ORE RESERVE REPORT
TULKUBASH GOLD PROJECT
CHAARAT GOLD HOLDINGS LTD

MAY 2022

Prepared by: P. Carter, BSc (Min Eng), MBA, P. Eng

Prepared for: Chaarat Gold Holdings Ltd

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Abbreviations

AACE	American Association of Cost Estimators
ABA	Acid-base Accounting
ADR	Adsorption-Desorption-Recovery
Ag	Silver
ASL	Above Sea Level
Au	Gold
bcm	Bank Cubic Meter
CGH	Chaarat Gold Holdings
CIC	Carbon-in-Column
EOY	End-of-Year
ESIA	Environmental and Social Impact Assessment
FS	Feasibility Study
g/t	Grams Per Tonne
GOH	Gross Operating Hours
G&A	General and Administration
IFC	International Finance Corporation
IRR	Internal Rate of Return
JORC	Joint Ore Reserves Council (of the Australasian Institute of Mining and Metallurgy)
Km	Kilometer
Koz	Kilo Ounce
L	Liters

LOM	Life-of-Mine
m	meter
M	Million
Mt	Million Tonnes
Mtpa	Million Tonnes Per Annum
MRE	Mineral Resource Estimate
MW	Megawatt
NAG	Non-acid Generating
NOH	Net Operating Hours
NPV	Net Present Value
oz	Troy Ounce
PAG	Potentially Acid-Generating
PLS	Pregnant Leach Solution
tpd	Tonnes Per Day
WAI	Wardell-Armstrong International

1.0 SUMMARY

Chaarat Gold Holdings (Chaarat) is developing the Tulkubash gold deposit in the western region of the Kyrgyz Republic. An updated feasibility study was completed for the project in April 2021. Additional exploratory and infill drilling conducted after the completion of the feasibility study update has dictated an update to the project Ore Reserves.

The Ore Reserves for the Tulkubash Gold Project have been updated according with JORC code (2012). Ore Reserves represent the potentially economic portion of Measured and Indicated Resources, subject to modifying factors defined at a pre-feasibility or feasibility study level, which can be reasonably expected to be mined.

The mineral resource used for conversion to reserves is the Tulkubash 2021 EOY Mineral Resource Estimate dated April 2022. The portion of the mineral resource potentially convertible to reserves was Indicated resources of 25.1 Mt grading 0.98 g/t Au containing 789,000 Au. An industry-standard mine design methodology was employed featuring pit optimization to define an optimal resource shell and a computer-aided manual design process to convert the shell into a minable pit design.

A $1,350/oz pit shell evaluated at a $1,600/oz gold price and a 0.22 g/t cutoff grade was selected as the basis for the pit design. Following adjustments for dilution, 10%, and mining losses, 2.5%, the final reserve is as shown in Table 1. All reserves are classified as Probable as no Measured resources were converted to reserves.

Estimate	Ore	Grade	Metal	Waste	Total	Strip Ratio	Recovery
	Mt	g/t Au	Koz Au	Mt	Mt	w:o	%
May 2021	23.1	0.87	647	66.4	89.5	2.9	74.1

Table 1. 2022 Tulkubash Ore Reserve

The updated reserve represents increases in ore tonnage and grade of 11% and 2%, respectively, resulting in a 13% increase in contained metal compared to the reserves for the 2021 Feasibility Study. Waste tonnage and strip ratio have also increased about 23% and 11%, respectively, compared to the previous reserve while metallurgical recovery has increased about 1%.

The reserve is planned to be mined by conventional open pit, truck-shovel methods using a mining contractor. Processing will be by 2-stage crushing and heap leaching on a valley-fill leach pad located 6 km from the open pit. Gold will be extracted from pregnant leach solution using carbon-in-column technology, stripped, and smelted to produce dore for refining offsite. Metallurgical recovery for the reserve is estimated to be about 74%.

The project design includes adequate and appropriate infrastructure to support development of the reserve. There are no environmental, social, or permitting issues which would prevent the deposit from being developed as an Ore Reserve.

A production schedule was developed for the updated reserve. The result was a 5-year operating plan producing an average of about 95,000 oz per year. The production schedule was used as a basis for an economic evaluation using discounted cash flow analysis. The evaluation employed parameters from the 2021 Feasibility

Study with mining costs adjusted annually to reflect the increasing cost of haulage for new reserves lying beyond the Main Zone pit.

The result of the economic evaluation was, at the same gold price as that used in the 2021 Feasibility Study, $1,450/oz, project NPV_5 increased 19% to $101 M from $85 M. At the projected gold price of $1,600/oz, the project value was estimated to increase 62% to $138 M.

The likelihood that costs may have changed since the feasibility study were addressed through sensitivity analysis. The analysis showed that even if capital and operating costs both increased 20%, the project would still generate an NPV_5 of $66 M, indicating robust economics in the current gold price environment. Breakeven for the project on an NPV_5 basis was determined to be a gold price of about $1,090/oz.

Based on the quality of the underlying resource estimate, the modifying factors applied, and the results of the economic analysis, it is concluded the Indicated resources defined for development at the Tulkubash gold deposit qualify as an Ore Reserve under JORC code (2012). The confidence and accuracy of the Ore Reserve estimate is considered moderate to high.

It is noted that the resource estimate, which is JORC-compliant and serves as a basis for the Ore Reserve, has not been reviewed by a qualified external party. Also, a review of capital and operating costs should be undertaken to identify any significant changes since the completion of the 2021 Feasibility Study. As such, the project values in this report should be considered indicative and require confirmation, however, the conclusion that the resources defined within the open pit design constitute an Ore Reserve is not in doubt.

Implementing these recommendations will enhance the quality of the estimate however, none of the issues identified add sufficient uncertainty or risk to prevent the declaration of Ore Reserves for the project.

2.0 INTRODUCTION

Chaarat Gold Holdings Limited (Chaarat) is developing the Tulkubash Gold Project located in the western Chaktal region of the Kyrgyz Republic. The project is currently in the early stages of construction. The company expects to finalize project financing in 2022 with the goal of producing gold in 2024.

Exploratory and infill drilling completed in Q3 2021 prompted an update of the project resources. Applying guidance from review of the previous model by external parties, the Mineral Resource Estimate was revised in Q4 2021. The MRE update was performed in-house by Chaarat geological and technical staff.

The updated resource provided the basis for a revised Ore Reserve developed by Chaarat in Q2 2022. This replaces the 2020 EOY reserves which underpin the 2021 Feasibility Study update. Information for the reserve update comes from Chaarat geological and technical personnel, and the 2021 Feasibility Study. The updated Ore Reserve complies with the standards prescribed in the JORC code (2012).

3.0 MINERAL RESOURCE FOR CONVERSION TO ORE RESERVES

The Mineral Resource estimate used for conversion to Ore Reserves is identified as the Tulkubash Mineral Resource Estimate dated April 2022 and is referred to in this document as such. This resource is based on data collected by diamond drilling inclusive of the 2021 exploration drill program.

The project drillhole database is composed of approximately 100,000 m of drilling from 715 holes including 24 holes totaling roughly 2,760 m of drilling completed since the issue of the 2021 Feasibility Study. The Mineral Resource Estimate was prepared by Chaarat geological and technical staff. The estimate has not been reviewed by external experts, but incorporates guidance provided by both SLR Consulting and Wardell-Armstrong International for improvement of further iterations of the 2020 EOY MRE. Details of the resource, defined at a cutoff grade of 0.21 g/t Au, can be found in Table 2.

Resource Category	Tonnage	Grade	Metal
	Mt	g/t Au	Koz Au
Measured	---	---	---
Indicated	25.2	0.98	789
Total M & I	25.2	0.98	789
Inferred	11.2	0.62	222
Total Resource	36.3	0.87	1,011

Table 2. Tulkubash 2021 EOY Mineral Resource

- Figures in Table 2 are rounded in accordance with disclosure guidelines.
- The Mineral Resource was estimated using 5 m x 5 m x 5 m (x, y, z) blocks, with minimum sub-block dimensions of 1 m x 1 m x 1 m (x, y, z).
- The estimate was constrained to the mineralised zone using wireframe solid models.
- Grade estimates were based on 1.5 m composited assay data.
- The interpolation of the metal grades was undertaken using Ordinary Kriging.
- The Mineral Resource was bounded by a pit shell based on a gold price of $1,800/oz Au.
- A cutoff grade of 0.21 g/t Au was applied to report the Mineral Resources.

The Indicated portion of the Tulkubash 2021 EOY MRE shown in Table 2 is has the same contained metal, 789 Koz, as the 2020 EOY Mineral Resource, but less tonnage and higher grade. The difference in the 2021 EOY MRE is attributable to the application of a variable rather than fixed recovery, the exclusion of sulfide material not amenable to heap leaching from the current estimate, and reinterpretation of wireframes following completion of the 2021 drilling program.

The Mineral Resource estimate is inclusive of the Ore Reserve. It should be noted that although stock exchange regulations require Chaarat to present Inferred Resources as part of the total project Mineral Resource as shown in Table 2, no Inferred Resources were converted to Ore Reserves.

4.0 COMPETENT PERSONS

The updated Ore Reserve estimate was prepared by Mr. Yavuz Aydemir, a graduate in mining engineering of the Middle East Technical University, Ankara, Turkey, with 13 years of experience in computerized mine planning and mine operations supervision. Mr. Aydemir is a former member of the Chaarat engineering team, now working on a contract basis. Mr. Aydemir visited the project site on numerous occasions from 2019-2020.

The Ore Reserve estimate was reviewed by Mr. Peter C. Carter, BSc (Min Eng), MBA, P. Eng, a consulting professional engineer registered in the province of British Columbia, Canada. As a former member of the Chaarat technical staff, Mr. Carter was involved in the development of the original 2018 and revised 2019 and 2021 feasibility studies. He currently provides oversight and technical advice on mining issues for Chaarat on a contract basis.

Mr. Carter has visited the project site on numerous occasions in 2018 and 2019, the last time in June 2019. There have been no changes at the project site relevant to the preparation of Ore Reserves since Mr. Carter's last visit. Mr. Carter is qualified as a Competent Person for the reporting of Ore Reserves as defined by the JORC code (2012).

With respect to the Mineral Resources to be converted to Ore Reserves, Mr. Carter has relied on the Mineral Resource Estimate for the Tulkubash deposit of December 20, 2021, prepared by Mr. Nikolai Dimitrov, Senior Resource Geologist, under the supervision of Mr. Dimitar Dimitrov, Vice-President Geology and Exploration, both of Chaarat. Dimitar Dimitrov is an expert in the estimation of mineral resources and is qualified as a Competent Person as defined by the JORC code (2012).

5.0 STUDY STATUS

The updated Ore Reserves are based on the technical and economic parameters established in the revised Tulkubash Gold Project Feasibility Study, prepared by Logiproc PLC and Sound Mining Inc. of Johannesburg, South Africa, in April 2021.

The study is considered to represent a Class 3 estimate according to the AACE international cost classification system. The accuracy of the estimate is -10% to +15% with most of the supporting costs based on data from Q4 2020.

Based on advice from Chaarat, the information from the 2021 Feasibility Study remains valid for the purpose of updating the project Ore Reserves. Any changes to key project parameters, following the completion of the 2021 Feasibility Study, are identified and their impact on defining updated reserves are explained in the document.

The Ore Reserves defined in this report may result in a material (> 30%) change to the project value subject to review of the contributing factors. If such a change is confirmed, it will be disclosed to the public with the revised Ore Reserves. To the author's knowledge, at the time of writing, no comprehensive update to the 2021 Feasibility Study is planned.

6.0 CUTOFF GRADE PARAMETERS

6.1 OPERATING COSTS

The operating costs used to determine the cutoff grade can be found in Table 3. Owner Mining costs are costs incurred by the owner for mine engineering and contractor management. Ore mining costs are the cost to haul ore from the boundary of the mining area to the process facility. Other mining costs are excluded from the calculation of a marginal cutoff.

Operating Cost	Units	Value
Mining (owner)	$/t processed	0.34
Mining (ore)	$/t processed	0.72
Process	$/t processed	4.79
G&A	$/t processed	1.25
Refining	$/oz	9.78

Table 3. Operating Costs used in the Cutoff Grade Calculation

6.2 METALLURGICAL PARAMETERS

Metallurgical recovery for the Tulkubash Project varies depending on degree of oxidation. As oxidation, and therefore recovery, varies from block to block, no single value can be used to calculate cutoff grade before the pit limits are defined. Within the open pit, a recovered gold cutoff grade is applied to the recovered gold in each block to define ore tonnage and grade within the pit limits.

In the calculation of a recovered gold cutoff, 100% recovery is used, because the cutoff is applied to recovered gold in each block, not total gold. Once the recovered gold cutoff grade is determined, the true recovery of the ore can be derived from the block model and that value can be used to calculate the true marginal cutoff, but only after the fact. In the case of the updated Ore Reserve, the actual recovery derived from the block model was 74.1%.

6.3 FINANCIAL PARAMETERS

Table 4 shows the financial parameters used in the cutoff grade calculation. The $1,600/oz gold price is aligned with the long-term consensus gold price expected to prevail during the LOM by major commodity brokers.

The Kyrgyz Republic employs a sliding scale royalty in lieu of corporate tax on gold mining companies. At gold prices from $1,501-$1,600/oz the royalty is 14%.

Financial Parameters	Units	Value
Gold Price	$/oz Au	$1,600
Royalty	%	14.0

Table 4. Financial parameters for Cutoff Grade Calculation

6.4 CUTOFF GRADE CALCULATION

The cutoff grade is defined as the grade at which revenue equals marginal direct costs. The calculation of a marginal recovered gold cutoff is as follows:

$$COG = ((OM + OH + PRO + GA) / ((PR * (1-ROY) - REF)/31.1)$$

Where:

COG	Cutoff grade	g/t	---
OM	Owner's Mining	$/t ore	0.34
OH	Ore Haul	$/t ore	0.72
PRO	Process	$/t ore	4.79
GA	G&A	$/t ore	1.25
REF	Refining	$/oz Au	9.78
PR	Gold Price	$/oz Au	1,600
ROY	Royalty	%	14

Table 5. Cutoff Grade Calculation Parameters

The foregoing calculation yields a marginal recovered gold cutoff grade of 0.16 g/t. Adjusting the recovered gold cutoff grade using the actual recovery derived from the defined ore blocks, the true marginal cutoff grade can be calculated to be 0.22 g/t. Further explanation regarding the application of a recovered gold cutoff grade can be found in Appendix I.

7.0 MINING FACTORS

7.1 RESOURCE MODEL

The following provides a brief description of the nature and process used to generate the Mineral Resource converted to Ore Reserves.

The resource block model was constructed using sample data from the geological drill hole database. Data includes assays and logs from diamond drillholes, channels, trenches, and road cuts. The database contains logs for 729 drillholes totaling approximately 101,000 m of core.

The Tulkubash deposit is interpreted as a brittle shear zone formed in a shallow epithermal environment. Reverse and dextral strike-slip movement associated with regional fault structures provide the setting for mineralization. The deposit consists of a wide corridor of low-grade mineralization showing strong continuity along a SW-NE trend, hosting a series of discrete, higher grade, steeply dipping lodes. This interpretation was used to guide the modelling of mineralized bodies within the deposit.

The sample data was subjected to classical statistical analysis to understand the nature of the populations present. Two populations were found to exist in the data set: a high-grade population above 0.70 g/t Au and a low-grade population existing from 0.20-0.70 g/t Au. Data analysis also showed that more than 95% of the data occurred in the same lithological unit indicating fracturing, not lithology, controlled mineralization.

Wireframe models of mineralized zones were generated manually from section to section using cutoff grades of 0.20 g/t Au and 0.70 g/t Au. All types of sample data were used to interpret the wireframes but only drillhole data was used to define the wireframe boundaries themselves. A total of 30 separate wireframes, 24 low-grade and 6 high-grade, were developed to model the deposit.

Sample data in the ore zones were composited in 1.5 m lengths. Top cuts were applied to each individual zone to prevent high grade samples from overly influencing the grade estimate. Variography was conducted separately on high-grade and low-grade domains to reveal trends in the continuity of the mineralization and define parameters used for grade estimation.

Variography indicated that the major anisotropy for the mineralization was orientated roughly along strike from southwest to northeast with a range of 40-60 m. Minor anisotropies with ranges of 20-40 m were found to exist with a northerly trend.

The Resource block model was constructed with a parent block size of 5 m x 5 m x 5 m (x, y, z) with sub-blocks as small as 1.0 m x 1.0 m x 1.0 m. Kriging Nearest-Neighbor Analysis confirmed that the parent block size maximized kriging efficiency. Gold grades were estimated for each subblock and then combined into a single value for the parent block. Ordinary Kriging (OK) was used for block gold grade estimation.

Only drillhole composites were used to inform the grade estimates to ensure a consistent level of support. A 40 m x 20 m x 30 m search ellipse was used with a multi-pass estimation strategy. Dynamic anisotropy was applied in some domains. Gold and silver grades were all estimated using OK.

Blocks were categorized as Indicated or Inferred based on ranges of 40 m and 80 m, respectively, grade/thickness variability, and continuity along strike. Measured resources were not classified due to insufficient drillhole density and QA/QC issues with historical data. Resources were tabulated by category within a bounding $1,800/oz Au pit shell at a cutoff grade of 0.21 g/t Au.

Density, averaging 2.66 t/m^3 for Indicated resources and 2.60 t/m^3 for Inferred resources, was modelled using Inverse Distance squared (ID2) methodology. Metallurgical recovery was also modelled using a geostatistical approach and is described in the discussion of “Metallurgical Factors”.

Data quality, geological interpretation, and resource estimation methodology are all consistent with accepted industry standards and practice. The resource model incorporates advice from third party experts, SLR Consulting and Wardell Armstrong International, regarding improvements to the previous model. In the opinion of the Competent Person for resources, the model is suitable as a basis for conversion of resources to reserves, given the application of appropriate modifying factors.

7.2 METHOD USED TO CONVERT RESOURCES TO RESERVES

The method used convert Mineral Resources to Ore Reserves for the Tulkubash Gold Project follows typical open pit mine engineering practice. It entails several steps which include:

- Model Validation
- Block Model Regularization
- Optimization Parameter Definition
- Pit Optimization
- Shell Selection
- Pit Design
- Dilution and Losses
- Reserve Calculation
- Ore Classification

The following provides a brief description of each of these steps as performed to generate the revised Tulkubash Ore Reserves.

7.2.1 MODEL VALIDATION

The model was visually inspected to determine if there were any apparent inconsistencies between DDH samples and estimated grade values. Spot checks were performed on several levels throughout the model. Block values within wireframes were checked to make sure ore blocks were consistent with the defined ore zones.

7.2.2 REGULARIZATION

The block model was provided to the mine engineer in its sub-blocked form with variable sized blocks as small as 1.0 m x 1.0 x 1.0 m. Regularization was performed to create a model suitable for mine planning with a uniform block size that reflects the selective mining unit (SMU).

The results of the regularization process indicated that aggregating the smaller, variable sized blocks into uniform 5.0 m x 5.0 m x 5.0 m minable blocks caused no loss in metal but an 8% increase in tonnage and a commensurate decrease in grade.

7.2.3 OPTIMIZATION PARAMETERS

The pit optimization process is driven by technical, economic, metallurgical, and geotechnical parameters which are used to determine if a block should be mined as ore or waste. These parameters are described in the following sections.

7.2.3.1 ECONOMIC

Unit costs are primary drivers in the pit optimization process. Costs were the same as those used in the 2021 Feasibility Study and the cutoff grade calculation.

Cost	Units	Value
Mining (Ore)	$/t mined	2.55
Mining (Waste)	$/t mined	1.83
Mining (Owner)	$/t ore	0.34
Process	$/t ore	4.79
G&A	$/t ore	1.25
Refining	$/oz	9.78

Table 6. Unit Costs for Pit Optimization

7.2.2.2 FINANCIAL

Pit shells were generated for a range of gold prices from $1,000-$1,800/oz Au. $1,600/oz represents the company's long-term view of gold price. Taxes in the Kyrgyz Republic (KR) are applied as a royalty linked to gold price. The royalty applied in the optimization was 14%, appropriate for gold prices from $1,501-$1,600/oz, as per KR legislation.

A silver price of $20.00/oz Ag was used in the optimization. It should be noted, however, that the grade of silver is too low to influence the outcome of the optimization.

7.2.2.3 RECOVERY

Recovery for gold was determined on a block-by-block basis from the geo-metallurgical model described in the "Metallurgical Factors" section. Recovery for silver was applied as a flat rate of 63.4%, the average value from the 2018 Metallurgical Test Program.

7.2.2.4 GEOTECHNICAL

Geotechnical parameters for pit slopes were taken from the 2017 geotechnical slope design study by WAI. Recommended inter-ramp angles (IRAs) of 51^{o} and 58^{o} were each flattened 2-6^{o} in appropriate sectors to reflect the presence of ramps as determined by previous design work. More details regarding pits slopes can be found in the section on pit design.

Design Sector	Slope Angle (o)	Design Sector	Slope Angle (o)
Default (0)	55.5	4	49.0
1	48.5	5	50.0
2	55.5	6	45.0
3	46.0	7	45.0

Table 7. Slope Angles for Pit Optimization by Sector

Slopes listed by sector in Table 7 were applied as shown in Figure 1. Design parameters for the Main Zone Pit area were extrapolated to the Mid and East Zone areas where geotechnical drilling has been performed but the results have yet to be subject to geotechnical review for the purpose of defining pit slopes.

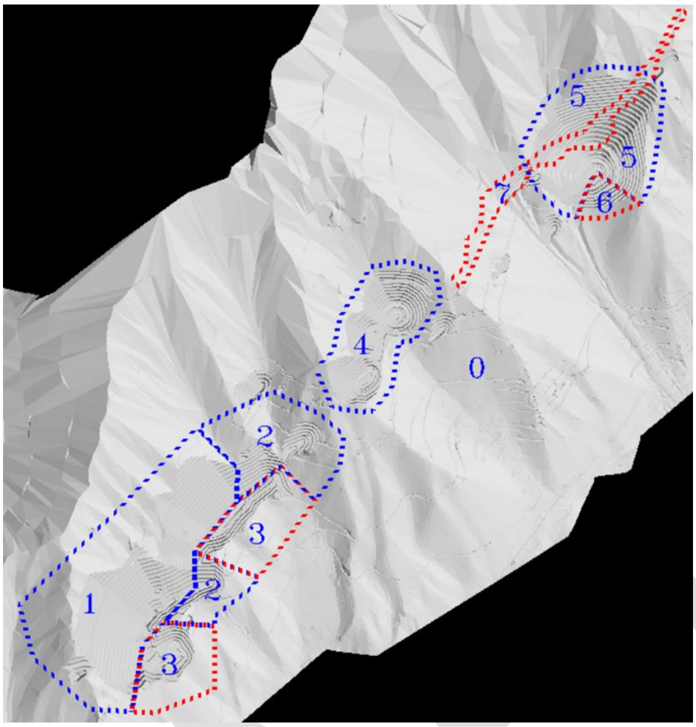

Figure 1. Slope Sectors for Pit Optimization

7.2.3 PIT OPTIMIZATION

Pit optimization was performed using Whittle 4X software which employs a Lerch-Grossman algorithm to determine the ore blocks which will provide the optimum return from extraction. The optimization parameters are used by the optimizer to calculate a value for each block including that of the overlying waste blocks. The waste blocks necessary to mine a given block of ore are defined by the slope constraints. All blocks with a net positive value including all overlying blocks are mined.

7.2.3.1 USE OF INFERRED RESOURCES

Inferred Resources were not used in the pit optimization. Inferred Resources, by definition, lack the geological certainty necessary for them to contribute to an Ore Reserve. All Inferred Resources were treated as waste during the pit optimization process.

7.2.3.2 OPTIMIZATION RESULTS

Optimization was performed at a range of metal prices from $1,000-$1,800/oz in $50/oz increments. For each metal price, the optimizer generates an outline of the pit limits in three dimensions called a pit shell. The material inside the pit limits is tabulated as ore and waste based on a calculated cutoff grade. Table 8 shows the potentially mineable resource within each shell.

Pit		Ore	Waste	Total	SR	Au	Ag	Au	Ag
#	$	t	t	t	w:o	g/t	g/t	oz	oz
1	1,000	17,060,080	39,149,118	56,209,198	2.29	1.01	0.91	551,292	496,662
2	1,050	18,113,497	45,996,833	64,110,330	2.54	1.01	0.92	585,857	533,386
3	1,100	18,489,292	47,107,585	65,596,877	2.55	1.00	0.91	593,850	543,560
4	1,150	19,292,133	50,265,907	69,558,040	2.61	0.99	0.92	611,759	568,837
5	1,200	19,911,350	52,891,649	72,802,999	2.66	0.98	0.91	626,401	585,559
6	1,250	20,584,519	56,629,450	77,213,969	2.75	0.97	0.91	642,814	604,495
7	1,300	21,131,579	59,379,177	80,510,756	2.81	0.97	0.91	656,568	618,318
8	1,350	21,814,146	64,114,382	85,928,528	2.94	0.97	0.90	676,794	633,451
9	1,400	22,079,776	65,325,730	87,405,506	2.96	0.96	0.90	682,267	639,816
10	1,450	22,524,636	67,597,504	90,122,140	3.00	0.96	0.90	691,958	650,462
11	1,500	23,350,447	72,290,742	95,641,189	3.10	0.95	0.89	710,570	668,153
12	1,550	23,671,874	73,947,649	97,619,523	3.12	0.94	0.89	717,383	675,068
13	1,600	24,094,552	75,949,369	100,043,921	3.15	0.95	0.89	733,911	690,065
14	1,650	24,466,015	78,155,583	102,621,598	3.19	0.94	0.89	742,551	698,737
15	1,700	24,845,008	80,965,315	105,810,323	3.26	0.94	0.89	751,417	708,283
16	1,750	25,281,171	83,686,695	108,967,866	3.31	0.94	0.88	760,707	716,409
17	1,800	25,720,737	86,422,077	112,142,814	3.36	0.93	0.88	770,213	727,046

Table 8. 2022 Pit Optimization Results

7.2.3.3 RELATIVE SHELL VALUE

A net present value (NPV) was calculated for each shell using a gold price of $1,600/oz. The discounted value for each shell is shown by the curve in Figure 2. All the shells from $1,000/oz to $1,800/oz had NPVs within 8% of the maximum.

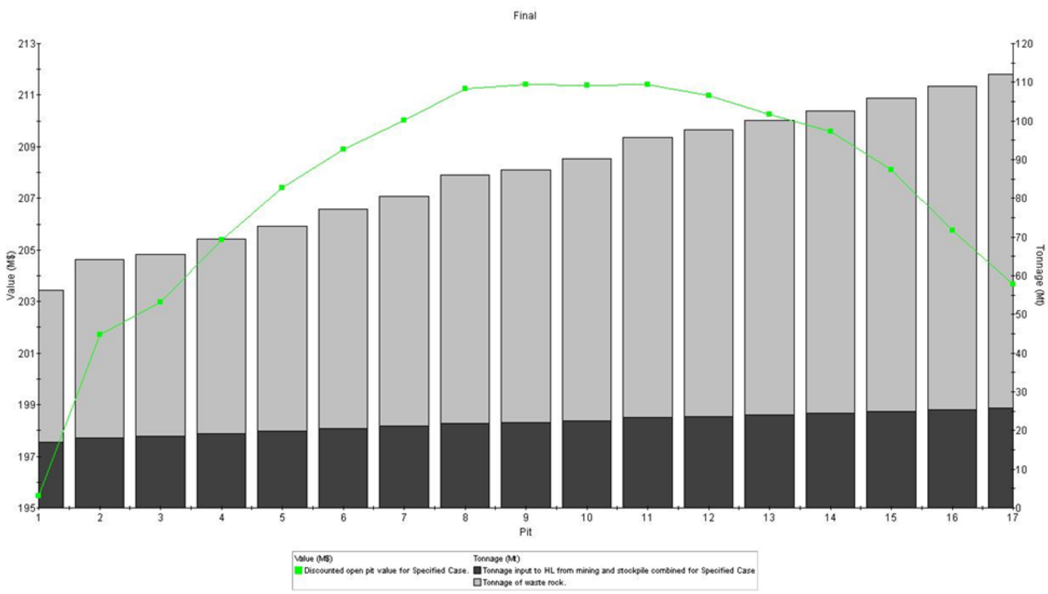

Figure 2. Relative Values of Optimized Pit Shells

The NPVs shown in Figure 2 are useful for comparing the relative merit of different shells but are not definitive because they were not derived from workable mining schedules. Four shells, 8-11, can be seen in Figure 2 to have very similar values. It is notable that although Pit shell #8, the $1,350/oz shell, had nominally less NPV than Pit Shell #11, the $1,500/oz shell, it featured 10 Mt less waste giving it significantly less mining risk.

7.2.3.4 PIT SHELL SELECTION

The $1,350/oz shell, Pit Shell #8, was selected because it represented:

- Highest relative value with lowest risk
- Mineable resource large enough to support financing
- Lower strip ratio and unit costs than larger shells
- Larger ore tonnage than smaller shells

The selected $1,350/oz pit shell is composed of seven separate sub-shells, one located in the Main Zone, one in the East Zone, and five in the Mid Zone. The total potentially minable resource is 21.8 Mt grading 0.97 g/t Au 0.90 g/t Ag containing 677 Koz Au and 633 Koz Ag, respectively. Associated with the ore is 64.1 Mt waste resulting in a 2.9:1 strip ratio as highlighted in Table 8.

7.2.4 PIT DESIGN METHODOLOGY

A traditional mine design methodology was applied to developing the pit design(s). Contours from the optimized $1,350/oz Au pit shell were used to guide a computer-aided, manual design process that results in a physically minable pit design, the limits of which, match as closely as possible those of the pit shell. The design work was conducted using GEMS mine planning software. The work resulted in a reserve within the mineable design less than 5% different from the optimized pit shell, before adjustments.

7.2.4.1 DESIGN CRITERIA

A minimum mining width of 15 m was used to define pit bottoms which corresponded as closely as possible to the optimized pit shell. Ramps were introduced to provide access to each successive bench. Every four benches, a safety bench was introduced into the designed pit walls to achieve the prescribed inter-ramp angle and provide access for mechanized cleaning of catchments as per Kyrgyz regulations.

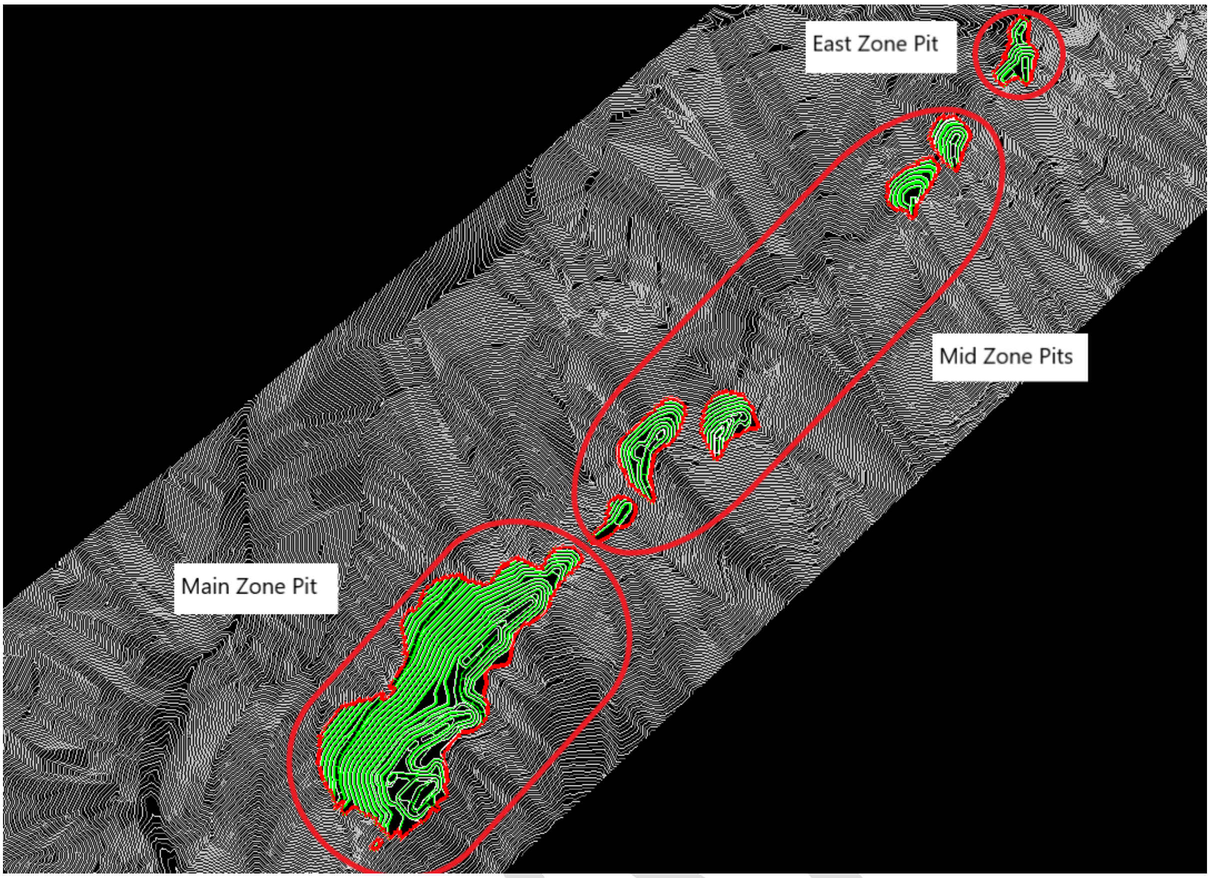

Figure 3. Final 2022 Tulkubash Open Pits

Benches were designed 5 m in height which was suited to both planned ore control practices and the size of mining equipment. Bench face angles were 66° and 75° as prescribed by the geotechnical slope design study. Four bench stacks, 20 m in height, combined with an 8 m safety bench, resulted in inter-ramp angles 1-2° flatter than those recommended.

Pit ramps were designed 15 m wide including running surface, berm, and ditches. The running surface is 7.8 m wide or three times the width of the haul trucks planned for the mining fleet. Ramp grades were designed 10% inside curve. Figure 3 shows the application of the pit design criteria in the final design pits.

The stability of the Main Zone Pit was confirmed by limit-equilibrium analysis in the 2019 Feasibility Study. Given the same slope design parameters and the similarity of the current and 2019 pit designs, there is no reason to believe that the 2022 design is not also geotechnically sound.

7.2.4.2 MINING DILUTION

Mining dilution occurs as a result of inaccurate digging, unplanned movement of ore during blasting, and the difference that exists between the projected location of ore/waste boundaries based on blasthole assays and the actual location of those boundaries.

Zone	Dilution Tonnage		Dilution Grade	
	(Kt)	(%)	(g/t Au)	(g/t Ag)
Main	2,007	10.1	0.15	0.30
Mid	315	10.3	0.11	0.13
East	21	8.5	0.29	0.17
Total	2,343	10.1	0.14	0.28

Table 9. Mining Dilution by Zone

Mining dilution was estimated by generating a 0.5 m wide "dilution skin" around the ore zone wireframes in each zone on representative benches. The tonnage and grade of the material within the dilution skins was then averaged for each zone and the reserve for each pit adjusted accordingly.

Table 9 indicates that dilution ranged from 8-10% across the three zones with an average of about 10%. Total dilution is estimated at 2.34 Mt grading 0.14 g/t Au. The diluting material contains about 10,500 oz gold. Silver grade was similarly diluted although, as a by-product, it does not constitute part of the reserve.

Mining dilution of about 10% is reasonable given modeling with an appropriately sized SMU and the high degree of selectivity expected from small mining equipment, despite the variable nature of the deposit. The dilution grade in the East Zone is above the marginal cutoff grade because the ore zones are surrounded by Inferred material which is above cutoff but treated as waste.

7.2.4.3 MINING RECOVERY

Mining recovery recognizes that some ore is lost during the mining process. This includes ore lost due to inaccurate digging, unplanned movement of material during blasting, ore incorrectly shipped as waste, and overbank losses. The diluted reserve was adjusted for losses of 2.5% resulting in an expected mining recovery of 97.5%.

Management of overbank losses at Tulkubash will be of high importance due to the narrow benches and steep hillside. Ore blasting and digging on the outside edge of benches will have to be carefully planned to minimize overbank losses. Material falling over the edge will be diluted below cutoff and unrecoverable.

The adjustment for mining losses assumes that lost ore is treated as waste. For this reason, the 2.5% decrease in diluted ore tonnage results in a commensurate increase in waste tonnes. It is expected at Tulkubash that a significant portion of material will move downslope outside the pit limit as a function of blasting and loading. This means that the approach used to adjust the reserve for mining recovery is likely conservative with respect to the total waste tonnage to be moved.

7.2.5 ORE RESERVE CALCULATION

Table 10 shows the final 2021 EOY Ore Reserve for the Tulkubash Gold Project. The reserve is based on an optimized pit shell generated at a gold price of $1,600/oz Au. A computer-aided, manual design process was used to convert the pit shell into a minable pit design.

Zone	Ore	Grade	Metal	Waste	Total	Strip Ratio
	Mt	g/t Au	Koz Au	Mt	Mt	w:o
Main	19.8	0.90	570	55.6	74.8	2.8
Mid	3.1	0.66	65	9.4	12.5	3.1
East	0.2	1.46	12	1.4	1.6	5.7
Total	23.1	0.87	647	66.4	89.5	2.9

Table 10. 2022 Adjusted Ore Reserve by Zone

A recovered gold cutoff grade of 0.16 g/t Au was applied to the recovered gold grades of material inside the pit design to distinguish ore from waste. Finally, ore and waste tonnage and grade within the pit design was manually adjusted for mining dilution and mining recovery to arrive at the final figures.

7.3 MINING PLAN

7.3.1 OPEN PIT DESCRIPTION

The updated Tulkubash open pit design is composed of seven separate pits arranged along the strike of the orebody over a distance of 4 km. The pits are situated in steep, mountainous terrain at elevations of 2,300-2,700 m ASL. The deposit is divided up into three zones, the Main Zone, Mid Zone, and East Zone. The following provides a brief description of the pits in each zone.

7.3.1.1 MAIN ZONE PIT

The Main Zone Pit is situated at the southwestern end of the mining area. It is the single largest pit accounting for 85-90% of both ore tonnage and contained gold. The Main Zone Pit hosts a reserve of 19.8 Mt ore grading 0.90 g/t Au containing 570 Koz Au. Associated with the ore is 55.6 Mt waste resulting in a strip ratio of 2.9:1.

The Main Zone Pit is approximately 1.3 km in length. The width of the pit varies from 500 m at the south end and 400 m in the central portion before narrowing to 100 m at the northeast end. The crest of the final pit above the highest section of highwall lies at an elevation of approximately 2750 m ASL while the elevation of the lowest part of the final pit bottom is roughly 2370 m ASL resulting in a maximum vertical extent of about 375 m at the south end. Overall, the final highwall averages 250-300 in height.

The Main Zone Pit exhibits a single pit bottom at the south end of the pit and two other lenticular bottom benches arranged along strike as the pit moves to the northeast. Most of the benches in the pit intersect surface contours except for the bottom 40-60 m. The Main Zone Pit design can be seen in Figure 4.

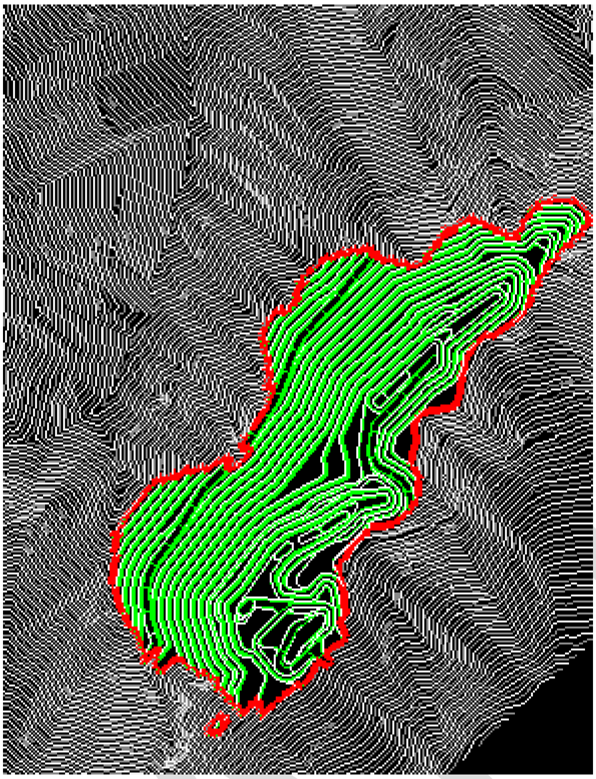

Figure 4. Main Zone Pit Design

7.3.1.2 MID ZONE PITS

The Mid Zone Pit design is composed of five separate small open pits. These pits are arranged along strike, three located within 500 m of the northeast end of the Main Zone Pit and two within 300 m of the East Zone Pit. The Mid Zone accounts for 13% of the reserve by tonnage and 10% of the contained gold. The Mid Zone Pits host a reserve of 3.1 Mt ore grading 0.66 g/t Au containing 65 Koz Au. Associated with the ore is 9.4 Mt waste resulting in a strip ratio of 3.1:1.

The three Mid Zone pits nearest the Main Zone Pit are ellipsoidal in shape with lengths of 150-350, widths of 100-160 m, and depth of 100-200 m. The two pits nearest the East Zone are 250 m long, 130-150 m wide, and 130-140 m deep. Although small and lower grade than the Main Zone, the Mid Zone Pits offer a higher metallurgical recovery of 76%. The Mid Zone Pit designs can be seen in Figure 5.

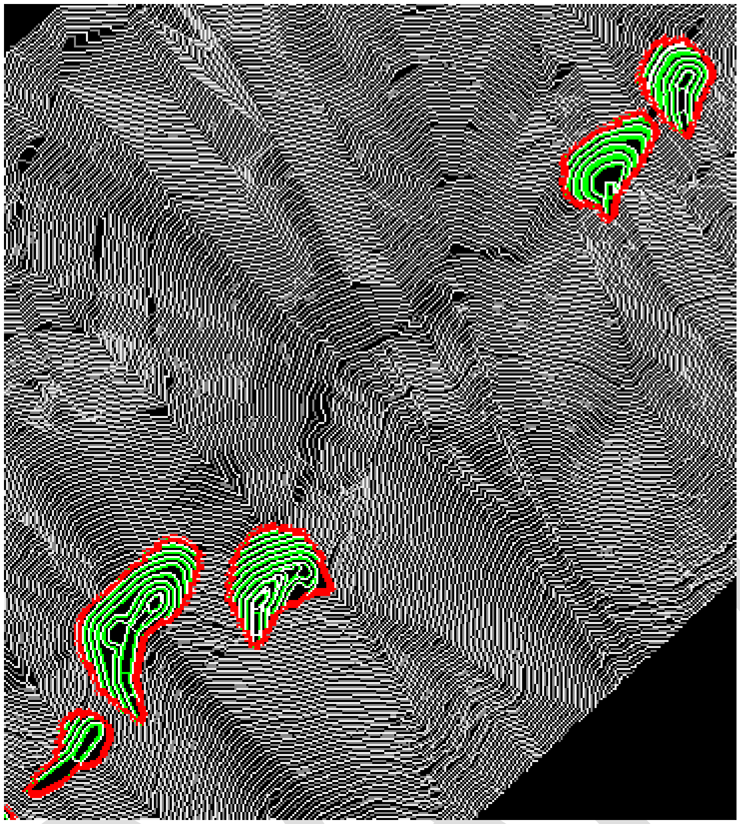

Figure 5. Mid Zone Pit Design(s)

7.3.1.3 EAST ZONE PIT

The East Zone Pit is very small containing less than 250,000 t of ore, but at a distinctly higher than average grade of 1.48 g/t Au. The strip ratio is high at almost 6:1, however, it is likely that further drilling will increase ore tonnage and reduce the proportion of waste to ore. The East Zone Pit presently composes 1-2% of the reserve by tonnage and contained gold. The East Zone Pit is shown in Figure 6.

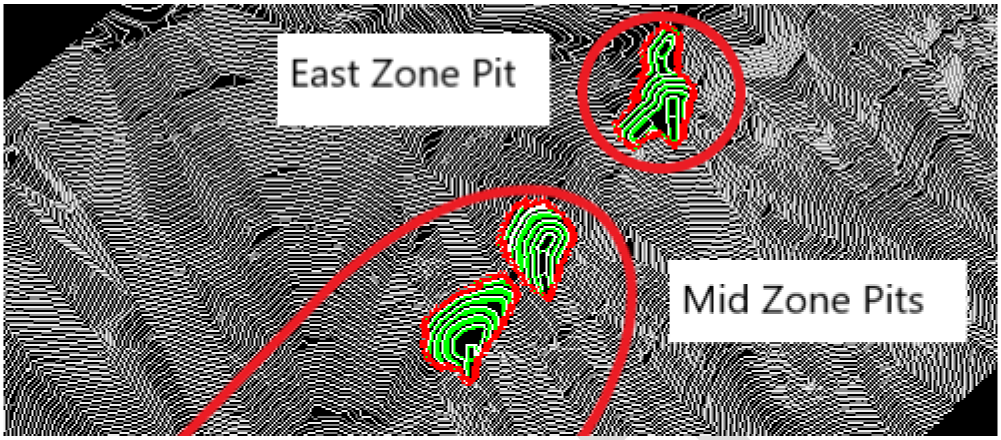

Figure 6. East Zone Pit Design

7.3.2 MINING METHOD

7.3.2.1 OPERATIONS

Mining will be conducted using conventional open pit, truck-shovel methods. All equipment will be diesel-powered. Mining will be performed by a contractor under the direction and control of the Owner's management and technical staff.

Crawler-type top hammer drills will drill blastholes on a nominal 3 m x 4 m pattern. Blast patterns will be loaded with bulk ANFO and shot using non-electric initiation. Hydraulic excavators configured in backhoe mode will load ore and waste from 5 m benches into highway-type dump trucks.

Small, "construction-sized" equipment will be used to ensure mining selectivity and maintain productivity on narrow benches. Wheel loaders, track dozers, and graders will be used to maintain bench floors and roadways. Smaller excavators equipped with hydraulic hammers will break oversize at the face and clean highwalls. Water trucks will be employed for dust suppression during non-freezing months.

Dewatering requirements are expected to be minimal. Groundwater will be confined to fractures that permit inflows to the pit. Mine water will be collected in sumps and pumped to a holding pond below the waste dump for use in dust suppression or testing, possible treatment, and discharge.

7.3.2.2 TECHNICAL SUPPORT

Mine planning, surveying, geology, and grade control will be conducted by the Owner's technical staff. The Mining Contractor will execute the weekly, monthly, and annual mine plans under the oversight of the Owner's technical and supervisory personnel.

Grade control will be based on blasthole assays. Flag lines delineating ore and waste will be surveyed on the broken muck pile. Supervisors and operators will be guided by daily dig plans with excavation overseen by technical staff on an as required basis. Geological staff will map structure and alteration in the pit walls, blasthole cuttings, and broken ore to understand how their relation the mineralization.

Pit slope and waste dump stability will be monitored visually by inspection, using prisms and EDMs, and by periodic surveys. Extensometers will be employed where cracking from movement is evident. Monthly surveys will be conducted to reconcile production with load counts and make payment to the contractor.

7.3.3 PRODUCTION PLAN

7.3.3.1 WORK REGIME

The Tulkubash open pit is planned to operate 350 days per year with lost operating days due to weather, geohazard, or supply-related issues. Crews will work a 12-hour continuous shift schedule on a 15-15, days-on days off, rotation. Time utilization for mine operations is as shown in Table 11.

Time	Hrs	Comments
Total	8,760	
Unscheduled	360	
Scheduled	8,400	350 d/yr
Down	1,260	85% mechanical availability
Available	7,140	
Idle	350	
Lunch	700	1.0 hr/shift
Shift Change	700	1.0 hr/shift
GOH	5,390	75% utilization (of availability)
Delay	916	83% efficiency
NOH	4,474	Net operating hours

Table 11. Mine Time Utilization

In the author’s opinion, the work regime and operating hours planned for the Tulkubash open pit mine are appropriate and consistent with similar projects.

7.3.3.2 PHASE DEVELOPMENT

The Tulkubash open pits will be developed in a series of phases to minimize pre-stripping, maximize initial grade to the heap leach pad, balance the mining rate from year to year, and manage the size of the truck fleet. The rugged nature of the terrain, the distribution of ore and waste in the deposit, and the objectives of the mining plan as mentioned above, have dictated a similar development sequence for each LOM plan since 2018.

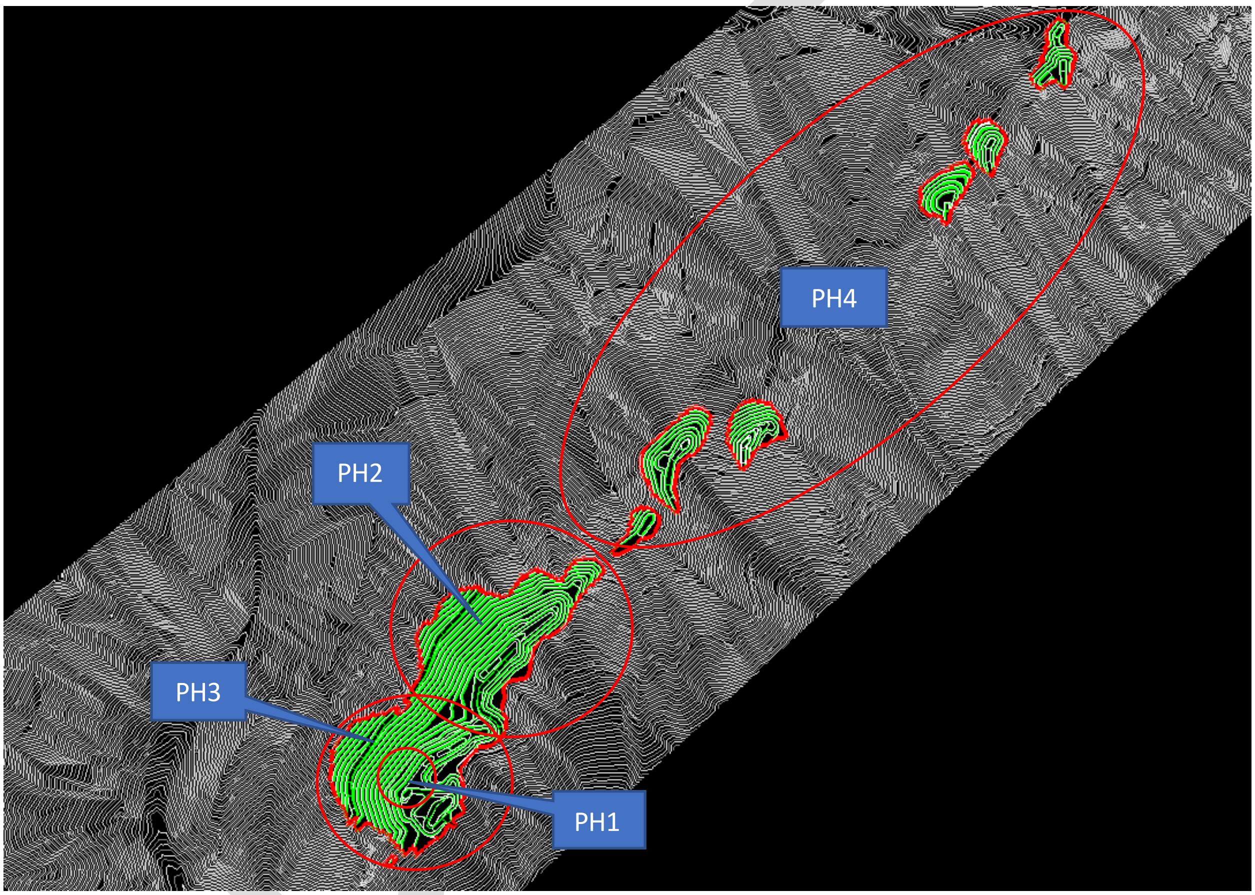

Figure 7. Tulkubash Pits Phase Development

Phase 1 begins in the Main Zone with an interim cut to develop ore at the south end of the pit and highwall stripping at the north end. Phase 2 mining concentrates entirely on the northern half of the Main Zone Pit. As Phase 2 starts to produce ore from the north end of the Main Zone, highwall stripping in Phase 3 starts in the southern half of the pit. Production mining of ore in Phase 3 permits development of the five small Mid Zone Pits and the most distant East Zone Pit in the last phase of mining.

7.3.3.3 PRODUCTION SCHEDULE

A production schedule was developed for the 2022 reserve as shown in Table 12. The mining plan calls for 5 years of production mining preceded by 13 months of pre-production stripping, a total of 73 months.

Total mined tonnage over the LOM, including pre-stripping, is 89.5 Mt with an average mining rate of 14.7 Mtpa or about 42,500 tpd. The mining rate peaks in Years 2025 to 2027 at about 18.4 Mtpa or 53,000 tpd.

During the pre-production period, 7.4 Mt of material is mined including 600 kt Mt of ore. Ore mined during pre-production will be stockpiled, rehandled, and subsequently stacked for leaching as the pad becomes ready.

YEAR			2023	2024	2025	2026	2027	2028	2029
		TOTAL							
MINING									
Ore	Kt	23,100	60	1,480	4,070	4,480	5,360	4,920	2,730
Grade	g/t Au	0.87	0.46	0.89	0.68	1.10	0.75	1.01	0.77
Metal	Koz	646	1	42	90	158	129	159	67
Grade	g/t Ag	0.82	0.60	0.61	0.58	0.84	0.89	0.96	0.89
Metal	Koz	610	1	29	76	121	153	151	78
Waste	Kt	66,400	720	11,380	14,300	13,930	13,110	8,210	4,750
Total	Kt	89,500	780	12,860	18,370	18,410	18,470	13,130	7,480
Strip Ratio	w:o	2.9	---	7.7	3.5	3.1	2.4	1.7	1.7

Table 12. LOM Mine Production Schedule

In 2028, as mining winds down in the Main Zone Pit, excess capacity is shifted to the Mid Zone to pre-strip the small pits there in order to ensure uninterrupted ore supply in 2029.

7.3.3.4 RATE OF ADVANCE

As for previous mining plans for the Tulkubash deposit, the rate of vertical advance is 10-20 benches per year. In a conventional open pit setting with a permanent internal ramp system and larger, mining-type equipment, this rate of advance would be unsustainable.

On the open mountainside at Tulkubash, small, construction-type equipment can mine multiple narrow benches simultaneously with access from both ends. Such an approach has been demonstrated by the mining contractor at the Copler gold mine in Turkey and will make the planned rate of advance achievable.

In the author's opinion, based on similar operating experience, the planned rate of advance is aggressive, but achievable, and an essential part of allowing a small, low-grade gold deposit to developed profitably.

7.3.3.5 EQUIPMENT FLEET

The mine production fleet is shown in Table 13. Excavators and loaders will be CAT 374C and CAT 980H, respectively, each with 5 m3 bucket capacity. Haul trucks will be Mercedes 3340 models with 35 t capacity. Drills will be Epiroc T40 top hammer blasthole rigs drilling 115 mm holes.

A maximum of five excavators supported by one loader and up to six drills will be required in any given year. The truck fleet will average 55 units over the LOM with a peak of 70 trucks in 2026. Use of similar highway-style 45-tonne trucks or truck-trailer combinations on the ore haul could help limit the number of units required at peak times in the schedule.

Year	2023	2024	2025	2026	2027	2028	2029
PRODUCTION							
Excavator	1	3	5	5	5	4	3
Loader	---	1	1	1	1	1	---
Haul Truck	3	30	55	70	65	50	50
Drill	1	4	6	6	6	5	4
SUPPORT							
Dozer	1	2	3	3	3	3	2
Loader	---	1	2	2	2	2	1
Grader	1	2	2	2	2	2	2
Water Trk	1	2	3	3	3	3	3

Table 13. Mine Production Fleet

7.3.4 MINE INFRASTRUCTURE

7.3.4.1 WASTE DUMPS

The waste dump for the development of the Tulkubash open pits is located about 500 m south of the Main Zone in the Irisai Valley. The dump is designed with a total capacity of about 100 Mt. About 58 Mt of waste will be stored in the Irisai Valley dump with a further 8 Mt of waste, from the Mid and East Zones, dumped in the mined-out Main Zone and Mid Zone Pits. Figure 8 shows the waste dumping areas from the 2021 Feasibility Study which will be similar for the 2022 Ore Reserve.

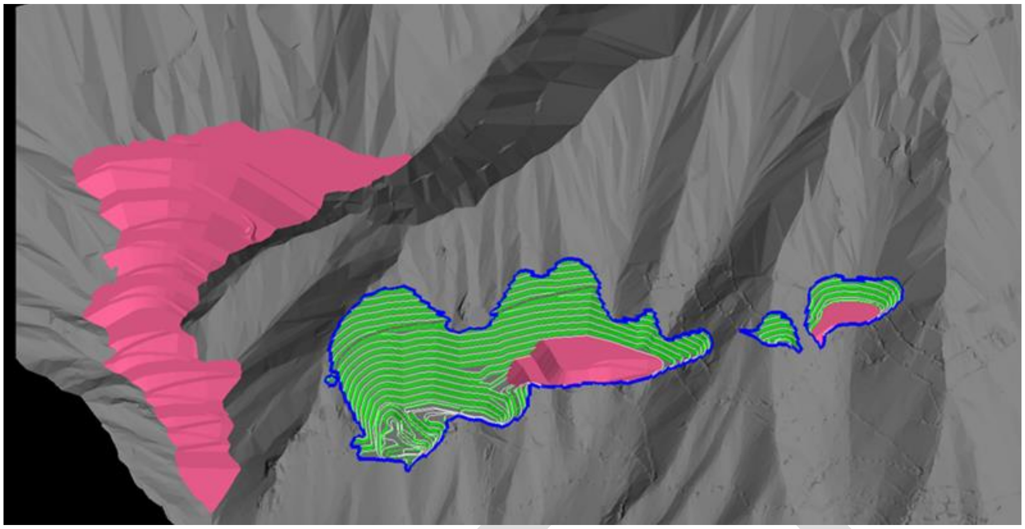

Figure 8. 2021 Irisai Waste Dump and Main and Mid Zone Backfills

The Irisai Valley dumps are designed and operated in accordance with Kyrgyz standards. A stable foundation will be established for lifts 30-90 m high before dumping is completed from the top. 50 m setbacks between lifts dumped at the angle of repose will result in an overall slope of about 22°.

CGH is in the process of having the stability of the dump design confirmed by geotechnical experts. Given the material dumped, construction method, overall dump slope, and foundation conditions, in the author's opinion there is no reason to expect that analysis will not return an adequate factor of safety for the design.

7.3.4.2 ORE STOCKPILES

A heap leach ore stockpile is planned to be constructed during pre-production on flat ground south of the Sandalash River Bridge. The stockpile will have a nominal capacity of 600 kt. It will be constructed a minimum of 100 m from the river on a compacted till pad. Runoff will be collected in a perimeter ditch. The stockpile will be fully depleted at the end of the LOM.

There is no plan to mine sulfide ore during the LOM, however, if sulfide ore is encountered during mining it will be stored in a suitable location on the waste dump until sulfide processing facilities are constructed to support the development of the neighboring Kyzyltash refractory gold deposit.

7.3.4.3 ROADS

There are four different types of roads associated with the Tulkubash open pits:

- Ore Haul Road - This is a 6 km dual lane road running from the Sandalash River bridge to the ROM pad for the purpose of hauling ore from the mine area to the crusher.

- Pit Access Roads - The pit will feature dual access with the first road winding up the mountainside from the Sandalash River bridge and the second descending the Irisai Valley through the waste dump to exist the mining area at the bridge.

- Internal Pit Roads - These are interim roads constructed within the bounds of the open pits and between the pits and the waste dump to facilitate mining. Most are mined out as the pits work down the mountainside.

- East Pit Access Road - This a permanent haul road which provides mining access to the Mid and East Zone pits from the Main Zone. It is the only permanent ramp in the Main Zone pit above the 2450 level.

Preliminary designs for all roads, suitable for the planned truck fleet, have been developed as part of the mining plan. In the author's opinion, sufficient detail in terms of road configuration, location, cost, and timing for construction exists to support the plan for the development of the Ore Reserve.

7.3.4.4 FACILITIES

The project plan provides for appropriate facilities to support the mining operation. A temporary maintenance workshop will be established near the Sandalash River bridge to support earthworks and pre-production mining. A permanent facility may be established on the waste dump platform later in the mine life.

Blasting material storage comprising a magazine and separate ammonium nitrate storage area will be constructed between the camp and the process plant. Fuel storage will be located near the power plant and ROM pad. Assays for blasthole samples will be prepared and analyzed at the laboratory located at the plant site.

Offices to support the contractor and Owner's staff will be located in the administration building at the plant site. Communications in the mine area will be by radio. Offices will be linked to the mine by radio and served by internet and cell phone service.

8.0 METALLURGICAL FACTORS

8.1 HISTORICAL TEST WORK

Preliminary scoping level test work was conducted from 2005-2015 by various parties which determined that some mineralization at the Chaarat property was refractory while other material was free leaching. In 2017, Wardell-Armstrong International conducted test work that defined the oxide portion of the mineralization, Tulkubash, and helped established the criteria to define material amenable to heap leaching.

McClelland Laboratories, in 2018, conducted a comprehensive program of heap leach test work for the Tulkubash Main Zone. In particular, they established a strong correlation between bottle-roll and column tests which allows bottle-roll results to be used to predict heap leach performance.

For 2019-2021, Stewart Analytical and Environmental Laboratories located in Kara-Balta, Kyrgyzstan, has conducted test work using the same protocols as those developed by McClelland. Most significant of this work was the 2019 program which focused on the previously untested Mid and East Zones.

8.2 RECOVERY MODELING

A geo-metallurgical model has been developed to estimate recovery. Bottle-roll extractions from more than 70 variability composites distributed throughout the three zones have been used to develop the model.

The boundary between free-leaching and refractory mineralization has been modeled from drillhole composites which generally exhibit % total sulfur > 0.6% and bottle-roll extractions of < 15% Au.

Oxidation above the boundary is fracture-related resulting in a mixture of material types rather than the gradational profile typical of many heap-leach deposits. Composites have been separated into three oxidations classes based on core logging and the average values for each class used to estimate block recoveries using inverse distance weighting.

Although the assignment of oxidation class is somewhat subjective, the resulting estimate reflects the variation in recoveries seen in the composite samples and is within about 1% of the average recovery realized from test work. The model has been reviewed by external parties and was judged to reasonably reflect the results of the test work.

8.3 PROJECTED METALLURGICAL PERFORMANCE

Gold recovery from the geo-metallurgical model for the 2022 reserve averages 74.0%. Recovery varies between zones. The average recovery for the Main Zone Pit is 73.8% while the Mid and East Zones have estimated recoveries of 75.9% and 76.4%, respectively, reflecting the increasing oxidation exhibited by mineralization along strike.

Silver recovery for all zones is based on the average silver bottle-roll extraction from the McClelland test program, 63.4%. Cyanide and lime consumption have been conservatively estimated at 0.6 kg/t and 0.5 kg/t, respectively, based on the results of column leach tests.

In the author's opinion, the metallurgical test work is comprehensive, based on representative sampling of the various zones. The quality of the test work is sufficient to support a recovery estimate for the Ore Reserve that is within 1% of the test work results. Further work to understand better, all the factors influencing recovery is recommended.

8.4 PROCESSING

8.4.1 PROCESS FLOWSHEET

Figure 9 shows the process flow sheet for the project. Ore will be delivered to the Run-of-Mine (ROM) Pad and direct dumped into the primary crusher. Ore, crushed and screened to P80 12 mm, will be dosed with lime and conveyed to a crushed ore stockpile. Stockpiled ore will then be reclaimed and hauled by trucks to the heap leach pad where it will be stacked and 7 m lifts.

Dilute sodium cyanide solution will be applied to the heap with buried drip emitters at a rate of 10 L/m2/hr to leach the ore. The leach solution will dissolve gold as it percolates through the heap and will be collected in the Pregnant Leach Solution (PLS) Pond at the base of the heap and then flow by gravity, via pipeline, to the ADR plant.

In the ADR Plant, PLS will pass through a Carbon-in-Column (CIC) circuit where the gold is adsorbed onto activated carbon. The gold will subsequently be stripped from the carbon using a batch-type AARL process and the resulting eluate subjected to electrowinning. The gold-rich sludge from electrowinning will be calcined and smelted producing dore bars for refining off-site.

The barren solution from the CIC circuit will have cyanide concentration adjusted before being reused for leaching on the heap. Stripped carbon will be reactivated in a regeneration kiln and then return to the CIC circuit.

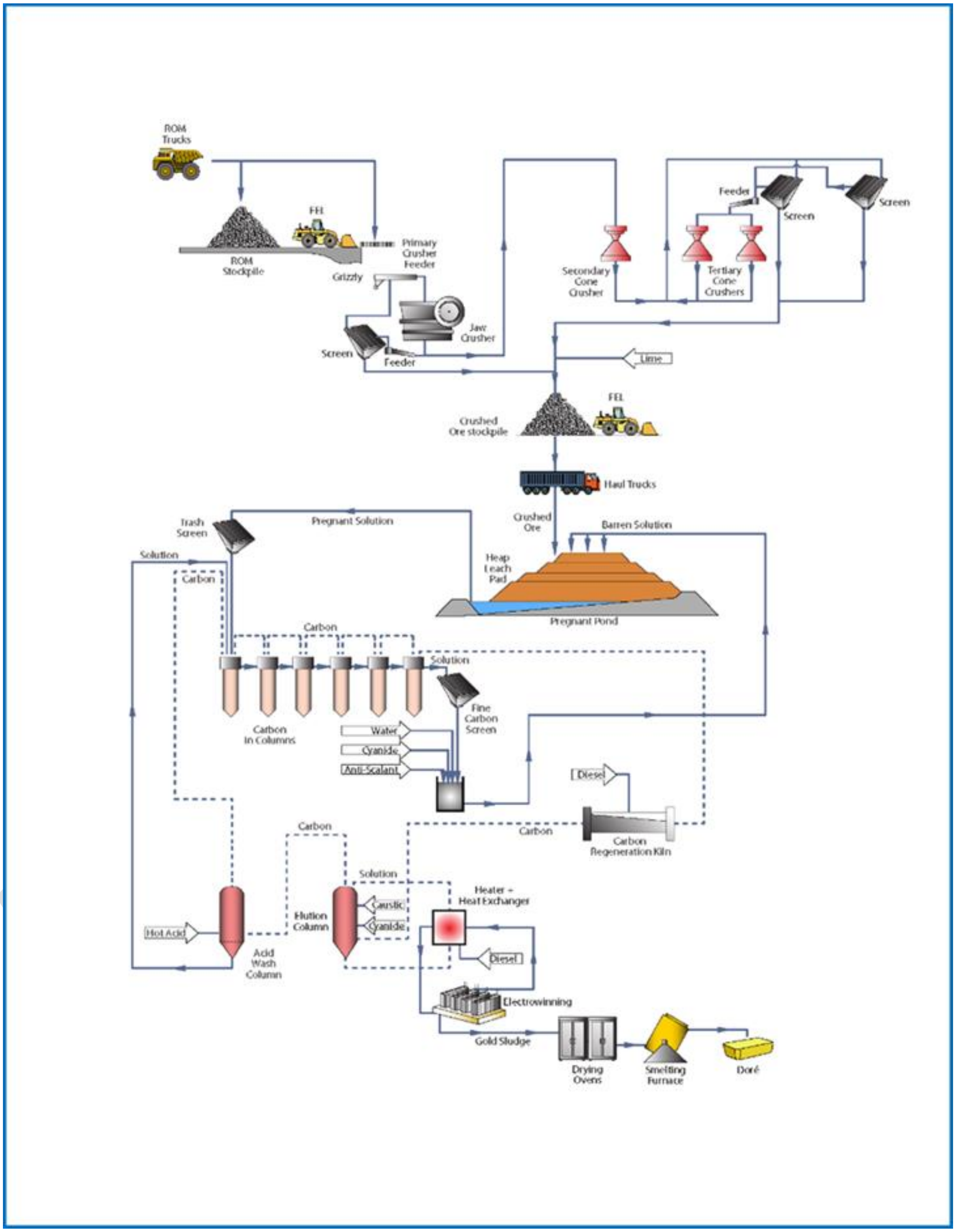

Figure 9. Planned Tulkubash Process Flowsheet

8.4.2 WORK REGIME

The process production plan is based on continuous operation of the plant and heap leach facility, 24 hours per day, 365 days per year. Mechanical availability of the crushing plant was estimated at 70%. Mechanical availability of the HLF and gold recovery plant was estimated at 90%. Processing activities will operate on two 12-hour shifts with work organized so that lunch breaks and shift changes do not disrupt continuous operations.

8.4.3 PRODUCTION SCHEDULE

Table 14 shows the LOM process production schedule. The project will process 23.1 Mt of ore grading 0.87 g/t Au and 0.82 g/t Ag over a period of 60 months or 5 years. Over the LOM, gold recovery is 74.0% yielding 479 Koz from total feed of 647 Koz. Silver recovery over the LOM is 63.4% yielding 386 Koz from total feed of 610 Koz. During the three years of operation at full throughput, production averages about 109 Koz Au and 89 Koz Ag annually.

Ore stacking and leaching begins during the last three months of the pre-production period. Ounces leached during pre-production remain in solution until recovery starts in October 2024. Production in Year 2025 is about 80% of maximum due to ramp-up. Full throughput of 13,500 tpd is reached at the start of Q4 2025.

YEAR			2024	2025	2026	2027	2028	2029
		TOTAL						
PROCESS - FEED								
Ore	Kt	23,100	1,100	3,980	4,920	4,920	4,920	3,260
Grade	g/t Au	0.87	1.07	0.69	1.03	0.78	1.01	0.71
Metal	Koz Au	647	38	88	163	123	160	74
Grade	g/t Ag	0.82	0.62	0.59	0.82	0.88	0.96	0.89
Metal	Koz Ag	610	22	75	129	139	151	93
RECOVERY- Au								
Recovery	% Au	74.0	75.7	75.8	74.9	73.2	72.4	74.2
Rec Metal	Koz Au	479	29	67	122	90	116	55
RECOVERY - Ag								
Recovery	% Ag	63.4	63.4	63.4	63.4	63.4	63.4	63.4
Rec Metal	Koz Ag	387	14	48	82	88	96	59

Table 14. Tulkubash Process Production Schedule

In the author's opinion, the production plan is reasonable and appropriate. Throughput and grade are consistent with the mining plan. Production is aligned with the planned process flowsheet and projected recoveries. No discount has been applied to recoveries based on advice from McClelland Laboratories whose experience suggests that test work results are generally representative of operating performance.

9.0 INFRASTRUCTURE

The site is accessed by a recently constructed all-weather gravel road which passes over the 3,200 m elevation Kumbel Pass before descending into the Sandalash Valley below.

Process facilities for the project include a crushing plant, heap leach facility, and ADR plant as described in the Process and Environment sections of the report. The HLF has a design capacity of 25 Mt with potential to expand to 50 Mt. Support infrastructure for the project includes provisions for power generation, fuel storage, water supply, accommodations, warehousing, communications, security, and administration.

A diesel-fired power plant will supply 4.5 MW of power with 100% redundancy to guarantee electrical service to plant and site. A fuel storage facility with 700,000 L capacity, sufficient for 14 days of full operation will be located next to the power plant.

Process and potable water will be sourced from boreholes located near the ADR plant and camp, respectively. A permanent camp with capacity for 360 persons is presently under construction at site. Communications on site will employ radios, cell phone, and internet.

Site access will be controlled at a security gatehouse which will also contain a medical clinic. Additional security in the form of fences and guards will be installed at high-risk locations such as the ADR plant, gold room, reagent storage, and explosive magazine.

Offices supporting administrative functions will be located in an administration building at the plant site. A warehouse building at the plant site will house spares and reagents for processing. Spares and lubes for the mining fleet will be stored near the Mobile Equipment Workshop.

In the author's opinion, the infrastructure planned to support the development of the Tulkubash project is both adequate and appropriate for the conditions at the project site and typical of small to medium-sized gold mines in similar locations.

10. LABOR

The total workforce for the project is estimated to be approximately 720. The Mining Contractor's personnel will account for 520 people or about 70% of the total workforce. Processing and Administration will employ 80 and 100 personnel, respectively. The Owner's Management and technical staff will comprise another 20 people. Based on a 15-15 continuous shift schedule, half of these personnel, 360, will be on site at any one time. Chaarat expects the workforce to be 90% national with a goal of hiring 30% from the local area.

11.0 ENVIRONMENT

11.1 STUDIES

The project is supported by a Kyrgyz environmental impact assessment (OVOS) completed in 2015 and a western-standard ESIA, prepared by Wardell-Armstrong in 2018 and updated with the results of recent studies in 2020.

11.2 CLIMATE

Temperatures at the project site range from -35C to +40C with over 200 days per year below freezing. The climate is arid but with enough seasonal rainfall and snow melt to create runoff from exposed pit walls, waste dumps, and stockpiles. Annual snow melt combined with rainfall in the spring creates the potential for flooding.

11.3 WATER

Mine water will be collected and used for dust suppression or tested, and potentially treated, before discharge. There is ample raw water supplied by a borehole near the plant site to provide make-up water for heap leaching. Potable water will be drawn from a well near the river and treated to make it fit for human consumption.

11.4 PROCESS

The HLF is designed as a closed system. The leach pad features a double liner system of HDPE over a bentonite-impregnated geomembrane. A leak detection and seepage collection system has been incorporated into the design.

Overflow and storm water ponds will collect excess water from weather events and runoff so it can be directed back to the leach pad. Diversion ditches and an underdrain system will direct the majority of runoff around the HLF without contact.

11.5 WASTE ROCK CHARACTERIZATION

Chaarat conducted comprehensive ABA and NAG test work in 2020 based on 110 samples distributed throughout the Main, Mid, and East Zones. None of the samples had a NAG pH of less than 4.9, higher than the 4.5 threshold value typically used to gauge acid-generating potential.

ABA testing identified 21% of the samples had some acid-producing potential, however, only 6% were likely PAG. Of the samples identified as PAG, half were ore which would not experience long-term exposure before being sent to the leach pad.

The results of the testing support the view that ARD potential for the project is low and potentially adverse impacts can be mitigated by appropriate management plans. Historic test work, which may or may not be representative of Tulkubash indicated that metals leaching could be an issue. Future test work is planned to examine this aspect of the project.

11.6 BIODIVERSITY

Management plans are being developed to protect species-at-risk that may be impacted by project activities. There is a single, red-listed species, Kaufman's Tulip, which inhabits the project site. The plant can be relocated if encountered so it will not affect activities. Biodiversity surveys and baseline updates are conducted annually.

A UNESCO-designated nature reserve is located near the project site. According to the Kyrgyz government, the mining license is outside the reserve while according to UNESCO, the boundaries overlap. The Kyrgyz government is working with UNESCO to resolve this issue. According to the 2020 ESIA and current advice from CGH, this issue does not prevent the development of the Tulkubash deposit.

11.7 EMISSIONS

The project will generate about 45,000 t of $C0_2$ equivalent annually primarily from the mining fleet and power generation. Dust will be generated by mining, processing, and vehicular activities. Dust suppression on roadways will be practiced during non-freezing months. There is minor potential for arsenic and mercury emissions from the carbon regeneration circuit. A retort system is planned to be installed to control these emissions. The camp has been sited to minimize the impact of noise from operations on personnel.

11.8 CLOSURE

A conceptual closure plan is part of the WAI ESIA. Closure calls for re-sloping and revegetation of waste dumps, the leach pad, and other disturbed areas. Facilities will be removed. Monitoring will be conducted to ensure site water quality remains satisfactory. A detailed closure plan will be developed once operations start.

To the author's knowledge there are no environmental issues or concerns which would prevent the Tulkubash deposit from being developed as an Ore Reserve.

12.0 COSTS

12.1 CAPITAL COSTS

The initial capital cost for the project were estimated in the 2021 Updated Feasibility Study at approximately $116 M, including contingency. Pre-production OPEX includes contractor mobilization, pre-stripping, and pre-production process activities. Deferred capital is largely for progressive expansion of the leach pad. Contingency is applied to all capital costs at a rate of 10%. Details can be found in Table 15.

The capital cost estimate is a Class 3 estimate as defined by the AACE international cost classification system. The accuracy of the estimate is -10% to +15% with most of the supporting costs based on data from Q4 2020/Q1 2021.

Cost Element	Cost ($ M)
Pre-production OPEX	15.1
Process	50.8
Infrastructure	20.1
Owner's Costs	18.9
Total Direct Costs	104.9
Deferred Capital	7.3
Closure	6.5
Total Indirect Costs	13.8
Contingency	11.9
LOM Capital Costs	130.6

Table 15. 2021 Feasibility Study Capital Cost Estimate

12.2 OPERATING COSTS

Operating costs shown for the project are based on those in the 2021 Feasibility Study and were developed from first principles and/or are based on quotes from contractors or service providers. The unit operating costs for the project are shown in Table 16.

Unit Operation	Units	Cost
Mining – Contractor	$/t mined	2.02
Mining – Owner	$/t processed	0.34
Process	$/t processed	4.79
G&A	$/t processed	1.25

Table 16. Unit Operating Costs

All the figures in Table 17 represent LOM averages including pre-production OPEX. The contract mining cost is based on three elements which vary from year to year. These are:

1) A base rate for material mined which increases every 5,000 bcm up to a maximum of 25,000 bcm. After 25,000 bcm, the base mining rate remains constant.

2) The cost of fuel which is provided to the contractor on a free-issue basis. Fuel costs vary from year to year based on the equipment hours required to achieve the annual mine targets.

3) A haul distance adjustment, which may increase or decrease the cost of mining, depending on whether the average annual haul distances for ore and waste are greater than or less than 5,000 m.

Owner mining cost is the cost of mine management, administration of the mining contract, mine planning, and technical oversight of contract mining activities.

The process cost is driven by process tonnage. At full production, process costs vary from year to year as the length of the haul from the crushed ore stockpile to the active portion of the leach pad progressively increases.

G&A costs are largely fixed. During production ramp-up, G&A unit costs are higher. At full production, these costs are about $5.8 M annually.

12.3 REFINING AND TRANSPORTATION

Refining and transportation costs are projected to $9.78/oz based on quotes from the Kyrgyz state refinery at Kara-Balta and secured transport providers.

12.4 ROYALTIES, TAXES, AND DUTIES

The Kyrgyz government imposes a sliding-scale royalty on gold production. The royalty is indexed to the price of gold. At a gold price of $1,600/oz, the royalty payable is 14% of gross value. For precious metal mines, the government royalty is payable in lieu of corporate income tax.

In December 2019, Chaarat completed a Stability Agreement with the Kyrgyz government. This agreement guarantees the legal framework within which the project will operate providing protection under Kyrgyz law for the investment with respect to royalties and taxation.

VAT is payable on most goods and services. The primary exceptions are Owner's labor and gold sales. VAT is 12% and has been added to the cost of all goods and services during construction and operation. A 10% withholding tax is payable on offshore services.

Duties are payable on imported items and vary from 5-10% depending on the class of goods. Duty has been added to the cost of machinery, equipment, materials, and supplies used for both construction and operations.

13.0 REVENUE FACTORS

Revenue factors as defined by JORC code (2012) include grade, recovery, metal price, and exchange rates. The grade used to determine revenue is the diluted block model grade. The recoveries used to calculate revenue are the recoveries projected by the geo-metallurgical model based on test work data as described in Section 8. These recoveries are considered to represent operating performance.

The metal price used to define and evaluate the Ore Reserve is $1,600/oz based on projections as described in Section 14. Gold will be sold at world spot prices and payment received in USD. Exchange rates do not impact revenue received from mining and processing the Ore Reserve.

14.0 MARKET ASSESSMENT

14.1 METAL PRICE

The gold price used to define and value the Ore Reserve is $1,600/oz Au. The price for by-product silver is $20.00/oz Ag. These values represent a slightly conservative outlook for metal prices over the operating life of the mine.

Figure 10 shows the Bloomberg Commodity Broker's Consensus Price forecast for gold and silver issued in February 2022. The average gold price over the planned operating period, Q4 2024 to Q3 2029 is $1,618/oz indicating that the $1,600/oz price used to evaluate the Ore Reserve is appropriate.

The price of by-product silver for the operating period is $21-$22/oz. A silver price of $20/oz was used to value silver although, as a by-product, its contribution to the project value is immaterial. Silver is not considered part of the Ore Reserve.

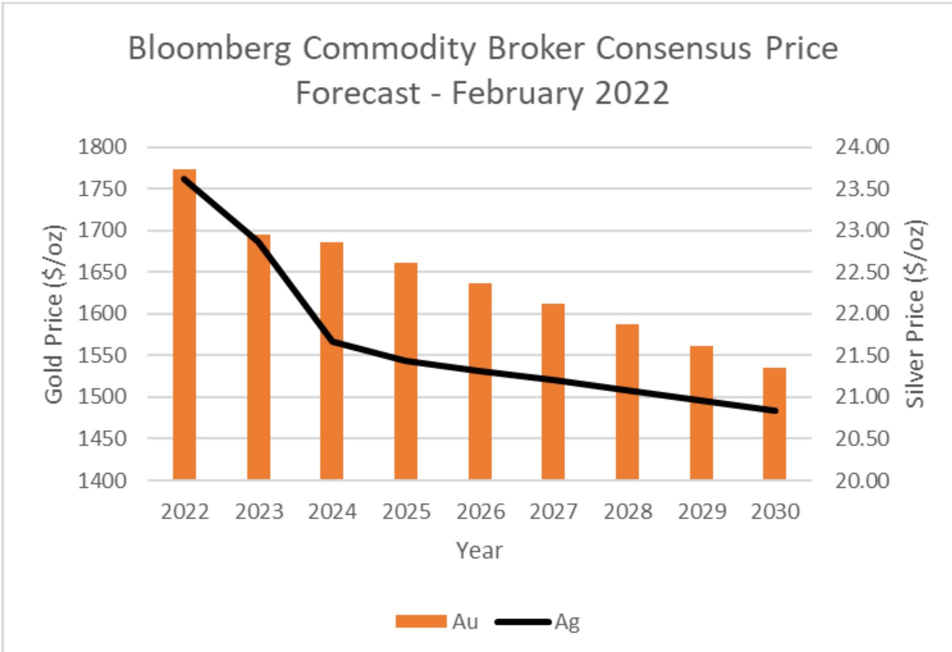

Figure 10. Metal Price Forecasts for 2022-2030

14.2 SALES

Under Kyrgyz legislation, gold and silver produced in the Kyrgyz Republic must be offered for sale to the National Bank of the Kyrgyz Republic at spot market prices. If the NBKR declines to purchase the metal, Chaarat is free to sell it on the international market.

Dore poured at site will be transported by bonded carrier to the Kyrgyz government refinery at Kara-Balta. 90% of payment will be made when the metal leaves the Gold Room. The remaining 10% will be paid based on final assays within 7 days of receipt.

15.0 PROJECT ECONOMICS

The economics of the Tulkubash Ore Reserve were modelled based on the production plan described in Sections 7 and 8. The following describes the economic model and compares the results to those of the 2021 Feasibility Study.

15.1 MODEL DESCRIPTION

15.1.1 PRODUCTION PLAN

The operating plan is based on mining 23.1 Mt ore grading 0.87 g/t Au and 66.4 Mt of associated waste over a period of 6 years. Total contained metal is 647 Koz Au and 610 Koz Ag. The details of the plan by year can be found in Tables 13 and 15.

Processing of the mined ore will take place over a period of 5 years. After ramp-up is complete, processing will be conducted at a rate of 4.9 Mtpa. Recovery of gold and silver will be 74.0% and 63.4% respectively yielding 479 Koz Au and 386 Koz Ag recovered over the LOM.

15.1.2 CAPITAL AND OPERATING COSTS

Capital costs are as per the 2021 Feasibility Study estimate of approximately $116 M initial capital, $8 M deferred capital, and $7 M for closure, including contingency. Initial capital is deployed over a 26-month period from start of July 2022 to the start of September 2024.

Operating costs have been adjusted from the 2021 Feasibility Study to reflect more tonnage mined in the Mid and East Zones which entails longer hauls. Annual contract mining costs are the average of the unit rates from the 2019 and 2021 feasibility studies, rounded to the nearest $0.05/t mined.

Process, Owner Mining, and G&A costs are similarly representative of the two previous feasibility studies and also rounded to the nearest $0.05/t ore. Refining and transportation costs total $9.78/oz Au. All costs represent the unit operating costs for the production period, not the total for the LOM as some operating costs incurred during the pre-production period are accounted for as part of initial capital.

15.1.3 FINANCIAL CONSIDERATIONS

Metal prices used to calculate revenue were $1,600/oz Au and $20.00/oz Ag. A royalty of 14% was applied directly to gross revenue. All other taxes and charges were built into the capital and operating costs as in the 2021 Feasibility Study.

Working capital was modelled to represent about 3 months of operating costs. It is assumed that all working capital will be recovered at the end of the mine life.

As in the 2021 Feasibility Study, the model does not contain any pre-construction or development costs including financing, permitting, engineering, or exploration. A Base Case discount rate of 5% was used with project value being discounted from July 1, 2022.

15.1.4 MODEL LIMITATIONS

Project economics have been assessed using a simple discounted cash flow model based on annual cash flows. The model does not consider delays in gold presentation due to the leach cycle or seasonality. In the last year of the model there is an allowance for three months to drain down the heap which may, in fact, take longer due to mining finishing at the start of winter. These factors will influence projections for short-term cash flow but will have only a nominal impact on overall project value and are not material as they pertain to the economic assessment of the Ore Reserve.

Changes to capital and operating costs may have occurred since completion of the 2021 Feasibility Study due to normal variation in the cost of inputs to construction and operation. Potential changes and their possible impact on the validity of the Ore Reserve are examined through sensitivity analysis and discussed later in this section.

15.1.5 ECONOMIC PERFORMANCE

The discounted cash flow model based for the Tulkubash 2022 Ore Reserve is shown in Table 17. After-tax NPV for the project discounted at 5% is estimated to be $138 M; after-tax IRR for the project is estimated at 33%; and Simple Payback is projected to be 2.3 years.

This result indicates the 2022 Tulkubash Ore Reserve qualifies as such under JORC (2012). It should be noted, however, that **the definitive project value may differ depending on changes to project timeline, capital and operating costs, and metal price.**

Unit costs were calculated for the project. Cash Costs were defined as on and off-site direct costs less by-product credits. Cash Costs were calculated to be $896/oz. All-In Sustaining Costs, which include Cash Costs plus deferred capital and closure costs, were calculated to be $927/0z. All-In Costs, defined as AISC plus initial capital, were calculated to be $1,169/oz.

YEAR			2022	2023	2024	2025	2026	2027	2028	2029	2030
DATE			01-Jul-22	31-Dec-23	31-Dec-24	31-Dec-25	31-Dec-26	31-Dec-27	31-Dec-28	31-Dec-29	31-Dec-30
		TOTAL									
MINING											
Ore	Kt	23,100	0	60	1,480	4,070	4,480	5,360	4,920	2,730	0
Grade	g/t Au	0.87	0.00	0.46	0.89	0.68	1.10	0.75	1.01	0.77	0
Metal	Koz	646	0	1	42	90	158	129	159	67	0
Grade	g/t Ag	0.82	0.00	0.60	0.61	0.58	0.84	0.89	0.96	0.89	0
Metal	Koz	610	0	1	29	76	121	153	151	78	0
Waste	Kt	66,400	0	720	11,380	14,300	13,930	13,110	8,210	4,750	0
Total	Kt	89,500	0	780	12,860	18,370	18,410	18,470	13,130	7,480	0
Strip Ratio	w:o	2.9	0.0	---	7.7	3.5	3.1	2.4	1.7	1.7	0
PROCESS - FEED											
Ore	Kt	23,100	0	0	1,100	3,980	4,920	4,920	4,920	3,260	0
Grade	g/t Au	0.87	0.00	0.00	1.07	0.69	1.03	0.78	1.01	0.71	0
Metal	Koz Au	647	0	0	38	88	163	123	160	74	0
Grade	g/t Ag	0.82	0.00	0.00	0.62	0.59	0.82	0.88	0.96	0.89	0
Metal	Koz Ag	610	0	0	22	75	129	139	151	93	0
PROCESS - RECOVERY											
Recovery	% Au	74.0	0	0.0	75.7	75.8	74.9	73.2	72.4	74.2	0
Recovery	% Ag	63.4	0	0	63.4	63.4	63.4	63.4	63.4	63.4	0
Rec Metal	Koz Au	479	0	0	29	67	122	90	116	55	0
Rec Metal	Koz Ag	387	0	0	14	48	82	88	96	59	0
PAYABLE METAL											
Payability - Au	%	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
Payability - Ag	%	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
Payable Au	Koz Au	476	0	0	28.5	66.6	121.4	89.9	115.1	54.9	0
Payable Ag	Koz Ag	329	0	0	11.7	40.4	69.6	75.0	81.6	50.4	0
GROSS REVENUE											
Price -Au	%	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600
Price - Ag	%	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Revenue - Au	$ x 1000	762,343	0	0	45,609	106,558	194,297	143,798	184,165	87,915	0
Revenue - Ag	$ x 1000	6,574	0	0	235	808	1,392	1,499	1,633	1,007	0
Total	$ x 1000	768,917	0	0	45,844	107,366	195,690	145,297	185,798	88,922	0
OPEX - OFFSITE											
Transport	$ x 1000	354	0	0	20	55	85	68	81	46	0
Refining	$ x 1000	4,683	0	0	280	655	1,194	883	1,131	540	0
Royalty	$ x 1000	107,648	0	0	6,418	15,031	27,397	20,342	26,012	12,449	0
Total	$ x 1000	112,686	0	0	6,718	15,741	28,675	21,293	27,224	13,035	0
NET REVENUE	$ x 1000	656,231	0	0	39,126	91,625	167,015	124,005	158,574	75,887	0
OPEX - ONSITE											
Contract Mining	$ x 1000	172,837	0	0	10,605	36,740	38,661	39,711	29,543	17,578	0
Owner Mining	$ x 1000	7,854	0	0	374	1,353	1,673	1,673	1,673	1,108	0
Process	$ x 1000	110,880	0	0	5,280	19,104	23,616	23,616	23,616	15,648	0
G&A	$ x 1000	29,337	0	0	1,397	5,055	6,248	6,248	6,248	4,140	0
HLF Drain-Down	$ x 1000	1,876	0	0	0	0	0	0	0	900	976
Total	$ x 1000	322,784	0	0	17,656	62,252	70,198	71,248	61,080	39,375	976
OPERATING CF	$ x 1000	333,448	0	0	21,470	29,373	96,817	52,757	97,494	36,513	-976
CAPITAL											
PP OPEX	$ x 1000	17,000	0	7,000	10,000	0	0	0	0	0	0
Construction	$ x 1000	88,000	17,000	47,000	24,000	0	0	0	0	0	0
Deferred	$ x 1000	7,300	0	0	0	3,600	1,700	1,400	600	0	0
Closure	$ x 1000	6,510	0	0	0	0	0	0	0	1,150	5,360
Total	$ x 1000	118,810	17,000	54,000	34,000	3,600	1,700	1,400	600	1,150	5,360
OTHER CAPITAL											
Contingency	$ x 1000	11,881	1,700	5,400	3,400	360	170	140	60	115	536
Working Capital	$ x 1000	0	0	0	5,000	0	0	0	0	-5,000	0
TOTAL		130,691	18,700	59,400	42,400	3,960	1,870	1,540	660	-3,735	5,896
NET CASH FLOW	$ x 1000	202,757	-18,700	-59,400	-20,930	25,413	94,947	51,217	96,834	40,248	-6,872

Table 17. Discounted Cash Flow Model

15.2 COMPARISON TO FEASIBILITY STUDY

Table 18 compares the economic performance of the 2022 Ore Reserve to that of the 2021 Feasibility Study. The result indicates that even at a lower gold price, the 2022 Ore Reserve has greater value than the 2021 Feasibility Study reserve, based on the parameters applied in the evaluation.

Performance Measure	Units	2021 FS	Updated Reserve	
		$1,450/oz	$1,450/oz	$1,600/oz
NPV @ 5%	$ M	85	97	138
IRR	%	25	27	33
Simple Payback	Years	2.9	2.7	2.3

Table 18. Economic Performance: 2021 FS vs Updated Ore Reserve

At the same gold price as the 2021 Feasibility Study, $1,450/oz, project value in terms of NPV discounted at 5% has increased 19%. At the current forecast gold price for the project, $1,600/oz, the project value has increased by 62%.

15.3 SENSITIVITY ANALYSIS

Figure 11 shows a spider diagram for the Tulkubash Ore Reserve. The slope of each line indicates the sensitivity to changes in CAPEX, OPEX, and gold price. The reserve is most sensitive to changes in gold price. The change in NPV is about $30-$40 M for each 10% change in price. The amount of change for each 10% increment is not uniform due to the variation in royalty rate that accompanies each change.

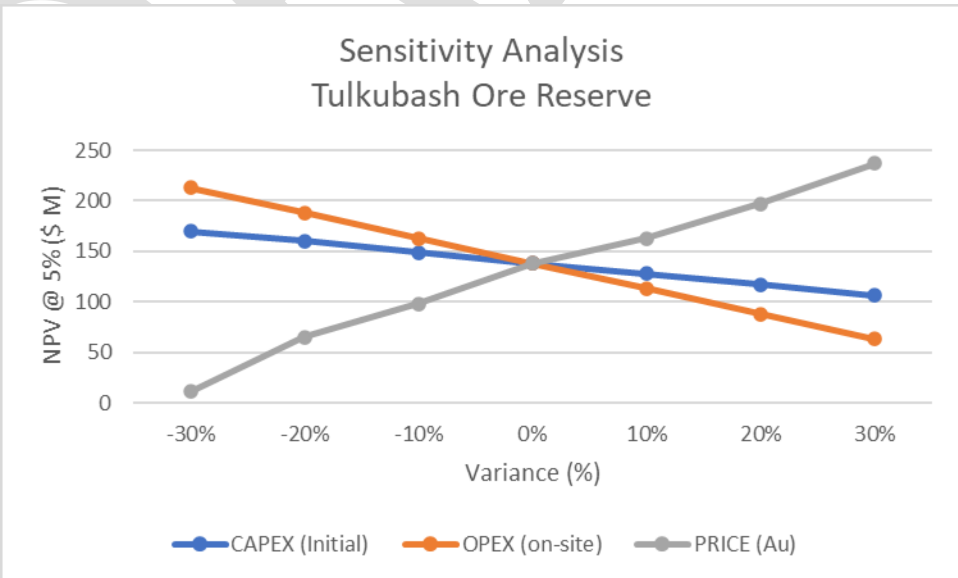

Figure 11. Spider Diagram for Tulkubash Gold Project

CAPEX (Initial)								
Change	%	-30%	-20%	-10%	0%	10%	20%	30%
CAPEX (Initial)	$ M	81	92	104	116	127	139	150
NPV_5	$ M	170	160	149	138	128	117	106
OPEX (on-site)								
Change	%	-30%	-20%	-10%	0%	10%	20%	30%
OPEX (on-site)	$ M	227	259	292	324	356	389	421
NPV_5	$ M	213	188	163	138	113	88	63
PRICE (Au)								
Change	%	-30%	-20%	-10%	0%	10%	20%	30%
PRICE (Au)	$ M	1120	1,280	1,440	1,600	1,760	1,920	2,080
Royalty	%	8%	8%	8%	14%	16%	19%	20%
NPV_5	$ M	11	65	98	138	163	197	237

Table 19. Sensitivity Analysis Data

The reserve is moderately sensitive to changes in operating cost. Project value changes $25 M for each 10% variation in operating cost. The reserve is least sensitive to changes in capital cost. The project value changes $ 11 M for each 10% variation in capital cost. Table 19 shows the sensitivity data used to generate the spider diagram in Figure 11.

In terms of viability, the reserve is quite robust at the forecast $1,600/oz gold price. Even with a 20% increase in both operating and capital cost, equating to an average mining cost of $2.60/t and initial capital of $139 M, the project still offers an NPV_5 of $66 M. Resilience falls away quickly at lower gold prices, however. The project is breakeven in terms of discounted cash flow at a gold price of about $1,090/oz.

In the author's opinion, based on the economic analysis, the mineralization defined and planned for development at Tulkubash deposit qualifies as an Ore Reserve under the definition in the JORC Code (2012).

16.0 SOCIAL LICENSE TO OPERATE

The CGH community engagement program is guided by IFC principles. The company has developed a strong and positive relationship with the community and local government. Employment is a key issue in local communities. In this regard, Chaarat has committed to hiring quotas from local villages and encourages its contractors to hire locally.

Chaarat invests in the community through the legislated "social package" process which requires mining companies to provide financial support to their host communities. Annual investment in the amount of $200-$300,000 is directed by the local government and managed by Chaarat.

In the author's opinion, Chaarat will maintain its social license to operate providing it continues to follow IFC guidelines, engage with the local community, and delivers on its promises to provide local employment.

17.0 NATURALLY OCCURRING RISKS

17.1 GEOHAZARDS

Due to the steep hillsides and mountainous terrain, avalanche and rockfall hazards exist in the project area. Facilities such as the Permanent Camp, Process Plant, and Power Plant have been located to minimize exposure to geohazards. Where it is not possible to locate a facility to eliminate geohazard risk, engineered protection such as avalanche barriers, diversion structures, and snow sheds will be constructed.

Snow conditions are monitored continually to provide early warning of developing hazards. Mitigative action such as dozing or blasting potentially unstable accumulations of snow will permit operations to continue safely, year-round. The Mine Safety Department will have experienced personnel dedicated to geohazard management. All employees will be trained in avalanche and rockfall hazard recognition, safety, and emergency response.

17.2 SEISMISCITY

The project site is situated in a mountainous, seismically active region. Engineered earth-fill structures such as the heap leach pad and associated ponds have been designed with consideration for the maximum credible event or MCE. Other critical infrastructure has been sited in order to minimize exposure to risk resulting from seismic activity.

17.3 EXTREME WEATHER

Extreme weather resulting from global climate change can potentially impact the project. Flood risk to the HLF has been managed by incorporating Overflow and Emergency Ponds into the facility design. Ponds have been sized to accommodate inflow from the 1 in 200-year storm event for a period of 24 hours. Critical solution management infrastructure will be buried to prevent freezing.

The management of naturally occurring risks has been incorporated into the project design. As such, the development of the Ore Reserve is planned to mitigate, manage, or minimize the naturally occurring risks at the site.

In the author's opinion, the design and operating considerations for managing naturally occurring risks are reasonable and appropriate for the project.

18.0 LEGAL AGREEMENTS

Development of the Tulkubash Ore Reserve involves establishing legal agreements with a variety of contractors engaged in construction, operations, and supply. The following describes the nature of services and supplies provided on a contract basis to support the development of the Ore Reserve.

18.1 MINING AND EARTHWORKS

Construction earthworks and mining will be conducted by Ciftay Insaat, a major Turkish construction and mining company. Ciftay has the expertise and capacity to execute the contract mining plan and perform all the major earthworks for the construction of the mine. The company currently performs contract mining at the Copler (SSR Mining) and Oksut (Centerra) gold mines in Turkey.

An agreement to provide contract mining services is in place. Ciftay is presently active on site, engaged in construction of the Ore Haul Road, earthworks for the permanent camp, and preparatory earthworks for the heap leach facility.

18.2 CONSTRUCTION SERVICES

The heap leach facility has been designed by Ausenco, a well known as a leader in heap leach design worldwide. Liner installation will be by Solmax or another major liner supplier/installer for heap leach systems. The crushing and ADR plants are to be supplied by YTP of Turkey and AZMET of South Africa, both smaller, but recognized providers of quality design-build services.

18.3 OPERATING SUPPLIES

Power will be provided on site on a contract basis by Aggreko, a company well known for providing reliable power generation at remote mining sites. Ciftay will also provide camp management services during construction and operations.

Fuel will be purchased in bulk from local suppliers sourcing product in Kazakhstan or Russia. Sodium cyanide and other reagents will be sourced internationally with a focus on Chinese and European supply.

In the author's opinion, the contractors arranged to perform the development and operation of the Tulkubash gold mine are quality service providers both capable and suited to meet the challenges of the project.

19.0 APPROVALS AND PERMITTING

19.1 LICENSES

Chaarat Zaav, a 100% owned subsidiary of Chaarat Gold Holdings, holds an exploration license, 3319AR, covering 6,776 ha in the project area and a mining license, 3317AR, covering 700 ha, in the area to be developed. The exploration and mining licenses are valid until 2023 and 2032 respectively, subject to various conditions including conduct of continuous work, paying tax, supporting local social programs, and funding a reclamation account.

19.2 SURFACE RIGHTS

Chaarat has obtained surface land use permits related to mining license 3317AR that provide access to land required for mining, processing, roads, and other project infrastructure until 2032. Surface land use permits are contingent on Chaarat filing required reports on activities, resources and reserves, fulfillment of license obligations, and payment of legislated taxes.

19.3 CONSTRUCTION APPROVALS

In order to design and build the mine, Chaarat must secure approvals with respect to industrial and environmental safety, and sub-surface protection for:

- Project technical design
- Project elements designed outside Kyrgyzstan
- Detailed construction design
- Constructed facilities

19.4 OPERATING PERMITS

Lastly, Chaarat must secure permits which will allow operation of the constructed facilities. These permits include, but are not limited to:

- Mining
- Construction
- Water Use
- Emissions
- Water Discharge
- Domestic Waste Disposal
- Hazardous Waste Disposal
- Explosive Storage
- Blasting
- Transport of Explosives and Hazardous Materials
- Emergency Response Preparedness
- Certification of Equipment, Machinery, and Staff

Kyrgyzstan has legislation which allows the project design to be approved progressively as engineering advances. Chaarat is fully engaged in securing all required permits and approvals necessary to build and operate the mine. The author has no reason to believe that this process will not be successfully completed.

19.5 ENVIRONMENTAL LIABILITIES

Chaarat bears full legal responsibility for complying with environmental requirements under Kyrgyz law. Chaarat is required to obtain the relevant environmental permits for activities described in the Kyrgyz-standard Environmental Impact Assessment (OVOS), make quarterly payments for environmental pollution as per Kyrgyz laws, and submit reports regarding compliance with environmental regulations.

20.0 ORE RESERVE ESTIMATE

20.1 UPDATED ORE RESERVE

As shown in Table 20, the updated Ore Reserve estimate for the Tulkubash Gold project is 23.1 Mt grading 0.87 g/t Au containing 647 Koz. The ore is associated with 66.4 Mt of waste resulting in a strip ratio of 2.9:1.

Estimate	Ore	Grade	Metal	Waste	Total	Strip Ratio	Recovery
	Mt	g/t Au	Koz Au	Mt	Mt	w:o	%
2022	23.1	0.87	647	66.4	89.5	2.9	74.0

Table 19. 2022 Tulkubash Ore Reserve

20.2 ORE RESERVE STATEMENT

This Ore Reserve statement is reported based on guidelines found in the JORC Code (2012). The Ore Reserve estimate for the Tulkubash Project is shown in Table 21. The application of appropriate technical and economic modifying factors, as described in this document, provide the basis for converting Indicated Mineral Resources to Probable Ore Reserves.

Category	Ore	Grade	Metal
	Mt	g/t Au	Koz Au
Proven	---	---	---
Probable	23.1	0.87	647
Total	23.1	0.87	647

Table 20. 2022 Tulkubash Ore Reserve by Category

Notes to the Ore Reserve Statement:

1) This statement of Ore Reserves has been prepared by Mr. Peter C. Carter, an independent consulting mining engineer, based on a review of work performed by Chaarat Gold and associated technical staff.

2) Mr. Carter is a member of the Association of Professional Engineers and Geoscientists of British Columbia and is qualified as a Competent Person under the JORC Code, 2012.

3) There are no Proven reserves as drillhole density and historical data quality do not support Measured resources.

4) Tonnages are in metric tonnes.

5) Figures have been rounded to three significant figures.

6) Reserves are reported inclusive of mining dilution (10%) and mining recovery (97.5%).

7) A gold price of US$1,600/oz was used in the preparation of the estimate.

8) Reserves are based on a marginal cutoff grade of 0.22 g/t Au.

9) Estimated metallurgical recovery for the Ore Reserve is 74.0% based on a geo-metallurgical model.

10) Reserve is contained in a minable pit design generated from an optimized pit shell based on a gold price of $1,350/oz

20.3 COMPARISON WITH PREVIOUS ESTIMATE

The previous Ore Reserve estimate was completed in 2020. Table 22 compares the 2020 Ore Reserve with the 2022 Ore Reserve.

Estimate	Ore	Grade	Metal	Waste	Total	Strip Ratio	Recovery
	Mt	g/t Au	Koz Au	Mt	Mt	w:o	%
2021 FS	20.9	0.85	571	54.0	74.9	2.6	73.6
2022	23.1	0.87	647	66.4	89.5	2.9	74.0
Variance	+11%	+2%	+13%	+23%	+19%	+12%	+1%

Table 21. Comparison of 2021 FS and 2022 Tulkubash Ore Reserves

It can be seen in Table 23 that compared to the 2021 Feasibility Study reserve, the 2022 Ore Reserve shows increases in tonnage and grade of 11% and 2% respectively, resulting in a 13% increase in contained metal. The current higher ore tonnage comes with 23% more waste increasing the total material to be mined and strip ratio by 19% and 12%, respectively. Recovery improved 1% on the inclusion of more highly oxidized material from the Mid and East Zones.

21.0 CONFIDENCE AND ACCURACY OF THE ESTIMATE

21.1 RESOURCES

The confidence and accuracy of the updated Ore Reserve estimate, with respect to the underlying resources, represents an improvement over its predecessor. The current resource model is based on an additional 2,760 m of drilling, most of which was dedicated to upgrading Inferred resources in the Mid and East Zones. QA/QC for the assay data is adequate to support the Mineral reserve estimate to a Probable classification.

As in the previous resource model, the deposit is modelled as a broad corridor of low-grade mineralization hosting narrow, higher grade zones. The interpretation has, however, been "fine-tuned" to reduce the possibility of overestimating the low-grade tonnage.

Sample search radii based on a comprehensive review of deposit variography lends greater confidence to the data selected to support block grade estimates. The 40 m range of influence used to define Indicated resources that can potentially be converted to reserves is both typical of this type of mineralization and, more specifically, appropriate for the Tulkubash deposit.

The resource model has been prepared internally by Chaarat geological staff. It incorporates advice from Wardell-Armstrong International and SLR Consulting made on the 2021 mineral resource estimate, however, this version of the model has not been reviewed by external parties.

With respect to the underlying Mineral Resource, the accuracy of the Ore Reserve is considered typical for a project based on a variable, vein-hosted gold deposit and benefits from the high degree of continuity along strike the geology exhibits. An ore reserve derived from a global mineral resource estimate inevitably contains an inherent level of risk which must be managed by a flexible and well-considered operating plan.

21.2 MODIFYING FACTORS

The confidence and accuracy of the updated Ore Reserve with respect to modifying factors used to define the Ore Reserve, is considered moderate to high. The reserve has been defined using industry-standard optimization and design methods. The confidence in the quality and accuracy of this work is high based on the author's knowledge of the processes used and personnel involved.

Additional geotechnical and hydrogeological data have been collected but are yet to be incorporated into the mine design process. Doing so will further enhance the quality of the engineering design and the confidence in the reserve estimate.

The mining schedule and operating plan have a moderate to high level of confidence. The approach to mining is conventional, the contractor is proven, and has gained valuable experience managing site conditions while engaged in construction earthworks. Production goals are reasonably within the capacity of the fleet. The potential exists to mine faster to manage higher strip ratios if necessary.

The process plan is based on proven technology and industry standard practice. The HLF is designed to accommodate more tonnage than in the current reserve and capacity exists in the ADR plant design to increase throughput or manage variations in head grade if necessary. The process recovery estimate is robust and comprehensive based on a geo-metallurgical model which reflects the results of test work in the block recovery estimates.

Risks from geohazards, seismicity, and extreme weather are inherent in the project given its setting. These factors do not affect the Ore Reserve estimate. The cost to manage and mitigate these factors is considered in the project costs.

Capital costs and operating costs from the 2021 Feasibility Study provide a sound basis for the project economics notwithstanding the potential for changes to have occurred since those estimates were made. However, sensitivity analysis indicates the Ore Reserve will remain viable despite significant cost increases and/or changes in metal price.

The outlook for metal prices is favorable over the LOM. The price used to define the Ore Reserve is appropriate and aligned with long-term consensus forecasts. Some risk may exist in the later years of operation as metal prices decline, however, by this time the investment will have been fully recouped.

Changes to taxation and royalties are a potential risk, however, the Stability Agreement between Chaarat and the Kyrgyz government serves to mitigate this to some degree. Some risk exists related to the UNESCO boundary issue until it is resolved, however, presently it does not pose a hurdle to development. CGH is taking a comprehensive approach to permitting. There are no environmental issues evident that would affect the accuracy of the Ore Reserve Estimate.

The Modifying Factors used to define the Ore Reserve Estimate are deemed appropriate. The risks associated with the project are typical of small to medium-sized gold mines in remote, developing world locations and have been addressed in the project design.

22.0 CONCLUSIONS

The following conclusions are drawn from the preceding description of the updated Ore Reserve.

1) The Indicated portion of the Mineral Resource for the project and the Modifying Factors applied are reasonable and appropriate for declaring the material to be mined at the Tulkubash deposit an Ore Reserve under JORC Code (2012).

2) The resource model underlying the 2022 Ore Reserve was developed using industry-standard practices, incorporates advice from independent experts, and is JORC-compliant.

3) The 2022 Ore Reserve is valid based on parameters established in the 2021 Feasibility Study. Some parameters have been adjusted to reflect current knowledge and forecasts. These changes are appropriate.

4) The indicated project value has increased almost 20% from that of the 2021 Feasibility Study at the same gold price and more than 60% at the currently forecast gold price.

5) The change in relative project value is driven by a larger gold reserve with nominally higher metallurgical recovery despite a somewhat higher strip ratio.

6) It is reasonable to consider the 2021 Feasibility Study capital cost estimate valid given the range of accuracy of a Class 3 estimate, however, capital and operating costs require review to confirm their continued validity.

7) Use of a recovered gold cutoff grade is appropriate given the nature of the geo-metallurgical model used to estimate recovery. That cutoff grade can be equated to an in-situ marginal cutoff once the recovery of the reserve is known from the block model.

8) The process used to define the 2022 Ore Reserve used industry-standard methodology for pit optimization and computer-aided open pit design. The level of accuracy in converting the pit shell to the pit design indicates the work was conducted with due care and diligence.

9) It is reasonable to extrapolate slope design criteria from the Main Zone to the Mid Zone due to the geological similarity of the three areas and the bulk of the reserves being in the Main Zone.

10) Inferred resources were neither permitted to influence the pit optimization nor included as part of the Ore Reserve.

11) An appropriate dilution methodology was employed and reasonable adjustments for dilution and mining losses were applied.

12) The mining plan entails a conventional hard-rock, drill-blast, truck-shovel approach using equipment matched to the needs for selectivity, production, and operating flexibility.

13) Annual mine production targets are within the capacity of the fleet and permit higher strip ratios to be managed if necessary.

14) The rate of mining advance is aggressive, but achievable given the planned operating method, equipment fleet, and contractor's demonstrated experience.

15) The truck fleet peaks at 70 units. Rescheduling waste stripping or utilizing larger capacity trucks or truck-trailer combinations should be considered to keep the fleet size manageable.

16) The Ore Control plan is based on proven practice, suited to the nature of the deposit, and appropriate for the prevailing metallurgy.

17) The waste dump is situated in a steep valley near the Main Zone Pit. The stability of the dump design should be confirmed.

18) Backfilling portions of mined-out pits represents best practice and enhances project economics.

19) Mine water management requirements are expected to be relatively few however, additional fieldwork and monitoring is required to confirm assumptions.

20) The geo-metallurgical model used to estimate recovery represents an industry best practice approach and is sufficient to support a feasibility level estimate.

21) The processing plan and planned ramp-up are appropriate for the project.

22) The 2021 Feasibility Study design of the heap leach facility is amenable to expansion.

23) The project does not entail any extraordinary environmental challenges. Variability test work indicates that ARD risk is minimal.

24) Chaarat has programs and plans in place to manage naturally occurring and social risks.

25) Chaarat has a process in place to secure all necessary permits and approvals. There is no reason to believe that Chaarat will not be able to secure the permits it needs to build and operate the mine.

22.0 RECOMMENDATIONS

The following recommendations are based on the preceding conclusions:

1) Conduct in-fill drilling to continue to convert Inferred resources in the Mid and East Zones to reserves.

2) Have the resource model reviewed by a qualified external party.

3) Incorporate the most recent geotechnical and hydrogeological data into the mine design process.

4) Conduct a geotechnical study for the Mid and East Zones to generate slope design parameters for those areas.

5) Have a qualified external party confirm the stability of the Main Zone pit and waste dump designs.

6) Conduct a review of capital and operating costs to establish definitively the value of the project based on the updated reserve.

7) Continue to support the Kyrgyz government in its efforts to resolve the UNESCO boundary issue.

APPENDIX I – RECOVERED CUTOFF GRADE EXPLANATION

TULKUBASH CUTOFF GRADE EXPLANATION
TULKUBASH GOLD DEPOSIT
CHAARAT GOLD

INTRODUCTION

The calculation of ore reserves for the Tulkubash gold deposit employs a recovered gold cutoff grade. This less common form of cutoff grade is necessitated by the geo-metallurgical model which estimates recovery on a block-by-block basis. The following describes the rationale for this approach and its application.

CUTOFF GRADE CALCULATION

The cutoff grade used to define the open pit reserve at Tulkubash is a marginal cutoff grade based on recovered gold. The calculation is shown below:

COG = ((OM + OH + PRO + GA) / ((PR * REC* (1-ROY) - REF)/31.1)

Where:

COG	Cutoff grade	g/t	---
OM	Owner's Mining	$/t ore	0.34
OH	Ore Haul	$/t ore	0.72
PRO	Process	$/t ore	4.79
GA	G&A	$/t ore	1.25
REF	Refining	$/oz Au	9.78
PR	Gold Price	$/oz Au	1,600
ROY	Royalty	%	14
REC	Recovery	%	100

Table 1. Cutoff Grade Parameters

A metallurgical recovery of 100% is used because recovery varies from block to block in the geo-metallurgical model. The rationale for using a recovered gold cutoff grade is provided in the following sections.

OPTIMIZATION

In preparation for pit optimization, cutoff grade in the optimization software is based on recovered gold and set to 100%. This ensures that every block with sufficient value to pay for direct operating costs can potentially help drive the optimization. When optimization is performed, the algorithm calculates the value of each block based on the individual block recoveries in the geo-metallurgical model defining which blocks are inside the pit shell and which are not.

RESERVE CALCULATION

When calculating the potentially minable resource or reserve within the pit shell and/or pit design, the cutoff grade is based on 100% metallurgical recovery. A 100% recovery is used because the optimization process has already determined which blocks are to be mined using the variable recovery for each block. **If a cutoff grade**

based on a fixed average recovery is then applied within the pit limits, it is unavoidable that some low-grade material, which is actually marginal ore, will be treated as waste.

This point is illustrated using two examples given that the average metallurgical recovery, calculated from the geo-metallurgical model for all ore within the 2022 pit design, is 74.0%. Applying this parameter in the cutoff grade calculation results in a calculated marginal cutoff of 0.22 g/t Au and a recovered marginal cutoff of 0.16 g/t Au.

Example 1

Consider a block within the pit with a grade of 0.20 g/t Au. Using the average recovery cutoff of 0.22 g/t Au, this block would be considered waste. However, if the block recovery were 85%, it would have a recovered gold grade of 0.17 g/t Au, higher than the recovered marginal cutoff, and should be classified as ore.

Example 2

Consider a block within the pit with a grade of 0.24 g/t Au. Using the average recovery cutoff of 0.22 g/t Au, this block would be considered ore. However, if the block recovery were 60%, it would have a recovered gold grade of 0.14 g/t Au, lower than the recovered marginal cutoff, and should be classified as waste.

MINE PLANNING AND ORE CONTROL

The application of the cutoff grade in the mining schedule is the same as for calculating the reserve in the pit. When the time comes to mine the deposit, the principle used to segregate ore and waste will be the same as that applied to defining reserves. The specific recovery of the material in question will be considered as opposed to the average recovery of all material to be mined as ore.

Ore control will be guided by a nominal cutoff grade, but the classification of ore and waste will be based on bottle roll testing for weekly and monthly mining areas and cyanide solubility shake tests for individual blastholes.

PROJECT IMPLICATIONS

There is a fundamental disconnect between the pit limits generated from blocks with variable recoveries and a reserve calculated within those limits using a cutoff based on a fixed recovery. The difference between the reserve calculated using a marginal cutoff and a recovered marginal cutoff is not large, perhaps 1-2%. However, at a gold price of $1,600/oz, this is a difference of $10-$20 M in revenue, a significant amount for a small project.

CONCLUSIONS

Use of a recovered gold cutoff grade is appropriate for the Tulkubash deposit where estimated recovery varies from block to block. The recovered gold cutoff ensures that ore within pit limits defined using variable block recoveries is not misclassified due to the variation between individual block recoveries and the average recovery of all the material to be mined as ore.

APPENDIX II - CONSENTS

COMPETENT PERSONS CONSENT FORM

Pursuant to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and Clause 9 of the JORC Code 2012 Edition (Written Consent Statement)

Report Name: **Ore Reserve Report**
Company Name: **Chaarat Gold Holdings Ltd**
Deposit Name: **Tulkubash Deposit, Kyrgyzstan**
Date: **May 15, 2022**

I, Peter Charles Carter,

confirm that I am the Competent Person for the Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).

- I am a Competent Person as defined by the JORC code, 2012 Edition, having five years' experience that is relevant to the type of deposit and mineralization described in the Report, and the activity for which I am accepting responsibility.

- I am a Member or Fellow of the Australasian Institute of Mining and Metallurgy or the Australasian Institute of Geoscientists or a 'Recognised Professional Organisation (RPO) included in a list promulgated by ASX from time to time.

- I have reviewed the Report to which this Consent Statement applies.

I am an independent consulting mining engineer employed on a contract basis by Chaarat Gold Holdings Ltd ("Chaarat") with offices at 10-floor, 103 Ibraimov Street, Bishkek, 720011, Kyrgyzstan.

I am a registered Professional Engineer and member in good standing of Engineers and Geoscientists BC, formerly known as the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), Canada, license number 18036.

I graduated from Montana Tech, Butte, Montana, USA, with a BSc Mining Engineering in 1987. I have practiced my profession for 35 years. My relevant experience in the estimation, assessment, evaluation, and economic extraction of Ore Reserves is based on performing and directing mine planning and mining operations at numerous gold and base metal mines hosting similar deposits over a period of more than 20 years.

As Operations Manager for Chaarat, I was directly involved in mine engineering, permitting, and project design for the Tulkubash Gold Project from February 2018 to September 2019. I have continued to be indirectly involved with the project in a consulting role from October 2019 to the present.

Based on the aforementioned experience and qualifications, I am a Competent Person as defined by the JORC code, 2012 Edition.

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest. I verify that the Report is based on, and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Ore Reserves.

I consent to the release of the Report and this Consent Statement by the directors of:

Chaarat Gold Holdings Ltd

Peter C. Carter, BSc (Min Eng), MBA, P. Eng

Report Name: **ORE RESERVE REPORT**

Company Name: **Chaarat Gold Holdings Ltd**

Deposit Name: **Tulkubash Deposit, Kyrgyzstan**

Date: **14 May 2022**

I, Dimitar Dimitrov,

confirm that I am a Competent Person for the section(s) of the Report relating to Mineral Resources and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC code 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report, and the activity for which I am accepting responsibility.
- I am a Member of the Australian Institute of Geoscientists.
- I have reviewed the Report to which this Consent Statement applies.

I am a member in good standing of Australian Institute of Geoscientists with registration number 4538.

I graduated from the University of Mining and Geology in Sofia, Bulgaria with degree of Engineer-Geologist in the field of Exploration of Mineral Resources in 1986.

I have practiced my profession for 35 years. My relevant experience with respect to the Tulkubash deposit is based on the geological study, assessment, and estimation of resources for similar gold deposits over a 20year period. I have been directly engaged in geological surveys and previous internal resource estimates for the Tulkubash deposit as an employee Chaarat Gold Holding during the period 2020-2022. As a result of my experience and qualifications, I am a Competent Person as defined by the JORC code 2012 Edition

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest. I verify that the Report is based on, and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources.

I consent to the release of the Report and this Consent Statement by the directors of Chaarat Gold Holdings.

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Dimitar Dimitrov

APPENDIX III – JORC TABLE 1, SECTION 4

Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to Ore Reserves* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves*	• Tulkubash April 2022, resource based on all DDH data inclusive of the 2021 exploration program. • Grades estimated with Ordinary Kriging into ore zones defined by wireframe modelling • Total M&I; 25.2 Mt @ 0.98 g/t Au containing 798 Koz • Inferred 11.2 Mt @ 0.62 g/t Au containing 222 Koz • Resource defined by 0.21 g/t Au cutoff within an $1,800/oz pit shell • Mineral Resource is inclusive of the Ore Reserve
Site Visits	• *Comment on any site visit undertaken by the Competent Person and the outcome of those visits*	• Peter C. Carter is qualified as a CP under JORC code (2012) • As a previous member of Chaarat staff, Mr. Carter has visited the site on numerous occasions in 2018 and 2019 • There have been no material changes to the project site with respect to Ore Reserves since Mr. Carter's last site visit
Study Status	• *The type and level of study undertaken to enable the Mineral Resource to be converted to Ore Reserves* • *The code requires that a study, at least to Pre-feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• The basis for the conversion of the Mineral Resource to an Ore Reserve is the 2021 Updated Feasibility Study completed by LogiProc PLC and Sound Mining Inc of Johannesburg, RSA. • The study represents a Class 3 estimate of the project value with an accuracy of -10% to +15%. • The study determined the project to be both technically and economically viable. • Modifying Factors have been considered in the conversion of the Mineral Resource to an Ore Reserve • Some technical parameters have changed since completion of the FS and have been updated
Cutoff Grade	• *Nature of cutoff grade*	• A cutoff grade for <u>recovered</u> Au was employed due to the variable recovery in the geo-metallurgical model • The cutoff grade parameters are based on those from the 2021 FS updated • Recovered Au cutoff = 0.16 g/t Au

		• True marginal cutoff = 0.22 g/t Au at 74% recovery
	• *Parameters used to calculate cutoff grade*	• Owner's Mining = 0.34 $/t ore • Ore Haul = 0.72 $/t ore • Process = 4.79 $/t ore • G&A = 1.25 $/t ore • Refining = 9.78 $/oz • Gold Price = 1,600 $/oz Au • Royalty = 14%
Mining Factors or Assumptions	• *The methods and assumptions used as reported in the PFS or FS to convert the Mineral Resource to an Ore Reserve.*	• Mineral Resource model used a parent block size of 5 m x 5 m x 5 m which respects the selective mining unit • Pit optimization conducted with Whittle 4X • Mining costs were $2.55/t ore and $1.83/t waste • Other parameters as per cutoff grade calculation and recommended pit slopes • Shells optimized for $1,000-$1800/oz Au • $1,350/oz shell selected as basis for pit design • Manual design process using GEMS software used to generate minable pit design • Ore Reserve inside manual design within 5% of the minable resource within optimized shell
	• *Use of Inferred Mineral Resources*	• Inferred Mineral Resources were not permitted to influence the pit optimization and were treated as waste during mine design and reserve calculation
	• *Dilution and Mining Recovery*	• 0.5 m "dilution skin" modeled around ore • Average dilution 10.1% at 0.14 g/t Au • Dilution grade high due to presence of Inferred resources adjacent to ore zones • Mining losses estimated at 2.5% resulting in 97.5% ore recovery
	• *Geotechnical*	• Pit slopes based on slope design study by WAI in 2017 • IRAs of 51^{o} and 58^{o} • Overall slopes of $40\text{-}50^{o}$ • 5 m benches; 8 m berms; 20 m highwalls • Design criteria extrapolated to Mid and East Zone as those areas host only 12% of the reserve

	• *Adjusted Reserve*	• 23.1 Mt ore grading 0.87 g/t Au containing 647 Koz Au • 66.4 Mt associated waste • 2.9:1 strip ratio • 89.5 Mt total material
	• *Open Pit Description*	• 7 pits arranged along 4 km of strike • Main Zone (MZ) Pit; 1 large pit; contains 88% of the reserve by contained metal • Mid & East Zone; 6 small pits; 12% of reserve
Mining Plan	• *Mining Approach*	• Contract mining • Contracting reduces capital costs and training burden • Contractor experienced in western-style open pit gold mining • Contractor has similar culture and language as local workforce
	• *Mining Method*	• Conventional drill-blast, truck-shovel open pit mining method • Small equipment able to provide production capacity, selectivity, and flexibility in restricted working areas
	• *Mine Production Plan*	• 6 years of mining including 1.1 years of pre-stripping • 350 days of operation per year • Average mining rate, 43,000 tpd over LOM • Peak mining rate, 53,000 tpd 2025-2027 • Average strip ratio during operating period, 2.6:1
	• *Ore Control*	• Blasthole cuttings tested for g/t Au, % Total Sulfur, CN solubility • Geologists log cuttings for degree of oxidation • Ore and waste blocks flagged by surveyors for excavation
	• *Mine Water Management*	• Groundwater inflows of 30 m3/hr anticipated • Inflows to be collected in sumps and pumped to a holding pond • Runoff will be diverted around the open pits by ditches • Collected water used for dust suppression or treated and released
	• *Slope Stability*	• Pre-shear and buffer blasting to protect pit

		walls • Walls to be cleaned with by excavators with hydraulic hammers • Visual inspections and survey employed to monitor movement • Mapping of structural features to optimize design safety
	• *Mining Equipment*	• 5 x 5 m3 excavator + 1 x 5 m3 FEL • 6 x crawler-type, 115 mm, blasthole drills • Max 70 x highway-type, 35t haul trucks • 40-50 t bulldozers and 200 HP graders in support
Mine Infrastructure	• *Dumps & Stockpiles*	• Main waste dump < 1 km from MZ Pit with 70 M m3, (100 Mt) capacity • 8 Mt of waste used to backfill pits 2027-28 • Ore SP 600 kt capacity located near Sandalash River bridge • All stockpiled ore processed by end of LOM
	• *Mine Roads*	• Dual access to MZ Pit • 6.5 Km Ore Haul Road from Sandalash River bridge to ROM Pad • All haul roads 15 m wide for 2-way traffic; maximum grade 10%
	• *Mine Facilities*	• Maintenance Workshop • Magazine • AN Storage • Fuel Farm • Offices & communications
Metallurgical Factors or assumptions	• *Proposed metallurgical process and flowsheet*	• Heap leach (HL) processing selected • 3-stage crushing of ore to P100 12 mm • Crushed ore stacked by trucks in 7 m lifts on valley-fill leach pad • Au adsorbed onto activated carbon from PLS in CIC circuit • Loaded carbon stripped in AARL-type elution circuit • Electrowinning and smelting on site produce dore for shipment
	• *Appropriateness of process to the style of mineralization*	• About 70% of the Au is readily CN soluble • Host rock fractures easily to produce 12 mm crush • No agglomeration at crush sizes > 6 mm • Lowest capital and operating costs for

		treating low grade, oxidized ore
	• *Is the metallurgical process well-tested or novel in nature?*	• Process is robust and widely used • Practical for cold-weather conditions • Heap leaching proven globally over last 40 years
	• *Nature of metallurgical test work*	• Process scoping test work conducted by Mintek, SGS, RDI, BGRIMM, and Hazen • HL test programs by WAI (2017), MLI (2018), SAEL (2019 & 2021) • HL testing included bottle roll (BR), column leach (CL), load-permeability, and agglomeration test work
	• *Amount and representativeness of metallurgical test work*	• 93 composite samples tested in all three programs • 78 BR and 11 CL tests produced results representing potential leach feed • 75% of samples from Main Zone, 25% from Mid Zone and potential East Zone • Results indicate BR good proxy HL recovery
	• *Nature of metallurgical domaining*	• Sulphide and oxide domains defined • Three oxidation states established • BR results matched to each ox state • IDW2 used to estimate recovery for individual blocks in oxide domain
	• *Metallurgical recovery factors applied*	• Recoveries derived from geo-metallurgical model • Overall recovery for the Ore Reserve 74% • Average recovery in Main Zone 73.8%, Mid Zone 75.9%, and 76.4% East Zone
	• *Assumptions or allowances for deleterious elements*	• Ore is associated with arsenic and antimony • Neither element is present in amounts which affect the selected process or create environmental issues
	• *Existence of bulk sample or pilot scale test work and the degree to which such samples are considered representative*	• No bulk samples or pilot scale test work has been conducted • The samples tested are representative of the variability of leach feed across the entire known deposit
	• *For minerals that are defined by specification, has the ore reserve estimate been based on the appropriate mineralogy to meet the specification?*	• The Ore Reserve is not defined by a specification

Environmental	• *The status of studies of potential environmental impacts of the mining and processing operations.*	• ESIA completed by WAI in 2018, updated in 2020 • Kyrgyz EIA (OVOS) completed in 2015 • OVOS being updated in support of project permitting
	• *Details of waste rock characterization*	• NAG testing in 2020 on 110 samples distributed throughout deposit • Average NAG pH 5-6 indicating little or no acid generating potential • ABA testing indicates 6% of samples PAG
	• *Consideration of potential sites and status of design options considered*	• Project site terrain is extremely rugged and constrained • Only location able to accommodate the heap leach pad and process facility was the selected Dry Valley site • Dry Valley enables a valley-fill leach pad design suited for cold weather operation • Detailed engineering is in progress
	• *Status of approvals for process residue storage and waste dumps*	• Dry Valley location for the heap leach pad is approved • MZ waste dump in the Irisai Valley is approved • Permitting process for various aspects of the process facility is ongoing
Infrastructure	• *Existence of appropriate infrastructure*	• New site access road completed • Exploration/Pioneer camps established • Permanent camp under construction • All other infrastructure to be provided during construction
	• *Availability of land for development*	• Chaarat has been granted surface rights for the land required to develop the project
	• *Power*	• A 4.5 MW diesel-fired power plant will supply the site with electricity
	• *Water*	• Process water and raw water will be sourced from boreholes located near the plant and camp respectively • Raw water at the camp and ADR plant will be treated to generate potable water
	• *Transportation*	• All personnel, goods, and materials will be transported to and from site via road • Bulk materials and equipment will arrive by rail in Bishkek, 750 km from site, finishing the journey by truck

	• *Labor*	• The project workforce is estimated at 720 • On a 15-15 continuous shift schedule, half the workforce will be on site at any given time • 80% of the workforce is expected to be national with a target of 30% coming from local villages
	• *Accommodation*	• The workforce will be housed on site in a 360-man permanent camp
	• *Ease with which infrastructure can be provided*	• All infrastructure will be installed during the 28-month construction period
Costs	• *Derivation and assumptions regarding capital costs*	• Capital costs from 2021 FS • LOM CAPEX estimated at $131 M • Initial capital approximately $116 M • Deferred and Closure costs = $15 M • Contingency was applied at 10% • AACE Class 3 estimate, -10% to +15%
	• *Methodology used to estimate operating costs*	• Mining cost from quote by the Contractor based on the detailed mine plan • Process, Owner Mining, and G&A were developed from first principles based on detailed operating plans • All other are based on the 2021 FS Update
	• *Allowances made for deleterious elements*	• Project does not incur any added cost due to deleterious elements
	• *Source of exchange rates used in the study*	• Exchange rates for Rubles, Som, and Euros to USD were as per prevailing rates in H1 2021
	• *Derivation of transportation charges*	• Transportation costs were included in the price of all goods and materials • Cost of shipping was based on estimates a specialist logistics service provider in the region
	• *Basis for forecasting refining charges*	• Refining charges were based on advice from the Kyrgyz gold refinery at Kara-Balta
	• *Allowances for royalties, both government and private*	• Kyrgyzstan has a sliding scale royalty system pegged to gold price • At a gold price of $1,600/oz Au the royalty payable is 14% • No private royalty payable on the project • Royalties are applied in lieu of corporate tax in Kyrgyzstan
	• *Head grade and recovery*	• Average head grade 0.87 g/t Au from the

Revenue Factors		block model, adjusted for dilution • Average Au recovery 74% from geo-metallurgical model
	• *Metal price*	• Commodity broker consensus forecast Feb 2022, $1,618/oz over production period • Gold price used $1,600/oz Au • By-product silver priced at $20.00/oz Ag
	• *Exchange rates*	• Payment made in USD, foreign exchange not applicable to revenue
	• *Transportation and treatment charges*	• Refining and transport costs from Kyrgyz national gold refinery at Kara-Balta and a bonded carrier respectively
	• *Refining penalties*	• No penalties payable on Tulkubash dore
	• *Net Smelter Returns*	• Dore, 45% Au and 55% Ag, payable 99.5% and 85% respectively
Market Assessment	• *The demand, supply, and stock situation for the commodity, consumption trends and factors likely to affect supply and demand in the future*	• All producers of precious metals in Kyrgyzstan are obliged to offer their output for sale to the National Bank of the Kyrgyz Republic at world spot prices • If NBKR declines to purchase metals offered, the producer is free to directly sell on world markets
	• *A customer/competitor analysis along with identification of likely market windows for the product*	• Not applicable
	• *Price and volume forecasts and the basis of these forecasts*	• The forecast gold price averages $1,600/oz over LOM • Average annual production forecast to be 106 Koz Au during 3 years of full operation
	• *For industrial minerals, the customer specification, testing, and acceptance requirements prior to a supply contract*	• Not applicable
Economic	• *Production Plan*	• Operations will mine 23.1 Mt ore grading 0.87 g/t Au and 66.4 Mt associated waste over 6-year period • Project will recover 479 Koz primary Au and 386 Koz by-product Ag over a 5-year LOM
	• *Capital Costs*	• 2021 FS LOM capital of $131 M
	• *Operating Costs*	• Mining, Contract = $2.15/t mined • Mining, Owner = $0.34/t ore • Process = $4.80/t ore

		• G&A = $1.27/t ore • Unit costs for production period only
	• *Financial Considerations*	• Royalty applied at 14% in lieu of tax • Base Case discount rate = 5% • Project value calculated from July 1, 2022 • Model is unleveraged, assumes 100% equity
	• *Cost Exclusions*	• Inflation • Engineering • Permitting • Exploration • Interest and financing charges
	• *Economic Performance*	• After-tax NPV discounted at 5% = $138 M • After-tax IRR = 33% • Simple Payback = 2.3 years
	• *Comparison to 2019 FS*	• 19% increase in NPV at $1,450/oz Au • 62% increase in NPV at $1,600/oz Au
	• *Sensitivity Analysis*	• Project NPV declines to $92 M 10% • Each 1% change in CAPEX = $1.1 M change in NPV • Each 1% change in OPEX = $2.5 M change in NPV • Each 1% change in gold price result in $3-$4 M change in NPV • Project is breakeven is at a gold price of about $1,090/oz Au
Social	• *Status of agreements with key stakeholders and matters leading to social license to operate*	• Chaarat has a standing agreement to fund annual "social package" for Chatkal as per Kyrgyz legislation • Chaarat has committed to hiring quotas from local villages • Chaarat has promoted the development of local business, education, and social events • Chaarat maintains a program of engagement with the local government and population
Other	• *Naturally Occurring Risks*	• The project is subject to risks from geohazards, seismicity, and extreme weather • The project design has been developed to mitigate, control, or manage these risks
	• *Legal Agreements*	• Chaarat has partnered with its Mining

		Contractor, Ciftay Insaat • Ciftay has taken a 12% stake in the project worth $31 M • Ciftay will perform construction earthworks, mining, ore stacking, and operate the Permanent Camp under a variety of separate contracts
	• *Permitting*	• Chaarat holds a mining license for the operating area, 700 ha, and an exploration license for the surrounding 6,770 ha • Surface rights have been secured for all land required to develop the project • A permitting process is in place to acquire all permits and approvals required for construction and operation
Ore Reserve Classification	• *Basis for classifying the ore reserve into various confidence categories*	• Drillhole data density • Search for Probable reserves 40 m • Grade/thickness variability • Continuity along strike
	• *Do the results reflect the CP's view of the deposit?*	• Yes. The absence of Measured resources precludes declaring Proven reserves • The Probable reserves are based on accepted standards for similar deposits and appropriately reflect the quality of the geologic, technical, and economic factors used to define them
	• *What proportion of Probable Ore Reserves have been derived from Measured Mineral Resources?*	• None, there are no Measured resources
Audits or Reviews	• *Results of any audits or reviews of the Ore Reserve estimate*	• No third-party audits or reviews have been completed on the updated Ore Reserve
Discussion of relative accuracy /confidence	• *Qualitative discussion of the factors that would affect the accuracy and confidence of the estimate* • *State whether the accuracy/confidence refers to the global or a local Ore Reserve estimate*	• Mineral Resource Estimate based on an additional 2,760 m of drilling • Variography and sample selection criteria reviewed • Wireframe and sulfide contact interpretation reviewed and updated • Previous MRE reviewed by external parties with no fatal flaws found • Accuracy and confidence refer to the global Ore Reserve estimate • Project design is flexible enough to accommodate local variations in presentation of tonnage and grade

	• *Modifying Factors which may affect the accuracy/confidence of the Ore Reserve estimate*	• The mining plan employs a conventional approach with achievable mining rates • Some geotechnical and hydrogeological factors need further definition, however, this will not affect the accuracy of the Ore Reserve estimate • Process technology is proven • Recovery estimate reflects test work • CAPEX and OPEX estimates are FS-level; review required to confirm current validity • The project can manage variations in metal and commodity prices of 10-20% • The project is subject to political and regulatory risks typical for a developing country • Natural risks such as geohazards and seismicity have been considered in the project design