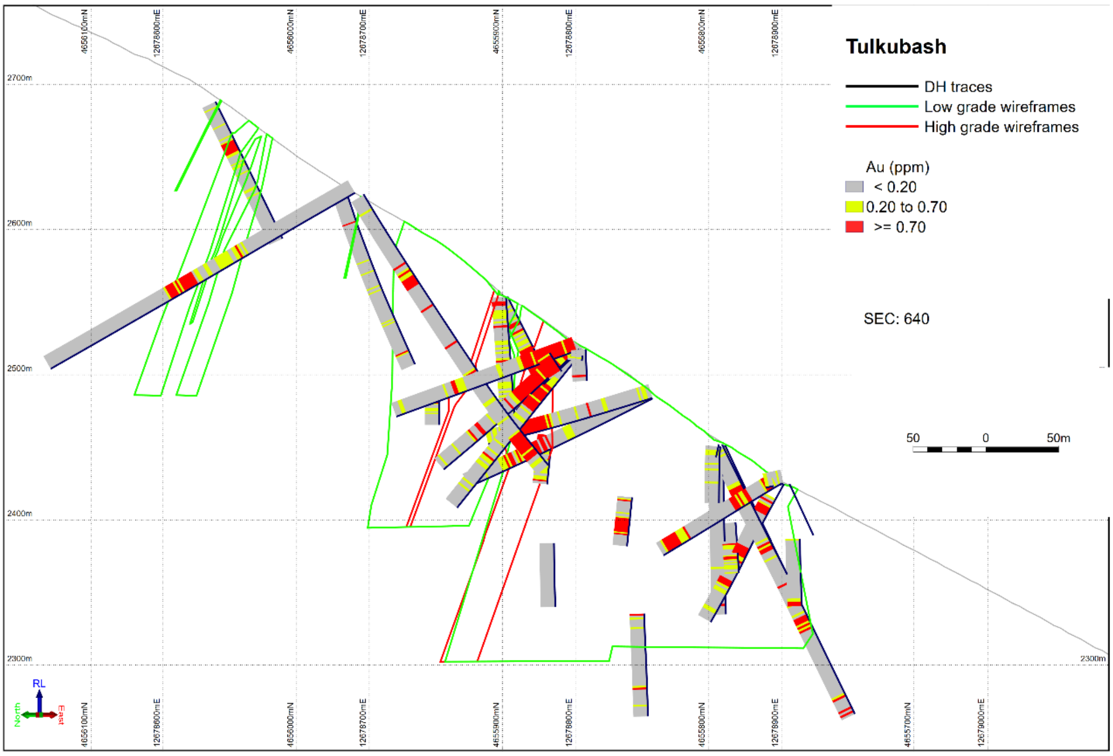


Figure 50 Ore wireframes, Sections 640

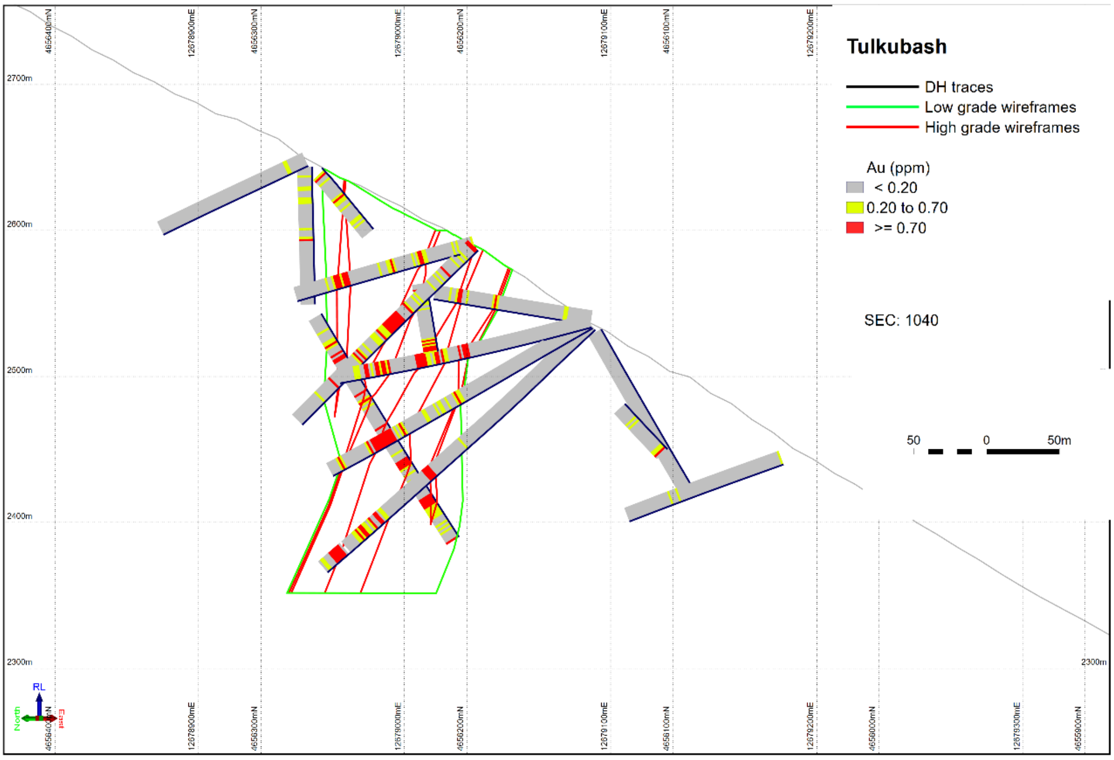


Figure 51 Ore wireframes, Sections 1040

The 2020 wireframes were adopted, updated and modified with the 2021 data as seen below on figures 52 and 53. The 2021 drill holes are shown in green and modified wireframes in blue compared to the 2020 ones in black.

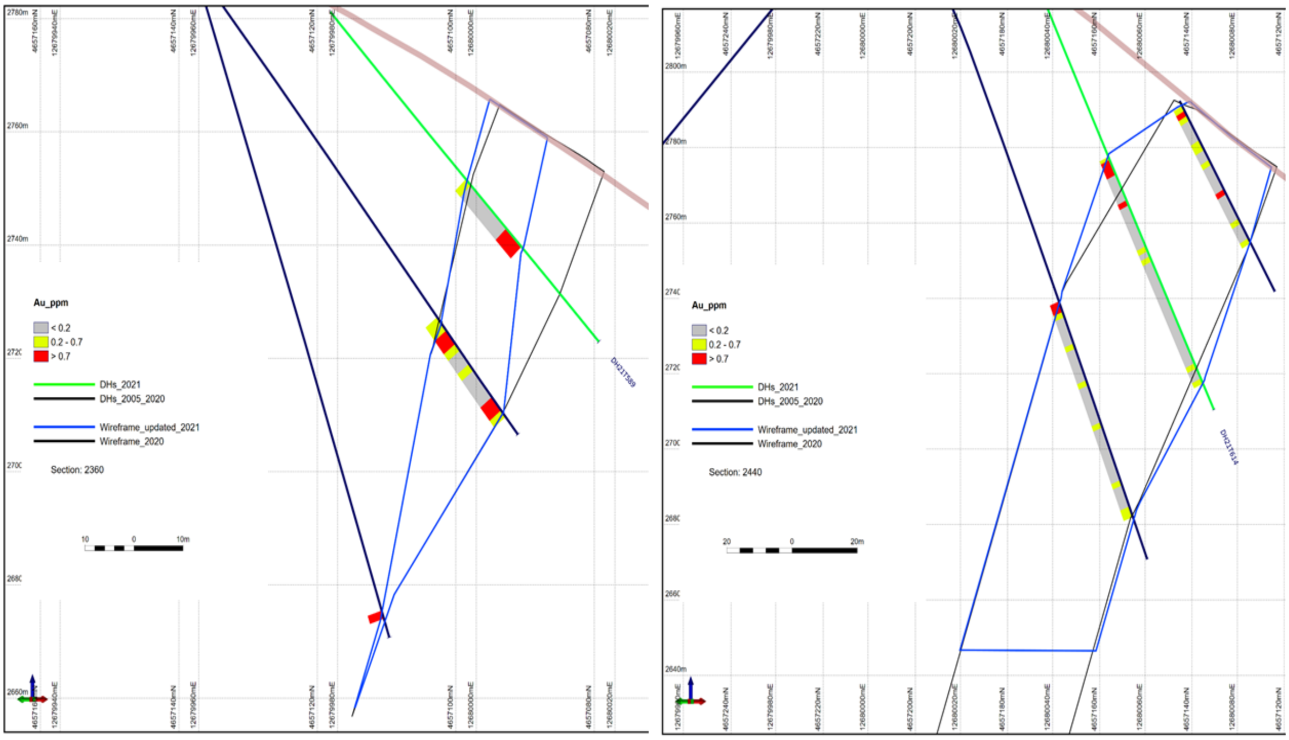


Figure 52 Modifying the 2020 ore wireframe, based on recent 2021 drilling data

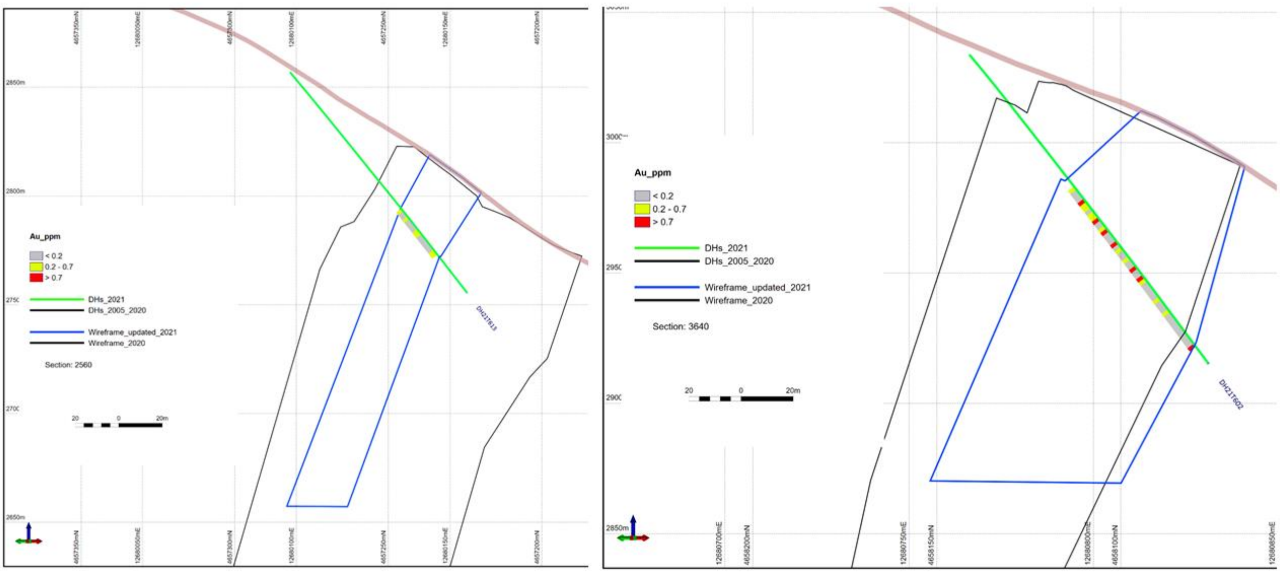


Figure 53 Modifying the 2020 ore wireframe, based on recent 2021 drilling data

The updated low grade (green) and high grade (red) wireframes over the Tulkubash three zones are shown on fig 54.

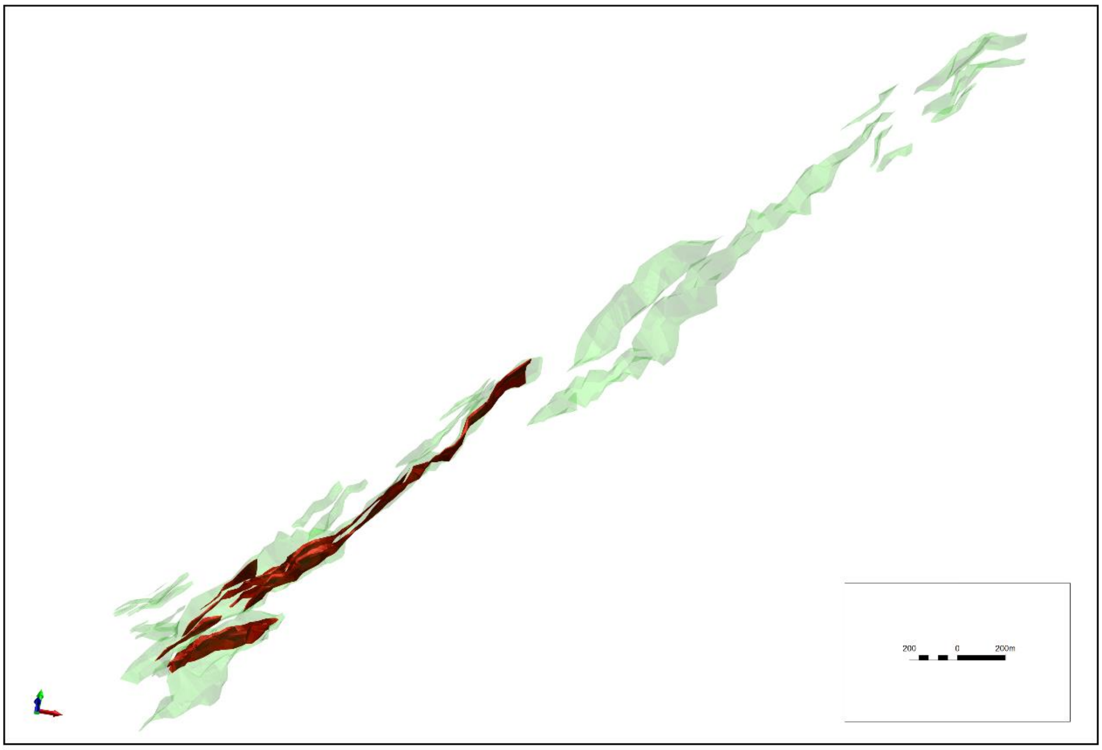


Figure 54 Tulkubash low and high grade wireframes

9.2.3 Top Capping

9.2.3.1 Gold top capping

Statistical analysis, including probability plots and coefficient of variation (COV) reduction were used separately for each ore domain. The average Au top cut for low grade domains is approximately 3.5 ppm, with average probability value 96.5.

The average top cut for the high grade domains is estimated to be approximately 8.8 ppm Au, with probability value 97. Applying the top capping summarized below, the average COV values were reduced to below 1.5 – 1.7. Some examples of estimated Au top capping on some domains are shown on probability and variability diagrams, and gold top capping values for each wireframe could be seen below in tables 13 and 15.

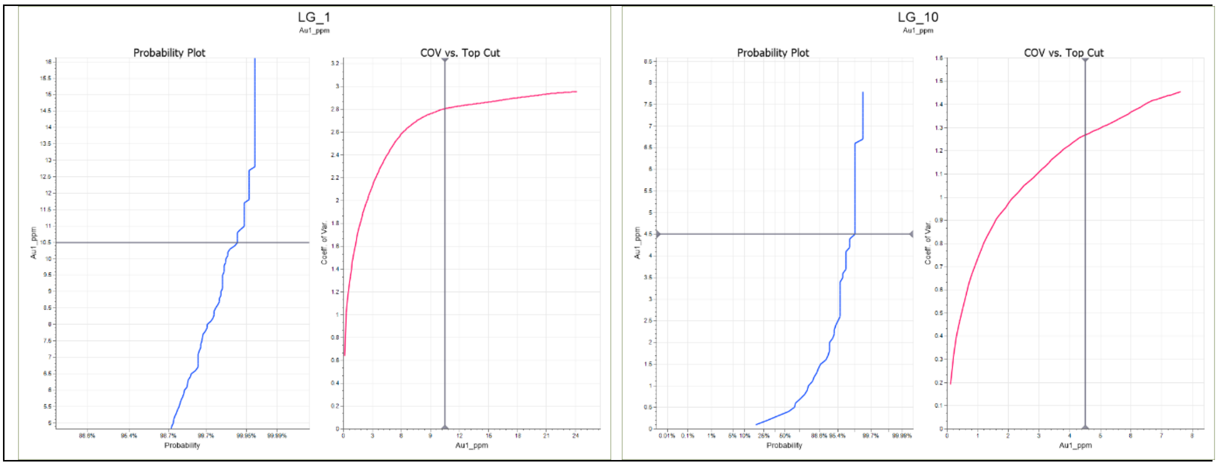


Table 12 Examples of Low Grade domains top capping

The estimate gold top capping for all the low grade wireframes are shown below in table 12.

WRFR	Top_Cap_Au, ppm	Probability, %	WRFR	Top_Cap_Au, ppm	Probability, %
LG_1	10.5	99.9	LG_13	1.3	80
LG_2	2.8	99.6	LG_14	4.3	99.65
LG_3	2.2	96.2	LG_15	2.8	99.4
LG_4	2.3	96.9	LG_16	6.7	99.8
LG_5	0.8	92.8	LG_17	5.2	99.8
LG_7	3.4	99.2	LG_19	6.2	97.8
LG_8	1.5	92.3	LG_20	3.4	96.8
LG_9	0.7	92.9	LG_21	1.8	97.5
LG_10	4.5	98.7	LG_22	2.6	99.2
LG_11	2.9	100	LG_23	2.3	99.3
LG_12	5.3	83.3	LG_24	5.6	99.8
			LG_25	1.8	99.5

Table 13 Low grade wireframes top capping

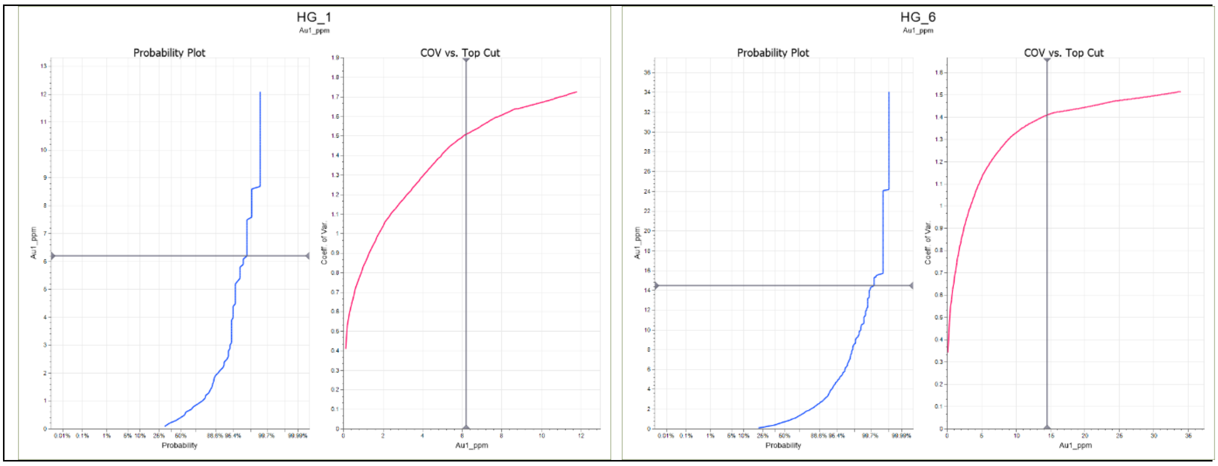


Table 14 Exampled of high grade domains top capping

The estimate gold top capping for all the high grade wireframes are shown below in table 15.

WRFR	Top_Cap_Au, ppm	Probability, %
HG_6	14.5	99.8
HG_1	6.2	98.2
HG_2	9.7	99.7
HG_3	2	92.2
HG_4	2.7	92.7
HG_5	17.5	99.6

Table 15 High grade wireframes top capping

9.2.3.2 Ag top capping

Silver is not considering as an element of interest for the Tulkubash economic assessment. Even though Ag was not included in the reported Mineral Resource, it was interpolated in the block model, and top capping was applied. The applied top cap was generalized only for low and high grade (Gold) domains. 42 ppm Ag for low grade domains and 63 ppm for the high grade domains were chosen, with both values having probability between 99.8 and 99.9, see fig. 55 below.

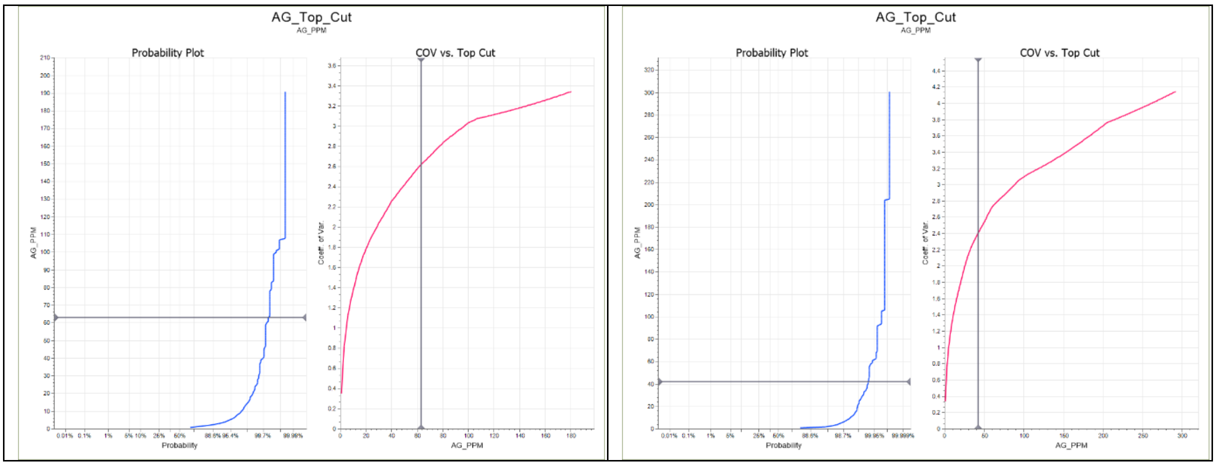


Figure 55 Ag top capping and probability

9.2.3.3 Density top capping

In order to prevent some measurement errors persisting in the data base and to reduce the influence of picking high density shots a density top cap of 4.5g/cub cm was implemented which is considered to be representative for Tulkubash. The average density in the oxidized material is between 2.60 and 2.65 although the higher values could be produced by unoxidized, sulphide patches.

The assumed density top capping of 4.5 is shown on geostatistical probability and distribution plots on fig 56.

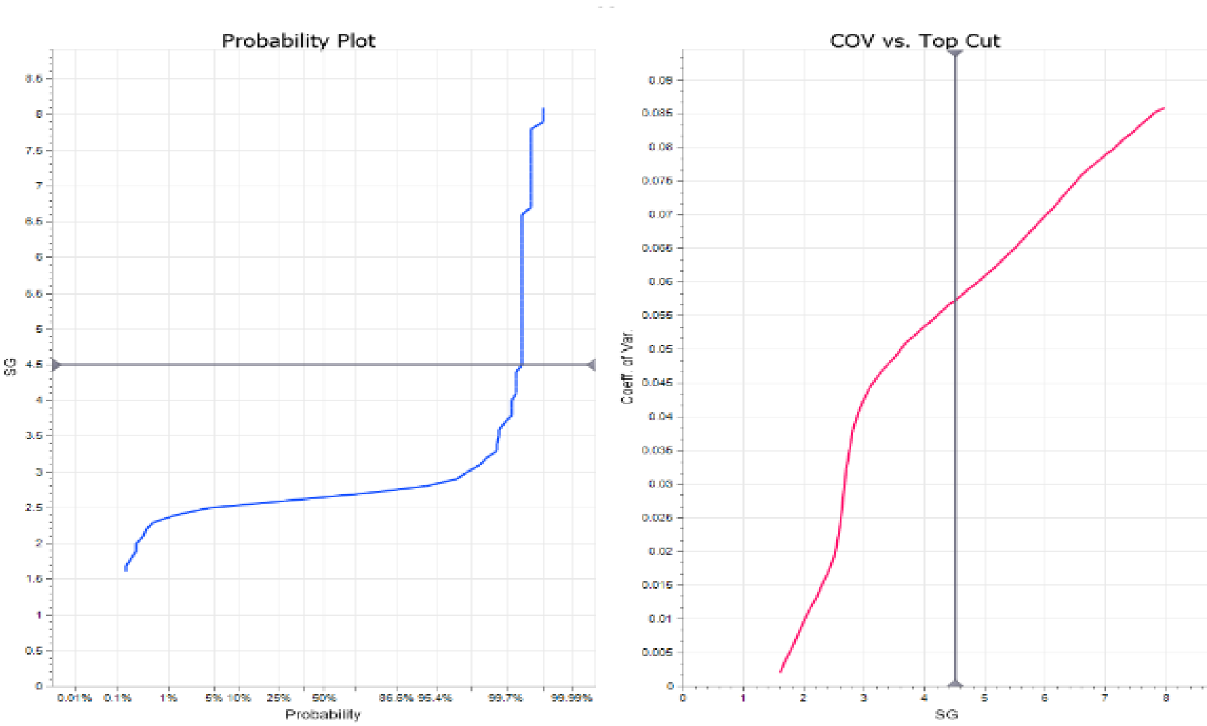
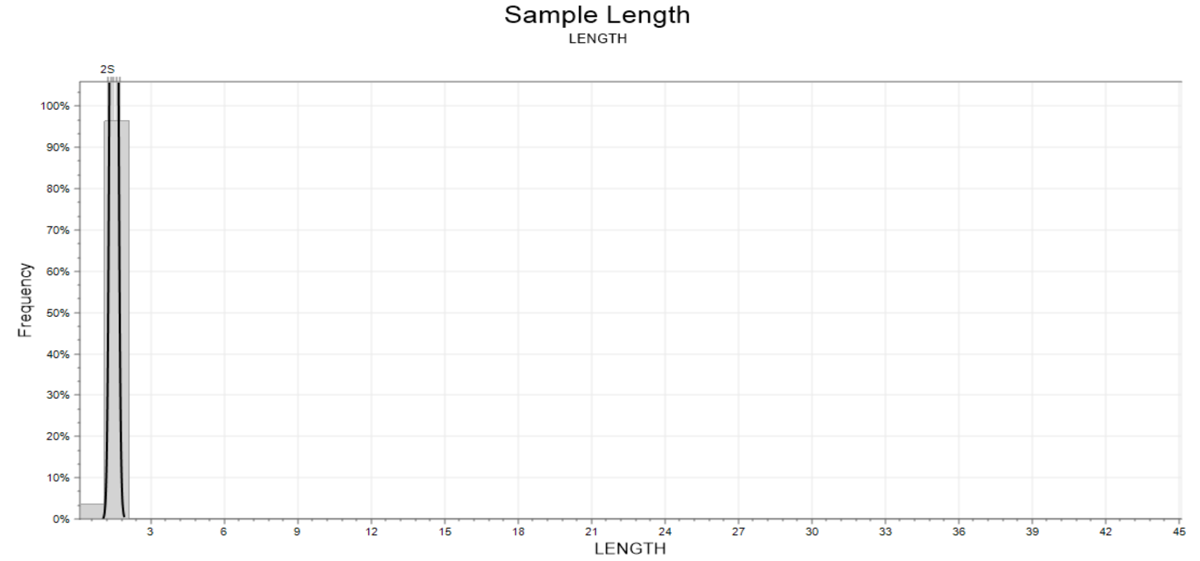


Figure 56 Density top capping

9.2.4 Compositing

1.5m is the dominant sample length and is considered as the best compositing option (fig 57).



LENGTH		Mean	1.484010894	Geometric Mean	1.478881989
Minimum Value	0.200000000	Variance	0.014363876	Geometric Std Dev	1.090596794
Maximum Value	4.700000000	Standard Deviation	0.119849388	Sichel's Estimator	1.484453797
2nd Highest	4.500000000	Coeff. of Variation	0.080760450	Sichel's V	0.007521004
3rd Highest	4.500000000	Median	1.500000000	Sichel's Gamma	1.003767581
4th Highest	4.300000000	Lognormal Mean	0.391286389	Experimental Chi²	58802.834
N	32312	Lognormal Std Deviation	0.086725064	Degrees of Freedom	-1

Figure 57 Drill sample compositing

Tulkubash composites over the low grade wireframes silhouette are shown in fig 58.

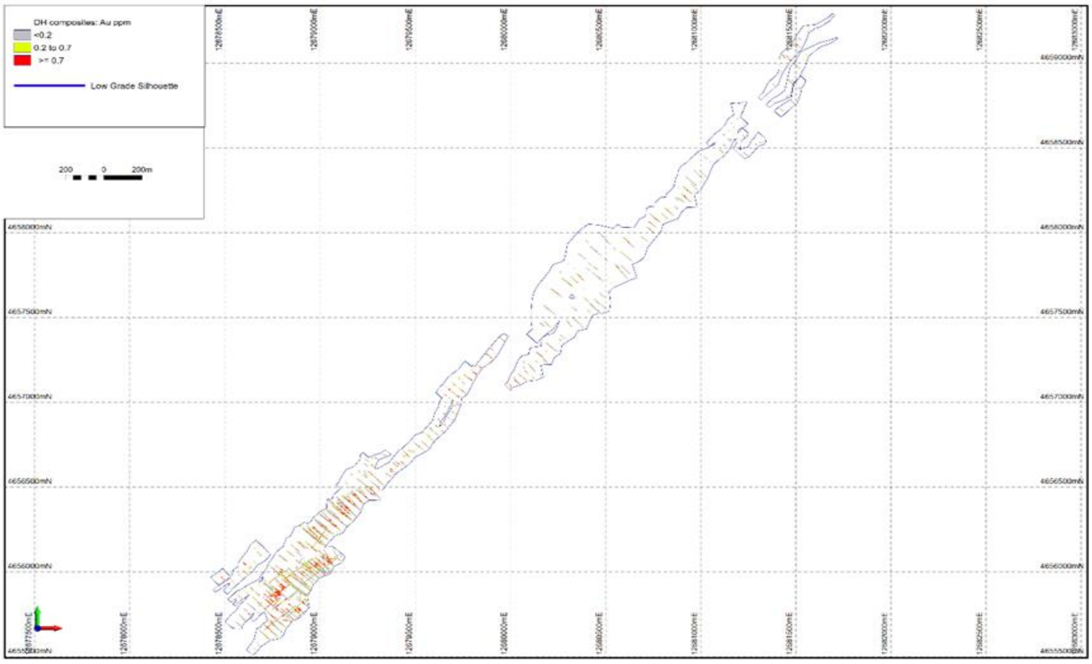


Figure 58 Tukubash composites and the low grade wireframe silhouette

9.2.5 Resource Modelling Parameters

Ordinary Kriging via Micromine ™ software was used for the gold interpolation. The Silver and Density interpolation was completed by IDW2 method via Micromine ™ software. The applied Block Model cell size is 5m, corresponding to the planned mining units with minimal sub-blocking of 1m.

File	BM_TULK_22_FIN_150322.DAT		
Title	Blank Block Model		
Size	602283362 bytes		
Date	22 март 2022 г.		
Time	6:56:35		
Encoding	Non-unicode (ibm-5347_P100-1998)		
Number of fields	26		
Record length	209 bytes		
Number of records	2854375		
Filtered records	No filter.		
	Block Model Information		
	EAST	**NORTH**	**RL**
Block size	5.00	5.00	5.00
Block model extents	660	758	172
Total number of cells	86048160		
Min centre	12678424.00	4655505.00	2290.00
Max centre	12681719.00	4659290.00	3145.00

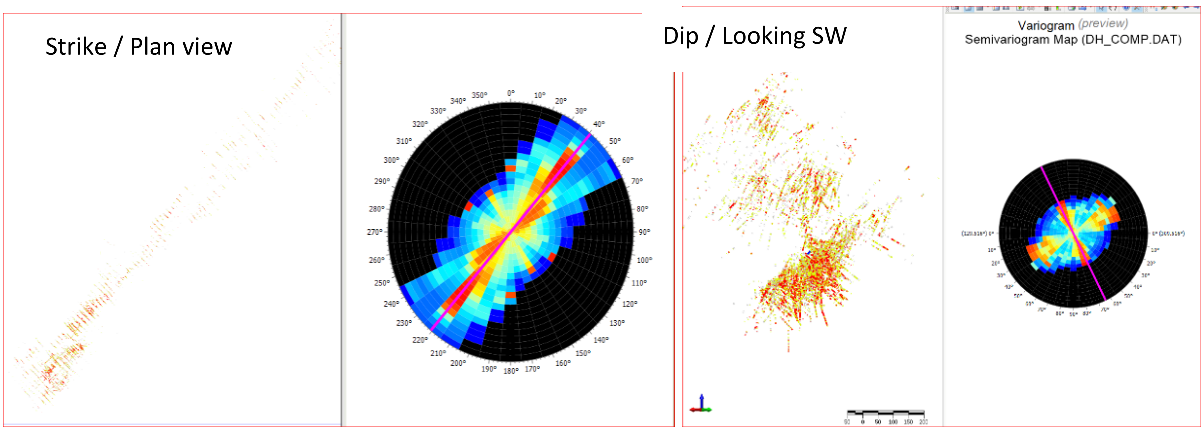
Table 16 Block Model information

The gold grade continuity has been initially investigated via variography maps, a useful approach helping to find out grade variations relative to the strike, dip and the plunge of the deposit, and then applied to the variography. The gold mineralisation continuity is controlled by series of north-eastern striking lenses, relatively steep dipping to north-west correlates with the observed grade variation trends. Sub-major gold variation vectors are observed as well, and these are considered to be controlled by oblique mineralisation structures, or to be a bias generated from the dominating drill hole orientations.

Natural Log transformed down-hole and directional variography were applied to define the model parameters, for both high and low grade domains separately. The interpolation runs were completed with a maximum of 12 passes for low grade and 18 for the high grade domains, gradually increasing the search radii, of static ellipse axis: 3/2/1. For all wireframes the strike of the search ellipse is 220, dipping north-west with 75 degrees. Only for wireframes Low Grade 19 and High grade 6, the orientation of the search radii was changed respectively to 195 /70 and 230 /70 due to their deviation of the overall orientation.

9.2.5.1 Low Grade variography

The Low grade variography maps, variography models and the searching ellipsoids parameters are shown in figs 59, 60, 61, 62 and table 17 below confirming the predominant northeast strike and northwest dip of the Tulkubash gold continuity.



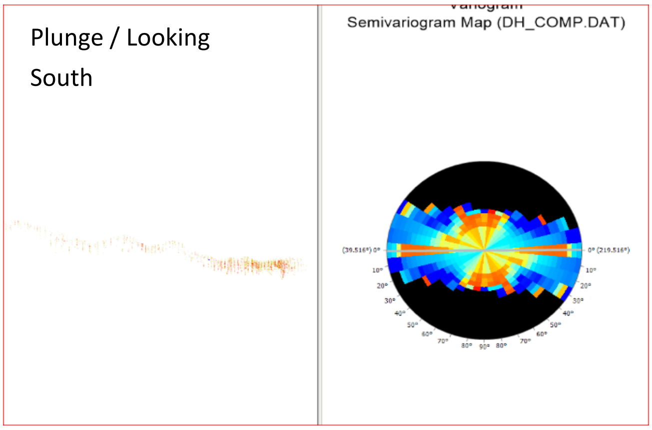
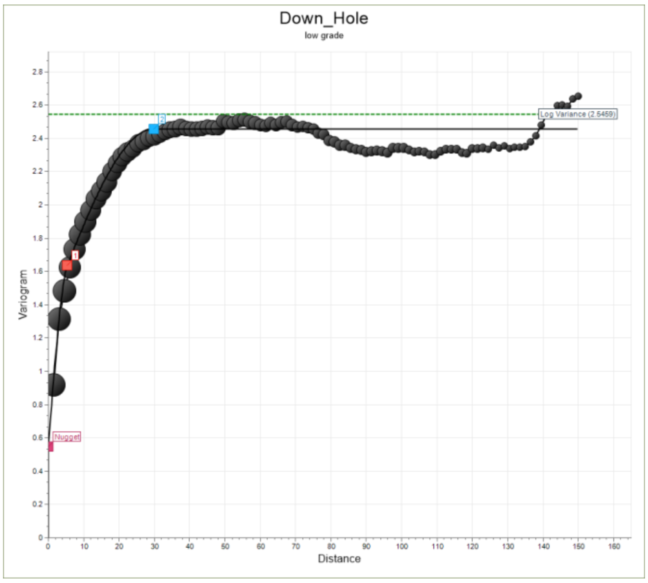


Figure 59 Variography maps



Low Grade, down-hole variography

Nugget: 0.52 (20.5 %)

Figure 60 Down- hole variography of the Tulkubash low grade domain

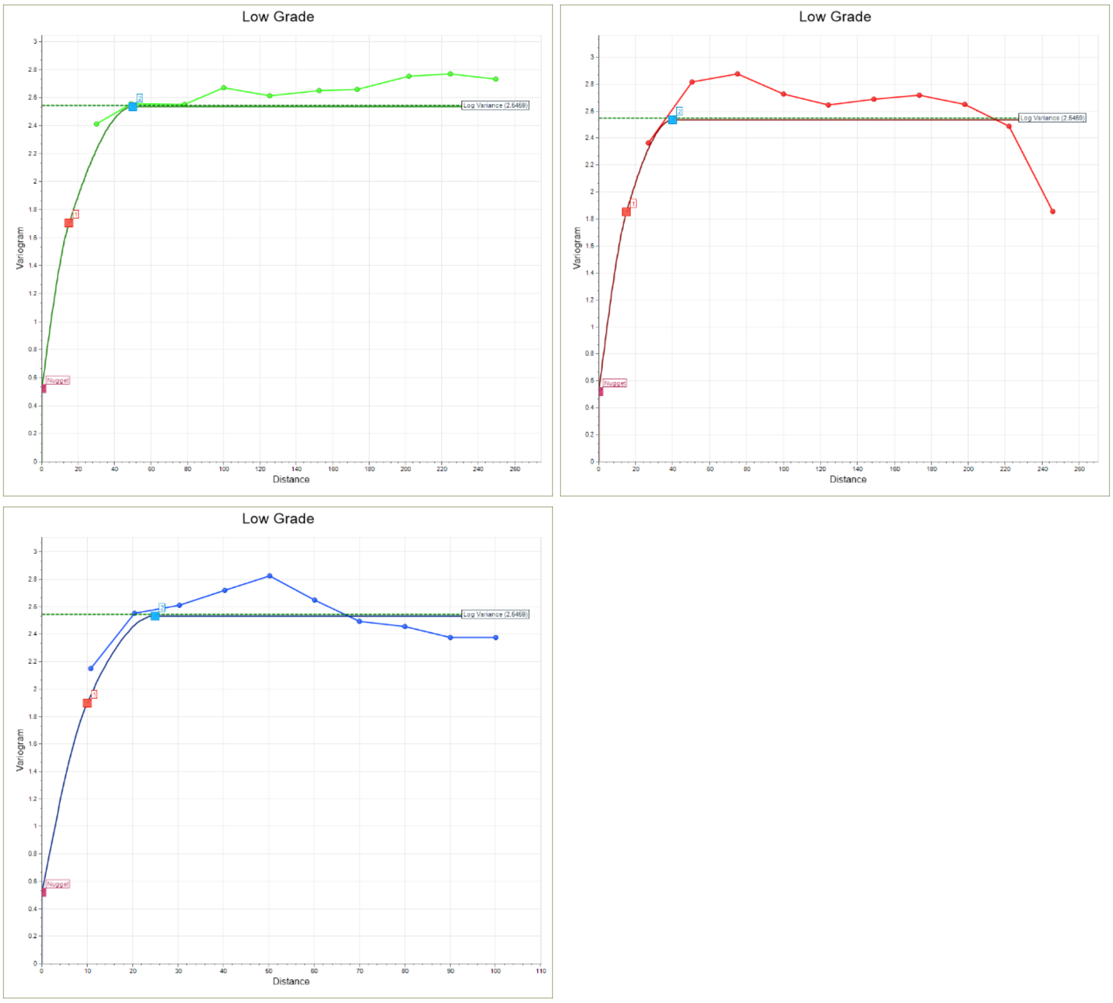


Figure 61 Major axis variography of the Tulkubash low grade domain

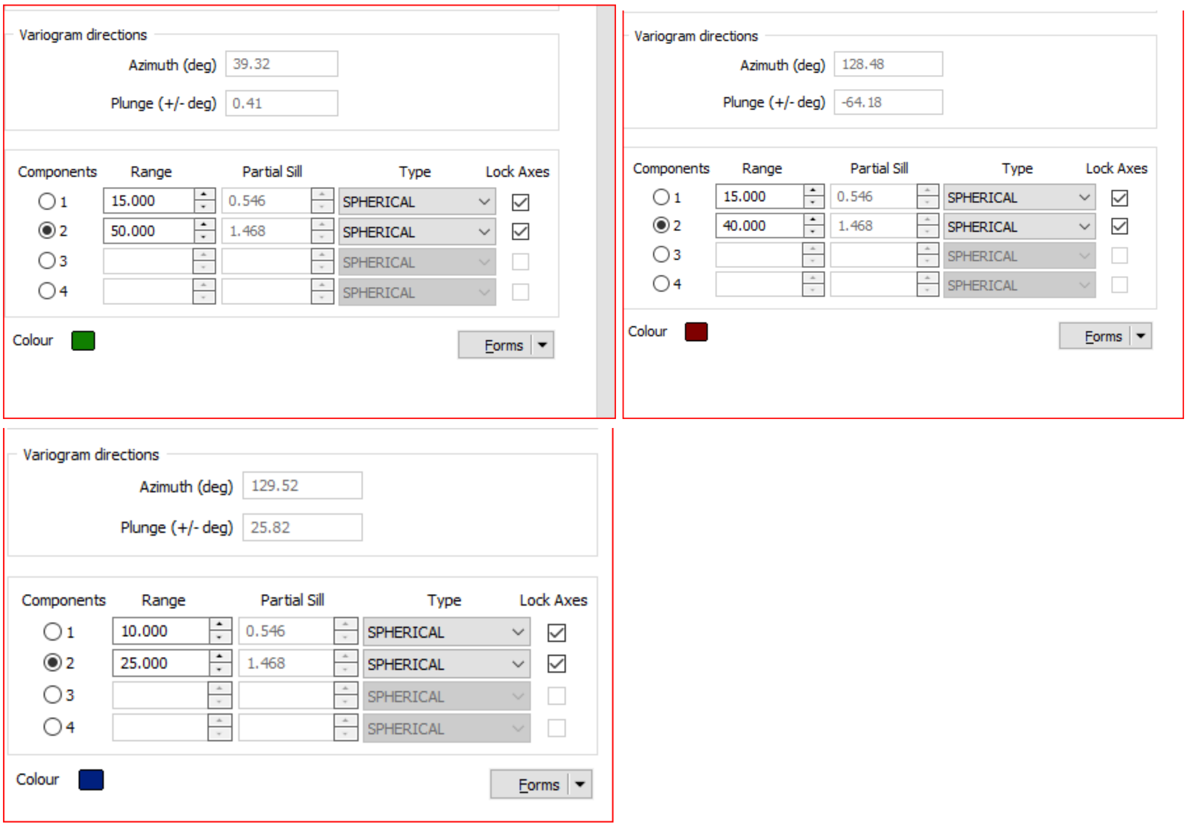


Figure 62 Major axis variography of the Tulkubash low grade domain

Domain	Run	Search_radii	Axis_1	Axis_2	Axis_3	Ax_1_m	Ax_2_m	Ax_3_m	SECTORS	MIN_PTS
LG	1	2	3	2	1	6	4	2	1	2
LG	2	4	3	2	1	12	8	4	1	2
LG	3	6	3	2	1	18	12	6	1	2
LG	4	8	3	2	1	24	16	8	1	2
LG	5	10	3	2	1	30	20	10	1	4
LG	6	15	3	2	1	45	30	15	1	4
LG	7	20	3	2	1	60	40	20	1	4
LG	8	30	3	2	1	90	60	30	1	4
LG	9	40	3	2	1	120	80	40	1	6
LG	10	80	3	2	1	240	160	80	1	6
LG	11	100	3	2	1	300	200	100	1	6
LG	12	120	3	2	1	360	240	120	1	6

Table 17 Search ellipse and interpolation runs

9.2.5.2 High Grade variography

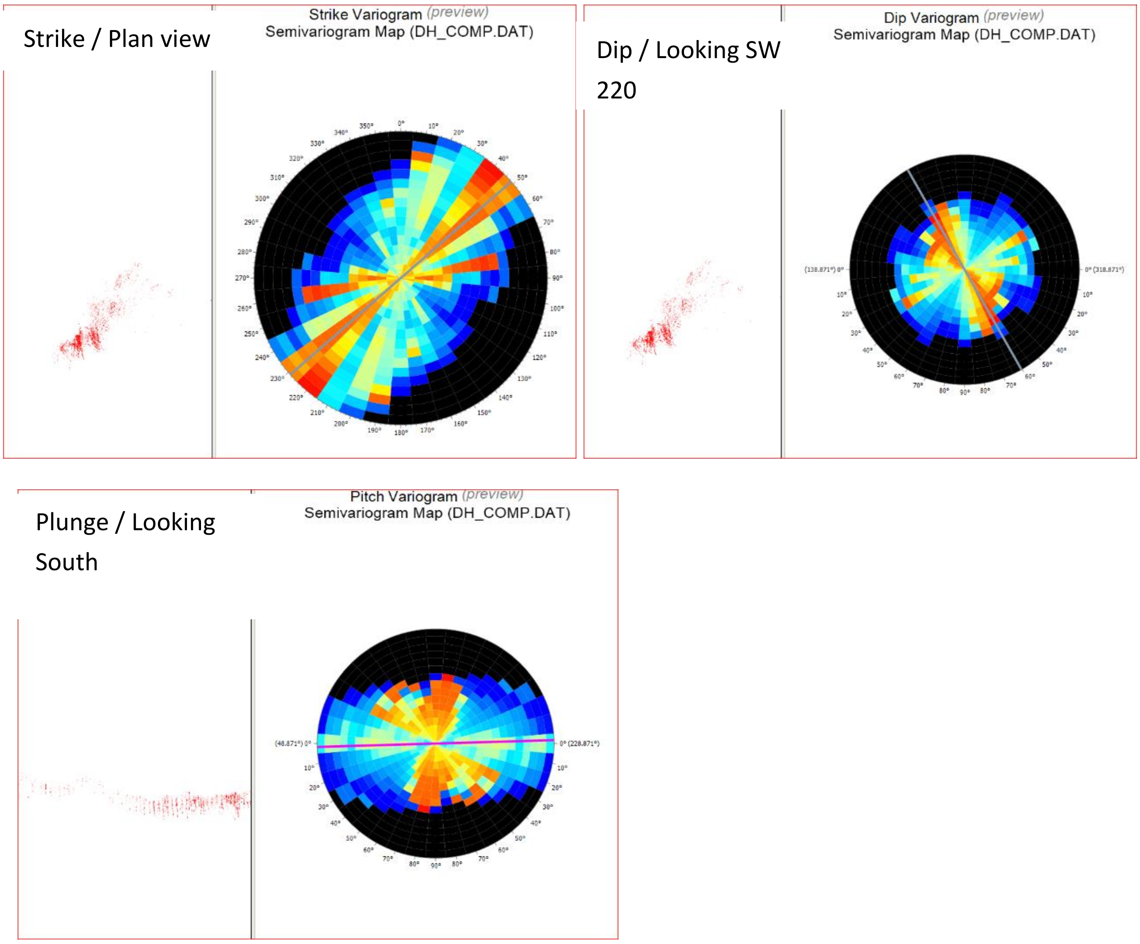
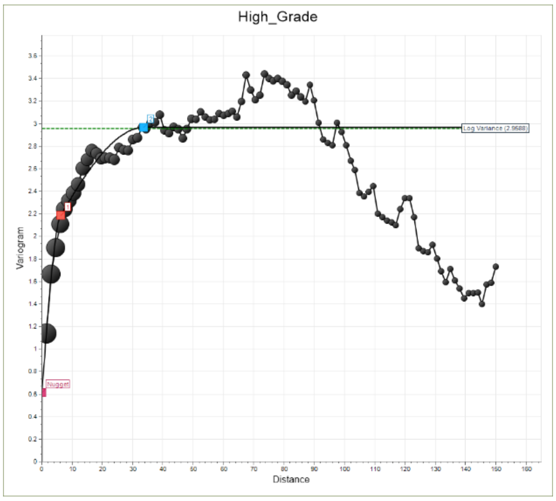


Figure 63 High grade 62 Variography map



High Grade down-hole variography:

0.61 Nugget (20.6 %)

Figure 64 High grade Down- hole variography

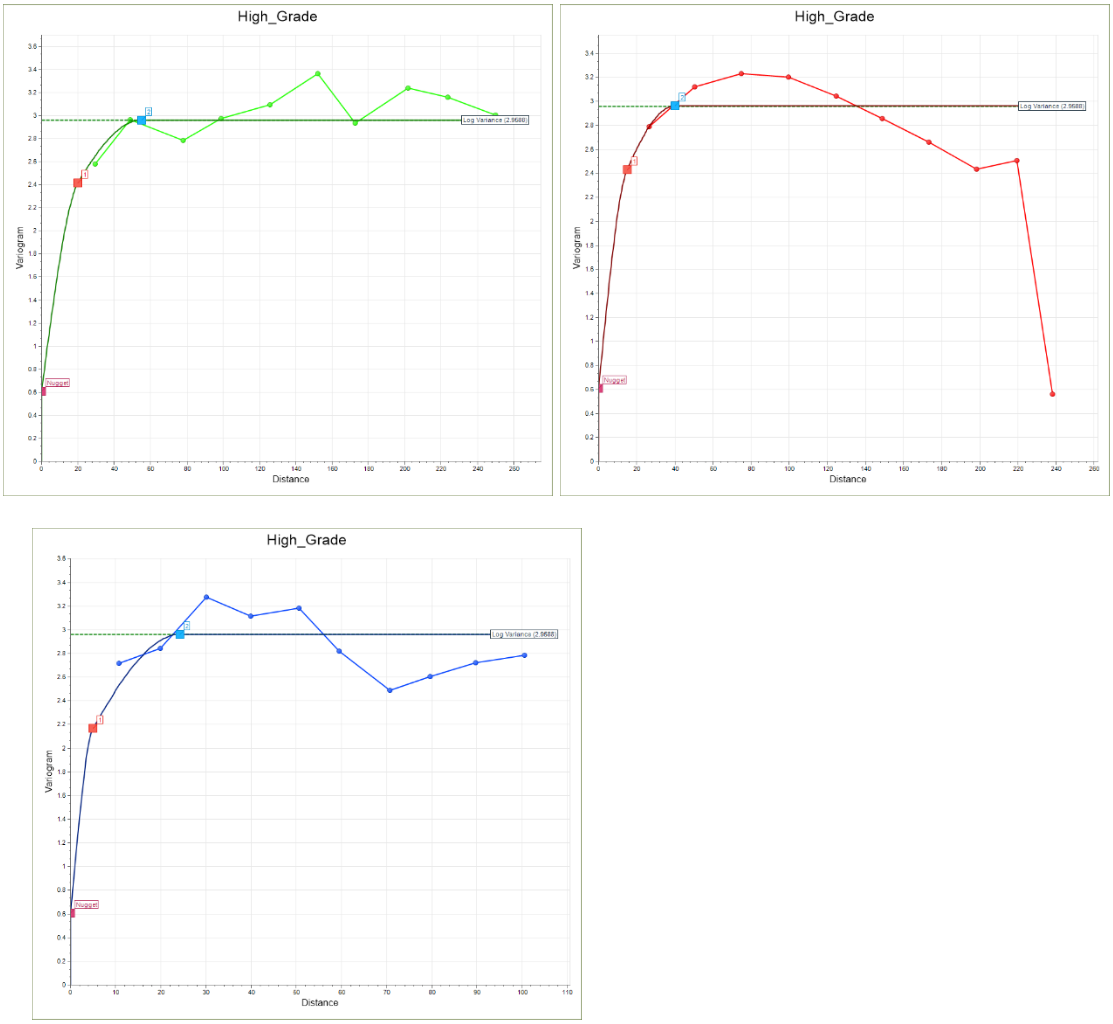


Figure 65 High grade Major axis variography

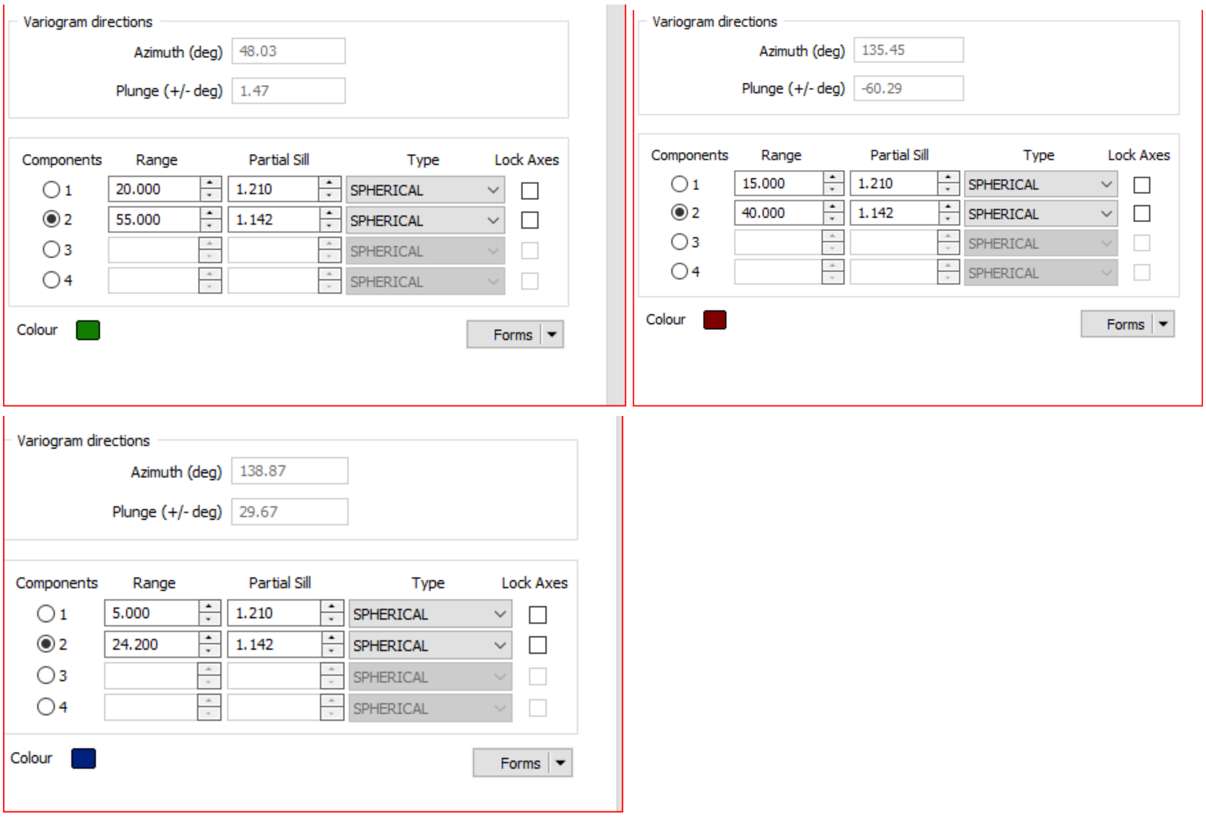


Figure 66 Major axis variography of the Tulkubash High grade domain

Domain	Run	Search_radii	Axis_1	Axis_2	Axis_3	Ax_1_m	Ax_2_m	Ax_3_m	SECTORS	MIN_PTS
HG	1	2	3	2	1	6	4	2	1	1
HG	2	4	3	2	1	12	8	4	1	1
HG	3	6	3	2	1	18	12	6	1	2
HG	4	8	3	2	1	24	16	8	1	2
HG	5	10	3	2	1	30	20	10	1	2
HG	6	12	3	2	1	36	24	12	1	2
HG	7	14	3	2	1	42	28	14	1	2
HG	8	16	3	2	1	48	32	16	1	2
HG	9	18	3	2	1	54	36	18	1	2
HG	10	20	3	2	1	60	40	20	1	2
HG	11	25	3	2	1	75	50	25	1	4
HG	12	30	3	2	1	90	60	30	1	4
HG	13	35	3	2	1	105	70	35	1	4
HG	14	40	3	2	1	120	80	40	1	4
HG	15	45	3	2	1	135	90	45	1	2
HG	16	50	3	2	1	150	100	50	1	2
HG	17	55	3	2	1	165	110	55	1	2
HG	18	60	3	2	1	180	120	60	1	2

Table 18 High grade Search ellipse and interpolation runs

9.2.5.3 IDW Interpolation

Even though Ag in not part of the economic assessment of Tulkubash due to its sub-economic grades, it was included in the Resource model. It is considered that Ag is related to a different hydrothermal event, using similar structural corridors to the Au, but making its own high grade clusters.

As the host rock of the deposit is similar, the main density deviations observed in Tulkubash are related with the stage of oxidation and sulphide content.

Both Density and Ag were interpolated via IDW2 constraining the samples within the block model outer shell (low grade domain), with applied top capping and gradually increasing the search radii. The applied ellipse is anisotropic, orientated with the general mineralization trend of the deposit: north-eastern striking (220 degrees) dipping north-west with 75 degrees.

9.2.6 Model Verification

Block Model verification was completed via statistical and visual approaches.

9.2.6.1 Statistical Verification

The statistical approaches used include Quantile-Quantile (Q-Q) plots which are plotting the quantiles of the first data set (composites) against the quantiles of the second data set (Block estimates. The Q-Q plot is a graphical technique for determining if the two data sets come from populations with a common distribution, theoretically represented by straight 45-degree line.

The swath plots show the variation in the mean values of the block model grades, the sample grade along the certain direction, separated by certain length portions. (Red: MRE 2021 / black: composites 2021/ grey bars: composites 2021 count)

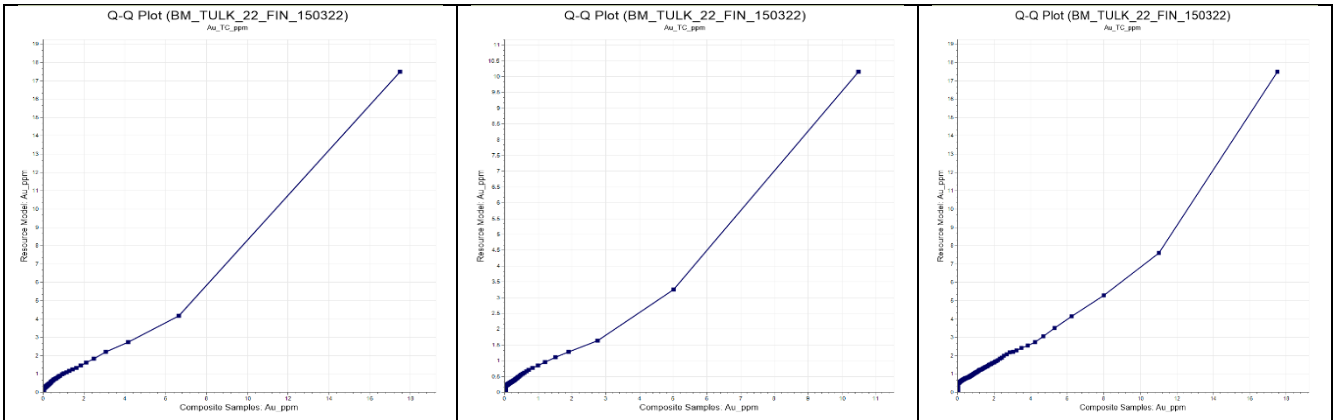


Figure 67 Q-Q plots: Au ppm

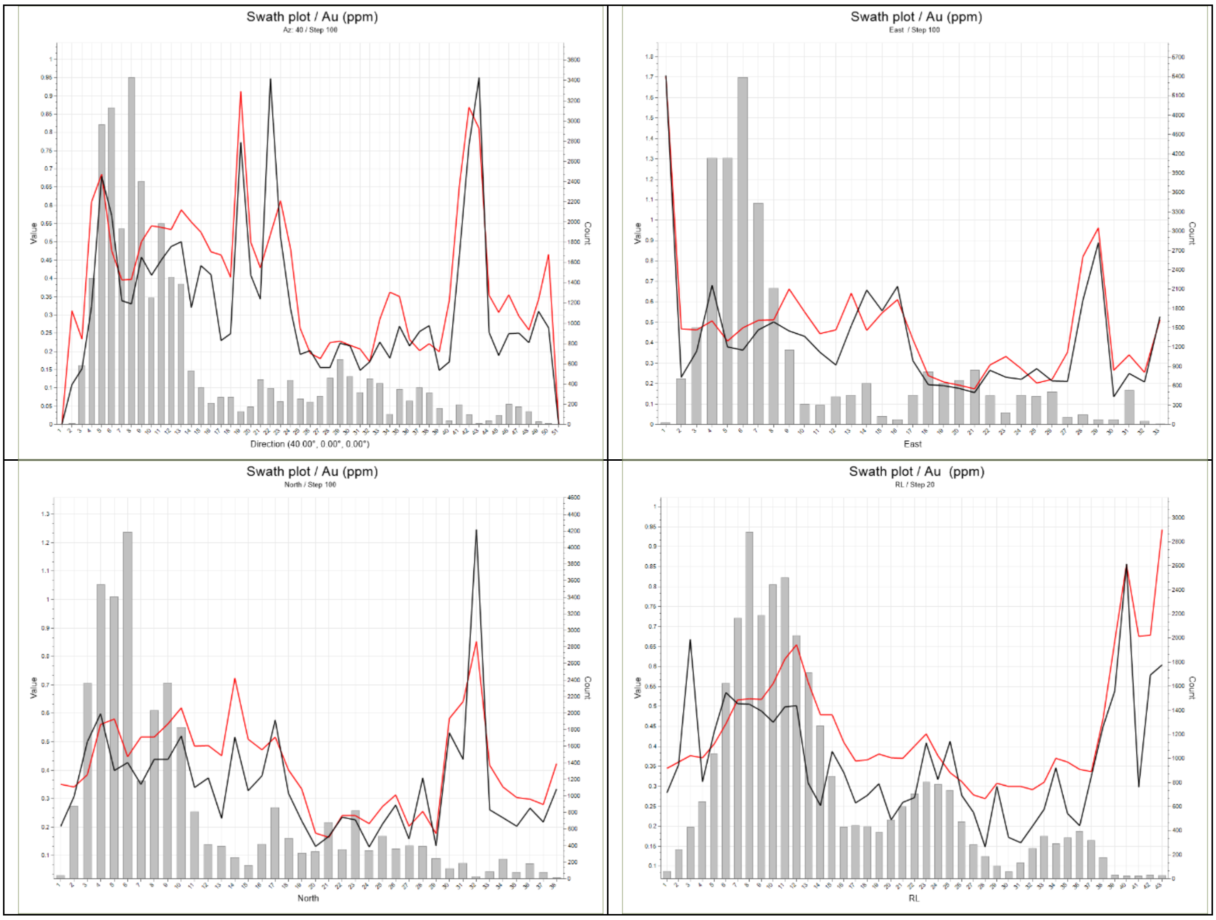
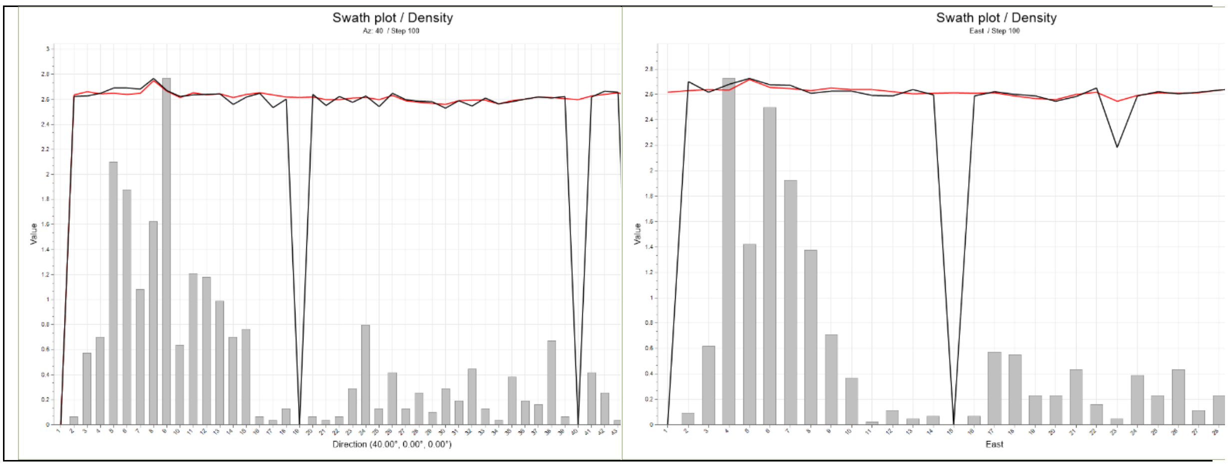


Figure 68 Swat plots: Au ppm



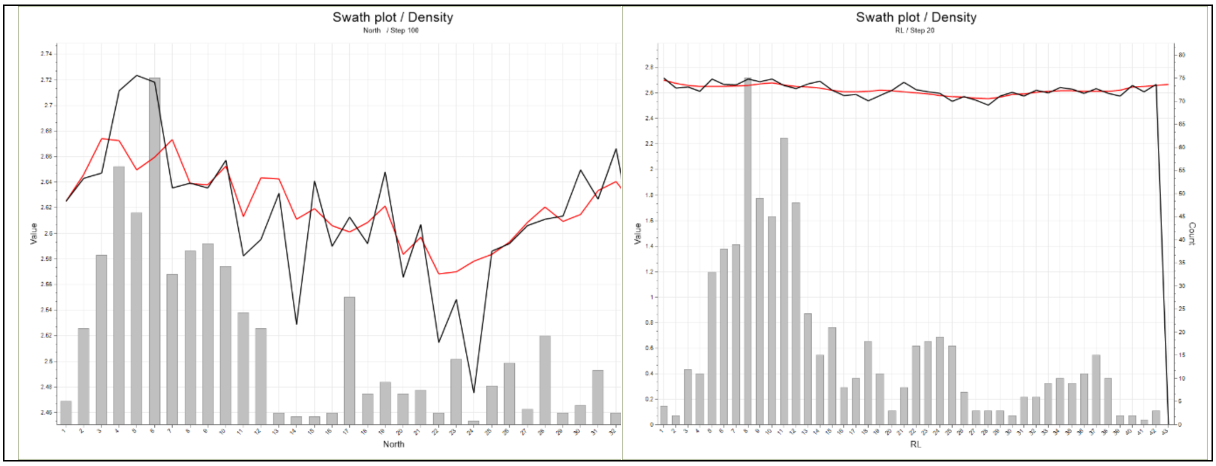


Figure 69 Swat plots: Density g/cm3

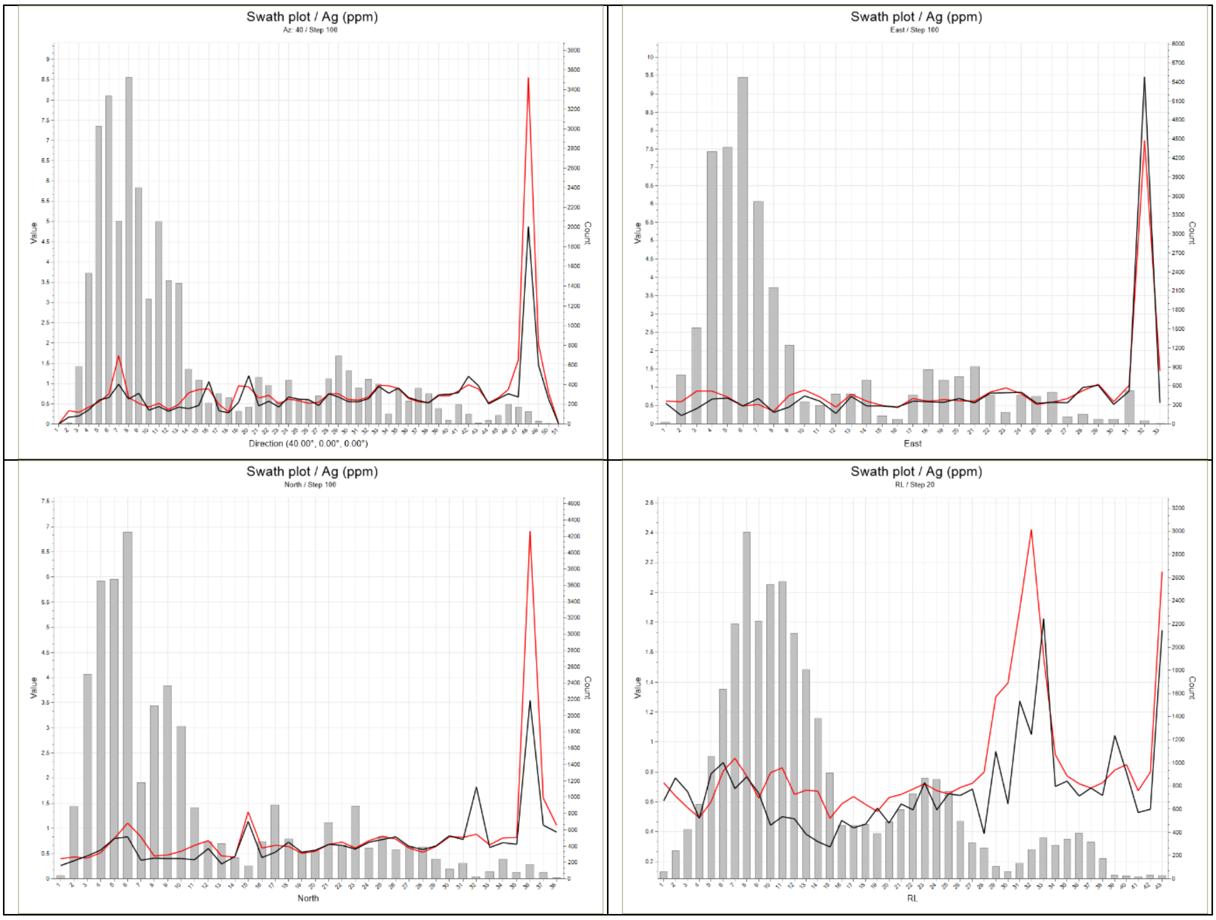


Figure 70 Swath plot Ag ppm

9.2.6.2 Visual verification

The visual verification includes a review of a series of sections, designed with step of 40 meters, and plotting the Resource model and composites gold grades (fig 71).

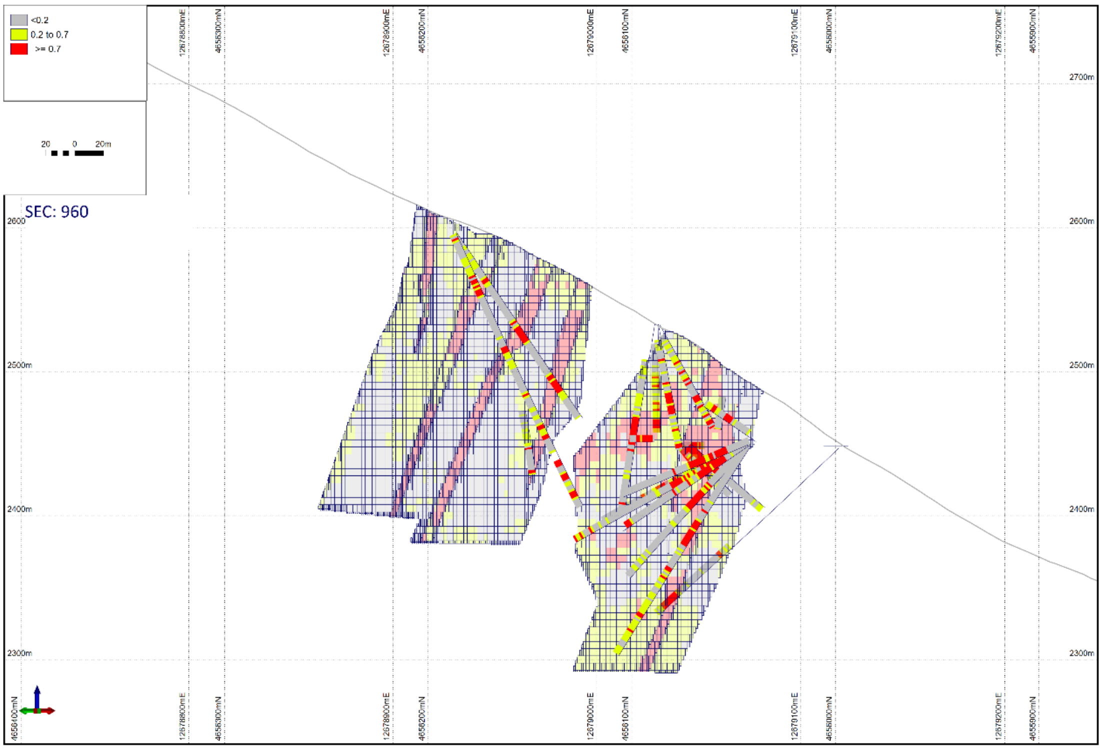


Figure 71 Section 960

9.2.6.3 Conclusions

The statistical and visual verification of the grades and density values show reasonable correlation with the initial drilling data and that the block model is suitable for resource estimate.

9.2.7 Resource Classification

- The Mineral resource classification was determined visually using a 40 m spaced section grid
- It is considered that there is no Measured Resources within the current Resource model due to insufficient data and the variability of gold grade continuity in the host rock;
- The model has been classified only into Indicated and Inferred;

- Drill hole spacing in plan for Indicated was assumed average 30-40m drilling grid, for Inferred 40-80m drilling grid;
- Total depth of Inferred Resource was restricted to 80m from the last hole, for Indicated the restriction is 40-60m;

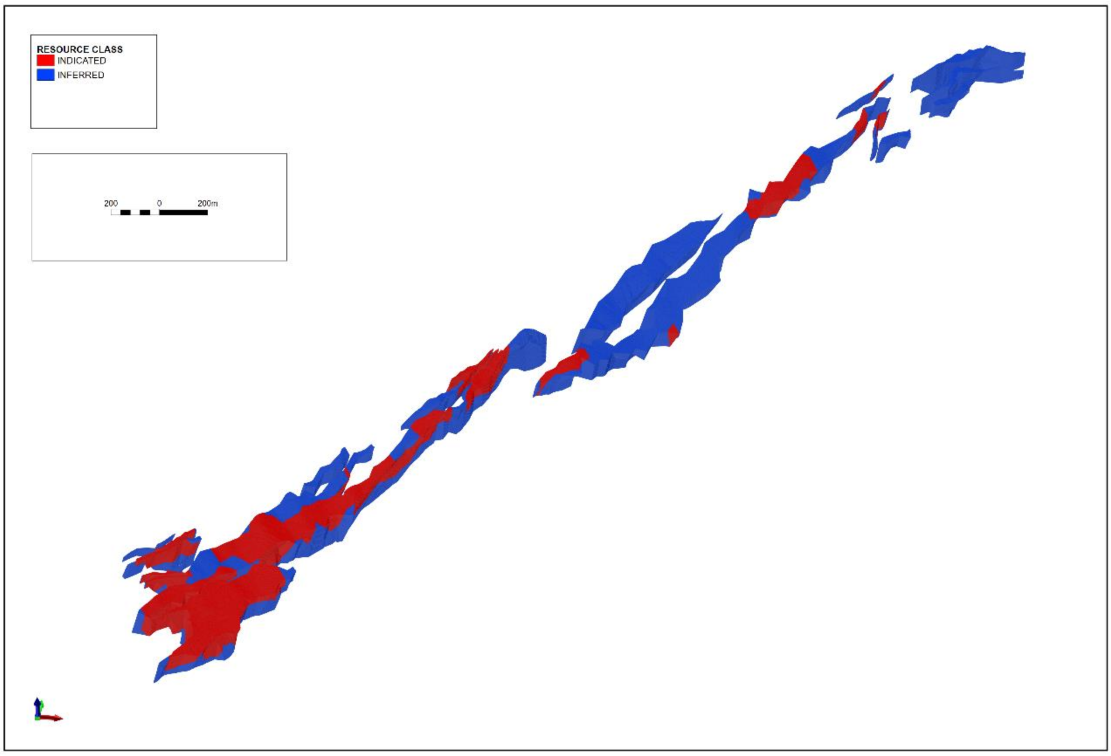


Figure 72 Resource Class

Tulkubash Constrained MRE, by zones, 2021 EOY								
	Indicated				Inferred			
Target	Mt	Au, g/t	Recovery, %	Au, Koz	Mt	Au, g/t	Recovery, %	Au, Koz
Main Pit	21.905	1.01	71.91	711	3.623	0.62	74.47	72
Mid Zone	2.764	0.66	75.01	59	5.785	0.58	76.14	108
East Zone	0.442	1.37	75.97	19	1.818	0.73	75.49	43
Tulkubash Total	25.111	0.98	72.32	789	11.226	0.62	75.50	223

Table 19 Pit shell constrained Mineral Resource per areas, $1,800, cut off grade of 0.21g/t gold

9.2.8 Reasonable Prospects for Eventual Economic Extraction

The applied open pit optimization was conducted internally using GEOVIA Whittle ™ and a regularized version of the block model. The process of Resource mode regularization was done using 5.0 m x 5.0 m x 5.0 m block size, using weighted average volume for the numerical variables, and dominant value (per volume) for the non-numeric variables.

No COG	Resource				Regularized Model				Variance (%)			
Class	Mt	Au g/t	Ag g/t	Au koz	Mt	Au g/t	Ag g/t	Au koz	Mt	Au g/t	Ag g/t	Au koz
Inferred	157,45	0,25	0,7	1 254	157,44	0,25	0,7	1 254	100	100	100	100
Indicated	78,21	0,44	0,57	1 119	78,23	0,44	0,57	1 119	100	100	100	100

@ 0,24 g/t Au	Resource				Regularized Model				Variance (%)			
Class	Mt	Au g/t	Ag g/t	Au koz	Mt	Au g/t	Ag g/t	Au koz	Mt	Au g/t	Ag g/t	Au koz
Inferred	50,05	0,55	0,97	889	51,67	0,54	0,96	891	103	98	99	100
Indicated	32,28	0,94	0,89	980	34,85	0,88	0,87	984	108	94	98	100

Table 20 Regularization process verification

The above comparison between the non-regularized and regularized model confirms the regularization procedure is appropriate.

For the current optimisation, the optimization parameters remain the same as the 2020 MRE.

	Item	Unit	2021 Resource
Econ.	Initial Capital Cost	$'000	99,016.42
	Selling Cost	$/oz	9.89
	Royalty	%	18.00
	Discount Rate	%	5.00
Metal Price	Au	$/oz	1,800.00
	Ag	$/oz	21.70
OP. Costs	Mining	$/t mined	1.89
	Extra Ore Mining /Haulage	$/t ore	0.84
	Processing	$/t ore	4.25
	Stacking	$/t ore	0.54
	Owner's Mining Cost	$/t ore	0.34
	G/A	$/t ore	1.27

	Item	Unit	2021 Resource
Other Par.	Recovery Au	%	Variable by block
	Refining Recovery-Au	%	99.80
	Refining Recovery-Ag	%	60.00
	Internal Cut-off	g/t	0.21
Pit Slopes			Variable by location
Op. Limits	Mining	t/year	27,000,000
	Processing	t/year	5,000,000

Table 21 Pit optimization parameters

An Important difference in the optimization approach between 2020 and 2021 is the applied gold recovery value. In the 2020 MRE a fixed recovery of 73.3 % was used, and in 2021 a variable recovery by block value, based on the 2021 Recovery model was used.

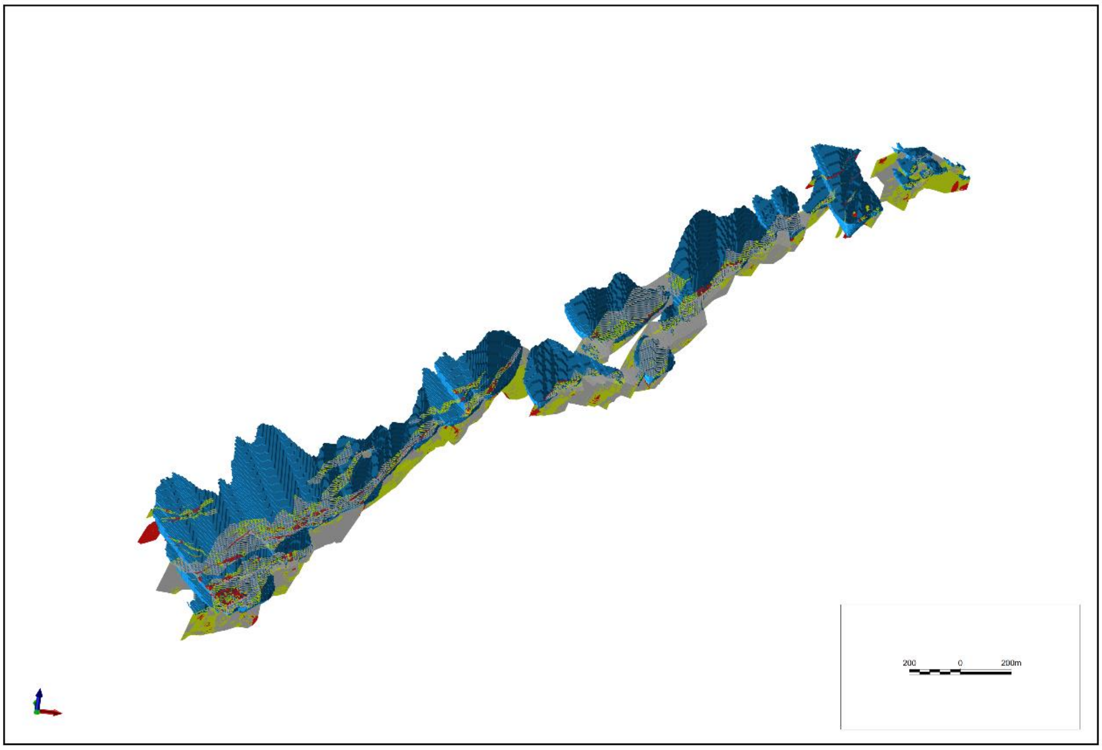


Figure 73 Open pit optimization, 1800 $ pit shell

10 CONCLUSIONS

It is a CP's opinion that the pit shell constrained resource demonstrates reasonable prospects for eventual economic extraction of the Tulkubash gold deposit and is a reasonable base for the Tulkubash Reserve update.

Classification	Tonnes (mt)	Density	Au (g/t)	AuEq (koz)
Measured				
Indicated	25.11	2.66	0.98	789
M & I	**25.11**	**2.66**	**0.98**	**789**
Inferred	11.23	2.56	0.62	222

Table 22 Tulkubash 2021 EOY Mineral Resource Estimate, constrained by Pit Shell 1800 $, cut-off grade 0.21 ppm Au

Notes: The effective date of the resource is December 2021. The Mineral Resources that are not Mineral reserve do not demonstrate economic viability. Numbers may not sum due to rounding.

The resource estimate is according the JORC Code (2012) reporting code.

Wireframes defined by a mineralized cut-off with a parent block size of 5 m x 5 m x 5 m, Grades interpolation is by Ordinary Kriging method.

Mineral Resources are constrained by Resource shell defined as per 1800 $ Au price, and applied variable recovery estimations

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

Tulkubash resource block model is dominated predominantly by longitudinal subvertical ore bodies which is accepted as generally representative to the complex structural control.

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

The obtained average recovery results in the constrained Resource are between 71 and 76%, with an average of 72.3% for the Indicated resource, which is considered to be representative and corresponding with the average gold extraction from the historical leaching tests. It is the CP opinion, that the 2021 recovery model is a reliable and reasonable way to predict and estimate the gold recovery within the current resource modeling.

The applied Tulkubash QAQC protocol is considered to be representative and meets best industry standards.

The statistical and visual verification of the grades and density values show reasonable correlation with the initial drilling data and the block model.

The deviation of tonnage and grade in the 2021 EOY Mineral Resource Estimate compared to the previous estimation (2020, IGT) is due to incorporation of the 2021 drilling data, adopted and modified wireframes based on new data, applied variable recovery model, and improved interpretation of the sulphide contact.

It is the CP's opinion, that the pit shell constrained Indicated Mineral Resources are a reasonable base for the Tulkubash Reserve update, planned in 2022.

11 REFFERENCES

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 characterisation, 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

12 JORC Table

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralization that are Material to the Public Report.* • *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 mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Sampling comprises predominantly wireline diamond drilling core, along with channel sampling from trenches, road cuts and underground adit. Limited RC drilling program was completed in 2020 as well • Data from the surface trenches, road cuts and underground adit has been used during the interpretation of the mineralization, but was excluded from interpolation process • Core was drilled through the full expected mineralization intersection, as normal to the strike and dip as possible • All drilling is diamond core, standard or triple-tube, predominantly at HQ diameter. Half core, cut along the core axis, has been used for sampling • All the trench and road cut sampling were done with ordinary hammer, following marked sample boundaries • The average down-hole sample length is 1.5m, the average trench and road cut sample length is 2.0m • The average sample weight is approx. between 4-6 kg • 1.0 m samples were collected from a cyclone, using a riffle splitter, during the RC drilling process • Samples were split along the major lithological breaks • All the sampling practices are meeting the industry standards • Handled XRF instrument was also available, and certain data from core and road cut measurements made through the exploration activities is available as well, although this data is not used directly for the current mineral assessment
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Almost, only diamond core drilling was conducted in Tulkubash project, except 2020 campaign, when limited RC drilling was completed • All the available drilling is included in MRE_update_21, 729 holes with total length of 102,406.2m (incl. 24 holes / 2,760.3m at 2021 and 21 RC

Criteria	JORC Code explanation	Commentary
		holes – 2,434.3m at 2020) • Additional 13 orientated, geotechnical holes (completed at 2021), with a total length of 1,549.9m are providing structural and lithological data, but were not included in the current Resource modelling • HQ was used as a major drilling diameter, PQ (at the hole upper levels and NQ at the hole deeper zones) were also sporadically used, aiming to guarantee best drilling performance in fractured host rock • 124mm drilling diameter was used in the RC drilling • For better core recovery triple – tube was used in the critical areas • The majority of the drilling is inclined, SE or NW orientated, aiming to intercept the expected mineralization strike as normal as possible • Overall, no orientation was applied in the drilling campaigns, although more than 3,300 orientated structural measurements are available after the geotechnical drilling, in Main Pit area • The used drilling equipment was in good condition, provided and operated by local subcontractor with wide experience in central Asia region • All drilling procedures are meeting the industry standards
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximize sample recovery and ensure representative nature of the samples.* • *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.*	• Core recovery is logged as percent of the core recovery length VS drill run length, and it is measured by company's geologists and technicians, directly in the core boxes, immediately after the core is transported to the field core shed • Through the drilling process, in an attempt to maximize the core recovery were used triple – core tube and additive drilling muds • Overall diamond core recovery is above 90% • RC drilling recovery is approx. 80% (based on the recovery weights) • The average down-hole sample length is 1.5m (1m for RC) • The average trench / road cut sample length is 2.0m • All samples were split along the observed major lithological breaks • There doesn't appear to be a relationship bias between grade and length, or sample weight and recovery

Criteria	JORC Code explanation	Commentary
		• All sampling practices are meeting the industry standards
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• The implemented core logging protocol is documented: lithology, hydrothermal alteration, oxidation stage, degree of fracturing, mineralization, structures, RQD, core recovery, and RMR based logging for the geotechnical holes. Entire core is regularly photographed. • Total length of the logged drill holes is 103, 956.2m (including geotechnical) • Total length of the logged surface workings (trenches, road cuts and profiles) is approx. 38km • 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 losses or extra moving • Core logging is done by company's geologists in laptops, using AGR 4.0 software as a base platform. Before using AGR platform, the logging was done on the hard copy and further transcribed into Microsoft Excel • Surface workings logging was done by company's geologists and / or sub-contractors, under the supervision of company's geologists • Photo documentation is done on wet trays, and data is also incorporated in the database. • At the end of the field season all core is transported at the main core storage facility, in Malovodnoye village, located close to Bishkek • Logging procedures are meeting the industry standards, and are reasonable for Mineral Resource estimation
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to*	• All of the drilled core is sampled, except the initial diluvium / alluvium zones • All intact core samples are cut along its long axis, using core saw, half core is packed in a labelled polyethylene bag, weighted, and further transported to laboratory for sample preparation and assaying. In case of intensively fractured zones, samples are taken with trowel • All in situ bedrock, outcropped in trenches and new road cuts were

Criteria	JORC Code explanation	Commentary
	maximize representivity of samples. • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	sampled as well • Rock density measurements are using field Archimedes' principle, approach with wax. Density sampling was designed as per 1 sample (approx. 10 cm) for each 5 meters (at 2021) and 1 sample per each 20m in the historical campaigns. In areas of intensively fractured material the interval is wider due lack of proper material. No density was measured at 2020 campaign as, RC drilling is not providing intact material • The collection of geological data meets the industrial standards
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Samples collected from 2007 to 2014 were prepared and assayed at IRC Laboratory in Karla Balta, Kyrgyzstan. • Sample collected from 2017 to 2019 were prepared and analysed at ALS Global (Karla Balta), and referee check samples were sent to SGS Vostok Limited (Chita, Russa) • 2020 (RC drilling) and 2021 campaigns were used Steward Assay and Environmental Laboratories LLC (Karla Balta, Kyrgyzstan). SGS (Chita, Russia) was used for an external control laboratory at 2021 campaign • 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 - lead collection with AA - Aqua Regia digestion with following ICP-OES reading - Analyses of Stotal, Ssulphide, Ssulphate, 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) • Lower detection limit for Au is 0.05ppm and for Ag is 1ppm • Assay quality control was achieved using, reference material (standards, provided by RockLab), blank material (barren sediments), coarse and pulp duplicates, along with field duplicates (applied in for first time at 2021 campaign), and external laboratory control sampling • The QA/QC design and results are adequate to support estimation of

Criteria	JORC Code explanation	Commentary
		Mineral Resource
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No twin holes have been conducted at Tulkubash area • All the assay results are received electronically as an Excel spreadsheet, and further incorporated in the database by company's database manager • The access to the database is limited, and only authorized employees can make corrections in it • Prior to data interpretation, the lower detection limits of Au (0.05 ppm) are changed to half of the detection limit (0.025 ppm). In regard to Ag same formula (half of the lower detection limit) was applied. For the elements with results restricted by upper detection limit, a conservative formula y = x*1.01 was applied • Data entry procedures and QA/QC verification meet the industrial standards and adequate to support MRE
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All collar locations are reported at Gauss Kruger Pulkovo 1942 Zone 12 • The survey is conducted, using Lecia Total Station (centimetre accuracy) • All the holes have been downhole surveyed, measurements taken between 25 - 50m interval, using REFLEX EZ SHOT tool • The topographic model is based on satellite data • Roads, drill sites and other topographic details have been added after on-the-ground survey made by field survey team • The quality of the topographic control is adequate for MRE and meet the industrial standards
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• The hole collars are in accordance with existing profiles, designed perpendicular to the mineralized zones • Main Pit area achieves average distance between the drilling profiles of 40m • At 2021 campaign, additional infill holes were located in several most promising clusters at Tulkubash Middle Zone and East Zone, aiming to upgrade the existing data, and to decrees the average drilling space of these clusters up to 40m (sufficient to upgrade the Inferred Resource to

Criteria	JORC Code explanation	Commentary
		Indicated) • Database from trenches, road cuts and adits were used only for the interpretation process, but excluded from the grade interpolation • The drilling grid allows to establish grade continuity and estimation parameters such as average grade and mineralization volume • Sample compositing of 1.5m was applied prior to interpolation process (1.0m for the RC drilling)
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• All the exploration holes were designed in attempt to intercept the expected NE strike of the mineralization as normal as possible, and to avoid any sampling biases. The average bearing is SE or NW, with drilling angle approx. 50 degrees
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.*	• The following independent audit was completed out during the entire period of exploration works at Tulkubsh project: • SRK consulting (Update of Mineral Resource Estimates, for Chaarat Gold Project, Kyrgyzstan, Feb. 2010) • Wardell Armstrong (Tulkubash Resource Modelling, Apr.2011) • Gustavson Associates (Chaarat Gold Project Resource Estimation, June 2014) • GeoSystems International (Mineral Resource Update, Jan.2018) • Tetra Tech (Competent Person Report for Chaarat Gold Project, Kyzrgyz Republic, Dec.2018) • Sound Mining (Competent Person’s Report on Tulkubash Gold Project, for Chaarat Gold Holdings Limited, Jan 2019) • LogiProc (Tulkubash Gold Project Bankable Feasibility Study Update Report, Aug.2019) • Wardell Armstrong (Review of Modelling Estimation and Classification, based on Resource Model, provided by IGT up to June 2020)

Criteria	JORC Code explanation	Commentary
		• Roscoe Postle Associates Inc. (RPA), part of SLR Consulting (RPA Due Diligence of Tulkubash Resource Model, based on Resource Model provided by IGT up to June 2020) • Institute of Geotechnologies (IGT) (The Tulkubash Gold Project Mineral Resource Estimate, for Chaarat ZAAV SJSC, Dec. 2020)

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Chaarat ZAAV CJSC (CZ) is established in Kyrgyz Republic, and is wholly – owned subsidiary of Chaarat Gold Holding Ltd (Chaarat). • CZ is developing Tulkubash Gold Project (Project) located in the Sandalash Range of the Alatau Mountains in the Chatkal district of the Jalal Abad region (province) of north-western Kyrgyzstan • The Property is located at latitude 42°1’6.91” N and longitude 71°9’39.04” E and is close to the border with Uzbekistan. The Project site is located approximately 300 km southwest of the capital Bishkek, 60 km northeast of the regional administrative center of Kanysh-Kiya in the Chatkal Valley, and 300 km by road from the nearest railway station in Shamaldy-Say • CZ sole holds two licenses, controlling the Property. • Mining (production) license: #3117AE of 700.03ha, valid to 2032 is covering defined Mineral Resources of SW part of the Property, which comprising Main Pit / Middle Zone and East Zone areas. • Exploration license # 3319AP, valid till October 2023 (including retain option), with area of 6776 ha is covering prospective ground in NE direction. • CZ is obtaining consent of the local state administration and the local governments of Chatkal Region, required to conduct exploration work • As per Kyrgyz Republic legislation, land allocation is granted for subsoil use (e.g. road construction, industrial sites, or other infrastructure facilities) for the term of license validity

Criteria	JORC Code explanation	Commentary
		• CZ bear a full legal responsibility for compliance with environmental requirements under Kyrgyz Republic legislation. CZ is required to obtain relevant environmental permits, make quarterly payments for environmental pollution as per Kyrgyz Laws and submit reports on compliance with environmental requirements
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Initial reconnaissance commences in Soviet era, in regard with identified antimony mineralization. Following the breakup of Soviet Union, Apex Asia in joint venture of Newmont Overseas Ltd complete approx. 1800m drilling and conduct geophysical survey. After 2002 CZ was formed and have acquired what is now known as Chaarat Mining License. Till 2021 CZ manage to confirm the presence of economic gold mineralization in the SW area of the Property and to opened room for further exploration in NE direction
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Chaarat Gold Project (Project) is located within Tien Shan Metallogenic Belt, a Hercynian fold and thrust belt, with length more than 2,500 km. Tien Shan belt consists of three tectono-stratigraphic units, each divided by major structural zones, and is thought to represent accretionary prisms, on the margin of proto-Eurasian continent. The Project is located in the middle Tien Shan province, made of Ordovician – Carboniferous fragments. Structurally, the terrene is intensively deformed by pre and post mineralization structural activities, dominated by SE and NW verging fore / back thrusts and steep N-NE strike-slip faults. Genetically, the mineralization system could be reference to “Orogenic” and “Intrusion Related” types. It has NE strike and is thought to be closely related with structurally controlled Permian aged magmatism. • Two main host rock / mineralization types can be outlined in the deposit. Oxidized type of gold mineralization, hosted in Devonian silicified sandstones of Tulkubash formation, represented by relatively steep, NE striking lenses, controlled by series of dilatational jogs. The second type of mineralization is unoxidized Au zone, containing refractory gold, hosted in Ordovician flysch complex, dominated by fine-

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>grained black shales, locally appeared in green-schist facies, and with features of comprehensive structural deformations and contact metasomatism. Both ore types are thought to relate to one hydrothermal system, developed in different facies due to difference in the host rock and the stratigraphic position
• 2021 infill drilling (and Mineral Resource update) was conducted in Middle Zone and East Zone, which along with Main Pit area are part of the oxidized Tulkubash mineralization type</td></tr>
<tr><td>Drill hole Information</td><td>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
○ easting and northing of the drill hole collar
○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
○ dip and azimuth of the hole
○ down hole length and interception depth
○ hole length.
• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</td><td>• Appproximately 105 km drilling have been carried out in the Tulkubash area after 2000, including RC and Geotechnical drilling.
• The 2021 drilling campaign is including approx. 2,760m (shown in the table below), aiming to update the available Resource Model, particularly in its Middle Zone and East Zone:
<table>
<tr><th>BHID</th><th>Az</th><th>DIP</th><th>East</th><th>North</th><th>RL</th><th>Depth</th></tr>
<tr><td>DH21T587</td><td>140</td><td>-55</td><td>12680050</td><td>4657226</td><td>2853</td><td>134.6</td></tr>
<tr><td>DH21T588</td><td>140</td><td>-55</td><td>12680084</td><td>4657241</td><td>2855</td><td>163.1</td></tr>
<tr><td>DH21T589</td><td>140</td><td>-47</td><td>12679982</td><td>4657121</td><td>2781</td><td>80.1</td></tr>
<tr><td>DH21T590</td><td>140</td><td>-50</td><td>12680458</td><td>4657549</td><td>2722</td><td>80.7</td></tr>
<tr><td>DH21T591</td><td>140</td><td>-55</td><td>12680481</td><td>4657579</td><td>2725</td><td>80</td></tr>
<tr><td>DH21T592</td><td>135</td><td>-55</td><td>12680602</td><td>4657748</td><td>2821</td><td>140</td></tr>
<tr><td>DH21T593</td><td>135</td><td>-60</td><td>12680894</td><td>4658292</td><td>3084</td><td>175.2</td></tr>
<tr><td>DH21T594</td><td>136</td><td>-70</td><td>12681103</td><td>4658543</td><td>3117</td><td>149.8</td></tr>
<tr><td>DH21T595</td><td>135</td><td>-50</td><td>12680948</td><td>4658294</td><td>3063</td><td>110.2</td></tr>
<tr><td>DH21T597</td><td>136</td><td>-50</td><td>12681105</td><td>4658543</td><td>3117</td><td>71.5</td></tr>
<tr><td>DH21T599</td><td>135</td><td>-60</td><td>12680739</td><td>4658062</td><td>2997</td><td>90.5</td></tr>
</table></td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		DH21T600 | 135 | -65 | 12680706 | 4658090 | 3021 | 150.4 DH21T602 | 135 | -50 | 12680771 | 4658146 | 3034 | 150 DH21T606 | 95 | -55 | 12681281 | 4658537 | 3037 | 100.2 DH21T609 | 135 | -55 | 12681179 | 4658588 | 3132 | 80.5 DH21T610 | 135 | -50 | 12681182 | 4658740 | 3129 | 85 DH21T611 | 135 | -58 | 12681146 | 4658608 | 3146 | 150.4 DH21T612 | 135 | -60 | 12681226 | 4658634 | 3120 | 85 DH21T613 | 135 | -50 | 12680097 | 4657281 | 2857 | 130.2 DH21T614 | 135 | -65 | 12680042 | 4657176 | 2819 | 120.4 DH21T616 | 135 | -50 | 12681190 | 4658682 | 3139 | 160 DH21T617 | 135 | -60 | 12681151 | 4658663 | 3156 | 85.1 DH21T618 | 136 | -50 | 12681231 | 4658755 | 3140 | 60.2 DH21T619 | 135 | -58 | 12679996 | 4657168 | 2817 | 127.2
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Middle Zone and East Zone holes done in 2021 were incorporated into existing block model from 2020, aiming to upgrade the Inferred Resources in these areas. • Overall, the results from 2021 exploration campaign, have available grade intercepts, with COG of 0.21g/t, accepted for Tulkubash style mineralization, certain rules are applied. For a maximum length of interval below the COG, but included in the calculations, is considered 6.0m. Each interval should start and end with sample >= COG. For top cap grade is considered 20 ppm, weighted averaging (length X grades) techniques are used for mean grades calculations • No Au equivalent was used
Relationship between mineralization	• *These relationships are particularly important in the reporting of Exploration Results.*	• Middle Zone / East Zone collars are supported by sufficient amount of historical data, aiming to avoid any significant fluctuation between the

Criteria	JORC Code explanation	Commentary
widths and intercept lengths	• *If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	intercepts and the true width
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Wide variety of 2D and 3D graphics, maps, plots and wireframes are available, the combination of which is fully sufficient to visual description of the reported data
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Middle Zone and East Zone results from 2021 will be used for updating the last available Mineral Resource model for Tulkubash area, prepared by Institute of Geotechnologies (IGT) in Dec. 2020
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Along with the Resource update made 2021, several other technical assessments for Tulkubash area were also done, including geotechnical / hydrogeological drilling in Main Pit area based on 13 holes (approx. 1,550m) • Acid Rock Drainage (ARD) survey for Tulkubash's Main Pit area is in progress
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Magnetic drone-based geophysics in the whole Property area, including Tulkubash area, is planned to define additional exploration targets. • The Karator and Ishakuldy exploration targets of Tulkubash stile, outlined on 2 and 5 km to northeast are planned for further resource definition drilling.

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 collection and its use for Mineral Resource estimation*	• The field data is compiled on the site and further combined, verified and stored in AGR 4.0 database platform, and in Excel spread sheets as well. • Prior the process of the Resource Modelling, the historic data and the

Criteria	JORC Code explanation	Commentary
	purposes. • *Data validation procedures used.*	new available one, were verified one more time, using Micromine software • The database used for the Mineral Resource update report has been previously audited by Gustavson and Associates (2014), by GeoSystems International (2018), by Sound Mining (2019), by IGT (2020)
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Last field visit by Competent Person was made between 25.08.2021 to 02.09.2021 by Dimitar Dimitrov • 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 a full-time employee of the company.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Mineralization and associated hydrothermal alteration, developed along a system of regional structural deformations, is genetically associated with Permian magmatism • Tulkubash mineralization zones are presented by series of dilatational jogs, hosted in silicified sandstones • No hard borders can be outlined, as all Tulkubash mineralization is host rock has similar facies • The interpretation is based on gold distribution, using actual drilling, trenches and underground adits • Overall, there is a good level of confidence in the geological continuity, although detailed drilling is required to advance the interpretation of the different mineralization lenses • The wireframing process is using 0.2 ppm and 0.7 ppm Au to contour high and low grade domains. • The low grade domains are considered as Resource outer shell, while the high grades are incorporated within it
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*	• The Mineral Resource extends approx. 4, 900m along strike, with maximum plan width of 500m, maximum depth below surface of approx. 300m

Criteria	JORC Code explanation	Commentary
	Resource.	
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation dta if available.*	• The 2021 Mineral Resource update, was made internally, by Chaarat geological department, and it was completed at March. 2022 • The 2021 Mineral resource update is using only drill hole data for the Resource interpolation, although assays from surface workings are used only in the interpretation process. • Micromine Software (under the license of Chaarat) was used for the block modelling • The Mineral Resource was estimated into block model, using ordinary kriging for Au, Ag is also estimated via IDW2 although it was not reported. IDW2 was used for density and recovery interpolation as well • Block model with parent block size of 5*5*5 m was generated within the wireframe domains, with 1m minimum sub-selling applied • Grade estimates was done by 1.5m composite sampling • Log probability plots and coefficient of variation were analysed for each domain for top cuts determination, including Au, Ag and Density • Two different variogram models were applied for low and high-grade domains • Block model was checked visually by sections, and geostatistical, using Q-Q and swath plots • The grade distribution in the block model is sufficiently matching the assay results • No estimation of deleterious elements was made • The Reported results are giving reasonable prospects for eventual economic extraction, taking in to account the estimated gold recovery • The updated at 2021 constrained Mineral Resource is: Density (g/cm^3) / Mt / Au (g/t) / Au (koz) / Class 2.66 / 25.11 / 0.98 / 789 / Indicated

Density (g/cm^3)	Mt	Au (g/t)	Au (koz)	Class
2.66	25.11	0.98	789	Indicated

Criteria	JORC Code explanation	Commentary
		2.56 11.226 0.62 222 Inferred
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 estimated and reported on a dry basis
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Mineral Resources have been reported at cut-off grade of 0.21 ppm Au • Cut-off grade determined using appropriate economic and technical parameters for open pit mining operations and heap leach gold extraction
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The applied open pit optimisation parameters are including:

c	Item	Unit	Resource_update_2021 Open pit optimization
Econ.	Initial Capital Cost	$'000	99016.42
	Selling Cost	$/oz	9.89
	Royalty	%	18
	Discount Rate	%	5
Metal Price	Au	$/oz	1800
	Ag	$/oz	21.7
OP. Costs	Mining	$/t mined	1.89
	Extra Ore Mining /Haulage	$/t ore	0.84

Criteria	JORC Code explanation	Commentary
		<table><tr><td></td><td>Processing</td><td>$/t ore</td><td>4.25</td></tr><tr><td></td><td>Stacking</td><td>$/t ore</td><td>0.54</td></tr><tr><td></td><td>Owner's Mining Cost</td><td>$/t ore</td><td>0.34</td></tr><tr><td></td><td>G/A</td><td>$/t ore</td><td>1.27</td></tr><tr><td rowspan="4">**Other Par.**</td><td>Recovery Au</td><td>%</td><td>Variable by block</td></tr><tr><td>Refining Recovery-Au</td><td>%</td><td>99.8</td></tr><tr><td>Refining Recovery-Ag</td><td>%</td><td>60</td></tr><tr><td>Internal Cut-off</td><td>g/t</td><td>0.21</td></tr><tr><td>**Pit Slopes**</td><td></td><td></td><td>Variable by location</td></tr><tr><td rowspan="2">**Op. Limits**</td><td>Mining</td><td>t/year</td><td>27000000</td></tr><tr><td>Processing</td><td>t/year</td><td>5000000</td></tr></table>
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.*	• Recovery model, based on the stage of oxidation, was prepared in attempt to adjust the designing of the reported Resource shell. An unoxidized cluster, containing refractory gold mineralization, with low recovery was outlined beneath the Main Pit area, and accordingly excluded in the process of pit optimization. The average recovery in the constrained Resource, estimated per zones is 72-76 % <table><tr><td>Recovery_Au (%)</td><td>Class</td><td>Zone</td></tr><tr><td>71.91</td><td>Indicated</td><td>Main_Pit</td></tr></table>

Criteria	JORC Code explanation	Commentary
		75.97 Indicated East_zone 75.01 Indicated Mid_zone 74.47 Inferred Main_Pit 75.49 Inferred East_one 76.14 Inferred Mid_zone
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• There are not considered to be any environmental factors likely to affect the assumption that the deposit has reasonable prospects for eventual economic extraction
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Dry bulk density is measured using paraffin –coated immersion (Archimedes) method to evaluate the specific gravity (SG) • Density (SG) values have been interpolated into the block model, using Inverse Distance Weighting (IDW) method • The density data are comprising total of 1,623 dry specimens, measured by Chaarat • In 2020 no density measurements were done, as RC drilling is not providing proper material
Classification	• *The basis for the classification of the Mineral Resources into*	• Classification of Mineral Resources is based upon a review of geological

Criteria	JORC Code explanation	Commentary
	varying confidence categories. • *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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	continuity, quality of supporting data, spatial grade continuity and quality of a block model • Mineral Resource Classification was made manually, from section to section • Following criteria has been took in account during the Resource Classification: -The model has been classified only into two categories of Indicated and Inferred, as it is considered that the available data is not sufficient for Measured category -Drill hole spacing in plan: for Indicated was used average 30-40m drilling grid, for Inferred 40-80m -Total depth of mineral Resource classification: Inferred was restricted up to 80m from the last hole, for Indicated the restriction is 40-60m • The results of the validation of the block model shows acceptable correlation in the input data to the estimated grades • The Competent Person is confident that all relevant factors have been considered and the results reflects these views.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No external reviews have been made for 2021 Mineral Resource Update
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic*	• The Mineral Resource is appropriate for the Tulkubash style of mineralization, and it is adequate to the available data. It is considered that the current drill hole spacing is sufficient to demonstrate geological continuity of the mineralization • Accuracy of the Mineral Resource is sufficient to permit economic development of the deposit • The Mineral Resource relates to global estimate • The application of top cuts and compositing in the Mineral Resource are considering as appropriate • 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

Criteria	JORC Code explanation	Commentary
	evaluation. Documentation should include assumptions made and the procedures used. • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	global Mineral Resource • The mineralization domains have been adhered to geostatistical and grade estimation works, and the spatial distribution of grade in the Mineral Resource model is representative of the sample data