# Technical Report Summary on the Çöpler Property, Türkiye

## S-K 1300 Report

### SSR Mining Inc.

SLR Project No.: 138.21581.00006

Effective Date:

October 31, 2023

Signature Date:

February 12, 2024

Prepared by:

**SLR International Corporation**

**RSC Consulting Ltd.**

**WSP USA Inc.**

**Ausenco Services Pty Ltd**

Making Sustainability Happen

**Technical Report Summary on the Çöpler Property, Türkiye**

SLR Project No.: 138.21581.00006


Prepared by

SLR International Corporation
1658 Cole Blvd, Suite 100
Lakewood, CO 80401

WSP USA Inc.
7245 West Alaska Drive, Suite 200
Lakewood, CO 80226 USA

RSC Consulting Ltd.
24 Smith Street
Dunedin 9016
New Zealand

Ausenco Services Pty Ltd
Level 6, 189 Grey Street
South Brisbane, Queensland 4101
Australia

for

SSR Mining Inc.
6900 E. Layton Avenue, Suite 1300
Denver, Colorado 80237
USA



Effective Date - October 31, 2023

Signature Date - February 12, 2024


Distribution: 1 copy - SSR Mining Inc.

1 copy - SLR International Corporation

***Cautionary Note Regarding Forward-Looking Statements:***

*Certain statements contained in this report are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and are intended to be covered by the safe harbor provided for under these sections. Forward looking statements can be identified with words such as "may," "will," "could," "should," "expect," "plan," "anticipate," "believe," "intend," "estimate," "projects," "predict," "potential," "continue" and similar expressions, as well as statements written in the future tense. Forward-looking statements are based on information known at such time and/or with a good faith belief with respect to future events. Such statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the forward-looking statements. Many of these risks and uncertainties cannot be controlled or predicted. Given these risks and uncertainties, readers are cautioned not to place undue reliance on forward-looking statements. Forward-looking statements include, among things: metal price assumptions, cash flow forecasts, projected capital and operating costs, metal recoveries, mine life and production rates, and other assumptions used in this report.*

*Such forward-looking information and statements are based on a number of material factors and assumptions, including, but not limited to: the inherent speculative nature of exploration results; the ability to explore; communications with local stakeholders; maintaining community and governmental relations; status of negotiations of joint ventures; weather conditions at our operations; commodity prices; the ultimate determination of and realization of Mineral Reserves; existence or realization of Mineral Resources; the development approach; availability and receipt of required approvals, titles, licenses and permits; sufficient working capital to develop and operate the mines and implement development plans; access to adequate services and supplies; foreign currency exchange rates; interest rates; access to capital markets and associated cost of funds; availability of a qualified work force; ability to negotiate, finalize, and execute relevant agreements; lack of social opposition to our mines or facilities; lack of legal challenges with respect to our properties; the timing and amount of future production; the ability to meet production, cost, and capital expenditure targets; timing and ability to produce studies and analyses; capital and operating expenditures; economic conditions; availability of sufficient financing; the ultimate ability to mine, process, and sell mineral products on economically favorable terms; and any and all other timing, exploration, development, operational, financial, budgetary, economic, legal, social, geopolitical, regulatory and political factors that may influence future events or conditions. While we consider these factors and assumptions to be reasonable based on information currently available to us, they may prove to be incorrect.*

*The above list is not exhaustive list of the factors that may affect any of the forward-looking statements and information included in this report, and such statements and information will not be updated to reflect events or circumstances arising after the date of such statements or to reflect the occurrence of anticipated or unanticipated events.*

*This technical report summary also contains financial measures which are not recognized under U.S. generally accepted accounting principles.*

# Table of Contents

## Tables

## Figures

# 1.0 Executive Summary

## 1.1 Summary

SLR International Corporation (SLR) was retained by SSR Mining Inc.(SSR) to prepare an independent Technical Report Summary (TRS) on the Çöpler Property (the Property or the Project), located in Erzincan Province, Türkiye. The Property is owned and operated by Anagold Madencilik Sanayi ve Ticaret Anonim Şirketi (Anagold). SSR controls 80% of the shares of Anagold, Lidya Madencilik Sanayi ve Ticaret A.Ş. (Lidya), controls 18.5%, and a bank wholly owned by Çalık Holdings A.Ş., holds the remaining 1.5%.

The purpose of this TRS is to disclose the results of the Mineral Resource and Mineral Reserve estimates for the Property with an effective date of October 31, 2023. This TRS conforms to the United States Securities and Exchange Commission's (SEC) Modernized Property Disclosure Requirements for Mining Registrants as described in Subpart 229.1300 of Regulation S-K, Disclosure by Registrants Engaged in Mining Operations (S-K 1300) and Item 601 (b)(96) Technical Report Summary. SLR visited the property on August 29-31, 2023. SLR, RSC Consulting Ltd (RSC), WSP USA Inc. (WSP) and Ausenco Services Pty Ltd (Ausenco) are the Qualified Persons (QPs) as required by S-K 1300 for purposes of this TRS.

SSR is a gold mining company with four producing assets located in the USA, Türkiye, Canada, and Argentina, and with development and exploration assets in the USA, Türkiye and Canada. SSR is listed on the NASDAQ (NASDAQ: SSRM), the Toronto Stock Exchange (TSX: SSRM), and the Australian Stock Exchange (ASX: SSR).

The Property consists of several mining licenses covering Mineral Resources on the Çöpler mine, Greater Çakmaktepe (Çakmaktepe and Çakmaktepe Extension (Ext.) - previously referred to as Ardich), and Bayramdere deposits, Mineral Reserves on the Çöpler and Greater Çakmaktepe deposits, oxide and sulfide processing facilities, and supporting infrastructure.

This report is an update of SSR's prior Technical Report Summary for the Property, dated as of September 29, 2022.

### 1.1.1 Conclusions

The QPs offer the following conclusions by area.

#### 1.1.1.1 Geology and Mineral Resources

- The Çöpler district deposits (Çöpler, Greater Çakmaktepe, and Bayramdere) are best classified as epithermal, disseminated, and skarn deposits related to a porphyry copper-gold system. Mineralizing fluids, derived from the intrusions, were primarily controlled by structural fluid pathways and lithology, including traps controlled by lithological contacts, resulting in replacement, vein and stockwork mineralization.
- The Çöpler property has been the site of considerable mining and exploration, including the drilling and logging of more than 4,800 drill holes totaling over 725,000 metres drilled.
- The QP has estimated and prepared the Mineral Resources in accordance with the U.S. Securities and Exchange Commission (US SEC) Regulation S-K subpart 1300 rules for Property Disclosures for Mining Registrants (S-K 1300).

- The QP has classified the Mineral Resources in accordance with the U.S. Securities and Exchange Commission (US SEC) Regulation S-K subpart 1300 rules for Property Disclosures for Mining Registrants (S-K 1300).
- Mineral Resource estimates were prepared using a domain-controlled, predominantly ordinary kriging technique with verified drillhole location, density and sample data derived from exploration activities conducted by various companies from 2000 to 2023. Inverse distance algorithms were used for estimating minor elements, densities, and where kriging results were sub-optimal.
- The QP is of the opinion that the drilling and sampling procedures adopted at Çöpler are consistent with generally recognized industry best practices. The diamond and reverse circulation (RC) samples were collected by competent personnel using common practices. The process was conducted or supervised by qualified geologists.
- Overall, the drilling pattern is sufficiently dense to interpret the geometry and the boundaries of gold mineralization with confidence. Several areas at Çöpler are based on approximately 60-m spaced drilling which carries a moderate risk; the impact of this has been limited by classifying these areas as Inferred. The QP considers the overall risk associated with data location, spacing and distribution to be low to moderate and has considered this risk when classifying the Mineral Resources.
- The data informing the Mineral Resources are collected using RC and core drilling. Overall, the QP is of the opinion that the samples are representative of the source materials.
- In the RSC QP's opinion, the sample preparation, security, and analytical procedures are adequate and meet industry standards, and the QA/QC program, as designed and implemented at Çöpler is adequate. The assay results within the drillhole database are considered suitable for the purpose of mineral resource estimation and classification in relevant categories. Neither the SSR in-house quality control nor SSR predecessor's quality control yielded any indication of material quality concerns.
- The QP was provided unlimited access by SSR for data verification purposes during the site visit. The QP is of the opinion that data verification procedures for the Project comply with industry standards and are adequate for the purposes of Mineral Resource estimation.
- Based on the site visit, data validation and the results of quality acceptance testing, the QP is of the opinion that the sampling methods, chain of custody procedures, and analytical techniques are adequate and meet acceptable industry standards. The assay and bulk density databases are of sufficient quality for Mineral Resource estimation at the Çöpler district deposits (Çöpler, Greater Çakmaktepe, and Bayramdere).
- The QP considers that the knowledge of the deposit setting, lithologies, controls on mineralization, and the mineralization style and setting, is sufficient to support the Mineral Resource classifications assigned. Alternative geological interpretations are possible. At Çöpler and Greater Çakmaktepe, the domains were updated to better align with previous mining reconciliation, however, a moderate–high risk is inherently carried in the domaining. It is anticipated that alternative geological interpretations could lead to tonnage or grade swings of up to ±20% in Inferred parts of the Mineral Resources.
- The assumptions, parameters and methods used in the estimations have been transparently reported. The estimation settings are considered conservative and have

been reconciled with previous mining at Çöpler and Greater Çakmaktepe to provide a robust result. Sensitivity testing has demonstrated that the estimation settings carry a moderate risk.

- The Mineral Resource estimates for Çöpler, Greater Çakmaktepe, and Bayramdere have an effective date of October 31, 2023.
- Appropriate cut-off grades and pit optimization parameters have been used to establish those portions of the block models that meet the requirement for reasonable prospects for economic extraction for this style of gold-copper deposit and mineralization. In assessing the potential of economic extraction, the QP reviewed mining, metallurgical, economic, environmental, social and geotechnical factors.
- The Mineral Resources estimates exclusive of Mineral Reserves at the Property include the following by deposit area (SSR 80% attributable share):
  - Çöpler: 5.0 million tonnes (Mt) Measured Mineral Resources at an average grade of 1.31 g/t gold (Au) containing 0.21 million ounces (Moz) Au, 11.1 Mt Indicated Mineral Resources at an average gold (Au) grade of 1.29 g/t containing 0.46 million ounces (Moz) Au and an additional 14.0 Mt at an average grade of 1.53 g/t Au containing 0.69 Moz Au of Inferred Mineral Resources.
  - Greater Çakmaktepe: 3.6 Mt Measured Mineral Resources at an average grade of 0.94 g/t Au containing 0.11 Moz Au, 7.3 Mt Indicated Mineral Resources at an average grade of 1.10 g/t Au containing 0.26 Moz Au and an additional 4.8 Mt at an average grade of 1.87 g/t Au containing 0.29 Moz Au of Inferred Mineral Resources.
  - Bayramdere: 0.1 Mt Indicated Mineral Resources at an average grade of 2.36 g/t Au containing 0.01 Moz Au. There are no Measured or Inferred Resources at Bayramdere.
- The level of uncertainty has been adequately reflected in the classification of Mineral Resources for the Çöpler Project. The Mineral Resources presented may be materially impacted by any future changes in the break-even cut-off grade, which may result from changes in mining method selection, mining costs, processing recoveries and costs, metal price fluctuations, or significant changes in geological knowledge.

The QP is of the opinion that with consideration of the recommendations summarized in Sections 1 and 23 of this TRS, any issues relating to all relevant technical and economic factors likely to influence the prospect of economic extraction can be resolved with further work.

#### 1.1.1.2 Mining and Mineral Reserves

- The total Mineral Reserve for the Çöpler Project is estimated to be approximately 67.4 Mt at an average grade of 2.32 g/t gold, totaling 5.1 Moz of contained gold, and SSR's (80%) portion is 53.9 Mt at an average grade of 2.32 g/t Au, totaling 4.1 Moz of contained gold. Average oxide gold recoveries are 61% and average sulfide gold recoveries range from 81% to 91%. SSR's portion of the Mineral Reserves for both Çöpler pit and Greater Çakmaktepe pit is 80%. The Çöpler pit represents approximately 41% of the total Mineral Reserve and the Greater Çakmaktepe pit represents the remaining 59%.
- The SLR QP reviewed the assumptions, parameters, and methods used to prepare the Mineral Reserves Statement and is of the opinion that the Mineral Reserves are estimated appropriately and disclosed in accordance with S-K 1300.

- This mine has operated profitably since 2011. Open pit mining at the Çöpler Project is carried out by a mining contractor and managed by Anagold.
- The mining method is a conventional open pit method with drill and blast operations and using excavators and trucks operating on bench heights of 5 m. The mining contractor provides operators, line supervisors, equipment, and ancillary facilities required for the mining operation. Anagold provides management, technical, mine planning, engineering, and grade control functions for the mining operation.
- Production schedules and costs associated with the Mineral Reserves have been updated by SSR based on current site performance and contracts.

#### 1.1.1.3 Mineral Processing

**Pressure Oxidation Sulfide Plant**

- The throughput from crushing and grinding was designed with a nominal capacity of 306 tph which was increased up to a maximum of 400 tph. The pressure oxidation (POX) autoclave circuit has demonstrated it can process a long-term average maximum of 280 tph feed (two autoclaves operating in parallel) and 13.75 tph sulfide sulfur, compared to design of 245 tph and 12.5 tph respectively. The limit of 13.75 tph sulfide sulfur is dictated by the capacity of the oxygen supply to effect oxidation of the sulfides, design 96%. The gold recovery has remained at approximately 87.5%.
- The flotation plant feed rate is variable between 50–150 tph based on sulfide sulfur feed grade and the oxidation capacity of the POX autoclaves to oxidize sulfides.
- The addition of a flotation circuit to the sulfide plant provides stability and flexibility to the POX circuit operation to maximize throughput and oxygen utilization by maintaining optimum sulfur grade to the autoclaves.
- A large amount of POX test work has been performed on Çöpler sulfide ore across several pilot plant campaigns. The current POX process works well, as demonstrated by actual operational performance.
- Comminution test work indicates that Çakmaktepe Ext. sulfide ore (jasperoid) is significantly harder and more abrasive than Çöpler sulfide ores and is not amenable for feeding to the existing Sulfide plant primary sizer. The ore will be crushed using the heap leach crushing plant and then delivered to POX plant grinding circuit.
- No test work has been completed for direct POX processing of Çakmaktepe Ext. sulfide ores or flotation concentrates.
- Further metallurgical testing of Çakmaktepe Ext. material types, both oxide and sulfide, is recommended to optimize the feeds to POX and slip stream flotation circuit. Further mineralogical work is recommended to understand the main gold associations.
- The silver recovery pattern is much less clear than gold because silver is not released by the oxidation process. Silver recovery is determined from actual plant recovery over the period January 2019 through February 2020. The silver recovery calculates to 3.0%.
- From the test work, it is estimated that the flotation concentrate reporting to the POX circuit will achieve the same overall recovery as the ore directly reporting to POX. Gold recovery to the flotation concentrate is estimated to be 55%.

- The flotation tails reporting directly to the leach circuit are estimated to have a gold recovery of 43%, based on test work using samples collected while processing large amounts of formerly stockpiled ore. When processing freshly mined sulfide ore, flotation tails recoveries can vary between 10% and 30% in CIP.

**Heap Leach**

- The oxide heap leaching facilities were commissioned in late 2010. The process was originally designed to treat approximately 6.0 Mtpa of ore by three-stage crushing (primary, secondary, and tertiary) to 80% passing 12.5 mm, agglomeration, and heap leaching on a lined heap leach pad with dilute alkaline sodium cyanide solution. Gold is recovered through a carbon-in-column (CIC) adsorption system, followed by carbon elution, electrowinning and smelting of the precipitate to produce doré ingots for sale.
- The ore contains cyanide soluble copper that consumes cyanide increasing operating cost. Copper cyanide in the leach solutions is treated in a sulfidation, acidification, recycling, and thickening (SART) plant which precipitates the copper as copper sulfide and regenerates sodium cyanide, which is recycled in the leach solutions.
- Metallurgical test work on Çakmaktepe oxide ore for heap leaching was performed in the on-site Çöpler metallurgical laboratory, initially under the supervision of Kappes, Cassiday & Associates (KCA). The results compare to the Çöpler oxide ore, with similar behavior and leach kinetics. Subsequently, Çakmaktepe oxide ore was heap leached together with Çöpler oxide ore.
- Metallurgical test work on Çakmaktepe Ext. oxide material for heap leaching was performed at McClelland Laboratories Inc. and supervised by Metallurgium consulting. The initial program in 2019 identified two distinct domains with respect to gold recovery based on sulfide sulfur (SS) content of <1% and between 1% to 2%.
- Metallurgical heap leach test work has been completed to characterize the Bayramdere oxide mineralization. In the column test, final gold extraction was 84% in the two duplicate columns with reasonable leach kinetics.
- The current heap leaching gold recovery assumptions are summarized for Çöpler oxide zone, Çakmaktepe oxide zone (including Bayramdere), and Çakmaktepe Ext. oxide zone in the report and vary by ore type and location. The main ore types include diorite, metasediment (Hornfels), limestone/marbles, gossan, manganese diorite, Jasperoid and ophiolite. The Çakmaktepe Ext. oxide ores include Jasperite, Listwanite and Dolomite and were extensively tested during 2023 by Ausenco and ALS.

**Grind Leach**

- The proposed process to treat oxide and low sulfur (< 2% sulfur) ores from the Çakmaktepe Ext. open pit is a conventional grind leach process. The grind leach process plant is designed to treat 248 tph of ore during 8,059 hours per year of operation or 92% availability for a total of 2 Mtpa. The operating availability of the crushing section will be 70%. The process will comprise primary jaw crushing, SAG mill and ball mill grinding closed by hydrocyclones, carbon-in-leach (CIL) cyanidation, carbon elution, electrowinning, and refining of electrowinning precipitate to produce a final precious metal (doré) product.
- In 2023, ALS Metallurgy - Kamloops completed a metallurgical test program supervised by Ausenco to evaluate grind/leach processing of Çakmaktepe Ext. oxide ores. Both standard and CIL bottle roll tests were completed at a grind size $P_{80}$ of 75 µm. Testing

on master composite samples indicated that gold recovery is insensitive to grind size over a range from 53 µm to 212 µm.

- Samples were selected to be representative of spatial, lithological and grade variability. Sample selection also took into consideration the preliminary mining sequence, with higher sample density in areas expected to be mined in the earlier years of the grind/leach plant operation.
- Test work is planned to understand metallurgical and mineralogical variability across the deposit. Gold recovery for the Jasperoid, Listwanite, and Dolomite lithologies were 60%, 90%, and 83%, respectively.

#### 1.1.1.4 Infrastructure

- The existing heap leach pad comprises four phases with an estimated capacity of 63 Mt of oxide ore heaps, with a maximum heap height of 100 m above the pad liner. Two additional phases (phase 5 and phase 6), with a total of 18.5 Mt capacity (13.5 Mt and 5.0 Mt, respectively), will be added to accommodate oxide ore extracted from Greater Çakmaktepe.
- The current tailings storage facility (TSF-1) is in the process of development and construction and will have seven phases when it reaches the ultimate phase. Currently the TSF holds 13.3 Mt of tailings as of the Effective Date of this report. Construction of Phase 4 of TSF-1 has been finalized, and it received approval for operation from the Ministry of Environment, Urbanisation and Climate Change (MoEUCC) in November 2023. The design capacity for TSF-1 is currently 65.8 Mt.
- However, the ultimate capacity required for TSF-1 that will have to incorporate the 60.4 Mt of tailings generated from the LOM plan is estimated to be 73.7 Mt (13.3 Mt plus 60.4 Mt). There are a number of options currently being studied to further expand TSF-1 capacity but these have not been finalized. A conceptual design to increase the crest elevation of Phase 7 embankment from 1,275 MASL to 1,280 MASL, thus increasing the total capacity to approximately 77 Mt, has been selected for the LOM plan.
- Limestone and marble overburden are currently used as embankment rockfill for TSF construction. According to the current mine plan, there will be a limestone shortage in 2025 but SSR has plans to quarry limestone near the mine area to produce the required amount required for the TSF expansion.
- The existing infrastructure, as well as the areas designated for tailings storage and the leach pad, will meet the demands of the current Mineral Reserves once the planned expansions are completed.

#### 1.1.1.5 Environment

- The Çöpler mining and processing operations have a well-established and effective environmental, social and permitting management program (10+ years) that follows National and International Standards.
- Site staff is knowledgeable and experienced in site and regulatory requirements and supported by corporate technical and Environmental, Social and Governance (ESG) personnel as well as outside (Türkiye and International) technical experts.
- Budgets and planned schedules for permit development are reasonable and there were no critical path permitting items noted that would limit production and Reserve/Resource

development. A reclamation/closure plan and estimates to perform this activity are in place.

- The budgets and staffing to perform required programs are adequate and indicative of site activities, requirements, and responsibilities.
- The SLR QP's opinion is that it is reasonable to rely on the information provided by SSR as outlined above for use in the this TRS because a significant environmental and social analysis has been conducted for the project over an extended period, the Project has been in operation for a number of years, and SSR employs professionals and other personnel with responsibility in these areas and these personnel have a good understanding of the permitting, regulatory, and environmental requirements for the Project.

#### 1.1.1.6 Capital and Operating Costs

- SSR's forecasted capital and operating costs estimates related to the development of Mineral Reserves are derived from annual budgets and historical actuals over the long life of the current operation. According to the American Association of Cost Engineers (AACE) classifications, these estimates would be Class 2 with an accuracy range of -5% to -15% to +5% to +20% except where noted elsewhere.

### 1.1.2 Recommendations

The QPs offer the following recommendations by area.

#### 1.1.2.1 Geology and Mineral Resources

1. Carry out an infill drill program of 50,000 m with a proposed budget of US$11.3 million over the next three years at Çöpler and Greater Çakmaktepe. The objective of the infill drill program is to increase orebody knowledge and improve the confidence in resource estimates and classification.
2. Carry out a resource extension drill program of 30,000 m with a proposed budget of US$6.8 million over the next three years at Çöpler and Greater Çakmaktepe. The drill program is planned to convert Inferred Resources to Indicated Resources within the current reserve pit. The drill program will also target higher-grade structures closer to the current resource boundary with an objective of expanding the Mineral Resources.
3. Carry out continuous pit mapping and updating of the structural and geological model at Çöpler and Greater Çakmaktepe. The data will be incorporated in resource models to increase the confidence in resource estimates and classification.
4. Audit the grade control process in 2024. Based on the outcomes of the audit, any changes, if warranted, will be implemented.

The RSC QP agrees with the objectives and overall scope of these planned activities.

#### 1.1.2.2 Mining and Mineral Reserves

1. Complete the Greater Çakmaktepe pit area hydrological model within the upcoming year (2024).
2. Update geotechnical model for the Greater Çakmaktepe pit area in 2024.

3 Pit dewatering should become a higher priority in both the Çöpler and Greater Çakmaktepe pit areas within the next few years as the pits are deepened.

4 Perform a study to optimize Waste Rock Dump (WRD) locations to improve the haulage profiles.

#### 1.1.2.3 Mineral Processing

1 Carry out additional test work to understand the significant metallurgical and mineralogical variability across the deposit, including gold recovery and grind size for the Jasperoid mineralization.

2 Implement further testing to determine optimum circuit design parameters including grind size.

#### 1.1.2.4 Infrastructure

1 Develop an execution plan for constructing TSF 1 phase 5 within the next 2.5 years to account for the current rate of rise in the facility and to mitigate any risk of reduced tailings capacity in the TSF-1 impoundment driven by excess water from the heap leach operations.

2 Evaluate and plan for the operation of water treatment facilities to filter the TSF reclaim water and manage discharges as soon as possible.

3 Expedite the permitting and initiation of limestone quarry operations to avoid delays in the construction of future TSF phases given the projected limestone shortage in 2025 in the current mine plan.

4 Develop a well-defined closure plan for the current TSF. The closure plan should be integrated with operations and life-of-mine planning.

5 Conduct further studies and install instrumentation for TSF-1 as the facility is expanded beyond Phase 5. The instrumentation should include inclinometers within the downstream abutments used to supplement the existing monitoring and instrumentation plan. These changes are proposed for the 2024 fiscal year.

6 Conduct further studies for the proposed TSF options, as listed below, during the next stage of their design.

- Geotechnical Investigation with Boreholes & Test pits
- Tailings Sample (pilot) and testing
- Tailings Large Strain Consolidation Modeling
- Seismic Deformation Modeling
- Probabilistic Water Balance Modeling
- Closure Plan
- Instrumentation Plan
- Diversion Channel Design
- Dam Breach Analysis
- Credible Failure Modes Analysis

#### 1.1.2.5 Environment

1. Evaluate whether there may be an opportunity to use the heap drain-down solution in the sulfide circuit rather than disposing of it by forced evaporation, potentially reducing costs. This would require changes to the design of the evapotranspiration cells included in the current estimate.
2. Evaluate the technical and regulatory/permitting requirements for treating and discharging water. The SLR QP understands that the current operations are designed as "Zero Discharge"; however, suggests that treating and discharging water may enhance sustainability goals by reducing fresh-water make-up and expedite closure timing.
3. Conduct further studies and design work for the mitigation of potential acid generating (PAG) materials exposed in the pits to verify whether the proposed one metre of non-PAG cover is practical and effective to implement.
4. Compare the growth media inventory and expected amount to be recovered over the course of the Project to the sum of the growth media requirements of the Project facilities. Further work (as part of a Test Plot Program) is recommended to determine the most sustainable revegetation covers to be employed.
5. Evaluate and, where possible, implement additional concurrent reclamation opportunities to minimize costs and requirements at the end of operations.
6. Track and, if necessary, participate in the development of new environmental and mine permitting regulations.
7. Continue to perform internal and external (independent) ESG Audits.
8. Continue to update Asset Retirement Obligations (ARO) as well as overall reclamation/closure cost estimates on a regular basis.

#### 1.1.2.6 Capital and Operating Costs

1. Evaluate the technical and regulatory/permitting requirements for treating and discharging water. The SLR QP understands that the current operations are designed as "Zero Discharge"; however, suggests that treating and discharging water may enhance sustainability goals by reducing fresh-water make-up and expedite closure timing.

## 1.2 Economic Analysis

An after-tax Cash Flow Projection has been generated from the Life of Mine production schedule and capital and operating cost estimates and is summarized in Table 1-2. A summary of the key criteria is provided below. The complete cash flow is presented in Section 27.0 Appendix. The analysis is based on Q4 2023 real US dollar basis with no escalation.

### 1.2.1 Economic Assumptions

#### 1.2.1.1 Revenue

- Approximately 13,000 tonnes per day processed (4.5 Mt per year) at an average overall head grade of 2.32 g/t gold, including the following circuits:
  - POX: Approximately 7,800 tpd milled (2.7 Mt per year) averaging 2.42 g/t gold,
  - Heap Leach: 3,800 tpd stacked (1.3 Mt per year) averaging 1.93 g/t gold, and

    - Grind-Leach: 5,340 tpd milled (1.9 Mt per year) averaging 2.26 g/t gold.
- LOM average 281,000 ounces per year gold recovered with LOM recovery averaging 84.7% over the 15 years of full process capacity (2024 to 2038). Total 4.25 Moz gold recovered over LOM with the following recovery rates:
    - POX: 87.9%; Heap Leach: 70.4%, and Grind-Leach: 81.3%
- The economic analysis was carried out on a total of 100% basis of Mineral Reserves, of which SSR owns 80%.
- Metal price: US$1,780 per ounce gold (LOM realized), US$1,755 per ounce gold long term price (2028+).
- Gold at refinery 100% payable (with de minimis silver and copper production not included in this analysis).
- Net Smelter Return (NSR) of $106/t processed includes freight/transport costs averaging $3.84/oz gold. Refining costs are included in process operating costs.
- Revenue is recognized at the time of gold production.

#### 1.2.1.2 Costs

- Mine life: 15 years (11 years of mining with four years of stockpile processing).
- Life of Mine production plan as summarized in Table 13-18.
- Greater Çakmaktepe starter pit, TSF expansion to 77 Mt, and G-L circuit construction growth capital totals $475.1 million.
- Mine life sustaining capital totals $61.3 million.
- Final reclamation costs total $100 million at end of mine life.
- Average site operating cost over the mine life is $54.45 per tonne processed.

#### 1.2.1.3 Taxation and Royalties

##### 1.2.1.3.1 Corporate Income Taxes

In Türkiye, the standard income tax rate is 25% but some of the site's income streams qualify for a reduced rate, thus the effective LOM income tax rate is 24.5%.

For tax purposes, a 10 year double declining balance methodology is used for all new and replacement capital starting in 2024 totaling $536 million. For the existing depreciation balance of $290 million as of Q3 2023, a combination of accelerated, straight line, and unit of production depreciation methods is used as modeled by the SSR tax group. All remaining depreciation at the end of the mine life is written off in the last year of production.

Investment incentive certificates (IIC) are available for investments that promote economic development. IIC's can be classified as strategic in specific circumstances, thereby providing additional incentives. An IIC generates credits that offset corporate income taxes generated by the investment. In this analysis, income tax credits totaling 29% over the LOM were applied to the income tax payable estimate, in 90% credits applied in 2024 and 2025 and 80% credits applied in 2026 to 2028, as modeled by the SSR tax group.

#### 1.2.1.3.2 VAT and Import Duties

This analysis assumes the annual operating and capital cost are subject to value-added tax (VAT) in Türkiye. VAT is levied at 4% of all operating and capital costs (less labor costs) starting July 2023, and the Project is eligible for the Turkish exemptions for mining projects and mining equipment purchases. VAT payments are expected to end in 2025.

Import duties are not included in the capital cost estimate for mining related imported equipment because they are exempted in the IICs.

#### 1.2.1.3.3 Royalties

Under Turkish Mining Law, the royalty rate for precious metals is variable and tied to metal prices. The Çöpler Project is subject to a mineral production royalty which is based on a sliding scale to gold price and is payable to the Turkish government.

Table 1-1 details the current prescribed royalty rates applicable to POX, heap leach and G-L production (revised September 2020). The royalties are calculated on total revenue with deductions allowed for processing and haulage costs of ore. Royalty rates are reduced by 40% for ore processed in country, as an incentive to process ore locally.

**Table 1-1: Gold Royalty Rates**

| Metal Price ($/oz Gold) | | Prescribed Royalty Rate (%) | Royalty After 40% In-Country Processing Incentive (%) |
|---|---|---|---|
| From | To | | |
| 0 | 800 | 1.25 | 0.75 |
| 800 | 900 | 2.50 | 1.50 |
| 900 | 1,000 | 3.75 | 2.25 |
| 1,000 | 1,100 | 5.00 | 3.00 |
| 1,100 | 1,200 | 6.25 | 3.75 |
| 1,200 | 1,300 | 7.50 | 4.50 |
| 1,300 | 1,400 | 8.75 | 5.25 |
| 1,400 | 1,500 | 10.00 | 6.00 |
| 1,500 | 1,600 | 11.25 | 6.75 |
| 1,600 | 1,700 | 12.50 | 7.50 |
| 1,700 | 1,800 | 13.75 | 8.25 |
| 1,800 | 1,900 | 15.00 | 9.00 |
| 1,900 | 2,000 | 16.25 | 9.75 |
| 2,000 | 2,100 | 17.50 | 10.50 |
| 2,100 | + | 18.75 | 11.25 |

The Çöpler Project effective LOM royalty rate based on the metal price assumptions and applicable deductions is approximately 8.4%.

Other than the royalty payments, there are no other known back-in rights, payments, or other agreements and encumbrances to which the Project is subject.

### 1.2.2 Cash Flow Analysis

Considering the Çöpler Project on a stand-alone basis, the undiscounted after-tax cash flow totals $2,368 million over the mine life. The after-tax Net Present Value (NPV) at a 5% discount rate (midpoint with November 1, 2023 as time zero) is $1,643 million, as shown in Table 1-2. An Internal Rate of Return (IRR) metric is not reported as the operation is cash positive in each year of the mine plan until closure.

**Table 1-2: After-Tax Cash Flow Summary**

| Description | US$ million |
|---|---|
| **Realized Market Prices** | |
| Au ($/oz) | $1,780 |
| **Payable Metal** | |
| Au (koz) | 4,254 |
| **Total Gross Revenue** | **7,564** |
| Mining Cost | (1,213) |
| Process Cost | (1,998) |
| G & A Cost | (441) |
| VAT Payments | (9) |
| Dore Freight/Insurance | (16) |
| Mining Royalties | (429) |
| **Total Operating Costs** | **(4,107)** |
| **Operating Margin (EBITDA)** | **3,457** |
| Cash Taxes Payable | (452) |
| Working Capital[1] | 0 |
| **Operating Cash Flow** | **3,005** |
| Development Capital | (475) |
| Sustaining Capital | (61) |
| Total Closure/Reclamation Capital | (100) |
| **Total Capital** | **(637)** |
| | |
| **Pre-tax Free Cash Flow** | **2,821** |
| **Pre-tax NPV @ 5%** | **1,931** |
| | |
| **After-tax Free Cash Flow** | **2,368** |
| **After-tax NPV @ 5%** | **1,643** |

Notes:

1. All working capital adjustments net to zero at end of mine life

The World Gold Council Adjusted Operating Cost (AOC) is US$965/oz Au. The mine life capital unit cost, including sustaining and closure/reclamation, is US$38/oz, for an All in Sustaining Cost (AISC) of US$1,003/oz Au. The average annual gold production during operation is 281,000 ounces per year over ROM operations.

### 1.2.3 Sensitivity Analysis

Project risks can be identified in both economic and non-economic terms. Key economic risks were examined by running cash flow sensitivities:

- Head grade
- Metallurgical recovery
- Gold price
- Operating costs
- Capital costs

After-tax IRR sensitivity over the base case has been calculated for -20% to +20% variations for head grade, recovery (only -20% to +15% variation), and gold price, and -15% to +15% variations for operating and capital costs. The Project is most sensitive to changes in head grade, metallurgical recovery, and metal price (usually with same magnitude of impact) followed by operating cost and finally capital costs.

## 1.3 Technical Summary

### 1.3.1 Property Description

The Project is serviced by road and rail networks. The mine is accessed from the main paved highway between Erzincan and Kemaliye. The Project area is in the Eastern Anatolia geographical district of Türkiye. Mining operations are conducted year-round. The climate is typically continental with cold wet, winters and hot dry, summers.

Anagold holds the exclusive right to engage in mining activities within the Çöpler project area. Anagold holds six granted licenses covering a combined area of approximately 16,600 ha. Mineral title is held in the name of Anagold. Kartaltepe holds six licenses covering approximately 7,250 ha. The total near-mine tenement package is approximately 23,850 ha. Anagold currently holds sufficient surface rights to allow continued operation of the mining operation in the Reserve Case.

### 1.3.2 History

The Çöpler region has been subject to gold and silver mining dating back at least to Roman times. The Turkish Geological Survey (MTA) carried out regional exploration work in the early1960s that was predominately confined to geological mapping. In 1964, a local Turkish company started mining for manganese, continuing through until closing in 1973. Unimangan Manganez San A.Ş. (Unimangan) acquired the property in January 1979 and re-started manganese production, continuing until 1992. In 1998, Anatolia Minerals Development Ltd (Anatolia) identified several porphyry-style gold–copper prospects in east central Türkiye and applied for exploration licenses for these prospects. During this work, Anatolia identified a prospect in the Çöpler basin. This prospect and the supporting work were the basis for a joint venture agreement for exploration with Rio Tinto and Anatolia and in January 2004, Anatolia acquired the interests of Rio Tinto and Unimangan.

In August 2009, a joint venture agreement between Anatolia and Lidya was executed.

In February 2011, Anatolia merged with Avoca Resources Limited, an Australian company, to become Alacer Gold Corp. (Alacer). In September 2020, Alacer merged with SSR.

Technical Reports have been prepared on the Project in accordance with NI 43-101 Standards for Disclosure for Mineral Projects since 2003. In 2022, a Technical Report Summary was prepared, in accordance with S-K 1300, that presented an Initial Assessment for a copper recovery circuit.

### 1.3.3 Geological Setting, Mineralization, and Deposit

The Çöpler Project, including Çöpler, Greater Çakmaktepe, and Bayramdere deposits, is within the Tethyan mineral belt, a terrane stretching from Indo-China to Europe through Eurasia that contains economically significant gold, copper, and base metal deposits.

The Çöpler deposit is centred on composite diorite to monzonite porphyry stocks that are part of the Eocene Çöpler Kabataş magmatic complex. The magmatic rocks have intruded into both the Keban and Munzur Formations. The mineralisation is considered to be related to fluids associated with diorite intrusions at depth.

Three types of mineralization are prevalent at the deposits; 1) intermediate sulfidation epithermal gold 2) replacement gold and 3) skarn gold. At Çöpler there is also evidence of an earlier low grade porphyry copper-gold system.

The Greater Çakmaktepe area mainly comprises Palaeozoic metamorphic rocks and marble belonging to the Keban Formation and Mesozoic platform carbonate such as the Munzur Formation limestone. All these units are tectonically overlain by ophiolitic mélange rocks. Mineralisation similar to Çöpler is also thought to be the result of intrusive activity that generated suitable conditions for mineralisation of ophiolite, limestone, and hornfels lithologies. The mineralisation is controlled by a complex system of structural fluid pathways and traps controlled by lithological contacts, in typical replacement-style processes.

The Bayramdere deposit is an oxide gold and copper deposit with similar geological and mineralisation characteristics to Greater Çakmaktepe deposits. The Bayramdere deposit is structurally controlled, displaying a replacement gold (minor copper, minor silver) mineralisation style. The deposit is dominantly represented by near-surface oxide mineralisation, primarily associated with iron-rich gossan.

### 1.3.4 Exploration

Core (Diamond Drilling-DD) and RC drilling on the Property is the principal method of exploration and delineation of gold mineralization after initial targeting using soil sampling and geophysical surveys.

As of the effective date of this TRS, SSR and its predecessor companies have completed 725,840 m of drilling in 4,834 drillholes in the property.

### 1.3.5 Mineral Resource Estimates

Mineral Resources have been classified in accordance with the definitions for Mineral Resources in S-K 1300. RSC Consulting Ltd. (RSC) has prepared, reviewed, and accepted the Mineral Resource estimates. The Mineral Resource estimates are based on block model values developed from assays on the mineralized properties.

The Mineral Resource estimates were completed using conventional block modelling approach in Seequent's Leapfrog Geo (Leapfrog Geo) software.

Estimates were validated using standard industry techniques including statistical comparisons with composite samples and parallel nearest neighbor (NN) estimates, swath plots, and visual reviews in cross-section and plan. A visual review comparing blocks to drill holes was completed after the block modelling work was performed to ensure general lithologic and analytical conformance and was peer reviewed prior to finalization. Mineral Resources (SSR ownership 80% only) have been summarised based on deposit, resource classification and processing methodology.

The Mineral Resource estimates are presented in Table 1-3.

**Table 1-3: Summary of Çöpler Mine, Greater Çakmaktepe and Bayramdere Mineral Resources (SSR's Attributable Share)**

| Deposit | Measured Mineral Resources | | | Indicated Mineral Resources | | | Measured + Indicated Mineral Resources | | | Inferred Mineral Resources | | | NSR Cut-off Values |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Amount | Grade | Rec | Amount | Grade | Rec | Amount | Grade | Rec | Amount | Grade | Rec | |
| **Gold** | **(Mt)** | **(g/t Au)** | **(%)** | **(Mt)** | **(g/t Au)** | **(%)** | **(Mt)** | **(g/t Au)** | **(%)** | **(Mt)** | **(g/t Au)** | **(%)** | **($/t)** |
| Çöpler Mine | 5.0 | 1.31 | 40 - 91 | 11.1 | 1.29 | 40 - 91 | 16.2 | 1.29 | 40 - 91 | 14.0 | 1.53 | 40 - 91 | 18.34 - 39.87 |
| Greater Çakmaktepe | 3.6 | 0.94 | 40 - 91 | 7.3 | 1.10 | 40 - 91 | 10.9 | 1.05 | 40 - 91 | 4.8 | 1.87 | 40 - 91 | 18.34 - 44.37 |
| Bayramdere | - | - | - | 0.1 | 2.36 | 75 | 0.1 | 2.36 | 75 | - | - | - | 18.34 |
| **Total Gold** | **8.6** | **1.15** | **40 - 91** | **18.6** | **1.22** | **40 - 91** | **27.2** | **1.20** | **40 - 91** | **18.9** | **1.61** | **40 - 91** | **18.34 - 44.37** |
| **Silver** | **(Mt)** | **(g/t Ag)** | **(%)** | **(Mt)** | **(g/t Ag)** | **(%)** | **(Mt)** | **(g/t Ag)** | **(%)** | **(Mt)** | **(g/t Ag)** | **(%)** | **($/t)** |
| Çöpler Mine | 5.0 | 3.33 | 0 - 38 | 11.1 | 3.38 | 0 - 38 | 16.2 | 3.36 | 0 - 38 | 14.0 | 4.92 | 0 - 38 | 18.34 - 39.87 |
| Greater Çakmaktepe | 3.6 | 3.75 | 0 - 20 | 7.3 | 2.56 | 0 - 20 | 10.9 | 2.95 | 0 - 20 | 4.8 | 2.26 | 0 - 20 | 18.34 - 44.37 |
| Bayramdere | - | - | - | 0.1 | 25.55 | 0 - 54 | 0.1 | 25.55 | 0 - 54 | - | - | - | 18.34 |
| **Total Silver** | **8.6** | **3.51** | **0 - 54** | **18.6** | **3.20** | **0 - 54** | **27.2** | **3.29** | **0 - 54** | **18.9** | **4.24** | **0 - 54** | **18.34 - 44.37** |
| **Copper** | **(Mt)** | **(% Cu)** | **(%)** | **(Mt)** | **(% Cu)** | **(%)** | **(Mt)** | **(% Cu)** | **(%)** | **(Mt)** | **(% Cu)** | **(%)** | **($/t)** |
| Çöpler Mine | 5.0 | 0.08 | 0 - 15 | 11.1 | 0.07 | 0 - 15 | 16.2 | 0.07 | 0 - 15 | 14.0 | 0.07 | 0 - 15 | 18.34 - 39.87 |
| Greater Çakmaktepe | 3.6 | 0.03 | 0 | 7.3 | 0.02 | 0 | 10.9 | 0.02 | 0 | 4.8 | 0.02 | 0 | 18.34 - 44.37 |
| Bayramdere | - | - | - | 0.1 | 0.00 | 1 | 0.1 | 0.00 | 1 | - | - | - | 18.34 |
| **Total Copper** | **8.6** | **0.06** | **0 - 15** | **18.6** | **0.05** | **0 - 15** | **27.2** | **0.05** | **0 - 15** | **18.9** | **0.06** | **0 - 15** | **18.34 - 44.37** |

Notes:

1. The definitions for Mineral Resources in S-K 1300 were followed.
2. Mineral Resources are reported based on October 31, 2023 topography surface.
3. Mineral Resources are reported exclusive of Mineral Reserves.
4. The numbers reflect SSR attributed share of 80%.
5. Heap Leach Oxide is defined as material <2% total sulfur.
6. Grind Leach Oxide is defined as material <2% total sulfur. Processing route will be available approximately in 2027.
7. Sulfide is defined as material ≥2% total sulfur.
8. Heap leach oxide uses an NSR cut-off $18.34/t, grind leach oxide uses an NSR cut-off value $19.26/t, Çöpler sulfide ore uses a cut-off value of $39.87/t, Greater Çakmaktepe sulfide ore uses a cut-off value of $44.37/t. All cut-off values include allowances for royalty payable.

9. Metallurgical gold recovery for heap leach oxide and grind leach varies between 40–78% and 53–90%, respectively, based on lithology; metallurgical recovery for sulfide varies between 81–91% based on lithology.
10. Metallurgical silver recoveries for heap leach and grind leach oxide vary between 0 and 54% based on lithology. Metallurgical recovery for sulfide varies between 0 and 3%.
11. Metallurgical copper recoveries for heap leach and grind leach oxide vary between 0 and 15% based on lithology. Metallurgical recovery for sulfide is 0%.
12. Metal prices used to report the Mineral Resources are $1,750/oz Au, $22.00/oz Ag, and $3.95/lb Cu with allowances for payability, deductions, transport, and royalties.
13. The point of reference for Mineral Resources is the point of feed into the processing facility for grind leach and sulfide material; or for Heap Leach oxide, it is the Carbon columns.
14. All Mineral Resources estimates were constrained within conceptual pit shells to meet reasonable prospects for economic extraction criteria.
15. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
16. Totals may vary due to rounding.

### 1.3.6 Mineral Reserve Estimates

Mineral Reserve estimates as prepared by SSR, and reviewed and accepted by the SLR QP, have been classified in accordance with the definitions for Mineral Reserves in S-K 1300.

The Mineral Reserves were developed based on mine planning work completed in 2023 and estimated based on an October 31, 2023, topography surface. The total Mineral Reserve for the Çöpler Project is estimated to be approximately 67.4 Mt at an average grade of 2.32 g/t Au, totaling 5.1 Moz of contained gold, and SSR's portion is 53.9 Mt at an average grade of 2.32 g/t Au, totaling 4.1 Moz of contained gold.  SSR's portion of the Mineral Reserves for both Çöpler and Greater Çakmaktepe is 80%.

Average oxide gold recoveries are 61% and average sulfide gold recoveries range from 81% to 91% for the Mineral Reserves.

The Mineral Reserve estimates have an effective date of October 31, 2023. SSR's 80% attributable portion of the Mineral Reserves have been summarized by pit area and reserve classification category in Table 1-4.

**Table 1-4: Summary of Mineral Reserves as of October 31, 2023 (SSR's Attributable Share)**

| | Proven | | Probable | | Total | | | Cut-off Value | Metallurgical Recovery |
|---|---|---|---|---|---|---|---|---|---|
| | Tonnage | Grade | Tonnage | Grade | Tonnage | Grade | Contained Metal | | |
| **Gold** | **(Mt)** | **(g/t Au)** | **(Mt)** | **(g/t Au)** | **(Mt)** | **(g/t Au)** | **(koz Au)** | **($/t)** | **(%)** |
| Çöpler | 5.7 | 2.03 | 10.3 | 1.77 | 16.1 | 1.86 | 962 | 21.32 - 45.58 | 40 - 91 |
| Greater Çakmaktepe | 7.3 | 2.42 | 20.2 | 2.79 | 27.5 | 2.69 | 2,383 | 21.32 - 45.58 | 40 - 91 |
| Stockpiles | - | - | 10.3 | 2.05 | 10.3 | 2.05 | 678 | 21.32 - 45.58 | 40 - 91 |
| Leach Pad Inventory | - | - | - | - | - | - | 49 | - | - |
| **Total** | 13.0 | 2.25 | 40.9 | 2.35 | 53.9 | 2.32 | 4,072 | 21.32 - 45.58 | 40 -91 |
| **Silver** | **(Mt)** | **(g/t Ag)** | **(Mt)** | **(g/t Ag)** | **(Mt)** | **(g/t Ag)** | **(koz Ag)** | **($/t)** | **(%)** |
| Çöpler | 5.7 | 4.85 | 10.3 | 4.97 | 16.1 | 4.93 | 2,547 | 21.32 - 45.58 | 0 - 38 |
| Greater Çakmaktepe | 7.3 | 3.52 | 20.2 | 4.32 | 27.5 | 4.11 | 3,636 | 21.32 - 45.58 | 0 - 20 |
| Stockpiles | - | - | 10.3 | – | 10.3 | – | - | 21.32 - 45.58 | - |
| **Total** | 13.0 | 4.10 | 40.9 | 3.40 | 53.9 | 3.57 | 6,183 | 21.32 - 45.58 | 0 - 38 |
| **Copper** | **(Mt)** | **(% Cu)** | **(Mt)** | **(% Cu)** | **(Mt)** | **(% Cu)** | **(Mlb Cu)** | **($/t)** | **(%)** |
| Çöpler | 5.7 | 0.06 | 10.3 | 0.05 | 16.1 | 0.05 | 18.8 | 21.32 - 45.58 | 0 - 15 |
| Greater Çakmaktepe | 7.3 | 0.02 | 20.2 | 0.01 | 27.5 | 0.01 | 8.7 | 21.32 - 45.58 | - |
| Stockpiles | - | - | 10.3 | – | 10.3 | – | - | 21.32 - 45.58 | - |
| **Total** | 13.0 | 0.04 | 40.9 | 0.02 | 53.9 | 0.00 | 27.5 | 21.32 - 45.58 | 0 - 15 |

Notes:

1. The Mineral Reserves were scheduled based on end of October 31, 2023 surface. Small differences between the Mineral Reserve statement and the production schedule may occur.
2. The numbers reflect SSR's attributed share of 80%. SSR owns 80% of both Anagold and Kartaltepe licenses.
3. Heap Leach Oxide is defined as material <2% total sulfur.
4. Grind Leach Oxide is defined as material <2% total sulfur. Processing route will be available approximately in 2027.
5. Sulfide is defined as material ≥2% total sulfur.

6. At Çöpler and Greater Çakmaktepe - heap leach oxide uses a NSR cut-off value $ 21.32/t, grind leach uses a NSR cut-off value $21.77/t while sulfide ore uses a cut-off value of $45.58/t. All cut-off values include allowances for royalty payable.
7. Metallurgical gold recoveries for heap leach oxide and grind leach vary between 40-78% and 53-90%, respectively, based on lithology, while for sulfide it is 81-91%
8. Metallurgical silver recoveries for heap leach and grind leach oxide vary between 0 and 54% based on lithology. Metallurgical recovery for sulfide varies between 0 and 3%.
9. Metallurgical copper recoveries for heap leach and grind leach oxide vary between 0 and 15% based on lithology. Metallurgical recovery for sulfide is 0%.
10. Metal prices used to report the Mineral Reserves are $1,450/oz Au, $18.50/oz Ag, and $3.30/lb Cu with allowances for payable deductions, transport, and royalties.
11. The point of reference for Mineral Reserves is the point of feed into the processing facility for grind leach and sulfide while for Heap Leach oxide it is Carbon columns.
12. Heap leach inventory was mined based on the heap leach cut-off value.
13. Totals may vary due to rounding.

### 1.3.7 Mining Methods

The mining method is an open pit method, which includes:

- Drill and blast of 5-m high benches,
- Loading by way of excavators and loaders, and
- Haulage by 40-t class-size trucks.

Open pit mining at the Çöpler project is performed by a mining contractor and managed by Anagold. The mining contractor, who has been with the Project since it started in 2011 provides equipment operators, maintenance personnel, line supervisors, equipment, and ancillary facilities required for the mining operation. Anagold provides management, technical, mine planning, engineering, and grade control.

Anagold currently operates a sulfide process plant and an oxide heap leach facility. Costs are based on the actual operational costs and the Project budget assumptions.

Pit designs for the Çöpler pit were reviewed and updated in 2023. The Greater Çakmaktepe pit designs were prepared in 2022 and 2023. Production schedules and costs have been updated based on recent site performance and updated contracts.

### 1.3.8 Processing and Recovery Methods

Processing and recovery methods are determined by sulfur content in the ore. Oxide ore (<2% sulfur) is processed via a three-stage crushing circuit followed by agglomeration prior to being stacked on a heap leach. The pregnant leach solution from the heap leach is processed through carbon adsorption, desorption and refining to produce doré bars. The ore contains cyanide soluble copper that consumes cyanide increasing operating cost. Copper cyanide in the leach solutions is treated in a sulfidation, acidification, recycling, and thickening (SART) plant which precipitates the copper as copper sulfide and regenerates sodium cyanide, which is recycled into the leach solutions.

The sulfide processing plant (>2% sulfur ore) comprises a POX sulfide processing plant, which began operation in 2018 and comprises crushing, grinding, acidulation, pressure oxidation, iron / arsenic precipitation, gold cyanide leaching, carbon adsorption, carbon desorption and refining. The original sulfide circuit, before the addition of flotation, demonstrated additional capacity in the crushing, grinding and autoclave circuits. A sulfide flotation circuit was added to process a portion of the grinding thickener feed to generate a sulfide concentrate that is added to the POX feed to control the sulfide feed concentration. The flotation tailings containing carbonates bypass the acidulation and sulfide oxidation portion of the plant and report directly to the cyanide leach feed for recovery of any cyanide soluble gold. Sulfide flotation allows the POX autoclaves to maximize throughput and sulfide sulfur oxidation capacity and increase overall plant throughput. Tailings are thickened and routed to the TSF.

A new processing facility is being considered at Çöpler. The proposed process is intended to treat oxide and low sulfur (< 2% sulfur) ores from the Çakmaktepe Ext. open pit and is a conventional grind leach process. The grind leach process plant is designed to treat 248 tph of ore during 8,059 hours per year of operation or 92% availability for a total of 2 Mtpa. The operating availability of the crushing section will be 70%. The process will comprise primary jaw crushing, SAG mill and ball mill grinding closed by hydrocyclones, carbon-in-leach (CIL) cyanidation, carbon elution, electrowinning, and refining of electrowinning precipitate to produce a final precious metal (doré) product.

### 1.3.9 Infrastructure

**Existing Infrastructure**

The existing facility infrastructure supports the mine and process areas of oxide heap leach and sulfide plant. The existing infrastructure, and the tailings storage and heap leach pad area once the planned expansions for each are complete, will be sufficient for the current Mineral Reserves. The infrastructure for flotation circuit at the sulfide plant commissioned in 2021 was supported by the existing facility infrastructure with some components modified to meet the addition of the flotation circuit.

The current leach pad consists of four phases with an estimated capacity of 63 Mt of oxide ore heap and a nominal maximum heap height of 100 m above the pad liner. An additional phase 5, with a capacity of 13.8 Mt will be added to accommodate some of the oxide to be mined from Greater Çakmaktepe.

The current TSF is being developed and constructed in stages. The development of TSF-1 includes seven phases. TSF 1 phase 4 construction has been completed and approval for use was granted in November 2023 by the Ministry of Environment, Urbanisation and Climate Change (MoEUCC). TSF-1 is permitted through phase 5, and a design application amendment to provide MoEUCC approval for phases 6 and 7 is planned. Ongoing work in ensuring sufficient long-term capacity for storage of tailings has been undertaken. Studies by Anagold have determined that the effect of the addition of the flotation circuit to the sulfide plant would result in an increase in the solids content and improvement in the final settled density based on an increase in the rate of tailings consolidation. Currently TSF-1 holds 13.3 Mt of tailings as of the Effective Date of this report and has a design capacity of 65.8 Mt.

**Planned Future Infrastructure**

Anagold is investigating TSF sites with the potential to increase tailings capacity beyond the currently 65.5 Mt design capacity pending environmental, social, and community relations engagements. WSP is currently working with Anagold to develop PFS-level TSF design options including a scenario to complete a lift in TSF-1 from 1,275 MASL to 1,280 MASL which would provide an expected 77 Mt of capacity which be adequate to contain the expected 73.3 Mt of tailings anticipated by the end of the LOM.

### 1.3.10 Market Studies

The markets for gold and silver doré are readily accessed and available to gold producers. Currently, 100% of the gold and silver is delivered to the Istanbul Gold Refinery. Copper precipitate is currently produced from the SART plant and sold into local markets in Türkiye.

### 1.3.11 Environmental Studies, Permitting and Plans, Negotiations, or Agreements with Local Individuals or Groups

The Çöpler mining and processing operations have a well-established and effective environmental, social, and permitting management program (10+ years). Site staff is knowledgeable and experienced in site and regulatory requirements and supported by corporate technical and ESG personnel as well as outside (Turkey and International) technical experts. Budgets are reasonable and there were no critical path permitting items noted that would limit production and Reserve/Resource development. A reclamation/closure plan and estimates to perform this activity are in place. The budgets and staffing to perform required programs are adequate and indicative of site activities, requirements, and responsibilities.

### 1.3.12 Capital and Operating Cost Estimates

LOM project capital costs total $636.6 million, which considers all costs incurred before November 1, 2023, as sunk; the capital costs are summarized in Table 1-4.

**Table 1-5: Capital Cost Summary**

| Description | Unit | Value |
|---|---|---|
| Growth | $ million | 475.1 |
| Sustaining | $ million | 61.3 |
| Final Closure/Reclamation | $ million | 100.3 |
| **Total** | **$ million** | **636.6** |

The projected LOM unit operating cost estimate is summarized in Table 1-5.

**Table 1-6: Average Operating Costs Unit Rates**

| Activity | Unit | Avg LOM |
|---|---|---|
| Mining (contract) | $/t mined | 2.11 |
| Mining (contract) | $/t ore processed | 18.04 |
| Processing – All Types | $/t ore processed | 29.73 |
| General and Administrative | $/t ore processed | 6.56 |
| VAT[1] Payments | $/t ore processed | 0.13 |
| **Total Operating Costs** | **$/t ore processed** | **54.45** |

Notes:

1. Value-Added Tax payments through 2025

# 2.0 Introduction

SLR International Corporation (SLR) was retained by SSR Mining Inc. (SSR) to prepare an independent Technical Report Summary (TRS) on the Çöpler Property (the Property or the Project), located in Erzincan Province, Türkiye. The Çöpler Project consists of several mining licenses covering Mineral Resources on the Çöpler, Greater Çakmaktepe, and Bayramdere deposits, Mineral Reserves on the Çöpler and Greater Çakmaktepe open pit mines, oxide and sulfide processing facilities, and supporting infrastructure.

The purpose of this TRS is to disclose the results of the Mineral Resource and Mineral Reserve estimates for the Project with an effective date of October 31, 2023. This TRS conforms to United States Securities and Exchange Commission's (SEC) Modernized Property Disclosure Requirements for Mining Registrants as described in Subpart 229.1300 of Regulation S-K, Disclosure by Registrants Engaged in Mining Operations (S-K 1300) and Item 601 (b)(96) Technical Report Summary.

SSR is a gold mining company with four producing assets located in the USA, Türkiye, Canada, and Argentina, and with development and exploration assets in the USA, Türkiye, and Canada. SSR is listed on the Nasdaq Stock Exchange (NASDAQ: SSRM), the Toronto Stock Exchange (TSX: SSRM), and the Australian Stock Exchange (ASX: SSR).

The Çöpler property area is owned and operated by Anagold Madencilik Sanayi ve Ticaret Anonim Şirketi (Anagold). SSR controls 80% of the shares of Anagold, Lidya Madencilik Sanayi ve Ticaret A.Ş. (Lidya) controls 18.5%, and a bank wholly owned by Çalık Holdings A.Ş. holds the remaining 1.5% of Anagold.

The Greater Çakmaktepe property area is wholly owned by Kartaltepe Madencilik Sanayi ve Ticaret Anonim Şirketi (Kartaltepe). SSR controls 80% of the shares of Kartaltepe and Lidya holds the remaining 20% of Kartaltepe.

## 2.1 Site Visits

This TRS was prepared by qualified persons (QPs), as defined by S-K 1300, from SLR, RSC Consulting Ltd. (RSC), Ausenco Services Pty Ltd (Ausenco), and WSP USA Inc. (WSP).

SLR QPs visited the Project on August 29 to 31, 2023. During the site visit, the SLR QPs received a Project overview by site management with specific activities as follows:

- SLR's QP for Mining and Mineral Reserves visited production, development, and critical infrastructure areas in the open pit mine. Both the Çöpler and Çakmaktepe pits were visited where discussions were carried out on the mining cycle, productivities, dilution, and mining recovery. The QP discussed mining methods, mine economics, planning and scheduling activities, and geotechnical procedures with relevant subject matter experts. In addition, the mining QP toured the tailings storage facility (TSF) with the WSP site engineer.
- SLR's QP for Process and Metallurgical Engineer visited the mineral processing facilities including 1) heap leach facilities: three stage crushing, agglomeration and conveying systems, heap leach pads and ponds, carbon adsorption and desorption, sulfidation, acidification, recycling and thickening (SART) for copper precipitation and cyanide recovery, and electrowinning; and 2) pressure oxidation (POX) sulfide processing facilities including process control room, crushing, grinding, sulfide flotation, acidulation, autoclave systems, neutralization, carbon in pulp cyanidation, cyanide destruction, neutralization, tailings thickening and high pressure pumping systems, carbon elution

and electrowinning. The QP also toured all of the mine pits, ore storage, stockpiling and blending, tailings storage facilities (TSF), reagent mixing and storage and laboratories. Meetings were then held with the metallurgists to discuss the flowsheets, laboratory, and plant metallurgical testing, and operating and maintenance information.

- SLR's Project Manager and QP for Economics visited the main operational facilities along with SLR's QPs for mining and processing, but also had additional discussions with site financial and environmental personnel as well as geological staff to understand SSR's future exploration and development strategy to sustain and expand mine production.

The RSC QP for Geology and Mineral Resource estimation visited the site from April 14 to 17, 2023, and September 1 to 15, 2023. The RSC QP reviewed the Project geology, standard operating procedures (SOPs), collar locations, downhole surveys, logs, core, pulps, and laboratory certificates. The RSC QP checked database entries against logs and chip trays, core and pulp samples retained on site. The WSP QP for tailings management most recently visited the site on November 3 to 10, 2022, and has visited the site annually since 2012. The WSP QP visited the TSF-1 as part of ongoing annual dam safety inspections and in support of the Engineer-of-Record (EoR) duties with other WSP responsible staff. Potential identified TSF sites were also visited as were the existing TSF and sulfide plant infrastructure such as the tailings pipeline corridor, overdrain-underdrain ponds, dump tank, and the sulfide plant area. Meetings were held with staff to review general construction progress, the overall TSF and site water balance, quality assurance records, deposition plans, monitoring data, issues related to source of limestone for future construction, and the construction of the Sabirli Village Road.

Representatives of Ausenco visited the Project from July 3 to 11, 2023. The site visit included briefings with corporate, mine, processing, maintenance, and projects personnel, and site inspections of the current processing plant and locations for future processing infrastructure. The Ausenco QP has not visited the site.

Table 2-1 lists the consulting companies whose personnel are QPs in this Report and the sections for which they are responsible.

**Table 2-1: Consulting Companies Which Acted as Qualified Persons in Preparing this Report**

| Qualified Person Firms | Report Sections |
|---|---|
| SLR International Corporation | 1.1, 1.1.1.2, 1.1.1.3, 1.1.1.5, 1.1.1.6, 1.1.2.2, 1.1.2.3, 1.1.2.5, 1.1.2.6, 1.2, 1.3.1, 1.3.2, 1.3.7–1.3.8, 1.3.10–1.3.12, 2–5, 7.1 and 7.2, 10 excluding 10.2 and 10.4.1, 12, 13, 14 excluding 14.3, 15.1–15.8, 16–21, 22.2–22.3, 22.5–22.6, 23.2–23.3, 23.5–23.6, 25 to 27 |
| RSC Consulting Ltd. | 1.3.3–1.3.5, 6, 7 except for 7.1 and 7.2, 8, 9, 11, 22.1, 23.1 |
| WSP USA Inc. | 1.1.1.4, 1.1.2.4, 1.3.9, 15.9 (Tailings Storage Facility), 22.4, 23.4 |
| Ausenco Services Pty Ltd | 10.2, 10.4.1, 14.3 |
| All | 24 |

## 2.2 Sources of Information

During the preparation of this TRS, discussions were held with personnel from SSR, Anagold, and SRK Consulting Inc.:

- John Ebbett, EVP Growth and Innovation, SSR
- Rex Brommecker, SVP Exploration and Geology, SSR
- Jonathan Holden, VP Innovation and Technical Services, SSR
- John Harmse, Capital Projects Contractor, SSR
- Jered Kullos, Principal Mine Engineer, SSR
- Bill Patterson, Studies Contractor, SSR
- Micaela Muro, Study Manager, SSR
- Karthik Rathnam, Director, Resource Geology, SSR
- Osman Uludağ, Director, Resource Development, SSR
- Brandon Heser, Director, Mine Technical Services, SSR
- Nitin Laddha, Business Evaluation Manager, SSR
- Volkan Aşgın, Resource Development Manager, SSR
- Seyfettin Genç, Resource Geologist, SSR
- Can Serdar Hastürk, Environmental Manager, Anagold
- Sera Tuncay, Environmental Engineer, Anagold
- Seda Çağatay, Mineral and Land Rights Manager, Anagold
- Can Serdar Hastürk, Environmental Manager, Anagold
- Goktuğ Özer, Mine Planning Chief, Anagold
- Faruk Değirminci, Sulfide Plant Process Manager, Anagold
- Murat Bayrakdar, Oxide Plant Process Manager, Anagold
- Ali Sert, Technical Services Manager, Anagold
- Benjamin Fuller, Senior Project Engineer, Anagold
- Goktuğ Evin, Hydrogeology Principal, SRK

This report is an update of a Technical Report Summary with a report date of September 29, 2022 (OreWin, 2022).

The documentation reviewed, and other sources of information, are listed at the end of this TRS in Section 24.0 References.

## 2.3 List of Abbreviations

Units of measurement used in this TRS conform to the metric system. All currency in this TRS is US dollars (US$) unless otherwise noted.

| | |
|---|---|
| μ | micron |
| μg | microgram |
| a | annum |
| A | ampere |
| bbl | barrels |
| Btu | British thermal units |
| °C | degree Celsius |
| C$ | Canadian dollars |
| cal | calorie |
| cfm | cubic feet per minute |
| cm | centimetre |
| $cm^2$ | square centimetre |
| d | day |
| dia | diameter |
| dmt | dry metric tonne |
| dwt | dead-weight ton |
| °F | degree Fahrenheit |
| ft | foot |
| $ft^2$ | square foot |
| $ft^3$ | cubic foot |
| ft/s | foot per second |
| g | gram |
| G | giga (billion) |
| gal | US gallon |
| g/L | gram per litre |
| gpm | US gallons per minute |
| g/t | gram per tonne |
| $gr/ft^3$ | grain per cubic foot |
| $gr/m^3$ | grain per cubic meter |
| ha | hectare |
| hp | horsepower |
| h | hour |
| Hz | hertz |
| in. | inch |
| $in^2$ | square inch |
| J | joule |
| k | kilo (thousand) |
| kcal | kilocalorie |
| kg | kilogram |
| km | kilometer |
| $km^2$ | square kilometer |
| km/h | kilometer per hour |
| kPa | kilopascal |
| kVA | kilovolt-amperes |
| kW | kilowatt |
| kWh | kilowatt-hour |
| L | litre |
| lb | pound |
| L/s | litres per second |
| $L/h/m^2$ | liters per hour per square meter |
| m | metre |
| M | mega (million); molar |
| $m^2$ | square metre |
| $m^3$ | cubic metre |
| MASL | metres above sea level |
| $m^3/h$ | cubic metres per hour |
| mi | mile |
| min | minute |
| μm | micrometre |
| mm | millimetre |
| mph | miles per hour |
| MVA | megavolt-amperes |
| MW | megawatt |
| MWh | megawatt-hour |
| oz | troy ounce (31.1035 g) |
| oz/st, opt | ounce per short ton |
| ppb | part per billion |
| ppm | part per million |
| psia | pound per square inch absolute |
| psig | pound per square inch gauge |
| RL | relative elevation |
| s | second |
| st | short ton |
| stpa | short ton per year |
| stpd | short ton per day |
| t | metric tonne |
| tpa | metric tonne per year |
| tpd | metric tonne per day |
| US$ | United States dollar |
| V | volt |
| W | watt |
| wmt | wet metric tonne |
| wt% | weight percent |
| $yd^3$ | cubic yard |
| yr | year |

# 3.0 Property Description

## 3.1 Location

The Project is located in east central Türkiye (Figure 3-1), 120 km west of the city of Erzincan, in Erzincan Province, 40 km east of the iron-mining city of Divriği, and 550 km east of Türkiye's capital city, Ankara. The nearest urban centre, Iliç, is located six kilometres east of the current Çöpler pit.

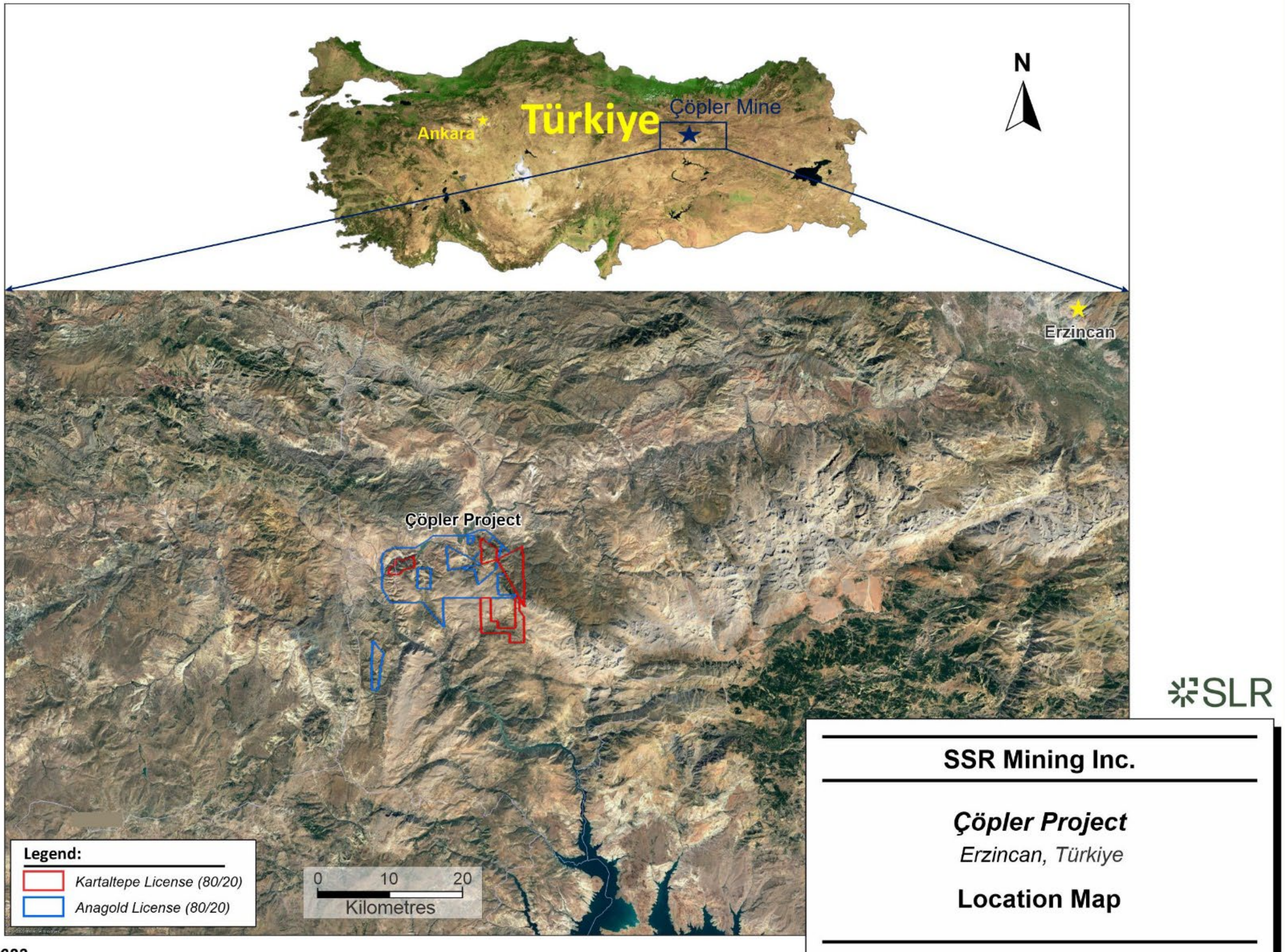
The Project uses the European 1950 (E1950) datum coordinate system, which is a Turkish Government requirement. The Project is in UTM6 zone 37N of the E1950 coordinate system; its centroid is situated at approximately 459,975 mE and 4,364,420 mN and has an approximate elevation of 1,160 m above mean sea level (MASL).

The Çöpler mining operations are located 900 m south-west of the Iliç district centre, 650 m south of the Bağıştaş-Bahçe villages, 250 m south of the Çöpler village, and 180 m north of the Sabırlı Village. The Project site lies within the licence areas numbered 847, 49729, and 20067313 (Figure 3-2), which have been granted by the General Directorate of Mining and Petroleum Affairs (MAPEG).

The Greater Çakmaktepe mining operation is located six kilometres east of the Çöpler pit and 1.5-km south of Iliç. The Greater Çakmaktepe pits are located within Kartaltepe Licence 1054 and Anagold Licenses 49729 and 20067313. Ore mined at Greater Çakmaktepe is hauled and treated at the Çöpler facilities. Figure 3-3 shows the location of the Çöpler and Greater Çakmaktepe operations in relation to the nearest population centers.

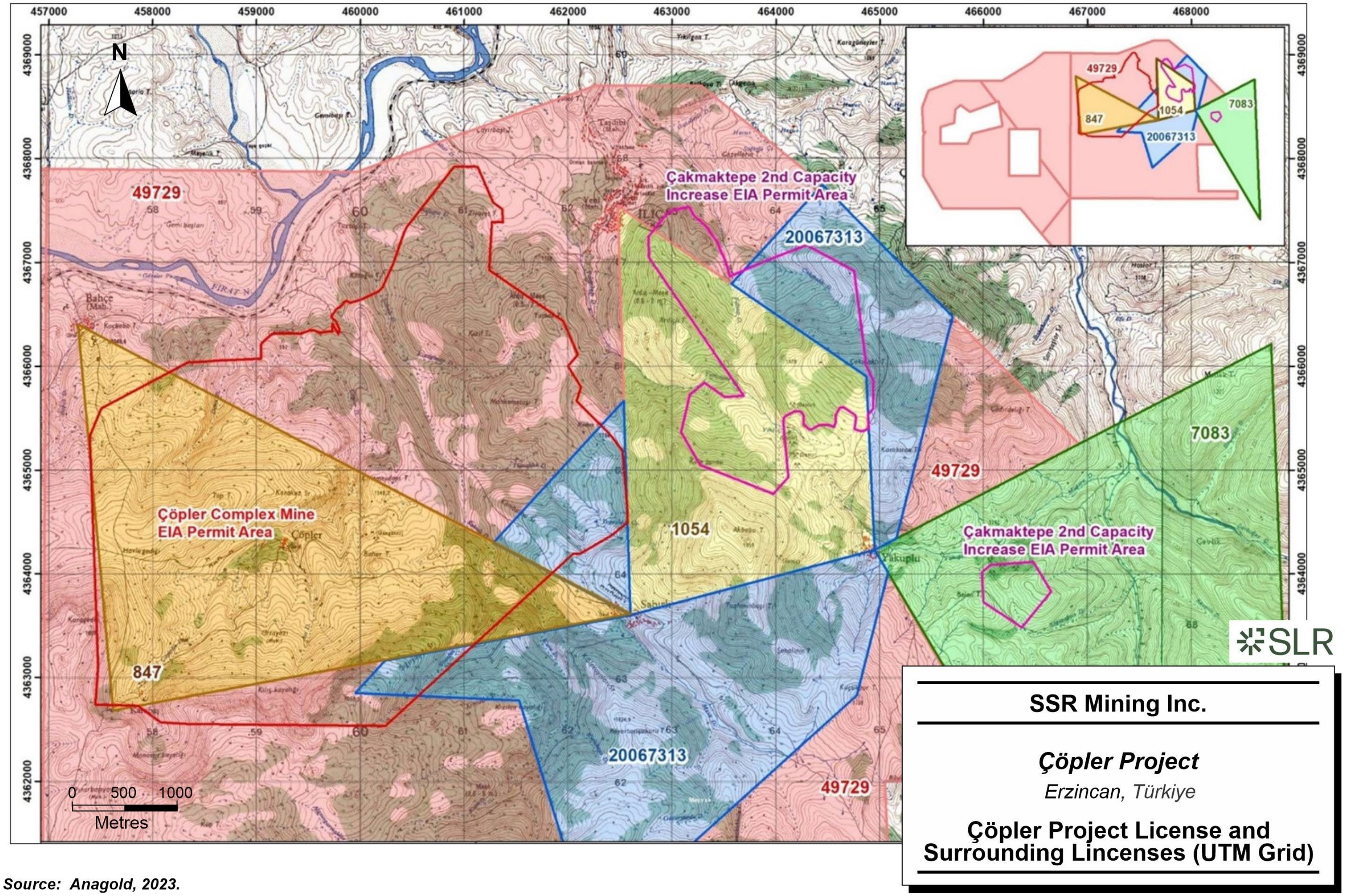
The Çöpler operations currently permitted Environmental Impact Assessment (EIA) boundary incorporates 1,747 ha, whereas the footprint of the mine units covers a combined 1,089 ha. The currently permitted Greater Çakmaktepe EIA boundary incorporates 360 ha, after approval of 2$^{nd}$ Capacity Increase EIA Permit Area on March 30, 2022. An EIA for a 3rd capacity expansion for Çakmaktepe is being prepared that is anticipated to increase the Greater Çakmaktepe EIA boundary to 486 ha.

**Figure 3-1: Location Map**



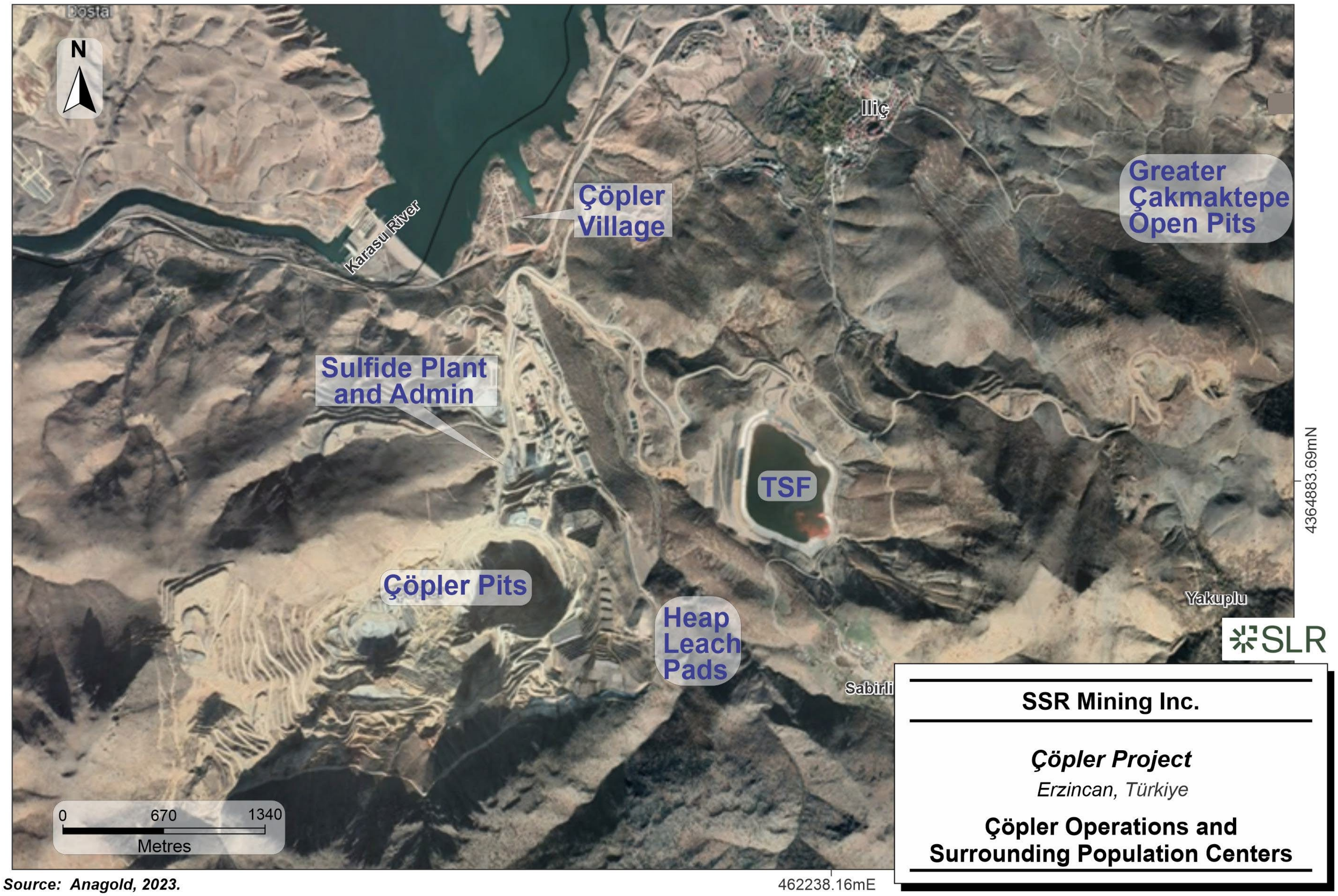

***Source: Anagold, 2023.***

**Figure 3-2: Çöpler Project License and Surrounding Licenses (UTM Grid)**




***Source: Anagold, 2023.***

**Figure 3-3: Çöpler Operations and Surrounding Population Centers**




*Source: Anagold, 2023.*

## 3.2 Land Tenure

### 3.2.1 Ownership

The Çöpler property is owned and operated by Anagold. SSR controls 80% of the shares of Anagold, Lidya controls 18.5%, and a bank wholly owned by Çalık Holdings A.Ş., holds the remaining 1.5%. The license that hosts the Çöpler deposit, including the Mineral Resources and Mineral Reserves, is wholly owned by Anagold.

Exploration tenures surrounding the Project area and mining at Greater Çakmaktepe are subject to joint venture agreements between SSR and Lidya that have varying interest proportions. SSR controls 80% of the shares of Kartaltepe Madencilik Sanayi ve Ticaret Anonim Şirketi (Kartaltepe) and 30% of Tunçpinar Madencilik Sanayi ve Ticaret Anonim Şirketi (Tunçpinar). Lidya holds the remaining 20% of Kartaltepe and 70% of the Tunçpınar.

The Greater Çakmaktepe property is owned by both Kartaltepe and Anagold. The Mavialtin, Bayramdere, Aslantepe, and Findiklidere prospects have areas owned by Kartaltepe.

### 3.2.2 Mineral Tenure

Anagold holds the exclusive right to engage in mining activities within the Çöpler property area. Anagold holds six granted licenses (Table 3-1) covering a combined area of approximately 16,600 ha (Figure 3-4). Mineral title is held in the name of Anagold. Kartaltepe holds six licenses covering approximately 7,250 ha. The total near-mine tenement package is approximately 23,850 ha. Anagold currently holds sufficient surface rights to allow continued operation of the mining operation in the Base Case. The Çöpler property area is held by SSR (80%), Lidya (18.5%), and a bank wholly owned by Çalık Holdings A.Ş. (1.5%).

The granted licenses include two clay borrow pit licenses, numbered 76817 and 76818, that have been extended to July 15, 2029.

The Çöpler open pit mine and associated infrastructure are hosted within the triangular-shaped concession 847. Property facilities are located within the Licenses 49729 and 20067313. Anagold also holds License 50237, and the license has been extended until March 21, 2028.

Anagold has confirmed that charges and administrative expenses due to the Turkish Ministry of Energy and Natural Resources, Directorate General of Mining and Petroleum Affairs (MAPEG) have been paid, and all Anagold licenses are currently in good standing.

Three Kartaltepe licenses (200707602, 200707605, and 200707606) were combined, and operation license 90047 was granted, on November 22, 2022. Kartaltepe also maintains Licenses 58473, 57004, and 7161. The Greater Çakmaktepe property area is owned by Kartaltepe, which is held by SSR (80%) and Lidya (20%).

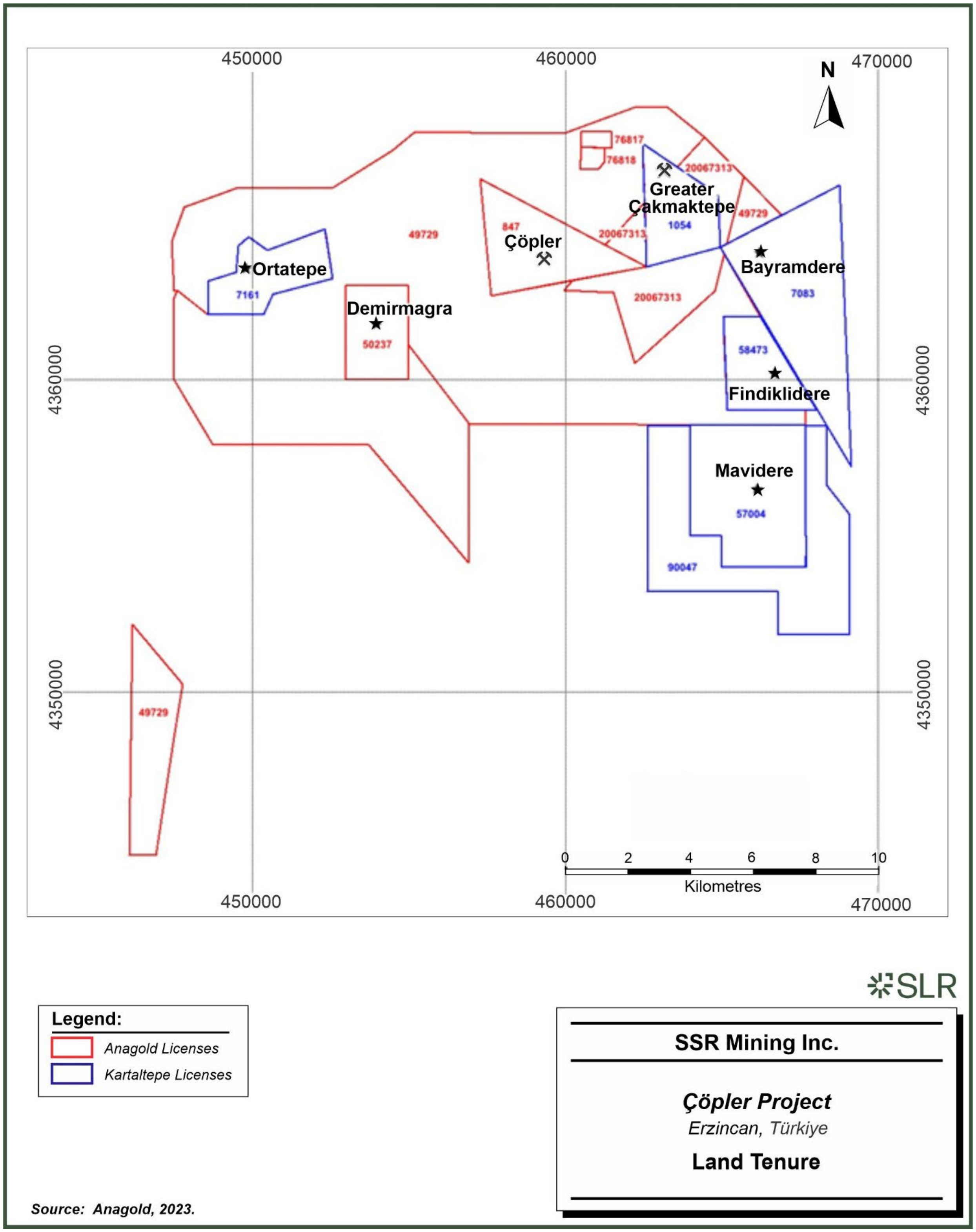
The mined Greater Çakmaktepe pits are all under Kartaltepe License 1054 and Anagold Licenses 49729 and 20067313. The Bayramdere prospect is on Kartaltepe Licence 7083.

All Kartaltepe licenses are currently in good standing.

## Table 3-1: Granted Licenses and Operating Permits

| Province | Town | Village | Registration No. | License No. | License Area (ha) | License Type | Licence Group | Operation Permit | Operation Permit Area (ha) | License Issue Date | License Expiry Date | Licensee | Project |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Erzincan | İliç | Çöpler | 1027313 | 847 | 941.92 | Operation | IV (c) | Au+Ag+Cu+Hg, Mn | 941.92 | 6/Nov/1986 | 6/Nov/2026 | Anagold | Çöpler/ Çöpler Saddle |
| Erzincan | İliç | Çöpler | 2384036 | 49729 | 13,747.51 | Operation | IV (c) | Au+Ag+Cu+Mo | 1,100.99 | 4/Aug/2016 | 4/Aug/2026 | Anagold | Çakmaktepe/ Çöpler/ Çöpler Saddle |
| Erzincan | İliç | Ortatepe | 2386272 | 50237 | 600.00 | Operation | IV (c) | Au | 18.07 | 21/Mar/2018 | 21/Mar/2028 | Anagold | Demirmağara |
| Erzincan | İliç | Sabırlı | 3095732 | 20067313 | 1,184.91 | Operation | IV (c) | Au+Ag+Cu | 406.57 | 25/Oct/2021 | 25/Oct/2031 | Anagold | Çakmaktepe/ Çöpler |
| Erzincan | İliç | Çöpler | 3201587 | 76817 | 49.32 | Operation | I (b) | Clay | 37.05 | 15/July/2019 | 15/July/2029 | Anagold | Clay Licence |
| Erzincan | İliç | Çöpler | 3201588 | 76818 | 49.09 | Operation | I (b) | Clay | 49.09 | 15/July/2019 | 15/July/2029 | Anagold | Clay Licence |
| **Total** | | | | | **16,572.75** | | | | | | | | |
| Erzincan | Kemaliye | Kabataş | 2450158 | 57004 | 1,564.69 | Operation | IV (c) | Au+Cu | 931.87 | 9/Sep/2022 | 9/Sep/2027 | Kartaltepe | Mavidere |
| Erzincan | Kemaliye | Kabataş | 3439805 | 90047 | 1,999.33 | Operation | IV (a) | – | – | 22/Nov/2022 | 22/Nov/2032 | Kartaltepe | Mavidere |
| Erzincan | İliç | Yakuplu | 1032544 | 58473 | 606.60 | Operation | IV (c) | Fe+Cu | 7.54 | 16/Nov/2017 | 16/Nov/2027 | Kartaltepe | Fındıklıdere |
| Erzincan | İliç | Yakuplu | 1032719 | 7083 | 1,756.55 | Operation | IV (c) | Au+Ag+Cu+Fe, Cr | 175.00<br>507.47 | 2/Apr/2021 | 2/Apr/2031 | Kartaltepe | Bayramdere/ Aslantepe/ Sarıdere |
| Erzincan | İliç | Yakuplu | 1027026 | 1054 | 660.87 | Operation | IV (c) | Au+Ag+Cu+Fe | 660.87 | 30/July/2017 | 30/July/2027 | Kartaltepe | Çakmaktepe |
| Erzincan | İliç | Ortatepe | 2003094 | 7161 | 642.68 | Operation | IV (c) | Au+Cu+Fe | 214.65 | 5/Oct/2022 | 5/Oct/2027 | Kartaltepe | Ortatepe |
| **Total** | | | | | **7,230.72** | | | | | | | | |

**Figure 3-4: Land Tenure Layout**




*Source: Anagold, 2023.*

### 3.2.3 Surface Rights

Anagold and Kartaltepe currently hold sufficient surface rights to support the Base Case, which includes oxide heap leach mining operations, sulfide processing, and tailings disposal.

## 3.3 Encumbrances and Royalties

The following subsection has been modified from OreWin (2022).

At present, there are no known environmental liabilities to which the Project is subject. Further discussion on environmental matters with respect to the Project is provided in Section Environmental Studies, Permitting, and Social Plans, Negotiations, or Agreements with Local Individuals or Groups.

Under Turkish Mining Law, the royalty rate for precious metals is variable and tied to metal prices. The Çöpler project is subject to a mineral production royalty that is based on a sliding scale to gold price and is payable to the Turkish government. In September 2020 a presidential decree was issued, increasing the prescribed royalty rates by 25%.

Table 3-2 details the relevant prescribed royalty rates along with the revised rates following the September 2020 presidential decree. The royalties are calculated on total revenue with deductions allowed for processing and haulage costs of ore. Revenue from by-products (silver and copper) is included in the total revenue used for royalty calculations.

The royalty rates outlined in Table 3-2 apply to gold production from heap leaching. Royalty rates are reduced by 40% for ore processed in country, as an incentive to process ore locally. As the Çöpler Project produces its gold doré on site, the Çöpler Project is eligible for a 40% reduction to the royalty rate for gold produced from pressure oxidation (POX) processing.

**Table 3-2: Gold Royalty Rates**

| Metal Price ($/oz Gold) | | Prescribed Royalty Rate (%) | Royalty After 40% In-Country Processing Incentive (%) |
|---|---|---|---|
| From | To | | |
| 0 | 800 | 1.25 | 0.75 |
| 800 | 900 | 2.50 | 1.50 |
| 900 | 1,000 | 3.75 | 2.25 |
| 1,000 | 1,100 | 5.00 | 3.00 |
| 1,100 | 1,200 | 6.25 | 3.75 |
| 1,200 | 1,300 | 7.50 | 4.50 |
| 1,300 | 1,450 | 8.75 | 5.25 |
| 1,450 | 1,500 | 10.00 | 6.00 |
| 1,500 | 1,600 | 11.25 | 6.75 |
| 1,600 | 1,700 | 12.50 | 7.50 |
| 1,700 | 1,800 | 13.75 | 8.25 |
| 1,800 | 1,900 | 15.00 | 9.00 |
| 1,900 | 2,000 | 16.25 | 9.75 |

| Metal Price ($/oz Gold) | | Prescribed Royalty Rate (%) | Royalty After 40% In-Country Processing Incentive (%) |
|---|---|---|---|
| From | To | | |
| 2,000 | 2,100 | 17.50 | 10.50 |
| 2,100 | + | 18.75 | 11.25 |

The Çöpler Project effective life-of-mine (LOM) royalty rate based on the financial model metal price assumptions and applicable deductions is approximately 8.4%.

Other than the royalty payments, there are no other known back-in rights, payments, or other agreements and encumbrances to which the Project is subject.

## 3.4 Required Permits and Status

The following subsections have been modified from OreWin (2022).

The EIA permitting for the Çöpler Mine oxide ore was completed in April 2008 with the issuance of an EIA positive certificate. All the necessary operation permits have already been obtained for the oxide inventory, as follows:

- Explosive and explosive storage permit
- Permit for water abstraction from groundwater sources
- EIA positive certificate for power transmission line construction
- Environmental permits and licenses
- Land acquisition permits for forest areas and pasturelands
- Workplace opening permit
- Operating permits

The EIA permitting process for the Sulfide Expansion Project was commenced on April 7, 2014, and completed with the receipt of an 'EIA Positive Statement' on December 24, 2014. In addition to an EIA approval, other permits required for the Sulfide Expansion Project involved an expanded workplace opening permit, additional operating permits, and land acquisition permits for forest areas and pasture lands.

Additional EIA studies conducted and environmental permits received for the Çöpler and Greater Çakmaktepe mine since the start of the gold mining operations are as follows:

- Çöpler
  - EIA permit dated April 10, 2012, for the operation of mobile crushing plant.
  - EIA permit dated May 17, 2012, for the capacity expansion involving:
    - Increasing operation rate to 23,500 tpd.
    - Increasing Çöpler waste rock dump (WRD) footprint area.
    - Adding a sulfidization, acidification, recovery, and thickening (SART) plant to the process to decrease the cyanide consumption due to the high copper content of the ore.
  - EIA permit, dated December 24, 2014, for the capacity expansion involving:

        - Sulfide plant expansion
        - Heap leach area expansion
    - EIA permit dated October 7, 2021, for the capacity expansion (the 2021 Çöpler EIA or COP 3) involving:
        - Heap leach pads 5 and 6
        - TSF expansion
- Greater Çakmaktepe
    - EIA permit dated January 26, 2017, for the Çakmaktepe satellite pits expansion.
    - EIA permit dated August 9, 2018, for the Çakmaktepe expansion for the newly defined Central pit.
    - EIA permit dated March 30, 2022, for the Çakmaktepe second expansion, including the Çakmaktepe Ext starter pit. (the 2022 Çakmaktepe EIA or CAK 2 EIA)

## 3.5 Other Significant Factors and Risks

SLR is not aware of any environmental liabilities on the Project. SSR Mining Inc. has all required permits to conduct work on the Project and has a reasonable plan, schedule, and budget to obtain current required permits and authorizations. SLR is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the Project.

# 4.0 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

The following subsections have been extracted from OreWin (2022).

## 4.1 Accessibility

The Çöpler project is accessed from the main paved highway between Erzincan and Kemaliye, crossing the Karasu River and passing by the village of İliç. From İliç there is an additional 4.5 km of road to reach the entrance to the Çöpler mine site.

The Ankara to Erzincan railway line, operated by the Turkish State Railway Company (TCDD), runs parallel to the south bank of the Karasu River and passes within two kilometres north of the Project at a point between the train stations at İliç and Bağıştaş. The railway line connects the site with Ankara and the west as well as with seaports to the north on the Black Sea, and to the south on the Mediterranean Sea. Overnight passenger sleeper cars are available between Erzincan and Ankara.

The reservoirs of the Bağıştaş I and II hydro-electric power plants (HEPP) are 350 m and 1,800 m away from the Çöpler mine site, respectively. The embankment of Bağıştaş I Dam originally covered a portion of the existing highway, railroad, and railroad station until these were relocated before dam construction was completed. Construction routes for the railroad and highway were located between the new Çöpler village and the Çöpler mine site. The bridge on the north-east side of İliç was relocated to further east of the embankment.

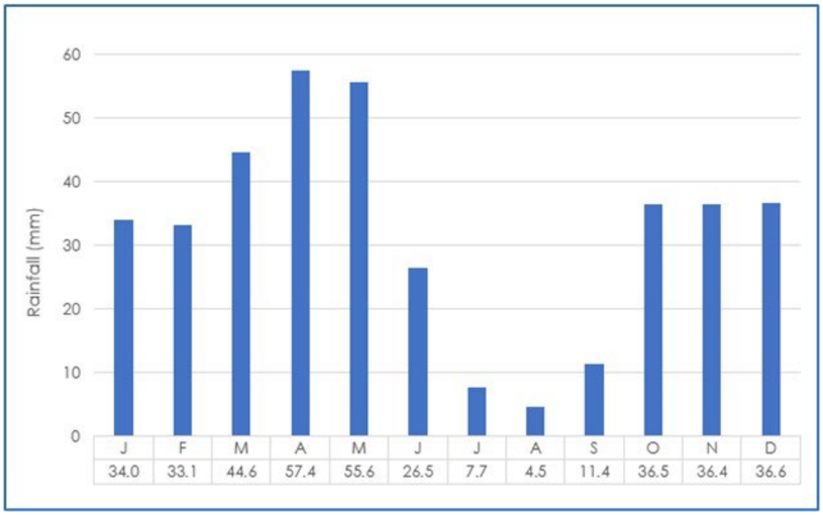
There are regular commercial airline flights from Istanbul and Ankara to the regional cities of Erzincan, Erzurum, Malatya, Elazığ, and Sivas. Driving from the regional cities to the Project site takes between two to four hours on paved highways. Driving from Ankara to the site takes approximately eight hours.

## 4.2 Climate

Mining operations are conducted year-round. The climate is typically continental with cold wet winters and hot dry summers. In winter, the night-time temperature can drop to –25°C although the average is usually a few degrees below freezing. The July temperature frequently exceeds +40°C but the climate is usually pleasantly warm outside of these extremes. The average monthly temperature ranges from +3.7°C for the coldest month of January to +23.9°C for August, the warmest month.

Most precipitation occurs in the winter and spring. Monthly average rainfall values are shown in Figure 4-1. The average annual rainfall for the site is 384.3 mm. Snowfall is common during the period mid-November through February, but with little, if any, accumulation. Snow depth assessments are based on the Divriği meteorological weather station, located 41 km west of the Project area, which shows maximum snow-pack depths at approximately 200 mm for 1985.

**Figure 4-1: Average Monthly Rainfall for Çöpler Project Area**




Source: Anagold, 2016

The frost depth is less than 0.3 m, based on local information, with 0.5 m selected as the design frost depth limit.

The maximum wind speed recorded at the Divriği weather station in 2004 ranges from 15 m/s to 25 m/s, with variable directions mainly from the north, south, and east.

## 4.3 Local Resources

The district of İliç has a population of approximately 3,800 inhabitants and is located approximately six kilometres east of the current Çöpler open pit. The district has a hospital, schools, municipal offices, a fire station, a police station, and a Gendarmerie post. The primary economic activity in the region is sheep herding for wool, meat, and dairy products. Other agricultural activities include bee keeping for honey production and, some wheat farming along the Karasu River. Additionally, there is some light manufacturing and grain milling performed in İliç.

The workforce for the Anagold exploration programs has primarily included residents drawn from the local communities of Çöpler, İliç, and Sabırlı.

## 4.4 Infrastructure

Turkish telecommunications are up to European standards. High-speed, fibre-optic internet access is available at the mine site.

Initially, electrical power at 380 V and 50 Hz was available in İliç and at the mine site. This was upgraded to support the Project by the construction of a 40 km long 154 kV power line from the sub-station at Divriği to the mine site. The power supply was further upgraded when the hydroelectric dam near the mine site was commissioned. Çöpler is now connected to the national grid by a 6 km, 154 kV powerline from the Bağıştaş sub-station.

Sufficient local fresh water supply exists to support the mining and processing operations. Ground water resources include seven production wells with a 25,728 m$^3$/day extraction permit. Further information on project infrastructure is included in Section 15. Section 17.3 contains additional data on the Project social setting.

## 4.5 Physiography

The Çöpler project is located in a roughly east–west oriented valley at altitudes ranging from 1,100 MASL to 1,300 MASL. The valley is surrounded by limestone mountains that rise to more than 2,500 MASL on the north and south sides of the Project area. These mountains are at the western end of the Munzur range, which rises to more than 3,300 MASL between Ovacık and Kemah.

The region is sparsely vegetated, predominantly with semi-arid brush and scrub trees including dwarf oaks and junipers.

The following are the site data developed during previous studies for the design of the Project:

- Latitude: 39° 25’ North
- Longitude: 38° 32’ East
- Elevation: 1,150 MASL
- Frost depth: 500 mm
- Snow load: 145 kg/m$^2$
- Wind load: 40 m/sec, Exposure ‘C’
- Earthquake zone: second order, Ao = 0.20
- Atmospheric pressure (average): 880.5 millibars
- Maximum design temperature: +40°C
- Minimum design temperature: –25°C
- Annual rainfall: 384 mm
- Maximum snowfall depth: 200 mm (estimated)
- Design maximum 24-hour rainfall: 76 mm

# 5.0 History

The following subsections have been modified from OreWin (2022).

## 5.1 Prior Ownership

The region around the Project has been subject to gold and silver mining that appears to date back at least the ancient Roman times. A copper-rich slag pile of approximately 2,500 t is located at the western edge of the district and is believed to be waste from ancient production. Although the district contains copper mineralization, there appears to have been little production targeting copper. There are several additional minor slag piles scattered around the Project area thought to be from ancient, small-scale gold and by-product copper production.

The Turkish Geological Survey (MTA) carried out regional exploration work in the early 1960s that was predominately confined to geological mapping. In 1964, a local Turkish company started mining for manganese, continuing until closing in 1973 and producing approximately 7,300 t of manganese ore during its active life. Unimangan Manganez San A.Ş. (Unimangan) acquired the property in January 1979 and re-started manganese production, producing one to five thousand tonnes per annum (ktpa) of ore until ceasing operations in 1992.

In 1998, Anatolia Minerals Development Ltd (Anatolia) identified several porphyry-style gold-copper prospects in east central Türkiye and applied for exploration licenses for these prospects. This work was based upon the earlier work by MTA in the 1960s. During this effort, Anatolia delineated a prospect in the Çöpler basin formed by an altered and mineralized granodiorite, intruded metasediment, and limestone. This prospect and the supporting work were the basis for a joint venture agreement for exploration with Rio Tinto.

During the period of the joint venture, exploration drilling of the Çöpler Deposit was completed and a Mineral Resource estimate was developed with three mineralized zones: Main, Manganese, and Marble. In January 2004, Anatolia acquired sole control over the Project and maintained exclusivity until 2009, at which time a joint venture with Lidya was executed.

In February 2011, Anatolia merged with Avoca Resources Limited to form Alacer Gold Corp. (Alacer). In September 2020, Alacer merged with SSR.

The Çöpler property area is currently owned and operated by Anagold, which is held by SSR (80%), Lidya (18.5%), and a bank wholly owned by Çalık Holdings A.Ş. (1.5%).

The Greater Çakmaktepe property area is owned by Kartaltepe, which is held by SSR (80%) and Lidya (20%).

## 5.2 Exploration and Development History

Exploration of the Çöpler Deposit has been conducted by Anagold and its predecessors since September 1998. Work completed has included the following:

- Geological and reconnaissance mapping
- Rock chip, grab, soil, channel, and stream sediment geochemical sampling
- Ground geophysical surveys including ground magnetic, complex resistivity / induced polarization (IP), time domain IP, and controlled source audio-frequency magneto-telluric (CSAMT) surveys

- A regional helicopter-borne geophysical survey
- Reverse circulation (RC) and diamond core (DD) drilling programs
- Acquisition of satellite imagery
- Mining technical studies
- Geotechnical and hydrogeological studies
- Environmental baseline studies
- Studies in support of project permitting
- Metallurgical testwork and studies
- Condemnation evaluations

The principal exploration technique used at the Project has been RC and DD drilling, conducted in multiple campaigns since 2000. Initially, exploration was directed at evaluating the economic potential of the near-surface oxide mineralization for the recovery of gold by either heap leaching or conventional milling techniques.

In 2013, drilling occurred primarily in the western portion of the Main Zone and on the northern edge of the Çöpler Deposit. Drilling during 2014 focused on verification of existing drilling results through a twin-hole program. Drilling in 2015 provided data coverage at depth in the Manganese Zone, infill drilling in the Main Zone, and testing of low-sulfur mineralization below the oxidation boundary.

Drilling continues to better define both the oxide and sulfide portions of the Çöpler Deposit.

## 5.3 Past Production

Annual production (produced) from the start of operations to the effective date of this TRS is presented in Table 5-1

**Table 5-1: Past Production**

| Year | Gold Ounces Produced |
|---|---|
| 2010 | 512 |
| 2011 | 185,418 |
| 2012 | 188,756 |
| 2013 | 271,063 |
| 2014 | 227,927 |
| 2015 | 204,665 |
| 2016 | 119,036 |
| 2017 | 168,163 |
| 2018 | 170,865 |
| 2019 | 391,213 |
| 2020 | 326,908 |

| Year | Gold Ounces Produced |
|---|---|
| 2021 | 329,276 |
| 2022 | 191,366 |
| **Total** | **2,775,168** |

Source: Alacer/SSR Annual reports

## 5.4 Previous NI 43-101 Technical Reports

The following subsection has been modified from OreWin (2022).

The most recent Technical Report was the 2021 Çöpler District Master Plan 2021 NI 43-101 Technical Report dated September 29, 2022.

The previous reporting of Mineral Resources and Mineral Reserves was in the SSR Annual Information Form (SSR, 2023). Those statements on Mineral Resources and Mineral Reserves have been used for comparison.

The following Technical Reports and Technical Report Summaries have been filed on the Çöpler project (in chronological order):

- Watts, Griffis and McQuat Limited, 2003. Update of the Geology and Mineral Resources of the Çöpler Prospect, May 1, 2003.
- Independent Mining Consultants, Inc., 2005. Çöpler Project Resource Estimate, October 19, 2005.
- Marek, J.M., Pennstrom, W.J., Reynolds, T., 2006. Çöpler Gold Project Feasibility Study, May 30, 2006.
- Marek, J.M., Moores, R.C., Pennstrom, W.J., Reynolds, T., 2007. Çöpler Gold Project, March 2, 2007, as amended April 30, 2007.
- Easton, C.L., Malhotra, D., Marek, J.M., Moores, R.C., and Pennstrom, W.J., 2008. Çöpler Gold Project East Central Turkey Preliminary Assessment Sulfide Ore Processing, February 4, 2008.
- Marek, J.M., Benbow, R.D., and Pennstrom, W.J., 2008. Çöpler Gold Project East Central Turkey, December 5, 2008 (amended and restated; supersedes July 11, 2008 version).
- Altman, K., Liskowich, M., Mukhopadhyay, D.K., and Shoemaker, S.J., 2011. Çöpler Sulfide Expansion Project Prefeasibility Study, March 27, 2011.
- Altman, K., Bascombe, L., Benbow, R.D., Mach, L., and Shoemaker, S.J., 2012. Çöpler Resource Update, Erzincan Province, Turkey, March 30, 2012.
- Altman, K., Bair, D., Bascombe, L., Benbow, R., Mach, L., and Swanson, B., 2013. Çöpler Mineral Resource Update, Erzincan Province, Turkey, March 28, 2013.
- Armstrong, D., Bascombe, L., Bohling, R., Kiel, R., Liskowich, M., Parker, H.M., Parshley, J., Seibel, G., and Swanson, B., 2014. Çöpler Sulfide Expansion Project Feasibility Study, Erzincan Province, Turkey, 29 July 2014.

- Bascombe, L., Benbow, R.D., Birch, R.G., Bohling, R., Francis, J., Khoury, C., Kiel, R., Liskowich, M., Marsden, J., Parker, H.M., Parshley, J., Seibel, G., and Statham, S., 2015. Çöpler Sulfide Expansion Project Feasibility Update, Erzincan Province Turkey, March 27, 2015.
- David, D., Kiel, R., Liskowich, M., Parshley, J., Marsden, J., Seibel, G., Parker, H., Bascombe, L., Benbow, R., Statham, S., Francis, J., and Smolonogov, S., 2016. Çöpler Mine, Erzincan Province, Turkey, June 9, 2016.
- OreWin Pty. Ltd., 2020. Çöpler District Master Plan 2020, November 27, 2020.
- OreWin Pty. Ltd., 2022. Çöpler District Master Plan 2021, September 29, 2022.

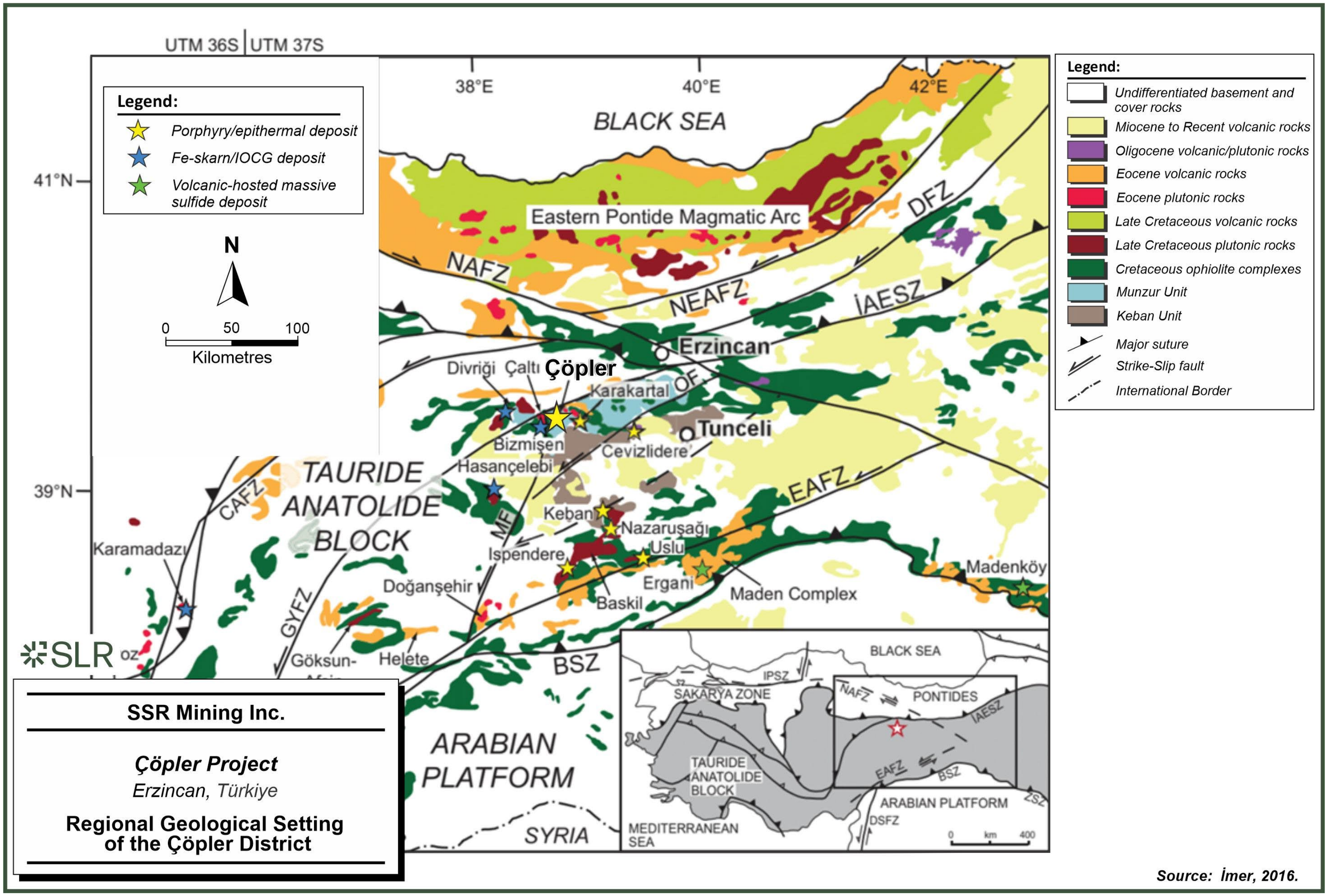
# 6.0 Geological Setting, Mineralization, and Deposit

## 6.1 Regional Geology

Türkiye is predominantly situated on the Anatolian Plate which is bounded by the Eurasian plate to the north, the Arabian Plate to the southeast, the African Plate to the south, and the Aegean Plate to the west. Due to the convergence between the Eurasian and Arabian plates, the Anatolian Plate is displaced westward along two major strike-slip fault zones: the North Anatolian Fault and the East Anatolian Fault. The North Anatolian Fault has a right-lateral displacement and forms the boundary between the Anatolian Plate and the Eurasian Plate to the north. The East Anatolian Fault has left-lateral displacement and forms the boundary between the Anatolian Fault and the Arabian Plate to the southeast. The region is also influenced by the subduction of the Neo-Tethys oceanic plate which led to arc and back arc magmatism during the Late Cretaceous and Middle Miocene era and continuing to the present.

A regional geology plan is presented in Figure 6-1.

**Figure 6-1: Regional Geological Setting of the Çöpler District**




Source: İmer, 2016.

The Çöpler Project, including Çöpler, Greater Çakmaktepe, and Bayramdere deposits, is within the Tethyan mineral belt, a terrane stretching from Indo-China to Europe through Eurasia that contains economically significant gold, copper, and base metal deposits.

## 6.2 Local Geology

The Çöpler Project is located near the north margin of a complex collision zone and to the south of the prominent North Anatolian Fault Zone (Figure 6-2). The collision zone, and subsequent crustal thickening, is related to the closure of the northern branch of the Neotethys ocean, resulting from the northward subduction and coming together of the Pontides and Tauride Anatolide Block in the Late Cretaceous to Early Tertiary. In this intensely deformed tectonic region, east trending imbricated structures were cut by north–northeast trending strike-slip faults during the Late Cretaceous to Paleogene period.

### 6.2.1 Lithologies

Three main rock assemblages are exposed in the Çöpler district (Figure 6-2 and Figure 6-3):

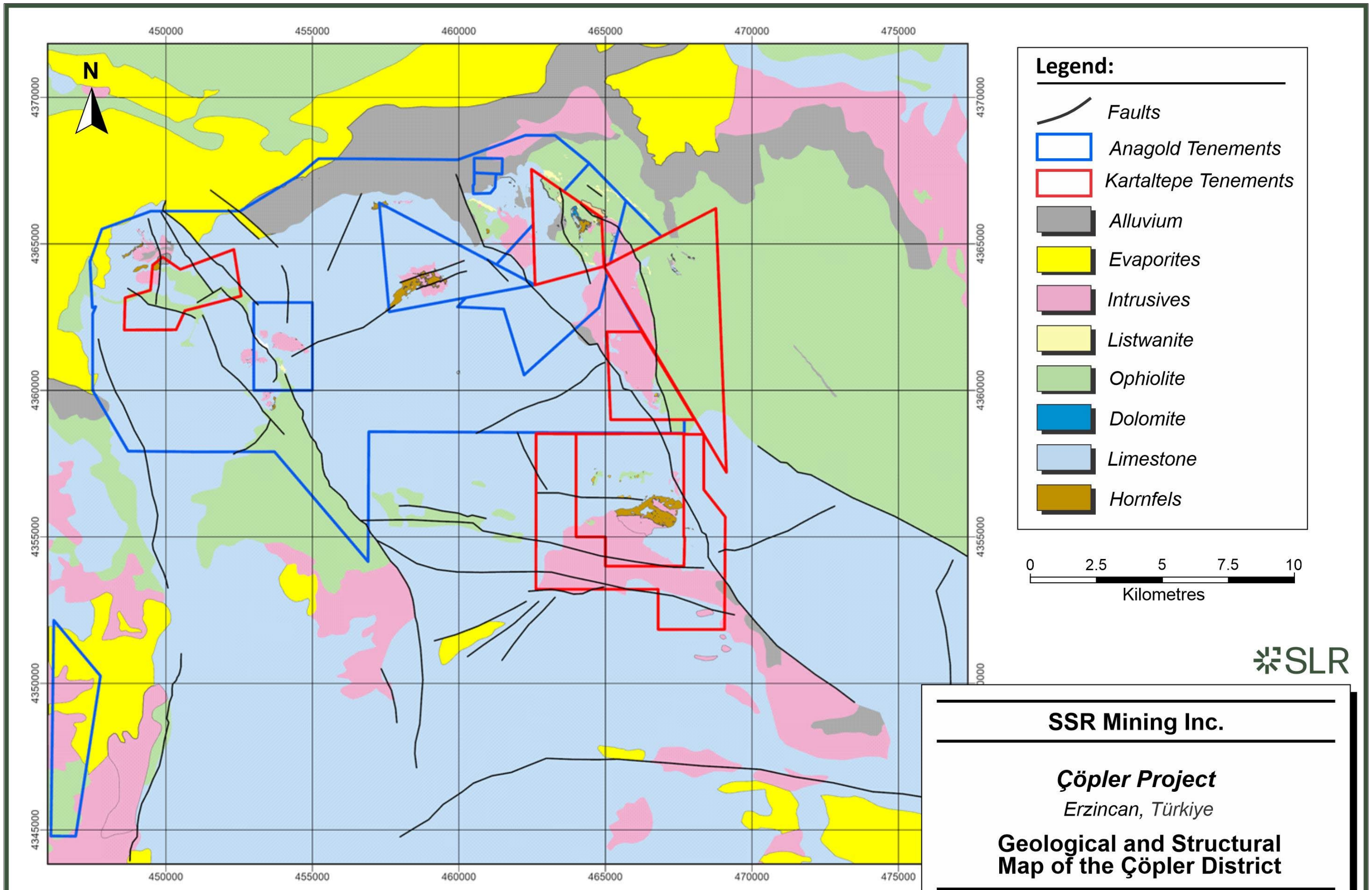
- The first assemblage includes the Keban Metamorphics (Hornfels, Clastics), Munzur Carbonates (Limestone, Dolomite), and Kemaliye Formations. These units are tectonically overlain by ophiolitic nappes (Ovacık Formation of Özgül and Turşucu 1984).
- The second assemblage includes Middle Eocene magmatic (Granodiorite – Diorite) and sedimentary rocks. Intrusions develop byproducts like jasperoid, listwanite, gossan, and silica cap.
- The third assemblage includes the Cretaceous ophiolitic mélange which is overthrusted onto Munzur Limestone from northeast to southwest.

The local geology is a complex structural assemblage of fault-bounded blocks (Figure 6-3) including the following rock types:

- Limestone: grey to blue-grey, fine-grained to recrystallised marbles. Much of the unit displays various degrees of karst development. Bedding within the unit is indistinct to massive.
- Hornfels: fine-grained argillite sequences consisting of interbedded siltstones, shale units, marls, and sandy siltstones. The thermal and hydrothermal impact on this unit from the intrusions resulted in the creation of the skarns and hornfels.
- Ophiolitic mélange: ophiolitic mélange consists of diabase and serpentinite units. Serpentinization is non-uniform and appears to be best developed near major fault zones.
- Diorite to granodiorite intrusions: beige and light brown, medium to coarse-grained plutons. This formation has intruded into the pre-existing argillites and Munzur limestone. This includes fine to medium-grained quartz, feldspar, biotite, and amphibole minerals.

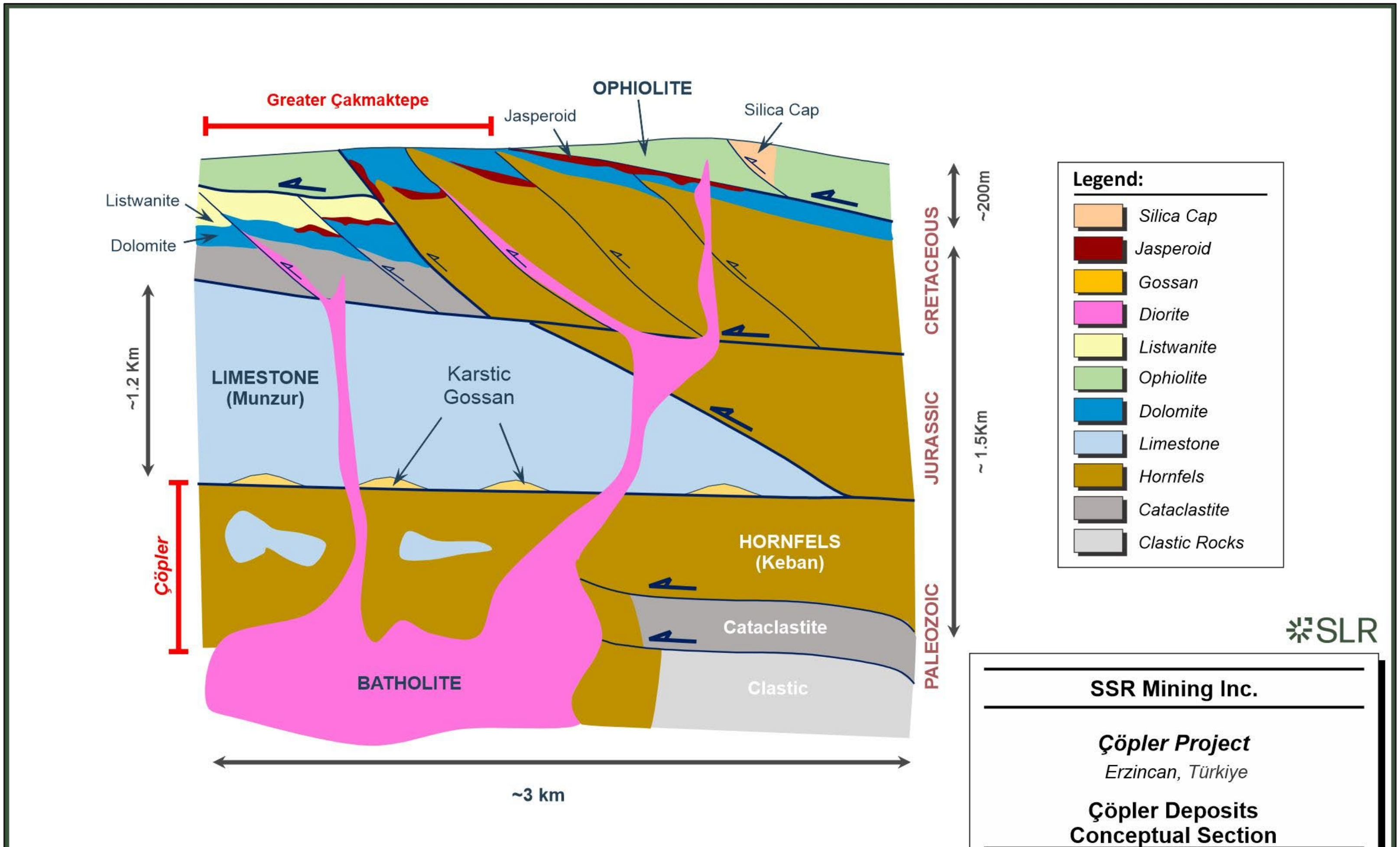
Figure 6-4 shows a generalized stratigraphic column for the Çöpler area.

**Figure 6-2: Geological and Structural Map of the Çöpler District**



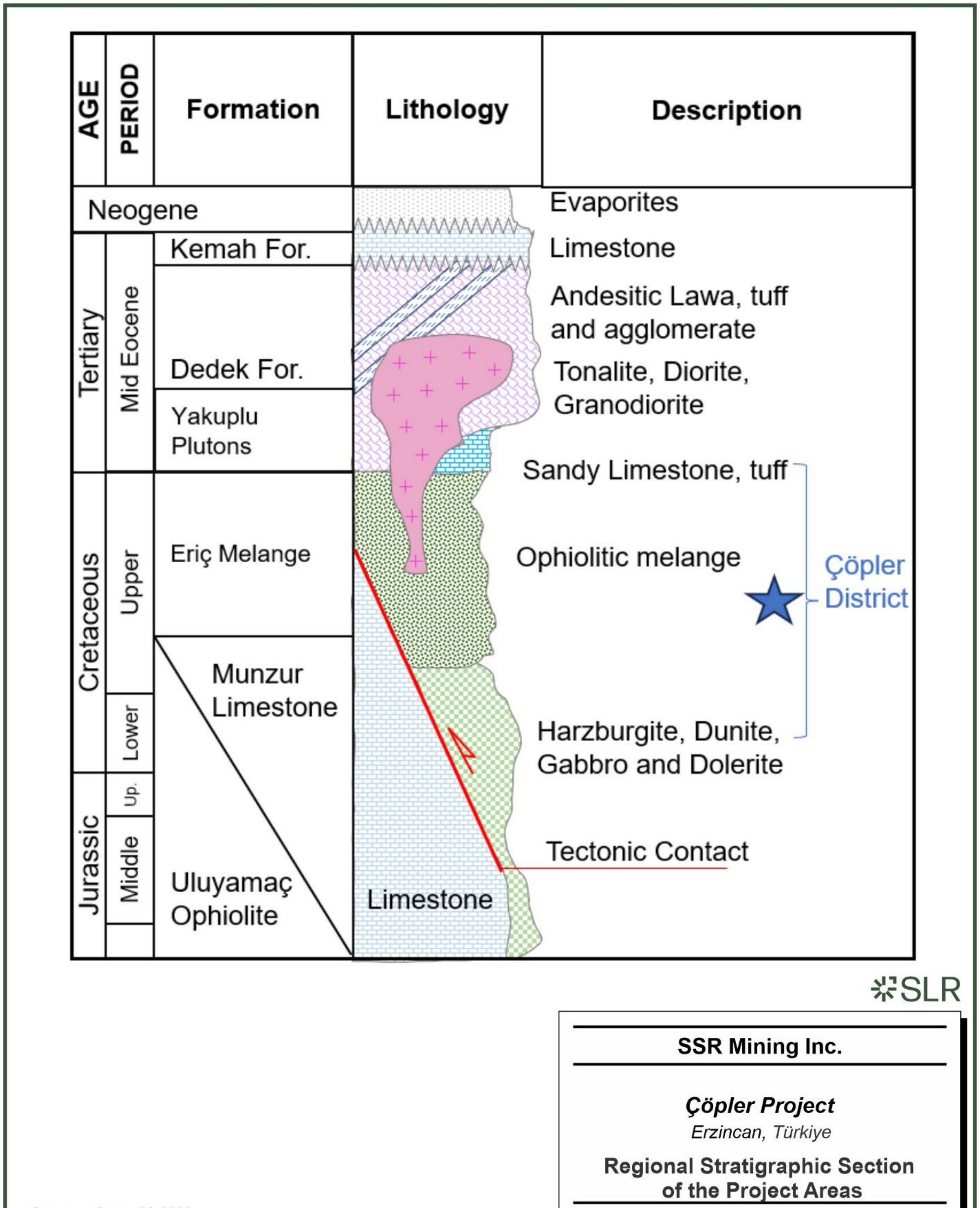

*Source: Anagold, 2023.*

**Figure 6-3: Çöpler Deposits Conceptual Cross Section**




Source: Anagold, 2023.

**Figure 6-4: Regional Stratigraphic Section of the Project Areas**




*Source: Anagold, 2023.*

## 6.3 Property Geology and Mineralization

### 6.3.1 Çöpler

#### 6.3.1.1 Deposit Dimensions

Economic Çöpler mineralization occurs predominantly between elevations 1,590 m and 740 m and across a 3,000 m by 1,300 m wide surface area.

#### 6.3.1.2 Deposit Setting

The Çöpler Deposit is centred on composite diorite to monzonite porphyry stocks that are part of the Eocene Çöpler Kabataş magmatic complex dated (by İmer et al., 2013) at:

- 43.8 ± 0.3 Ma and 44.2 ± 0.2 Ma (from 40 Ar / 39 Ar analysis of igneous biotite), and
- 44.1 ± 0.4 Ma (from igneous hornblende).

The magmatic rocks have intruded into both the Keban and Munzur formations.

Rocks of the Permian to Upper Cretaceous Keban Formation shelf sequences vary in composition between siliciclastic and calcareous, with fine to medium-grained sandstone interbedded with mudstone, and locally thick sections of fine laminated mudstone. The sedimentary units are folded with a fold axis oriented at approximately 25→200 (plunge→plunge direction) resolved from bedding measurements in the Çöpler pits. Limestone of the Upper Triassic to Late Cretaceous (Upper Campanian) Munzur Formation structurally overlies the folded Keban Formation with the contact represented by cataclasite at the base of the Munzur Formation. Intense shearing of the underlying sedimentary rocks is observed, with top-to-south kinematics.

Stratigraphically, the Munzur Formation overlies the Keban. However, mapping of the Munzur Formation to the north of Çöpler shows homoclinal structure with consistent bedding in the limestones (40/060, dip/ dip-direction) indicating juxtaposition of structural blocks. The Munzur allochthon was thrusted onto Permo-Triassic metamorphic basement in the Late Cretaceous (Özgül and Turşucu, 1984). This structural contact pre-dates Eocene Çöpler Kabataş intrusions, which appear to have intruded across the sheared contact between Keban Formation metamorphic rocks (Main Zone) and Munzur Formation limestone (Manganese Zone).

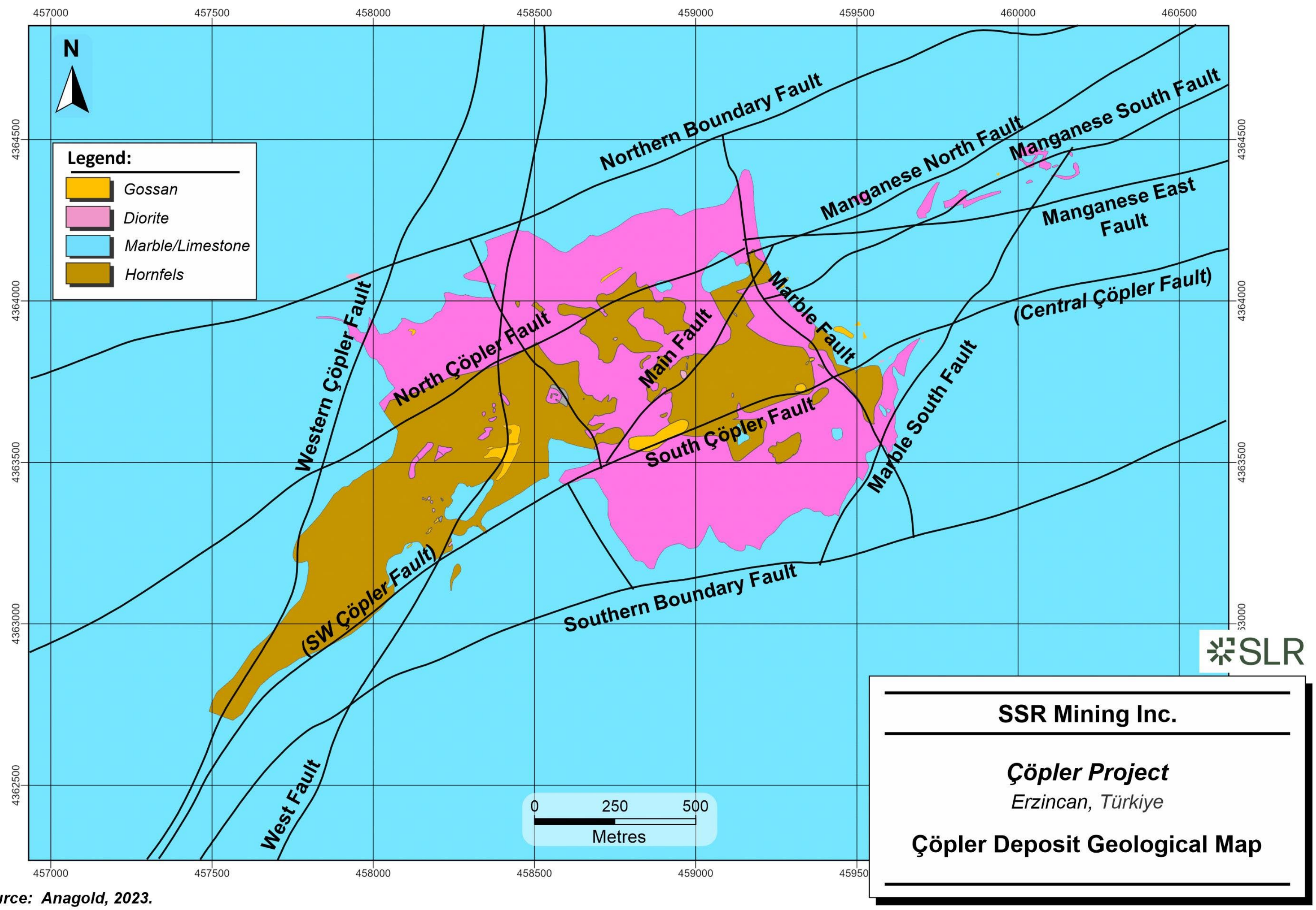
The Çöpler intrusion is a hornblende–quartz diorite-porphyry that shows strong argillic alteration. Some fresh outcrop occurs in the central part of the Main Zone and as remnants within the Manganese Zone. In its least-altered state, the diorite-porphyry is relatively pristine with well-preserved hornblende, biotite, and K-feldspar phenocrysts in a granular matrix of plagioclase and quartz with prominent magnetite. Flow alignment of the hornblende phenocrysts can be seen in places. Gradational transitions to argillic-altered rocks are evident in outcrop and drill core on a centimetre scale.

The geology of the area is controlled by a dominant east-northeast-trending tectonic fabric that formed during a major sinistral strike-slip event. This trend is the primary driver of fault geometry, intrusion emplacement and controls on mineralization.

The contact of the Çöpler intrusion has a roughly rectilinear shape, suggesting control by pre-existing east–northeast trending faults, and by a set of north–northwest trending fractures (Figure 6-5). The north–northwest striking bedding may also have exerted a local control in the central part of the intrusion where many intrusive contacts are parallel to bedding and have a sill-like morphology. However, it is considered more likely that this reflects the north–northwest trending fracture control referred to above.

A pronounced ground magnetic anomaly is centred on the core of the porphyry, which has been modeled to reflect the potassically altered core of the stock-like barren porphyry system dipping steeply towards the south. In addition, there are several dykes and intrusive apophyses; most notably, a brecciated and strongly clay-altered intrusion centred on the Manganese Zone.

**Figure 6-5: Çöpler Deposit Geological Map**




*Source: Anagold, 2023.*

#### 6.3.1.3 Structure

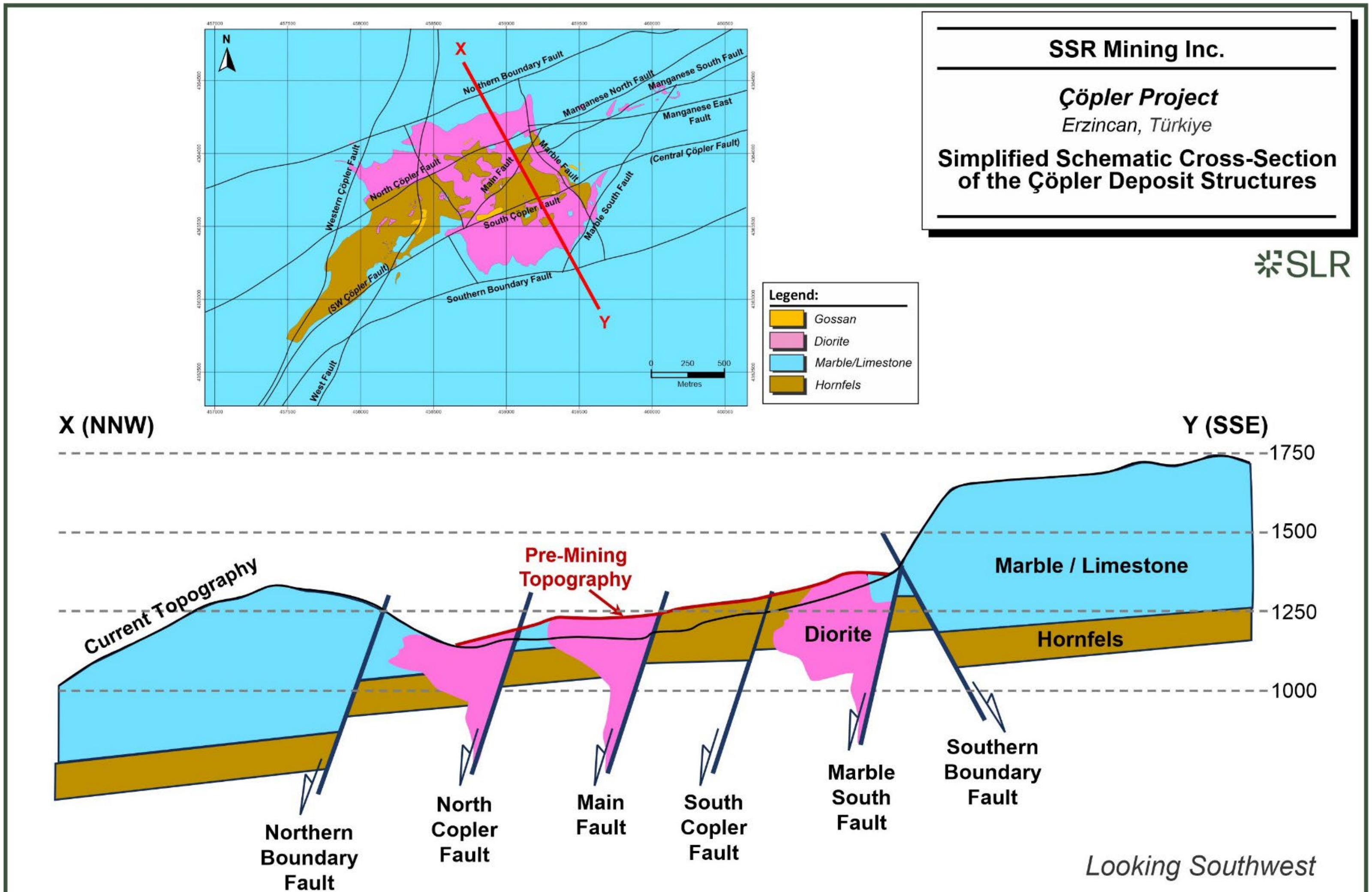
Structures are one of the three primary mineralization controls at Çöpler, the others being the hornfels-marble contact and diorite geometry.

In the area of the Çöpler deposit, two dominant sets of faults are present. These faults are approximately parallel to the long axis of the deposit and are oriented east–northeast. These are referred to as longitudinal faults. The other set of faults are transverse to the longitudinal faults and referred to as cross-faults (Figure 6-5). The major cross-faults include (from east to west) the Manganese North fault, Marble fault, Main fault, and West fault.

The longitudinal faults include the Northern Boundary fault, North Çöpler fault, Central Çöpler fault, SW Çöpler fault, and Southern Boundary fault. The Central and SW Çöpler faults dip to the south and were previously thought to be the same fault. The South Çöpler Fault Zone and associated faults represent the most recent significant fault activity and have divided the north and south parts of the mine into two principal structural domains.

The Çöpler deposit area demonstrates trans-tensional deformation. The extensional deformation in the area dominates over strike-slip motion as indicated by the lack of compressional structures and the presence of normal movement on all faults. Structurally, the Çöpler deposit occurs in a horst-like feature developed within a sinistral trans-tensional strike-slip setting (Figure 6-6). The two boundary faults delimit the northern and southern extent of the gossan-like, oxidized, supergene, gold-bearing deposits. The northern and southern boundary faults are located almost at the present boundaries of the mine, and dip away from the mine, thereby defining the horst-like geometry. In addition, the deposit is traversed by several cross-cutting normal faults (with or without strike-slip components) in various orientations that complicate but localise the geometry and position of oxidized ore (Kaymakçı, 2017).

**Figure 6-6: Simplified Schematic Cross-Section of the Çöpler Deposit Structures (Looking East-Northeast)**




Source: Anagold, 2023.

#### 6.3.1.4 Weathering and Alteration

Weathering has resulted in oxidation of the mineralization close to surface. The oxidized cap is underlain by primary and secondary sulfide mineralization. In addition to the gold–silver–copper mineralization of economic interest, arsenic, lead, magnesium, manganese, mercury, and zinc are also present.

#### 6.3.1.5 Mineralization

The Çöpler Deposit gold, silver, and copper mineralization is exposed in four adjacent open pits from east to west: Manganese Pit, Marble Pit, Main Pit, and West Pit.

The mineralization is considered to be related to fluids associated with diorite intrusions at depth; mineralization is generally controlled by structural fluid pathways, intrusion contacts, and traps associated with lithological contacts. More specifically, there are three primary controls on mineralization: the hornfels-marble contact, the diorite geometry, and 2$^{nd}$ or 3$^{rd}$ order fault structures and their confluence.

Most of the Çöpler mineralization is controlled by the physical trap/seal that the hornfels formed for the diorite-derived fluids and associated with typical replacement-style processes (e.g. jasperoid).

Mineralization generally manifests as three closely related styles:

- Iron skarn and carbonate replacement mineralization
- Intermediate sulfidation epithermal mineralization
- Low-grade porphyry vein mineralization

**Iron Skarn and Carbonate Replacement Mineralization**

Carbonate replacement oxide gold mineralization developed within karstic spaces and along faults and shear zones. The carbonate-siliciclastic contact is the most dominant control on mineralization, where diorite-derived fluids have replaced limestones on the marble-hornfels contact.

It is observed as iron oxide-rich zones as well as gossan-like and jarosite units developed by oxidation of previous pyrite-rich mineralization. This replacement type mineralization appears may be derived from previously formed distal skarn mineralization. Development of gossan and jasperoid is potentially related to weathering of primary Eocene sulfide deposits in situ or remobilised from a nearby source.

Manganese skarn mineralization is primarily observed in the Manganese Pit. The geometries of mineralization in the Manganese pit are typically consistent with those of the diorite intrusion; manganese skarns wrap around the contact and display internal porphyry-style mineralization.

**Intermediate Sulfidation Epithermal Mineralization**

Intermediate sulfidation epithermal mineralization is primarily observed in the Manganese Pit as clusters of bright pink, banded, colloform, rhodochrosite base metal sulfide veins and breccia lodes. Carbonate base metal veins contain base metal sulfides sphalerite±galena±chalcopyrite in a gangue of calcite, ferroan dolomite, and/or rhodochrosite and realgar.

In the Main Pit, the base metal carbonate veins are coarsely crystalline whereas veins in the Manganese Pit display brecciation, colloform banding, and locally quartz pseudomorphs of bladed calcite. The change in vein style suggests the Manganese Pit represents a higher level position with respect to the mineralising system.

Epithermal veins and mineralized faults are mostly thin and hosted in the hornfels within the Main Pit. Elevated gold grades occur in blowout zones where $2^{nd}$-to-$3^{rd}$ order faults intersect.

**Low-Grade Porphyry Vein Mineralization**

Sub-economic porphyry copper–gold–molybdenum mineralization is characterised by well-developed alteration zones that are complex and superimposed on each other. Late-stage porphyry mineralization is hosted in diorite-tonalite porphyry as dominant sheeted veinlet arrays and as stockworks in metamorphic wall rocks.

### 6.3.2 Greater Çakmaktepe

#### 6.3.2.1 Deposit Dimensions

Greater Çakmaktepe mineralization occurs approximately between elevations 1,020 m and 1,615 m, is approximately 2,500 m long (northwest–southeast) by 950 m wide (northeast–southwest), and ranges in thickness from 10 m to 200 m.

#### 6.3.2.2 Deposit Setting

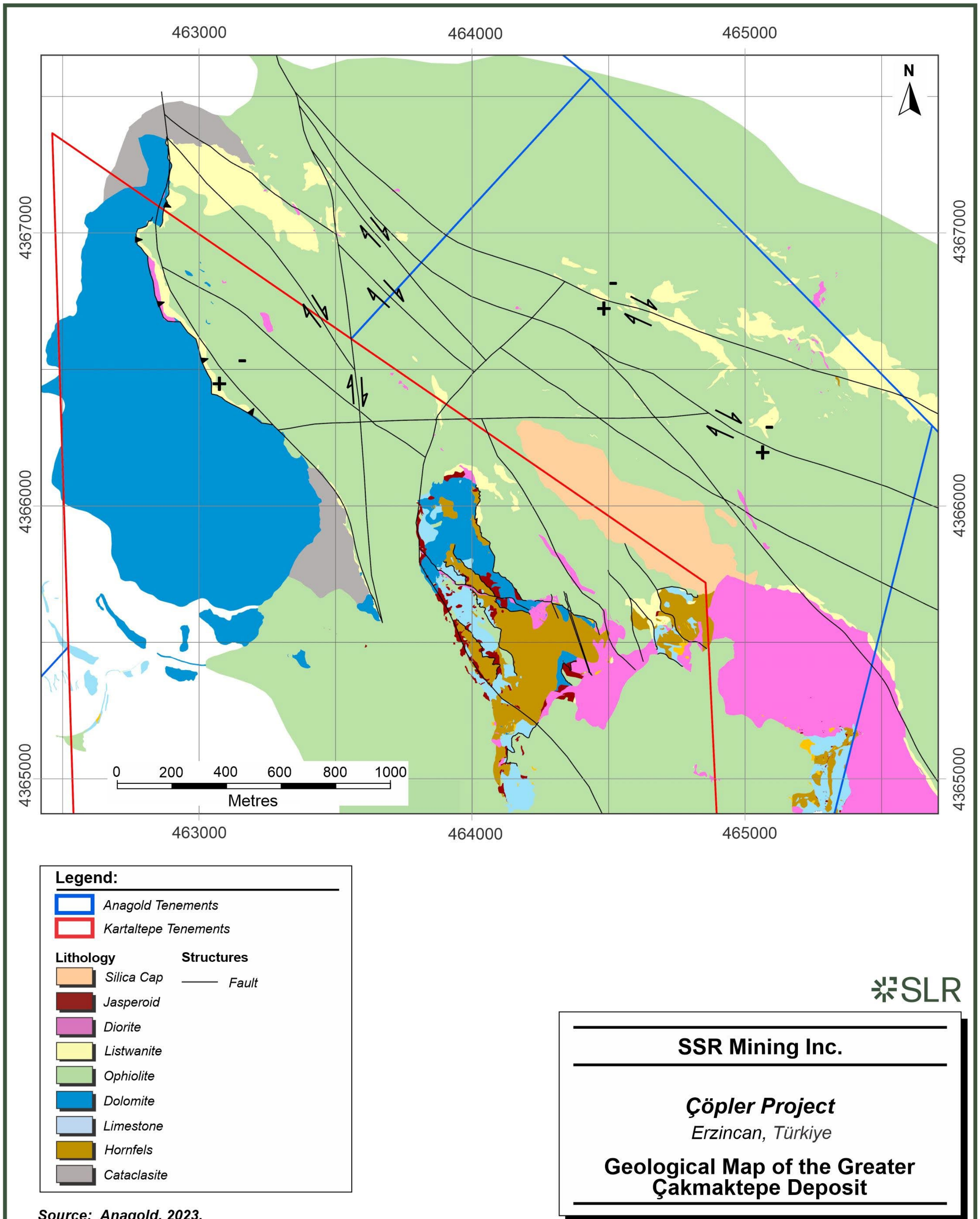
The Greater Çakmaktepe deposit is made up of several mineralized zones including Çakmaktepe, Çakmaktepe North, and Çakmaktepe Ext (Figure 6-7). While there are some characteristic differences between Çakmaktepe Ext and Çakmaktepe, the local geology is generally very similar.

The deposit area mainly comprises Palaeozoic metamorphic rocks and marble belonging to the Keban Formation and Mesozoic platform carbonate such as the Munzur Formation limestone. All these units are tectonically overlain by ophiolitic mélange rocks. These ophiolitic rocks originated from the northern branch of the NeoTethys ocean, the former position of which is delineated by the Ankara–Erzincan suture zone. The emplacement of the ophiolitic units took place at the end of the Upper Cretaceous with north-to-south motion.

The youngest units include Eocene and younger magmatic rocks, volcaniclastics rocks and sedimentary units that unconformably overlie and seal the Munzur Formation limestone, its basement and the ophiolitic units. All these units are intruded by intermediate igneous rocks that are exposed mainly at the northern and western parts of the Munzur mountains and southern margin of the Sivas Basin.

Listwanite formed in structurally deformed areas by the percolation of $CO_2$-rich fluids along the margins of ultramafic rocks within the ophiolite complex. Sulfidic jasperoid is present, a result of silica-sulfide metasomatism of Munzur Formation carbonate rocks. Both listwanite and jasperoid are important host rocks for gold and silver mineralization.

**Figure 6-7: Geological Map of the Greater Çakmaktepe Deposit**




Source: Anagold, 2023.

### 6.3.2.3 Mineralization

The Greater Çakmaktepe (Çakmaktepe and Çakmaktepe Ext) deposit is a structurally controlled gold–silver–copper deposit, displaying typical replacement mineralization styles. Mineralization is primarily associated with jasperoid and listwanite.

The mineralization at Çakmaktepe Ext occurs at a higher stratigraphic level than that seen at Çakmaktepe. The emphasis at Çakmaktepe Ext is on the ophiolitic mélange rocks that have been thrust into place on top of the basement metasediment and carbonate lithologies.

As with the Çöpler deposit, Çakmaktepe is thought to be the result of intrusive activity that generated suitable conditions for mineralization of ophiolite, limestone, and hornfels lithologies. The mineralization is controlled by a complex system of structural fluid pathways and traps controlled by lithological contacts, in typical replacement-style processes, rather than being constrained by relatively discrete fault or shear zones characteristic of epithermal-style mineralization.

The mineralization at Çakmaktepe Ext is also considered to be related to fluids associated with diorite intrusions at depth, much like those observed at the Çöpler and Çakmaktepe deposits. However, diorite dykes are less common at Çakmaktepe Ext, unlike the adjacent Çakmaktepe deposit and nearby Çöpler deposit where diorite is a dominant lithology.

Mineralization is strongly structurally controlled. Two steep faults are intruded by diorites and played a role as conduits for mineralization at Greater Çakmaktepe.

Relatively shallowly dipping thrust-related mineralization is characterised at Çakmaktepe East, Çakmaktepe South-East, Çakmaktepe Central, and Çakmaktepe North. This is interpreted as a ramp-flat stacked thrust system that has resulted in rollover/stack geometries. Key to each structurally associated style of mineralization is the juxtaposition of ophiolites against limestone and hornfels. Contacts between ophiolite and limestone, limestone and hornfels, and all lithologies in contact with intrusive diorite sills and dykes are generally mineralized. The listwanite horizon is the most favourable host rock for gold mineralization. Diorite intrusions show evidence of hydrothermal activity that either takes the form of massive iron-dominated replacement (magnetite, specular hematite, or pyrite) or sheeted crystalline quartz vein bearing jasperoid closer to diorite contacts.

In the north at Çakmaktepe Ext., mineralization also occurs along low-angle thrust zones between ophiolite, listwanite, and dolomite and limestone (Figure 6-8); however, at Çakmaktepe Ext the thrust planes have not resulted in stacking and forelimb-backlimb geometries. The thrust zones occur within a complex northwest trending structural zone that is cut by multiple high-angle faults that together result in multiple rotated fault blocks and mineralized zones.

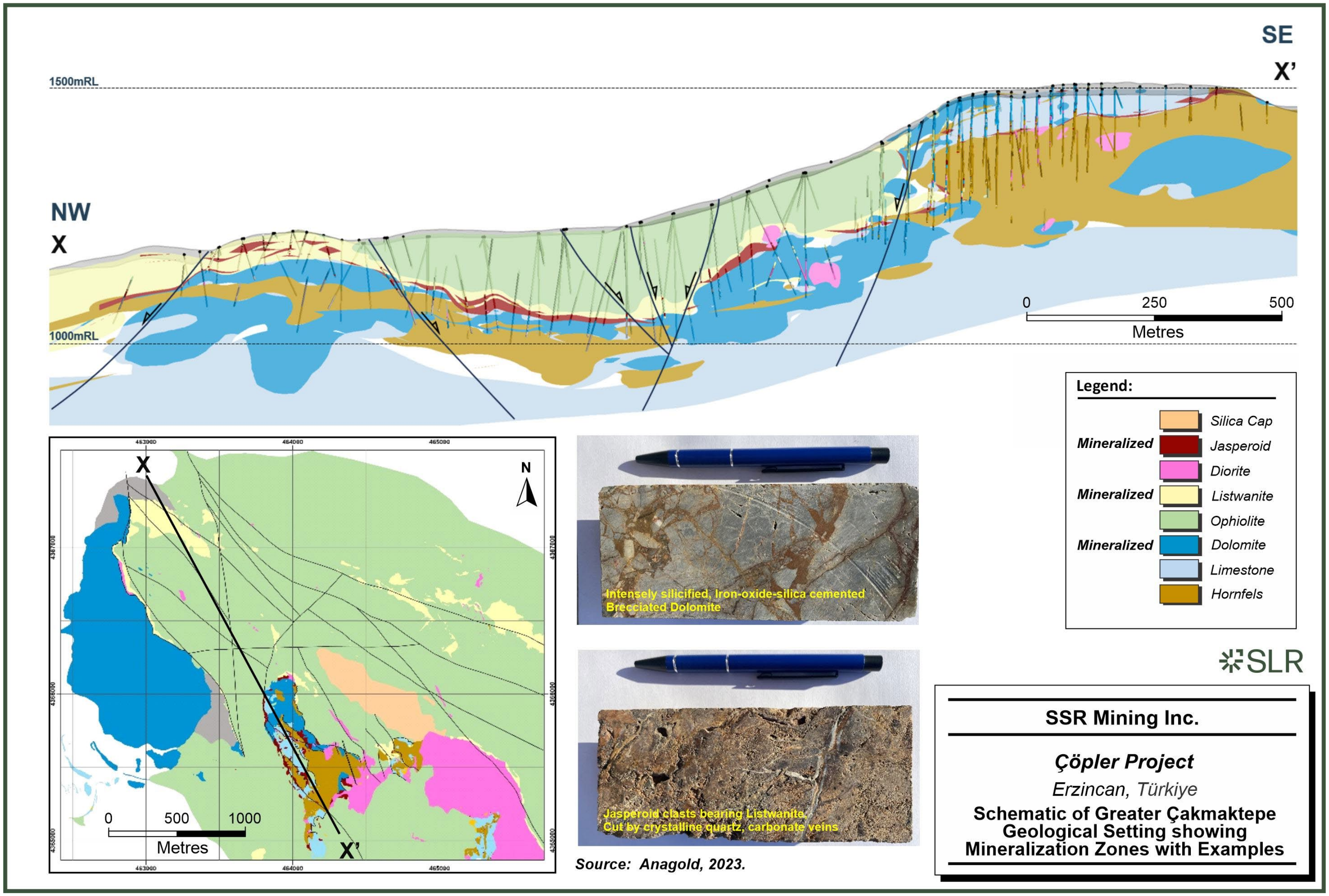
Other mineralized zones within the Çakmaktepe deposit are referred to as 'contact' styles of mineralization where iron, sulfur, gold, copper, and silver have been emplaced along thrust surfaces where ophiolite is next to limestone and metasediment. Epithermal veining and replacement alteration and textures are prevalent. Skarn and metasomatic mineralization occur in contact with intrusive diorite dykes, sills, and stocks.

Oxide mineralization at Çakmaktepe is predominantly characterised by silica–iron–carbonate-rich jasperoid, less-siliceous iron-rich gossan, and epithermal veined and brecciated limestone.

The mineralization at Çakmaktepe Ext is related to crystalline and chalcedonic quartz veins within the brecciated and silicified listwanite and dolomite zones. The mineralization is predominantly in the form of oxide, with sulfide mineralization confined to limited pyrite-rich jasperoid zones. Clay/gossan in jasperoid or limestone karstic boundaries also contain high-grade gold across Çakmaktepe Ext.

Gold grades increase at dolomite/listwanite contacts and within silica-rich listwanite that acts as horizontal traps for higher-grade gold-bearing mineralization. Increases in gold grade can be seen along the lithological contacts. Elevated grades can exist within either contact lithology. Several drill holes show a very rapid downhole change in gold grade from mineralized to unmineralized material, indicating that mineralization is tightly constrained instead of disseminated across the deposit.

**Figure 6-8: Schematic of Greater Çakmaktepe Geological Setting showing Mineralized Zones with Examples**




Source: Anagold, 2023.

### 6.3.3 Bayramdere

#### 6.3.3.1 Deposit Dimensions

Bayramdere mineralization occurs approximately between elevations 1,290 m and 1,370 m, is approximately 370 m long (east–west) by 50 m to 110 m wide (north–south), and ranges in thickness from 5 m to 20 m.

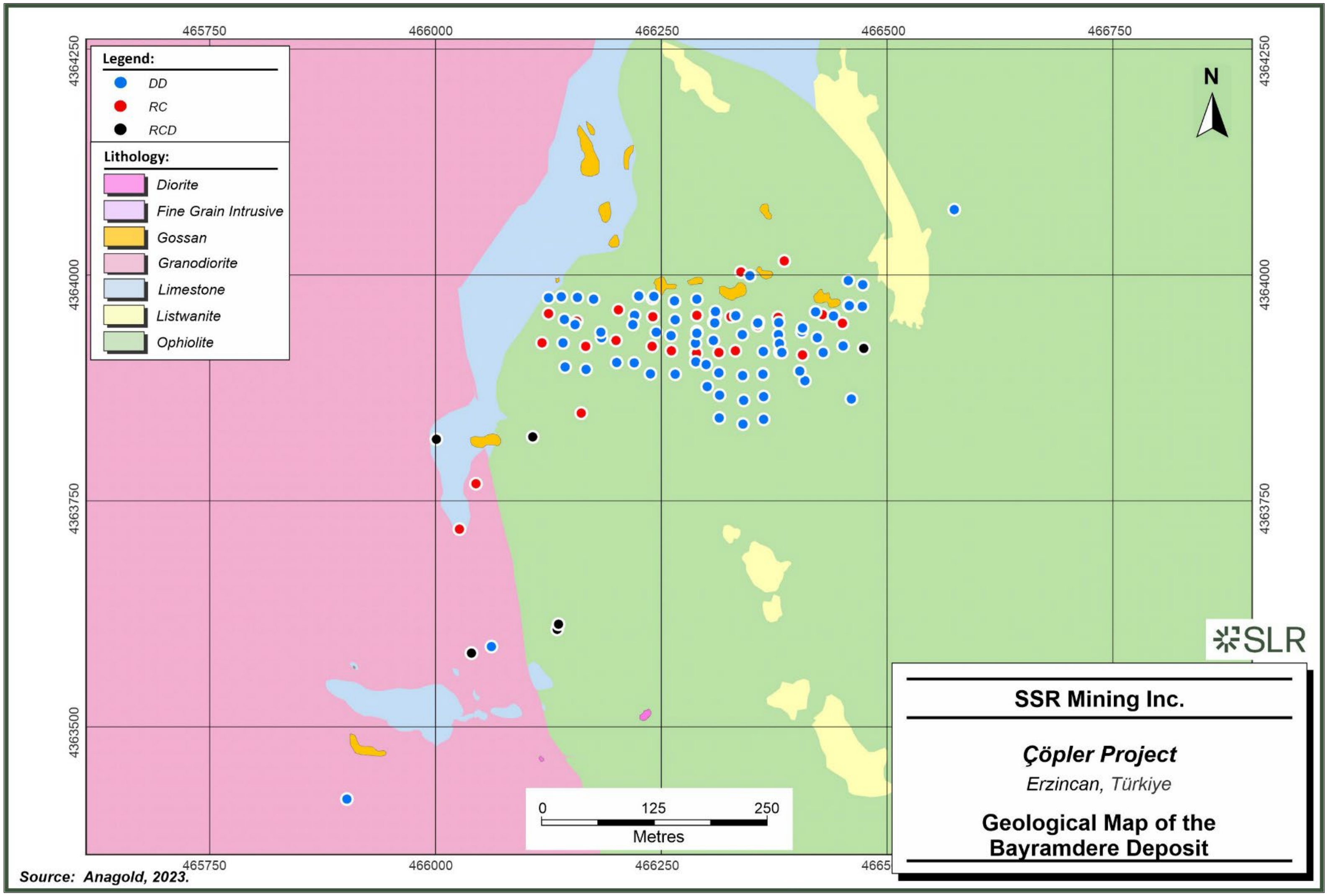
#### 6.3.3.2 Deposit Setting

The Bayramdere deposit is an oxide gold and copper deposit with similar geological and mineralization characteristics to the Greater Çakmaktepe deposit. The geology is characterised by ophiolite thrust over the limestone and dolomite, which are in turn intruded by granodioritic stocks (Figure 6-9 and Figure 6-10). Gossans are generally observed as lenses and confined by normal faults.

The Bayramdere deposit is structurally controlled, displaying a replacement gold (minor copper, minor silver) mineralization style. The deposit is dominantly represented by near-surface oxide mineralization, primarily associated with iron-rich gossan.

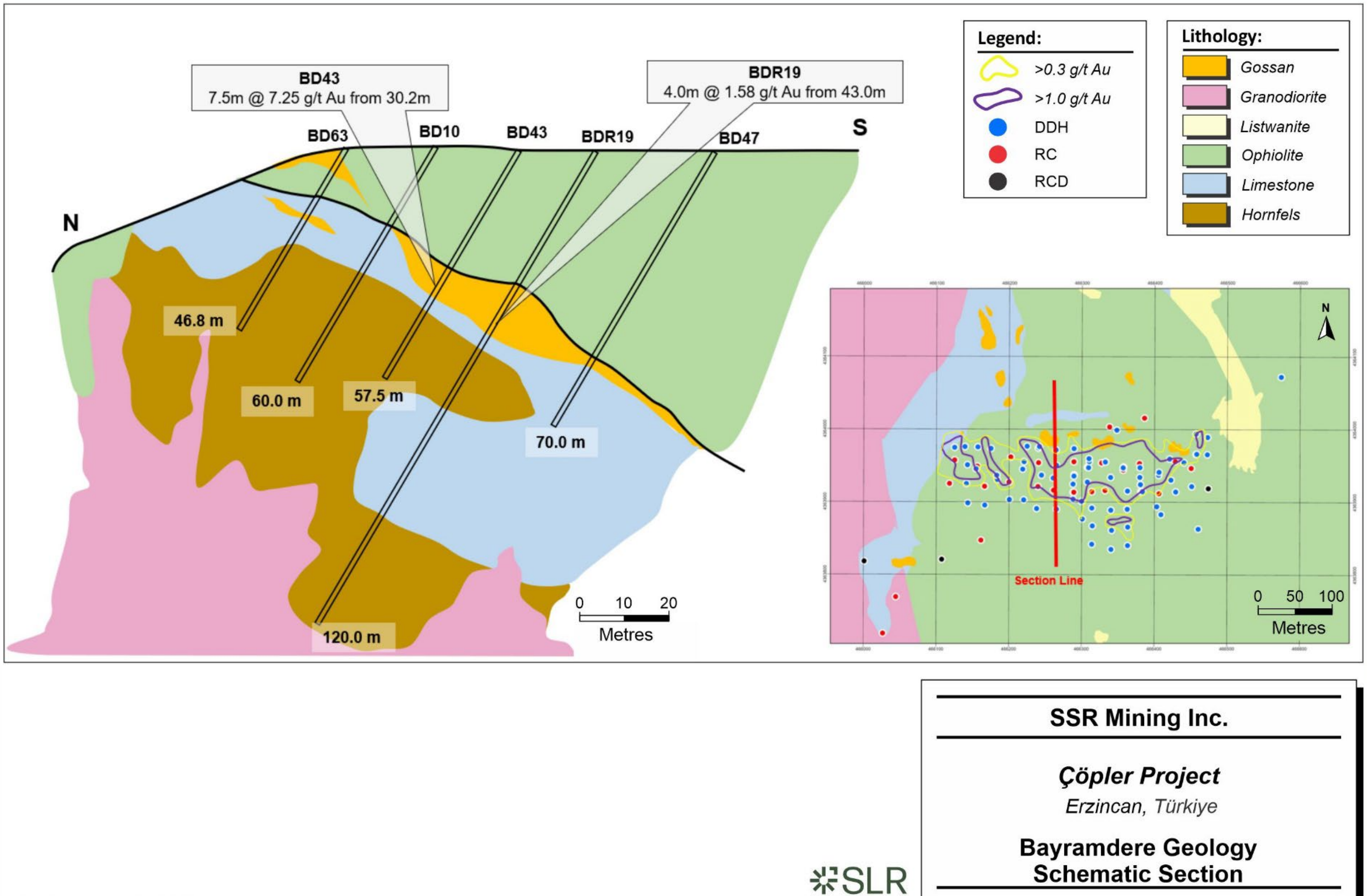
The Bayramdere deposit is thought to be the result of intrusive activity that generated suitable conditions for mineralization. A complex system of faults enabled emplacement of diorite intrusions and transport of metalliferous fluids associated with the mineralising system. Key to each structurally associated style of mineralization is the juxtaposition of ophiolite against limestone (±hornfels) to create the right geochemical conditions for the deposition of gold and other metals.

**Figure 6-9: Geological Map of the Bayramdere Deposit**




Source: Anagold, 2023.

**Figure 6-10: Bayramdere Geology Schematic Section**




*Source: Anagold, 2023.*

#### 6.3.3.3 Mineralization

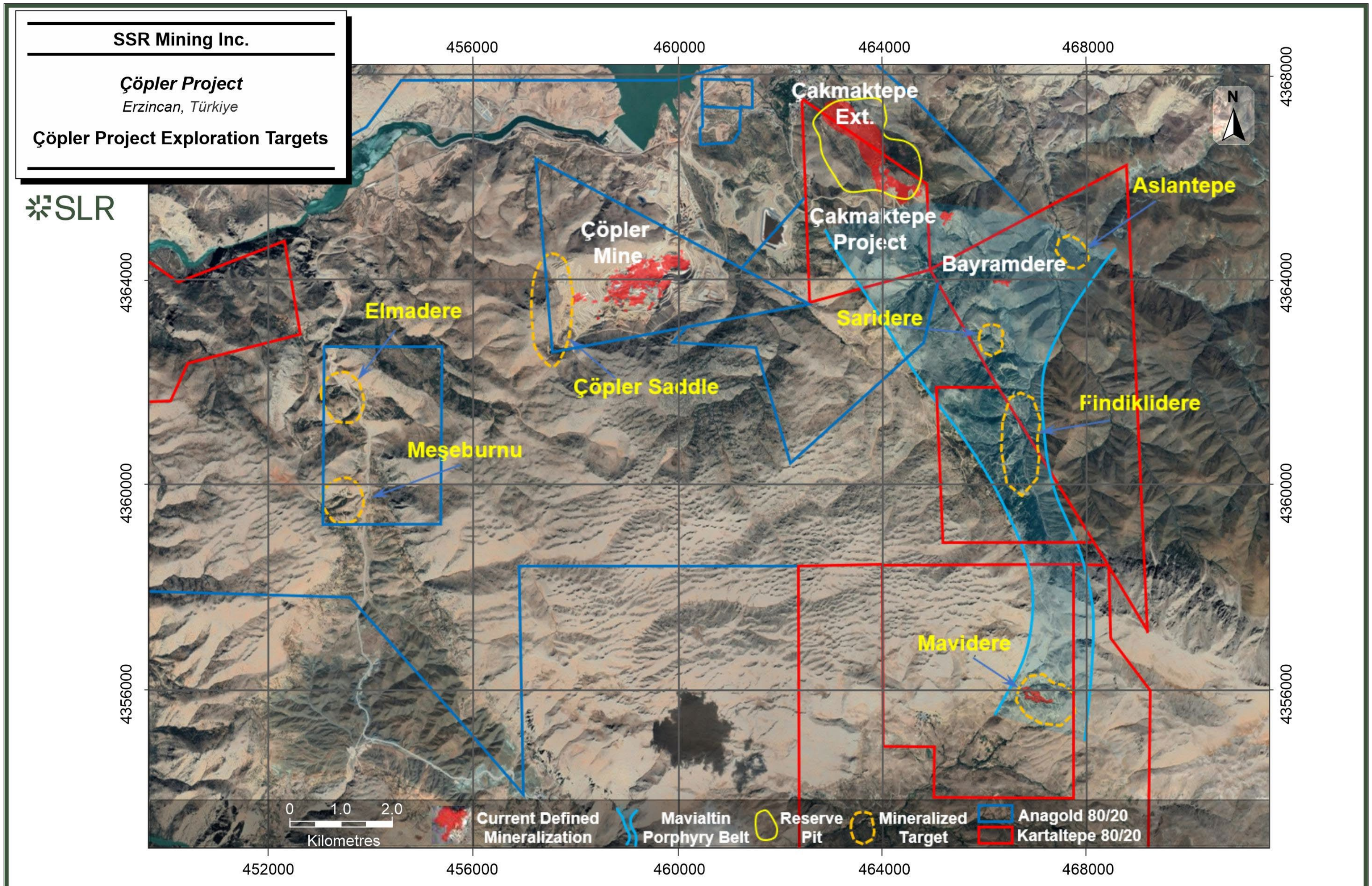
The Bayramdere mineralization is localized within three stacked, shallow-dipping zones that formed at the contact of limestone and ophiolite, with mineralization having replaced limestone along the contacts. The limestone / ophiolite contacts are low-angle thrusts, typified by limestone wedges within a dominantly ophiolite stratigraphy. Mineralization occurs within shallow iron-rich gossan horizons.

## 6.4 Regional Prospects and Targets

Since 2000, Anagold exploration programs within the Çöpler district have identified several new gold-dominant and copper-gold prospects. The gold-dominant regional prospects include the Çöpler Saddle and Elmadere. Copper–gold prospects are Aslantepe, Sarıdere, Findiklidere and Mavidere porphyries, located within the Mavialtin Porphyry Belt (Figure 6-11), and the early exploration stage Meşeburnu porphyry, located west of the Çöpler deposit.

Each of these prospects is discussed below.

**Figure 6-11: Çöpler Project Exploration Targets**




*Source: Anagold, 2023.*

### 6.4.1 Geology – Çöpler Saddle

The Çöpler Saddle prospect borders the western flank of the Çöpler mine. The Çöpler Saddle is associated with a shear zone defined as an arc-like structure that trends north–south for approximately two kilometres. Along the shear zone, the geology is dominated by limestone, marble, and hornfels units that are in turn intruded by small-scale microdioritic to granodioritic stocks. These lithologies were subjected to silica-clay alteration with iron oxide developments along the local structures as well as clay-pyrite alteration. At the south of the zone, silica is mainly observed as jasperoid lenses, of approximately two metres long and one metre wide, which occur along the hornfels and marble contacts. At the centre of the zone, less silica is observed and larger gossan-like mineralized iron oxide bodies have formed.

### 6.4.2 Geology – Meşeburnu and Elmadere

The Meşeburnu and Elmadere prospects (former Demirmağara project licence group) are located approximately seven kilometres southwest of the Çöpler deposit. The area is covered by ophiolites, limestone, and metamorphic rocks that are intruded by dioritic to granodioritic stocks. Three types of mineralization have been identified in the area:

- Gold-bearing skarn and jasperoid occurrences along limestone and granodiorite contacts.
- Epithermal gold mineralization developed along ophiolite, listwanite, and limestone structural contacts (referred to as Elmadere mineralization).
- Meşeburnu copper-gold porphyry mineralization.

### 6.4.3 Geology – Mavialtin Porphyry Belt Prospects

The Mavialtin Porphyry Belt is a structural corridor approximately 6–7 km wide and extending over approximately 20 km from the Çakmaktepe deposit in the north to the Mavidere porphyry deposit in the south. The Mavialtin Porphyry Belt contains the Mavidere, Findiklidere, Saridere, and Aslantepe porphyry copper-gold prospects.

#### 6.4.3.1 Geology – Mavidere

The Mavidere porphyry copper-gold mineralization is hosted by hornblende–biotite monzonite to monzogranite to granodioritic phases of a shallow porphyritic intrusive hosted by metamorphic and crystallised limestone. At the centre of the porphyry system, the intrusive phases were subjected to mainly potassic alteration with clay and minor sericite overprinting covering an area of approximately 800 m x 400 m. The porphyry system appears to continue underneath the moraine cover to the east and south.

#### 6.4.3.2 Geology – Aslantepe

The geology of the Aslantepe porphyry copper-gold prospect is dominated by ophiolites thrusted over Jurassic to Cretaceous limestone, both of which are intruded by dioritic to granodioritic stocks and dykes. The Aslantepe intrusives outcrop in a narrow corridor subjected to propylitic, potassic, and clay alteration. The potassic zone is characterised by well-developed intense quartz–sulfide stockwork veinlets with secondary biotite, K-feldspar, and magnetite.

#### 6.4.3.3 Geology – Sarıdere

The Sarıdere porphyry copper-gold prospect is covered by metamorphic limestone and ophiolite, which are in turn intruded by tonalitic to granodioritic stocks. The prospect was initially identified by stream sediment and soil anomalies. In 2018 and 2019, exploration activities identified potassic-altered porphyry intrusive outcrops covering an area of approximately 800 m x 500 m, with a phyllic alteration halo around the potassic zone of 4.3 km x 0.6 km.

#### 6.4.3.4 Geology – Fındıklıdere

The Findiklidere porphyry copper-gold prospect is covered by massive Jurassic to Cretaceous limestone, which has been over-thrusted by ophiolites on the eastern flank. These units were intruded by fine to medium-grained tonalitic to granodioritic intrusive stocks. The porphyry copper mineralization is characterised by well-developed stockwork quartz-magnetite-pyrite veins with copper. Peripheral iron-copper-gold skarns are observed within the limestone. In 2018, the geology, structure, and alteration were re-mapped to better understand the porphyry potential of the prospect which indicated that the porphyry mineralization was potentially continuing underneath the ophiolitic body to the southwest of the known porphyry mineralization.

## 6.5 Deposit Types

Porphyry copper-gold systems host some of the most widely distributed mineralization types at convergent plate boundaries, including porphyry deposits centred on intrusions; skarn, carbonate-replacement, and sediment-hosted gold deposits in increasingly peripheral locations; and high to intermediate-sulfidation epithermal deposits.

The alteration and mineralization in porphyry copper-gold systems are zoned outward from the stocks or dyke swarms, which typically comprise several generations of intermediate to felsic porphyry intrusions. Porphyry copper (± gold, ± molybdenum) deposits are centred on the intrusions, whereas carbonate wall rocks commonly host proximal copper-gold skarns, less common distal zinc-lead and/or gold skarns, and, beyond the skarn front, carbonate-replacement copper and/or zinc-lead-silver (± gold) deposits, and/or sediment-hosted (distal-disseminated) gold deposits. Peripheral mineralization is less conspicuous in non-carbonate wall rocks but may include base metal-bearing or gold-bearing veins and mantos (Sillitoe, 2010). Skarn deposits are typically hosted in mineralogically simple fine-grained clastic and carbonate sedimentary rocks. Skarn mineralogy and metal content is largely dependent on the crystallisation history and genesis of associated plutons (Meinert et al., 2005).

The Çöpler district is located at the edge of a convergent plate boundary. It is characterised by a complex structural history and is associated with intermediate intrusive and carbonate-rich host lithologies. As such, porphyry copper-gold systems and related styles of mineralization are appropriate models to be applied across the Çöpler district.

The Çöpler deposit consists of three major mineralization types that are closely associated with each other: low-grade sub-economic porphyry copper-gold-molybdenum mineralization characterised by well-developed alteration zones and stockwork quartz veins (Main Zone); intermediate sulfidation epithermal mineralization observed in the Manganese Zone as clusters of bright pink, banded, colloform rhodochrosite base metal sulfide veins and breccia lodes; and iron-gold (± copper) skarn with related carbonate replacement gold mineralization.

The setting, alteration mineralogy, and mineralization characteristics of the Manganese Zone are somewhat consistent with an intermediate sulfidation epithermal system, as defined in Hedenquist et al., (2000).

Exploration programs modeled on epithermal-style deposits have shown success in the Çöpler district. A multi-phase porphyry model with a barren trapping system and a possible mineralized porphyry underneath it is also applicable.

# 7.0 Exploration

## 7.1 Hydrogeological Data

SRK (2021) compiled and updated the Project conceptual hydrogeological model with new geological data, established a numerical model and used it to evaluate the hydrogeology of the Project area.

### 7.1.1 Existing Data Evaluation, Field Investigation, and Hydrogeology Conceptual Model

Within the regional hydrology area, lithological units are defined in three main classes according to their underground water transport and transmission properties. These units are:

- Impervious units.
- Low permeate units: such units contain some thin layers that are more permeable than other layers with small extensions and provide water through sources with a flow rate of less than 1 L/s.
- Conductive and very permeable units: Munzur Formation limestone and Quaternary alluvium units.

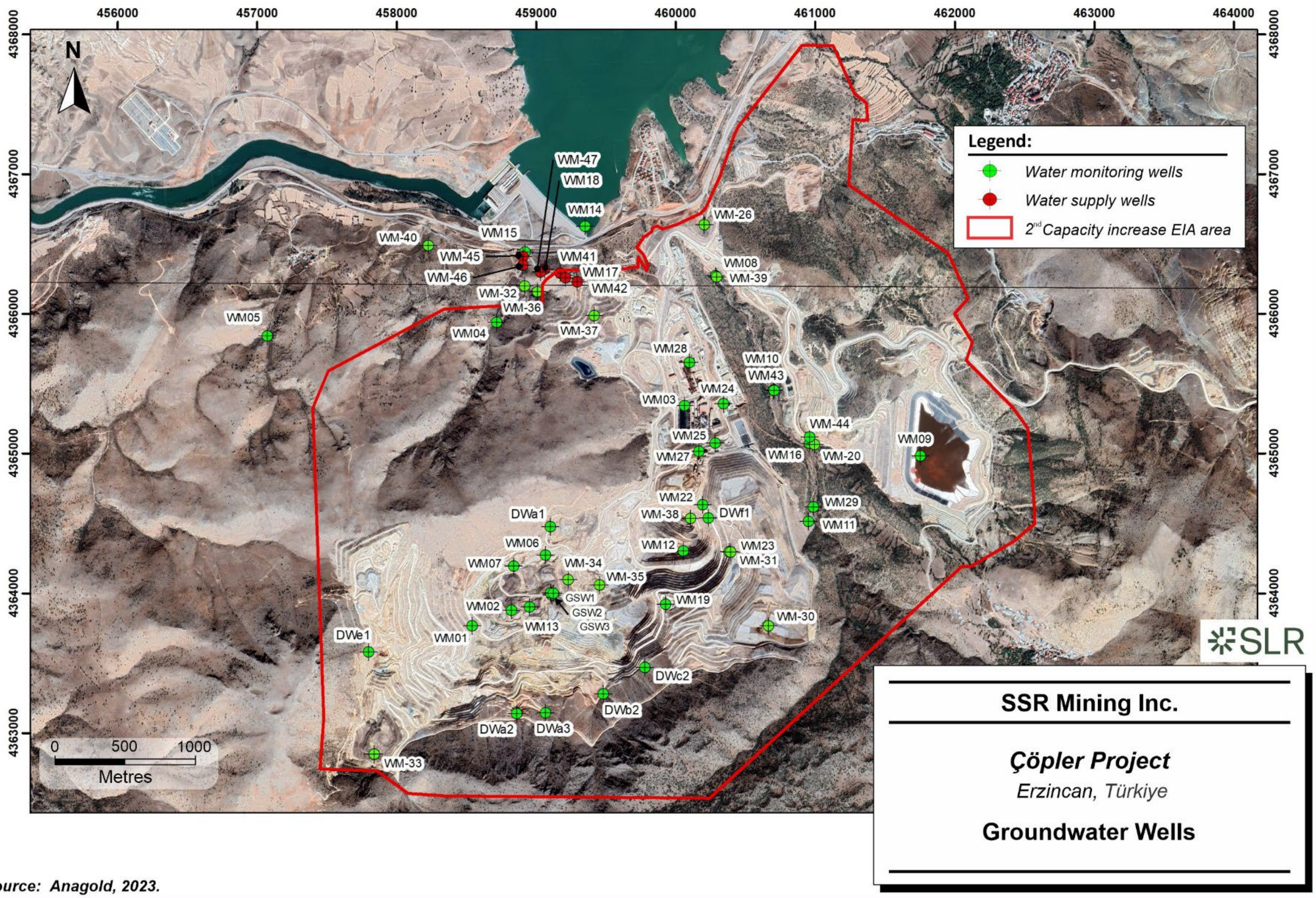
### 7.1.2 Well Installation

A total of 49 wells for groundwater observation and water supply purposes have been drilled. Twenty-one of the 49 are still active; the others have been decommissioned. Fourteen of these 21 are being used for observation and the remaining seven are used for water supply purposes.

A total of four geotechnical and hydrogeological test holes was completed for the Çöpler Expansion Pre-feasibility Studies in 2023.

The locations of the hydrogeology wells are presented in Figure 7-1.

**Figure 7-1: Groundwater Wells**




*Source: Anagold, 2023.*

Groundwater recharges from the infiltration of precipitation through secondary porosity in the bedrock terrain. Groundwater elevation data indicate that the flow direction is typically northward to the Karasu River through the Munzur limestone. During the resource drilling and subsequent monitoring well installation programs, perched groundwater conditions were reported above the clay-altered intrusions. The full extent and volume of perched groundwater is unknown, although Anagold anticipated that the perched groundwater is only present in restricted areas.

Groundwater elevations at the Çöpler Project range from 1,328.5 m at Well GMW-10 (southern end of the site) to 864.7 m at Well GMW-09 (northern end of the site). Observations of cavernous features (karst) during drilling and high-values of hydraulic conductivity from aquifer tests suggest an area of karst development in the limestone near the Karasu River, at boreholes GMW-09 and GMW-24. This was incorporated into the groundwater flow model as an area of high hydraulic conductivity near these wells and along the Sabırlı Fault.

## 7.2 Geotechnical Data

Geotechnical studies have been conducted since 2011. A summary of the work completed, including geotechnical recommendations, is presented in Section 13.1.

## 7.3 Çöpler Deposit Exploration

Exploration of the Çöpler deposit has been conducted by Anagold and its predecessors since September 1998. A summary of work completed to date is provided in Table 7-1.

**Table 7-1: Overview of Anagold Exploration at Çöpler Deposit**

| Year | Deposit | Exploration Type | Details |
|---|---|---|---|
| 1998–1999 | Çöpler | Surface Studies | Geological and reconnaissance mapping. Rock chip, grab, soil, channel, and stream sediment geochemical sampling. |
| 2000–2013 | Çöpler | Geophysics | Ground geophysical surveys including ground magnetic, complex resistivity / induced polarisation (IP), time domain IP, and controlled source audio-frequency magneto-telluric (CSAMT) surveys.<br>A regional helicopter-borne geophysical survey.<br>Acquisition of satellite imagery. |
| 2014–2016 | Çöpler | Drilling | Resource expansion and definition drilling |
| 2017-2020 | Çöpler | Geological and Structural Mapping | Kinematic interpretation of major structures. Define/confirm main faults and their relationships with mineralization. Structural pit mapping and analyse of ore triggering features. |
| 2017–2020 | Çöpler | Drilling | Oxide Resource expansion drilling and Resource definition drilling |
| 2021–2023 | Çöpler | Geophysics | Reprocessing of geophysical data |

### 7.3.1 Geological Mapping – Çöpler Deposit

Surface mapping and sampling have been undertaken over the life of the Project, culminating in detailed geological maps of the Çöpler valley, e.g. Figure 6-5. Geological mapping is used in support of exploration vectoring, exploration activities, infrastructure locations, mine planning, and environmental monitoring.

### 7.3.2 Geochemical Sampling – Çöpler Deposit

Owing to the long history of the Çöpler area, geochemical sampling techniques used for exploration purposes have been typically superseded by data from drilling and open pit mining. Current exploration combines the use of surface sampling methods (rock-chip, stream-sediment, and soils), following industry standard sampling and quality assurance and quality control (QA/QC), along with structural modeling and drilling (downhole geochemistry) to explore for mineralization. A total of 2,608 soil samples, 128 stream-sediment, and 4,959 rock-chip samples have been collected at Çöpler.

### 7.3.3 Geophysics – Çöpler District

Various ground and airborne geophysical surveys have been conducted at the Çöpler deposit as well as across the wider Çöpler district since mid-2000. Surveys carried out include ground magnetic, complex resistivity / induced polarisation (IP), time domain IP, and CSAMT surveys, as well as a regional helicopter-borne aeromagnetic survey that included the broader Çöpler district. Raw data from helicopter-borne aeromagnetic, ground-mag and IP/R surveys were re-processed in 2023 as part of a district-wide target generation program.

## 7.4 Greater Çakmaktepe Exploration

The Çakmaktepe deposit and surrounding mineralized zones were identified by stream sediment samples with elevated gold geochemistry. Drilling at Çakmaktepe started in 2012. Exploration activities began at the Çakmaktepe Ext deposit in 2017 and included geological mapping, geochemical sampling, and DD drilling programs.

Drilling at Çakmaktepe since 2019 has been designed to improve the Mineral Resources identified at Çakmaktepe North. Data collected to date include magnetic geophysical surveys, outcrop and bench wall mapping, rock and soil sampling, and both RC and DD drilling.

**Table 7-2: Overview of Anagold Exploration at Greater Çakmaktepe**

| Year | Deposit | Exploration Type | Details |
|---|---|---|---|
| 2000–2012 | Çakmaktepe | Surface Studies | Regional geological and reconnaissance mapping. |
| 2012–2019 | Çakmaktepe | Surface Studies | Geological mapping, rock chip, grab, soil, channel, and stream sediment geochemical sampling |
| 2015-2018 | Çakmaktepe Ext | Surface Studies | Geological mapping, rock chip, grab, soil, channel, and stream sediment geochemical sampling |

### 7.4.1 Geological Mapping – Greater Çakmaktepe

The first geological mapping study in the area was conducted in 2000. Surface mapping and sampling have been regularly undertaken over the life of the Project, culminating in detailed geological maps of Greater Çakmaktepe, shown in Figure 6-7. Geological mapping is used in support of exploration vectoring, exploration activities, infrastructure locations, mine planning, and environmental monitoring. Detailed lithology and structural mapping are currently ongoing on the benches exposed after production.

### 7.4.2 Geochemical Sampling – Çakmaktepe Deposit

Geochemical sampling programs, following industry standard sampling and QA/QC procedures, were initiated at Çakmaktepe in 2014 and included rock-chip and soil sampling. A total of 5,160 rock-chip and 2,249 soil samples have been collected from the Çakmaktepe deposit since 2014. The deposit has been fully covered with a 50 m x 50 m soil sampling grid. No rock-chip or soil samples were collected from 2021to 2023.

### 7.4.1 Geochemical Sampling – Çakmaktepe Ext Deposit

Geochemical sampling programs at Çakmaktepe Ext have included rock-chip/channel and soil sampling following industry standard sampling and QA/QC procedures. A total of 2,107 rock-chip/channel samples and 1,843 soil samples have been collected from the Çakmaktepe Ext deposit. No rock-chip or soil samples were collected from 2021 to 2023.

## 7.5 Drilling

Drill hole totals presented in this section include holes drilled for resource definition, geotechnical, and metallurgical purposes before the effective date October 31, 2023.

### 7.5.1 Drilling – Çöpler Deposit

The Çöpler deposit continues to be tested by reverse circulation (RC) and diamond core (DD) drilling. A total of 2,679 drill holes have been drilled for a total of 407,589.4 m drilled (Table 7-3 and Table 7-4).

Drill hole spacing at surface is at a nominal 50 m; however, in some areas, the drill spacing has been reduced to 25 m. Step-out drilling at the Çöpler deposit has defined most of the lateral boundaries of the mineralization.

Drilling since 2021 has focused on testing the main Au-bearing structures to improve geological and grade continuity to aid mineral resource definition and pit design. A total of 421 drill holes were drilled from 2022 to 2023 (Table 7-4). The drilling campaigns were designed to test push-back options of near-surface oxide mineralization for short-term production plans, infill existing drilling and test possible extensions. Moreover, model update, validation and de-risking drilling programs were carried out to increase the level of confidence in the Mineral Resources and the execution of near-mine development.

**Table 7-3: Drill Summary by Hole Type for Çöpler Deposit (2000–2023)**

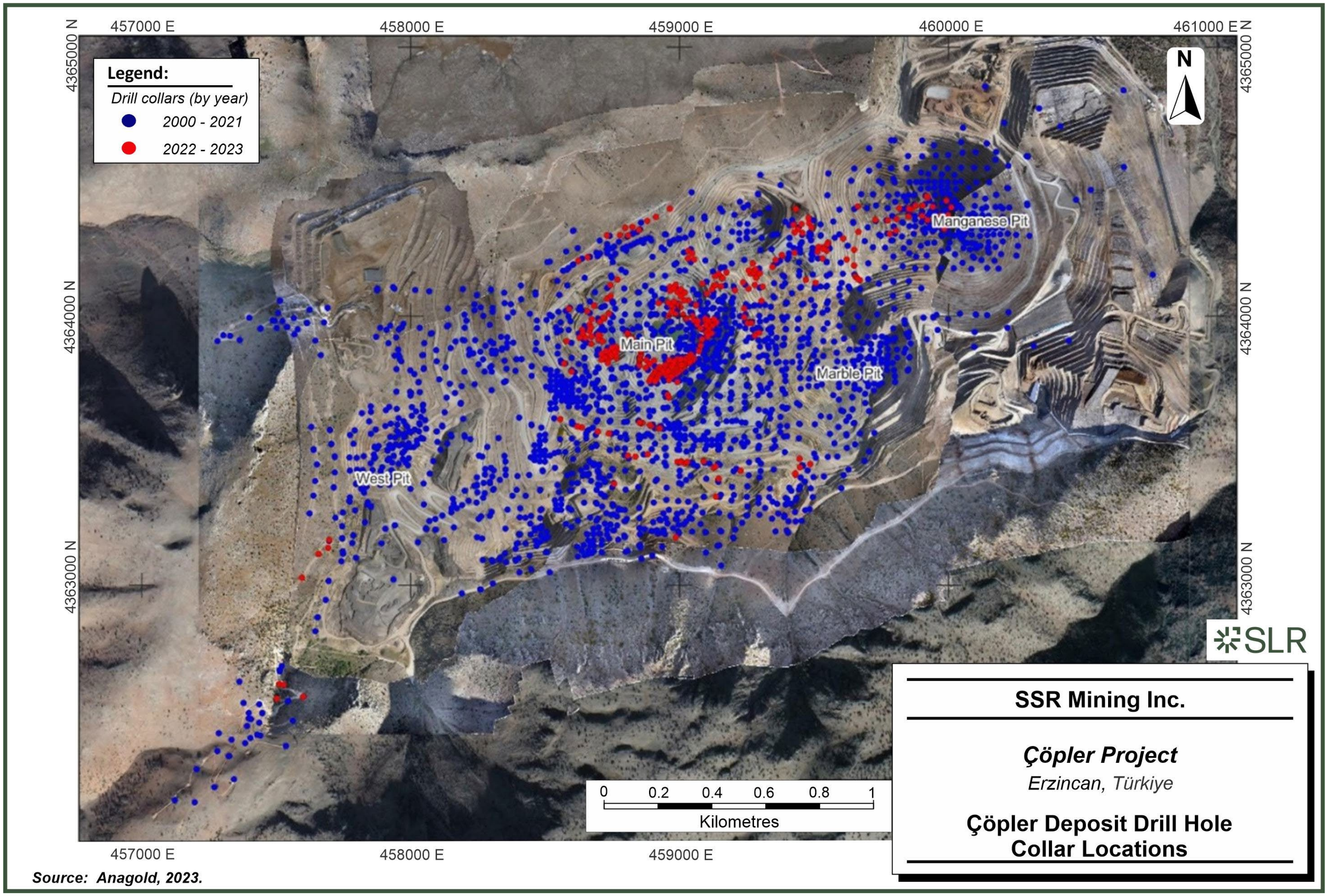
| Hole Type | Number of Holes | Metres Drilled | Minimum Hole Depth (m) | Average Hole Depth (m) | Maximum Hole Depth (m) |
|---|---|---|---|---|---|
| DD | 1,321 | 272,171.60 | 12.8 | 206.03 | 806.5 |
| RC | 1,358 | 135,417.80 | 8.0 | 99.71 | 270.5 |
| **Total** | **2,679** | **407,589.40** | **8.0** | **152.87** | **806.5** |

**Table 7-4: Drill Summary by Year for Çöpler Deposit**

| Year | Hole Type | Number of Holes | Metres Drilled |
|---|---|---|---|
| 2000 | DD | 4 | 971.25 |
| 2001 | DD | 10 | 2,253.45 |
| | RC | 33 | 4,168.60 |
| 2002 | DD | 31 | 6,575.45 |
| | RC | 1 | 120.00 |
| 2003 | DD | 33 | 2,975.70 |
| 2004 | DD | 11 | 1,218.45 |
| | RC | 207 | 9,866.50 |
| 2005 | DD | 24 | 4,776.40 |
| | RC | 171 | 28,673.70 |
| 2006 | DD | 15 | 1,967.60 |
| | RC | 92 | 12,823.00 |
| 2007 | DD | 75 | 16,613.30 |
| | RC | 125 | 16,998.50 |
| 2008 | DD | 14 | 4,053.00 |
| | RC | 41 | 4,904.00 |
| 2009 | DD | 25 | 6,178.50 |
| | RC | 33 | 4,441.50 |
| 2010 | DD | 12 | 1,879.10 |
| | RC | 1 | 144.50 |
| 2011 | DD | 117 | 29,618.80 |
| | RC | 160 | 18,615.00 |
| 2012 | DD | 145 | 50,290.40 |
| | RC | 120 | 13,879.50 |

| Year | Hole Type | Number of Holes | Metres Drilled |
|---|---|---|---|
| 2013 | DD | 125 | 33,005.80 |
| | RC | 53 | 4,545.00 |
| 2014 | DD | 16 | 1,846.00 |
| 2015 | DD | 40 | 5,752.90 |
| | RC | 70 | 6,759.00 |
| 2016 | DD | 0 | 0.00 |
| | RC | 94 | 2,194.00 |
| 2017 | DD | 41 | 3,370.50 |
| 2018 | DD | 108 | 10,674.40 |
| 2019 | DD | 62 | 7,607.70 |
| 2020 | DD | 131 | 23,029.40 |
| 2021 | DD | 68 | 18,491.80 |
| 2022 | DD | 96 | 15,440.60 |
| 2023 | DD | 118 | 23,581.10 |
| | RC | 157 | 7,285.00 |
| **Total** | **RC** | **1,358** | **135,417.80** |
| | **DD** | **1,321** | **272,171.60** |
| | **All Types** | **2,679** | **407,589.40** |

**Figure 7-2: Çöpler Deposit Drill Hole Collar Locations**




*Source: Anagold, 2023.*

### 7.5.2 Drilling – Greater Çakmaktepe Deposit

Since 2012, Anagold has drilled a total of 1,971 drill holes for a total of 292,544 m at Greater Çakmaktepe (Table 7-5 and Table 7-6). This includes 1,352 DD, 567 RC, and 52 drill holes with an RC pre-collar and diamond tail (RCD). All drilling since 2021 has been conducted at the Çakmaktepe Ext prospect. A total of 217 DD holes have been drilled from 2022 to the effective date of this report (Table 7-6).

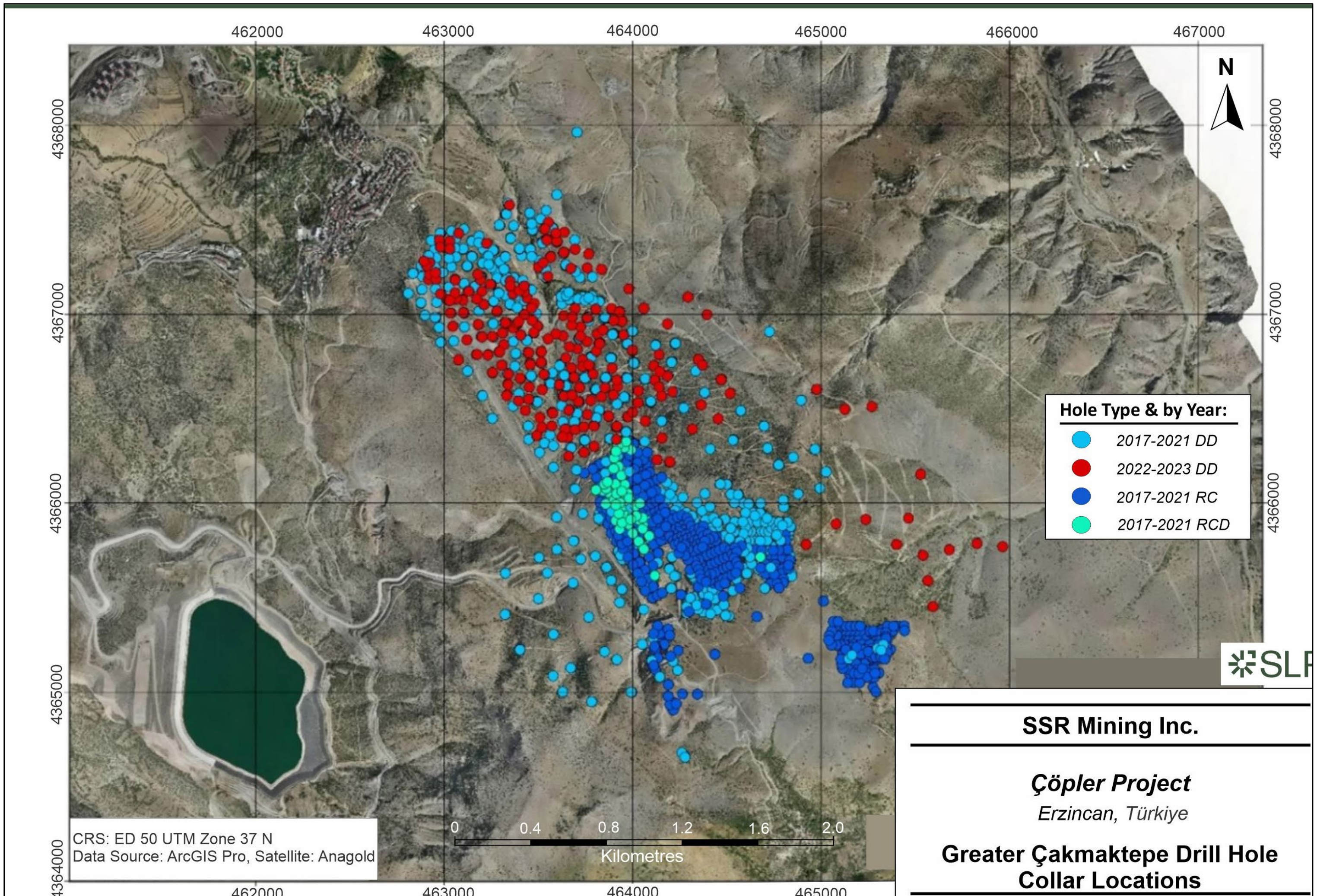
**Table 7-5: Drill Summary for Greater Çakmaktepe Deposit (2012–2023)**

| Hole Type | Number of Holes | Metres Drilled | Minimum Hole Depth (m) | Average Hole Depth (m) | Maximum Hole Depth (m) |
|---|---|---|---|---|---|
| DD | 1,352 | 219,822.80 | 11.6 | 164.31 | 520.1 |
| RC | 567 | 58,660.50 | 10.0 | 97.82 | 221 |
| RCD | 52 | 14,060.70 | 220.0 | 270.39 | 358.5 |
| **Total** | **1,971** | **292,544.00** | **10.0** | **177.5** | **520.1** |

**Table 7-6: Greater Çakmaktepe 2012–2023 Drill Summary**

| | Çakmaktepe | | Çakmaktepe Ext. | | Greater Çakmaktepe | |
|---|---|---|---|---|---|---|
| Year | Number of Holes | Drilled Metres | Number of Holes | Drilled Metres | Number of Holes | Drilled Metres |
| 2012 | 21 | 2,287.50 | | | 21 | 2,287.50 |
| 2013 | 7 | 962.00 | | | 7 | 962.00 |
| 2014 | 162 | 15,976.70 | | | 162 | 15,976.70 |
| 2015 | 279 | 25,506.20 | | | 279 | 25,506.20 |
| 2016 | 501 | 67,072.20 | | | 501 | 67,072.60 |
| 2017 | 116 | 9,366.20 | 9 | 1,374.10 | 125 | 10,740.30 |
| 2018 | | | 91 | 14,216.40 | 91 | 14,216.40 |
| 2019 | 75 | 5,919.40 | 133 | 27,821.20 | 208 | 33,740.60 |
| 2020 | 62 | 8,983.70 | 147 | 32,393.30 | 209 | 41,377.00 |
| 2021 | | | 151 | 33,004.20 | 151 | 33,004.20 |
| 2022 | | | 128 | 25,432.10 | 128 | 25,432.10 |
| 2023 | | | 89 | 22,228.40 | 89 | 22,228.40 |
| **Total** | **1,223** | **136,073.90** | **748** | **156,469.70** | **1,971** | **292,544.00** |

**Figure 7-3: Greater Çakmaktepe Drill Hole Collar Locations**




*Source: Anagold, 2023.*

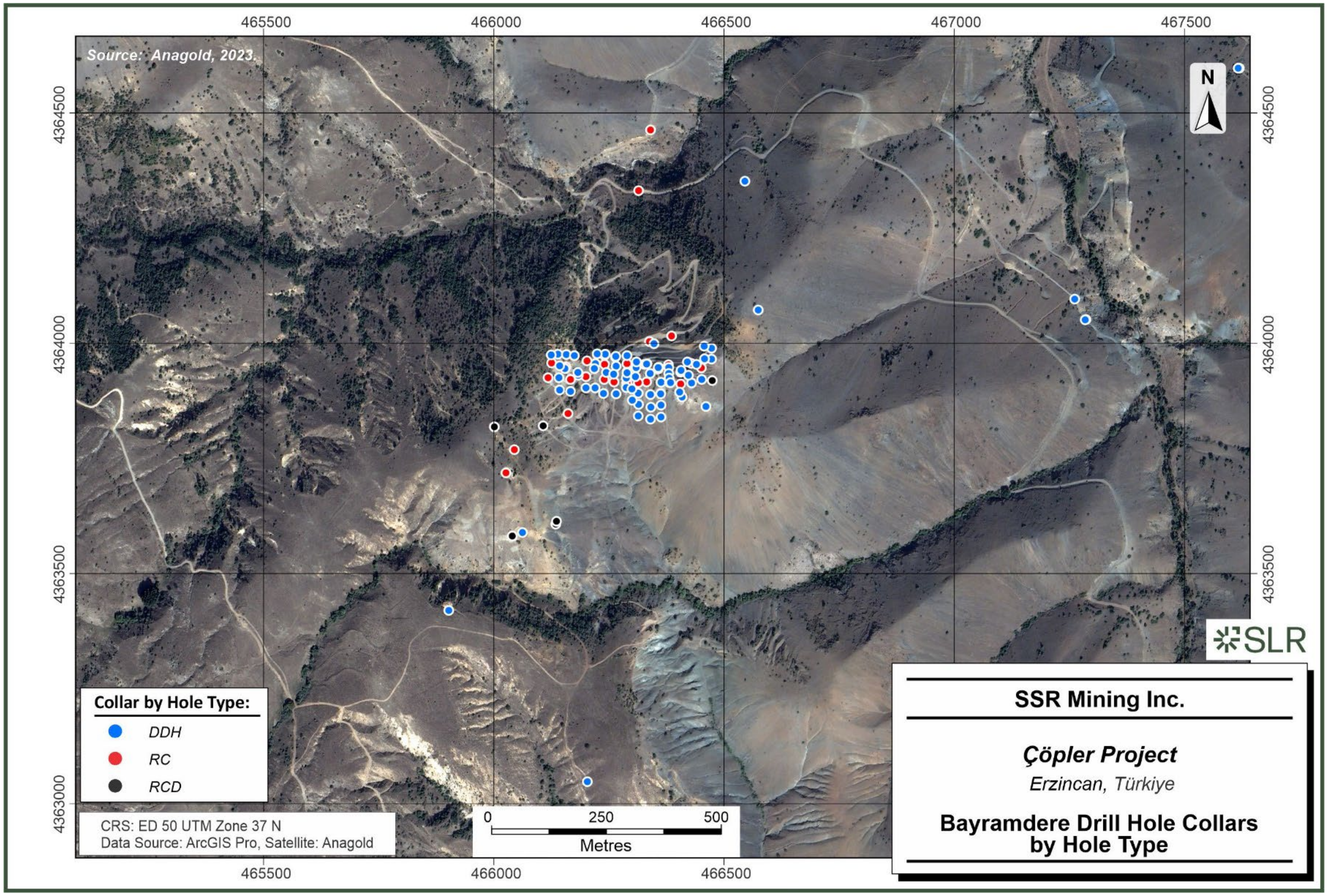
### 7.5.3 Drilling – Bayramdere

Drilling at the Bayramdere Deposit began in 2007. A total of 120 resource definition, geotechnical, and metallurgical holes have been drilled. This includes both RC and DD holes for a total of 11,189 m drilled (Table 7-7; Figure 7-4). One hydrology hole to test groundwater depth has also been drilled. No drilling has been conducted at Bayramdere since the end of 2020.

**Table 7-7: Drill Summary for Bayramdere**

| Hole Type | Number of Holes | Metres Drilled | Minimum Hole Depth (m) | Average Hole Depth (m) | Maximum Hole Depth (m) |
|---|---|---|---|---|---|
| DD | 81 | 6,752 | 19.7 | 83.5 | 301 |
| RC | 32 | 2,946 | 55 | 92.1 | 173 |
| RCD | 7 | 1,491 | 155.5 | 213 | 242.5 |
| **Total** | **120** | **11,189** | **19.7** | **93.3** | **301** |

**Figure 7-4: Bayramdere Drill Hole Collars by Hole Type**



### 7.5.4 Grid Coordinate Systems

The Çöpler Project uses the European 1950 (E1950) datum coordinate system; this is a Turkish Government requirement.

The Çöpler Project is in UTM6 zone 37N of the E1950 coordinate system. Until 2014, drill hole collars were surveyed by the mine surveyors in the E1950 UTM3 coordinate system and then converted to E1950 UTM6 before making them available to other personnel. The conversion from UTM3 to UTM6 was achieved by subtracting 1,746 m (–1,746 m) from the UTM3 northing coordinate and adding 17 m (+17 m) to the UTM3 easting coordinate. There is no rotation, scaling, or change in elevation between the E1950 UTM3 and E1950 UTM6 systems. Since March 2014, collar coordinates have been and are being collected in the E1950 UTM6 coordinate system.

## 7.6 Sample Collection

### 7.6.1 Reverse Circulation Drilling Sample Collection

RC drilling was completed with a 4.5 inch to 4.75 inch (11.4 cm to 12.0 cm) diameter down-the-hole hammer drill rig between 2000 and 2015. RC samples were collected every one metre from the cyclone underflow in large, reinforced plastic bags. The samples were then split using a Jones splitter.

Between 2015 to 2023, RC drilling has been completed with a nominal 5.25 inch face sampling hammer with centre sample return to a rig-side mounted sampling system. The sampling system included a cyclone, sending one-metre samples through a rotary cone splitter. RC samples, weighing 2 kg to 5 kg, were collected in calico or cloth bags for analysis. All sample bags are clearly numbered and labelled with the drill hole name and sample number.

A representative sample from every metre of drilling is sieved and placed in a numbered chip tray for logging and future record.

RC drilling has been generally used above the water table.

### 7.6.2 Diamond Drilling Sample Collection

Up until 2017, diamond drilling at the Project was generally PQ or HQ diameter. Although NQ diameter is not generally preferred, it is used in cases of ground-related problems. Approximately 90% of the DD core drilled at Çöpler and Çakmaktepe is HQ.

PQ core has a nominal diameter of 85 mm, HQ core has a nominal diameter of 63.5 mm, and NQ has a nominal size of 47.6 mm.

Of the more recent drilling at Çakmaktepe Ext, approximately 60% was completed with HQ core, and the remainder was mostly PQ-sized core. A few drill holes early in at Çakmaktepe Ext were NQ core.

Drill core is boxed at the rig by the driller and transported to the sample preparation facility on site for logging by Anagold exploration staff.

### 7.6.3 Drill Hole Logging and Data Collection

RC chip samples are collected by field staff for review by the logging geologist. Similarly, core samples are metre-marked by field staff in preparation for the logging geologist.

Drill core is subjected to detail logging using Anagold geological codes and logging formats. Information captured includes lithology, structure, alteration, mineralization, and geotechnical data on veining, joint frequency, and joint sets. Since 2017, drill core has also undergone a detailed geotechnical logging process including a detailed ‘mining rock mass rating’ to ‘rock mass rating’ system. In addition, core samples are collected every 10 m to undertake point load IS50 testing to determine uniaxial compressive strength (UCS).

Until September 2019, all geological data were recorded onto hard-copy logs and then transcribed into text files, using data-loading templates, ready for loading into Maxwell Datashed. Since September 2019, hard copy logs have been replaced with data loading templates on touchpads with direct links to the company server. Files located on the server are uploaded into Datashed regularly following appropriate checking of the data entry.

As of May 2023, Resource Development migrated all the data from Maxwell Datashed to Seequent Mx Deposit. Logging is currently carried out directly in Mx Deposit.

### 7.6.4 QP Opinion

The RSC QP is of the opinion that the drilling and sampling procedures adopted at Çöpler and Greater Çakmaktepe are fit for the purpose of resource classification in high-confidence categories and generally consistent with industry common practices. The drilling spacing is sufficiently dense to demonstrate grade and geological continuity with sufficient confidence for the Inferred, Indicated and measured Classifications. Drilling samples were collected by trained personnel and the process was supervised by suitably qualified geologists.

The RSC QP is of the opinion that the samples are representative of the source materials, and there is no evidence that the sampling process introduced statistically significant bias.

# 8.0 Sample Preparation, Analyses, and Security

## 8.1 Sample Preparation

### 8.1.1 Diamond Drilling (DD) Sample Preparation

Diamond drill samples collected prior to 2012 were prepared at ALS İzmir, an ISO-9001:2008 certified facility in Izmir, Türkiye. From late-2012 through to the end of 2013, pulp samples weighing approximately 150 g were sent to ALS Vancouver an ISO/IEC 17025:2005 accredited laboratory for precious and base metal assay methods, located in Vancouver, Canada. All samples in 2014 were generated and analyzed by ALS İzmir. From 2015 to 2016, samples were sent to the SGS laboratory, located in Ankara, Türkiye (SGS Ankara), for preparation and assay. SGS Ankara is certified to ISO 9001:2008 and OHSAS 18001. Since 2017, ALS İzmir has been used as the main laboratory. All laboratories are independent of SSR.

Cut core samples were prepared by laboratory technicians at ALS İzmir. The DD samples were crushed to 70% passing <2 mm (CRU-31, PREP31BY), split by a Body rotary splitter (PREP-31BY), before being pulverized to 85% passing <75 µm (PUL-32). Duplicate (coarse crush) samples were collected by a rotary splitter (SPL-22), and pulp duplicates were collected by riffle splitter.

### 8.1.2 Reverse Circulation Sample Preparation

RC samples collected prior to 2012 were prepared at ALS İzmir. From late 2012 through to the end of 2013, pulp samples weighing approximately 150 g were sent to ALS Vancouver. All samples in 2014 were generated and analyzed by ALS İzmir. From 2015 to 2016, samples were sent to SGS Ankara for preparation and assay. Since 2017, ALS İzmir has been used as the main laboratory.

Once at the laboratory, samples underwent fine crushing (70% passing <2 mm; ALS method code CRUI-31). The crushed samples were riffle split (ALS method code: SPL-21) before being pulverized to 85% passing <75 mm (ALS method code: PUL-32).

## 8.2 Sample Analysis

The sample analysis methodology from 2004 to 2023 is summarized in Table 8-1. Anagold is independent of all laboratories used to analyze samples.

**Table 8-1: Summary of Sample Analysis Methods Over Time**

| Date | Laboratory | Assay Methodology |
|---|---|---|
| 2004–2014 | ALS Vancouver | Au-AA25: 30 g fire assay (FA) with atomic absorption spectroscopy (AAS) finish. Lower detection limit: 0.01 g/t Au. Upper detection limit: 100 g/t Au.<br>Over-limit samples were re-analyzed using the gravimetric method Au-GRA21.<br>ME-ICP61: Additional 33 elements analyzed including Ag, Cu, Pb, Zn, and Mn. Involves a four-acid (perchloric, nitric, hydrofluoric, and hydrochloric acid) digestion (4A digest), followed by inductively coupled plasma-atomic emission spectroscopy (ICP-AES). |

| Date | Laboratory | Assay Methodology |
|---|---|---|
| 2015 | SGS Ankara | FAA303: 30 g FA with ICP-AES finish. Lower detection limit: 0.01 g/t Au. When Au grades were detected above 3 g/t Au, method FAG303 using a gravimetric finish was added.<br>ICP40B: Additional 36 elements analyzed by 4A digest followed by inductively coupled plasma-optical emission spectroscopy (ICP-OES). |
| 2016–2019 | ALS İzmir | Au-AA23: 30 g FA followed by AAS. Lower detection limit: 0.01 g/t Au. Upper detection limit: 10 g/t Au. Over-limit samples were re-analyzed using Au-GRA21. |
| 2019–present | ALS İzmir | Au-AA24: 50 g FA with AAS finish.<br>ME-IR08: Total carbon (C) and sulfur (S) concentrations were measured by induction furnace finished by infrared (IR) spectroscopy. A subsample was also analyzed for 33 elements by 4A digest with ICP-AES finish.<br>Overlimit samples for Au, Ag or Cu were re-analyzed by FA with gravimetric finish (Au-GRA22), hydrofluoric nitric perchloric digestion with hydrochloric acid leach with ICP-AES finish (Ag-OG62), or four acid digestion and ICP finish (Cu-OG62), respectively. |

## 8.3 Quality Assurance and Quality Control

The quality assurance and quality control (QA/QC) program consisted of a combination of QC sample types (duplicates, blanks and certified reference materials (CRMs)) that are used to monitor different aspects of the sample preparation and assaying process. Duplicate samples were used to monitor preparation, assay precision, and grade variability as a function of sample homogeneity and sample preparation or laboratory error. Blank material was used to assess contamination or sample-cross contamination during sample preparation and to identify special-cause variation at the laboratory, to identify issues with specific batches, and determine analytical biases.

Field duplicates have historically been submitted at a nominal rate of 1-in-40 samples. In 2015, the field duplicate insertion rate was increased to 1-in-20. Since 2017 for DD samples, duplicate samples have only been collected as laboratory coarse crush (second-split) duplicates, instead of as first-split (core-split) duplicates. From Q3 2023, duplicate samples have been collected as field duplicates. If the cores are PQ diameter, duplicate samples are quartered, and if they are HQ diameter, they are halved. In addition, duplicate samples from Çöpler are now taken at a rate of 1-in-5, from mineralized zones only.

Blank samples have been inserted routinely into all sample batches. Prior to 2015, blank pulp samples were used; however, in 2015, the blank samples were switched from pulp to a coarse quartz material to allow monitoring of sample contamination from crushing and pulverising to analysis. The first sample in a drill hole was typically a blank, after which blanks were inserted into the sample batch at a nominal rate of 1-in-60 samples until 2015. The insertion rate was updated in 2015 to 1-in-30 samples. As of 2020, blank sources have been increased to two in 30 samples and coarse blanks prepared by ALS and Bureau Veritas Laboratories have started to be used. Blanks are inserted randomly to provide an overall 15% insertion rate.

CRMs have historically been inserted into sample submissions at a nominal rate between 1-in-30 and 1-in-20. The frequency was increased from 3% to 5% in 2015. Several different CRMs have been selected for use at varying Au and Cu grades over the life of the Project. Starting from 2020, CRM insertion has been random at an average rate of 5%. CRMs used have various grade ranges as oxide and sulfide are used according to their Au, Cu, and Ag contents. While CRMs from Rocklabs and Geostats Pty Ltd were used between 2012 and 2017, CRMs provided by OREAS have been preferred since 2018.

RSC has independently reviewed standard operating procedures (SOPs) and quality control data relevant to the Project area. This review focused on processes that could have affected the quality of the final drill hole dataset that is used in the 2023 Mineral Resource estimation. The processes and components are sub-divided into those aspects that are relevant to the quality of the estimation:

- Location of data points (collar surveys and downhole surveys)
- Density data
- Grade data

A final data quality determination is made for all the deposits in section 8.3.4.

### 8.3.1 Data Quality Objective

Every data collection process implicitly comes with expectations for the accuracy and precision of the data being collected. Data quality can only be discussed in the context of the objective for which the data is being collected. In the minerals industry, the term ‘fit for purpose’ is typically used to convey the principle that data should suit the objective. In the context of data quality objectives (DQOs), fit for purpose could be translated as ‘meeting the DQO’.

The Çöpler Project deposits vary in stage between advanced exploration to mining. For all deposits described in this section, data should be of a quality that is ‘fit for the purpose of classifying at an Indicated Mineral Resource classification in accordance with the CRIRSCO-code affiliated global guidelines of classifying Mineral Resources.

### 8.3.2 Quality Assurance

Quality assurance (QA) is about error prevention and establishing processes that are repeatable and self-checking. This can be achieved using technically sound, simple, and prescriptive SOPs and management systems.

RSC has reviewed SSR’s SOPs. A summary of RSC’s audit is presented in Table 8-2. For each part of the sampling, preparation and analytical process, a comment on the expected associated risk with respect to resource classification is provided. For each category, RSC determined whether the following best practices were included:

- Processes are documented in an SOP and represent good practice.
- The SOP includes clear details on quality control (QC) measures.
- The SOP includes clearly defined data quality objectives.

**Table 8-2: Summary of QA and SOP Review**

| Category | Availability of SOP | QC Measures in SOP | Clear DQO in SOP | Summary of Process/Comments | QA Risk Factor |
|---|---|---|---|---|---|
| Location | Yes | Yes | Marginal | Collar location data are collected using | Low |

| Category | Availability of SOP | QC Measures in SOP | Clear DQO in SOP | Summary of Process/Comments | QA Risk Factor |
|---|---|---|---|---|---|
| | | | | differential GPS. Site confirmed that QC procedures have been implemented since 2021. | |
| Density | Yes | No | Marginal | Standard industry water-immersion practice. Risk of selection bias due to non-fractured and non-deformed core. No QC procedures (duplicates measurements, standard weights) in SOP; however, site confirmed that QC procedures have been implemented since 2021. | Low-moderate |
| Diamond: Primary Sampling | Yes | Marginal | Marginal | The primary sample is collected at the drill bit. The SOP does not contain clear guidance on how to manage drilling and improve sample recovery. | Low-moderate |
| Diamond: First Split | Yes | No | Marginal | Standard industry markup and cutting practice. No core-split duplicates were collected during the review period. RSC recommended resuming the collection of core-split duplicates, which was commenced in Q3 2023. | Low |
| RC: Primary Sample | Yes | Marginal | Marginal | The SOP notes that "issues with sample quality should be discussed with the driller, as they may be related to poor drilling conditions or other problems"; however, no further commentary on how to make decisions or improvements is provided. | Low-moderate |
| RC: First Split | Yes | Not specified in SOP (but | No | The first split takes place on-site when the RC | Low |

| Category | Availability of SOP | QC Measures in SOP | Clear DQO in SOP | Summary of Process/Comments | QA Risk Factor |
|---|---|---|---|---|---|
| | | duplicates are collected) | | chip material is passed through the cyclone and over a conical splitter to generate a 2 kg to 5 kg sample. Wet samples are not split and are instead speared. | |
| Second Split | No | No SOP but QC does occur at laboratory | n/a | The second splitting process takes place at the laboratory after the coarse crush when a sub-sample is collected for pulverization. QA follows laboratory best practices and industry standard procedures. | Low |
| Third Split | No | No SOP but QC does occur at laboratory | n/a | The third splitting process (pulp scoop/spoon) takes place at the laboratory after pulverization when a sub-sample is collected for analysis. QA follows laboratory best practices and industry standard procedures. | Low |
| Analytical | No | No SOP but QC does occur at laboratory | n/a | SSR uses ISO-certified laboratories that follow industry best practices for its analytical analyses. | Low |

### 8.3.3 Quality Control

The purpose of quality control (QC) is to detect and correct errors while a measuring or sample-collection system is in operation. The outcome of a good QC program is that it can be demonstrated that errors were fixed during operation and that the system delivering the data was always in control. Together with good QA, it ensures that the quality objective is met.

Good QC is achieved by inserting and constantly evaluating checks and balances. These checks and balances can be incorporated at every stage of the sample process (location, primary sample collection, preparation, and analytical phases) and, if in place, should be monitored during data collection, allowing the operator to identify and fix errors as they occur.

#### 8.3.3.1 Çöpler

QC data are available for diamond core primary sampling, diamond splitting, RC second split samples, and the analytical process. No QC data are available for collar location, downhole surveys, density, primary RC sampling (RC sample weights), diamond first-split (core-split), or third-split (pulp repeats).

A brief summary of RSC's QC data review is provided in Table 8-3 and several associated figures are presented in Figure 8-1 through Figure 8-5.

**Table 8-3: Summary of Çöpler QC Review**

| Category | QC Method | Comments and Conclusion |
|---|---|---|
| Diamond: Primary Sampling | Consistency can be monitored by reviewing core recovery. | While there are some intervals with significant core loss, no trends are observed (Figure 8-1). There was sufficient control, at the scale of the entire drilling period supporting the resources. |
| Diamond: Second split | Consistency can be monitored by relative difference of second-split (coarse crush) duplicates. | The splitting process was relatively consistent except in January 2023 and October 2023 (Figure 8-2). In January 2023, the variance noticeably increased in both Ag and Cu; however, these are within tolerance limits. |
| RC: First Split | Consistency can be monitored by relative difference of first-split (cone-split) duplicates. | Mostly in control; no trends or step changes observed (Figure 8-3). Acceptable consistency and suitable to support mineral resource estimations. |
| Analytical | Consistency can be monitored by CRMs and blanks (e.g. Figure 8-4, Figure 8-5). Unwanted, *special*-cause variation (as opposed to "*common*-cause variation") can be assessed for each CRM using statistical process control plots (SCPs). When a blank or CRM fails, Anagold requests reanalysis for the interval from the previous to the next CRM. If the distance between the previous and next QC sample is less than 20 samples, this interval is increased to 20 samples.<br>RSC reviewed past CRM performance on SCPs created using the process mean and the CRM-certified standard deviation. Westgard rules 1(3s), 2(2s), 4(1s), R(4s), 7X, 6T, J-Chart and 14O (Westgard et al., 1981) were used to identify possible transgressions.<br>CRM results were plotted on a heatmap to provide a holistic review and identify periods where multiple transgressions occurred across various CRMs. | RSC's review of analytical results of blanks inserted in the sample stream indicates all Au results were below the limit of quantification and therefore Au contamination was not an issue (Figure 8-4).<br>The review of the Au and Cu CRM heat maps using RSC's in-house QC tool does not reveal any significant periods of special cause variation across multiple CRMs.<br>Therefore, the laboratory was sufficiently in control and provided consistent and fit-for-purpose data. |

**Figure 8-1: Diamond Core Recovery at Çöpler since January 2021**

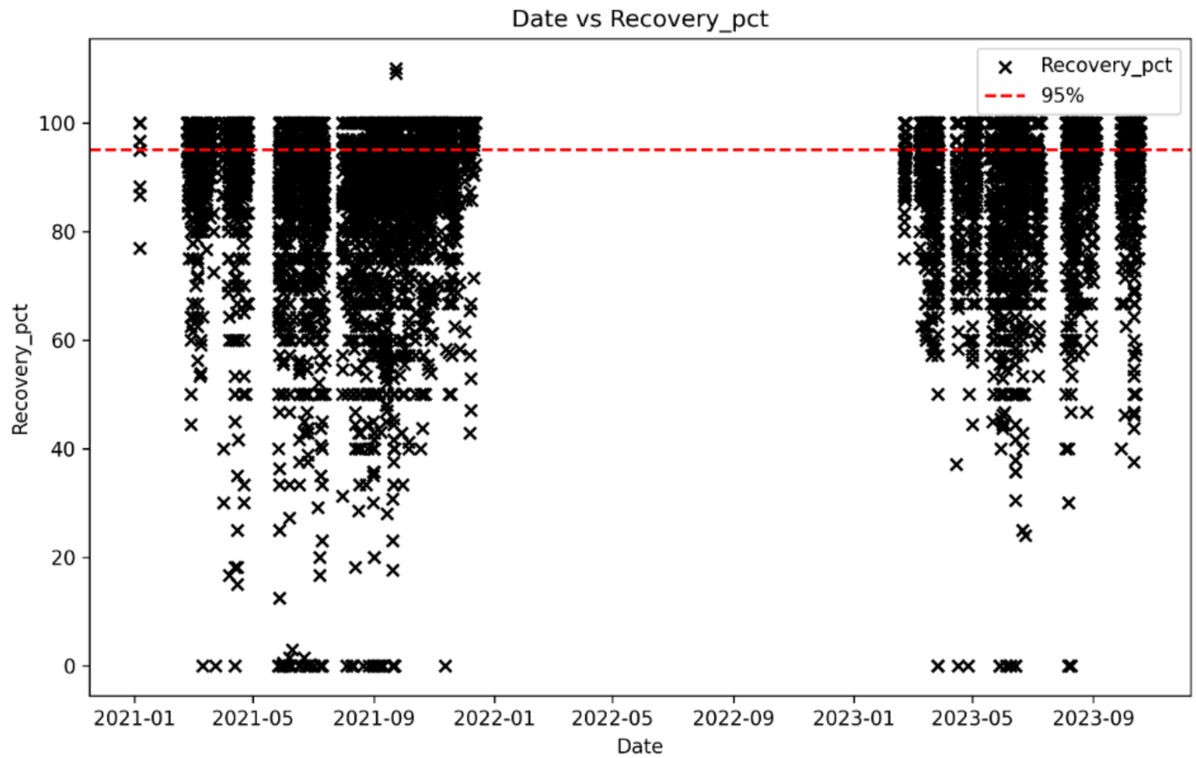
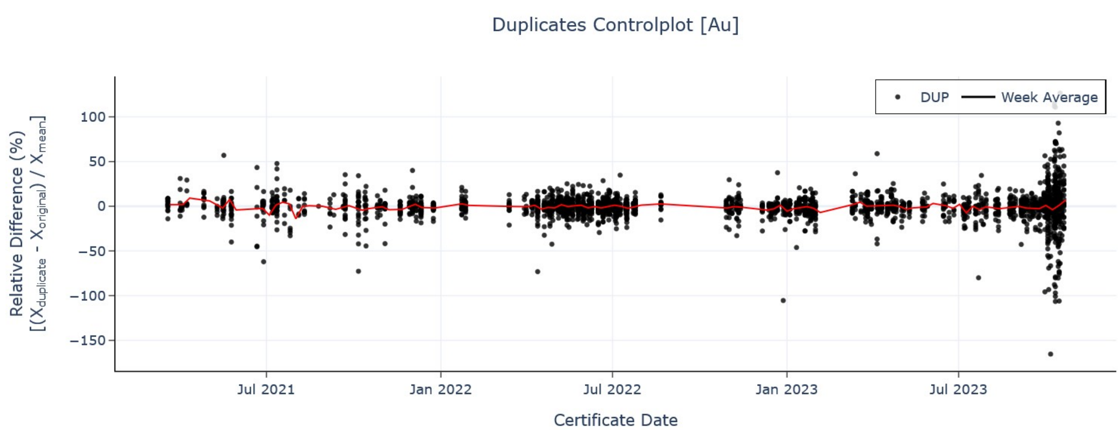
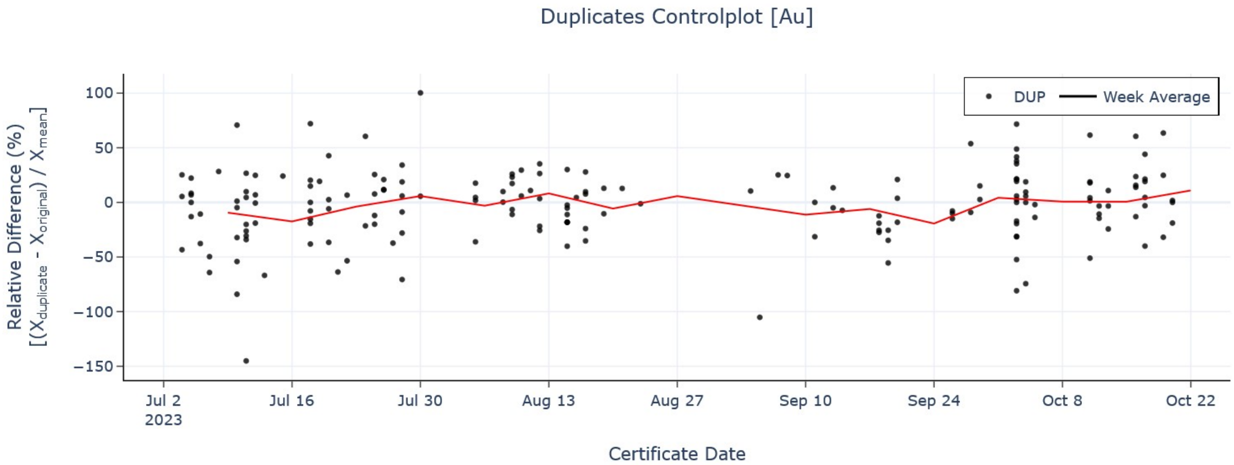



**Figure 8-2: Relative Difference Plot for Çöpler DD Second Split (2021–2023)**




Notes: The Relative Difference (RD) plot illustrates the relative difference in gold grades between the original and duplicate DD second split samples against date.

**Figure 8-3: Relative Difference Plot for Çöpler RC First Split (2023)**




Notes: The RD plot illustrates the relative difference in gold grades between the original and duplicate RC first split samples against date.

**Figure 8-4: Çöpler Blank Analyses for Au versus Analysis Date (ALS), 2021–2023**

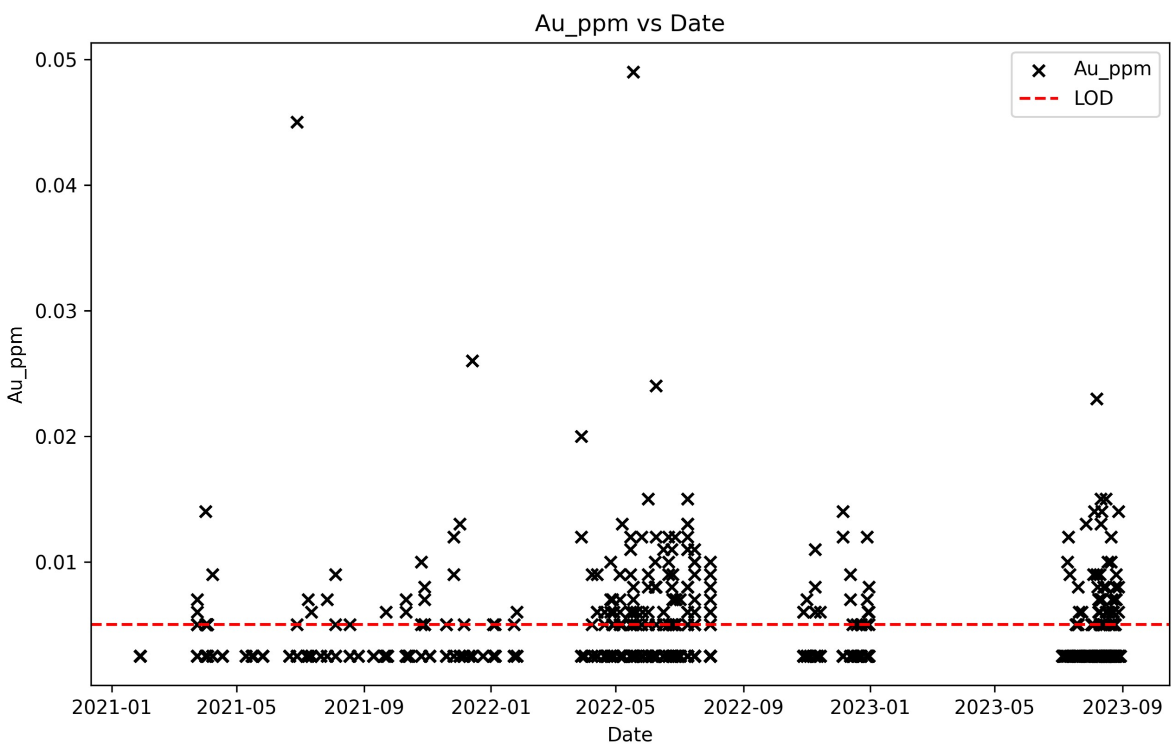
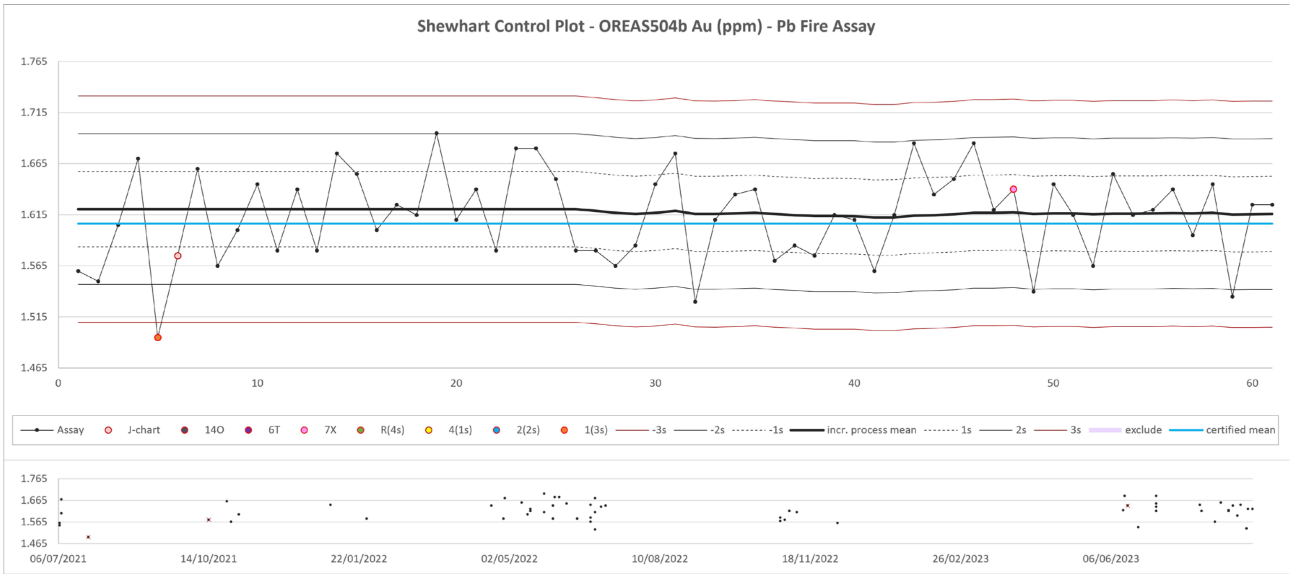


**Figure 8-5: Shewhart Control Plot for OREAS504b Au in Çöpler Sample Stream (2021–2023)**




Notes: Colored points represent Westgard rule transgressions. Westgard transgressions must be reviewed holistically.

### 8.3.3.2 Greater Çakmaktepe

#### Çakmaktepe Ext

A summary of RSC's QC data review for Çakmaktepe Ext is provided in Table 8-4.

**Table 8-4: Summary of Çakmaktepe Ext QC Review**

| Category | QC Method | Comments and Conclusion |
|---|---|---|
| Collar Location | Consistency monitored by repeat measurements. | Acceptable consistency established. |
| Diamond: Primary Sampling | Consistency is monitored by reviewing core recovery. | While there are intervals with significant core loss, no trends are observed. Acceptable consistency. |
| Diamond: Second split | Consistency is monitored by relative difference of second-split (coarse crush) duplicates. | The Au second-split duplicate pair data do not exhibit any systematic trends, step changes, or threshold breaches.<br>The Cu data demonstrate a preference towards the duplicate; however, this is associated with low-grade samples.<br>Acceptable consistency overall. |
| Analytical | Consistency is monitored by CRMs and blanks. CRM SCP results were plotted on a heatmap to identify periods multiple transgressions occurred across various CRMs. | A review of the Au and Cu CRM heat maps using RSC's in-house QC tool does not reveal any significant periods of special cause variation across multiple CRMs.<br>The review of blank performance confirmed contamination was not an issue. |

| Category | QC Method | Comments and Conclusion |
|---|---|---|
| | | The laboratory was mostly in control and provided consistent data. |

No QC data for downhole surveys, density, first-split (core-split), or third-split (pulp repeats) were independently reviewed.

### Çakmaktepe

RSC completed a brief review of historical QC data available for the Çakmaktepe project to establish out-of-control periods where data should be excluded from quality testing.

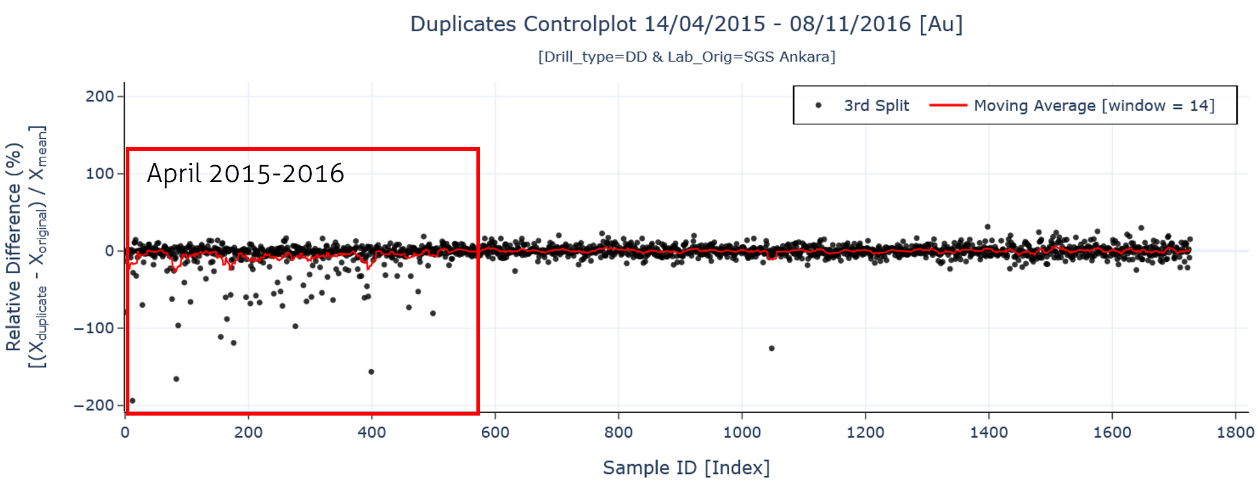
No QC data were available for review on collar location, downhole surveys, density, primary sampling (diamond recovery or RC sample weights), RC second-splitting, CRMs and blanks.

A brief summary of RSC's QC data review, for where data were available, is provided in Table 8-5 and the relevant data are presented in Figure 8-6–Figure 8-7. Quality control concerns from 2015–2016 are considered low risk as the areas drilled have since been mined.

**Table 8-5: Summary of Çakmaktepe QC Review**

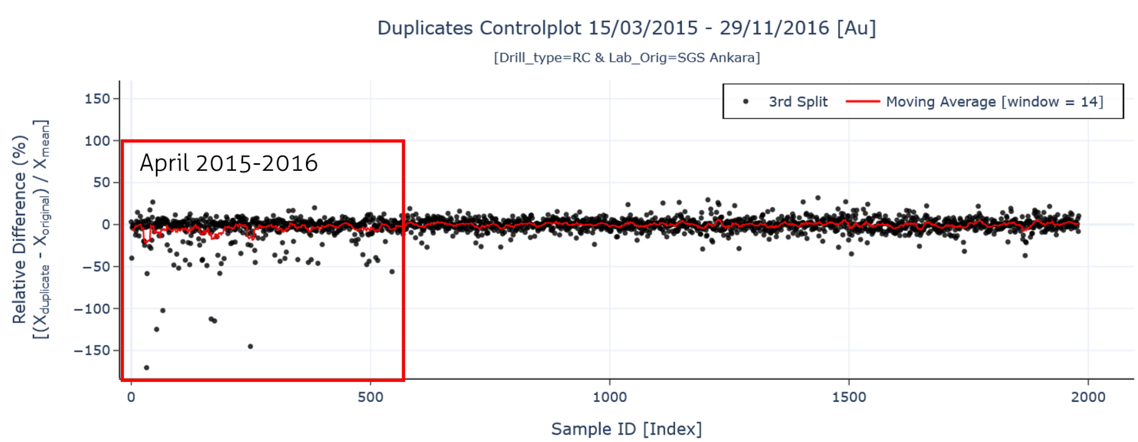
| Category | QC Method | Comment & Conclusion |
|---|---|---|
| Diamond: First split | Consistency is monitored by relative difference of first-split (core-split) duplicates. | The first-split duplicate data pairs demonstrate consistent splitting, and the data are suitable to support mineral resource classification in appropriate categories. |
| Diamond: Second split | Consistency is monitored by relative difference of second-split (coarse crush) duplicates. | The second-split duplicate data pairs demonstrate consistent splitting, and the data are suitable to support mineral resource classification in appropriate categories. |
| Diamond: Third split | Consistency is monitored by relative difference of third-split (pulp) duplicates/repeats. | Gold and copper diamond repeat pair data for the third split (e.g. Figure 8-6) suggest that some process consistency issues occurred from April 2015 to April 2016 at SGS Ankara; however, these have minimal impact on the mineral resource confidence. The third-split duplicate data pairs from ALS demonstrate consistent splitting occurred. |
| RC: Third Split | Consistency is monitored by relative difference of third split (pulp) duplicate/repeats | Gold, silver, and copper RC repeat pair data (e.g., Figure 8-7) suggest that the process was not always in control at SGS Ankara. The same out-of-control period as in the Au diamond data is present from April 2015 to April 2016 at SGS Ankara. Its impact on the resource classification is minimal, and taken into account when classifying the resource. The third-split duplicate data pairs from ALS demonstrate consistent splitting. |

**Figure 8-6: RD Plot Çakmaktepe DD Third Split (SGS Ankara)**




Notes: The RD plot illustrates the relative difference in gold grades between the original and duplicate DD third split samples against sample ID.

**Figure 8-7: RD plot Çakmaktepe RC Third Split (SGS Ankara)**




Notes: The RD plot illustrates the relative difference in gold grades between the original and duplicate RC third split samples against sample ID.

### 8.3.3.3 Bayramdere

RSC completed a brief review of historical QC data available for the Bayramdere project to establish out-of-control periods where data should be excluded from quality testing.

No, or insufficient, QC data were available for review on collar location, downhole surveys, density, primary sampling (diamond recovery or RC sample weights), second-splitting (diamond or RC), CRMs, and blanks.

A summary of RSC's QC data review for the Bayramdere deposit, for data nodes where QC data are available, is provided in Table 8-6.

**Table 8-6: Summary of Bayramdere QC Review**

| Category | Comment | Consistency |
|---|---|---|
| Diamond: Third split | Consistency is monitored by relative difference of third-split (pulp) duplicates/repeats. | Mostly in control, no trends or step changes are observed in third-split duplicate pair data. Acceptable consistency. |

### 8.3.4 Quality Acceptance Testing

Quality acceptance testing (QAT) is where a final judgement of the data is made by assessing the accuracy and precision of the data, for those periods where the process was demonstrated to be in control. Accuracy and precision are evaluated, and a final risk assessment is made based on the DQO. RSC notes that where quality data were not available, it has considered its review of processes, systems, and tools used, and/or its experience with certified laboratories, to make a final judgement on data quality and risk.

#### 8.3.4.1 Çöpler

A summary of RSC's Çöpler QAT is provided in Table 8-7. Where relevant, summary text and figures are provided in the following sections.

**Table 8-7: Summary of Çöpler Quality Acceptance Testing**

| Category | Quality Acceptance Testing | 2021–2023 Summary | Pre-2021 Summary | Risk Factor |
|---|---|---|---|---|
| Location | -- | Some drill holes intersect or scissor, where there are high grades in one and below-detection material in the other. This is usually an indication that either downhole surveys or collar surveys are inaccurate and presents a minor risk. | Reviewed and considered fit-for-purpose. | Low–moderate |
| Density | Density data accuracy was assessed by reviewing umpire (ACME) density data on scatter and QQ plots. No statistically significant biases are present. | ACME data confirm that the Anagold density data are accurate. RSC considers the data fit for purpose; however, there is a minor risk due to possible selection bias. | Reviewed and considered fit-for-purpose. | Low–moderate |
| Diamond: Primary Sampling | Review of recovery vs grade and distance buffered quantile-quantile (QQ) plot with grade control (GC) data. | SSR uses blasthole drilling for GC which RSC has found to be biased high compared to the DD results (Figure 8-8). Refer to body text. The true quality of the diamond primary sampling is unknown; however, the overall cover recovery is acceptable for the purpose of classifying resources in their appropriate categories, and there is no correlation between recovery and grade.<br>In some parts of the resource, there is a reasonable amount of core loss present (Table 8-8), which represents a low–moderate risk that has been taken into account during resource estimation and classification. | | Low–moderate |
| Diamond: First split | -- | No first-split (core-split) duplicates were collected by SSR from 2021 to Q3 2023. RSC considers the risk associated with the first-split process to be low and considers the data fit for purpose. | Reviewed and considered fit-for-purpose. | Low |
| Diamond: Second split | Scatter and QQ plots were reviewed for data from in control periods. No statistically significant biases are present. Precisions (CV[1]) were calculated as ~9.0%, ~7.3%, and ~7.5% | Overall, second-split data are consistent with the DQO. Data from October 2023 are imprecise; although, the impact of this variance is probably limited. | Reviewed and considered fit-for-purpose. | Low–moderate |

[1] Root mean square coefficient of variation (CV), Stanley & Lawie (2007) & Abzalov (2008).

| Category | Quality Acceptance Testing | 2021–2023 Summary | Pre-2021 Summary | Risk Factor |
|---|---|---|---|---|
| | for Au, Ag and Cu, respectively, which is consistent with the mineralization style and comminution. | | | |
| Diamond: Third split | -- | No third-split (pulp) quality data are available from 2021–2023. RSC considers the risk associated with the third-split process to be low and considers the data fit for purpose. | Reviewed and considered fit-for-purpose. | Low |
| RC: Primary Sample | A thorough investigation into the relative quality of data for RC drilling was carried using a distance-buffered QQ analysis against DD results (Figure 8-9, Table 8-9). The data show a statistically significant bias (~20–30%) with the RC drilling having higher grades than the DD grades.<br>Refer to body text for further details. | As many parts of the resource model that rely on RC drilling information have already been mined, the impact of this bias, which may be around 20–30% between the relevant grade bin of 1–4 g/t Au, is probably limited. However, it is taken into account when classifying the Mineral Resource. | | Low-moderate |
| RC: First Split | Scatter and QQ plots were reviewed. No statistically significant biases are present. Precisions were calculated as ~29.1% and ~19.2% for Au and Cu, consistent with the mineralization style and split-stage. | The data resulting from the RC first-split are accurate and precise and therefore consistent with the DQO. | Reviewed and considered fit-for-purpose. | Low |
| RC: Second Split | -- | No quality data were available for review. RSC considers the risk associated with the second-split process to be low and the data fit for purpose. | Reviewed and considered fit-for-purpose. | Low |
| RC: Third Split | -- | No quality data were available for review. RSC considers the risk associated with the third-split process to be low and the data fit for purpose. | Reviewed and considered fit-for-purpose. | Low |
| Analytical | Analytical quality was assessed by calculating the bias and precision from the CRM data and reviewing umpire data. Small biases and variance issues | Considering the magnitude (Table 8-10) of the biases and variance in CRM results, the nature (low-grade and negative) of the Ag and (low-magnitude) Cu biases in the umpire | Reviewed and considered fit-for-purpose. | Low |

| Category | Quality Acceptance Testing | 2021–2023 Summary | Pre-2021 Summary | Risk Factor |
|---|---|---|---|---|
| | are present in some of the data; however, this is mostly in the low-grade CRMs (Table 8-10). Umpire analyses were reviewed using QQ plots. Gold results at ALS are not biased. Low-grade Ag results at ALS are biased low and Cu results may be slightly high-biased (<2%). Refer to body text for details. | results, RSC considers the analytical accuracy and precision acceptable for the DQO. | | |

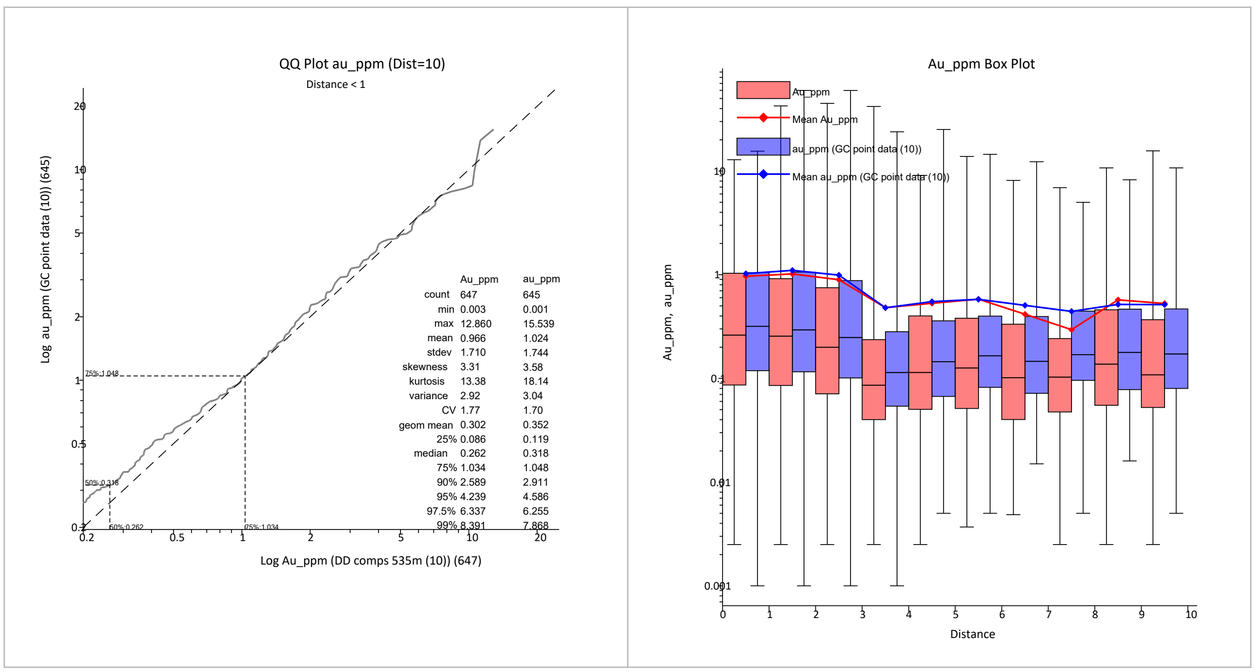
## Diamond: Primary Sample

A practical way to check and verify the quality of a primary sample is to validate it against, or compare it with, a sample of a known grade. In simple terms, the difference between the measured value and the 'known' value is then defined as the bias, a measure of sample quality.

For the *primary* sample, i.e., the sample collected at the drill bit, such options do not readily exist. The next practical way to determine the quality of the primary sample is to compare it with a sample of better quality, taken at the same location. This process is usually called 'twin drilling', but it can be used anywhere where a sample from drill type A is close enough to a sample from drill/sample type B.

For diamond core, 'twin' holes can be drilled using optimal quality control. However, SSR uses blasthole drilling for grade control which RSC has found to be biased high compared to the diamond results (Figure 8-8). RSC recommends that SSR use RC drilling for input grade control drilling due to its advantages over blasthole drilling.

**Figure 8-8: Çöpler Distance-Buffered QQ-plot for Au from Diamond and Blasthole GC drilling, pairs separated by <1 m (left) and Box-Whisker Plots of Paired DD and GC Distributions at Various Buffer Distances (right)**




While RSC considers that the primary diamond samples are acceptable for use in the Mineral Resource estimation, it notes that there is a reasonable amount of core loss present and that this represents a low to moderate risk. Since 2021, 51% of samples have recovery recorded as >95% (Table 8-8) and many samples have low recovery. This risk has been taken into account when classifying the Mineral Resource.

**Table 8-8: Recovery Summary Statistics for Çöpler, 2021–2023.**

| Recovery Range | Percentage of Samples | No. of Samples |
|---|---|---|
| Above 95% Recovery | 51% | 5,675 |
| Below 95% Recovery | 49% | 5,360 |

### RC: Primary Sample

A thorough investigation into the relative quality of data for RC drilling was carried out by running a distance-buffered analysis on 1-m composites from both DD and RC drilling campaigns. At a 1-m buffer distance between an RC and a DD sample, this generated 1,015 RC-DD sample pairs.

The data show a bias (Figure 8-9, Table 8-9), with the RC drilling showing statistically higher grades than the DD grades (a Wilcoxon signed-rank test shows that there is a better than 50% chance that an RC sample is of a higher grade than a DD sample, with a p-value of 0.00001235). This relationship is consistent, regardless of the buffer distance (Figure 8-9); a 10 m buffer creates 14,000 paired DD-RC samples.

As many parts of the resource model that rely on RC drilling information have already been mined, the impact of this bias, which may be around 20–30% between the relevant grade bin of 1–4 g/t Au, is probably limited. However, it is taken into account when classifying the Mineral Resource.

**Figure 8-9: Çöpler Distance-Buffered QQ-plot for Au from Diamond and RC Drilling, pairs separated by <1 m (left) and Box-Whisker Plots of Paired DD (red) and RC (blue) Distributions at Various Buffer Distances (right)**

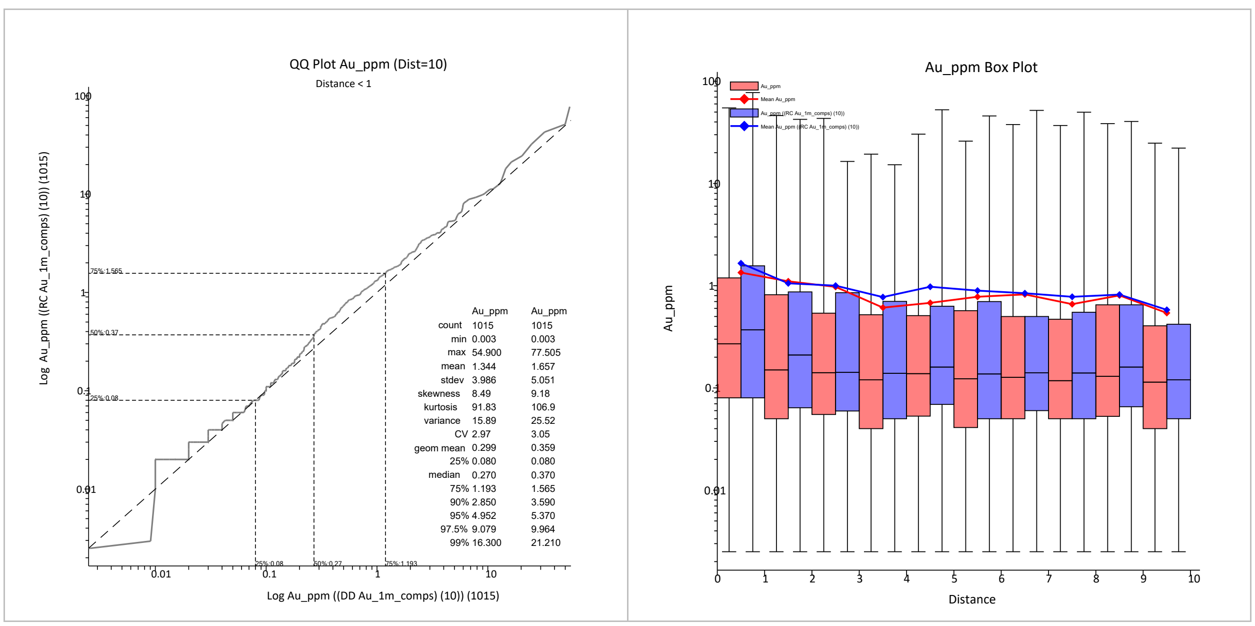


**Table 8-9: Results of Çöpler Distance Buffered QQ-Plot Analysis of Diamond and RC Drilling (Only pairs separated by <1 m)**

| Metric | RC | DD | Bias (RC vs DD) |
|---|---|---|---|
| Mean | 1.657 | 1.344 | 23% |
| 25% | 0.08 | 0.08 | 0% |
| Median | 0.37 | 0.27 | 37% |
| 75% | 1.565 | 1.193 | 31% |
| Metric | RC | DD | Bias (RC vs DD) |

### Analytical

The quality of the fire assaying and analytical process can be determined from the performance of the CRMs, for those periods where the laboratory systems were in control as demonstrated by the SPC analysis, and from the results of umpire testing. In addition, masked and spiked CRMs and blind pulp repeats can be used to test the laboratory's relative performance.

RSC assessed the analytical performance by calculating bias and precision of the CRM results from 2021–2023 (Table 8-10). CRM accuracy performance is recorded as marginal or not acceptable when a statistically significant (based on p-values) bias is calculated. Statistical significance does not consider magnitude; RSC made a final judgement after considering all factors.

The statistically significant biases noted in the Au CRM results are either of small magnitude (≤3%) and calculated from small sample populations, or relate to low-grade CRMs. Statistically significant variance in Au results also relates to low-grade CRMs. Assessment of scatter- and QQ-plots of umpire analyses against original results confirm that ALS Au results are accurate and not statistically significantly biased.

For the most part, the statistically significant biases and variance noted in the Ag CRM results are either of small magnitude or relate to low-grade CRMs. In addition to the negative bias noted in the OREAS507 Ag results (Table 8-10), assessment of BV (formerly ACME) umpire analyses against original results also suggests that ALS's low-grade Ag results are biased low (statistically significant) and below 5 ppm Ag the results may be biased by up to ~15% (Table 8-10). Since this is a negative bias and Ag is a minor component of the Çöpler mineralization, this is not considered a material risk to the resource estimation; however, RSC recommends that SSR discusses Ag analytical performance with the laboratory.

The statistically significant biases noted in the Cu CRM results are either of small magnitude, or relate to low-grade CRMs. Statistically significant variance in Cu results also relates to low-grade CRMs. Assessment of scatter- and QQ-plots of umpire analyses against original results confirm that ALS Cu results are accurate and not biased.

Considering the magnitudes and nature of the CRM biases and variance, and the acceptable Au and Cu umpire results, RSC considers the analytical accuracy and precision for this period acceptable and the overall risk is low.

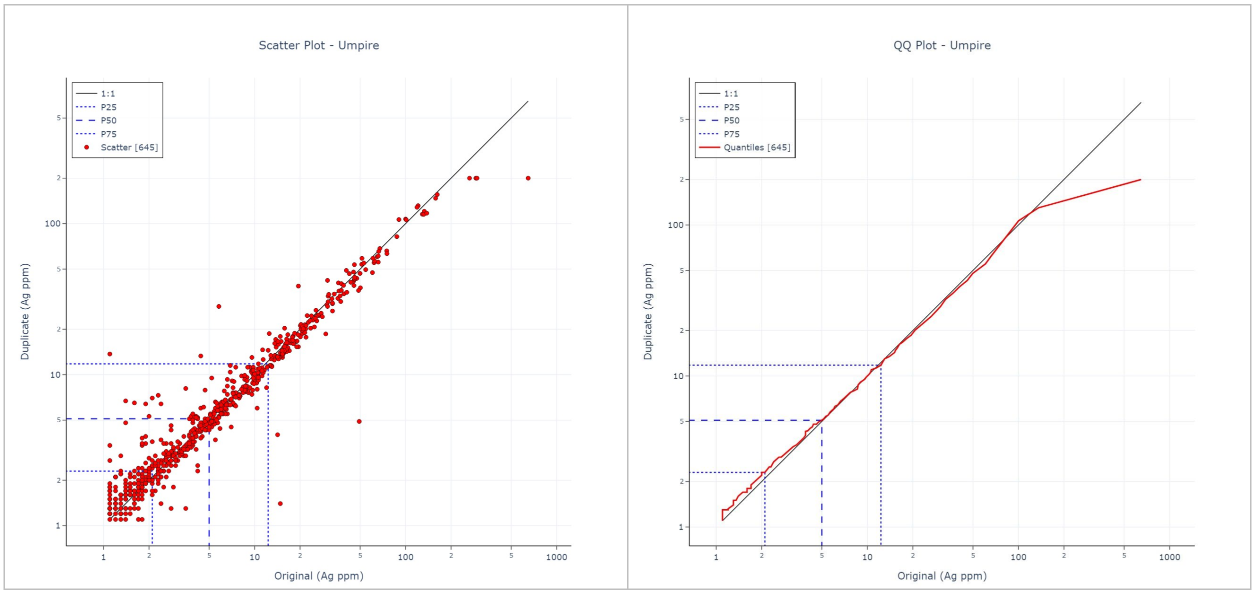
**Table 8-10: Quality Acceptance Testing for Çöpler CRMs (2021–2023)**

| CRM ID | Analyte | Date From | Date To | No. of Samples | CRM Mean (ppm) | Assay Mean (ppm) | Bias | Accuracy | CRM SD* (ppm) | Assay SD (ppm) | Precision | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OREAS61f | Au | 2/04/21 | 26/08/23 | 37 | 4.6 | 4.72 | 3% | Marginal | 0.134 | 0.128 | Excellent | Small magnitude positive bias; however, small sample population. Low risk. |
| OREAS504b | Au | 7/07/21 | 8/09/23 | 61 | 1.61 | 1.61 | 0% | Excellent | 0.037 | 0.044 | Acceptable | -- |
| OREAS524 | Au | 29/04/22 | 1/09/23 | 34 | 1.54 | 1.57 | 2% | Marginal | 0.046 | 0.04 | Good | Small magnitude positive bias; however, small sample population. Low risk. |
| OREAS604 | Au | 21/06/21 | 6/10/23 | 119 | 1.43 | 1.45 | 2% | Acceptable | 0.055 | 0.056 | Excellent | -- |
| OREAS253 | Au | 19/03/21 | 31/08/23 | 32 | 1.22 | 1.23 | 1% | Good | 0.044 | 0.03 | Acceptable | -- |
| OREAS251 | Au | 19/03/21 | 16/09/23 | 44 | 0.5 | 0.51 | 2% | Marginal | 0.015 | 0.011 | Acceptable | Small magnitude positive bias; however, relatively small sample population. Low risk. |
| OREAS502b | Au | 19/03/21 | 20/09/23 | 81 | 0.49 | 0.5 | 1% | Good | 0.015 | 0.018 | Acceptable | -- |
| OREAS153a | Au | 1/04/22 | 6/10/23 | 64 | 0.31 | 0.32 | 2% | Marginal | 0.012 | 0.01 | Good | Small magnitude positive bias. Low risk. |
| OREAS153b | Au | 25/05/21 | 5/10/23 | 84 | 0.31 | 0.31 | 0% | Excellent | 0.009 | 0.011 | Good | -- |
| OREAS501c | Au | 10/05/21 | 4/10/23 | 189 | 0.22 | 0.23 | 2% | Marginal | 0.007 | 0.008 | Acceptable | Small magnitude positive bias. Low risk. |
| OREAS908 | Au | 19/03/21 | 19/09/23 | 88 | 0.19 | 0.19 | 2% | Marginal | 0.007 | 0.007 | Good | Low-grade, small magnitude positive bias. Low risk. |
| OREAS507 | Au | 30/03/22 | 19/09/23 | 47 | 0.18 | 0.18 | 2% | Marginal | 0.006 | 0.006 | Excellent | Low-grade, small magnitude positive bias. Low risk. |

| CRM ID | Analyte | Date From | Date To | No. of Samples | CRM Mean (ppm) | Assay Mean (ppm) | Bias | Accuracy | CRM SD* (ppm) | Assay SD (ppm) | Precision | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OREAS152b | Au | 16/05/21 | 12/09/23 | 136 | 0.13 | 0.14 | 1% | Good | 0.005 | 0.006 | Good | -- |
| OREAS907 | Au | 19/03/21 | 19/09/23 | 68 | 0.1 | 0.106 | 6% | Not Acceptable | 0.004 | 0.015 | Not Acceptable | Positive bias and large variance; however, low-grade, below COG, Au CRM (Cu target CRM). Low risk. |
| OREAS604 | Ag | 21/06/21 | 6/10/23 | 116 | 490.7 | 487.8 | -1% | Acceptable | 10.29 | 7.82 | Acceptable | -- |
| OREAS36 | Ag | 21/06/21 | 7/07/23 | 109 | 10.17 | 10.14 | 0% | Excellent | 0.634 | 0.307 | Acceptable | -- |
| OREAS61f | Ag | 2/04/21 | 26/08/23 | 35 | 3.64 | 3.71 | 2% | Acceptable | 0.148 | 0.131 | Good | -- |
| OREAS504b | Ag | 7/07/21 | 8/09/23 | 54 | 3.07 | 3.13 | 2% | Acceptable | 0.225 | 0.147 | Acceptable | -- |
| OREAS908 | Ag | 19/03/21 | 19/09/23 | 81 | 2.4 | 2.47 | 3% | Marginal | 0.109 | 0.145 | Acceptable | Small magnitude positive bias. Low risk. |
| OREAS153b | Ag | 25/05/21 | 5/10/23 | 78 | 1.45 | 1.45 | 0% | Excellent | 0.09 | 0.125 | Marginal | Large variance; however, low-grade Ag CRM. Low risk. |
| OREAS907 | Ag | 19/03/21 | 19/09/23 | 66 | 1.35 | 1.35 | 0% | Excellent | 0.115 | 0.126 | Good | -- |
| OREAS507 | Ag | 30/03/22 | 19/09/23 | 45 | 1.34 | 1.29 | -4% | Not Acceptable | 0.081 | 0.103 | Acceptable | Low-grade, negative bias. Low risk. |
| OREAS152b | Ag | 16/05/21 | 12/09/23 | 134 | 0.86 | 0.86 | 0% | Excellent | 0.096 | 0.117 | Acceptable | -- |
| OREAS604 | Cu | 30/03/22 | 6/10/23 | 46 | 21,641 | 21,323 | -1% | Marginal | 485.2 | 429.9 | Good | Small magnitude, negative bias. Low risk. |
| OREAS908 | Cu | 19/03/21 | 19/09/23 | 58 | 12,604 | 12,497 | -1% | Good | 293.9 | 264.3 | Good | -- |
| OREAS907 | Cu | 19/03/21 | 19/09/23 | 38 | 6,377 | 6,428 | 1% | Good | 188.4 | 272.4 | Not Acceptable | Large variance; however, low-grade Cu CRM. Low risk. |

| CRM ID | Analyte | Date From | Date To | No. of Samples | CRM Mean (ppm) | Assay Mean (ppm) | Bias | Accuracy | CRM SD* (ppm) | Assay SD (ppm) | Precision | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OREAS152b | Cu | 16/05/21 | 12/09/23 | 55 | 3,753 | 3,866 | 3% | Not Acceptable | 83.4 | 100.2 | Good | Low-grade, small magnitude, positive bias. Low risk. |
| OREAS501c | Cu | 10/05/21 | 4/10/23 | 70 | 2,755 | 2,818 | 2% | Marginal | 80.7 | 74.2 | Excellent | Low-grade, small magnitude, positive bias. Low risk. |

**Figure 8-10: Scatter and QQ Plot from Çöpler Umpire Analysis for Ag, ALS vs BV (2021–2023)**




### 8.3.4.2 Greater Çakmaktepe

**Çakmaktepe Ext**

A summary of RSC's Çakmaktepe Ext QAT is provided in Table 8-12. Where relevant, summary sections and figures are provided in the following sections.

RSC data quality review of the data presented in OreWin (2020) confirmed that the Çakmaktepe Ext drill hole data, sampling and assaying before 2021 is of a good standard and suitable for the purpose of mineral resource estimation and the reporting of exploration results.

**Diamond: Primary Sample**

While RSC considers that the primary samples are acceptable for use in the mineral resource estimation, it notes that there is a reasonable amount of core loss present and that this represents a low–moderate risk. Since 2020, only 34% of samples have recovery recorded as >95% (Table 8-11). This risk has been taken into account when classifying the Mineral Resource.

**Table 8-11: Recovery Summary Statistics for Çakmaktepe Ext, May 2020–2023.**

| Recovery Range | Percentage of Samples | No. of Samples |
|---|---|---|
| Above 95% Recovery | 34% | 13,509 |
| Below 95% Recovery | 66% | 26,269 |

**Analytical**

RSC assessed the analytical performance by calculating the bias and precision of the CRM results from 2021–2023 (Table 8-13).

The statistically significant biases noted in the Au CRM results are either of small magnitude (≤3%), or relate to low-grade CRMs. Statistically significant variance in Au results also relates to low-grade CRMs. Assessment of scatter- and QQ-plots of umpire analyses against original results confirm that ALS Au results are accurate and not biased.

The statistically significant bias noted in the Ag CRM results only relates to a low-grade Ag CRM. However, similar to Çöpler, the assessment of BV umpire analyses against original results on scatter- and QQ-plots demonstrates that ALS's Ag results are biased (conditional linear; Figure 8-11). The positive bias, up to approximately 13%, in the higher-grade (10 ppm to 200 ppm) Ag umpire results is in a grade range that was not quality-controlled by any of the CRMs at ALS. Statistically significant variance is also common in the Ag CRM results at ALS. Even though Ag is a minor component of the Çakmaktepe Ext mineralization with low recovery by heap leach, this represents a low–moderate risk to the Ag resource estimation. RSC recommends that SSR discuss Ag analytical performance with the laboratory.

The statistically significant biases noted in the Cu CRM results are either of small magnitude (≤4%) or relate to low-grade CRMs. Assessment of scatter- and QQ-plots of umpire analyses against original results confirm that ALS Cu results are accurate and not biased. Statistically significant variance in Cu results also relates to low-grade CRMs.

**Table 8-12: Summary of Çakmaktepe Ext Quality Acceptance Testing**

| Category | Quality Acceptance Testing | 2021–2023 Summary | Pre-2021 Summary | Risk Factor |
|---|---|---|---|---|
| Location | -- | RSC considers the location data fit for the purpose of estimation and resource classification. | Reviewed and considered fit-for-purpose. | Low |
| Density | Density data accuracy was assessed by reviewing umpire (ACME) data on scatter and QQ plots. | ACME data confirm that the Anagold density data are accurate. RSC considers the data fit for purpose; however, there is a minor risk due to possible selection bias. | Reviewed and considered fit-for-purpose. | Low–moderate |
| Diamond: Primary Sampling | Comparison of recovery vs grade | There is a reasonable amount of core loss present (Table 8-11) which represents a low–moderate risk to be taken into account during resource estimation and classification. | Reviewed and considered fit-for-purpose. | Low–moderate |
| Diamond: First split | -- | No first-split (core-split) duplicates were collected by SSR from 2021–2023. RSC considers the risk associated with the first-split process to be low and considers the data fit for purpose. | Reviewed and considered fit-for-purpose. | Low |
| Diamond: Second split | Scatter and QQ plots were reviewed. No statistically significant biases are present for Au, Ag or Cu. Acceptable precision values of ~9.7%, ~9.9% and ~15.4% for Au, Ag and Cu were calculated. | The data resulting from the second split are accurate and precise and therefore fit for the purpose of resource estimation in high-confidence classification categories. | Reviewed and considered fit-for-purpose. | Low–moderate |
| Diamond: Third split | -- | No third-split (pulp) quality data are available from 2021–2023. RSC considers the risk associated with the third-split process to be low and considers the data fit for purpose. | Reviewed and considered fit-for-purpose. | Low |
| Analytical | Assessed using bias and precision of the CRM data and reviewing umpire data. Biases and variance issues are present in some of the data, particularly Ag (Table 8-13Table 8-10). Refer to body text for details. | Overall, Au and Cu analytical data are considered accurate and precise at grades of interest. Silver data may be biased up to ~13% across the grade range and are imprecise at low grades. As Ag is a minor component, this represents a moderate risk. | Reviewed and considered fit-for-purpose. | Low–moderate (Ag) |

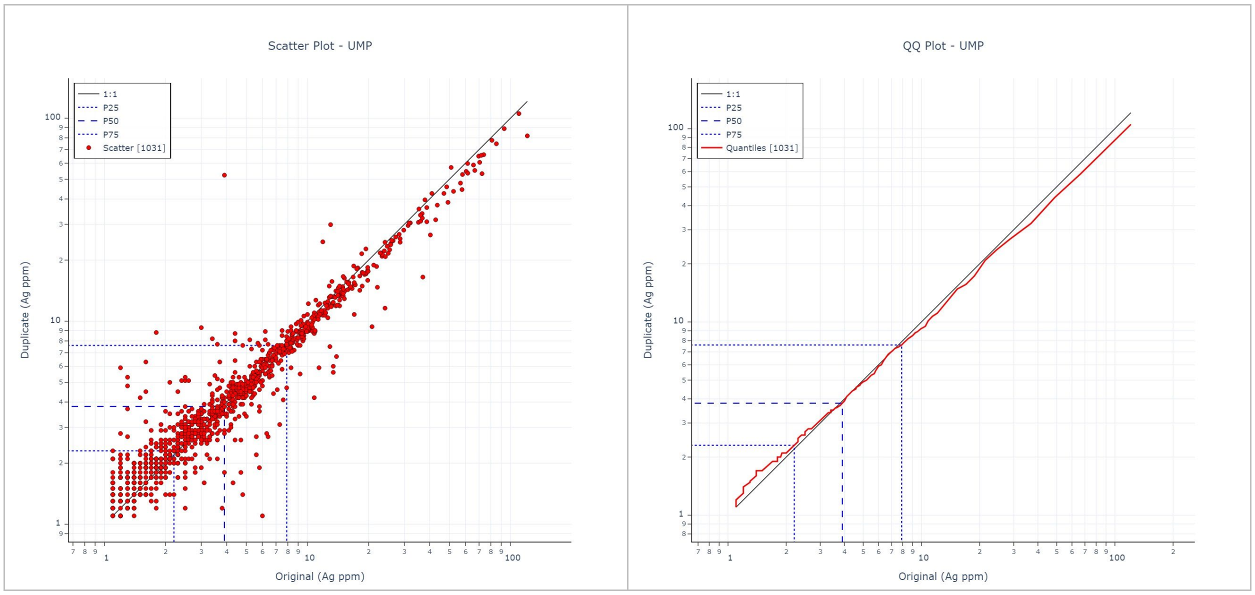
**Table 8-13: Quality Acceptance Testing for Çakmaktepe Ext CRMs, 2021–2023.**

| CRM ID | Analyte | Date From DD / MM / YY | Date To DD / MM / YY | No. of Samples | CRM Mean (ppm) | Assay Mean (ppm) | Bias | Accuracy | CRM SD (ppm) | Assay SD (ppm) | Precision | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OREAS256b | Au | 26/07/21 | 31/07/23 | 33 | 7.84 | 7.88 | 1% | Good | 0.207 | 0.212 | Good | -- |
| OREAS256 | Au | 25/06/21 | 7/08/23 | 35 | 7.66 | 7.72 | 1% | Good | 0.238 | 0.155 | Good | -- |
| OREAS254b | Au | 26/03/21 | 31/12/22 | 56 | 2.53 | 2.55 | 1% | Acceptable | 0.061 | 0.065 | Good | -- |
| OREAS604 | Au | 14/01/21 | 10/07/23 | 191 | 1.427 | 1.45 | 2% | Acceptable | 0.055 | 0.061 | Good | -- |
| OREAS253 | Au | 24/03/21 | 28/07/23 | 82 | 1.22 | 1.23 | 1% | Good | 0.044 | 0.045 | Excellent | -- |
| OREAS251 | Au | 19/03/21 | 27/07/23 | 110 | 0.5 | 0.51 | 2% | Marginal | 0.015 | 0.022 | Not Acceptable | Small magnitude, positive bias and variance. Low-grade CRM. Low risk. |
| OREAS153b | Au | 14/01/21 | 2/08/23 | 138 | 0.31 | 0.32 | 1% | Acceptable | 0.009 | 0.0102 | Good | -- |
| OREAS153a | Au | 11/05/22 | 3/08/23 | 34 | 0.31 | 0.32 | 2% | Marginal | 0.012 | 0.01 | Good | Small magnitude, positive bias; however, small sample population and low-grade CRM. Low risk. |
| OREAS501c | Au | 19/03/21 | 2/08/23 | 119 | 0.22 | 0.23 | 2% | Marginal | 0.0065 | 0.0071 | Good | Small magnitude, positive bias. Low-grade CRM. Low risk. |
| OREAS908 | Au | 14/01/21 | 29/07/23 | 170 | 0.187 | 0.191 | 2% | Marginal | 0.0066 | 0.007 | Good | Small magnitude, positive bias. Low-grade CRM. Low risk. |
| OREAS507 | Au | 1/04/22 | 28/07/23 | 96 | 0.18 | 0.18 | 1% | Acceptable | 0.0059 | 0.008 | Marginal | Small imprecision. Low-grade CRM. Low risk. |
| OREAS152b | Au | 14/01/21 | 22/07/23 | 234 | 0.13 | 0.13 | 0% | Excellent | 0.0055 | 0.0052 | Excellent | -- |

| CRM ID | Analyte | Date From DD / MM / YY | Date To DD / MM / YY | No. of Samples | CRM Mean (ppm) | Assay Mean (ppm) | Bias | Accuracy | CRM SD (ppm) | Assay SD (ppm) | Precision | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OREAS907 | Au | 14/01/21 | 2/08/23 | 239 | 0.1 | 0.103 | 3% | Not Acceptable | 0.0038 | 0.008 | Not Acceptable | Small magnitude, positive bias and variance. Small imprecision. Low-grade CRM. Low risk. |
| OREAS604 | Ag | 14/01/21 | 10/07/23 | 186 | 490.6 | 486.6 | -1% | Acceptable | 10.29 | 7.71 | Acceptable | -- |
| OREAS36 | Ag | 17/06/21 | 20/07/23 | 207 | 10.17 | 10.17 | 0% | Excellent | 0.634 | 0.313 | Acceptable | -- |
| OREAS908 | Ag | 14/01/21 | 29/07/23 | 163 | 2.4 | 2.42 | 1% | Good | 0.109 | 0.173 | Not Acceptable | Imprecision, relatively low-grade Ag CRM. Low Risk |
| OREAS153b | Ag | 14/01/21 | 2/08/23 | 138 | 1.45 | 1.46 | 1% | Good | 0.09 | 0.123 | Not Acceptable | Imprecision, low-grade Ag CRM. Low Risk |
| OREAS256b | Ag | 26/07/21 | 31/07/23 | 31 | 1.45 | 1.43 | -2% | Acceptable | 0.064 | 0.124 | Not Acceptable | Imprecision, low-grade Ag CRM. Low Risk |
| OREAS907 | Ag | 14/01/21 | 2/08/23 | 232 | 1.35 | 1.34 | -1% | Excellent | 0.115 | 0.17 | Marginal | Imprecision, low-grade Ag CRM. Low risk. |
| OREAS507 | Ag | 1/04/22 | 28/07/23 | 88 | 1.34 | 1.29 | -4% | Marginal | 0.081 | 0.104 | Acceptable | Negative bias (similar to Çöpler, Table 8-10), low-grade CRM. Low risk. |
| OREAS152b | Ag | 14/01/21 | 22/07/23 | 234 | 0.86 | 0.84 | -3% | Acceptable | 0.096 | 0.112 | Acceptable | -- |
| OREAS908 | Cu | 14/01/21 | 29/07/23 | 167 | 12,604 | 12,548 | 0% | Excellent | 293.9 | 209.5 | Good | -- |
| OREAS153a | Cu | 11/05/22 | 3/08/23 | 34 | 7,117 | 7,174 | 1% | Good | 252 | 177 | Good | -- |
| OREAS153b | Cu | 14/01/21 | 2/08/23 | 48 | 6,782 | 6,919 | 2% | Marginal | 152 | 182 | Acceptable | Small magnitude positive bias. Low risk. |
| OREAS907 | Cu | 14/01/21 | 2/08/23 | 236 | 6,377 | 6376 | 0% | Excellent | 188.4 | 158.5 | Good | -- |

| CRM ID | Analyte | Date From DD / MM / YY | Date To DD / MM / YY | No. of Samples | CRM Mean (ppm) | Assay Mean (ppm) | Bias | Accuracy | CRM SD (ppm) | Assay SD (ppm) | Precision | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OREAS507 | Cu | 1/04/22 | 28/07/23 | 97 | 6,224 | 6,252 | 0% | Excellent | 127.9 | 135.2 | Good | -- |
| OREAS152b | Cu | 14/01/21 | 22/07/23 | 232 | 3,753 | 3,865 | 3% | Not Acceptable | 83 | 111 | Not Acceptable | Small magnitude, positive bias and imprecision. Low risk. |
| OREAS501c | Cu | 19/03/21 | 2/08/23 | 120 | 2,755 | 2,822 | 2% | Marginal | 80.7 | 68.7 | Good | Small magnitude positive bias. Low risk. |
| OREAS256b | Cu | 26/07/21 | 31/07/23 | 31 | 94 | 96 | 2% | Acceptable | 4.267 | 6.529 | Not Acceptable | Imprecision; however, small sample population and low-grade Cu CRM. Low risk. |
| OREAS251 | Cu | 1/04/22 | 27/07/23 | 55 | 48 | 55 | 17% | Not Acceptable | 2.382 | 4.504 | Not Acceptable | Large positive bias and imprecision. However, very low-grade CRM. Low risk |
| OREAS254b | Cu | 1/04/22 | 20/06/23 | 45 | 43 | 45 | 4% | Marginal | 2.411 | 2.885 | Acceptable | Positive bias; however, very low-grade Cu CRM. Low risk. |

**Figure 8-11: Scatter and QQ Plot from Çakmaktepe Ext Umpire Analysis for Ag, ALS vs BV, (2021–2023)**




## Çakmaktepe

No new drill hole data have been collected since the previous Technical Report Summary, completed by OreWin (2022). A summary of RSC's Çakmaktepe QAT is provided in Table 8-14.

**Table 8-14: Summary of Çakmaktepe Quality Acceptance Testing**

| Category | Quality Testing | Summary | Risk Factor |
|---|---|---|---|
| Location | -- | Previously reviewed and considered fit-for-purpose. | Low |
| Density | -- | Previously reviewed and considered fit-for-purpose. | Low–moderate |
| Diamond: Primary Sampling | Comparison of recovery vs grade. | A substantial number of samples have low to very low recoveries (only 23% of samples have recovery >95%), with a significant proportion of poor recovery samples having Au grades well above the expected cut-off grades. This represents a low–moderate risk to be taken into account during resource estimation and classification. | Low–moderate |
| Diamond: First split | Scatter and QQ plots were reviewed. Acceptable precision values were calculated for Au, Ag and Cu and no statistically significant biases are present. | The data resulting from the diamond first split are accurate and sufficiently precise for use in resource estimation. | Low |

| Category | Quality Testing | Summary | Risk Factor |
|---|---|---|---|
| Diamond: Second split | Scatter and QQ plots were reviewed. Acceptable precision values were calculated for Au, Ag and Cu and no statistically significant biases are present | The data resulting from the diamond second-split are accurate and precise for use in resource estimation and classification. | Low |
| Diamond: Third split | An out-of-control periods was identified in the Au repeat data from April 2015–April 2016 at SGS Ankara. This relates to drilling in an area that has since been mined.<br>Outside of this period, scatter and QQ plots demonstrate that the third split (pulp) repeat data are accurate and precise. | When the system was in control, the Au, Ag and Cu data delivered were sufficiently accurate and precise for use in resource estimation. | Low |
| RC: Primary Sampling | An investigation into the relative quality of data for RC drilling was carried out by running a distance-buffered analysis against DD results.<br>The results indicate a bias with the RC drilling showing statistically significant higher (~5–10%) grades than the DD grades on average. This bias appears to be more profound when opening up the buffer distance, with 5,000 RC/DDD sample pairs within 3 m of each other having a grade bias of up to 25%. | The impact of this 5–10% bias is probably limited; however, it is taken into account when classifying the Mineral Resource. | Low–moderate |
| RC: First Split | -- | Previously reviewed and considered fit-for-purpose. | Low |
| RC: Second Split | -- | Previously reviewed and considered fit-for-purpose. | Low |
| RC: Third Split | An out-of-control period was identified in the Au from April 2015–April 2016 at SGS Ankara. Scatter and QQ plots were reviewed. Acceptable precision values were calculated for Au, Ag and Cu. The small Ag dataset (65 pairs) from ALS Izmir is low-biased. | When the system was in control, the Au and Cu data delivered were sufficiently accurate and precise. Given the nature (low bias) of the Ag results, this is considered low risk. | Low |
| Analytical | -- | Previously reviewed and considered fit-for-purpose: | Low |

#### 8.3.4.3 Bayramdere

The RSC QP completed a brief review of the reported historical quality data verification completed by Cube Consulting (2016b) for the Bayramdere project. The RSC QP concluded that the sample data are considered to be of an acceptable standard and appropriate for the purpose of classification of Mineral Resources in appropriate categories.

A summary of RSC's Bayramdere QAT is provided in Table 8-15.

**Table 8-15: Summary of Bayramdere Quality Acceptance Testing**

| Category | Quality Testing | Summary | Risk Factor |
|---|---|---|---|
| Location | -- | Previously reviewed and considered fit-for-purpose. | Low |
| Density | -- | Previously reviewed and considered fit-for-purpose. | Low–moderate |
| Diamond: Primary Sampling | -- | Previously reviewed and considered fit-for-purpose. | Low–moderate |
| Diamond: First split | Insufficient quality data available to reach statistical conclusions. | Based on a review of processes and systems, and a visual review of the available duplicate pair data in scatterplot, RSC considers the data are fit for the purpose of estimation; however, the lack of quality data should be taken into consideration when classifying the mineral resource. | Low |
| Diamond: Second split | -- | Based on a review of processes and systems, data resulting from the diamond second-split are considered fit-for-purpose for resource estimation. | Low–moderate |
| Diamond: Third split | Scatter and QQ plots were reviewed for data from ALS and SGS. Acceptable precision values were calculated for Au. The QQ plots do not suggest any significant biases; however, a ranked Wilcoxon test confirms an average ~3.5% bias towards the duplicate at SGS is statistically significant at 95% confidence. | Given the magnitude of the bias, its nature (low original results) and the larger contribution of ALS results, RSC considers the third split data are sufficiently accurate and precise for the purpose of resource estimation; however, the risk of a bias should be taken into consideration when classifying the mineral resource. | Low–moderate |
| RC: Primary Sampling | -- | Previously reviewed and considered fit-for-purpose. | Low |
| RC: First Split | Insufficient quality data available to reach statistical conclusions. | Based on a review of processes and systems, and a visual review of the available duplicate pair data in scatterplot, RSC considers the data are fit for the purpose of estimation; however, the lack of quality data should be taken into consideration when classifying the mineral resource. | Low |

| Category | Quality Testing | Summary | Risk Factor |
|---|---|---|---|
| RC: Second Split | -- | Previously reviewed and considered fit-for-purpose. | Low |
| RC: Third Split | An out-of-control period was identified in the Au from April 2015–April 2016 at SGS Ankara. The small Ag dataset (65 pairs) from ALS Izmir is biased (higher duplicate grades). | When the system was in control, the Au and Cu data delivered were sufficiently accurate and precise. Given the nature (low bias) of the Ag results, this is considered low risk. | Low |
| Analytical | -- | Previously reviewed and considered fit-for-purpose: Analytical results of CRMs and umpire analyses demonstrate that analytical results for Au, Ag, Cu and S are precise and mostly accurate. | Low |

## 8.4 Sample Security

Drill core and RC chips are transported to the core storage facility by either the drilling company personnel or Anagold geological staff. Once at the facility, the samples are kept in a secure location while logging and sampling are conducted. The DD core storage facility is enclosed by a fence and gate that is locked at night and when the geology staff are absent. When samples are transported off site, a commercial carrier is used.

## 8.5 QP Opinion

In the opinion of the QP, the sample preparation, security, and analytical procedures are adequate and meet industry standards for data quality and integrity. There are no factors related to sampling or sample preparation that would materially impact the accuracy or reliability of the samples or the assay results. The QC results indicate that the assay results are within acceptable levels of accuracy and precision and the resulting database is sufficient to support the estimation of Mineral Resources and classification in the relevant confidence categories.

# 9.0 Data Verification

Data verification is the process of checking and verifying hard-copy logs and digital records for accuracy, ensuring the data on which mineral resource estimates are based can be linked from digital databases or records to log sheets and drilling or sampling intervals. It is an additional verification process to determine that QA and QC processes have been effectively applied and that these were working to assure and control the quality of the data. Data verification is carried out after samples have been collected, assays have been returned, and data have been stored in the database. Where relevant, data verification may also include check sampling carried out by the Competent Person, especially if SOPs are not available or difficult to audit, and QC data are limited to demonstrate processes were in control.

## 9.1 Site Visit

The RSC QP for Geology and Mineral Resource estimation visited the site from April 14 to 17, 2023, and September 1 to 15, 2023.

The RSC QP reviewed the Project geology, SOPs, collar locations, downhole surveys, logs, core, pulps, and laboratory certificates. The location data of a selection of collars were checked using a handheld GPS. The locations captured generally match and are within acceptable variance with the DGPS values that are recorded in the database. The RSC QP checked database entries against logs and chip trays, core and pulp samples retained on site. No noteworthy issues or discrepancies were observed.

A selection of check samples and spiked CRMs were sent to the laboratory. Forty samples of high-grade intercepts over different geological domains at Çöpler were selected for assay check, sampled under RSC supervision, and sent to ALS to confirm grade tenor and verify the laboratory. A batch of ten CRMs, of which two were spiked with one spoon of another CRM, was prepared under RSC supervision. The ten CRMs were distributed in three identical batches and submitted over the course of three weeks to ALS. No issues or discrepancies were observed.

Checks completed by the RSC QP only uncovered minor database errors which were corrected. Check samples indicated an expected correlation compared with the original sampling. In the RSC QP's opinion, the Çöpler district data were collected through proper processes and quality controlled to be fit for the purpose of exploration targeting, Mineral Resource estimation, and resource classification in suitable categories.

## 9.2 Database Validation

Digital database exports were supplied to RSC by SSR for use in the Mineral Resource estimates. The data are from the various drilling campaigns that have taken place at the Project deposits since 2000.

A list of 330 drill holes that were to be ignored, for various reasons, was provided by SSR, and removed from RSC's estimation work. These holes were drilled for geotechnical, water monitoring, and metallurgical studies, as well as grade control holes that were drilled on stockpiles. All data were then further validated and reviewed, where possible, and other than some minor data adjustments and corrections, no additional data were excluded from the estimation process. All numerical data were transferred to the modeling software, where collar, survey, lithology, assay, and density tables were validated, and inconsistencies checked.

Below-detection values were replaced by two-thirds of the detection limit in the model; for these samples, the original entries were retained in the database.

The data checks completed are summarized below.

- Consistency checks of alphanumeric fields, numeric fields, assay data, density, and interval tables (i.e. assays, lithology and surveys).
- Checks for erroneous drill hole collar outliers — easting, northing, elevation.
- Discrepancies in maximum hole depths between collar and assay, survey, and geology records.
- Survey table drill hole dips and azimuths checked to be within the expected range (in degrees), and that no excessive deviation exists between successive downhole readings.
- Survey table checked for any positive or near-zero drill hole inclinations.
- Assay table checked for overlaps of assay sample intervals.
- Assay table checked for negative assays (other than below detection limit values), missing assays or assays outside of expected ranges.
- Visual inspection of the drill holes in 3D to identify spatial inconsistencies of drill hole traces (i.e., unlikely hole deviations).

## 9.3 Çöpler Deposit Data Verification

As detailed in OreWin (2020), various independent database audits have been conducted since 2014. SSR also completes an internal data and QA/QC review of new data every quarter.

Before estimating the 2023 Mineral Resource, RSC completed data verification following the process outlined in Sections 9.1 and 9.2. The QA/QC review and data quality summary are detailed in Section 8.3.4.

In the RSC QP's opinion, the Çöpler data were collected through proper processes and quality controlled to be fit for the purpose of Mineral Resource estimation and classification in suitable categories; the data resulting from the process is managed well in appropriate management systems.

## 9.4 Greater Çakmaktepe

### 9.4.1 Çakmaktepe Deposit Data Verification

No new drill hole data has been collected since OreWin (2020) for the Çakmaktepe Deposit. As detailed in OreWin (2020), various independent database audits have been conducted since 2014.

Before estimating the 2023 Mineral Resource, RSC completed data verification following the process outlined in Sections 9.1 and 9.2. A data quality summary for Çakmaktepe is detailed in Section 8.3.4.

In the RSC QP's opinion, the Çakmaktepe data was collected through proper processes and quality controlled to be fit for the purpose of Mineral Resource estimation and classification in suitable categories; the data resulting from the process is managed well in appropriate management systems.

### 9.4.2 Çakmaktepe Ext Deposit Data Verification

Previous Çakmaktepe Ext data reviews were undertaken on a campaign basis at milestone times in the evolution of the exploration program. The collective results up to May 29, 2021, were reported in OreWin (2022). SSR also completes an internal data and QA/QC review of new data every quarter.

Before estimating the 2023 Mineral Resource, RSC completed data verification following the process outlined in Sections 9.1 and 9.2. A QA/QC review and data quality summary for Çakmaktepe Ext are detailed in Section 8.3.4.

In the RSC QP's opinion, the Çakmaktepe Ext data was collected through proper processes and quality controlled to be fit for the purpose of Mineral Resource estimation and classification in suitable categories; the data resulting from the process is managed well in appropriate management systems.

## 9.5 Bayramdere Deposit Data Verification

No new drill hole data have been collected at Bayramdere since 2016. As detailed in OreWin (2020), independent data verification was conducted during and immediately following the 2015 Bayramdere drilling program, and a data audit was completed in January 2016 (Cube Consulting, 2016b).

Before estimating the 2023 Mineral Resource, RSC completed data verification following the process outlined in Sections 9.1 and 9.2. A data quality summary for Bayramdere is detailed in Section 8.3.

In the RSC QP's opinion, the Bayramdere data were collected through proper processes and quality controlled to be fit for the purpose of Mineral Resource estimation and classification in suitable categories; the data resulting from the process is managed well in appropriate management systems.

## 9.6 QP Opinion

The RSC QP is of the opinion that database verification procedures for the Çöpler Project comply with industry standards and are adequate for the purposes of Mineral Resource estimation and classification in suitable categories.

# 10.0 Mineral Processing and Metallurgical Testing

## 10.1 Oxide Ore for Heap Leaching

This subsection is modified from OreWin (2022).

Material referred to as “oxide” in these subsections is defined as having a sulfur grade lower than 2%.

### 10.1.1 Test Work – Çöpler Oxide

Metallurgical test work for Çöpler oxide ore for heap leaching commenced in September 2004. Much of this testing was carried out by independent laboratory, Resource Development Inc. (RDi) of Wheat Ridge Colorado, USA, with oversight from Ausenco Services Pty Ltd of Brisbane, Australia, and Pennstrom Consulting of Highlands Ranch, Colorado. RDi is a metallurgical laboratory specializing in bench-scale testing and process flowsheet development. RDi makes no claims on their website or in reports to ISO certification. Additional follow-up metallurgical test work was conducted by independent laboratories, AMMTEC Limited (AMMTEC) of Perth, Australia, in 2009 and by McClelland Laboratories Inc. (McClelland) and supervised by Metallurgium between 2018 and 2019.

McClelland complies to the requirements of ISO/IEC 17025 for specific tests as listed on their respective scope of accreditation documents.

Table 10-1 presents a list of the metallurgical and analytical laboratories that contributed to the Project and their accreditation.

**Table 10-1: Metallurgical and Analytical Laboratories Contributing to the Project**

| Laboratory | Accreditation |
|---|---|
| SGS Ankara, Turkey | ISO/IEC 17020 conformity assessment, accredited by TURKAK, the national accreditation body |
| | ISO/IEC 17025 general requirements for the competence of testing and calibration laboratories, accredited by TURKAK |
| | ISO 9001 Quality Management System Standard certified |
| SGS Perth, Australia | Quality management and operational guidelines set out in ISO/IEC 17025 and ISO 9001 Quality Management Systems |
| ALS Metallurgy, Perth, Australia, formerly AMMTEC Ltd, Perth, Australia | ISO/IEC 17025 and ISO 9001 Quality Management Systems |
| ALS Metallurgy - Kamloops, British Columbia Canada | ISO/IEC 17025 and ISO 9001 Quality Management Systems |
| Kappes, Cassiday and Associates, and Florin Analytical Services, Reno Nevada USA | No certifications listed on Website. |

| Laboratory | Accreditation |
|---|---|
| McClelland Laboratories, Inc, Sparks, Nevada USA | ISO/IEC 17025, ILAC-MRA, IAS International Accreditation Service. Nevada State Certified NV-00933 for MWMP & HC Testing Procedures and Wastewater Certification. |
| Resource Development Inc., Wheat Ridge Colorado, recently merged with Forte Analytical, Fort Collins, Colorado USA | Quality Management ISO 17025 – Testing and Calibration Laboratories (In Progress) |
| Hazen Research, Inc., Golden, Colorado | Hazen holds analytical certifications from state regulatory agencies and from the US Environmental Protection Agency (EPA). Certifications available for client inspection. |

The heap leaching facilities were commissioned at the Project in late-2010 and have operated continuously since that time. Operations are currently ongoing. A summary of the samples selected for the historical test work is presented in Table 10-2.

**Table 10-2: Summary of Çöpler Samples Selected for Historical Test Work**

| Lithology | Sample Count | Avg Gold Grade (g/t) | Gold Grade Range (g/t) | | Avg Total Sulfur (%) | Total Sulfur Range | |
|---|---|---|---|---|---|---|---|
| Diorite | 20 | 0.64 | 0.02 | 2.60 | 2.61% | 0.7% | 5.9% |
| Metasediment | 10 | 1.14 | 0.24 | 2.77 | 2.59% | 0.6% | 4.8% |
| Master | 6 | 1.44 | 0.05 | 2.80 | 3.52% | 1.1% | 5.1% |
| Manganese | 2 | 6.44 | 5.07 | 7.80 | 6.03% | 1.4% | 10.6% |
| Gossan | 1 | 2.30 | 2.30 | 2.30 | 0.73% | 0.7% | 0.7% |
| Marble | 1 | 5.20 | 5.20 | 5.20 | 1.48% | 1.5% | 1.5% |
| Massive Py | 1 | 2.80 | 2.80 | 2.80 | 32.13% | 32.1% | 32.1% |

### 10.1.2 Test Work – Çakmaktepe Oxide

Metallurgical testwork on Çakmaktepe oxide ore for heap leaching was undertaken at the on-site metallurgical laboratory, initially under the supervision of Kappes, Cassiday & Associates (KCA). The initial testwork in 2015 undertook bottle roll and column leach tests. The results compare to the Çöpler oxide ore, with similar behaviour and leach kinetics. Subsequently, Çakmaktepe oxide ore was heap leached together with Çöpler oxide ore.

### 10.1.3 Test Work – Çakmaktepe Ext. Oxide

#### 10.1.3.1 Previous Test Work

Metallurgical test work on Çakmaktepe Ext. oxide for heap leaching has been undertaken at McClelland and supervised by Metallurgium. An initial test work program, including bottle roll and column leach, was carried out in 2019. This initial program identified two distinct domains with respect to gold recovery based on sulfide sulfur (SS) content of <1% and between 1% to

2%. The column test results indicated that the listwanite, dolomite, and jasperoid lithologies have physical properties amenable to heap leaching. The column tests were undertaken at a crush size of $P_{80}$ of 12.5 mm.

**Table 10-3: Summary of Çakmaktepe Ext Oxide Samples Selected for 2019 Test Work**

| Lithology | Sample Count | Avg Gold Grade (g/t) | Gold Grade Range (g/t) | |
|---|---|---|---|---|
| Cataclastite | 2 | 1.03 | 1.01 | 1.05 |
| Dolomite | 20 | 2.00 | 0.18 | 11.60 |
| Jasperoid | 17 | 3.78 | 0.76 | 15.40 |
| Listwanite | 32 | 1.52 | 0.42 | 4.38 |

#### 10.1.3.2 Çakmaktepe Ext. Historical Crushing Testwork

Crushing test work on six Çakmaktepe Ext. composite samples was performed as part of the 2019 McClelland test work program. The crusher work index (CWi) values ranged from 4.0 to 6.9 kWh/t, indicating that the material was very soft. The jasperoid was the hardest material, with a CWi of 6.9 kWh/t. The abrasion index (Ai) values ranged from 0.12 to 0.90. The jasperoid was the most abrasive (0.90, Very Abrasive), whereas all other lithology types ranged from 0.12 to 0.26 (Abrasive to Moderately Abrasive).

### 10.1.4 Test Work – Bayramdere Oxide

Metallurgical test work has been completed to characterize the Bayramdere oxide mineralisation and determine its suitability for heap leaching. A total of 11 intermittent bottle roll leach (IBRL) tests were completed on diamond drill core samples, for which the gold extraction ranged from 54% to 97% with an average cyanide consumption of 0.85 kg/t NaCN. In the column test, final gold extraction was 84% in the two duplicate columns with reasonable leach kinetics.

### 10.1.5 Heap Leach Gold Recovery

The original gold recovery assumptions for Çöpler ores were developed in 2008, based on the results of column leach and bottle roll testing performed by RDi between 2005 and 2008. These recovery assumptions are reviewed and updated annually based on the following information:

- An analysis of the results of additional column leach and bottle roll tests performed on routine composite samples of heap leach feed material conducted at the Çöpler project.
- Use of a MS Excel-based heap leach production model that is calibrated against actual gold production data at the Çöpler mine from start-up. This model has been audited periodically by Metallurgium.

The current heap leaching gold recovery assumptions are summarized for Çöpler oxide in Table 10-4, Çakmaktepe oxide in Table 10-5 (including Bayramdere), and Çakmaktepe Ext. oxide in Table 10-6.

The recovery values listed in Table 10-4, Table 10-5, and Table 10-6 consider heap leaching of ore crushed to 80% passing 12.5 mm, agglomerated, and placed on a lined heap leach pad for treatment.

**Table 10-4: Çöpler Gold Recovery (%) Assumptions for Heap Leaching of Oxide**

| Oxide Ore Type | Çöpler Zone | | | | | |
|---|---|---|---|---|---|---|
| | Manganese | Marble | Main | Main East | Main West | West |
| Diorite | 71.2 | 62.3 | 71.2 | 71.2 | 62.3 | 62.3 |
| Metasediment (Hornfels) | 66.8 | 66.8 | 66.8 | 66.8 | 66.8 | 66.8 |
| Limestone / Marble | 78.4 | 75.7 | 68.6 | 78.4 | 75.7 | 75.7 |
| Gossan | 71.2 | 65.1 | 71.2 | 71.2 | 65.1 | 65.1 |
| Manganese Diorite | 71.2 | 62.3 | 71.2 | 71.2 | 62.3 | 62.3 |

**Table 10-5: Çakmaktepe Gold Recovery (%) Assumptions for Heap Leaching of Oxide (incl. Bayramdere)**

| Oxide Ore Type | Çakmaktepe Zone | | | | |
|---|---|---|---|---|---|
| | Central | North | East | South-east | Bayramdere |
| Limestone / Marble | 70.0 | 59.0 | 67.0 | – | 75.0 |
| Metasediment (Hornfels) | 80.0 | 14.0 | – | – | – |
| Gossan | – | 59.0 | 67.0 | 75.0 | 75.0 |
| Jasperoid | 73.0 | 59.0 | – | – | – |
| Diorite | 61.0 | 38.0 | – | – | – |
| Ophiolite | 70.0 | 63.0 | 67.0 | 75.0 | 75.0 |

**Table 10-6: Çakmaktepe Ext. Gold Recovery (%) Assumptions for Heap Leaching of Oxide**

| Ore Type | Çakmaktepe Ext. Zone | |
|---|---|---|
| | Main | East |
| Sulfur <1% | | |
| Jasperoid | 50.0 | 50.0 |
| Listwanite | 73.0 | 55.0 |
| Dolomite | 73.0 | 55.0 |
| Sulfur 1%–2% | | |
| Jasperoid | 40.0 | 40.0 |
| Listwanite | 58.0 | 45.0 |
| Dolomite | 58.0 | 45.0 |

## 10.2 Oxide Ore for Grind / Leach

### 10.2.1 Metallurgical Testwork – Çakmaktepe Ext. Oxide

Exploration of the Çakmaktepe Ext. deposit commenced in 2017. Since then, two metallurgical test work programs have evaluated samples from Çakmaktepe Ext. Table 10-7 provides a summary of the metallurgical test work completed to support processing of Çakmaktepe Ext. oxide ore.

**Table 10-7: Çakmaktepe Ext. Oxide - Grind Leach - Metallurgical Testwork Summary**

| Year | Laboratory | Test Work Performed |
|---|---|---|
| 2018 | McClelland Laboratories Inc. (Phase I)<br>Reviewed by Metallurgium | Standard cyanide bottle roll tests at 75 µm of six Çakmaktepe Ext. oxide composites as part of a wider program to evaluate Çakmaktepe Ext. oxide amenability to heap leach.<br>Tests were conducted both with and without activated carbon |
| 2019 | McClelland Laboratories Inc. (Phase II and III)<br>Reviewed by Metallurgium | Standard Bond abrasion tests for six Çakmaktepe Ext. oxide composites |
| 2020 | McClelland Laboratories Inc. (Phase IV)<br>Partially completed.<br>No review | Bond ball mill work index tests and abrasion tests for three Çakmaktepe Ext. oxide composites.<br>Recovery sensitivity to grind size using standard cyanide bottle roll tests on seven Çakmaktepe Ext. oxide composites, including tests at a $k_{80}$ of 75 µm |
| 2023 | ALS Kamloops<br>Supervised by Ausenco | SMC®, Bond ball mill work index and abrasion index tests on 25 variability oxide samples.<br>Cyanide leaching bottle roll tests at a $k_{80}$ of 75 µm of 16 listwanite, 11 dolomite, and one jasperoid samples.<br>Tests were conducted both with and without activated carbon |

ALS Kamloops operates a Quality Management System which complies to the requirements of ISO 9001:2015 for provision of consultancy services to the mining industry including metallurgical, mineralogical and assay testing services; and design and analysis of processing systems.

#### 10.2.1.1 McClelland Test Work

**Phase I – Leaching (2018)**

In 2018/19, McClelland completed both standard and carbon-in-leach (CIL) cyanide bottle roll tests at a $P_{80}$ of 75 µm for six Çakmaktepe Ext. oxide lithology composite samples. Table 10-8 summarizes leaching test results.

**Table 10-8: McClelland (2018) – Çakmaktepe Ext. Oxide Leaching Test Work Results**

| Lithology | No. of Samples | Min | Max | Avg. |
|---|---|---|---|---|
| Standard Cyanide Bottle Roll Test (75 µm) - Au Recovery (%) | | | | |
| Listwanite | 4 | 73.4 | 88.2 | 83.0 |
| Dolomite | 2 | 76.7 | 83.4 | 82.5 |

| Lithology | No. of Samples | Min | Max | Avg. |
|---|---|---|---|---|
| CIL Bottle Roll Test (75 µm) - Au Recovery (%) | | | | |
| Listwanite | 4 | 77.4 | 87.5 | 84.2 |
| Dolomite | 2 | 83.2 | 90.1 | 86.7 |

**Phase II and III – Comminution (2019)**

Phase II and III of the 2019 McClelland test work included standard Bond abrasion tests on twelve Çakmaktepe Ext. lithology composites, consisting of five dolomite, six listwanite, and a single jasperoid sample. The average Ai for listwanite and dolomite was 0.15 g and 0.25 g, respectively, indicating moderate abrasiveness, while the jasperoid sample was 0.91 g, indicating very high abrasiveness.

**Phase IV – Comminution and Leaching (2020)**

In 2020, McClelland Laboratories completed both Bond ball mill work index and abrasion index testing on three Çakmaktepe Ext. oxide composite samples. The range of BWi was 14.7 to 19.6 kWh/t and the Ai range was 0.12 to 0.69 g.

Grind and leach tests were conducted at $P_{80}$ sizes between 50 and 150 µm; the oxide samples showed no sensitivity to grind size and recovery was flat through the size range tested. The range of recoveries was 50 to 90%, with an average of 73%. Composites were not separated by lithology.

### 10.2.1.2 ALS Kamloops Test Work

**Leaching (2023)**

In 2023, ALS Kamloops, an independent laboratory completed a test work program supervised by Ausenco to evaluate grind/leach processing of Çakmaktepe Ext. oxide ores. ALS Canada Ltd. Metallurgy Services of Kamloops, BC, Canada, is a metallurgical laboratory specializing in bench- and pilot-scale flotation testing and various metallurgical investigations. ALS Kamloops is an ISO 9001:2015 certified laboratory. Both standard and CIL bottle roll tests were completed at a grind size $P_{80}$ of 75 µm. Table 10-9 summarizes the Çakmaktepe Ext. oxide leaching results.

Testing on master composite samples indicated that gold recovery is insensitive to grind size over a range from 53 µm to 212 µm. Further testing is on-going to determine optimum grind size for the CIL circuit design, as well as isolating any deleterious lithologies or geochemistry.

**Table 10-9: ALS Kamloops (2023) – Çakmaktepe Ext. Oxide Leaching Testwork Results**

| Lithology | Variability Samples | | | | Master Composite Result |
|---|---|---|---|---|---|
| | No. of samples | Min | Max | Avg. | |
| Standard Cyanide Bottle Roll Test (75 µm) - Au Recovery (%) 24 hours | | | | | |
| Jasperoid | 1 | N/A | N/A | 69.1 | N/A |
| Listwanite | 15 | 71.0 | 93.1 | 84.1 | 88.5[1] |
| Dolomite | 10 | 66.9 | 82.5 | 74.9 | 80.0 |
| CIL Cyanide Bottle Roll Test (75 µm) - Au Recovery (%) 24 hours | | | | | |

| Lithology | Variability Samples | | | | Master Composite Result |
|---|---|---|---|---|---|
| | No. of samples | Min | Max | Avg. | |
| Jasperoid | 1 | N/A | N/A | 75.0 | N/A |
| Listwanite | 6 | 67.9 | 88.0 | 80.1 | 85.9 |
| Dolomite | 9 | 75.7 | 88.1 | 82.7 | 80.7 |

Notes:

1. While the Listwanite Master Composite sample gold recovery was 88.5%, the planning assumption is 90% recovery as the composite only reached the median grade of the resource and historic work has shown a strong grade-recovery relationship.

**Comminution Test Work (2023)**

Comminution test work was completed on 10 dolomite, 14 Listwanite, and a single jasperoid oxide sample. Table 10-10 outlines the summary of results of the Çakmaktepe Ext. oxide comminution test work.

**Table 10-10: ALS Kamloops (2023) – Çakmaktepe Ext. Oxide Comminution Results**

| Comminution Parameter | | Dolomite | Listwanite | Jasperoid oxide |
|---|---|---|---|---|
| JK SAG mill hardness (Axb) | 25th percentile | 43.0 | 47.7 | 30.4 |
| | Range | 31.0 – 103.2 | 36.1 – 96.9 | - |
| BWi (kWh/t) | 75th percentile | 13.9 | 17.5 | 17.1 |
| Closing screen | Range | 8.0 – 18.6 | 10.7 – 18.4 | - |
| Ai (g) | Average | 0.12 | 0.24 | 0.63 |
| | Range | 0.02 – 0.50 | 0.06 – 0.60 | - |

### 10.2.2 Metallurgical Variability – Çakmaktepe Ext. Oxide

Sample selection for the 2023 metallurgical test work program was developed by Ausenco using a drill hole database and block model provided by SSR. Samples were selected to be representative of both lithological and grade variability. Spatial coverage was assessed by visualising the samples in 3D using Cancha software. Sample selection also took into consideration the preliminary mining sequence, with higher sample density in areas expected to be mined in the earlier years of the grind/leach plant operation.

### 10.2.3 Deleterious Elements – Çakmaktepe Ext. Oxide

Mercury head grades in the Çakmaktepe Ext. test work samples were in the range of 0.52 to 34.8 ppm.

Existing controls for mercury at Çöpler include monitoring and capturing fumes from the electrowinning cells. Gold sludge recovered from electrowinning is heated and in a mercury retort for extraction and recovery of mercury prior to smelting. Exhaust systems are installed over the furnace and in the gold room. New controls for Çakmaktepe Ext. ore will include capture of off-gas from the new carbon regeneration kiln, which will then pass through a sulfur impregnated carbon mercury scrubber.

### 10.2.4 Grind / Leach Gold Recovery Estimates – Çakmaktepe Ext. Oxide

Table 10-11 presents the gold recovery estimates for grind/leach processing of Çakmaktepe Ext. oxide lithologies. Further test work is planned to understand metallurgical and mineralogical variability across the deposit, gold recovery variability, and grind size to recovery insensitivity.

**Table 10-11: Çakmaktepe Ext. Gold Recovery Estimates for Grind/Leach of Oxide Ore**

| Lithology | Gold Recovery (%) |
|---|---|
| Jasperoid | 60 |
| Listwanite | 90 |
| Dolomite | 83 |

## 10.3 Sulfide Ores – Flotation and Pressure Oxidation

Sulfide material (i.e., material with >2% sulfur content) is not suitable for treatment by the heap leaching process.

### 10.3.1 Historical Test Work – Çöpler Sulfide

This subsection is modified from OreWin (2022).

Historical testing was conducted on samples from the sulfide material in several phases. RDi performed several sulfide processing scoping-level investigations from 2006–2009. A two-phase program on sulfide samples was conducted at SGS laboratory in Ankara, Türkiye (SGS Ankara) in 2009 and 2010 to support a pre-feasibility study (PFS) completed in 2011 (Samuel, 2011). A QEMSCAN (quantitative evaluation of minerals by scanning electron microscopy) mineralogy study on three sulfide (and six oxide) samples was performed by AMMTEC in December 2008.

The historical work completed at both RDi and SGS Ankara concentrated on evaluating sulfide processing options, including direct cyanidation, flotation, cyanidation of flotation concentrates, pressure oxidation (POX) coupled with cyanidation, and roasting coupled with cyanidation. The evaluation of the historical data in the PFS resulted in the selection of POX coupled with cyanidation as the process to further evaluate with testing and a FS.

Initial metallurgical test work carried out by RDi indicated that 11% to 30% of the gold content in the Çöpler sulfide material may be amenable to whole-ore cyanidation, as demonstrated by diagnostic leaching. Between 60% to 80% of the gold content was found to be associated with sulfide minerals and would require some type of oxidation step to liberate the gold for cyanidation.

The RDi scoping studies indicated that pre-treatment using POX was the most effective treatment and displayed the potential to achieve greater than 90% gold extractions. Flotation tests indicated that gold could be recovered by flotation, but the concentrates were low-grade with relatively high mass pulls and low gold recovery. Test work indicated that flotation concentrate and tailings did not leach well using cyanide, even after being finely ground.

### 10.3.2 Historical Test Work – Çakmaktepe Ext. Sulfide

A metallurgical testing program was competed by McClelland and supervised by Metallurgium between 2018 and 2020. In 2023, ALS Kamloops completed a test work program supervised by Ausenco. The two programs combined provide comminution parameters for Çakmaktepe Ext.

sulfide and preliminary results for mineralogy, direct cyanidation, and rougher flotation with flotation tailings leaching.

### 10.3.3 Mineralogy – Çöpler Sulfide

This subsection is extracted from OreWin (2022).

In December 2008, Anagold commissioned AMMTEC to complete a QEMSCAN precious metals search (PMS), trace mineral search (TMS), and energy dispersive spectra signal (EDS) mineralogy analyses performed on three sulfide mineralisation samples. Analyses were performed on samples of diorite, metasediment, and massive pyrite rock types.

The findings from the 2008 QEMSCAN analyses indicated that the gangue mineralisation in the sulfide mineralisation is composed mainly of quartz, micas / clays, and feldspars, (displaying relative abundances of approximately 31%, 27%, and 21%, respectively). The sulfide mineralisation consists of pyrite, arsenopyrite, chalcopyrite, and sphalerite.

A gold deportment study was performed by AMTEL Ltd. (AMTEL) on samples of MC4 composite after flotation separation. Although flotation was not part of the flow sheet, it is a useful method of concentrating the sulfides (the main gold carriers) to improve analysis statistics. The Advanced Mineral Technology Laboratory (AMTEL) of London, ON, Canada, is an independent analytical laboratory specializing in mineralogical services to produce detailed gold deportment analysis. AMTEL makes no claims on their website or in reports to ISO certification. The combined concentrate represented 18.5% of the feed mass and assayed 9.8 g/t Au and 23% SS. Recoveries of gold and sulfur to concentrate were 72.7% and 90% respectively. Flotation tailings assayed 0.68 g/t Au and 0.48% SS.

The detailed mineralogical analysis confirms that the gold is primarily carried by sulfide minerals. In the calculated head, 83% of all gold is in sulfides (free or locked) and only 2.4% was held in rock. The remainder of the gold (14%) was present as free gold, and this correlates well with a direct cyanidation recovery of only 17% when the ore was ground to a P80 of 90 µm.

Of the gold that is in sulfides, the majority (78%) is in sub-microscopic form. This confirms the refractory nature of the ore and explains why oxidation of the sulfides is necessary to make the gold available for leaching. Arsenopyrite was the sulfide mineral found to have the highest contained gold, averaging 123 g/t Au by one measure and 182 g/t Au by a second. Gold in pyrite was more than an order of magnitude lower than arsenopyrite and averaged 7.0 g/t Au. Marcasite, a mineral chemically similar to pyrite, carried an average of 17.8 g/t Au. Of the gold contained in sulfides, 50% was found to be in arsenopyrite, 25% in pyrite, and 20% in marcasite.

In summary, the AMTEL gold deportment study is consistent with previous mineralogy studies and confirms that a large portion of the gold is present as sub-microscopic particles, primarily in sulfides, largely arsenopyrite. The study also concluded that whole-ore oxidation would be required as a pre-treatment to cyanidation to liberate the majority of the gold contained in the sulfide materials. The gold deportment summary can be found in Table 10-12, below.

**Table 10-12: Gold Deportment in Flotation Separated Streams**

| Form and Carrier of Gold | Concentrate (g/t) | Tails (g/t) |
|---|---|---|
| Assayed Grade | 10.187 ± 0.167 | 0.837 ± 0.028 |
| Free / Liberated Gold Grains | | |

| Form and Carrier of Gold | Concentrate (g/t) | Tails (g/t) |
|---|---|---|
| >40 µm | 0.106 | 0.004 * |
| 5–4 µm | 0.346 | 0.003 |
| <5 µm | 0.871 | 0.146 |
| Exposed Associated Gold Grains | | |
| Free Sulfides +5 µm | 0.350 | 0.018 |
| –5 µm | – | – |
| Rock-Sulfide Composites | 0.125 | 0.052 |
| Rock Particles | 0.021 | 0.035 |
| Enclosed Associated Gold Grains | | |
| Free Sulfides +5 µm | 0.977 | 0.007 |
| –5 µm | 0.292 | 0.029 |
| Rock-Sulfide Composites | 0.338 | 0.023 |
| Rock Particles | 0.014 | 0.031 |
| Sub-microscopic Gold | | |
| Free Sulfides +5 µm | 4.156 | 0.020 |
| –5 µm | 1.244 | 0.157 |
| Associated Sulfides | 1.605 | 0.304 |
| Total (mineralogically counted) | 10.444(102.5%) | 0.829(99.0%) |

* From a very small number of grains (1 free grain, from ~2 kg of material)

### 10.3.4 Mineralogy – Çakmaktepe Ext. Sulfide

In 2023, ALS Kamloops completed a mineralogical assessment of a master composite jasperoid sample by Particle Mineral Analysis (PMA) QEMSCAN protocols. The results indicated that gangue mineralogy consisted of mainly of quartz and carbonates displaying relative abundances of 72.2% and 10.1% respectively. Sulfide mineralisation consists of pyrite (83% of sulfur), sulfate minerals including barite, jarosite, and calcium sulfate (15% of sulfur), and other minor sulfides including arsenopyrite and chalcopyrite. Arsenic was primarily in arsenopyrite and other arsenic sulfides (77%) with remaining arsenic in goethite/limonite and arsenate (23%). Copper grade in the sample was low (0.01%).

Size-by-size analysis indicated that gold concentrated in the finer sizes (<12 µm) and appeared to be directly related with arsenic and iron elemental assays. This was noted in the preliminary flotation tests, where gold recovery followed arsenic recovery.

### 10.3.5 Direct Cyanidation – Çöpler Sulfide

This subsection is extracted from OreWin (2022).

Hazen performed direct cyanidation carbon-in-leach (CIL) tests at various grind sizes with no pre-treatment on the individual sulfide rock type composites to establish baseline gold extractions. The goal of these tests was to examine gold extraction variability with grind size. These samples were subsequently used to prepare feed composites used in the Hazen pilot plant program.

The test work demonstrated that the bulk of the Çöpler sulfide samples are refractory to direct cyanidation, and that extractions do not improve significantly with finer grinding.

### 10.3.6 Direct Cyanidation – Çakmaktepe Ext. Sulfide

In 2019, as part of the McClelland broader heap leaching focused program, cyanide bottle roll testing with a target $P_{80}$ of 12.5 mm was completed on seven Çakmaktepe Ext. sulfide (>2% sulfur) composites. The reported gold recovery ranged from 16%–62% (average of 29%). This showed a relatively poor response of the sulfide jasperoid material to direct cyanidation. Finer grind sizes were not investigated in the McClelland program.

In 2023, ALS Kamloops completed direct cyanidation testing by standard cyanide bottle roll tests of four variability samples and a jasperoid sulfide master composite. The leach feed grind size target was a $P_{80}$ of 75 µm. Gold recovery ranged from 22.5%–69.7% (with an average of 47.0%). The jasperoid composite gold recovery was 43.7%, suggesting refractory characteristics.

### 10.3.7 Flotation Test Work – Çöpler Sulfide

This subsection is modified from OreWin (2022).

Flotation test work has been undertaken on Çöpler sulfide samples since before 2006 with a series of test work programs and studies undertaken by RDi, FLSmidth, and the on-site metallurgical laboratory.

Initially, the test work was focused on development of a viable flowsheet to recover gold to enable subsequent recovery as doré. This work was unsuccessful due to a generally poor flotation response, resulting in the adoption of the current POX and CIP gold recovery flowsheet.

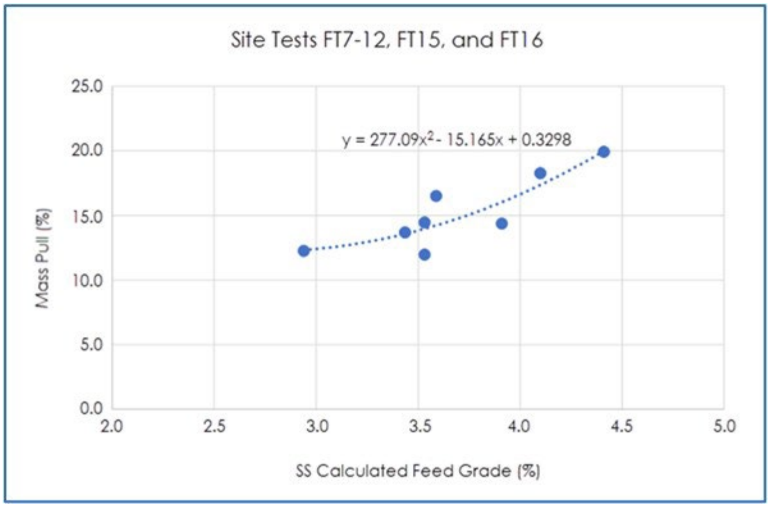
In 2019, flotation was again considered for incorporation into the POX / CIP circuit to improve both sulfur and gold recovery and enable the POX circuit to operate at optimum conditions.

Test work was conducted on fresh material from the existing sulfide circuit. A total of 20 tests were conducted as part of this program.

The key variables considered in determining throughput for flotation are sulfide sulfur (SS) flotation recovery and flotation mass pull. Gold recovery to concentrate and gold recovery of the flotation tails are also determined. Of the 20 tests undertaken, a total of eight flotation test work tests are considered representative due to their relative commonality of flotation conditions, and the SS feed grade is within the range that the flotation plant is expected to operate. The results ranged from 65% to 81% SS recovery and 43% to 55% Au recovery to concentrate.

The mass pull for sulfide flotation is typically related to SS grade. Figure 10-1 shows the relationship of mass pull to SS feed grade.

**Figure 10-1: Feed SS% – Mass Pull Relationship**




Source: Anagold, 2020

Notes: Float Concentrate Mass Pull = 277.09 x (Feed SS%)$^2$ – 15.165 x (Feed SS%) + 0.3298

### 10.3.8 Flotation Test Work – Çakmaktepe Ext. Sulfide

#### 10.3.8.1 McClelland Test Work (2019)

This subsection is modified from OreWin (2022).

Metallurgical test work on Çakmaktepe Ext. sulfide was undertaken by McClelland in 2019. Six jasperoid composites were tested by rougher flotation with agitated cyanidation of the flotation tailings. Gold recovery to the flotation bulk sulfide rougher concentrate ranged from 40.3% to 55.0%, with an average of 46.5%. Gold extracted by cyanide leaching of the flotation tailings ranged from 24.9% to 39.9% (average of 34.1%) of gold contained in the samples. The combined gold recovery of the flotation concentrates and tailings cyanidation processes ranged from 72.7% to 87.1% (with an average of 80.6%) and do not include gold losses from subsequent processing of the flotation concentrate.

Two cataclastite samples were found to be of very refractory nature, with flotation gold recoveries of 68.5% and 73.7% (71.1% average) and low gold leaching recoveries of 2.9% and 6%, respectively.

#### 10.3.8.2 ALS Kamloops Test Work (2023)

The 2023 ALS Kamloops test work program included flotation test work on a jasperoid sulfide master composite and 15 variability samples.

The test work on the jasperoid master composite explored conditions of feed density, grind size, and collector dosage. Gold recovery to the flotation bulk sulfide rougher concentrate was 66.9%, and gold extracted by cyanide leaching of the flotation tailings was 20.0% of gold contained in the sample. The combined flotation concentrate and tailings leaching recovery was 86.9% at a grind size P80 of 75 µm. The ore required relatively very high collector additions (1 kg/t) to improve flotation kinetics.

Test work on the 15 variability samples was in progress at the time the report was written.

### 10.3.9 Test Work – Comminution – Çöpler Sulfide

This subsection is extracted from OreWin (2022).

The comminution properties for the three major ore domains (metasediment, diorite, and manganese diorite) have been measured during all test work stages. Rock competence drives semi-autogenous grind (SAG) mill selection, Bond ball mill work index (BWi) drives ball mill selection, and Ai is used to estimate media and mill liner consumption rates. The major domains exhibit moderate comminution characteristics.

### 10.3.10 Test Work – Comminution – Çakmaktepe Ext. Sulfide

Comminution test work was completed on 14 variability jasperoid sulfide samples by ALS Kamloops in 2023. Table 10-13 summarizes the results of the Çakmaktepe Ext. sulfide comminution testwork. Çakmaktepe Ext. sulfide is significantly harder and more abrasive than Çöpler sulfide ores and is not amenable for feeding to the existing Sulfide plant primary sizer.

**Table 10-13: ALS Kamloops (2023) – Çakmaktepe Ext. Sulfide Comminution Results**

| Comminution Parameter | | Jasperoid sulfide |
|---|---|---|
| JK SAG mill hardness (Axb) | 25th percentile | 30.2 |
| | Range | 28.0 – 45.8 |
| BWi (kWh/t)<br>Closing screen size of 106 µm | 75th percentile | 19.3 |
| | Range | 14.2 – 20.3 |
| Ai (g) | Average | 0.55 |
| | Range | 0.09 – 0.88 |

### 10.3.11 Test Work – POX

This subsection is modified from OreWin (2022).

Three continuous pilot plant programs have been conducted for the POX sulfide plant: the first two programs at Hazen Research, Inc. (Hazen) comprising a total of four test campaigns, and the third program at SGS Lakefield Oretest, Perth, Australia (SGS Perth). Three campaigns were completed during the first pilot plant program, with the first campaign commencing in February 2012. The second pilot program, incorporating one campaign, was conducted in December 2012. The third pilot program, conducted in August 2015, included a single campaign that tested multiple lithologies at high and low-acidulation extents.

The pilot plant facility for the first pilot program included the following continuous circuits: acidulation, POX autoclave, hot cure (HC), primary neutralisation (PN), six-stage counter current decantation (CCD), and mixed sulfide precipitation (MSP). Ore preparation (grinding), cyanidation, activated carbon gold recovery, cyanide destruction, tailings neutralisation, and final tailings production were all completed on a batch basis.

In 2015, Anagold performed confirmatory pilot testing on a range of ore-types and composite blends treated at ‘high’ and ‘low’ acidulation conditions. This program comprised a single pilot plant campaign, Campaign 5, which was conducted at SGS Perth during August and September. Apart from testing the impact of acidulation chemistry, one of the key purposes of the campaign was to produce samples for repeat thickener vendor testing. This was prompted by the inconsistent vendor data generated during Campaigns 1–4.

### 10.3.12 Test Work – Overall Circuit Performance

This subsection is extracted from OreWin (2022).

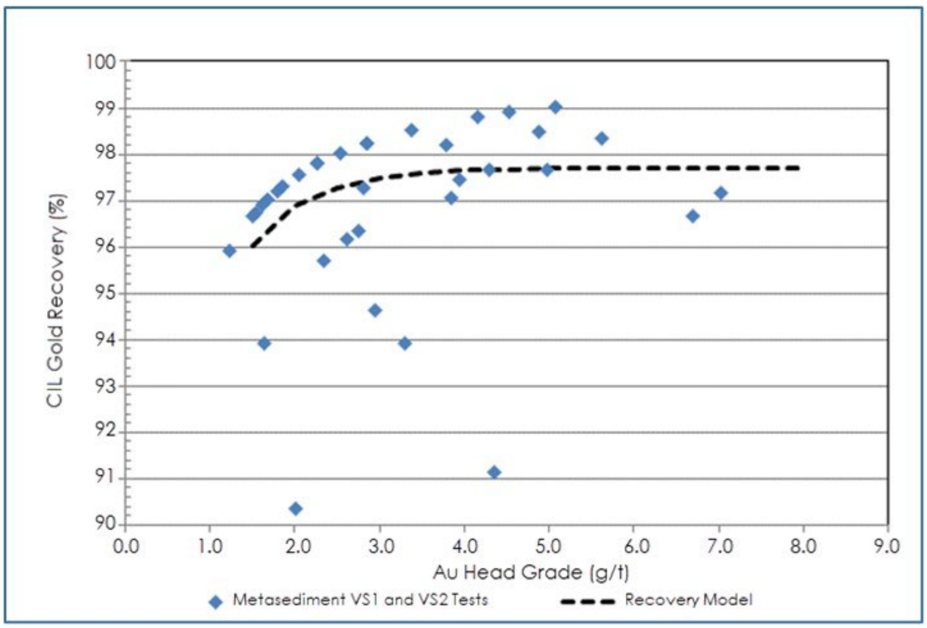
The recovery of gold across a laboratory carbon-in-pulp (CIP) circuit was measured for a number of variability samples representing each of the three major ore types.

In addition to the test work, the commercial sulfide POX plant commenced commissioning in December 2018, with actual results reviewed to validate the recovery.

#### 10.3.12.1 POX Gold Recovery

The gold recovery results of the acceptable tests are plotted in Figure 10-2, Figure 10-3, and Figure 10-4, together with an appropriate recovery model curve in each instance.

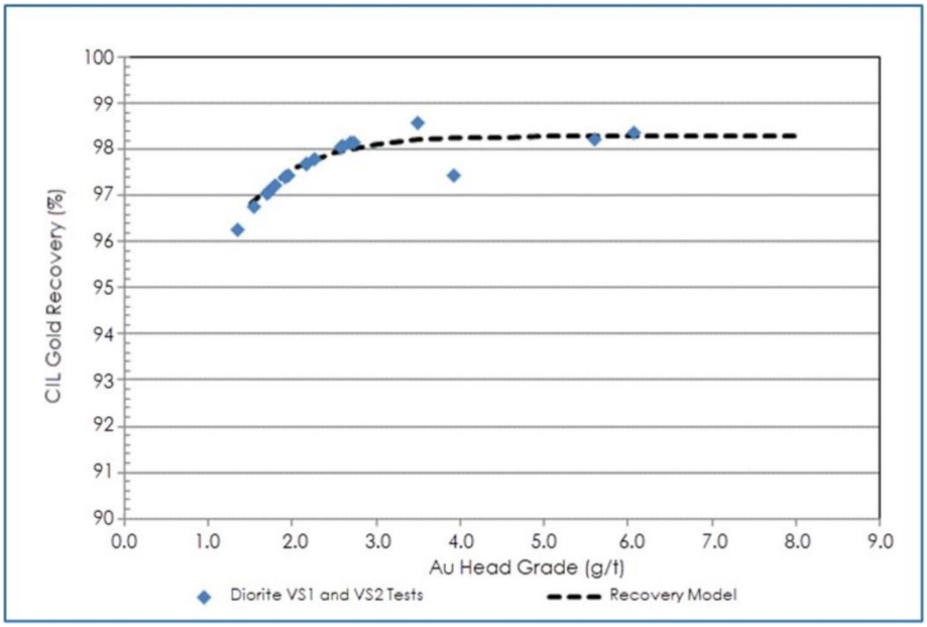
**Figure 10-2: Metasediment Gold Recovery Results and Model**




Source: Anagold, 2016

The results are plotted in terms of feed grade so that predictions of recovery during operations can be made by knowing the feed grade.

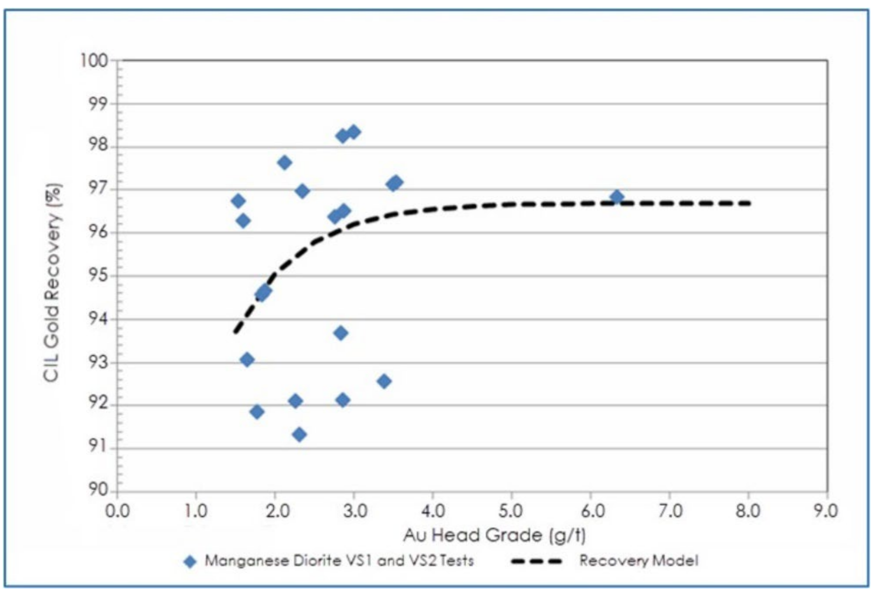
**Figure 10-3: Diorite Gold Recovery and Model**




Source: Anagold, 2016

Note that Figure 10-2 and Figure 10-3 show a number of results that tend to form a regular curve at the top of the datasets. In each instance when the results are on this curve, the solid tails Au grade was below the limit of detection and an assigned tails grade equal to half the limit of detection was set for calculation purposes.

**Figure 10-4: Manganese Diorite Gold Recovery and Model**




Source: Anagold, 2016

The recovery model is represented by the equation:

$$Gold\ Recovery\ (\%) = a * (1 - e^{-b*(Au\ Head\ \left(\frac{g}{t}\right) - c)}) + d$$

Parameter ‘a’ is the only one of the four that has a direct process meaning, representing the maximum recovery the equation can generate. The parameter ‘d’ represents circuit losses in a commercial operation.

The parameters used to generate the curves in Figure 10-2, Figure 10-3, and Figure 10-4 are shown in Table 10-14, and include an allowance for operational losses of 1%.

**Table 10-14: Gold POX Recovery Model Parameters**

| Material Type | a | b | c | d |
|---|---|---|---|---|
| Metasediment | 97.7 | 1.4 | –1.4 | –1.0 |
| Diorite | 98.3 | 1.4 | –1.5 | –1.0 |
| Manganese Diorite | 96.7 | 1.2 | –1.4 | –1.0 |

The POX commissioning and ramp-up allowances in Table 10-15 have been made on top of the base recoveries.

**Table 10-15: Commissioning and Ramp-up Allowances**

| Recovery Corrections | Gold Recovery Deduction (%) |
|---|---|
| Commissioning to June 2019 | –3.30 |
| Ramp-up July 2019 to June 2020 | –2.30 |
| Flotation Commissioning | –0.75 |

### 10.3.12.2 POX Silver Recovery

The silver recovery pattern is much less clear than gold because silver is not released by the oxidation process. Silver recovery is determined from actual plant recovery over the period January 2019 through February 2020. The silver recovery calculates to 3.0%.

### 10.3.12.3 Flotation Gold Recovery

From the test work, it is estimated that the flotation concentrate reporting to the POX circuit will achieve the same overall recovery as the ore directly reporting to POX. Gold recovery to the flotation concentrate is estimated to be 55%.

The flotation tails reporting directly to the leach circuit are estimated to have a gold recovery of 43%, based on test work using samples collected while processing large amounts of formerly stockpiled ore. When processing freshly mined sulfide ore, flotation tails recoveries can vary between 10% and 30% in CIP.

An allowance of 0.75% reduced gold recovery during commissioning and ramp-up of the flotation circuit (Year 1 of flotation operation) has been included.

## 10.4 Mineral Processing and Metallurgical Discussion

### 10.4.1 Grind / Leach Processing – Çakmaktepe Ext. Oxides

Since exploration of Çakmaktepe Ext. commenced in 2017, two test work programs have investigated leaching of Çakmaktepe Ext. oxide ores.

Sufficient comminution testwork exists to support the design criteria for the grind/leach process plant. Test work indicates that Çakmaktepe Ext. oxide ores are amenable to cyanide leaching. Gold recovery is variable by lithology. There is significant variability within each lithology which is currently not well understood.

Recovery estimates are based on a grind size of 75 µm and a leach time of 24 hours. The test work indicates that gold recovery is insensitive to grind size between 53 and 212 µm.

Further test work is planned to understand metallurgical and mineralogical variability across the deposit, gold recovery variability, grind size to recovery insensitivity, and CIL benefits.

### 10.4.2 Flotation and POX Processing – Çöpler Sulfides

This subsection is modified from OreWin (2022).

A large amount of POX test work has been performed on Çöpler sulfide ore across several pilot plant campaigns. The processes used have been shown to be robust, as demonstrated through operational performance during commissioning, ramp-up, and operations.

The addition of a flotation circuit to the sulfide plant provides stability and flexibility to the POX circuit operation to maximize throughput and oxygen utilization by maintaining optimum sulfur grade to the autoclaves.

Ongoing test work and analysis is also recommended on POX oxidation and leach recovery to improve and optimize circuit performance. This should include detailed assessment of gold deportment in final tailings.

### 10.4.3 Flotation and POX Processing - Çakmaktepe Ext. Sulfides

Comminution test work indicates that Çakmaktepe Ext. sulfide ore (jasperoid) is significantly harder and more abrasive than Çöpler sulfide ores and is not amenable for feeding to the existing Sulfide plant primary sizer. No test work has been completed for direct POX processing of Çakmaktepe Ext. sulfide ores or flotation concentrates.

Further metallurgical testing of Çakmaktepe Ext. material types, both oxide and sulfide, is recommended to optimize the feeds to POX and slip stream flotation circuit. Further mineralogical work is recommended to understand the main gold associations.

## 10.5 QP Opinion

In the opinion of the QP, the data, including metallurgical test work and operating experience with the various ores within the deposit, are adequate for the purposes used in this Technical Report and the analytical procedures used in the analyses are of conventional industry practice. The test work focuses on new ore types and mineralization being encountered as a result of ongoing exploration and expansion. Much more work will be performed in future to characterize the new materials and to determine the affects of the variable ores on the existing operating plants.

The main deleterious elements in the Copler ores are arsenic and mercury. The arsenic is encountered in the sulfide plant from arsenopyrite, which is oxidized in the autoclaves. The arsenic is oxidized and reacted with ferric iron in the autoclave to form insoluble ferric arsenate which is further reacted and precipitated in the subsequent Fe/As precipitation circuit of the sulfide plant. Mercury is encountered in the cyanide leaching circuits and is recovered in the electrowinning and refining areas as described in Section 13.2.3. The QP considers these methods of mitigation to be consistent with best industry practices.

# 11.0 Mineral Resource Estimates

## 11.1 Summary

Mineral Resources have been classified in accordance with the U.S. Securities and Exchange Commission (US SEC) Regulation S-K subpart 1300 rules for Property Disclosures for Mining Registrants (S-K 1300) and were estimated by RSC. Mineral Resources are presented on a project basis and have an effective date of October 31, 2023.

The RSC QP has prepared the Mineral Resource estimates derived from drilling on the properties that are subject of this report. SLR has reviewed, audited, and accepted the Mineral Resource estimate prepared by RSC which are based on block model values developed from reported drilling results and assays on the mineralized properties.

The Mineral Resource estimates were completed and validated using a combination of various software tools, including Seequent's Leapfrog Geo (Leapfrog Geo), Datamine Studio and Supervisor software. Estimates were validated using standard industry techniques including statistical comparisons with composite samples and nearest neighbor (NN) estimates, swath plots, and visual reviews in cross-section and plan. A visual review comparing blocks to drill holes was completed after the block modeling work was performed to ensure general lithologic and analytical conformance and was peer reviewed prior to finalization.

Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability, nor is there certainty that all or any part of the Mineral Resource estimated here will be converted to Mineral Reserves through further study. Sources of uncertainty that may affect the reporting of Mineral Resources include sampling or drilling methods, data processing and handling, geologic modelling, and estimation.

Mineral Resources are reported exclusive of Mineral Reserves and have been summarized by project, Mineral Resource classification, and oxidation state in Table 11-1 which also summarises the cut-off values, metallurgical recoveries, and SSR ownership percentage associated with the Mineral Resources.

In the opinion of the RSC QP, the resource evaluation reported herein is an appropriate representation of the gold, silver and copper Mineral Resources found at the Çöpler Project at the current level of sampling. The RSC QP is of the opinion that with consideration of the recommendations summarized in Sections 1 and 23 of this TRS, any issues relating to all relevant technical and economic factors likely to influence the prospect of economic extraction can be resolved with further work.

**Table 11-1: Summary of Çöpler Mine, Greater Çakmaktepe and Bayramdere Mineral Resources (SSR's Attributable Only)**

| Deposit | Measured Mineral Resources | | | Indicated Mineral Resources | | | Measured + Indicated Mineral Resources | | | Inferred Mineral Resources | | | NSR Cut-off Values |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Amount | Grade | Rec | Amount | Grade | Rec | Amount | Grade | Rec | Amount | Grade | Rec | |
| **Gold** | **(Mt)** | **(g/t Au)** | **(%)** | **(Mt)** | **(g/t Au)** | **(%)** | **(Mt)** | **(g/t Au)** | **(%)** | **(Mt)** | **(g/t Au)** | **(%)** | **($/t)** |
| Çöpler Mine | 5.0 | 1.31 | 40 - 91 | 11.1 | 1.29 | 40 - 91 | 16.2 | 1.29 | 40 - 91 | 14.0 | 1.53 | 40 - 91 | 18.34 - 39.87 |
| Greater Çakmaktepe | 3.6 | 0.94 | 40 - 91 | 7.3 | 1.10 | 40 - 91 | 10.9 | 1.05 | 40 - 91 | 4.8 | 1.87 | 40 - 91 | 18.34 - 44.37 |
| Bayramdere | - | - | - | 0.1 | 2.36 | 75 | 0.1 | 2.36 | 75 | - | - | - | 18.34 |
| **Total Gold** | **8.6** | **1.15** | **40 - 91** | **18.6** | **1.22** | **40 - 91** | **27.2** | **1.20** | **40 - 91** | **18.9** | **1.61** | **40 - 91** | **18.34 - 44.37** |
| **Silver** | **(Mt)** | **(g/t Ag)** | **(%)** | **(Mt)** | **(g/t Ag)** | **(%)** | **(Mt)** | **(g/t Ag)** | **(%)** | **(Mt)** | **(g/t Ag)** | **(%)** | **($/t)** |
| Çöpler Mine | 5.0 | 3.33 | 0 - 38 | 11.1 | 3.38 | 0 - 38 | 16.2 | 3.36 | 0 - 38 | 14.0 | 4.92 | 0 - 38 | 18.34 - 39.87 |
| Greater Çakmaktepe | 3.6 | 3.75 | 0 - 20 | 7.3 | 2.56 | 0 - 20 | 10.9 | 2.95 | 0 - 20 | 4.8 | 2.26 | 0 - 20 | 18.34 - 44.37 |
| Bayramdere | - | - | - | 0.1 | 25.55 | 0 - 54 | 0.1 | 25.55 | 0 - 54 | - | - | - | 18.34 |
| **Total Silver** | **8.6** | **3.51** | **0 - 54** | **18.6** | **3.20** | **0 - 54** | **27.2** | **3.29** | **0 - 54** | **18.9** | **4.24** | **0 - 54** | **18.34 - 44.37** |
| **Copper** | **(Mt)** | **(% Cu)** | **(%)** | **(Mt)** | **(% Cu)** | **(%)** | **(Mt)** | **(% Cu)** | **(%)** | **(Mt)** | **(% Cu)** | **(%)** | **($/t)** |
| Çöpler Mine | 5.0 | 0.08 | 0 - 15 | 11.1 | 0.07 | 0 - 15 | 16.2 | 0.07 | 0 - 15 | 14.0 | 0.07 | 0 - 15 | 18.34 - 39.87 |
| Greater Çakmaktepe | 3.6 | 0.03 | 0 | 7.3 | 0.02 | 0 | 10.9 | 0.02 | 0 | 4.8 | 0.02 | 0 | 18.34 - 44.37 |
| Bayramdere | - | - | - | 0.1 | 0.00 | 1 | 0.1 | 0.00 | 1 | - | - | - | 18.34 |
| **Total Copper** | **8.6** | **0.06** | **0 - 15** | **18.6** | **0.05** | **0 - 15** | **27.2** | **0.05** | **0 - 15** | **18.9** | **0.06** | **0 - 15** | **18.34 - 44.37** |

Notes:

1. The definitions for Mineral Resources in S-K 1300 were followed.
2. Mineral Resources are reported based on October 31, 2023 topography surface.
3. Mineral Resources are reported exclusive of Mineral Reserves.
4. The numbers reflect SSR attributed share of 80%.
5. Heap Leach Oxide is defined as material <2% total sulfur.
6. Grind Leach Oxide is defined as material <2% total sulfur. Processing route will be available approximately in 2027.
7. Sulfide is defined as material ≥2% total sulfur.
8. Heap leach oxide uses a NSR cut-off $18.34/t, grind leach oxide uses a NSR cut-off value $19.26/t, and Çöpler sulfide ore uses a cut-off grade of $39.87/t, Greater Çakmaktepe sulfide ore uses a cut-off grade of $44.37/t . All cut-off values include allowances for royalty payable.

9. Metallurgical gold recovery for heap leach oxide and grind leach varies between 40-78% and 53-90%, respectively, based on lithology; metallurgical recovery for sulfide varies between 81% and 91% based on lithology.
10. Metallurgical silver recoveries for heap leach and grind leach oxide varies between 0 and 54% based on lithology.  Metallurgical recovery for sulfide varies between 0 and 3%.
11. Metallurgical copper recoveries for heap leach and grind leach oxide varies between 0 and 15% based on lithology.  Metallurgical recovery for sulfide is 0%.
12. Metal prices used to report the Mineral Resources are $1,750/oz Au, $22.00/oz Ag, and $3.95/lb Cu with allowances for payability, deductions, transport, and royalties.
13. The point of reference for Mineral Resources is the point of feed into the processing facility for grind leach and sulfide material; or for Heap Leach oxide, it is the Carbon columns.
14. All Mineral Resources estimates were constrained within conceptual pit shells to meet reasonable prospects for economic extraction criteria.
15. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
16. Totals may vary due to rounding.

## 11.2 Çöpler

### 11.2.1 Resource Database

The digital drill hole data used in the Mineral Resource Estimate (MRE) are from the various drilling campaigns that have taken place at the deposits since 2000. A list of 330 drill holes that were to be excluded was provided by SSR to RSC, and following a review of these holes, these holes were removed from any estimation work. These holes were drilled for the purposes of geotechnical, hydrogeological monitoring and metallurgical studies. Additionally, holes drilled for grade control purposes on stockpiles were also removed. All data were then further validated and reviewed, where possible, and other than some minor data adjustments and corrections, no additional data were excluded from the estimation process. A summary of the informing drill hole data is presented in Table 11-2.

All numerical data were transferred to implicit modeling software as csv files. Below-detection values were replaced by two-thirds of the detection limit after they had been imported into the implicit modeling software; the original entries for these samples were retained in the Access database.

Both pre-mining surface and post-mining digital terrain models (DTM) surfaces were loaded in the 3D modeling workspace. All modeling was clipped against the pre-mining surface, with the post-mining surface used to reconcile estimates against production data.

Grade control data were loaded from a point database provided by the mining department. A bias correction was applied to the grade-control data for Au grades less than 1 ppm. As noted in section 8.3.4.1 the positive bias identified in the RC drill data was taken into account when classifying the Mineral Resource.

**Table 11-2: Summary of Drill Hole Data Informing Çöpler MRE**

| Drill Type | No. of Holes | Total Drill Metres |
|---|---|---|
| DD | 1,284 | 268,054.90 |
| RC | 1,325 | 132,535.75 |
| Total | 2,609 | 400,590.65 |

### 11.2.2 Geological Interpretation

#### 11.2.2.1 Primary Lithologies & Rationale

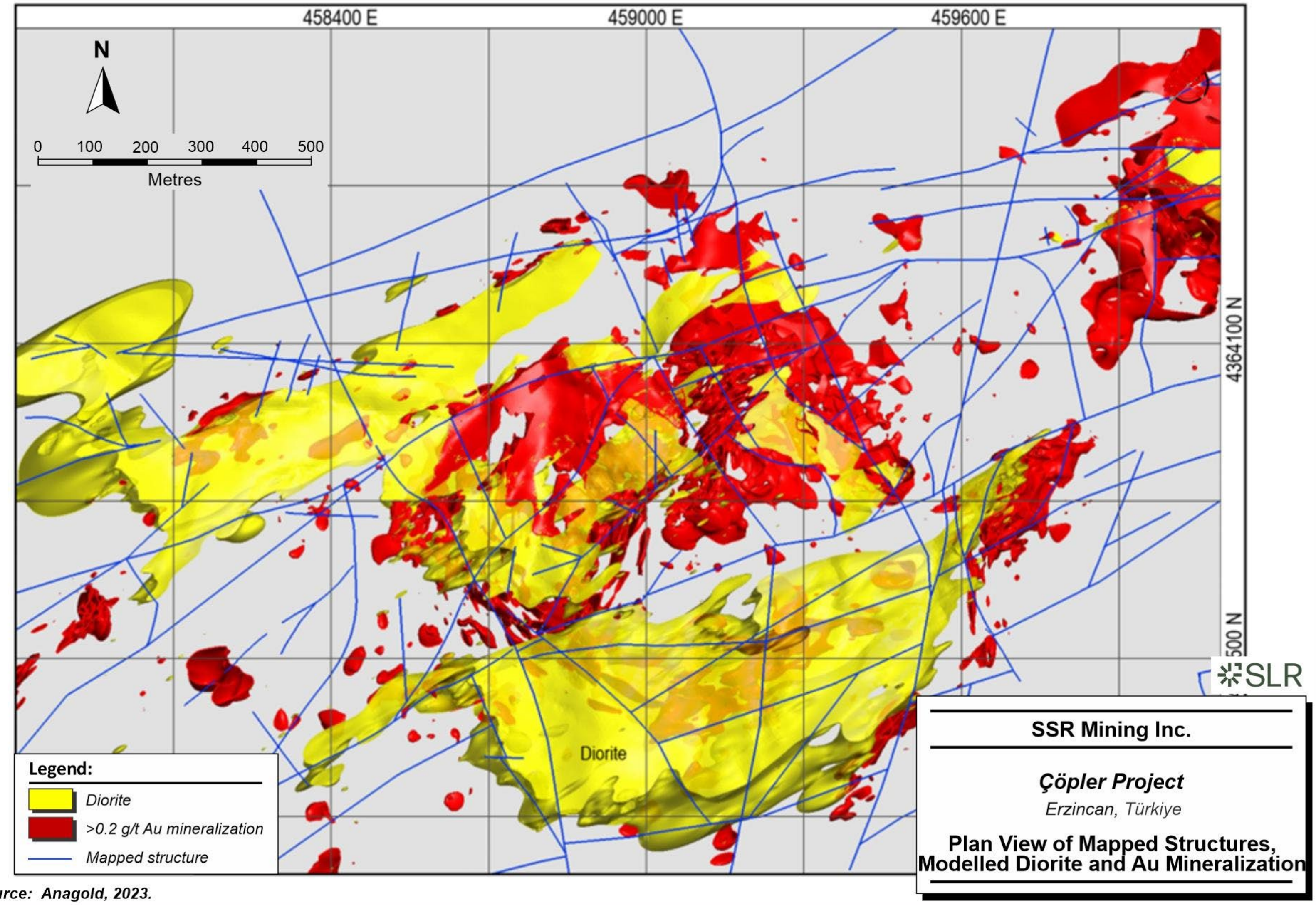
The primary rock types modeled at Çöpler are carbonates (limestone and marble of Munzur Formation), siliciclastic/volcaniclastic sediments (hornfels of Keban Formation) and intrusives (diorite porphyries of Çöpler-Kabataş magmatic complex).

At Çöpler, the Munzur carbonate rocks overlie the Keban sediments and are intruded by diorites. The carbonate-siliciclastic contact was modeled as a sedimentary contact with additional manual refinement as most of the Çöpler mineralization is controlled by the physical trap that the hornfels formed for the diorite-derived fluids, which then replace limestones on the contact.

The geology of the area is controlled by a dominant northeast-trending tectonic fabric that was formed during a major sinistral strike-slip event. This trend is the primary driver of fault geometry, intrusion emplacement and controls on mineralization. A plethora of faults have been mapped and digitised over the years by various consultants (Figure 6-5; Kaymakci, 2017; Tripp, 2017; Bartsch, 2018). A global southwest trend was used to honor the control of the large-scale structures that control the diorite intrusion geometries.

The intense faulting observed in the Manganese pit with a somewhat radial pattern has caused the weakening resulting in the diorite intruding there; however, in most cases, the geometries of the mineralization follow the contact of the diorite intrusion more than they do the individual structures.

**Figure 11-1: Plan View of Mapped Structures, Modeled Diorite and Au Mineralization**




Source: Anagold, 2023.

#### 11.2.2.2 Oxidation

Quantitative sulfide (S) concentration thresholds, determined for each lithology to mark the transition between sulfide and oxide material, were used to model the oxide and sulfide domains.

It is important to note that from a mining and metallurgical perspective, material below 2% S is considered as "Oxidized" and above 2% S as "Sulfide", whereas the geologist's logging and the geological relationships, which were used in the geological model, indicate the oxidation front to be better represented by a lower value (between 0.2% and 0.9% S depending on rock type).

### 11.2.3 Estimation Domain Interpretation

#### 11.2.3.1 Çöpler Estimation Domaining

The mineralization controls are critical to understand when establishing estimation domains. The spatial continuity, stationarity, and modality of gold grades, in the context of the established geological and structural model, were assessed, and estimation domains were refined by applying an implicit approach guided by the geological and structural knowledge of the deposit.

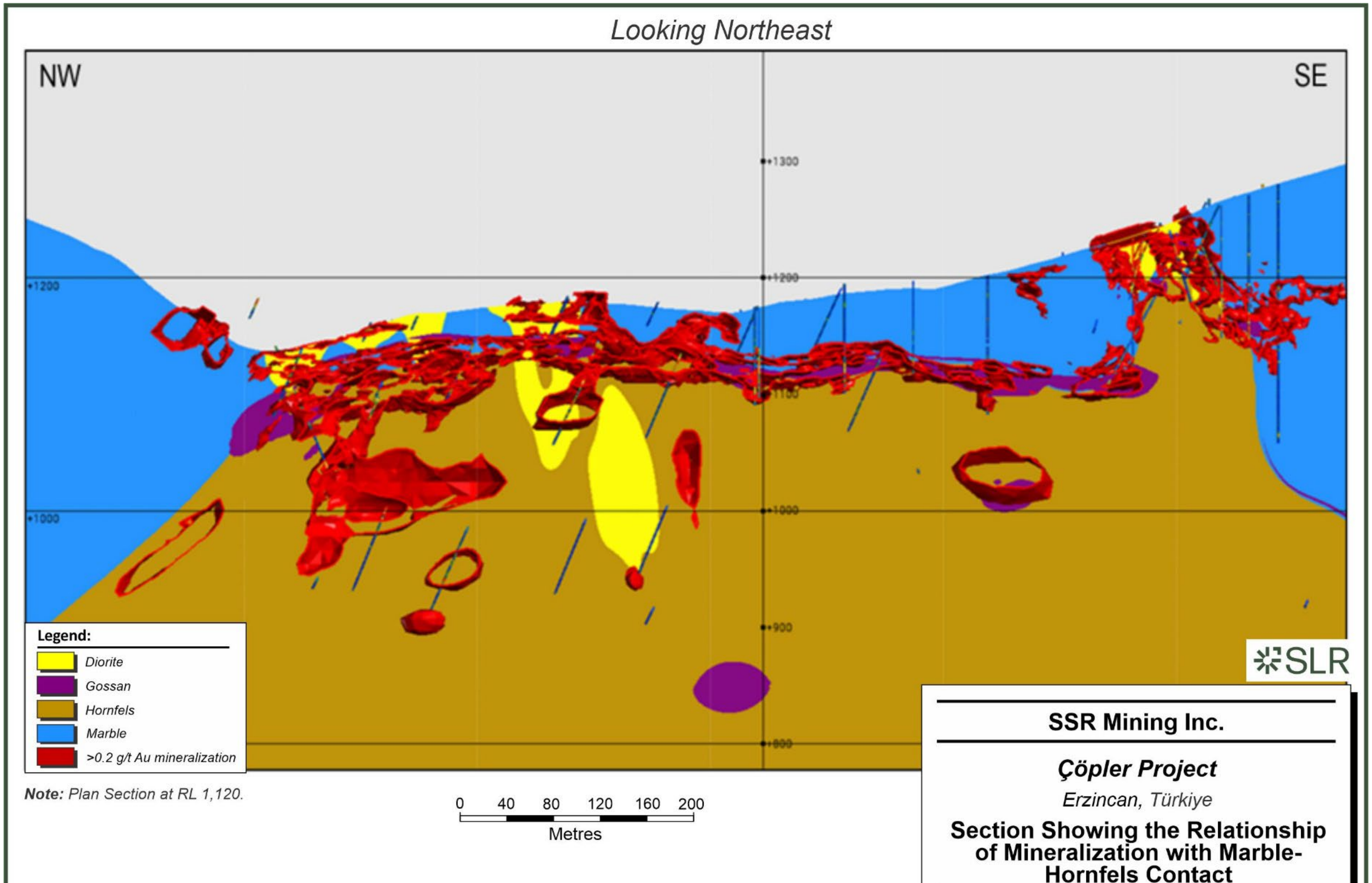
The estimation domains developed differ significantly from the previous models.

The mineralization is controlled by structural fluid pathways, intrusion contacts, and traps controlled by lithological contacts, in typical replacement-style processes (e.g. jasperoid).

The estimation domains honor three key controls on mineralization:

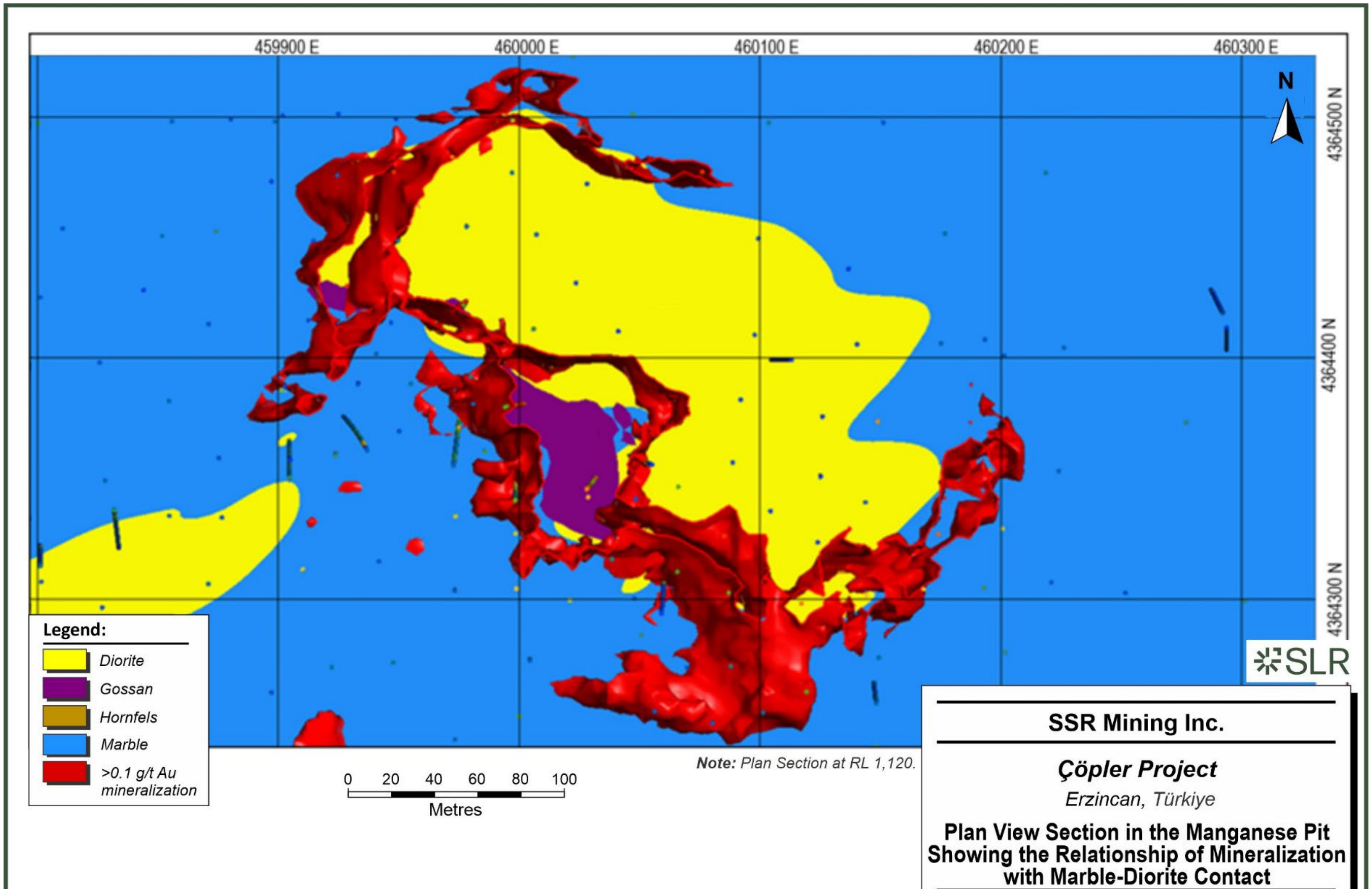
1. **Hornfels-Marble Contact** — This contact has a major control on the mineralization. The thick carbonate sequence once overlying the deposit acted as a pressure seal, forming a physical trap for the mineralizing fluids. At the resource model resolution, the hornfels-marble contact appears to be a highly continuous, geometrically simple doming feature, perhaps with its contacts showing minor offsets and some small-scale folding in places. This contact, modeled as a single doming plane, was used to set the primary anisotropic ratios in the creation of estimation domains, getting progressively weaker further away from the contact, up to 80 m away.
2. **Diorite and Diorite Contact** — The geometry of mineralization in the Manganese pit strongly mimics the diorite geometry (Figure 11-3), creating manganese skarns that wrap around the contact and display internal porphyry-style mineralization. In the Main Pit, the diorites also define the trend of high-grade mineralization at the Hornfels-Diorite contacts. The diorite contact was used to define the anisotropy of nearby mineralization in the grade estimation domains.
3. **Epithermal Veins, Mineralized Faults, and confluence of faults —** These mostly form thin, discreet and tabular geometries, hosted mostly in the hornfels in the Main Pit. Often, they are not continuous across long distances. Other times, where they intersect, or where there are multiple 2nd-to-3rd-order faults intersecting, grade blow-outs occur. Modeling of these zones incorporated trend planes (guided by mapped faults).

**Figure 11-2: Section Showing the Relationship of Mineralization with Marble-Hornfels Contact**




**Source: Anagold, 2023.**

**Figure 11-3: Plan View Section in the Manganese Pit Showing the Relationship of Mineralization with Marble-Diorite Contact**




Source: Anagold, 2023.

A categorical domaining approach using the raw Au grade data and trend planes was implemented. The domain-building process was iterative with both geological and numerical data used to build, validate, and adjust the domains. The domain statistics and behaviour around contacts were investigated to support the final estimation domain decisions.

Following a statistical analysis, including a boundary analysis, nine Au sub-domains describing different ore and grade characteristics were developed: Manganese Sulfide, Manganese Oxide, Diorite, Hornfels Oxide, Hornfels Sulfide, Marble Oxide, Marble Sulfide, Gossan, and Jasperoid. Four of these domains represent alteration processes that have led to different grade distributions and do not necessarily represent primary lithology (Manganese Oxide, Manganese Sulfide, Gossan, and Jasperoid).

Different grade domains were also generated for other elements (Ag, Cu, Fe, C, S, As) as there is a clear zonation of these elements in this largely porphyry-driven system, with Cu particularly becoming progressively higher grade to the south of the Main Pit.

#### 11.2.3.2 Extrapolation

The deposit has been reasonably well closed off in most directions; hence, there is low risk in incorrect estimates due to extrapolation assumptions. The inherent settings in the indicator domains mean that the key estimation domains have not been extended to more than roughly half the drill spacing, which in most cases is 25 m.

#### 11.2.3.3 Alternative Interpretation and Risk in Domaining

International public reporting codes and best-practice guidelines encourage practitioners to discuss the impact of any alternative geological interpretation, and both qualify and quantify the risk these have on resource estimation.

As with almost every deposit, alternative geological interpretations are possible. In some areas, like in the Main Pit, the steep and narrow, high-grade structures are not well constrained by the current estimation domaining approach and improved estimation domains could be developed for the Çöpler deposit following further work. Detailed mapping in the pit should integrate with more detailed domaining of particularly discrete vein and fault domains. Local controls are still quite uncertain in many places, and the blanket approach of trend planes based on three broad controls on mineralization will not be applicable in some under-drilled areas. This was taken into account when classifying the Mineral Resource estimate. Variance in reconciliation on a monthly basis should be expected until further upgrades to domains are made.

In terms of quantification of the overall risk on the total tonnages and grades associated with the interpretation of the estimation domains, given the relatively poor density of drilling in key deeper parts of the deposit, it is anticipated that the risk in alternative interpretations of the geological model may lead to tonnage or grade swings of up to ±20% in Inferred parts of the Mineral Resource.

### 11.2.4 Compositing

The data informing the MRE are from RC and diamond core drilling. The samples resulting from each of these drilling techniques have a different sample support, which may lead to a difference in variance in the data used in estimation.

A comparison between RC and DD drilling demonstrated that difference to be insignificant, with CVs of 2.95 and 2.85, respectively. Notwithstanding a potential bias between RC and DD sampling (Section 8.3.4.1), this is an acceptable difference in variance for the purpose of resource classification.

Differences in sample support also occur. The predominant part of the drill holes (85%) has been sampled at approximately one-metre lengths. Of those intervals that are longer than one metre, most samples have grades below the grade cut-off. Only a small percentage of samples are of intervals larger than 1.3 m and with grades higher than the cut-off grade. Therefore, one metre was selected as the composite interval. Testing of 2.5 m composites did not significantly improve the kriging metrics.

The impact of core loss on the compositing algorithm was also considered. The *minimum coverage* function was set to 50%; for core loss intervals less than 50 cm, the algorithm disregards the core loss and continues the downhole averaging process undisturbed. For core loss over 50 cm, a break is assumed, and no composite value was calculated. Compositing was carried out within hard boundaries, and residual sample lengths were distributed equally along the hole where they were less than 30 cm. Compositing statistics for the combined Au domains are presented in Table 11-3.

**Table 11-3: Compositing Statistics in the Single Au Mineralization Domain (All Sub-Domains Combined)**

| | Count | Length | Mean (g/t) | SD | CV | Variance | Minimum (g/t) | Q1 (g/t) | Q2 (g/t) | Q3 (g/t) | Maximum (g/t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Composited | 109,500 | 108,109 | 1.42 | 4.3 | 3.1 | 18.87 | 0.0025 | 0.3 | 0.6 | 1.4 | 935 |
| Uncomposited | 102,077 | 108,849 | 1.41 | 4.4 | 3.2 | 19.75 | 0.0025 | 0.3 | 0.5 | 1.3 | 935 |

### 11.2.5 Exploratory Data Analysis

Following estimation domaining and compositing, the statistics for the domains were evaluated further. The CVs of the composites within the nine estimation domains range between 1.1 and 5.5, and no multi-modality was noted in the individual distributions of domains (Figure 11-4, Table 11-4).

**Figure 11-4: Log-histograms of Composites within the Hornfels Sulfide (left) and Diorite (right) Domains**

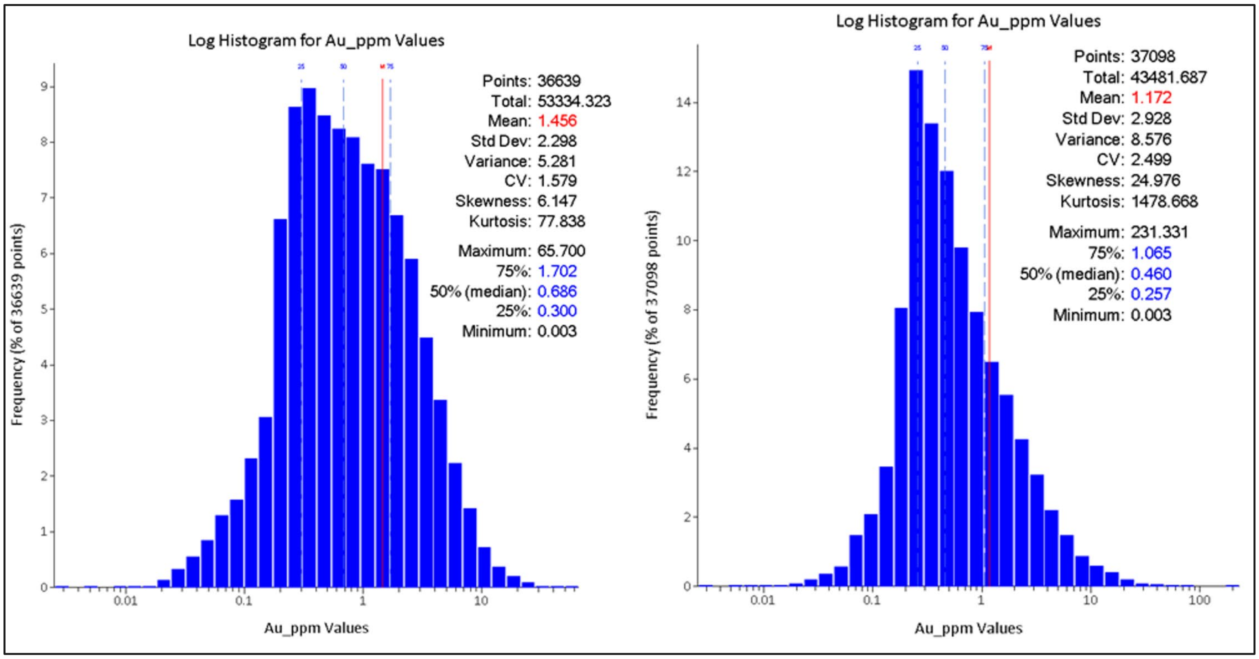



**Table 11-4: Domain Statistics (g/t Au)**

| Domain Name | Manganese Sulfide | Manganese Oxide | Diorite | Hornfels Oxide | Hornfels Sulfide | Marble Oxide | Marble Sulfide | Gossan | Jasperoid |
|---|---|---|---|---|---|---|---|---|---|
| CV | 2.06 | 1.14 | 2.5 | 2.63 | 1.58 | 5.46 | 2.18 | 2.15 | 2.43 |
| Mean | 1.86 | 4.87 | 1.17 | 1.06 | 1.46 | 1.19 | 2.16 | 2.87 | 2.17 |

### 11.2.6 Treatment of High-Grade Assays

#### 11.2.6.1 Capping Levels

Where the assay distribution is skewed positively or approaches log-normal, erratic high grade assay values can have a disproportionate effect on the average grade of a deposit. One method of treating these outliers to reduce their influence on the average grade is to cut or cap them at a specific grade level.

At Çöpler, global grade capping has not been applied, as most domains demonstrate a relatively low CV.

#### 11.2.6.2 High Grade Restriction

An alternative approach to reducing the influence of high-grade composites is to restrict the influence of high-grade samples during the estimation process. The threshold grade levels and buffer distances were selected from the basic statistics and from visual inspection of the apparent continuity of very high grades within each estimation domain.

Iin all but the Manganese Oxide domain, a distance-buffered capping was applied (usually up to 15 m). Given the low amount of grade outliers and the relatively low grade of these, model sensitivity testing confirms that the extent of the grade cap has a very low impact on Project risk.

### 11.2.7 Spatial Analysis

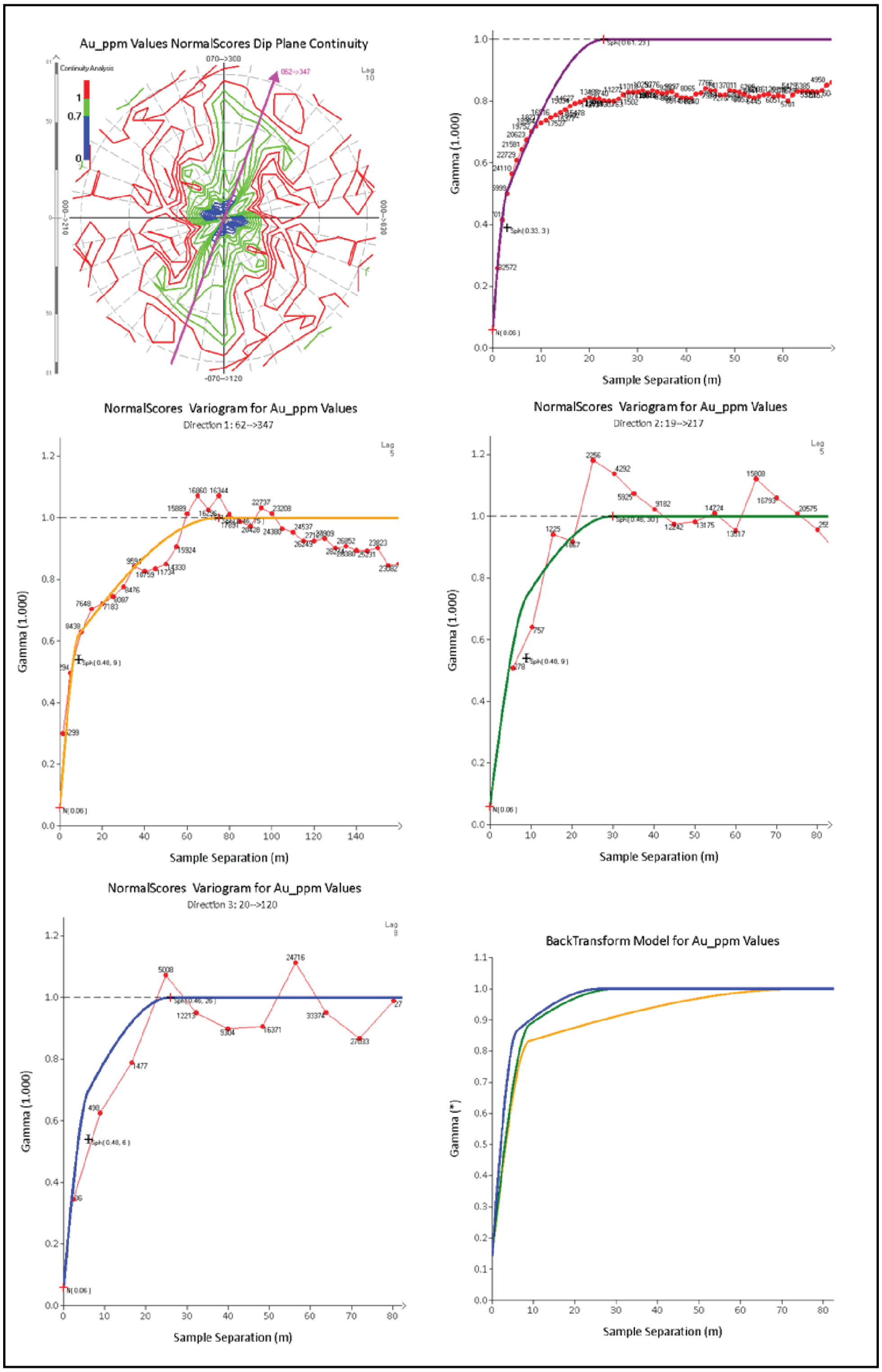
#### 11.2.7.1 Variography

Experimental variograms were created for each of the nine estimation domains. All variograms were calculated on composited, non-capped data, and transformed to normal scores. Long and short ranges were validated by reviewing spatial continuity of low-and-high-grade implicit grade shells respectively. Nuggets were compared to domain CVs as a broad check of alignment of domain variance characteristics. As an example of the experimental variograms, the results of the Diorite domain are presented in Figure 11-5.

The variography model data used in the ordinary kriging (OK) estimation are detailed in summary form in Table 11-6.

Since the geological and grade continuities are heavily influenced by three different mineralization controls, it is important to orient the search ellipse at each block appropriately. This process, often referred to as ‘dynamic anisotropy’, or as ‘variable orientation’ in the software package used, can be set by referencing a variety of meshes. Several reference surfaces were trialled to optimise this process. In an effort to still honor the controls, and in particular the influence of diorite contacts and steep mineralized fault zones, simplified trend planes were generated. These trend planes are the same trend planes that also guide the formation of the categorical grade estimation domains. Future mapping and improved geological knowledge should be continually integrated to update and improve these trend planes.

**Figure 11-5: Experimental and Modelled Variograms for Diorite Domain (Exploration Data only)**



### 11.2.8 Search Strategy and Grade Estimation Parameters

#### 11.2.8.1 Block Model

The block model covers the entire geological model area and has 12 m x 12 m x 5 m parent blocks in the X, Y, Z directions, respectively (Table 11-5). A study of optimal block size was undertaken, and the final size was selected based on the weighted average of kriging statistics in high-metal blocks. The block model is sub-blocked to 3 m x 3 m x 5 m to provide volume resolution and to match the grade control (GC) block size. Grid origins match the grid of the GC model so that each sub-block exactly matches each GC block. Discretization was set to 3 m x 3 m x 4 m.

**Table 11-5: Block Model Description**

| Parameter | X | Y | Z |
|---|---|---|---|
| Parent block size (m) | 12 | 12 | 5 |
| Sub-block size (m) | 3 | 3 | 5 |
| Sub block divisions | 4 | 4 | 1 |
| Minimum parent centroid | 456,906 | 4,361,907 | 437.5 |
| Maximum parent centroid | 460,818 | 4,364,955 | 1,857.5 |
| Minimum corner | 456,900 | 4,361,901 | 435 |
| Maximum corner | 460,824 | 4,364,961 | 1,860 |
| Size (m) | 327 | 255 | 285 |
| Azimuth (°) | 0 | | |
| Dip (°) | 0 | | |
| Pitch (°) | 0 | | |

#### 11.2.8.2 Grade Estimation

**Gold**

Gold data were interpolated using search ellipses that were slightly larger than the variogram ranges to select samples around blocks. Minimum and maximum samples were set for each domain, finding a balance between conditional bias and over smoothing. Blocks estimated by a low number of samples are assigned a lower confidence in the classification of the resource. All estimation settings are summarized in Table 11-6.

Grade control data were used to inform an area of 20 m below the current pit. These data were first corrected for bias in the lower grade (<1 ppm Au) range. These higher variance data do negatively affect the kriging statistics; however, the amount of available GC data provides better local accuracy and this is important in the making of short-term mine planning decisions.

Because of the low nugget in the variogram, a few negative kriging weights exist, particularly in the 20-m buffer zone where the GC data are allowed to inform the model, which in some minor blocks have led to negative Au grades. For these blocks, and for those blocks with a total sum of negative weights below -0.2, the estimate was overwritten by an inverse distance algorithm. This has a negligible impact on the overall MRE but provides better local accuracy.

The estimation strategy also included a separate restricted search outside the main domains, where the domaining could not generate sensible shapes in areas of poor drill spacing or without contiguous mineralization.

**Silver and Copper**

Silver and copper were estimated into numeric indicator interpolant domains and estimated using ordinary kriging algorithms with similar settings as those used for Au. Similar trend planes were used to guide these domains. Dynamic anisotropy was used to control the orientation of the ellipse. Grade data did not require grade capping.

While indicator interpolants do not always show logical geometries, this is considered fit-for-purpose as the Ag and Cu mineralization is mostly at very low grades that are not material to the Project economics.

**Sulfur**

The sulfur grades were estimated in oxidation domains using inverse distance with a power of 1.5. Dynamic anisotropy was used for the estimation, following the general trend of the oxidation front as well as the mineralization.

**Carbon**

Carbon grades were estimated, constrained within lithological domains from the updated geological model, due to the lithological control on carbon content. Grades were estimated using inverse distance and using dynamic anisotropy to guide the search ellipse, based on simplified lithological contacts.

**Table 11-6: Estimation Kriging Neighbourhood and Variography Settings for All Domains (Au)**

| Domain Name | CV | Mean (g/t Au) | Min Samples (No.) | Max Samples (No.) | Outlier Dist | Outlier Cap | Major (m) | Semi (m) | Minor (m) | Nugget | J1 | Major Range (m) | Semi Range (m) | Minor Range (m) | 2nd Major Range (m) | 2nd Semi Range (m) | 2nd Minor Range (m) | Var Dir1 (m) | Var Dir2 (m) | Var Dir3 (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manganese Sulfide | 2.06 | 1.86 | 6 | 30 | 20% | 35 | 150 | 75 | 50 | 0.1 | 0.67 | 135 | 40 | 30 | 40 | 8 | 7 | 70 | 215 | 10 |
| Manganese Oxide | 1.14 | 4.87 | 6 | 25 | - | - | 1750 | 75 | 50 | 0.06 | 0.37 | 165 | 40 | 30 | 100 | 12 | 5 | 5 | 70 | 0 |
| Diorite | 2.5 | 1.17 | 6 | 35 | 15% | 60 | 100 | 50 | 40 | 0.14 | 0.65 | 75 | 30 | 25 | 9 | 9 | 6 | 70 | 120 | 110 |
| Hornfels Oxide | 2.63 | 1.06 | 6 | 35 | 10% | 35 | 150 | 100 | 25 | 0.29 | 0.59 | 135 | 60 | 20 | 100 | 30 | 4 | 35 | 60 | 10 |
| Hornfels Sulfide | 1.63 | 1.46 | 6 | 25 | 15% | 70 | 125 | 75 | 25 | 0.11 | 0.66 | 100 | 60 | 20 | 9 | 9 | 4 | 60 | 320 | 110 |
| Marble Oxide | 5.46 | 1.19 | 6 | 40 | 15% | 75 | 100 | 50 | 20 | 0.47 | 0.46 | 60 | 30 | 15 | 8 | 8 | 3 | 60 | 325 | 90 |
| Marble Sulfide | 2.18 | 2.16 | 6 | 30 | 50% | 35 | 500 | 150 | 50 | 0.07 | 0.63 | 400 | 125 | 30 | 30 | 30 | 4 | 50 | 35 | 50 |
| Gossan | 2.15 | 2.87 | 6 | 30 | 10% | 60 | 150 | 100 | 25 | 0.11 | 0.57 | 125 | 60 | 10 | 35 | 10 | 4 | 85 | 310 | 0 |
| Jasperoid | 2.43 | 2.17 | 6 | 35 | 50% | 25 | 125 | 125 | 25 | 0.13 | 0.66 | 100 | 100 | 18 | 35 | 30 | 4 | 25 | 35 | 285 |

#### 11.2.8.3 Density Estimation

Density grade estimates were constrained within lithological domains from the updated geological model, due to the clear lithological control on density. Grades were estimated using inverse distance and using a lithology-driven dynamic search to guide the search ellipse. Any remaining blocks not estimated were assigned the median grade of their population, except in the case of the Gossan domain, where a nominated value of 2.62 t/m$^3$ was used based on a review of the population histogram. Summary bulk density statistics for the lithological domains are presented in Table 11-7.

**Table 11-7: Çöpler Density Statistics for Lithology Domains**

| Domain | Count | Mean (t/m$^3$) | CV | Median (t/m$^3$) |
|---|---|---|---|---|
| Diorite | 3,392 | 2.55 | 0.12 | 2.57 |
| Gossan | 145 | 2.65 | 0.14 | 2.65 |
| Hornfels | 5,504 | 2.65 | 0.09 | 2.67 |
| Jasperoid | 68 | 2.70 | 0.23 | 2.59 |
| Manganese | 459 | 2.51 | 0.11 | 2.51 |
| Marble | 7,154 | 2.64 | 0.06 | 2.66 |

### 11.2.9 Classification

Mineral Resources have been classified by the QP in accordance with the U.S. Securities and Exchange Commission (US SEC) Regulations S-K subpart 1300 rules for Property Disclosures for Mining Registrants (S-K 1300).

A Mineral Resource is defined as a concentration or occurrence of material of economic interest in or on the Earth's crust in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction. A mineral resource is a reasonable estimate of mineralization, considering relevant factors such as cut-off grade, likely mining dimensions, location, or continuity, that with the assumed and justifiable technical and economic conditions, is likely to, in whole or in part, become economically extractable. It is not merely an inventory of all mineralization drilled or sampled.

Based on this definition of Mineral Resources, the Mineral Resources estimated in this TRS have been classified according to the definitions below based on geology, grade continuity, and drill hole spacing.

**Measured Mineral Resource** is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.

**Indicated Mineral Resource** is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.

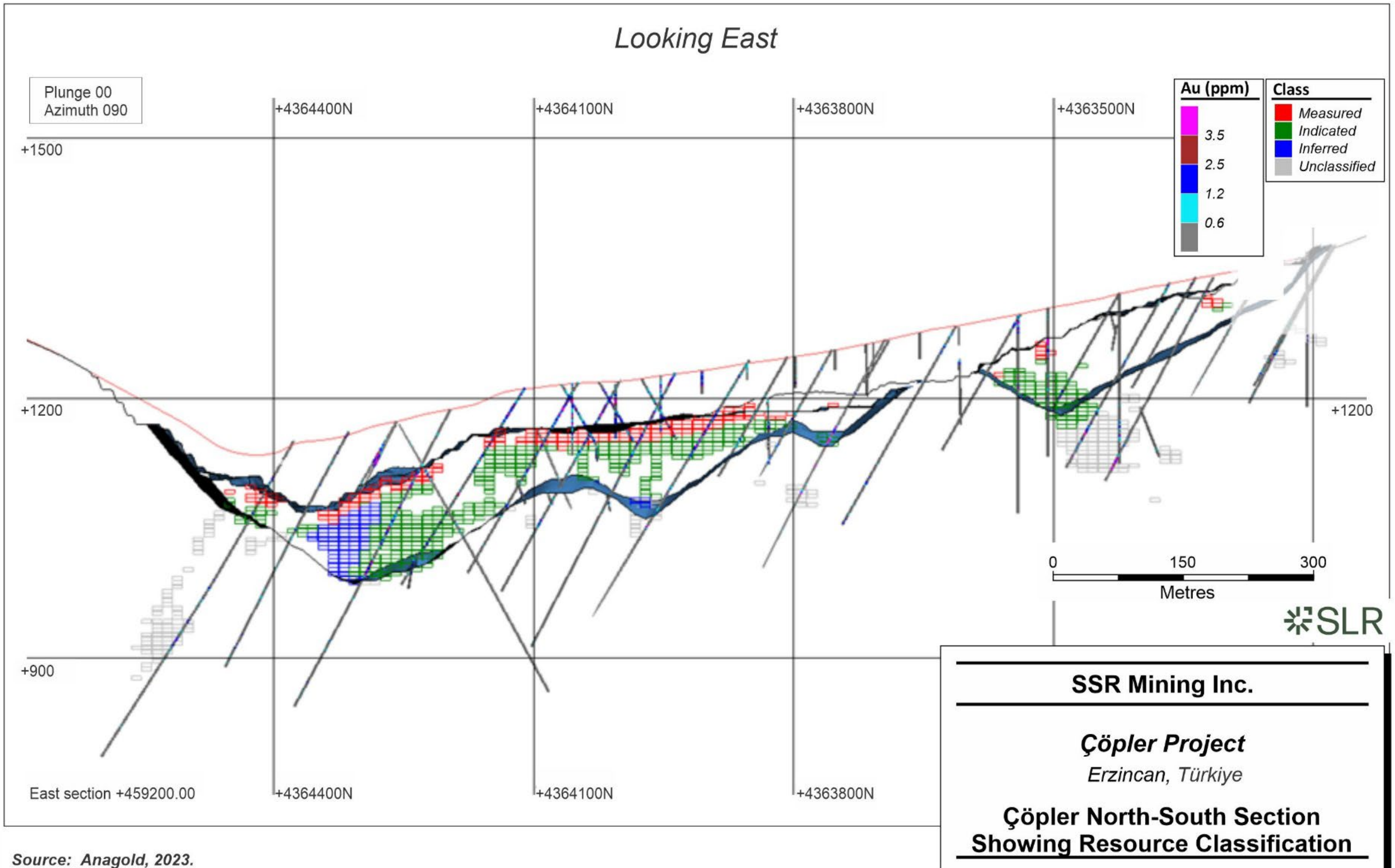
**Inferred Mineral Resource** is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project and may not be converted to a mineral reserve.

The QP has classified the Mineral Resource based on a workflow that includes the assessment of geological continuity, of the confidence in the estimation domains, and of the quality of the informing data. The drill spacing at Çöpler is exceptionally challenging and erratic, leading to various areas that, on balance, are more under-drilled than others. Additionally, the geometries of the estimation domains are highly variable as well, creating a rather undesirable set of conditions to classify.

Therefore, in assessing the effect of drill spacing on classification, the QP used quantitative kriging metrics such as SoR and KE, which inherently carry information on drill spacing, as well as a simple distance buffer mesh to informing samples, to inform 10 reasonably continuous areas that are, on balance, less informed or of lower estimation quality than others. These areas were hand-digitised to minimise the spotted-dog effect, and further informed by geological confidence.

An example of classification approach can be seen in Figure 11-6. The Measured part of the resource (light green) is the area 20 m immediately below the current pit floor, as this area is informed by detailed knowledge of the geology and grade distribution, and correlates well with drilling right under the pit floor. One of the hand-digitised low-confidence areas is shown in blue in this figure, showing the lack of information between drill holes on this section.

**Figure 11-6: Çöpler North-South Section Showing Resource Classification**




*Source: Anagold, 2023.*

### 11.2.10 Estimation Validation

The estimate was validated using conventional procedures such as swath plots (Figure 11-7) and visual validations. The swath plots demonstrate that the kriging results have good agreement with the declustered composite grade mean and show that there is good spatial correlation with the grade trends across the strike of the deposit.

**Figure 11-7: Trend Plot in Y Direction Showing Raw Sample Grades (Black), 2-m NN-"Declustered" Sample Grades (Blue), and Block OK Grades (Green)**

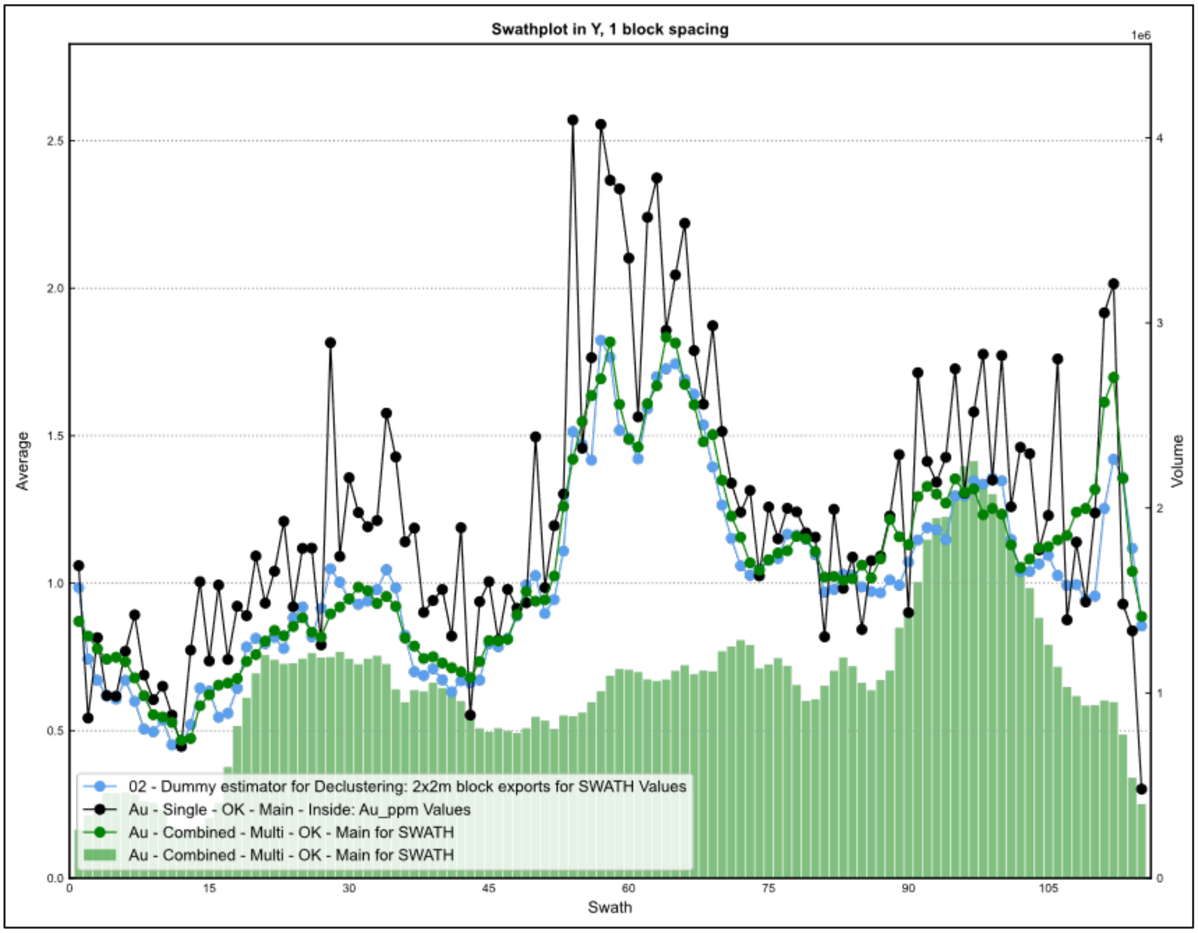
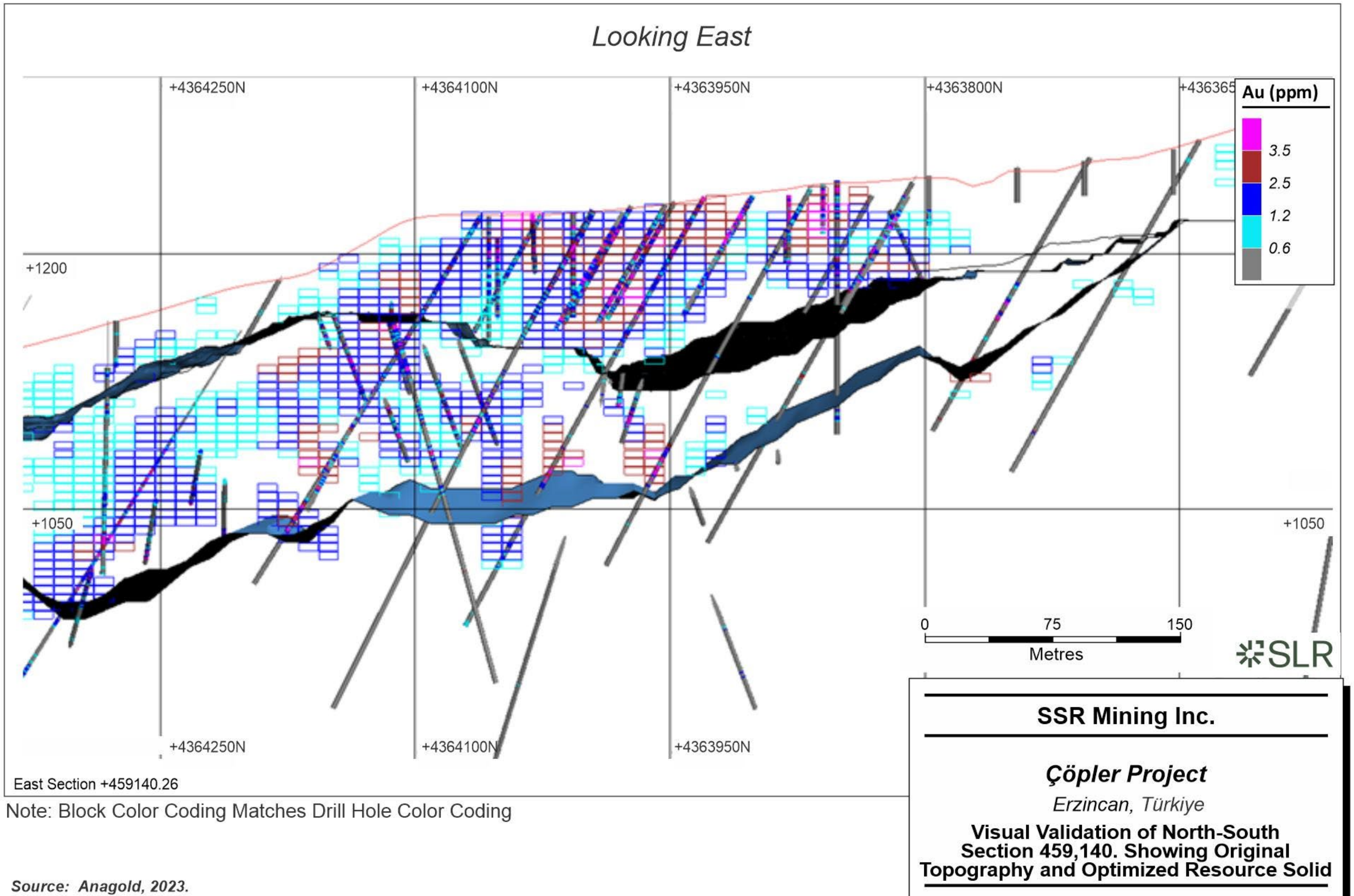


**Figure 11-8: Visual Validation of North-South Section 459,140, Showing Original Topography and Optimized Resource Solid**




Note: Block Color Coding Matches Drill Hole Color Coding

*Source: Anagold, 2023.*

### 11.2.11 Reasonable Prospects for Economic Extraction and Cut-off Grade

The RSC QP has considered the potential of reasonable prospects for economic extraction (RPEE) of the Çöpler Mineral Resource. In assessing the potential of economic extraction, the RSC QP has reviewed mining, metallurgical, economic, environmental, social, and geotechnical factors. Metal prices used for resources and reserves are based on consensus, long-term forecasts from banks, financial institutions, and other sources. For resources, metal prices used are higher than those for reserves.

A reporting cut-off grade for the Project based on assumed costs for open pit extraction through heap leach, grind leach, and POX processing methods and using commodity prices that provide a reasonable basis for establishing the prospects of economic extraction for Mineral Resources was established and reviewed by the RSC QP.

The Mineral Resource is reported within a conceptual optimised pit shell using a gold price of US$1,750/oz. The key pit optimization parameters are summarized in Table 11-8.

Portions of the deposit that do not have reasonable prospects for economic extraction are not included in the Mineral Resource. Future work should seek to decrease the drill spacing, improve sample and analytical quality control, and improve the estimation domains.

**Table 11-8: Summary of Key Parameters Used in 2023 Conceptual Pit Shell at Çöpler**

| Input Area | Units | Value |
|---|---|---|
| Mining Cost | $/t | $2.06 |
| Fill Cost | $/t | $1.75 |
| Oxide G&A | $/t | $4.44 |
| Sulfide G&A | $/t | $4.5 |
| CIP G&A | $/t | $4.44 |
| Sulfide Process Cost | $/t | $35.37 |
| Oxide Process Cost | $/t | $13.91 |
| CIP Process Cost | $/t | $14.82 |
| Sulfide CAPEX | $/t | $1.21 |
| Oxide CAPEX | $/t | $2.97 |
| CIL CAPEX | $/t | $2.51 |
| Au Price | $/oz | $1,750 |
| Ag Price | $/oz | $22.00 |
| Cu Price | $/lb | $3.95 |
| Oxide Sell Cost | $/oz | $6.61 |
| Sulfide Sell Cost | $/oz | $6.87 |
| Oxide Royalty | % | 3.40% |
| Sulfide Royalty | % | 2.00% |

Recovery parameters for various lithologies are provided in Table 12-3.

### 11.2.12 Mineral Resource Reporting

The Mineral Resources were estimated by an independent Qualified Person employed by consultancy RSC. The Mineral Resource estimate presented in Table 11-9 has an effective date of October 31, 2023.

The RSC QP is not aware of any environmental issues and understands that social issues are well-managed.

Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability, nor is there certainty that all or any part of the Mineral Resource estimated here will be converted to Mineral Reserves through further study. Sources of uncertainty that may affect the reporting of Mineral Resources include sampling or drilling methods, data processing and handling, geologic modelling, and estimation.

**Table 11-9: Summary of Çöpler Mineral Resources exclusive of Mineral Reserves**

| Resource Category | Type | Total Mineral Resources | | | | | | | SSR Attributed Basis | SSR Attributed Mineral Resources (80%) | | | | | | | NSR Cut-off Values | Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Tonnage | Grade | | | Contained Metal | | | | Tonnage | Grade | | | Contained Metal | | | | |
| | | | Au | Ag | Cu | Au | Ag | Cu | | | Au | Ag | Cu | Au | Ag | Cu | | |
| | | (Mt) | (g/t) | (g/t) | (%) | (koz) | (koz) | (Klb) | (%) | Mt) | (g/t) | (g/t) | (%) | (koz) | (koz) | (Klb) | ($/t) | (%) |
| Measured | Oxide Heap Leach | 0.01 | 0.15 | 21.26 | 0.91 | 0 | 10 | 297 | 80 | 0.0 | 0.15 | 21.26 | 0.91 | 0 | 8 | 237 | 18.34 | 40 - 78 |
| | Sulfide | 4.6 | 1.37 | 4.10 | 0.08 | 202 | 606 | 7,794 | 80 | 3.7 | 1.37 | 4.10 | 0.08 | 162 | 484 | 6,235 | 39.87 | 81 - 91 |
| | Oxide Grind Leach CIL | 1.7 | 1.14 | 1.09 | 0.08 | 62 | 59 | 3,108 | 80 | 1.3 | 1.14 | 1.09 | 0.08 | 49 | 47 | 2,486 | 19.26 | 53 - 90 |
| **Total Measured** | **Total** | **6.3** | **1.31** | **3.33** | **0.08** | **264** | **675** | **11,199** | 80 | **5.0** | **1.31** | **3.33** | **0.08** | **211** | **540** | **8,959** | | |
| Indicated | Oxide Heap Leach | 0.0 | 0.06 | 113.13 | 0.36 | 0 | 14 | 31 | 80 | 0.0 | 0.06 | 113.13 | 0.36 | 0 | 11 | 25 | 18.34 | 40 - 78 |
| | Sulfide | 13.2 | 1.28 | 3.42 | 0.07 | 546 | 1,454 | 19,413 | 80 | 10.6 | 1.28 | 3.42 | 0.07 | 437 | 1,163 | 15,530 | 39.87 | 81 - 91 |
| | Oxide Grind Leach CIL | 0.7 | 1.41 | 1.95 | 0.04 | 30 | 42 | 654 | 80 | 0.5 | 1.41 | 1.95 | 0.04 | 24 | 34 | 523 | 19.26 | 53 - 90 |
| **Total Indicated** | **Total** | **13.9** | **1.29** | **3.38** | **0.07** | **577** | **1,510** | **20,098** | 80 | **11.1** | **1.29** | **3.38** | **0.07** | **461** | **1,208** | **16,079** | | |
| Total Measured + Indicated | Oxide Heap Leach | 0.0 | 0.13 | 40.54 | 0.80 | 0 | 24 | 328 | 80 | 0.0 | 0.13 | 40.54 | 0.80 | 0 | 20 | 263 | 18.34 | 40 - 78 |
| | Sulfide | 17.8 | 1.31 | 3.59 | 0.07 | 749 | 2,059 | 27,207 | 80 | 14.3 | 1.31 | 3.59 | 0.07 | 599 | 1,647 | 21,766 | 39.87 | 81 - 91 |
| | Oxide Grind Leach CIL | 2.4 | 1.22 | 1.34 | 0.07 | 92 | 101 | 3,762 | 80 | 1.9 | 1.22 | 1.34 | 0.07 | 74 | 81 | 3,009 | 19.26 | 53 - 90 |
| **Total M + I** | **Total** | **20.2** | **1.29** | **3.36** | **0.07** | **841** | **2,185** | **31,297** | 80 | **16.2** | **1.29** | **3.36** | **0.07** | **673** | **1,748** | **25,037** | | |
| Inferred | Oxide Heap Leach | 0.0 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 80 | 0.0 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 18.34 | 40 - 78 |
| | Sulfide | 15.8 | 1.53 | 5.13 | 0.08 | 779 | 2,607 | 27,657 | 80 | 12.6 | 1.53 | 5.13 | 0.08 | 623 | 2,086 | 22,125 | 39.87 | 81 - 91 |
| | Oxide Grind Leach CIL | 1.7 | 1.45 | 3.01 | 0.01 | 81 | 169 | 278 | 80 | 1.4 | 1.45 | 3.01 | 0.01 | 65 | 135 | 223 | 19.26 | 53 - 90 |
| **Total Inferred** | **Total** | **17.5** | **1.53** | **4.92** | **0.07** | **860** | **2,776** | **27,935** | 80 | **14.0** | **1.53** | **4.92** | **0.07** | **688** | **2,220** | **22,348** | | |

Notes:

1. The definitions for Mineral Resources in S-K 1300 were followed.
2. Mineral Resources are reported based on October 31, 2023 topography surface.
3. Mineral Resources are reported exclusive of Mineral Reserves.
4. The Mineral Resource estimates are presented at both a 100% Project level and SSR's 80% attributable share.
5. Heap Leach Oxide is defined as material <2% total sulfur.
6. Grind Leach Oxide is defined as material <2% total sulfur. Processing route will be available approximately in 2027.

7. Sulfide is defined as material ≥2% total sulfur.
8. Heap leach oxide uses a NSR cut-off $18.34/t, grind leach oxide uses a NSR cut-off value $19.26/t, and Çöpler sulfide ore uses a cut-off grade of $39.87/t, Greater Çakmaktepe sulfide ore uses a cut-off grade of $44.37/t . All cut-off values include allowances for royalty payable.
9. Metallurgical gold recovery for heap leach oxide and grind leach varies between 40-78% and 53-90%, respectively, based on lithology; metallurgical recovery for sulfide varies between 81% and 91% based on lithology.
10. Metallurgical silver recoveries for heap leach and grind leach oxide varies between 0 and 54% based on lithology. Metallurgical recovery for sulfide varies between 0 and 3%.
11. Metallurgical copper recoveries for heap leach and grind leach oxide varies between 0 and 15% based on lithology. Metallurgical recovery for sulfide is 0%.
12. Metal prices used to report the Mineral Resources are $1,750/oz Au, $22.00/oz Ag, and $3.95/lb Cu with allowances for payability, deductions, transport, and royalties.
13. The point of reference for Mineral Resources is the point of feed into the processing facility for grind leach and sulfide material; or for Heap Leach oxide, it is the Carbon columns.
14. All Mineral Resources estimates were constrained within conceptual pit shells to meet reasonable prospects for economic extraction criteria.
15. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
16. Totals may vary due to rounding.

### 11.2.13 Comparison with Previous Estimates

The 2023 Mineral Resource exclusive of Mineral Reserves has been compared with previous Mineral Resource estimate as reported in SSR's 2022 Form 10-K filing (SSR, 2022).

There has been a decrease in Measured and Indicated contained gold ounces of 1,155 koz and a decrease in Inferred gold ounces of 1,710 koz. The change can be attributed due to the following:

- Re-interpretation of the mineralized envelopes using the most updated drill hole, blasthole, and geological mapping information
- Change to optimization parameters with regards to processing methodology
- Depletion

## 11.3 Greater Çakmaktepe

### 11.3.1 Resource Database

In contrast to the previous model, the 2023 model for Greater Çakmaktepe contains the Çakmaktepe and Çakmaktepe Ext deposits within a single model.

The digital drill hole data used in the Greater Çakmaktepe MRE are from the various drilling campaigns that have taken place at the deposits since 2002. All data were validated and reviewed, where possible, 13 drillholes totalling to 1,770 m were excluded from estimation due to core recovery issues, duplication of holes and drillholes drilled for other reasons. A summary of the informing drill hole data is presented in Table 11-10.

All numerical data were transferred to implicit modeling software as csv files. Below-detection values were replaced by two-thirds of the detection limit after they had been imported into the implicit modeling software.

Previous wireframes from 2016, 2017, and 2020 resource estimation campaigns were also loaded to allow comparisons.

Both pre-mining surface and post-mining surface Digital Terrain Models were loaded into the 3D modeling workspace. All modeling was clipped against the pre-mining surface, with the post-mining surface used to reconcile estimates against production data.

**Table 11-10: Summary of Drill Hole Data Informing Greater Çakmaktepe MRE**

| Drill Type | No. of Holes | Total Drill Metres |
|---|---|---|
| DD | 1,348 | 221,433.75 |
| RC | 529 | 51,490.50 |
| RCD | 52 | 14,060.70 |
| Total | 1,933 | 287,866.75 |

### 11.3.2 Geological Interpretation

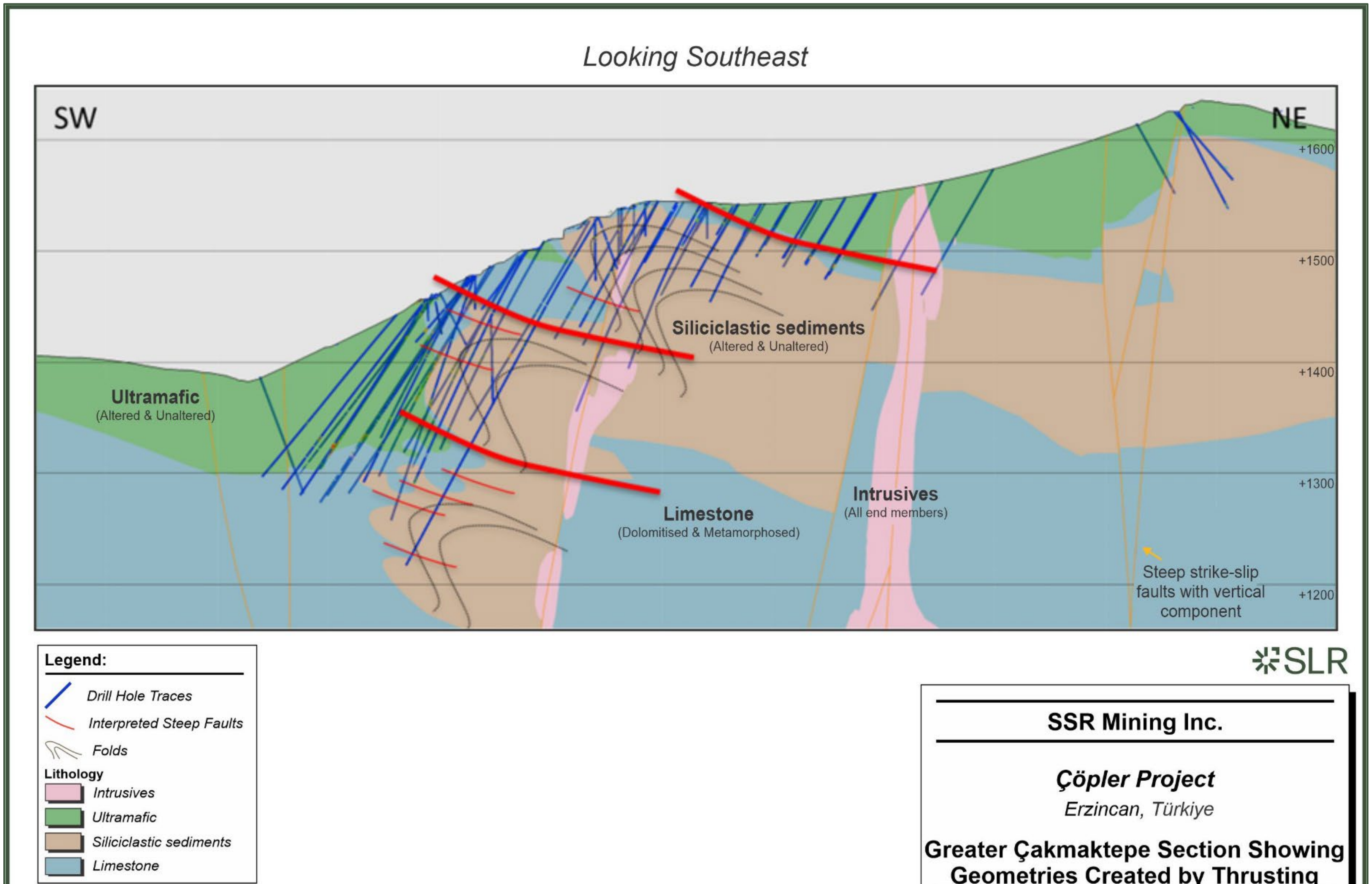
#### 11.3.2.1 Primary Lithologies

The four primary rock types modeled at Çakmaktepe are carbonates (limestone and dolomite), siliciclastic/volcaniclastic sediments, ultramafics (ophiolite and serpentinite), and intrusives (diorite).

The Çakmaktepe area was modeled as a rollover/stack on a ramp-flat stacked thrust system, with the ophiolite obduction over and across the carbonate rocks and sediments, and later intruded by diorites. The three main thrust planes causing this geometry are shown in thick red lines in Figure 11-9.

Other thrust planes depicted are conceptual and not relevant at the resolution of the model. Thrust planes are also identified at Çakmaktepe Ext; however, it has not resulted in stacking and forelimb–backlimb geometries.

**Figure 11-9: Greater Çakmaktepe Section Showing Geometries Created by Thrusting**




Source: Anagold, 2023.

All geological domains were modeled implicitly, with additional steering and refinement by applying anisotropy (following a SE–NW control along low-angle thrust planes created by the ophiolite obduction) or with manual manipulation, where required to achieve the desired outcomes.  Domains were iteratively refined for faults and shears. Particularly, two key faults (Çakmaktepe South Fault and Bayramdere NE Fault) were adjusted based on the diorite, which has intruded along these faults.

#### 11.3.2.2 Secondary Lithologies

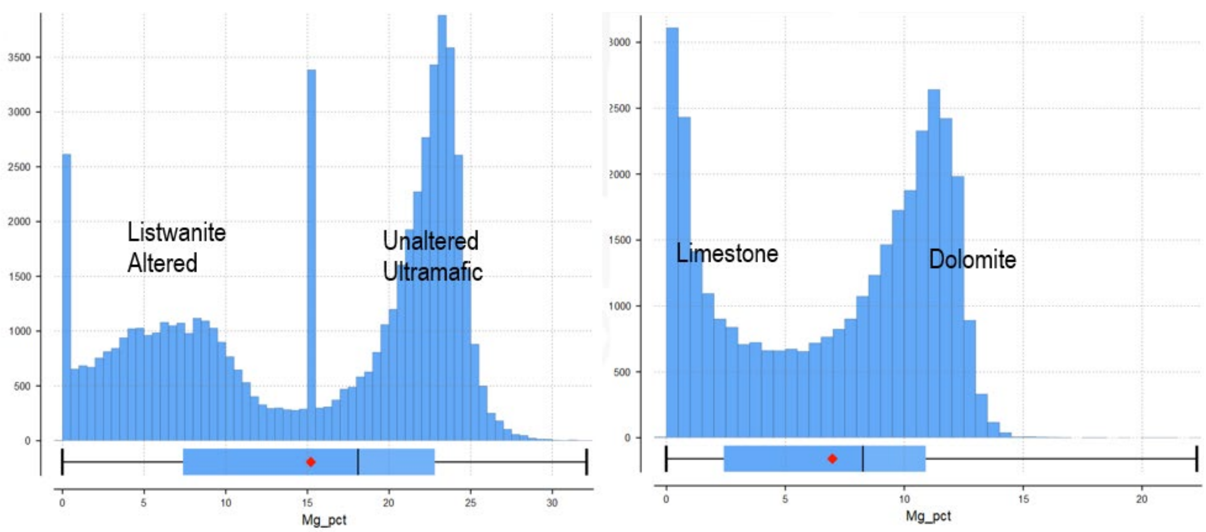
Further sub-domaining was undertaken to consider secondary processes.

Listwanites form as a result of the chemical reaction between serpentinite and $CO_2$-rich fluids. These fluids usually migrate along faults or fractures along the contact of serpentinite and the adjacent country rocks. Following the creation of the primary lithological architecture, listwanite alteration of the ultramafic rocks was modeled within the constraints of the ultramafic domain using a geochemical cut-off of 12% Mg, with the distribution of Mg being perfectly bimodal with ‘Unaltered’ and ‘Altered’ end members (Figure 11-10). This created a realistic ‘skin’ alteration halo honoring this genetic model.

Within the carbonate unit, a similar process to that used for listwanite was used to model dolomite, with a Mg grade cut-off of 7%.

The jasperoids are an important alteration that controls high gold grades. The silica-sulfide metasomatism of dolomites has formed discrete gossan horizons anastomosing through the carbonate unit. These were modeled implicitly, with minor manual manipulation used to achieve acceptable outcomes.

**Figure 11-10: Distribution of Mg within Rocks Classified as Ultramafic (left) and Carbonates (right)**




Notes: The single stick in the middle of the ultramafics (left image) is an upper-detection limit issue with an older assay technique.

#### 11.3.2.3 Oxidation

The oxide/sulfide domains are contained in a separate geological model. Modeling for oxidation was carried out using the logging codes. The final oxidation categories have good contrast with the sulfur grades. Oxide and sulfur domains were modeled using an intrusion algorithm which provided good results that were generally consistent with the geologists' interpretations.

It is important to note that the mining and metallurgical departments consider material below 2% S to be categorised as "oxidized" and above 2% as "sulfide", whereas the geologists' logging and the geological relationships indicate the oxidation front to be better represented by a lower value (between 0.2 and 0.6% S, depending on rock type).

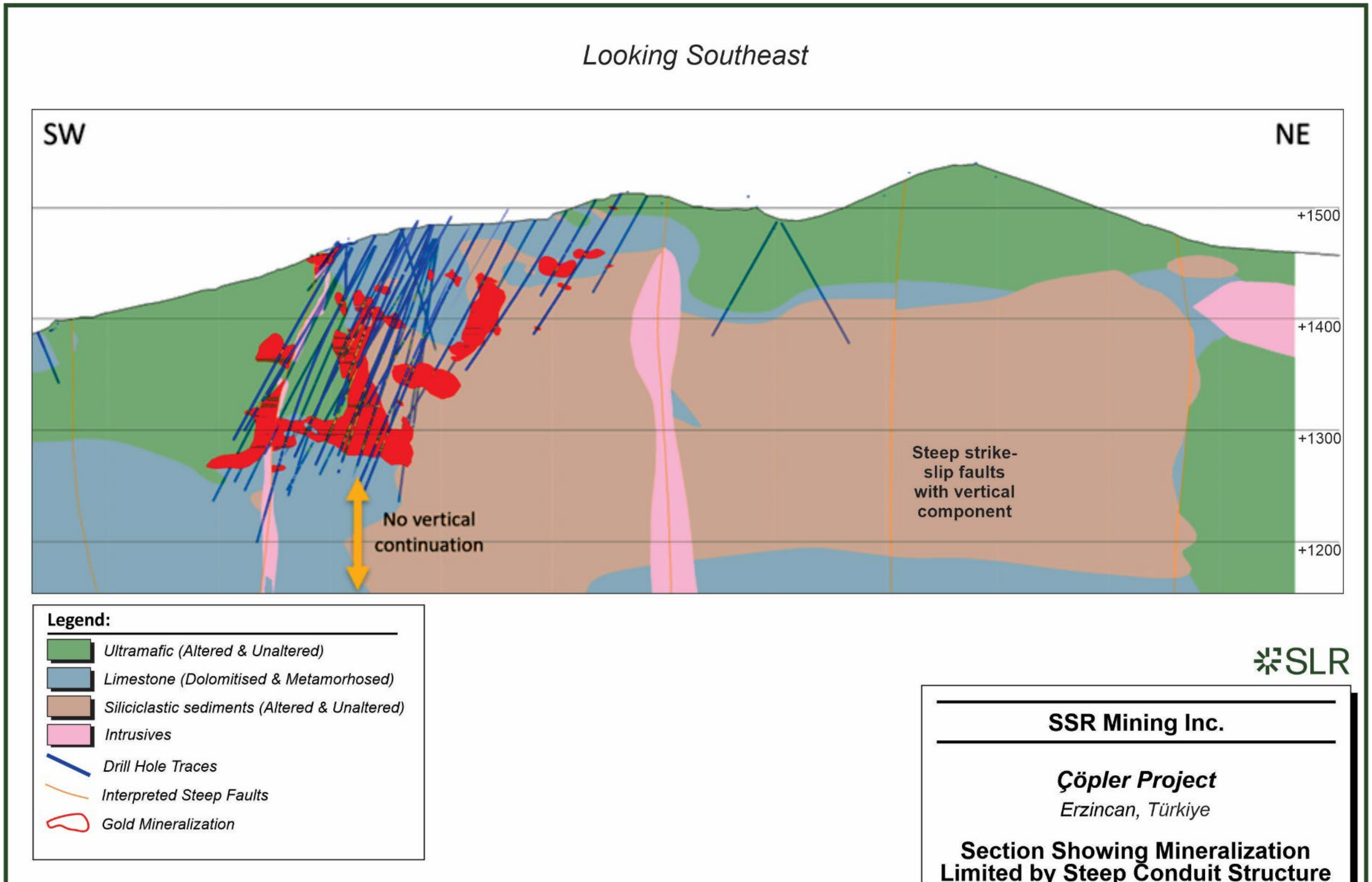
### 11.3.3 Estimation Domain Interpretation

#### 11.3.3.1 Greater Çakmaktepe Estimation Domaining

At Çakmaktepe, geological and numerical data have been reviewed together in order to develop robust estimation domains. The domain-building process was iterative and geological and numerical data have both been used to build, validate, and adjust any domains.

Mineralization follows the lithological contacts and the stacked thrust geometries; mineralization is controlled by structural fluid pathways, and traps controlled by lithological contacts, in typical replacement-style processes (e.g. jasperoid and listwanite as main hosts for Au), rather than being constrained by relatively discrete fault or shear zones characteristic of epithermal-style mineralization. Mineralization does not appear to have any vertical continuation down-dip from a steep conduit structure (Figure 11-11). This has important implications for the estimation domaining strategy.

**Figure 11-11: Section Showing Mineralization Limited by Steep Conduit Structure**




Source: Anagold, 2023.

Two steep faults (coined the Cross Fault and Çakmaktepe North Fault) play a role as conduits for mineralization at Greater Çakmaktepe. Both faults are intruded by diorites. The Cross Fault, in particular, has gold mineralization associated with it and bisects the Çakmaktepe North deposit.

The Bayramdere Fault and the Ilic-Yakuplu Faults are regarded as confining the broader Greater Çakmaktepe deposit area to the northwest and southeast, respectively. These faults, along with the Cross Fault and Çakmaktepe North Fault, are all considered first-order structures. Some smaller steep faults in the area have an important purpose in 'redirecting' mineralization.

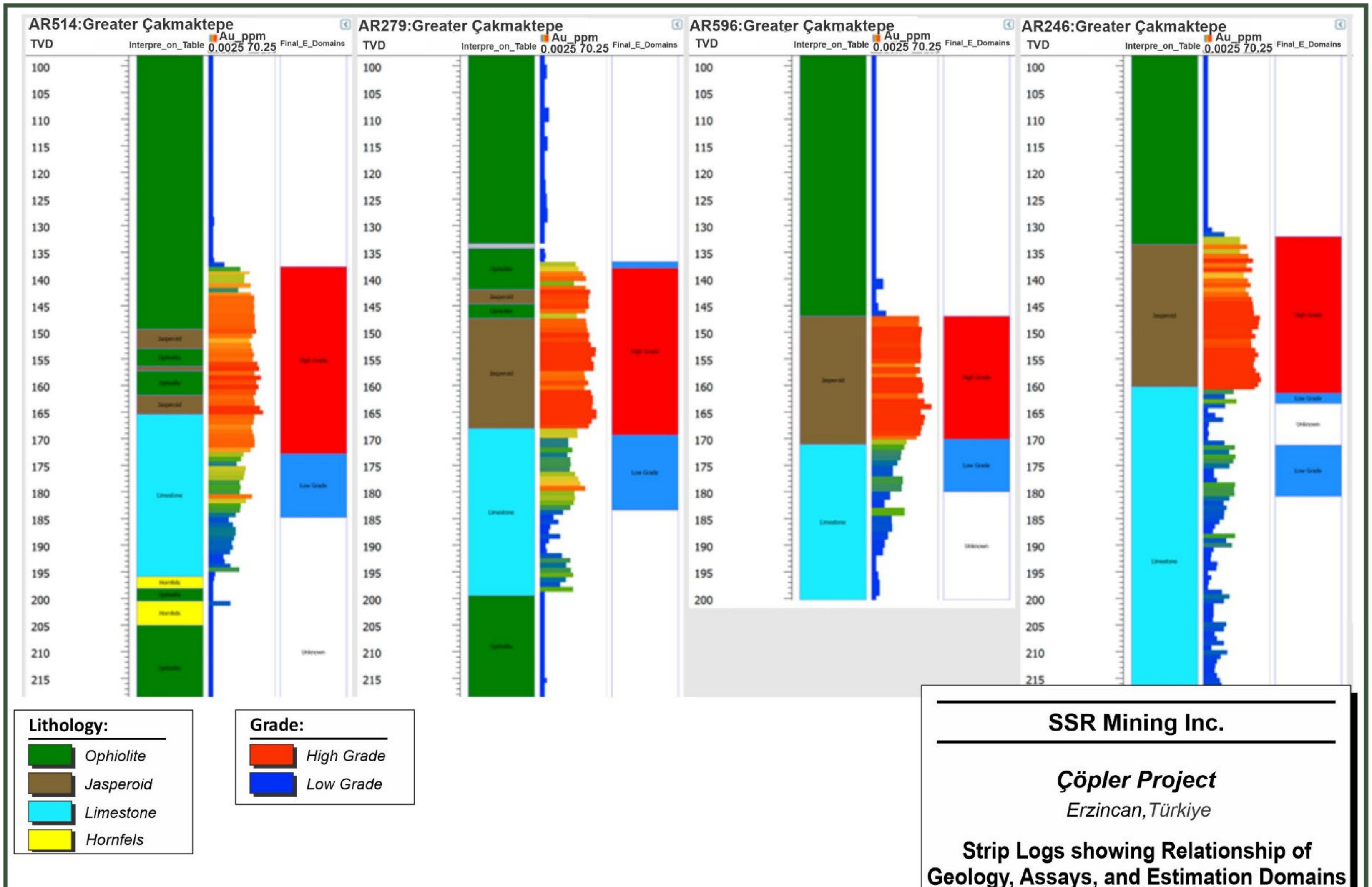
The mineralization often shows fairly "hard" boundaries where ultramafic rocks have been altered to listwanite, but shows more diffuse and gradational contacts into the jasperoid-metasomatosed carbonate rocks (Figure 11-12). In particular, there are large parts within the listwanite domain that are not mineralized. At the same time, the jasperoid geological domains needed to be honored as these are controlling the high-grade mineralization. However, as these domains are very thin, often discontinuous, representing a gradational hydrothermal process, a higher-grade shell approach was used to represent this jasperoid metasomatism.

The resulting estimation domains are therefore a combination of a "primary control", modeled by a grade-based "vein" model, within which a nested indicator interpolant defines the higher grade jasperoid mineralization. This is supported by a full boundary analysis which shows that a 0.2 g/t Au grade cut-off generates a relatively hard contact. The contact analysis for the selected 0.2 g/t Au grade cut-off at Greater Çakmaktepe is presented in Figure 11-13.

As both the high- and low-grade domains represent different controls on mineralization, they are treated as hard boundaries and samples from across domain boundaries do not influence the block estimate.

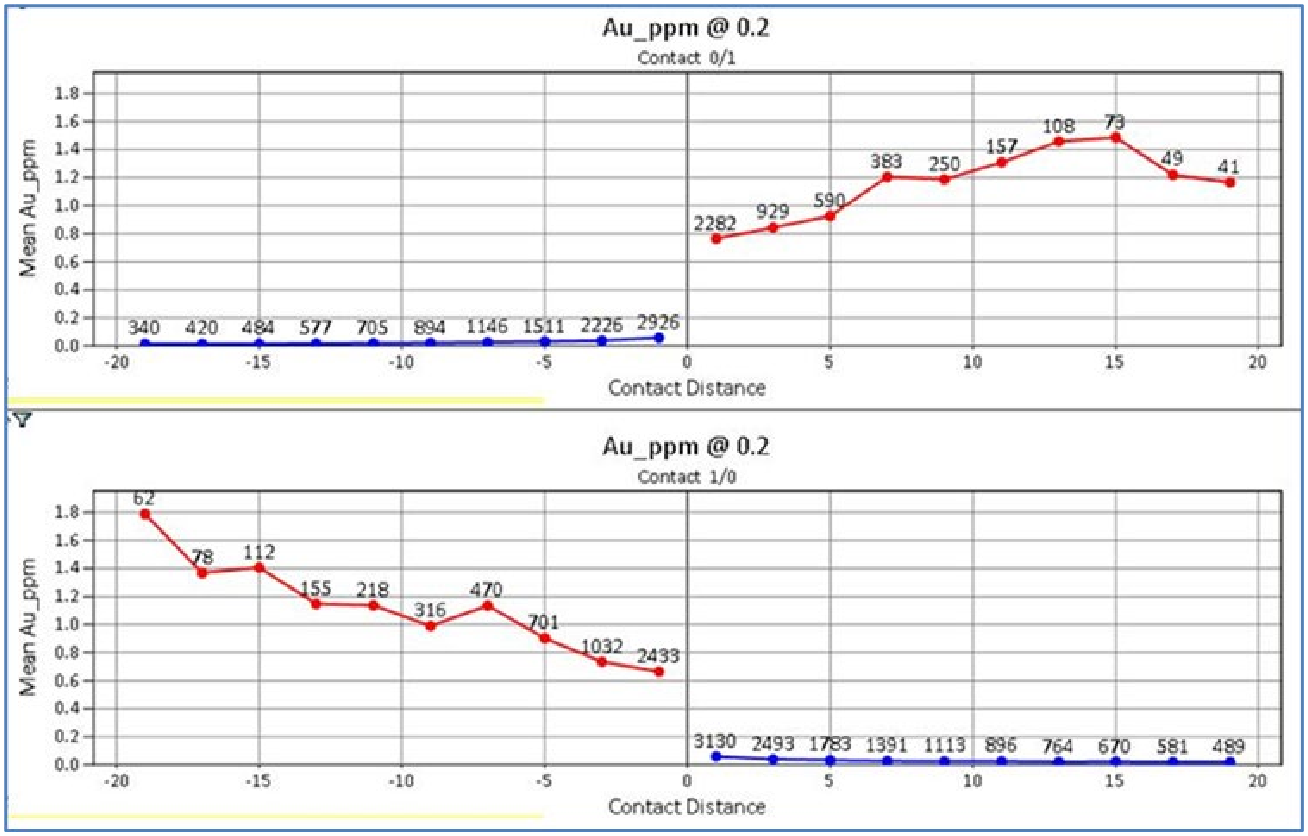
Estimation domains were also reviewed beyond the control of the jasperoid domain, to determine whether rock type or oxidation caused different grade distributions and whether they would warrant separate estimation; however, the grade distributions were consistent and further estimation domaining was not required.

**Figure 11-12: Strip Logs showing Relationship of Geology, Assays, and Estimation Domains for Greater Çakmaktepe**




*Source: Anagold, 2023.*

**Figure 11-13: Boundary Analysis**




### 11.3.3.2 Extrapolation

As the deposit has been well drilled and closed off in most directions, there is little risk due to extrapolation assumptions. The inherent settings in the indicator domains mean that the key estimation domains have not been extended to more than roughly half the drill spacing, which in most cases is 25 m.

### 11.3.3.3 Alternative Interpretations and Risk in Domaining

Given the relatively high density of drilling of the deposit, and regardless of the high-level structural interpretation of the deposit, it is anticipated that the overall risk on the total tonnages and grades associated with alternative interpretations of the geological model does not exceed ±10%. This number should be broadly interpreted as the impact on either tonnes or grade, either positive or negative, due to factors related to geological interpretation and domaining.

## 11.3.4 Compositing

The data informing the MRE are from RC and diamond core drilling. The samples resulting from each of these drilling techniques have a different sample support, which leads to a difference in variance in the data used in estimation. A comparison between RC and DD drilling showed that difference to be small, with coefficients of variations (CV) of 4.0 and 4.5, respectively. Notwithstanding a small potential bias issue between RC and diamond sampling (Section 8.3.4.2), this is an acceptable difference in variance for the purpose of resource classification.

Differences in sample support also occur due to different sample lengths. The predominant part of the samples (81%) has been sampled at one metre lengths. Of those intervals that are longer than one metre, most samples have grades below the grade cut-off. Only a small percentage of samples are of intervals larger than 1.3 m and with grades higher than the cut-off grade. Ultimately, one metre was selected as the composite interval. Testing of 2.5 m composites did not significantly improve the kriging metrics.

The impact of core loss on the compositing algorithm was also considered. The 50% minimum coverage function leads to a discrepancy between total composite and total assay lengths, which demonstrates the significant impact of core loss on the integrity of this process (Table 11-11). Compositing was carried out within hard boundaries and residual sample lengths were distributed equally along the hole where they were less than 30 cm.

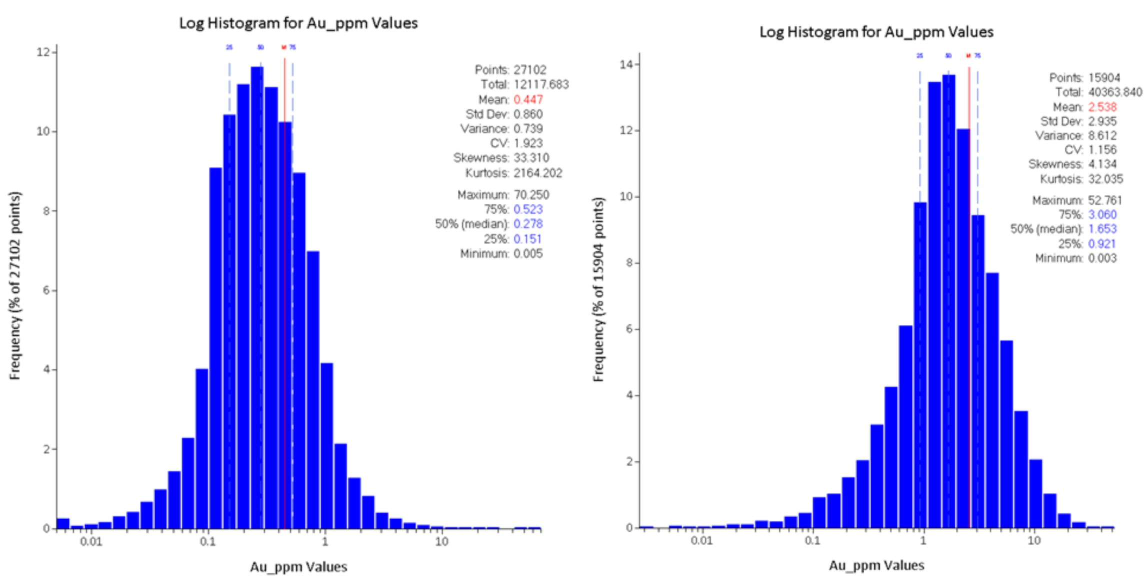
**Table 11-11: Compositing Statistics in Au HG domain**

| | Count | Length | Mean | SD | CV | Variance | Min | Q1 | Q2 | Q3 | Max |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Composited | 15,405 | 15,102 | 2.63 | 2.99 | 1.14 | 8.94 | 0.005 | 0.98 | 1.72 | 3.17 | 52.8 |
| Uncomposited | 14,970 | 15,061 | 2.63 | 3.16 | 1.2 | 9.99 | 0.0025 | 0.87 | 1.69 | 3.18 | 52.8 |

### 11.3.5 Exploratory Data Analysis

Following estimation domaining and compositing, the statistics for the domains were evaluated further. The CV of the composites within the combined high-grade and low-grade domain is 1.78, which indicates a fairly low/moderate skewedness for a gold deposit (Figure 11-14). The CV in the high-grade (HG) and low-grade (LG) domains is 1.16 and 1.92, respectively.

**Figure 11-14: Log-histogram of Composites within the LG (left) and HG (right) Domains**



### 11.3.6 Treatment of High-Grade Assays

#### 11.3.6.1 Capping Levels

Where the assay distribution is skewed positively or approaches log-normal, erratic high grade assay values can bias the estimation of a block. One method of treating these outliers to reduce their influence on the average grade is to cut or cap them at a specific grade level.

At Greater Çakmaktepe, global grade capping has not been applied.

#### 11.3.6.2 High Grade Restriction

An alternative approach to reducing the influence of high-grade composites is to restrict the influence of high-grade samples during the estimation process. The threshold grade levels and buffer distances were selected from the basic statistics and from visual inspection of the apparent continuity of very high grades within each estimation domain. In the LG domain, a minor distance-buffered grade capping was applied, to ensure that small stray high-grade samples in this domain do not unduly influence blocks at large distances.

Given the low amount of grade outliers and the relatively low grade of these, model sensitivity testing confirms that the extent of the grade cap has a very low impact on project risk.

### 11.3.7 Spatial Analysis

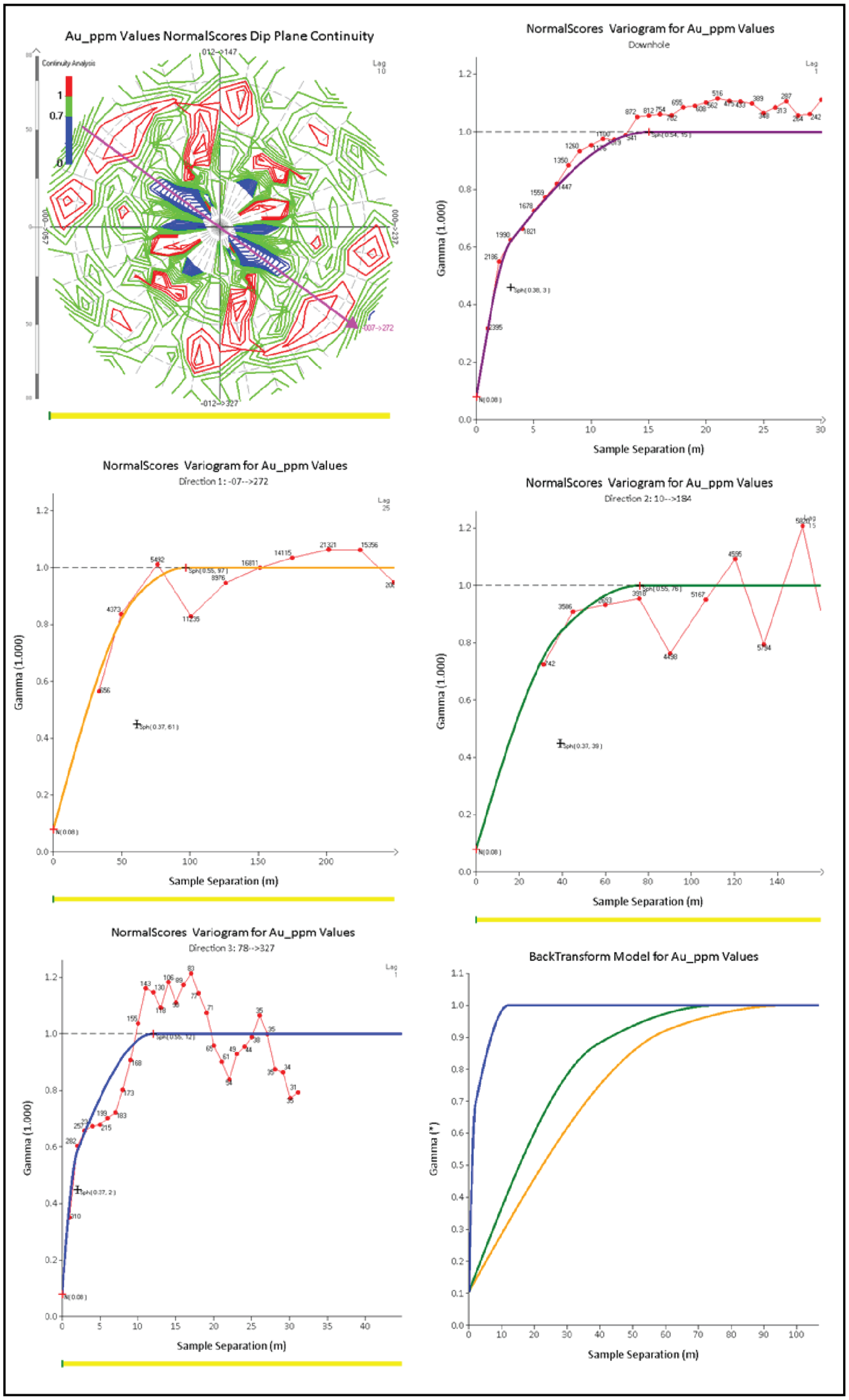
#### 11.3.7.1 Variography

Experimental variograms were created for the estimation domains. The estimation domain was reduced to a smaller area in which the orientation of mineralization did not change much, to allow a more robust experimental variography analysis, resulting in ~2,400 composites. In analysing the experimental variography, mineralization grade continuity at Greater Çakmaktepe is interpreted as broadly consistent in terms of the controls and statistically, for the strict purpose of variography modeling.

The experimental directional variograms are reasonably consistent, showing short and maximum ranges of approximately 50 m and 100 m in the direction of maximum continuity, and 75 m and 40 m, respectively, in the semi-major direction. The $\gamma_0$ was derived from the downhole variogram on 1-m composited exploration data without grade caps and provides a robust estimate of the variance at zero distance (0.11). The models are presented in Figure 11-15.

Since the mineralization is heavily controlled by the orientation of the lithological contacts, the search ellipse at each block needs to be appropriately oriented. Simplified trend planes, extracted from the vein domains (that were used to create primary mineralization constraints) were used as variable orientations (dynamic anisotropy) during the estimation process.

**Figure 11-15: Experimental and Modeled Variograms**



### 11.3.8 Search Strategy and Grade Estimation Parameters

#### 11.3.8.1 Block Model

The block model covers the entire geological model area and has 12 m x 12 m x 5 m parent blocks in the X, Y, Z directions, respectively (Table 11-12). A study on optimal block size was undertaken, and the final size was selected based on the weighted average of kriging statistics in high-metal blocks. The block model is sub-blocked to 3 m x 3 m x 5 m to provide volume resolution. Discretization was set to 4 x 4 x 5 points.

**Table 11-12: Greater Çakmaktepe Block Model Description**

| Parameter | X | Y | Z |
|---|---|---|---|
| Parent Block Size (m) | 12 | 12 | 5 |
| Sub-block Size (m) | 3 | 3 | 5 |
| Sub block Divisions | 4 | 4 | 1 |
| Minimum parent centroid | 462,716 | 4,364,876 | 837.5 |
| Maximum parent centroid | 464,912 | 4,367,672 | 1,727.5 |
| Minimum corner | 462,710 | 4,364,870 | 835 |
| Maximum corner | 464,918 | 4,367,678 | 1730 |
| Size (blocks) | 184 | 234 | 179 |
| Azimuth (°) | 0 | | |
| Dip (°) | 0 | | |
| Pitch (°) | 0 | | |

#### 11.3.8.2 Grade Estimation

**Gold**

Ordinary kriging estimates were run separately in three domains: the HG and LG domains, and the "outside" domain. Data were interpolated in the mineralized domains using a single 150 m x 100 m x 25 m search ellipse to select samples and using a minimum of four and maximum of 35 samples, into parent blocks discretized at 4 x 4 x 5 points. Blocks estimated by a low number of samples are assigned a lower confidence in the classification of the resource. Estimation in the outside domain picks up stray intercepts that were not domained and uses a very tight estimation search so as not to smear grades. All estimation settings are summarized in Table 11-13.

Because of the low nugget in the variogram, there were a few negative kriging weights, which in some minor blocks have led to negative gold grades. For these blocks, and for those blocks with a total sum of negative weights below -0.2, the OK estimate was overwritten by an inverse distance algorithm. This has a negligible impact.

**Table 11-13: Kriging Neighbourhood and Variography Settings for Au Domains**

| | Au HG | Au LG | Outside |
|---|---|---|---|
| CV | 1.14 | 1.9 | 5.19 |
| Mean | 2.59 | 0.45 | 0.03 |
| Min samples | 4 | 4 | 8 |
| Max Samples | 35 | 35 | 35 |
| Outlier Dist | N/A | 15 | 1.25 |
| Outlier Cap | N/A | 20 | 20 |
| Major Search | 150 | 150 | 25 |
| Semi-Major Search | 100 | 100 | 25 |
| Minor Search | 25 | 25 | 5 |
| Nugget | 0.1 | 0.1 | 0.1 |
| J1 | 0.5 | 0.45 | 0.3 |
| Major Range | 40 | 40 | 25 |
| Semi Range | 20 | 35 | 15 |
| Minor Range | 2 | 3 | 3 |
| 2nd Major Range | 100 | 110 | 130 |
| 2nd Semi Range | 75 | 65 | 65 |
| 2nd Minor Range | 12 | 7 | 13 |
| Var Dir 1 | 272 | 337 | 262 |
| Var Dir 2 | 4 | 247 | 353 |
| Var Dir 3 | 147 | 147 | 133 |

### Silver and Copper

Silver and copper were estimated into numeric indicator interpolant domains and estimated using ordinary kriging algorithms with similar settings as those used for Au. Similar trend planes were used to guide these domains. Dynamic anisotropy was used to control the orientation of the ellipse. Grade data did not require grade capping.

### Sulfur

The sulfur grades were estimated in oxidation domains using inverse distance with a power of 2. Estimation used dynamic anisotropy, following the general trend of oxidation front as well as the mineralization. However, the complex nature of this contact provided mixed results and this is an area of potential future improvements.

### Carbon

Carbon grades were estimated within lithological domains from the updated geological model, due to the clear lithological control on carbon content. Grades were estimated using inverse distance and using dynamic anisotropy to guide the search ellipse, based on simplified lithological contacts.

#### 11.3.8.3 Density Estimation

Density grades were estimated within lithological domains from the updated geological model due to the clear lithological control on density. The search was also constrained within weathering domains ("fresh" and "weathered"). Grades were estimated using inverse distance and using a lithology-driven dynamic search to guide the search ellipse.

Any remaining blocks not estimated were assigned a value based on a review of the population histogram. Summary density statistics for the lithological domains are presented in Table 11-22.

**Table 11-14: Çakmaktepe Density Statistics for Lithology Domains**

| Name | Weathering State | Count | Mean ($t/m^3$) | CV | Median ($t/m^3$) | Assigned Density ($t/m^3$) |
|---|---|---|---|---|---|---|
| Diorite | Fresh | 640 | 2.70 | 0.06 | 2.67 | 2.63 |
| Diorite | Weathered | 747 | 2.38 | 0.07 | 2.41 | 2.48 |
| Dolomite | Fresh | 4872 | 2.72 | 0.05 | 2.73 | 2.55 |
| Dolomite | Weathered | 1123 | 2.41 | 0.07 | 2.45 | 2.71 |
| Hornfels | Fresh | 4804 | 2.76 | 0.07 | 2.74 | 2.71 |
| Hornfels | Weathered | 2068 | 2.38 | 0.07 | 2.42 | 2.53 |
| Jasperoid | Fresh | 1116 | 2.74 | 0.05 | 2.71 | 2.55 |
| Jasperoid | Weathered | 479 | 2.42 | 0.08 | 2.45 | 2.77 |
| Limestone | Fresh | 1912 | 2.70 | 0.05 | 2.70 | 2.55 |
| Limestone | Weathered | 467 | 2.38 | 0.08 | 2.43 | 2.71 |
| Listwanite | Fresh | 2410 | 2.69 | 0.06 | 2.67 | 2.63 |
| Listwanite | Weathered | 2670 | 2.42 | 0.07 | 2.44 | 2.55 |
| Silica Cap | Fresh | 159 | 2.64 | 0.04 | 2.63 | 2.62 |
| Silica Cap | Weathered | 24 | 2.48 | 0.03 | 2.51 | 2.54 |
| Unaltered Ultramafics | Fresh | 336 | 2.71 | 0.07 | 2.67 | 2.69 |
| Unaltered Ultramafics | Weathered | 9473 | 2.41 | 0.05 | 2.42 | 2.45 |

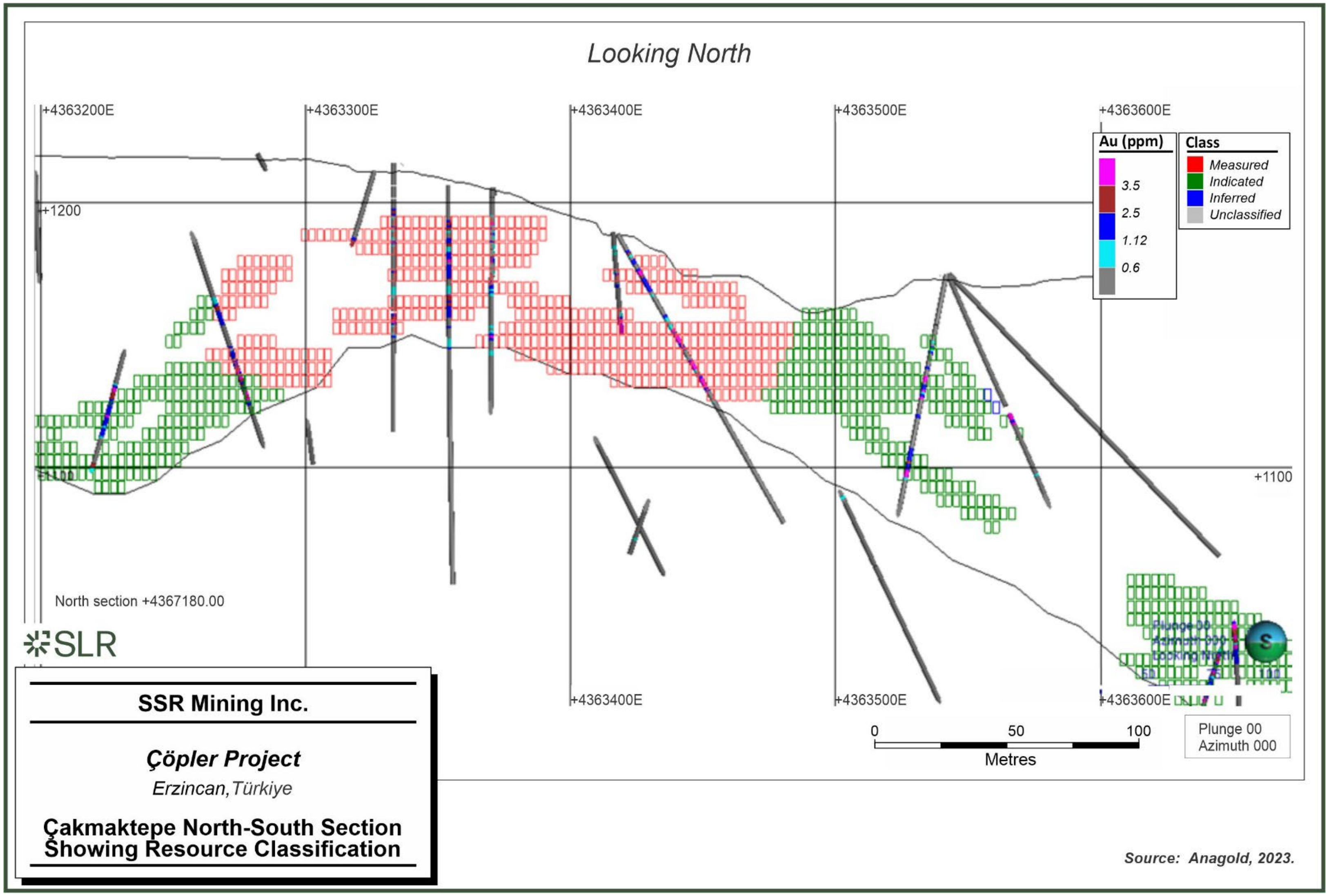
### 11.3.9 Classification

Mineral Resources have been classified in accordance with the U.S. Securities and Exchange Commission (US SEC) Regulations S-K subpart 1300 rules for Property Disclosures for Mining Registrants (S-K 1300).

The QP has classified the Mineral Resource based on a workflow that includes the assessment of geological continuity, of the confidence in the estimation domains, and of the quality of the informing data. The drill spacing at Greater Çakmaktepe is irregular, leading to various areas that, on balance, are more under-drilled than others.

Therefore, in assessing the effect of drill spacing on classification, the QP used quantitative kriging metrics such as SoR and KE, which inherently carry information on drill spacing, as well as a simple distance buffer mesh to informing samples, to inform two reasonably continuous areas that are, on balance, less informed or of lower estimation quality than others. These areas were hand-digitised to minimise the spotted-dog effect, and further informed by geological confidence. An example of classification approach can be seen in Figure 11-16.

**Figure 11-16: Çakmaktepe North-South Section Showing Resource Classification**

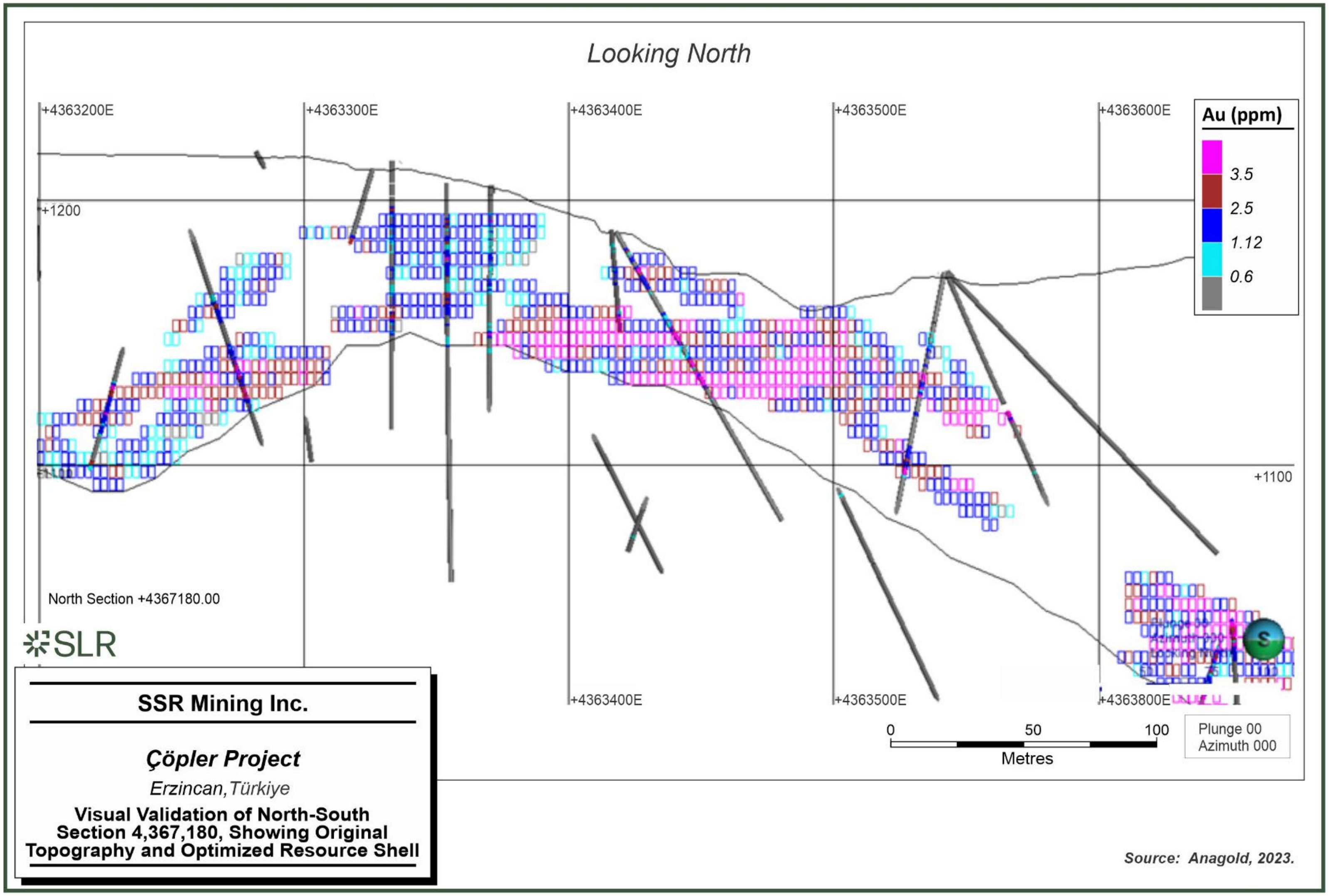



Source: Anagold, 2023.

### 11.3.10 Estimation Validation

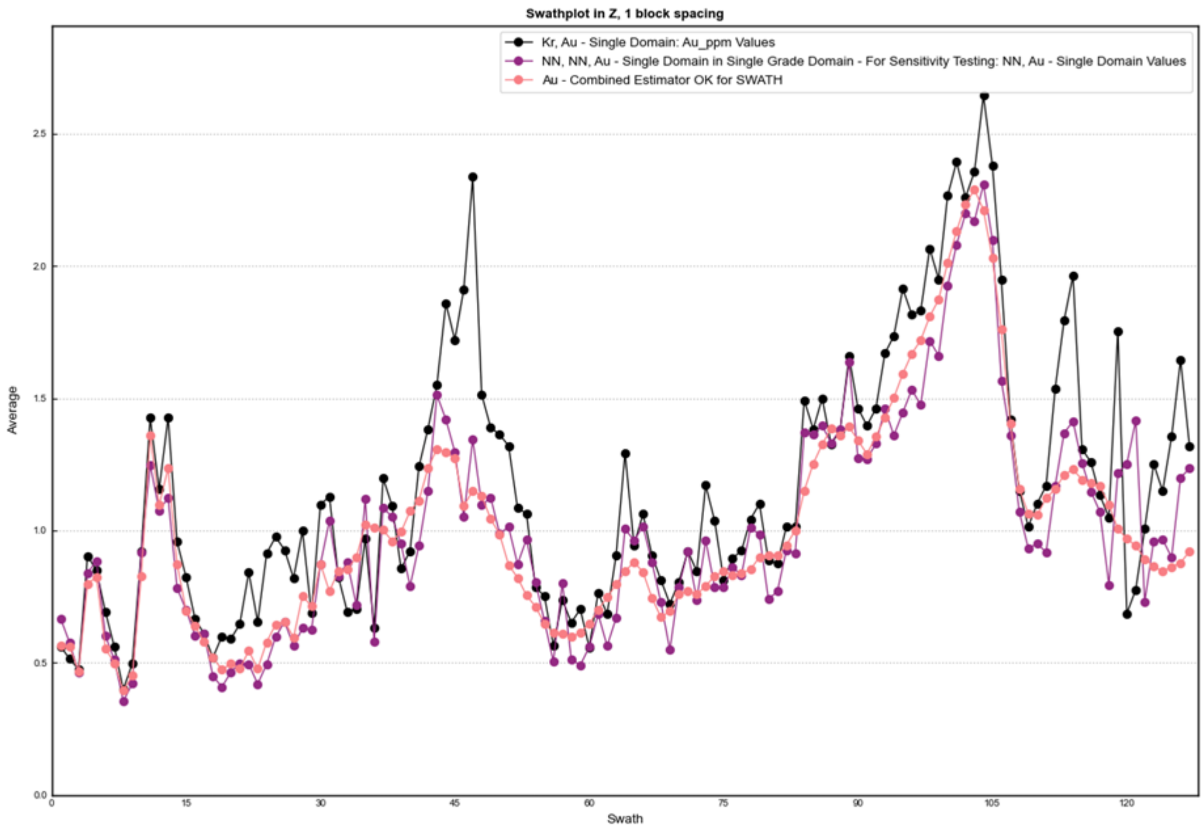
The estimate was validated using conventional procedures such as swath plots (Figure 11-18), global mean comparisons and visual validations which demonstrated that the kriging results match the declustered grade mean very well and map the grade trend across the strike of the deposit well too. In addition, the block interrogator was used to query and validate settings for high-grade blocks, to ensure that the settings applied generate reasonable estimates. All results are acceptable.

**Figure 11-17: Visual Validation of North-South Section 4,367,180, Showing Original Topography and Optimized Resource Shell**




Source: Anagold, 2023.

**Figure 11-18: Trend Plot in Z Direction Showing Raw Same Grades (black), 2-m NN-“Declustered” Sample Grades (purple), and Block Grades (pink).**




## 11.3.11 Reasonable Prospects for Economic Extraction and Cut-off Grade

The RSC QP has considered the potential of economic extraction of the Greater Çakmaktepe Mineral Resource. In assessing the potential of economic extraction, the QP has reviewed mining, metallurgical, economic, environmental, social and geotechnical factors. Extensive metallurgical results are available. The RSC QP is not aware of any environmental issues and understands that social issues are well-managed.

The Mineral Resource is reported within a conceptual optimised pit shell using a gold price of USD 1,750/oz with the parameters summarized in Table 11-15.

**Table 11-15: Summary of Key Parameters used in 2023 Conceptual Pit Shell at Greater Çakmaktepe**

| Input Area | Units | Value |
|---|---|---|
| Mining Cost | $/t | $2.79 |
| Fill Cost | $/t | $2.48 |
| Oxide G&A | $/t | $4.44 |
| Sulfide G&A | $/t | $9.00 |
| CIP G&A | $/t | $4.44 |
| Sulfide Process Cost | $/t | $35.37 |
| Oxide Process Cost | $/t | $13.91 |
| CIP Process Cost | $/t | $14.82 |
| Sulfide CAPEX | $/t | $1.21 |
| Oxide CAPEX | $/t | $2.97 |
| CIP CAPEX | $/t | $2.51 |
| Au Price | $/oz | $1,750 |
| Ag Price | $/oz | $22.00 |
| Cu Price | $/lb | $3.95 |
| Oxide Sell Cost | $/oz | $6.61 |
| Sulfide Sell Cost | $/oz | $6.87 |
| Oxide Royalty | % | 3.40% |
| Sulfide Royalty | % | 2.00% |

Recoveries for different lithologies are provided in Table 12.3

### 11.3.12 Mineral Resource Reporting

The Mineral Resource estimate presented in Table 11-16 was prepared by independent consultancy RSC and has an effective date of October 31, 2023.

The RSC QP is not aware of any environmental issues and understands that social issues are well-managed.

Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability, nor is there certainty that all or any part of the Mineral Resource estimated here will be converted to Mineral Reserves through further study. Sources of uncertainty that may affect the reporting of Mineral Resources include sampling or drilling methods, data processing and handling, geologic modelling, and estimation.

**Table 11-16: Summary of Greater Çakmaktepe Mineral Resources exclusive of Mineral Reserves**

| Resource Category | Type | Total Mineral Resources | | | | | | | SSR Attributed Basis | SSR Attributed Mineral Resources (80%) | | | | | | | NSR Cut-off Values | Au Recovery |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Tonnage | Grade | | | Contained Metal | | | | Tonnage | Grade | | | Contained Metal | | | | |
| | | | Au | Ag | Cu | Au | Ag | Cu | | | Au | Ag | Cu | Au | Ag | Cu | | |
| | | (Mt) | (g/t) | (g/t) | (%) | (koz) | (koz) | (Klb) | (%) | (Mt) | (g/t) | (g/t) | (%) | (koz) | (koz) | (Klb) | ($/t) | (%) |
| Measured | Oxide Heap Leach | 1.5 | 0.76 | 2.65 | 0.03 | 36 | 125 | 1,088 | 80 | 1.2 | 0.76 | 2.65 | 0.03 | 29 | 100 | 871 | 18.34 | 40 - 78 |
| | Sulfide | 0.2 | 1.22 | 5.90 | 0.04 | 7 | 34 | 150 | 80 | 0.1 | 1.22 | 5.90 | 0.04 | 6 | 27 | 120 | 44.37 | 81 - 91 |
| | Oxide Grind Leach CIL | 2.8 | 1.01 | 4.20 | 0.03 | 91 | 380 | 1,765 | 80 | 2.3 | 1.01 | 4.20 | 0.03 | 73 | 304 | 1,412 | 19.26 | 53 - 90 |
| **Total Measured** | **Total** | **4.5** | **0.94** | **3.75** | **0.03** | **135** | **539** | **3,003** | 80 | **3.6** | **0.94** | **3.75** | **0.03** | **108** | **431** | **2,402** | | |
| Indicated | Oxide Heap Leach | 0.6 | 0.75 | 1.66 | 0.01 | 14 | 31 | 132 | 80 | 0.5 | 0.75 | 1.66 | 0.01 | 11 | 25 | 106 | 18.34 | 40 - 78 |
| | Sulfide | 0.9 | 2.08 | 3.68 | 0.02 | 60 | 106 | 475 | 80 | 0.7 | 2.08 | 3.68 | 0.02 | 48 | 85 | 380 | 44.37 | 81 - 91 |
| | Oxide Grind Leach CIL | 7.7 | 1.01 | 2.50 | 0.02 | 249 | 616 | 3,137 | 80 | 6.1 | 1.01 | 2.50 | 0.02 | 199 | 493 | 2,509 | 19.26 | 53 - 90 |
| **Total Indicated** | **Total** | **9.2** | **1.10** | **2.56** | **0.02** | **323** | **753** | **3,743** | 80 | **7.3** | **1.10** | **2.56** | **0.02** | **259** | **603** | **2,995** | | |
| Total Measured + Indicated | Oxide Heap Leach | 2.1 | 0.76 | 2.37 | 0.03 | 50 | 156 | 1,220 | 80 | 1.6 | 0.76 | 2.37 | 0.03 | 40 | 125 | 976 | 18.34 | 40 - 78 |
| | Sulfide | 1.1 | 1.94 | 4.06 | 0.03 | 67 | 141 | 624 | 80 | 0.9 | 1.94 | 4.06 | 0.03 | 54 | 113 | 499 | 44.37 | 81 - 91 |
| | Oxide Grind Leach CIL | 10.5 | 1.01 | 2.95 | 0.02 | 340 | 995 | 4,902 | 80 | 8.4 | 1.01 | 2.95 | 0.02 | 272 | 796 | 3,921 | 19.26 | 53 - 90 |
| **Total M + I** | **Total** | **13.6** | **1.05** | **2.95** | **0.02** | **458** | **1,292** | **6,746** | 80 | **10.9** | **1.05** | **2.95** | **0.02** | **366** | **1,034** | **5,397** | | |
| Inferred | Oxide Heap Leach | 0.1 | 1.32 | 2.57 | 0.02 | 2 | 4 | 28 | 80 | 0.0 | 1.32 | 2.57 | 0.02 | 2 | 3 | 22 | 18.34 | 40 - 78 |
| | Sulfide | 0.7 | 2.58 | 2.36 | 0.02 | 56 | 51 | 229 | 80 | 0.5 | 2.58 | 2.36 | 0.02 | 45 | 41 | 184 | 44.37 | 81 - 91 |
| | Oxide Grind Leach CIL | 5.3 | 1.78 | 2.25 | 0.02 | 306 | 386 | 1,797 | 80 | 4.3 | 1.78 | 2.25 | 0.02 | 244 | 308 | 1,438 | 19.26 | 53 - 90 |
| **Total Inferred** | **Total** | **6.1** | **1.87** | **2.26** | **0.02** | **364** | **441** | **2,054** | 80 | **4.8** | **1.87** | **2.26** | **0.02** | **291** | **353** | **1,644** | | |

Notes:

1. The definitions for Mineral Resources in S-K 1300 were followed.
2. Mineral Resources are reported based on October 31, 2023 topography surface.
3. Mineral Resources are reported exclusive of Mineral Reserves.
4. The Mineral Resource estimates are presented at both a 100% Project level and SSR's 80% attributable share.
5. Heap Leach Oxide is defined as material <2% total sulfur.
6. Grind Leach Oxide is defined as material <2% total sulfur. Processing route will be available approximately in 2027.

7. Sulfide is defined as material ≥2% total sulfur.
8. Heap leach oxide uses a NSR cut-off $18.34/t, grind leach oxide uses a NSR cut-off value $19.26/t, and Çöpler sulfide ore uses a cut-off grade of $39.87/t, Greater Çakmaktepe sulfide ore uses a cut-off grade of $44.37/t . All cut-off values include allowances for royalty payable.
9. Metallurgical gold recovery for heap leach oxide and grind leach varies between 40-78% and 53-90%, respectively, based on lithology; metallurgical recovery for sulfide varies between 81% and 91% based on lithology.
10. Metallurgical silver recoveries for heap leach and grind leach oxide varies between 0 and 54% based on lithology. Metallurgical recovery for sulfide varies between 0 and 3%.
11. Metallurgical copper recoveries for heap leach and grind leach oxide varies between 0 and 15% based on lithology. Metallurgical recovery for sulfide is 0%.
12. Metal prices used to report the Mineral Resources are $1,750/oz Au, $22.00/oz Ag, and $3.95/lb Cu with allowances for payability, deductions, transport, and royalties.
13. The point of reference for Mineral Resources is the point of feed into the processing facility for grind leach and sulfide material; or for Heap Leach oxide, it is the Carbon columns.
14. All Mineral Resources estimates were constrained within conceptual pit shells to meet reasonable prospects for economic extraction criteria.
15. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
16. Totals may vary due to rounding.

### 11.3.13 Comparison with Previous Estimates

The 2023 Mineral Resource exclusive of Mineral Reserves has been compared with previous Mineral Resource estimate as reported in SSR's 2022 Form 10-K filing (SSR, 2022).

There was a decrease in contained Measured and Indicated Resources by 252 koz and 409 koz in Inferred, these changes can be attributed to:

- Conversion of Inferred Resource to Indicated
- Conversion of Resources to Reserves

## 11.4 Bayramdere Mineral Resource Estimate

### 11.4.1 Resource Database

Bayramdere represents a small satellite deposit within the wider Çöpler Project.

The data used in the mineral resource estimate are from the various drilling campaigns that have taken place at the deposits since 2007. Anagold provided drill hole data to RSC in an MS Access database. All data were validated and reviewed.

A total of 120 drill holes (excluding water monitoring holes) have been drilled at Bayramdere for a total length of 11,189.4 m (Table 11-17). The assay database includes 8,758 sample intervals for a total assayed length of 10,965.1 m. Of the 120 holes, only 104 were drilled within the central part of the Bayramdere deposits and are covered and used by the resource model. The remaining 16 holes have been drilled on the outer edges of the prospect and are too widely spaced from the central part of the deposit to be used in the resource estimation, other than for a generic understanding of the geology of the area. No further data were excluded from the domaining and estimation process.

All numerical data were linked to the implicit modeling software from an MS Access database. Below-detection values were replaced by half of the detection limit after they had been imported into the implicit modeling software; the original entries for these samples were retained in the database.

**Table 11-17: Summary of Drill Hole Data Informing Bayramdere MRE**

| Drill Type | No. of Holes | Total Drill Metres |
|---|---|---|
| DD | 81 | 6,752 |
| RC | 32 | 2,946 |
| RCD | 7 | 1,491 |
| Total | 120 | 11,189 |

### 11.4.2 Geological Interpretation

The primary geological units modeled at Bayramdere are Limestone, Ophiolite, Hornfels and Diorite. Limestone, Ophiolite and Hornfels have been thrust over one another along shallow-dipping shear zones. Subsequently, diorite intruded into the stacked units.

Gossan is closely associated with limestone and an important host for mineralization. Gossan was formed from the interaction of metal-enriched fluids with the country rock and subsequent oxidation due to weathering.

All five geological domains were modeled implicitly, with manual manipulation used where required to achieve the desired outcomes.

### 11.4.3 Estimation Domain Interpretation

The estimation domains cannot be represented by any of the primary geological domains in isolation. Hence, grade-based domains were used to constrain the mineralization while still honoring the geology and controls on mineralization, particularly the Gossan geological domains. Since the Gossan domains are very thin and often discontinuous, representing a gradational hydrothermal and weathering process, a higher-grade shell was used to represent this domain.

Separate domains were created for low-grade and high-grade Au, Ag, Cu, and As. Sulfur was also estimated in two grade-based domains based on a 0.45% S threshold.

#### 11.4.3.1 Extrapolation

At depth, mineralization transitions below the base of complete oxidation to disseminated pyrite, vein sulfides, and massive sulfide horizons generally occurring within shear zones, along shallow thrusts and diorite sill and dyke margins. The extent of sulfide mineralization has not been tested. The inherent settings in the indicator estimation domains mean that the key estimation domains have not been extended to more than roughly half the drill spacing, which in most cases is 25 m.

#### 11.4.3.2 Alternative Interpretation & Risk in Domaining

In terms of quantification of the overall risk on the total tonnages and grades associated with the interpretation of the estimation domains, given the relatively poor density of drilling in key deeper parts of the deposit, it is anticipated that the risk in alternative interpretations of the geological model may lead to tonnage or grade variance of up to ±20%.

### 11.4.4 Compositing

The data informing the estimate are from RC and diamond core drilling. The samples resulting from each of these drilling techniques have a different sample support, which leads to a difference in variance in the data used in estimation.

Differences in sample support also occur. The predominant part of the samples (65%) has been sampled at 1-m lengths. Of those intervals that are longer than 1 m, most samples have grades below the grade cut-off. Only a small percentage of samples are of intervals larger than 2.0 m and with grades higher than the cut-off grade.

A 1 m composite length was selected and compositing was carried out within hard boundaries and residual sample lengths were distributed equally along the hole where they were less than 30 cm.

### 11.4.5 Exploratory Data Analysis

Following estimation domaining and compositing, the statistics for the domains were evaluated further (Table 11-20, Figure 11-19, Figure 11-20). The CV of the composites in the high-grade and low-grade Au domains is 1.05 and 1.10, respectively.

**Table 11-18: Bayramdere Estimation Domain Statistics**

| Variable | Domain | Count | Length (m) | Mean (ppm) | SD (ppm) | CV | Variance | Min | Max |
|---|---|---|---|---|---|---|---|---|---|
| Au | HG | 46 | 46.85 | 14.4 | 15.2 | 1.05 | 231.82 | 4 | 96 |
| | LG | 396 | 372.77 | 0.7 | 0.7 | 1.1 | 0.53 | 0.005 | 3.9 |
| | background | 9,243 | 9,199.65 | 0.0 | 0.1 | 3.54 | 0.01 | 0.005 | 5.92 |
| Ag | HG | 474 | 480.56 | 39.0 | 96 | 2.46 | 9211.74 | 1.1 | 992 |

| Variable | Domain | Count | Length (m) | Mean (ppm) | SD (ppm) | CV | Variance | Min | Max |
|---|---|---|---|---|---|---|---|---|---|
| | LG | 694 | 679.70 | 2.7 | 2.6 | 0.96 | 6.54 | 0.25 | 50.8 |
| | background | 7,324 | 7,310.71 | 0.4 | 1.6 | 3.81 | 2.44 | 0.25 | 68 |
| Cu | HG | 465 | 452.30 | 4,947 | 8988 | 1.82 | 80,777,183 | 84 | 127,369 |
| | LG | 665 | 632.59 | 1,039 | 1948.4 | 1.88 | 3,796,345 | 18 | 33,092 |
| | background | 7,413 | 7,369.64 | 115 | 457.2 | 3.98 | 209,061 | 0.5 | 22,790 |

**Figure 11-19: Log-histograms of Composites Within the Au Low-Grade (left) and High-Grade (right) Estimation Domains**

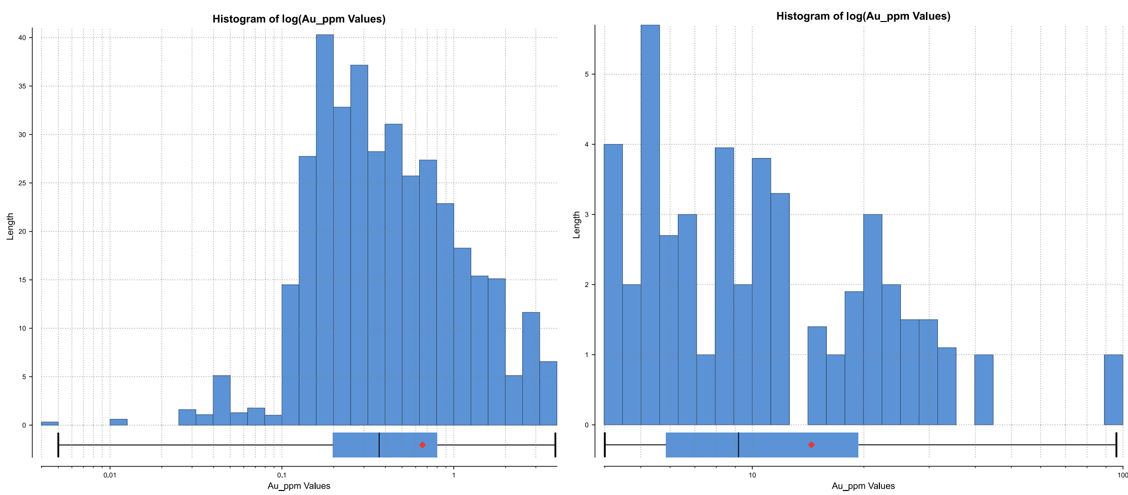
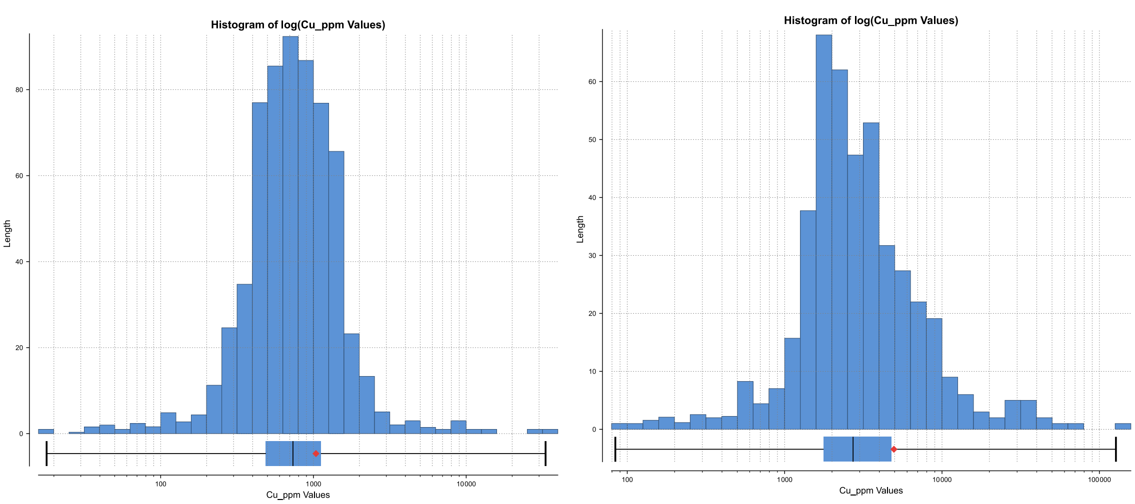



**Figure 11-20: Log-histograms of Composites Within the Cu Low-Grade (left) and High-Grade (right) Estimation Domains**



### 11.4.6 Treatment of High-Grade Assays

#### 11.4.6.1 Capping Levels

Where the assay distribution is skewed positively or approaches log-normal, erratic high grade assay values can have a disproportionate effect on the average grade of a deposit. One method of treating these outliers to reduce their influence on the average grade is to cut or cap them at a specific grade level.

Global grade capping has not been applied as most domains demonstrate relatively low CV.

#### 11.4.6.2 High Grade Restriction

In addition to capping thresholds, a secondary approach to reducing the influence of high-grade composites is to restrict the search ellipse dimension (high yield restriction) during the estimation process. The threshold grade levels, chosen from the basic statistics and from visual inspection of the apparent continuity of very high grades within each estimation domain, may indicate the need to further limit their influence by restricting the range of their influence.

A distance-buffered capping has been applied to all the mineralized domains to ensure that a small amount of stray high-grade samples influence blocks in the immediate vicinity (usually up to approximately 15 m to 25 m) but do not unduly influence blocks at large distances.

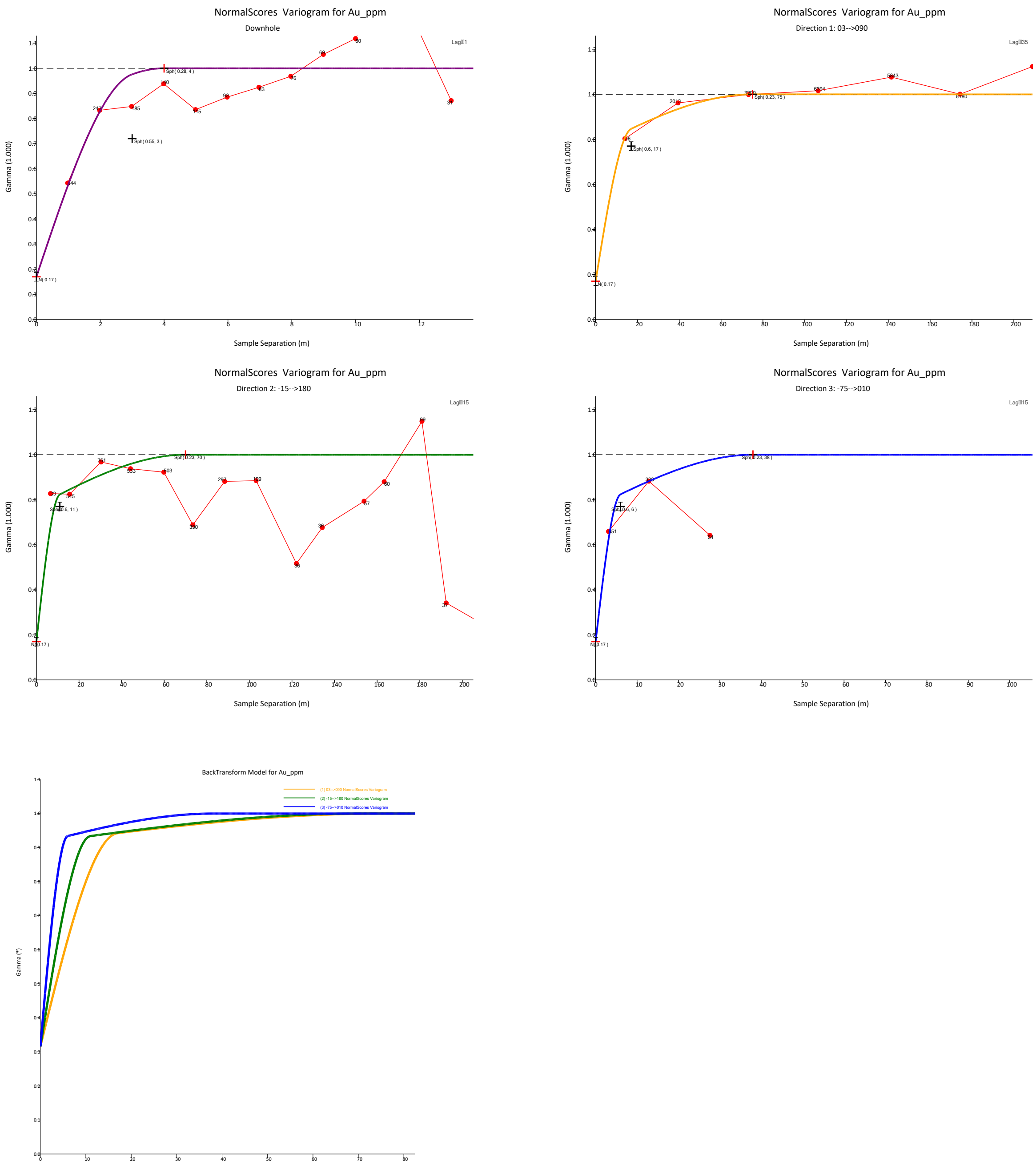
### 11.4.7 Spatial Analysis

#### 11.4.7.1 Variography

Experimental variograms were generated with Au composites from the high-grade and Low-grade domains combined since there weren't sufficient samples for variography on the HG alone.

All variograms were calculated on composited, non-capped data, and transformed to normal scores. Long and short ranges were validated by reviewing the spatial continuity of implicit grade shells. Nuggets were compared to the domain CVs as a broad check of alignment to domain variance characteristics. The results established from the combined Au domains are presented in Figure 11-21.

## Figure 11-21: Experimental and Modeled Variograms for Au




The variography model established from the combined Au domain data was used in the OK estimation of Au, Ag and Cu. The variography model data are detailed in summary form in Table 11-19. The Au domains were also estimated using variable orientation settings established from a simplified trend plane.

**Table 11-19: Summary of Variography Model Data in the OK estimation**

| Domain | Nugget | J1 | Major Range | Semi Range | Minor Range | 2nd Major Range | 2nd Semi Range | 2nd Minor Range | VarDir1 | VarDir2 | VarDir3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Au, Ag, Cu (LG & HG) | 0.1 | 0.83 | 17 | 11 | 6 | 75 | 70 | 40 | 270 | 180 | 10 |

### 11.4.8 Search Strategy and Grade Estimation Parameters Block Model

The block model is not rotated and has 12 m x 12 m x 5 m parent blocks in the X, Y, Z directions, respectively (Table 11-20). A brief study of optimal block size was undertaken, and the final size was selected based on the weighted average of kriging statistics in high-metal blocks. It is sub-blocked to 3 m x 3 m x 1 m to provide volume resolution.

**Table 11-20: Bayramdere Block Model Description**

| Parameter | X | Y | Z |
|---|---|---|---|
| Parent Block Size (m) | 12 | 12 | 5 |
| Sub-block Size (m) | 3 | 3 | 1 |
| Sub block divisions | 4 | 4 | 5 |
| Minimum parent centroid | 465,995 | 4,363,730 | 1,137 |
| Maximum parent centroid | 466,595 | 4,364,125 | 1,417 |
| Minimum corner | 466,600 | 4,363,700 | 1,135 |
| Maximum corner | 466,600 | 4,364,100 | 1,420 |
| Size (blocks) | 51 | 34 | 57 |
| Azimuth (°) | 0 | | |
| Dip (°) | 0 | | |
| Pitch (°) | 0 | | |

#### 11.4.8.1 Grade Estimation

Ordinary kriging was used to estimate Au, Ag, and Cu into the numeric interpolant domains. Minimum and maximum samples were set for each domain, finding a balance between conditional bias and over smoothing. Dynamic anisotropy was used to control the orientation of the ellipse for Au only. Blocks estimated by a low number of samples are assigned a lower confidence in the classification of the resource. All kriging estimation settings are summarized in Table 11-21.

**Table 11-21: Estimation settings for Mineralized Domains**

| Domain | Min samples | Max samples | Outlier Distance (m) | Outlier Cap (ppm) | Major Search (m) | Semi Search (m) | Minor Search (m) |
|---|---|---|---|---|---|---|---|
| Au HG | 3 | 35 | 13 | 10 | 50 | 45 | 15 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Au LG | 5 | 35 | 8 | 2 | 50 | 45 | 15 |
| Ag HG | 5 | 25 | 22 | 300 | 110 | 80 | 40 |
| Ag LG | 5 | 25 | 28 | 10 | 110 | 80 | 40 |
| Cu HG | 5 | 25 | 22 | 30,000 | 110 | 80 | 40 |
| Cu LG | 5 | 25 | 28 | 5,000 | 110 | 80 | 40 |

#### 11.4.8.2 Density Estimation

Density grades have been estimated using data from DD core water-immersion measurements, and constrained within lithological domains from the updated geological model, due to the clear lithological control on density. Grades were estimated using inverse distance and using a lithology-driven dynamic search to guide the search ellipse. Any remaining blocks not estimated were assigned the mean value of their population (Table 11-22).

**Table 11-22: Bayramdere Median Density Values for Lithology Domains**

| Name | Weathering State | Count | Mean ($t/m^3$) | CV | Median ($t/m^3$) |
|---|---|---|---|---|---|
| Diorite | Weathered | 12 | 2.31 | 0.15 | 2.13 |
| Diorite | Fresh | 23 | 2.57 | 0.13 | 2.53 |
| Gossan | Weathered | 60 | 2.54 | 0.19 | 2.39 |
| Hornfels | Weathered | 111 | 2.33 | 0.12 | 2.29 |
| Hornfels | Fresh | 103 | 2.74 | 0.10 | 2.75 |
| Limestone | Weathered | 182 | 2.55 | 0.09 | 2.61 |
| Limestone | Fresh | 8 | 2.68 | 0.05 | 2.68 |
| Ophiolite | Weathered | 202 | 2.35 | 0.10 | 2.33 |
| Ophiolite | Fresh | 291 | 2.35 | 0.08 | 2.34 |

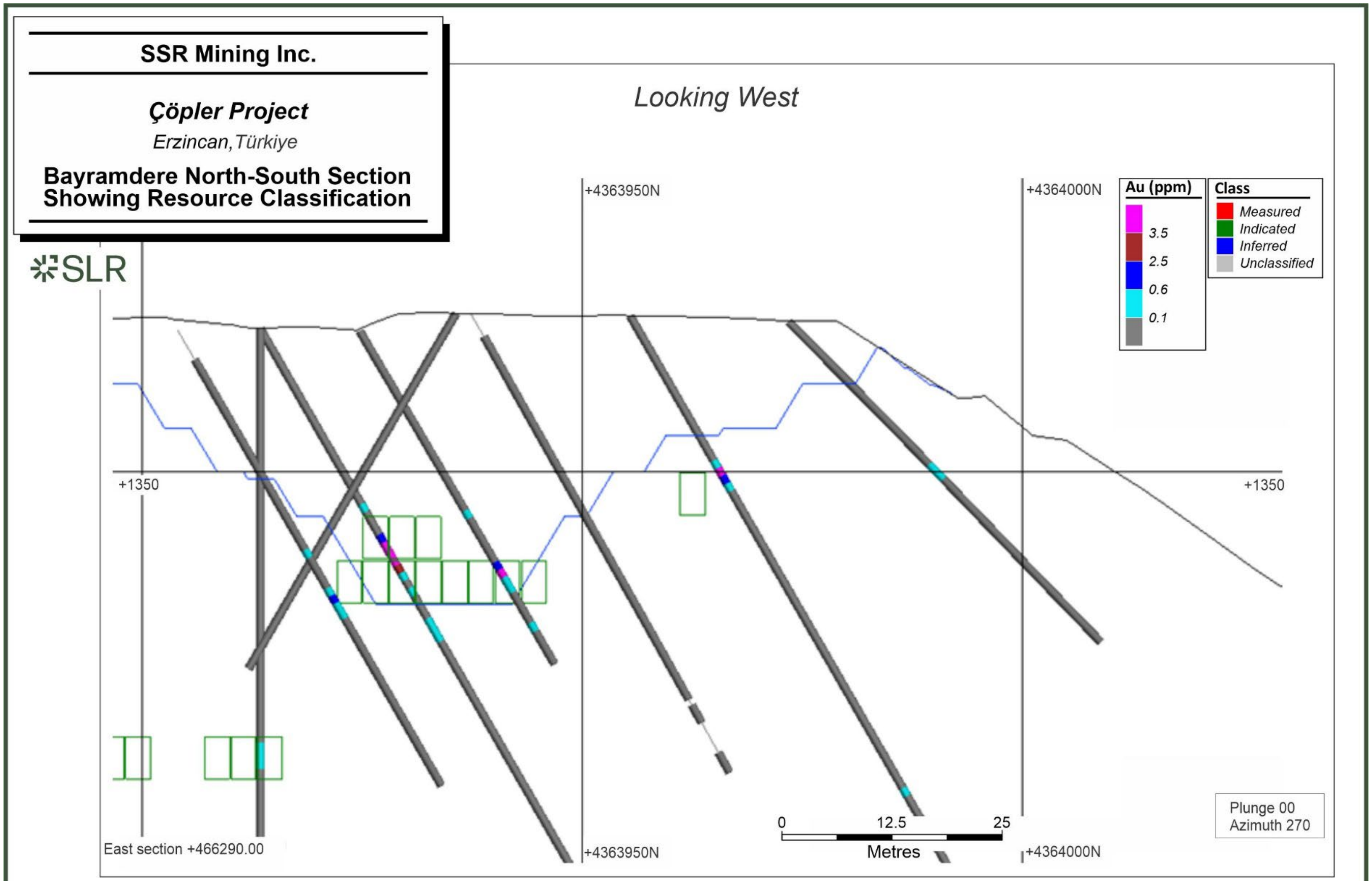
### 11.4.9 Classification

Mineral Resources have been classified in accordance with the U.S. Securities and Exchange Commission (US SEC) Regulations S-K subpart 1300 rules for Property Disclosures for Mining Registrants (S-K 1300).

The QP has classified the Mineral Resource based on a workflow that includes the assessment of geological continuity, of the confidence in the estimation domains, and of the quality of the informing data. The drill spacing at Bayramdere is irregular, leading to various areas that, on balance, are more under-drilled than others.

Therefore, in assessing the effect of drill spacing on classification, the QP used quantitative kriging metrics such as SoR and KE, which inherently carry information on drill spacing, as well as a simple distance buffer mesh to informing samples, to inform two reasonably continuous areas that are, on balance, less informed or of lower estimation quality than others. These areas were hand-digitised to minimise the spotted-dog effect, and further informed by geological confidence. An example of classification approach can be seen in Figure 11-22.

**Figure 11-22: Bayramdere North-South Section Showing Resource Classification**




Source: Anagold, 2023.

### 11.4.10 Estimation Validation

Bayramdere grade estimates were validated against alternate interpolation methods. Swath plots were used to check for a local bias. The estimated Au grades in the model were compared to the composite grades by visual inspection in plan views and cross-sections. Composite samples were queried by domain to confirm appropriate sample flagging.

### 11.4.11 Reasonable Prospects for Economic Extraction and Cut-off Grade

The RSC QP has considered the potential of economic extraction of the Bayramdere Mineral Resource. In assessing the reasonable prospects of economic extraction, the RSC QP has reviewed mining, metallurgical, economic, environmental, social and geotechnical factors. Extensive metallurgical results are available. The QP is not aware of any environmental issues and understands that social issues are well-managed.

The Mineral Resource is reported within a conceptual optimised pit shell using a gold price of USD 1,750/oz and the parameters summarised in Table 11-23. The QP considers that with consideration of the recommendations summarised in Sections 1.1.2.1 and 23.1 of this TRS, any outstanding issues relating to technical and economic factors likely to influence the prospect of economic extraction are likely to be resolved with further work.

**Table 11-23: Summary of Key Parameters used in 2023 Conceptual Pit Shell at Bayramdere**

| Input Area | Units | Value |
|---|---|---|
| Mining Cost | $/t | $2.79 |
| Oxide G&A | $/t | $4.44 |
| Oxide Process Cost | $/t | $13.91 |
| Oxide CAPEX | $/t | $2.97 |
| Au Price | $/oz | $1,750 |
| Ag Price | $/oz | $22.00 |
| Cu Price | $/lb | $3.95 |
| Oxide Sell Cost | $/oz | $6.61 |
| Oxide Royalty | % | 3.40% |

Recoveries for all lithologies were considered to be 75%.

### 11.4.12 Mineral Resource Reporting

The Mineral Resource estimate presented in Table 11-16 was prepared by independent consultancy RSC and has an effective date of October 31, 2023.

The RSC QP is not aware of any environmental issues and understands that social issues are well-managed.

Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability, nor is there certainty that all or any part of the Mineral Resource estimated here will be converted to Mineral Reserves through further study. Sources of uncertainty that may affect the reporting of Mineral Resources include sampling or drilling methods, data processing and handling, geologic modelling, and estimation.

**Table 11-24: Summary of Bayramdere Mineral Resources**

| Resource Category | Type | Total Mineral Resources | | | | | | | SSR Attributed Basis | SSR Attributed Mineral Resources (80%) | | | | | | | NSR Cut-off Values | Au Recovery |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Tonnage | Grade | | | Contained Metal | | | | Tonnage | Grade | | | Contained Metal | | | | |
| | | | Au | Ag | Cu | Au | Ag | Cu | | | Au | Ag | Cu | Au | Ag | Cu | | |
| | | (Mt) | (g/t) | (g/t) | (%) | (koz) | (koz) | (klb) | (%) | (Mt) | (g/t) | (g/t) | (%) | (koz) | (koz) | (klb) | ($/t) | (%) |
| Measured | Oxide Heap Leach | 0.0 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 80 | 0.0 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 18.34 | 75 |
| Indicated | Oxide Heap Leach | 0.1 | 2.36 | 25.55 | 0.00 | 11 | 122 | 0 | 80 | 0.1 | 2.36 | 25.55 | 0.00 | 9 | 98 | 0 | 18.34 | 75 |
| **Total M + I** | **Total** | **0.1** | **2.36** | **25.55** | **0.00** | **11** | **122** | **0** | 80 | **0.1** | **2.36** | **25.55** | **0.00** | **9** | **98** | **0** | | |
| Inferred | Oxide Heap Leach | 0.1 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 80 | 0.04 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | | |

Notes:

1. The definitions for Mineral Resources in S-K 1300 were followed.
2. Mineral Resources are reported based on October 31, 2023 topography surface.
3. Mineral Resources are reported exclusive of Mineral Reserves.
4. The Mineral Resource estimates are presented at both a 100% Project level and SSR's 80% attributable share.
5. Heap Leach Oxide is defined as material <2% total sulfur.
6. Grind Leach Oxide is defined as material <2% total sulfur. Processing route will be available approximately in 2027.
7. Sulfide is defined as material ≥2% total sulfur.
8. Heap leach oxide uses a NSR cut-off $18.34/t, grind leach oxide uses a NSR cut-off value $19.26/t, and Çöpler sulfide ore uses a cut-off grade of $39.87/t, Greater Çakmaktepe sulfide ore uses a cut-off grade of $44.37/t . All cut-off values include allowances for royalty payable.
9. Metallurgical gold recovery for heap leach oxide and grind leach varies between 40-78% and 53-90%, respectively, based on lithology; metallurgical recovery for sulfide varies between 81% and 91% based on lithology.
10. Metallurgical silver recoveries for heap leach and grind leach oxide varies between 0 and 54% based on lithology. Metallurgical recovery for sulfide varies between 0 and 3%.
11. Metallurgical copper recoveries for heap leach and grind leach oxide varies between 0 and 15% based on lithology. Metallurgical recovery for sulfide is 0%.
12. Metal prices used to report the Mineral Resources are $1,750/oz Au, $22.00/oz Ag, and $3.95/lb Cu with allowances for payability, deductions, transport, and royalties.
13. The point of reference for Mineral Resources is the point of feed into the processing facility for grind leach and sulfide material; or for Heap Leach oxide, it is the Carbon columns.
14. All Mineral Resources estimates were constrained within conceptual pit shells to meet reasonable prospects for economic extraction criteria.
15. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
16. Totals may vary due to rounding.

### 11.4.13 Comparison with Previous Estimates

The 2023 Mineral Resource exclusive of Mineral Reserves has been compared with the previous December 31, 2022 Mineral Resource estimate as reported in SSR's 2022 Form 10-K filing (SSR, 2023).

Compared to EOY 2022 Resources there is a decrease in 1,000 oz in the Inferred category; this is attributed to change in the estimation and classification methodology. There are no Inferred Resources in the current estimate.

## 11.5 QP Opinion

In the opinion of the RSC QP, the resource estimation reported herein is an appropriate representation of the gold Mineral Resources found at the Çöpler Project at the current level of sampling. The RSC QP is of the opinion that with consideration of the recommendations summarized in Sections 1 and 23 of this TRS, any issues relating to all relevant technical and economic factors likely to influence the prospect of economic extraction can be resolved with further work.

# 12.0 Mineral Reserve Estimates

## 12.1 Summary

The Mineral Reserves were developed based on mine planning work completed in 2023 and estimated based on an end of October 31, 2023, topography surface, projected to an October 31, 2023 surface. The total Mineral Reserve for the Çöpler Project is estimated to be approximately 67.4 Mt at an average grade of 2.32 g/t gold, totaling 5.071 Moz of contained gold, and SSR's portion is 53.9 Mt at an average grade of 2.32 g/t gold, totaling 4.057 Moz of contained gold. Average oxide gold recoveries are 61% and average sulfide gold recoveries range from 81% to 91%. SSR's portion of the Mineral Reserves for both Çöpler and Greater Çakmaktepe is 80%.

The cut-off grades for the Mineral Reserve estimates are based on a gold price of $1,450/oz. There are no credits for silver or copper in the cut-off grade calculations. Economic analysis has been carried out using a long-term metal price of $1,755/oz gold, and an average metal price of $1,780/oz gold. Metal prices were selected after consideration of the pricing information described in Section 16, which includes a description of the time frame used for the selection of the price and the reasons for selection of such a time frame. The metal prices are representative of the range of price estimates publicly reported for Mineral Reserve cut-off grades.

## 12.2 Mineral Reserves Statement

A summary of the Mineral Reserves estimate is shown in Table 12-1. Additional detail by process method is provided in Table 12-2. The Mineral Reserves estimates were prepared by SSR and have been classified in accordance with S-K 1300 and were confirmed by the SLR QP. The Mineral Reserves reported represent a SSR attributable gold ounce portion basis and have an effective date of October 31, 2023.

The Mineral Reserve is at a feasibility level of study. The Project Mineral Reserve has been demonstrated to be viable by a financial analysis, and Çöpler has been an operating, profitable mine since 2011. The Mineral Resource models include dilution, which has been modeled into the block that is much bigger than the selective mining unit (SMU). Measured Mineral Resources were converted to Proven Mineral Reserves, and Indicated Mineral Resources were converted to Probable Mineral Reserves. Inferred Mineral Resources were treated as waste and were not converted to Mineral Reserve.

The ultimate pits and subsequent phase designs were developed from the gold price of $1,450/oz for the optimization runs. The gold price assumption was based on an internal assessment of recent market prices, long-term forward curve prices, and consensus among analysts regarding price estimates.

Mineral Reserves for the Project will be sourced from either the Çöpler pit or the Greater Çakmaktepe pit. There are three primary processing methods at the Project:

- Pressure Oxidation (POX) followed by cyanide leaching and gold recovery using the carbon in pulp (CIP) process
- Grind-Leaching using the carbon in leach process, CIL
- Heap Leaching with carbon adsorption using carbon in columns (CIC)

Most of the Reserves will be processed by POX followed by cyanide leaching and gold adsorption onto carbon using either carbon in pulp (CIP) or carbon in leach (CIL) processes. Process method constraints, and the associated material routing, have a major impact on how the Çöpler and Greater Çakmaktepe Mineral Reserves are mined.

SSR performs a rigorous evaluation to determine the most profitable method of processing: POX-CIP, direct cyanide leaching followed by CIP, direct leaching using CIL, or Heap Leaching. This evaluation includes the following inputs:

- Gold grade
- Oxidation State, either oxide or sulfide
- Amount of sulfide sulfur (SS), which dictates the amount and rate at which certain ores can be fed into the POX and/or CIP circuits.
- Amount of organic carbon, which would require the use of carbon in leach (CIL)
- Rock Types. The type of rock can have a significant impact on how the ore is processed, e.g., low gold grade oxide ores would report to the heap leach versus low grade sulfide material might be waste due to poor heap leach recoveries.
- Copper grade
- Treatment cost: POX followed by cyanide leaching is the most expensive, next is direct cyanide leaching followed by CIP, followed closely by heap leaching.

Table 12-3 shows the areas, rock types, and metallurgical recoveries used as inputs to determine the Mineral Reserves. Table 12-4 is a summary of the cost inputs used for pit optimization, cut-off grades, and scheduling. Table 12-5 summarizes the gold grade and sulfide sulfur criteria used in the determination of the different processing ore types.

The ultimate pit design for the Çöpler Mine is shown in Figure 12-1. Figure 12-2 and Figure 12-3 are cross sections of the Çöpler ultimate pit. The Greater Çakmaktepe ultimate pit is presented in Table 12-4. Figure 12-5 and Figure 12-6 are cross sections of the Greater Çakmaktepe ultimate pit.

## 12.3 Dilution

No mining dilution was applied to the grade of the cells. Dilution intrinsic to the Mineral Resource model is considered sufficient to represent the stated mining selectivity.

## 12.4 Mining Recovery

Mining recovery was assumed to be 100% of the Measured and Indicated Mineral Resources. Inferred Mineral Resources were considered waste.

**Table 12-1: Summary of Mineral Reserve Estimates as of October 31, 2023 (SSR's Attributable Share)**

| | Proven | | Probable | | Total | | | Cut-off Value | Metallurgical Recovery |
|---|---|---|---|---|---|---|---|---|---|
| | Tonnage | Grade | Tonnage | Grade | Tonnage | Grade | Contained Metal | | |
| **Gold** | **(Mt)** | **(g/t Au)** | **(Mt)** | **(g/t Au)** | **(Mt)** | **(g/t Au)** | **(koz Au)** | **($/t)** | **(%)** |
| Çöpler | 5.7 | 2.03 | 10.3 | 1.77 | 16.1 | 1.86 | 962 | 18.34–44.37 | 40–91 |
| Greater Çakmaktepe | 7.3 | 2.42 | 20.2 | 2.79 | 27.5 | 2.69 | 2,383 | 18.34–44.37 | 40–91 |
| Stockpiles | - | - | 10.3 | 2.05 | 10.3 | 2.05 | 678 | 18.34–44.37 | 40–91 |
| Leach Pad Inventory | - | - | - | - | - | - | 49 | 18.34–44.37 | 40–91 |
| **Total** | 13.0 | 2.25 | 40.9 | 2.35 | 53.9 | 2.32 | 4,072 | 18.34–44.37 | 40-91 |
| **Silver** | **(Mt)** | **(g/t Ag)** | **(Mt)** | **(g/t Ag)** | **(Mt)** | **(g/t Ag)** | **(koz Ag)** | **($/t)** | **(%)** |
| Çöpler | 5.7 | 4.85 | 10.3 | 4.97 | 16.1 | 4.93 | 2,547 | 18.34–44.37 | 40–91 |
| Greater Çakmaktepe | 7.3 | 3.52 | 20.2 | 4.32 | 27.5 | 4.11 | 3,636 | 18.34–44.37 | 40–91 |
| Stockpiles | - | - | 10.3 | – | 10.3 | – | - | 18.34–44.37 | 40–91 |
| **Total** | 13.0 | 4.10 | 40.9 | 3.40 | 53.9 | 3.57 | 6,183 | 18.34–44.37 | 40–91 |
| **Copper** | **(Mt)** | **(% Cu)** | **(Mt)** | **(% Cu)** | **(Mt)** | **(% Cu)** | **(Mlb Cu)** | **($/t)** | **(%)** |
| Çöpler | 5.7 | 0.06 | 10.3 | 0.05 | 16.1 | 0.05 | 18.8 | 18.34–44.37 | 40–91 |
| Greater Çakmaktepe | 7.3 | 0.02 | 20.2 | 0.01 | 27.5 | 0.01 | 8.7 | 18.34–44.37 | 40–91 |
| Stockpiles | - | - | 10.3 | – | 10.3 | – | - | 18.34–44.37 | 40–91 |
| **Total** | 13.0 | 0.04 | 40.9 | 0.02 | 53.9 | 0.00 | 27.5 | 18.34–44.37 | 40–91 |

Notes:

1. The Mineral Reserves were scheduled based on end of October 31, 2023 surface. Small differences between the Mineral Reserve statement and the production schedule may occur.
2. The numbers reflect SSR's attributed share of 80%. SSR owns 80% of both Anagold and Kartaltepe licenses.
3. Heap Leach Oxide is defined as material <2% total sulfur.
4. Grind Leach Oxide is defined as material <2% total sulfur. Processing route will be available approximately in 2027.
5. Sulfide is defined as material ≥2% total sulfur.

6. At Çöpler and Greater Çakmaktepe - heap leach oxide uses a NSR cut-off value \$21.32/t, grind leach uses a NSR cut-off value \$21.77/t while sulfide ore uses a cut-off grade of \$45.58/t. All cut-off values include allowances for royalty payable.
7. Metallurgical gold recoveries for heap leach oxide and grind leach varies between 40–78% and 53–90% respectively based on lithology while for sulfide it is 81-91%
8. Metallurgical silver recoveries for heap leach and grind leach oxide vary between 0 and 54% based on lithology. Metallurgical recovery for sulfide varies between 0 and 3%.
9. Metallurgical copper recoveries for heap leach and grind leach oxide vary between 0 and 15% based on lithology. Metallurgical recovery for sulfide is 0%.
10. Metal prices used to report the Mineral Reserves are \$1,450/oz Au, \$18.50/oz Ag, and \$3.30/lb Cu with allowances for payable deductions, transport, and royalties.
11. The point of reference for Mineral Reserves is the point of feed into the processing facility for grind leach and sulfide while for Heap Leach oxide it is carbon columns.
12. Heap leach inventory was mined based on the heap leach cut-off value.
13. Totals may vary due to rounding.

**Table 12-2: Summary of Mineral Reserves by Process Types and Mining Areas (as of October 31, 2023)**

| Deposit | Reserve Category | Tonnage | Grades | | | Contained Metal | | | Tonnage (SSR Share 80%) | Contained Metal (SSR Share 80%) | | | Cut-off Value $/t | Met. Recovery % Au |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (kt) | Au (g/t) | Ag (g/t) | Cu (%) | Au (koz) | Ag (koz) | Cu (klb) | (kt) | Au (koz) | Ag (koz) | Cu (klb) | | |
| Çöpler Mine Oxide Heap Leach | Proven | | | | | | | | – | – | – | – | 21.32 | 40–78 |
| | Probable | 2 | 0.03 | 143.78 | 0.42 | 0 | 9 | 18 | 2 | 0 | 7 | 15 | | |
| | Probable - Stockpile | 69 | 2.73 | – | – | 6 | – | – | 55 | 5 | – | – | | |
| | Heap Leach inventory | | | | | 61 | | | – | 49 | – | – | | |
| | **Total** | **71** | **2.65** | **3.99** | **0.01** | **67** | **9** | **18** | **57** | **54** | **7** | **15** | | |
| Çöpler Mine Sulfide | Proven | 6,574 | 2.09 | 4.71 | 0.06 | 441 | 996 | 8,831 | 5,259 | 353 | 797 | 7,064 | 45.59 | 81–91 |
| | Probable | 12,202 | 1.82 | 4.89 | 0.05 | 713 | 1,919 | 12,413 | 9,762 | 571 | 1,535 | 9,930 | | |
| | Probable - Stockpile | 12,798 | 2.05 | – | – | 842 | – | – | 10,238 | 673 | – | – | | |
| | **Total** | **31,574** | **1.97** | **2.87** | **0.03** | **1,996** | **2,915** | **21,244** | **25,259** | **1,597** | **2,332** | **16,995** | | |
| Çöpler Mine Oxide Grind Leach CIL | Proven | 584 | 1.43 | 6.47 | 0.10 | 27 | 122 | 1,268.16 | 467 | 21 | 97 | 1,015 | 21.77 | 58–90 |
| | Probable | 728 | 0.93 | 5.89 | 0.06 | 22 | 138 | 949.06 | 582 | 17 | 110 | 759 | | |
| | Probable - Stockpile | | | | | | | | – | – | – | – | | |
| | **Total** | **1,312** | **1.15** | **6.15** | **0.08** | **49** | **259** | **2,217** | **1,050** | **39** | **207** | **1,774** | | |
| Greater Çakmaktepe Oxide Heap Leach | Proven | 2,749 | 1.84 | 1.19 | 0.00 | 163 | 105 | 232 | 2,199 | 130 | 84 | 185 | 21.32 | 40–78 |
| | Probable | 2,577 | 2.04 | 1.62 | 0.00 | 169 | 134 | 236 | 2,062 | 135 | 107 | 189 | | |
| | Probable - Stockpile | – | – | – | – | – | – | – | – | – | – | – | | |
| | **Total** | **5,325** | **1.94** | **1.40** | **0.00** | **332** | **239** | **468** | **4,260** | **266** | **191** | **374** | | |
| Greater Çakmaktepe Sulfide | Proven | 1,423 | 2.77 | 4.04 | 0.01 | 127 | 185 | 424 | 1,138 | 101 | 148 | 339 | 45.59 | 81–91 |
| | Probable | 6,851 | 4.00 | 7.15 | 0.01 | 881 | 1,575 | 1,355 | 5,481 | 705 | 1,260 | 1,084 | | |
| | Probable - Stockpile | – | – | – | – | – | – | – | – | – | – | – | | |
| | **Total** | **8,274** | **3.79** | **6.62** | **0.01** | **1,008** | **1,760** | **1,779** | **6,619** | **807** | **1,408** | **1,424** | | |
| Greater Çakmaktepe | Proven | 4,961 | 2.64 | 4.67 | 0.04 | 422 | 745 | 3,934 | 3,969 | 337 | 596 | 3,147 | 21.77 | 58–90 |
| | Probable | 15,869 | 2.38 | 3.53 | 0.01 | 1,217 | 1,802 | 4,721 | 12,695 | 973 | 1,441 | 3,777 | | |

| Deposit | Reserve Category | Tonnage | Grades | | | Contained Metal | | | Tonnage (SSR Share 80%) | Contained Metal (SSR Share 80%) | | | Cut-off Value $/t | Met. Recovery % Au |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (kt) | Au (g/t) | Ag (g/t) | Cu (%) | Au (koz) | Ag (koz) | Cu (klb) | (kt) | Au (koz) | Ag (koz) | Cu (klb) | | |
| Oxide Grind Leach CIL | Probable - Stockpile | – | – | – | – | – | – | – | – | – | – | – | | |
| | **Total** | **20,830** | **2.45** | **3.80** | **0.02** | **1,638** | **2,546** | **8,655** | **16,664** | **1,311** | **2,037** | **6,924** | | |
| **Summary by Process** | | | | | | | | | | | | | | |
| Total Oxide Heap Leach | Proven | 2,749 | 1.84 | 1.19 | 0.00 | 163 | 105 | 232 | 2,199 | 130 | 84 | 185 | $21.32 | 40–78 |
| | Probable | 2,579 | 2.04 | 1.73 | 0.00 | 169 | 143 | 255 | 2,063 | 135 | 115 | 204 | | |
| | Probable - Stockpile | 69 | 2.73 | 0.00 | 0.00 | 6 | 0 | 0 | 55 | 5 | 0 | 0 | | |
| | Heap Leach inventory | – | – | – | – | 61 | – | – | – | 54 | – | – | | |
| | **Total** | **5,397** | **1.95** | **1.43** | **0.00** | **399** | **248** | **486** | **4,318** | **319** | **198** | **389** | | |
| Total Sulfide | Proven | 7,997 | 2.21 | 4.59 | 0.05 | 568 | 1,180 | 9,255 | 6,398 | 454 | 944 | 7,404 | $45.59 | 81–91 |
| | Probable | 19,052 | 2.60 | 5.70 | 0.03 | 1,595 | 3,494 | 13,768 | 15,242 | 1,276 | 2,795 | 11,015 | | |
| | Probable - Stockpile | 12,798 | 2.05 | 0.00 | – | 842 | 0 | – | 10,238 | 673 | – | – | | |
| | **Total** | **39,848** | **2.35** | **3.65** | **0.03** | **3,004** | **4,674** | **23,023** | **31,878** | **2,403** | **3,739** | **18,418** | | |
| Total Oxide Grind Leach CIL | Proven | 5,546 | 2.52 | 4.86 | 0.04 | 448 | 866 | 5,202 | 4,437 | 359 | 693 | 4,161 | $21.77 | 58–90 |
| | Probable | 16,596 | 2.32 | 3.63 | 0.02 | 1,239 | 1,939 | 5,671 | 13,277 | 991 | 1,552 | 4,536 | | |
| | Probable - Stockpile | | | | | | | | | – | – | – | | |
| | **Total** | **22,142** | **2.37** | **3.94** | **0.02** | **1,687** | **2,806** | **10,872** | **17,714** | **1,350** | **2,245** | **8,698** | | |
| **Project Total** | | | | | | | | | | | | | | |
| Total Project | Proven | 16,292 | 2.25 | 4.11 | 0.04 | 1,179 | 2,151 | 14,688 | 13,034 | 943 | 1,721 | 11,750 | $21.32–$45.59 | 40–91 |
| | Probable | 38,227 | 2.44 | 4.54 | 0.02 | 3,003 | 5,577 | 19,693 | 30,582 | 2,402 | 4,461 | 15,755 | | |
| | Probable - Stockpile | 12,868 | 2.05 | 0.00 | 0.00 | 848 | 0 | 0 | 10,294 | 678 | 0 | 0 | | |
| | Heap Leach inventory | | | | | 61 | | | – | 54 | 0 | 0 | | |
| | **Total** | **67,386** | **2.32** | **3.57** | **0.02** | **5,090** | **7,728** | **34,381** | **53,909** | **4,072** | **6,183** | **27,505** | | |

Notes:

1. The Mineral Reserves were scheduled based on end of October 31, 2023 surface. Small differences between the Mineral Reserve statement and the production schedule may occur.

2. Mineral Reserves are reported both on a Project and SSR attributable basis. SSR owns 80% of both Anagold and Kartaltepe licenses.
3. Heap Leach Oxide is defined as material <2% total sulfur.
4. Grind Leach Oxide is defined as material <2% total sulfur. Processing route will be available approximately in 2027.
5. Sulfide is defined as material ≥2% total sulfur.
6. At Çöpler and Greater Çakmaktepe - heap leach oxide uses a NSR cut-off value $ 21.32 grind leach uses a NSR cut-off value $ 21.77/t while sulfide ore uses a cut-off grade of $45.58/t. All cut-off values include allowances for royalty payable.
7. Metallurgical gold recoveries for heap leach oxide and grind leach varies between 40–78% and 53–90% respectively based on lithology while for sulfide it is 81–91%
8. Metallurgical silver recoveries for heap leach and grind leach oxide vary between 0 and 54% based on lithology. Metallurgical recovery for sulfide varies between 0 and 3%.
9. Metallurgical copper recoveries for heap leach and grind leach oxide vary between 0 and 15% based on lithology. Metallurgical recovery for sulfide is 0%.
10. Metal prices used to report the Mineral Reserves are $1,450/oz Au, $18.50/oz Ag, and $3.30/lb Cu with allowances for payable, deductions, transport, and royalties.
11. The point of reference for Mineral Reserves is the point of feed into the processing facility for grind leach and sulfide while for Heap Leach oxide it is Carbon columns.
12. Heap leach inventory was mined based on the heap leach cut-off value.
13. Totals may vary due to rounding.

**Table 12-3: Summary of Metallurgical Inputs Used for Cut-off Grade (COG) Analysis and Scheduling**

| Deposit | Zone No. | Area Name | Rock Type Name | Gold CIP Recovery (%) | | Silver CIP Recovery (%) | POX Recovery (%) | Heap Leach Recoveries (%) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | S%<1 | 1 <=S% <2 | | | S%<1 | 1 <=S% <2 |
| Greater Çakmaktepe | 1 | Çakmaktepe Main - Oxide | Limestone | 68% | 53% | 20.00% | 81-91% | 73.00% | 58.00% |
| | | | Metasediments (Hornfels) | 68% | 53% | 20.00% | 81-91% | 73.00% | 58.00% |
| | | | Listwanite | 90% | 90% | 20.00% | 81-91% | 73.00% | 58.00% |
| | | | Gossan | 68% | 53% | 20.00% | 81-91% | 73.00% | 58.00% |
| | | | Jasperoid | 60% | 60% | 20.00% | 81-91% | 50.00% | 40.00% |
| | | | Diorite | 68% | 53% | 20.00% | 81-91% | 73.00% | 58.00% |
| | | | Dolomite | 83% | 83% | 0.55% | 81-91% | 73.00% | 58.00% |
| | | | Manganese Diorite | 68% | 53% | 20.00% | 81-91% | 73.00% | 58.00% |
| | | | Ophiolite | 68% | 53% | 20.00% | 81-91% | 73.00% | 58.00% |
| | | | Silica Cap. | 68% | 53% | 20.00% | 81-91% | 73.00% | 58.00% |
| | | | Cataclastite | 68% | 53% | 20.00% | 81-91% | 73.00% | 58.00% |
| | | | Fill or Leach Pad | 68% | 53% | 20.00% | 81-91% | 73.00% | 58.00% |
| | 2 | Çakmaktepe Main - East | Limestone | 68% | 53% | 15.00% | 81-91% | 55.00% | 45.00% |
| | | | Metasediments (Hornfels) | 68% | 53% | 15.00% | 81-91% | 55.00% | 45.00% |
| | | | Listwanite | 90% | 90% | 15.00% | 81-91% | 55.00% | 45.00% |
| | | | Gossan | 68% | 53% | 15.00% | 81-91% | 55.00% | 45.00% |
| | | | Jasperoid | 60% | 60% | 15.00% | 81-91% | 50.00% | 40.00% |
| | | | Diorite | 68% | 53% | 15.00% | 81-91% | 55.00% | 45.00% |
| | | | Dolomite | 83% | 83% | 15.00% | 81-91% | 55.00% | 45.00% |
| | | | Manganese Diorite | 68% | 53% | 15.00% | 81-91% | 55.00% | 45.00% |

| Deposit | Zone No. | Area Name | Rock Type Name | Gold CIP Recovery (%) | | Silver CIP Recovery (%) | POX Recovery (%) | Heap Leach Recoveries (%) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | S%<1 | 1 <=S% <2 | | | S%<1 | 1 <=S% <2 |
| | | | Ophiolite | 68% | 53% | 15.00% | 81-91% | 55.00% | 45.00% |
| | | | Silica Cap. | 68% | 53% | 15.00% | 81-91% | 55.00% | 45.00% |
| | | | Cataclastite | 68% | 53% | 15.00% | 81-91% | 55.00% | 45.00% |
| | | | Fill or Leach Pad | 68% | 53% | 15.00% | 81-91% | 55.00% | 45.00% |
| | 3 | Çakmaktepe North | Limestone | 68% | 53% | 17.00% | 81-91% | 59.00% | 59.00% |
| | | | Metasediments (Hornfels) | 68% | 53% | 19.00% | 81-91% | 14.00% | 14.00% |
| | | | Listwanite | 90% | 90% | | 81-91% | | |
| | | | Gossan | 68% | 53% | 17.00% | 81-91% | 59.00% | 59.00% |
| | | | Jasperoid | 60% | 60% | 17.00% | 81-91% | 59.00% | 59.00% |
| | | | Diorite | 68% | 53% | 40.00% | 81-91% | 38.00% | 38.00% |
| | | | Dolomite | 83% | 83% | | 81-91% | | |
| | | | Manganese Diorite | 68% | 53% | | 81-91% | | |
| | | | Ophiolite | 68% | 53% | 24.00% | 81-91% | 63.00% | 63.00% |
| | | | Silica Cap. | 68% | 53% | | 81-91% | | |
| | | | Cataclastite | 68% | 53% | | 81-91% | | |
| | | | Fill or Leach Pad | 68% | 53% | | 81-91% | | |
| | | Çakmaktepe Central | Limestone | 68% | 53% | 17.00% | 81-91% | 70.00% | 70.00% |
| | | | Metasediments (Hornfels) | 68% | 53% | 28.00% | 81-91% | 80.00% | 80.00% |
| | | | Listwanite | 90% | 90% | | 81-91% | | |
| | | | Gossan | 68% | 53% | | 81-91% | | |
| | | | Jasperoid | 60% | 60% | 17.00% | 81-91% | 73.00% | 73.00% |

| Deposit | Zone No. | Area Name | Rock Type Name | Gold CIP Recovery (%) | | Silver CIP Recovery (%) | POX Recovery (%) | Heap Leach Recoveries (%) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | S%<1 | 1 <=S% <2 | | | S%<1 | 1 <=S% <2 |
| | | | Diorite | 68% | 53% | 24.00% | 81-91% | 61.00% | 61.00% |
| | | | Dolomite | 83% | 83% | | 81-91% | | |
| | | | Manganese Diorite | 68% | 53% | | 81-91% | | |
| | | | Ophiolite | 68% | 53% | 19.00% | 81-91% | 70.00% | 70.00% |
| | | | Silica Cap. | 68% | 53% | | 81-91% | | |
| | | | Cataclastite | 68% | 53% | | 81-91% | | |
| | | | Fill or Leach Pad | 68% | 53% | | 81-91% | | |
| Çöpler | | | Limestone | 68% | 53% | 27.30% | 81-91% | 78.40% | |
| | | | Metasediments (Hornfels) | 68% | 53% | 32.50% | 81-91% | 66.80% | |
| | | | Listwanite | 90% | 90% | 20.00% | 81-91% | | |
| | | | Gossan | 68% | 53% | 27.50% | 81-91% | 71.20% | |
| | | | Jasperoid | 60% | 60% | 20.00% | 81-91% | | |
| | | | Diorite | 68% | 53% | 37.80% | 81-91% | 71.20% | |
| | | | Dolomite | 83% | 83% | 0.55% | 81-91% | | |
| | | | Manganese Diorite | 68% | 53% | 37.80% | 81-91% | 71.20% | |
| | | | Ophiolite | 68% | 53% | 20.00% | 81-91% | | |
| | | | Silica Cap. | 68% | 53% | 20.00% | 81-91% | | |
| | | | Cataclastite | 68% | 53% | 20.00% | 81-91% | | |
| | | | Fill or Leach Pad | 68% | 53% | 20.00% | 81-91% | | |

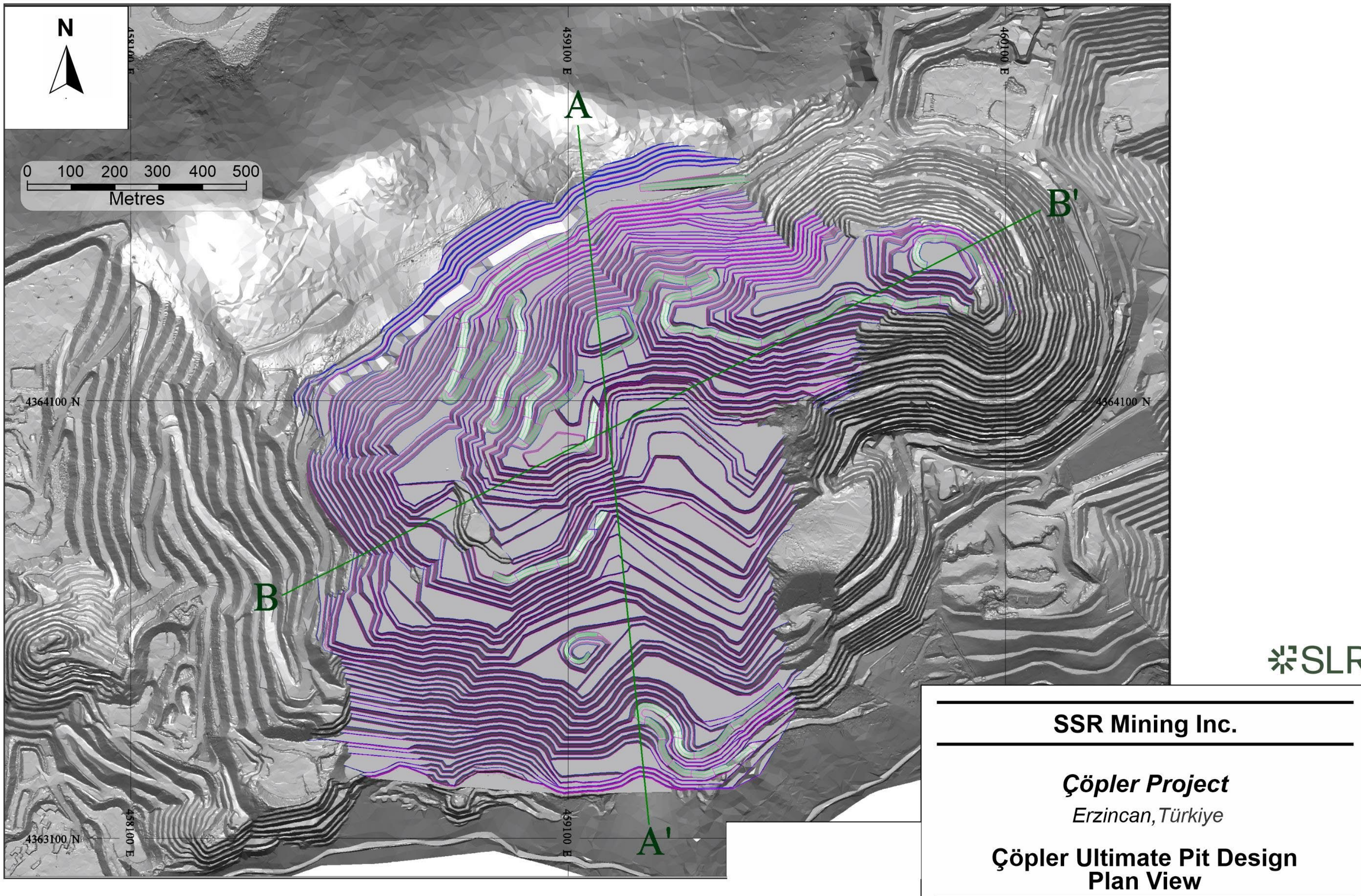
**Table 12-4: Summary of Costs Inputs Used for Pit Optimization, COG Analysis, and Scheduling**

| Input Area | Units | Çöpler | Greater Çakmaktepe |
|---|---|---|---|
| Mining Cost | $/t | 2.06 | 2.79 |
| Fill Cost | $/t | 1.75 | 2.48 |
| Oxide G&A | $/t | 4.44 | 4.44 |
| Sulfide G&A | $/t | 9.00 | 9.00 |
| CIP G&A | $/t | 4.44 | 4.44 |
| Sulfide Process Cost | $/t | 35.37 | 35.37 |
| Oxide Process Cost | $/t | 13.91 | 13.91 |
| CIP Process Cost | $/t | 14.82 | 14.82 |
| Sulfide CAPEX | $/t | 1.21 | 1.21 |
| Oxide CAPEX | $/t | 2.97 | 2.97 |
| CIP CAPEX | $/t | 2.51 | 2.51 |
| Au Price | $/oz | 1,450 | 1,450 |
| Ag Price | $/oz | 18.50 | 18.50 |
| Cu Price | $/lb | 3.30 | 3.30 |
| Oxide Sell Cost | $/oz | 6.61 | 6.61 |
| Sulfide Sell Cost | $/oz | 6.87 | 6.87 |
| Oxide Royalty | % | 3.40 | 3.40 |
| Sulfide Royalty | % | 2.00 | 2.00 |
| Grams to Ounce | g/oz | 31.1 | 31.1 |
| Cu% to Pounds | % | 22 | 22 |
| Average Bulk Density | t/m$^3$ | 2.78 | 2.57 |

**Table 12-5: Sulfide Sulfur and Gold Grade Criteria for Establishing Process Methods Routing**

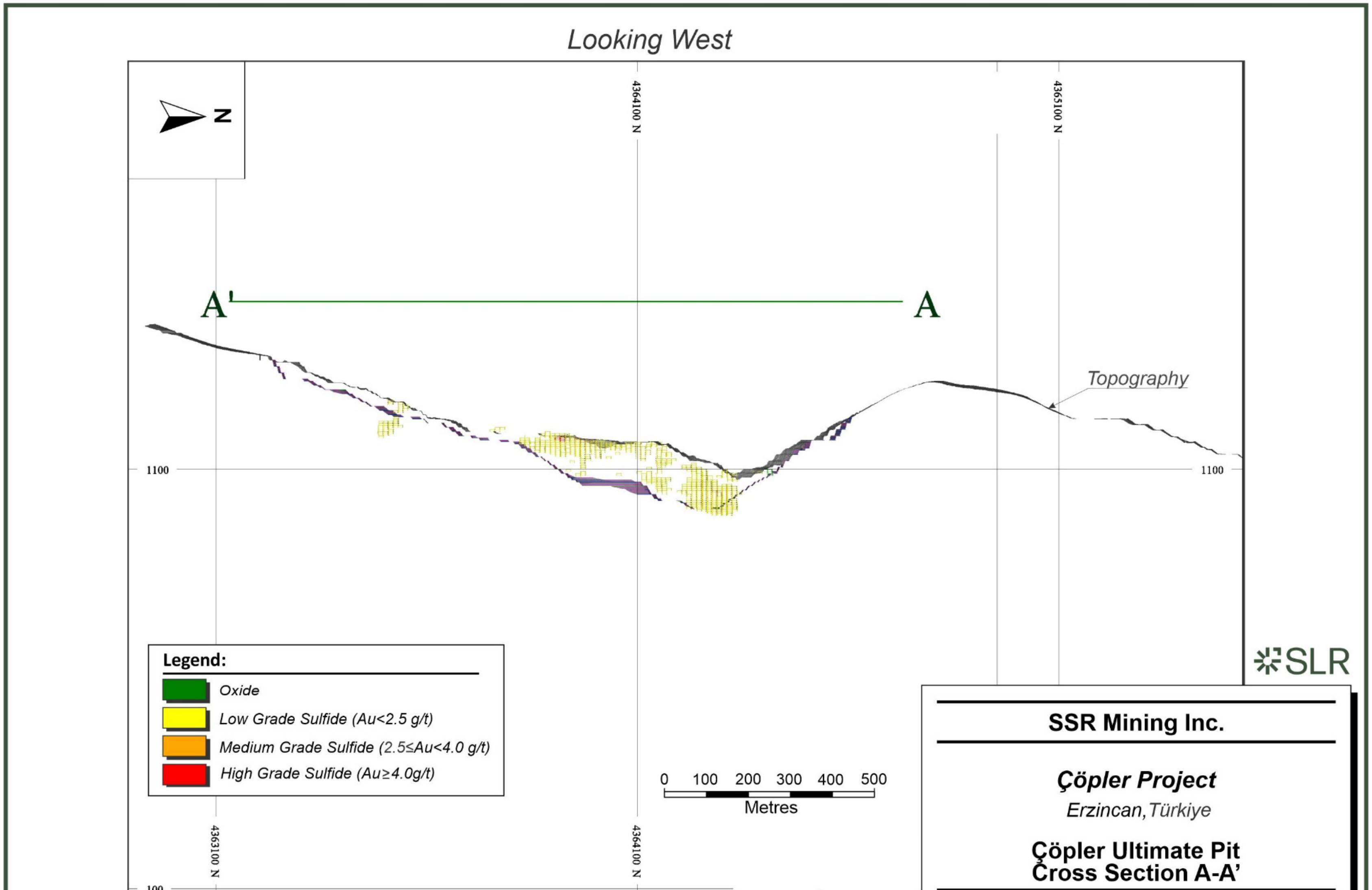
| ORECT Code Name | ORECT Number | Description | Sulfide Sulfur Range, (% SS) | Gold Grade Range (g/t Au) | Process Stream |
|---|---|---|---|---|---|
| Unknown | 948 | Unknown | | | Waste |
| R_PAG | 949 | Re-handle Potential Acid Generating (PAG) | | | Waste |
| R_NAG | 950 | Re-handle Non-Acid Generating (NAG) | | | Waste |
| PAG | 951 | Potential Acid Generating (PAG) | | | Waste |
| NAG | 952 | Non-Acid Generating (NAG) | | | Waste |
| R_OX | 953 | Re-handle Oxide | | | Heap Leach |
| OX | 954 | Oxide | <1% | | Heap Leach |
| HS_OX | 955 | High Sulfur Oxide | 1% <S<2% | | Heap Leach |
| CILOX | 956 | Grind Leach Oxide | <2% | | CIP |
| OXPOX | 957 | Oxide Sent to Autoclave (POX) | <2% | >4g/t Au | Heap Leach |
| CILPOX | 958 | Grind Leach Sent to POX | <2% | >4g/t Au | CIP |
| LGLSS | 964 | Low Grade Low Sulfide Sulfur | SS%<3.494% | 1.12 g/t =<Auppm<2.5 g/t | POX |
| LGMSS | 965 | Low Grade Medium Sulfide Sulfur | 3.494%<SS%=<4.15 | 1.12 g/t =<Auppm<2.5 g/t | POX |
| LGHSS | 966 | Low Grade High Sulfide Sulfur | SS>=4.15% | 1.12 g/t =<Auppm<2.5 g/t | POX |
| MGLSS | 967 | Medium Grade Low Sulfide Sulfur | SS%<3.494% | 2.5 g/t =<Auppm<4 g/t | POX |
| MGMSS | 968 | Medium Grade Medium Sulfide Sulfur | 3.494%<SS%=<4.15 | 2.5 g/t =<Auppm<4 g/t | POX |
| MGHSS | 969 | Medium Grade High Sulfide Sulfur | SS>=4.15% | 2.5 g/t =<Auppm<4 g/t | POX |
| HGLSS | 970 | High Grade Low Sulfide Sulfur | SS%<3.494% | Auppm>4 g/t | POX |
| HGMSS | 971 | High Grade Medium Sulfide Sulfur | 3.494%<SS%=<4.15 | Auppm>4 g/t | POX |
| HGHSS | 972 | High Grade High Sulfide Sulfur | SS>=4.15% | Auppm>4 g/t | POX |

**Figure 12-1: Çöpler Ultimate Pit Design – Plan View**



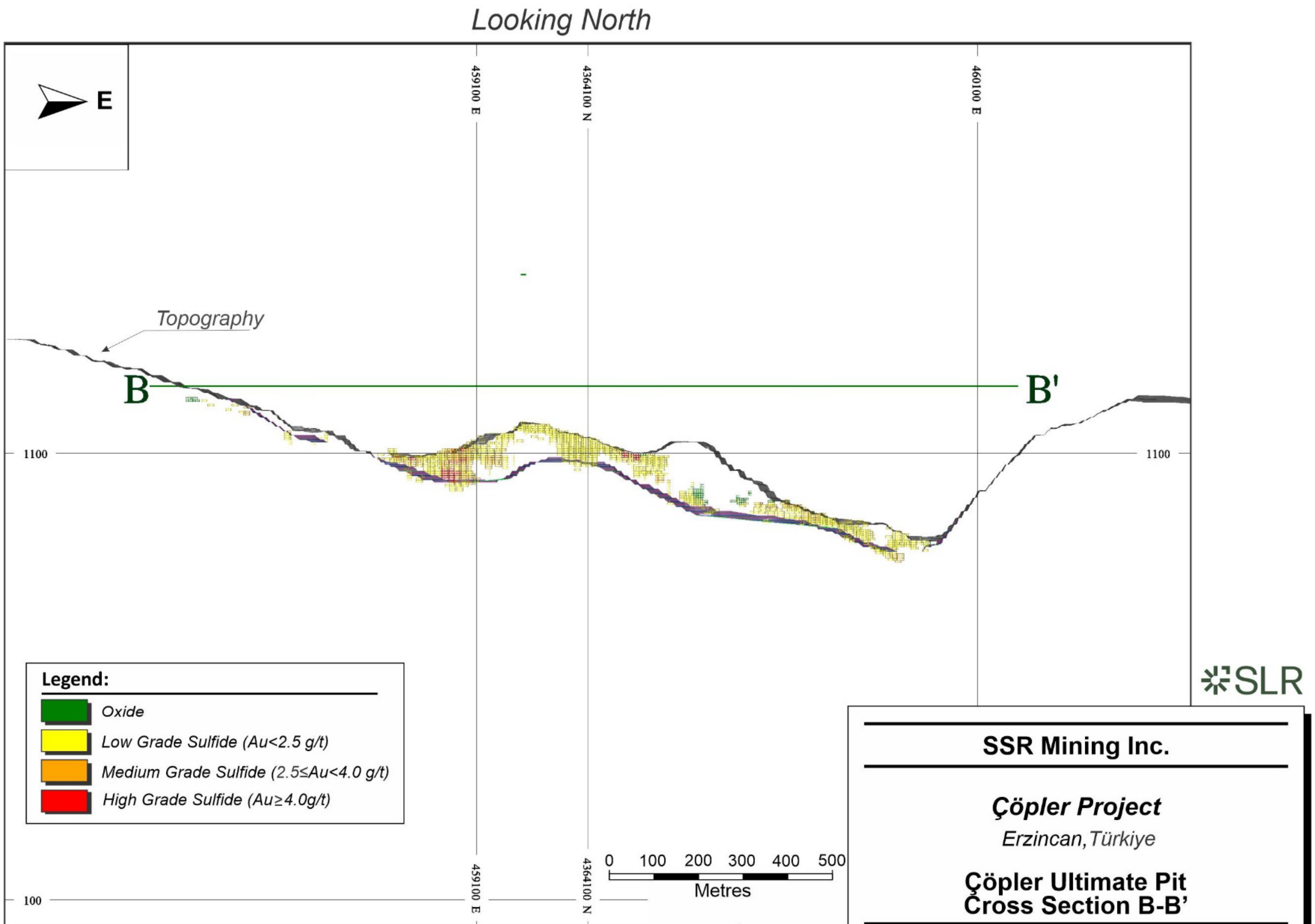

*Source: Anagold, 2023.*

**Figure 12-2: Çöpler Ultimate Pit – Cross Section A-A' (Looking West)**



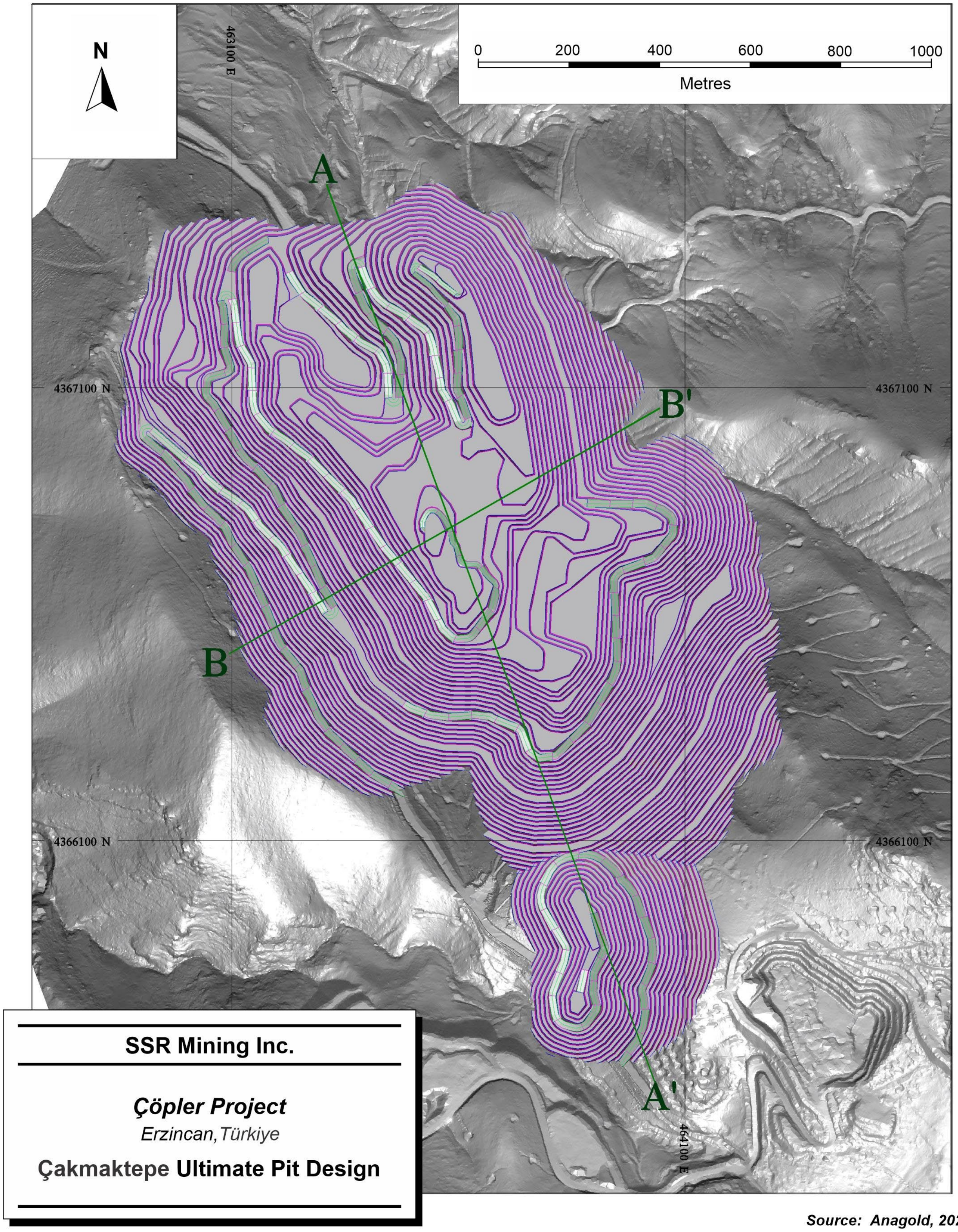

**Source: Anagold, 2023.**

**Figure 12-3: Çöpler Ultimate Pit – Cross Section B-B' (Looking North)**



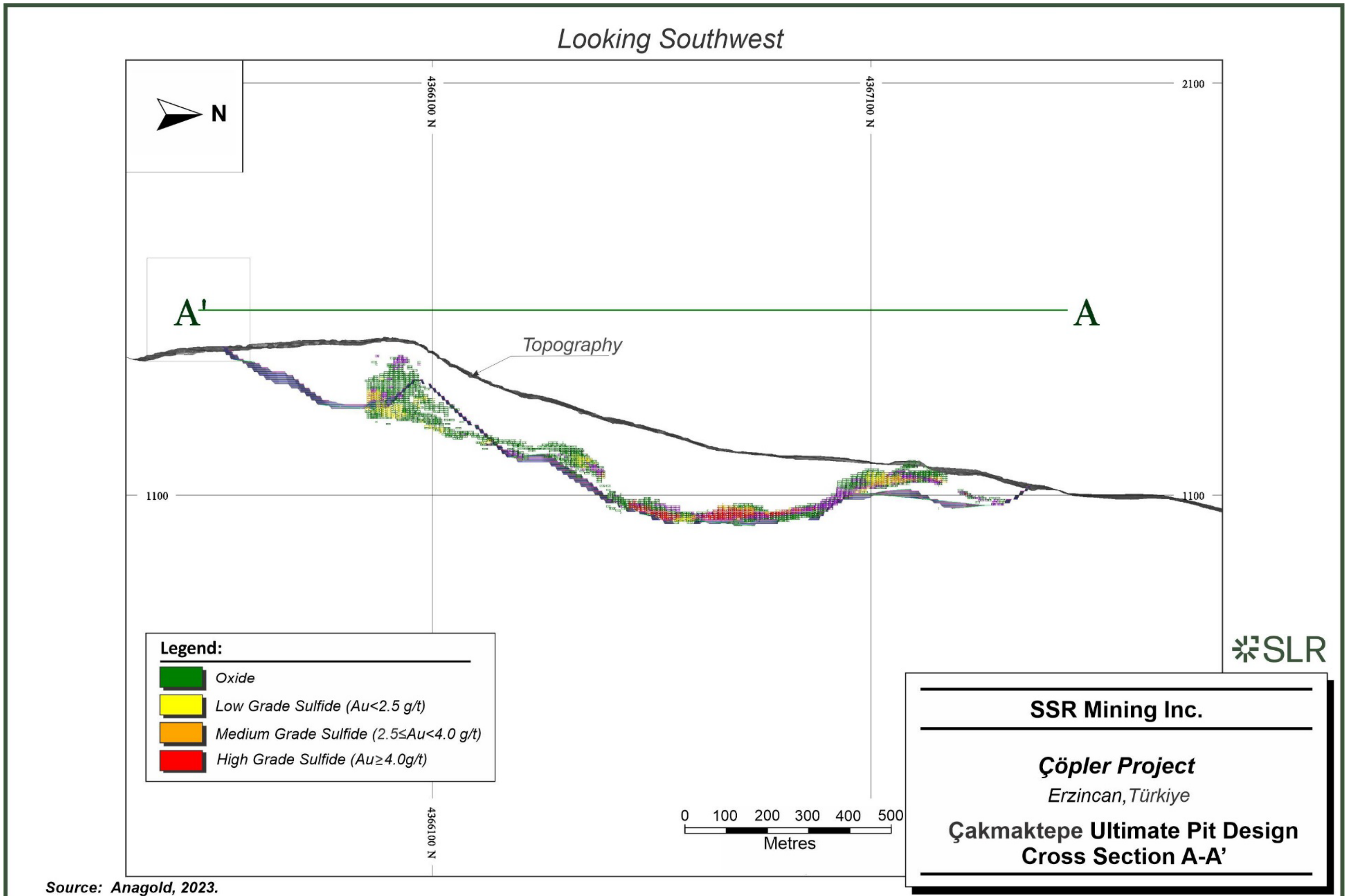

Source: Anagold, 2023.

**Figure 12-4: Çakmaktepe Ultimate Pit Design (Plan View)**



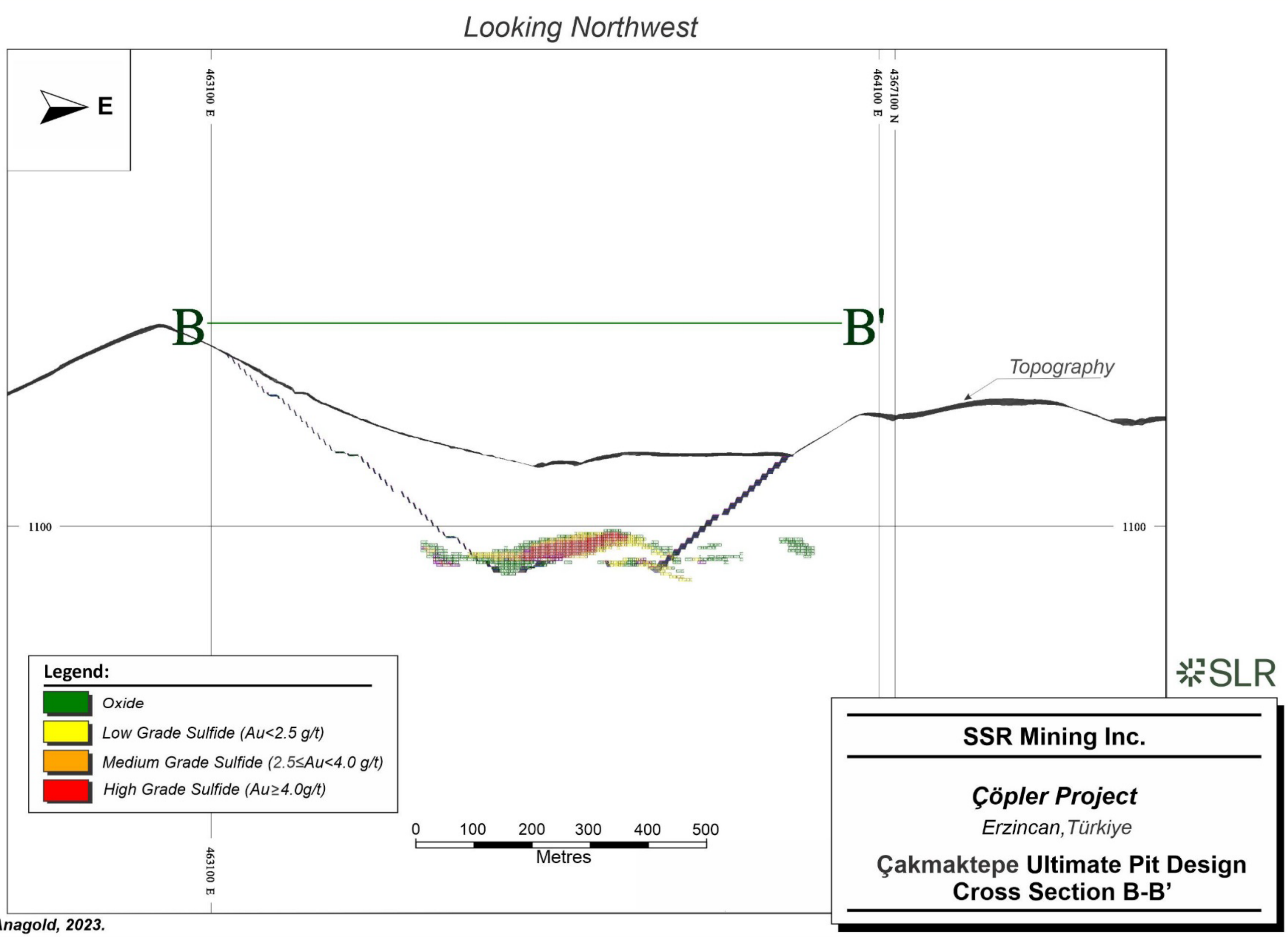

*Source: Anagold, 2023.*

**Figure 12-5: Çakmaktepe Ultimate Pit Design – Cross Section A-A' (Looking Southwest)**




*Source: Anagold, 2023.*

**Figure 12-6: Çakmaktepe Ultimate Pit Design – Cross Section B-B' (Looking Northwest)**




*Source: Anagold, 2023.*

Significant factors that could materially affect the Mineral Reserve are:

- Metal price impacts – Gold is the primary revenue element, and silver and copper are produced as by-products. The ore is mined at an elevated cut-off grade and low-grade ore is stockpiled for processing after mining is completed in 2036.
- Processing impacts – The processing analysis in the Reserve Case includes consideration of the existing sulfide flotation circuit in the sulfide plant used to upgrade sulfide sulfur (SS) to fully utilize grinding and pressure oxidation (POX) autoclave capacity. Continued debottlenecking of the sulfide plant and optimization of the flotation circuit may improve costs and recoveries, thus lowering the cut-off grades and positively impacting the Mineral Reserve. The sulfide plant flotation circuit requires grade control protocols and associated stockpile strategies to manage the required sulfide plant feed blend. It is likely that there will need to be ongoing modification of the stockpiling cut-offs and procedures for both short-term and long-term blending as the mine progresses. Measures such as increasing the number of active mining areas, increasing the mining rate, and increasing the size or number of run-of-mine (ROM) stockpiles may be required.
- Geotechnical impacts – Slope recommendations have significant impacts on the Mineral Reserve. Geotechnical studies are ongoing; future revisions to the geotechnical guidance may allow the Mineral Reserves to be maximized.
- Seismic impacts – The Project is in an area with a history of significant seismic activity that could negatively impact mining operations.
- Mining impacts – The mining equipment is suitable for a selective mining unit (SMU) of approximately 3 m x 3 m x 5 m. This allows for selectivity in mining and enhances the opportunities for blending the feed to the sulfide plant. The total mining rate in the mine plan is at 22.5 Mtpa (Çöpler mining only), In the past, total mining rates of 36.5 Mtpa (combination of Çöpler and Çakmaktepe mining) have been achieved. Increasing the total mining rate may allow gold to be brought forward in the production schedule.
- Environmental, Permitting, Social, and Community – The Çöpler Project is subject to the laws and regulations of Türkiye, and the mine has several local communities that are nearby. Anagold must maintain appropriate relations with all the authorities and stakeholders. Social, community and government relations are managed by Anagold and include programs and engagement with the local communities and both local and national governments. Anagold has remained in compliance with all aspects of the Environmental Impact Assessments (EIA) and operating permits throughout the history of the Project.

## 12.5 Comparison to Previous Estimate

The Mineral Reserve estimate for the Çöpler Project has been compared to the previous December 31, 2022 Mineral Reserve estimate as reported in SSR's 2022 Form 10-K filing (SSR, 2023). Comparison of the current Mineral Reserve with the 2022 Mineral Reserve shows a net increase in contained gold of 89 koz (SSR Share only) in the Proven and Probable categories. Changes have occurred from mine depletion, infill drilling results, Mineral Resource model updates, updates to metallurgical and geotechnical parameters, design changes and addition of leach pad inventory.

## 12.6 QP Opinion

The SLR QP reviewed the assumptions, parameters, and methods used to prepare the Mineral Reserves Statement and is of the opinion that the Mineral Reserves are estimated and prepared in accordance with the U.S. Securities and Exchange Commission (US SEC) Regulation S-K subpart 1300 rules for Property Disclosures for Mining Registrants (S-K 1300).

The total Mineral Reserves at the Project are estimated to be 67.4 Mt grading 2.32 g/t Au containing 5.1 Moz of gold, of which 53.9 Mt at an average grade of 2.32 g/t Au, totaling 4.1 Moz of gold, is SSR's 80% share. The Project total Mineral Reserves support a LOM of 17 years of operational life, including 14 years of active mining followed by an additional three years of processing the heap leach pad inventory, which currently contains 61 koz of gold, and stockpiles.

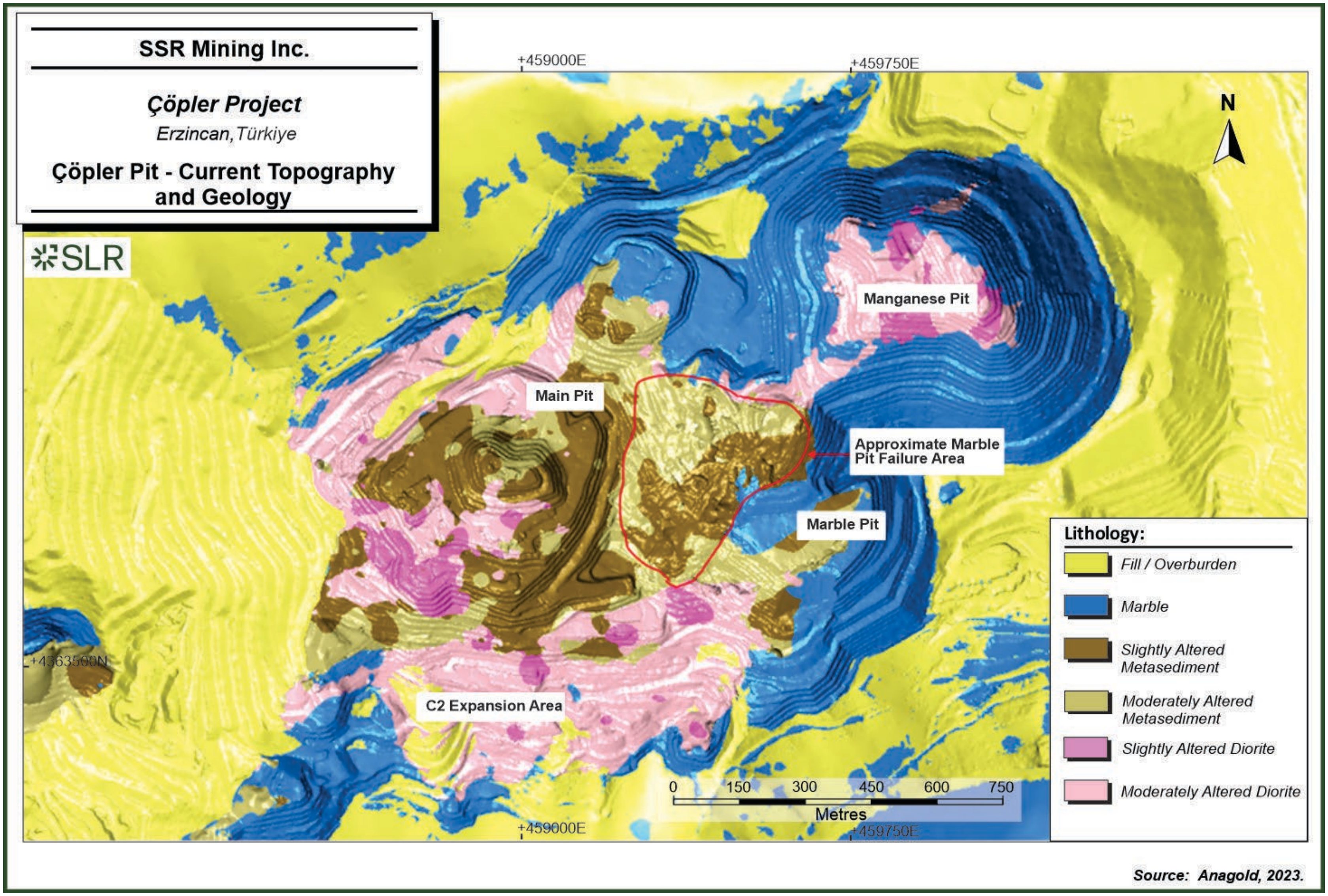
# 13.0 Mining Methods

The mining method at the Project is open pit mining, carried out by a mining contractor and managed by Anagold, using conventional drill and blast to facilitate extraction using excavators and trucks. Anagold currently operates a sulfide process plant, a CIP circuit, and an oxide heap leach facility. Costs are based on actual operational costs and the Anagold budget assumptions.

The current Çöpler mine consists of three interconnected open pits aligned in a southwest to northeast direction–the Çöpler Main (west), Marble (middle), and Manganese (east) pits, as shown in Figure 13-1. Work has begun on the Greater Çakmaktepe pit, which represents approximately 59% of the stated Mineral Reserve.

The Çöpler pit expansion is proposed to expand the Çöpler pit area to the south and west. Slopes in the south and southwest pit area will be formed in marble and diorite with slopes approximately 380 m high. Slopes in the west and northwest will be developed in metasediment and diorite with slopes approximately 190 m high. The proposed expansion also includes a deepening of the Main pit north of the Marble Pit Failure area. This slope will be approximately 220 m high, and it is expected to be developed primarily in metasediment.

**Figure 13-1: Çöpler Pit - Current Topography and Geology**




*Source: Anagold, 2023.*

## 13.1 Geotechnical

This section contains a summary of the feasibility study level mining geotechnical investigation and design conducted for the Project, which includes the Çöpler pit and the Çakmaktepe pit. Much of this work has been prepared prior to 2023, however, the work and the recommendations are still applicable to the current mine designs and workings.

Approximately 41% of the Mineral Reserve is found in the Çöpler pit, whereas 59% of the Mineral Reserve is found in the Greater Çakmaktepe pit. The bulk of the proceeding discussion involves the Çöpler pit, because it has been mined since 2011. Much of the knowledge learned from the Çöpler pit geotechnical analyses is used for the Çakmaktepe pit, because both pits are relatively close to one another and have similar lithological units.

### 13.1.1 Pit Slope Stability Summary– Çöpler Mine

A description of each of the pits in the Çöpler Mine follows:

- The Main Pit is located to the west of the Manganese and Marble pits. This pit is developed in limestone and marble in the upper portions of the north slopes and developed in metasediment and diorite in the remaining slopes. Altered metasediments and diorite are encountered in final slopes, which cause bench and inter-ramp scale instability. Metasediment and diorite are observed to have varying degrees of alteration in this pit.
- The Marble Pit is located in the southeast portion of the current Çöpler Mine layout. Slopes on the eastern side of the pit were developed in limestone and marble. SSR did not encounter significant slope instability issues in eastern slopes. Slopes on the western portion of the Marble pit are developed in metasediments. A large slope instability occurred in the western slopes starting in November 2014, referred to in this report as the Marble Pit failure area (Figure 13-1). This failure is interpreted to have been caused by sliding through highly altered metasediment material. Mitigation of this failure by the engineering and mine department is ongoing as of the date of this report.
- Mining in the Manganese Pit is complete and SSR does not expect significant development to the pit configuration during the pit expansion. The pit is primarily developed in limestone and marble; intrusive diorite was encountered in the lower regions of the pit. SSR did not encounter significant slope instability issues while mining the Manganese Pit.

The Çöpler mine maintains an on-site geotechnical monitoring program that consists of 120 prisms, nine tiltmeters, a long-range synthetic aperture radar, and daily data and field monitoring. Additional work is currently in progress to implement pit slope depressurisation. It is expected that pit slope depressurisation will be used extensively throughout the Main Pit as the sulfide pit phases are progressed.

In 2021, nine oriented core holes were drilled within the Greater Çakmaktepe ultimate pit boundary. Physical properties, laboratory testing, and both kinematic and 2D limit equilibrium (LE) analyses were completed to determine the appropriate design slope angles for the pit. It should be noted that Golder (2021c) recommends a 16-m wide geotechnical berm in highwalls greater than 120 m.

### 13.1.2 Geotechnical Studies

Geotechnical studies at the Project were conducted starting in 2004, and mining began in the Çöpler pit in 2011. In 2014, a major highwall failure occurred in the Marble Pit. Golder Associates Inc. (Golder, now WSP) has provided geotechnical slope recommendations since 2014, as well as geotechnical recommendations for other site facilities and WRDs. The most recent recommendations were presented in Golder 2021a, 2021b, and 2021c.

#### 13.1.2.1 Geotechnical Domains

Golder (now WSP) completed a geotechnical site review in 2014. Based on Golder (2014c), the following geotechnical domain categories are considered appropriate for design recommendations:

- **Marble / limestone** – characterized by competent rocks and marble-ized near the Çöpler intrusion.
- **Fresh diorite** – characterized as a fresh to slightly weathered or altered moderately strong rock.
- **Hydrothermally altered diorite** – alteration sufficient to significantly reduce strength relative to fresh diorite, but without the shearing and intense clay alteration of contact and fault zones.
- **Weathered diorite and metasediment** – highly weathered, extremely weak rock and soil that occurs in the oxidized zone (typically to 30 m depth).
- **Fresh metasediment** – fresh to slightly weathered, weak to moderately strong rock consisting of a turbidite sequence that may also be structurally complex near faults.
- **Hydrothermally altered metasediment** – alteration sufficient to significantly reduce strength relative to fresh metasediment, but without the shearing and intense clay alteration of contact and fault zones.
- **Fault gouge including intrusive contact and intense sulfide alteration** – slicken sided plastic clay with rock fragments that occurs in fault zones including the intrusive contacts.

Where data are insufficient within the alteration zones, the most conservative pit slope angle is assumed. There is an upside potential to increase the slope if the alteration zone is defined in the geological model. The above listed geotechnical domains are mostly well known and modeled in the geologic model. The alteration zones vary significantly and have not been modeled. It has been recommended by Golder that the best way to identify alteration zones is by modeling RQD in the geologic model. For this purpose, RQD values of 15% and less are considered altered and RQD values greater than 15% are considered unaltered, or fresh. Currently, the resource model does not contain RQDs, however, SSR has a separate model for Greater Çakmaktepe generated by WSP (Golder) based on RQD data. There is an internal working model at Çöpler, which is used for slope guidelines in their pit designs, and this model has been verified by Furgo.

#### 13.1.2.2 Rock Quality Designation (RQD) Model

RQD is used as a simple and inexpensive indication of rock mass quality. At the Çöpler Project, it has been determined that RQD is a reliable indicator of alteration; areas with RQD modeled as being less than 15% are considered altered.

Standard testing of RQD was collected on 661 diamond core holes, and 30 of these drill holes were drilled within the pit for metallurgical purposes. The 661 holes represent approximately 34% of all drilling in the Çöpler deposit. The Main pit contains RQD measurements for holes evenly spaced with data gaps occurring in the Manganese, Marble, and West pits. The West pits are mined out as of October 31, 2023.

RQD was interpolated in the resource model using the inverse distance method, weighted to the power of two (ID2) with 2 m drill hole composites. A total of six domains were used to estimate RQD values and included a distinction between oxide and sulfide material. To account for the variance in sample spacing, a two-pass approach was used to capture available samples. Model cell estimates were limited to the search distances used with no attempt to assign RQDs to un-estimated cells.

#### 13.1.2.3 Rock Strength and Rock Mass Quality

Golder (2021a) included an update on rock and soil strengths, as summarized in Table 13-1, which indicated uniaxial compressive strengths (UCS) could be lower by nominally 35% for diorite and 12% for metasediments than those summarized in Golder (2019), based on Hoek & Brown envelopes and with a comparison over a normal stress range of 40 kPa to 700 kPa.

**Table 13-1: Golder Intact Strength Estimates (General)**

| Rock Type | Golder 2019 | | Golder 2021[1] | |
|---|---|---|---|---|
| | UCS (MPa) | mi | UCS (MPa) | mi |
| Metasediments | 49 | 22 | 41 | 14 |
| Diorite | 42 | 28 | 22 | 24 |
| Carbonates | 41 | 10 | | |

Source: Golder, 2021a.

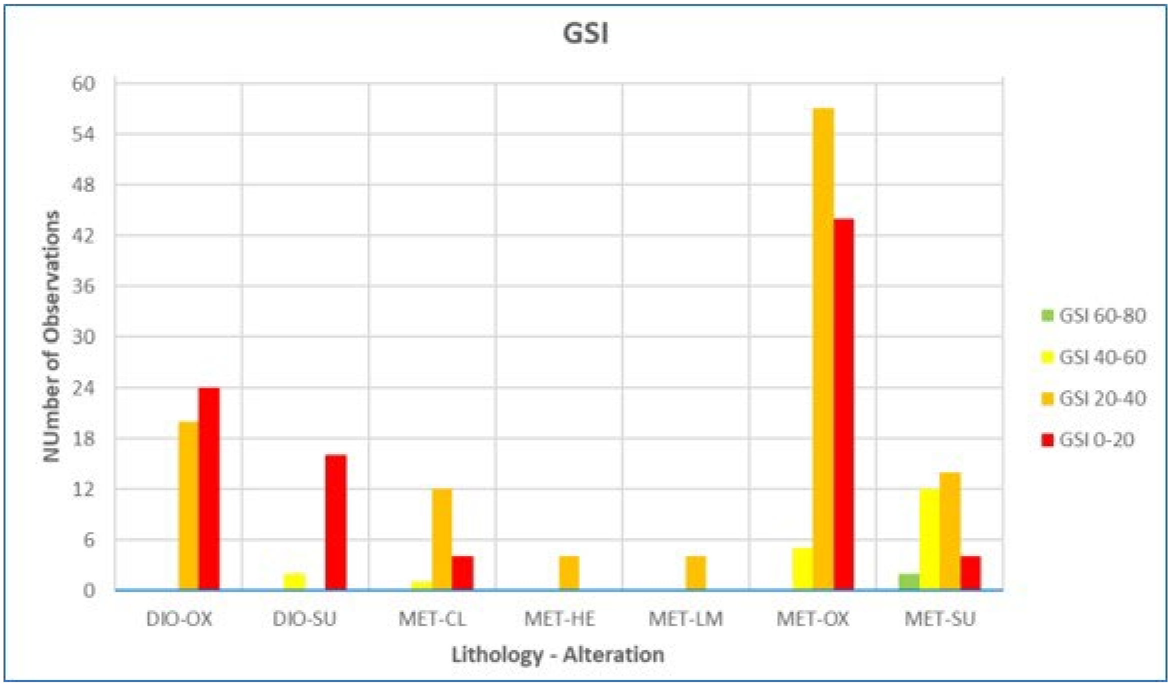
Notes:

1. 35% percentile values suggested by Golder

Anagold had undertaken mapping of rock mass quality, the geological strength index (GSI), within the Çöpler pit between 2015 and 2017.

The mapping indicated geological strength index (GSI) values typically below 40. Figure 13-2 provides the data from mapping of the Çöpler Main pit, where most of the mapping took place (225 measurements, predominantly of diorite and metasediments). Additional mapping of the Marble and Manganese pits also took place, with a total of 42 data points. It was interpreted the alteration noted as OX relates to oxidized/altered materials and SU relates to presence of sulfides, i.e., fresh rock. The data from Anagold's GSI mapping exercise, as presented in Figure 13-2, infers median GSI values of nominally 19 for altered diorite, less than 20 for fresh diorite, 23 for altered metasediments, and 38 for fresh metasediments.

**Figure 13-2: Geological Strength Index (GSI) Mapping of Çöpler Main Pit**




The Anagold mapping identified lower rock mass quality than what was adopted in the previous Golder studies and with the following values noted for rock like materials by Golder:

- Diorite – 41
- Metasediments – 52
- Marble – 61

With this additional information, Golder assigned the lower GSIs in 2021 as mapped by Anagold because of three factors (Golder, 2021a):

1 Observed intact strengths and RQD in the field were lower than typically seen in the core, which had been used by Golder in assessing rock mass quality of the rock-like materials.

2 Greater percentage of soil-like material in the exposures with significantly lower GSIs.

3 Golder has assumed the percentages of rock-like material comprise 60% of the diorite and 75% of the metasediments.

Golder recommended a rock mass quality model be created to allow the slope design recommendations to be appropriately implemented. Such a model needed to take into consideration the Anagold rock mass quality mapping, which suggested a higher proportion of soil-like materials in the slopes than the Golder estimates.

WSP (2023a) emphasises that the slopes need to be depressurized in order to maintain adequate Factors of Safety in the pit wall slopes.

### 13.1.2.4 Seepage Locations and Piezometer Data

The available seepage locations and piezometer data are provided by Golder (2021c), however, there is key information that is not addressed by Golder and these comprise:

- The seepage is focused on the contact between Diorite and Metasediments, as can be noted in comparing the lithology in Figure 13-1 and seepage locations in Figure 13-3.
- There is no clear indication of the significance of the piezometer data.
- The nominal piezometer locations are presented in Figure 13-3 (red dots) and the compiled data in form of a hydrograph in Figure 13-4. The followings trends observed are as follows:
  - Significant compartmentalization in piezometer Pa3.
  - Lower groundwater level near limestone contact, piezometer Pa1.
  - Groundwater conditions elsewhere indicating phreatic surface at the mined slope and with a Hu of nominally 70% (i.e., 70% of hydrostatic) (The Hu value is a factor between 0 and 1, by which the vertical distance from a point (in the soil or rock) to a Water Surface (i.e. Piezo Line) is multiplied to obtain the pressure head and indicating depressurization of the slopes).

**Figure 13-3: Locations of Seepage and Ponding in 2021**

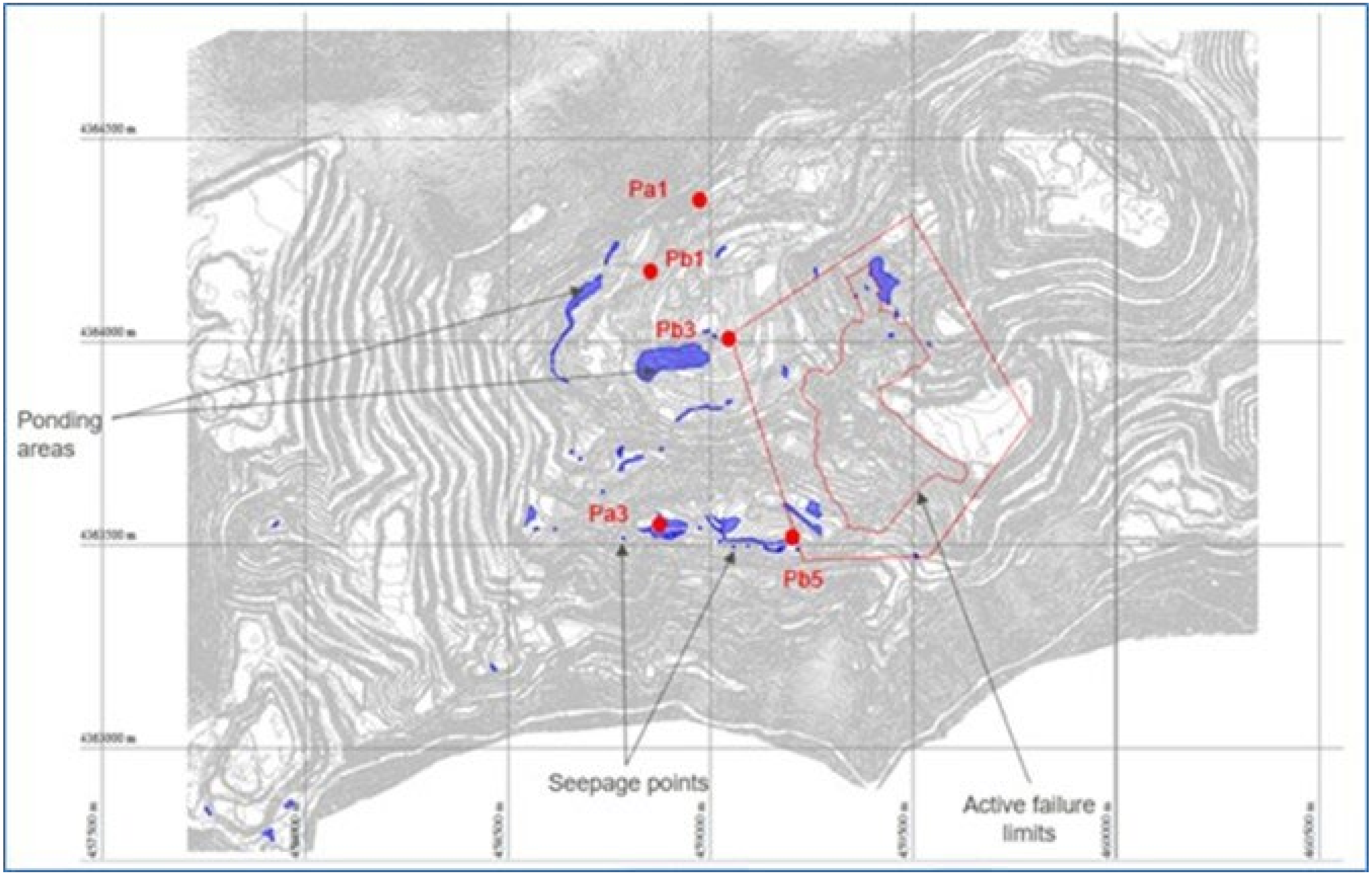
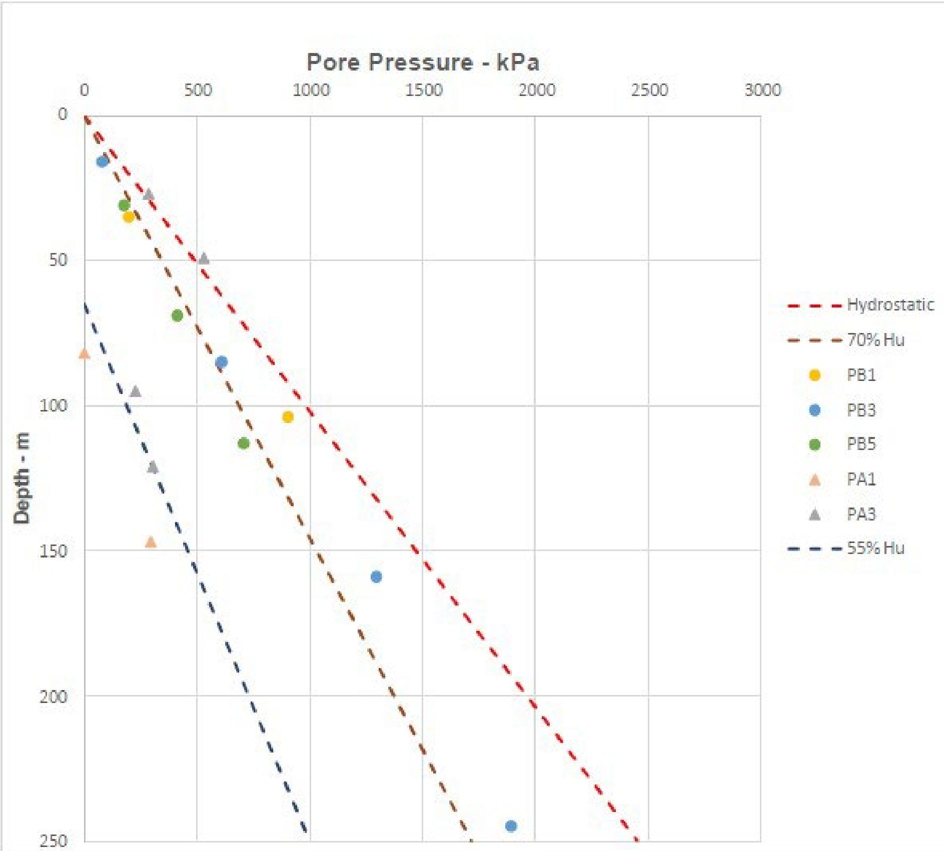


**Figure 13-4: Çöpler Vibrating Wireline Piezometer (VWP) Data**

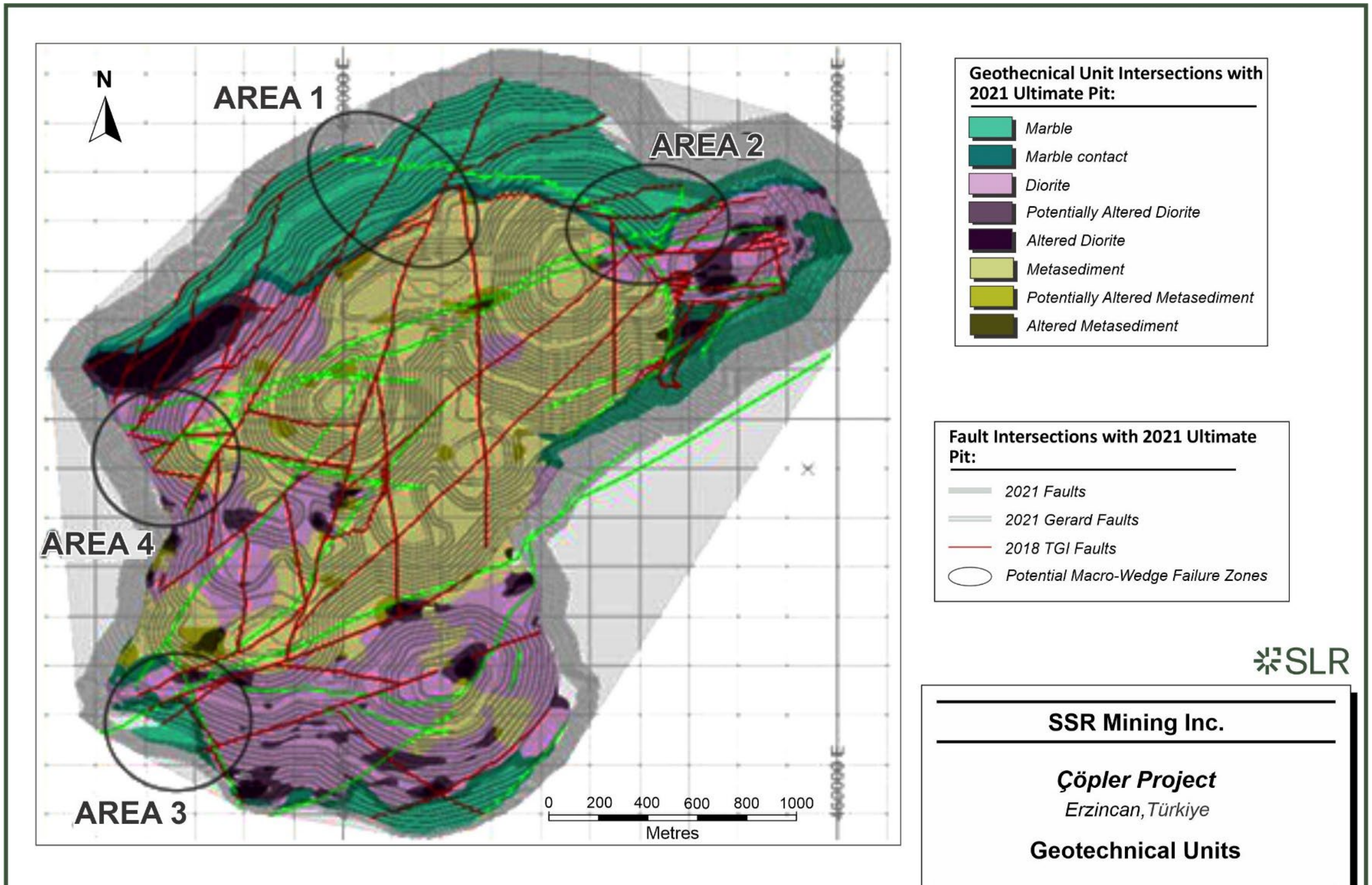



Source: Golder, 2021.

### 13.1.2.5 Pit Slopes and Interaction with Ultimate Pit Design

Golder in 2021 and 2023 provided updates on structural data where faults provided potential control on overall pit slopes for the circled areas shown in Figure 13-5.

**Figure 13-5: Çöpler Geotechnical Units**




**Source: Anagold, 2023.**

Golder (2021c) notes several studies, including both external and internal reports. Two reports relate to internal design checks, which indicate a requirement for localized flattening of designs in areas of altered materials. For the two examples presented, the issues relate to potential impacts on slopes over two benches high and with very high Factors of Safety (FOS) for global stability. Golder also notes "local instabilities may occur where pockets of altered rock mass are exposed on benches. If the altered rock mass area is significant, i.e., exposed over more than two benches, or if the local instabilities cannot be managed by operations, then the mine may need to locally adapt the slope configuration to the altered rock mass slope design or change the whole domain to the shallower altered rock mass design angles".

With regards to the LOM designs completed in 2021, Golder (2021c) noted that the geometric design for the Çöpler pits conforms with Golder pit slope design recommendations. During this review, some areas were identified and further design evaluations were recommended.

Details of the operational pit slope performance were unknown to Golder. The pit slope performance would provide valuable information. Golder (2021c) notes a requirement for slope stability analyses to address "maximum vertical height for uninterrupted interramp slopes and geotechnical berm widths" as well as set back distances from the designed pit crest to the existing WRDs. Further, Golder noted that Anagold had recently developed 3D solids for altered and potentially altered rock masses based on the RQD evaluation from the entire database.

#### 13.1.2.6 Geotechnical Recommendations and Further Studies

Golder (2021c) highlighted potential issues of concern. The SLR QP concurs with Golder's key recommendations, as follows:

- Appropriate interaction between Anagold and Golder is required such that an appropriate rock mass quality model is developed either "backboned" to existing Anagold models or appropriately using geotechnical borehole logging data and rock mass quality mapping to develop a model. The primary aim, regardless of approach, is that the Golder slope design recommendations relate to an Anagold rock mass quality model so that designs can be appropriately implemented.
- Future and ongoing design revisions must be based on a feedback loop that includes an appropriate revision of rock strengths based on back analysis of failure and review of slope performance.
- Pit highwall stability analyses must be completed once the above components are completed and with appropriate revision of slope design parameters.

As part of the Çöpler Expansion Project, WSP performed an updated geotechnical model review in 2023 (WSP, 2023a). In summary, the WSP findings stress the importance of depressurizing and dewatering in both unaltered and altered rock units. The need to have dewatered and depressurized slopes is critical in the altered metasediments and diorites.

Professor Tamer Topal from Middle East Technical University (METU) has prepared geotechnical evaluation reports on slope stability for the open pit mine, specifically addressing the south wall failure in the Marble pit, which occurred in 2014. The scope appeared to be limited to a single stability analysis (i.e., one cross-section) based on piezometer data from specific drilled boreholes and utilising all available monitoring (inclusive of inclinometers). The slow landslide movements and groundwater levels have been evaluated in these reports. Landslides are being monitored continuously by Anagold and derived results were used in stability analyses for static and dynamic conditions.

It is also noted by Professor Topal that Çöpler is located in a first-degree earthquake seismic zone (Sial 2004), which can experience acceleration values that range from 0.3 g to 0.4 g.

### 13.1.3 Pit Slope Design Parameters

The 2023 recommended pit slope design parameters for the Çöpler pit are presented in Table 13-2. Figure 13-6 illustrates the geotechnical domains for the Çöpler pit as well as specific geotechnical recommendations on pit design.

The recommended 2023 pit slope design parameters for Greater Çakmaktepe are shown in Table 13-3. The design parameters for Greater Çakmaktepe are in relation to the Central pit.

**Table 13-2: Çöpler 2023 Recommended Mine Pit Slope Parameters**

| Geotechnical Domain | Slope Design Sector | Wall Orientation (Azimuth) | Bench Height (m) | Design BFA[1] (deg.) | Catch Bench Width (m) | IRA[2] (deg.) | Comments |
|---|---|---|---|---|---|---|---|
| Marble | MA1 | 190 - 290 | 15 | 55 | 7.5 | 40 | BFA limited by southwest dipping structural set 1, which has reduced dip angle in expansion area. |
| | MA2 | 290 – 350 | 15 | 60 | 7.5 | 43 | BFA limited by northwest dipping structural set 2. |
| | MA3 | All Other Orientations | 15 | 70 | 7.5 | 49 | Maximum achievable BFA |
| Slightly and Moderately Altered Diorite | DIO1 | 040 - 100 | 10 | 50 | 6 | 35 | BFA limited by northwest dipping structural set 6. |
| | DIO2 | 100 – 160 | 10 | 55 | 6 | 37.5 | BFA limited by wedges formed between structural sets 5 and 6. |
| | DIO3 | All Other Orientations | 10 | 60 | 6 | 40 | Maximum BFA; IRA recommendation assumes depressurization targets achieved (5 m to 15 m behind highwall) |
| Slightly Altered Metasediments | MET1 | 330 – 020 | 10 | 50 | 6 | 35 | BFA limited by wedges formed between structural sets 6 and 7a. |
| | MET2 | 020 – 055 | 10 | 45 | 6 | 32 | BFA limited by northwest dipping structural set 6. |
| | MET3 | 055 - 120 | 10 | 60 | 6 | 40 | BFA limited by wedges formed between structural sets 4a and 6 |
| | MET4 | 120 - 170 | 10 | 70 | 6 | 46 | Maximum achievable BFA |
| | MET5 | 170 – 300 | 10 | 65 | 6 | 43 | BFA limited by structural controls |
| | MET6 | 300 – 330 | 10 | 70 | 6 | 46 | Maximum achievable BFA |
| Moderately Altered Metasediment (Depressurization Targets) | AMET4 | 120 – 170 | 10 | 70 | 6.5 | 45 | Increased catch bench to achieve 45º IRA |
| | AMET6 | 300 – 330 | 10 | 70 | 6.5 | 45 | Increased catch bench to achieve 45º IRA |
| | | All Other Orientations | BFA structurally controlled. Refer to recommendations of Slightly altered Metasediment. | | | | |
| Moderately Altered Metasediment (Undrained)[3] | AMET1 | 330 – 020 | 10 | 50 | 6 | 35 | BFA limited by wedges formed between structural sets 6 and 7a. |
| | AMET2 | 020 – 055 | 10 | 45 | 6 | 32 | BFA limited by northwest dipping structural set 6. |
| | AMET3 | 055 - 120 | 10 | 60 | 8.5 | 35 | Increase catch bench width to achieve 35º IRA |
| | AMET4 | 120 - 330 | 10 | 70 | 10.5 | 35 | Increase catch bench width to achieve 35º IRA |
| | AMET5 | 170 – 300 | 10 | 65 | 9.5 | 35 | Increase catch bench width to achieve 35º IRA |
| | AMET6 | 300 – 330 | 10 | 70 | 10.5 | 35 | Increase catch bench width to achieve 35º IRA |

Notes:

1. Bench face angle
2. Interramp angle
3. For slopes that are not depressurized.

Source: WSP, 2023a

### Table 13-3: Greater Çakmaktepe 2023 Recommended Mine Pit Slope Parameters

| Slope Design Sector | Wall Dip Direction (°) | Max OSA[1] (°)[1] | Max IRA[2] (°) | BFA[3] (°) | Bench Width (m) | Comments |
|---|---|---|---|---|---|---|
| Overburden | - | - | 26 | 35 | 6.0 | Apply 2H:1V.<br>Must be effectively depressurized and protected from erosion |
| Fault or Contact Influenced Rock Mass | - | - | 25 | 45 | 5.0 | Design requires bench height of 5 m.<br>Not currently anticipated, however, these design sectors might be required locally (e.g., the Southeast corner)<br>Stability will be sensitive to presence of groundwater |
| 1a (NE) | 195° - 295° | 42 | 42 | 65 | 6.5 | BFA controlling factor, entire slope is in Ophiolite.<br>Opportunity to increase BFA to 70° and IRA 45° depending on quality of Ophiolite benches. |
| 1b (E) | | 42 | 42 | 65 | 6.5 | BFA controlling factor, entire slope is in Ophiolite.<br>Opportunity to increase BFA to 70° and IRA 45° depending on quality of Ophiolite benches. |
| 2a (N) | 140° - 195° | 42 | 42 | 65 | 6.5 | BFA controlling factor, entire slope is in Ophiolite.<br>Sector 2a is extremely small and no longer exposes sub-horizontal faults on this wall. As design is further updated, review possible fault exposure on the wall and associated stability concerns.<br>Opportunity to increase BFA to 70° and IRA 45° depending on quality of Ophiolite benches. |
| 2b (W wall in NE corner) | 000° - 090° | 38 | 38 | 65 | 8 | IRA controlled by local sub-horizontal fault; shallow slope to avoid undercutting. |
| 3 | 105° - 140° | 34 | 36 | 65 | 9.0 | Weak contacts govern angle. Shallow angle mines out the contacts and increases stability on remaining contacts.<br>One 16 m wide geotechnical are required at approx. elevation 1185 m asl in addition to shallow slope angles. |

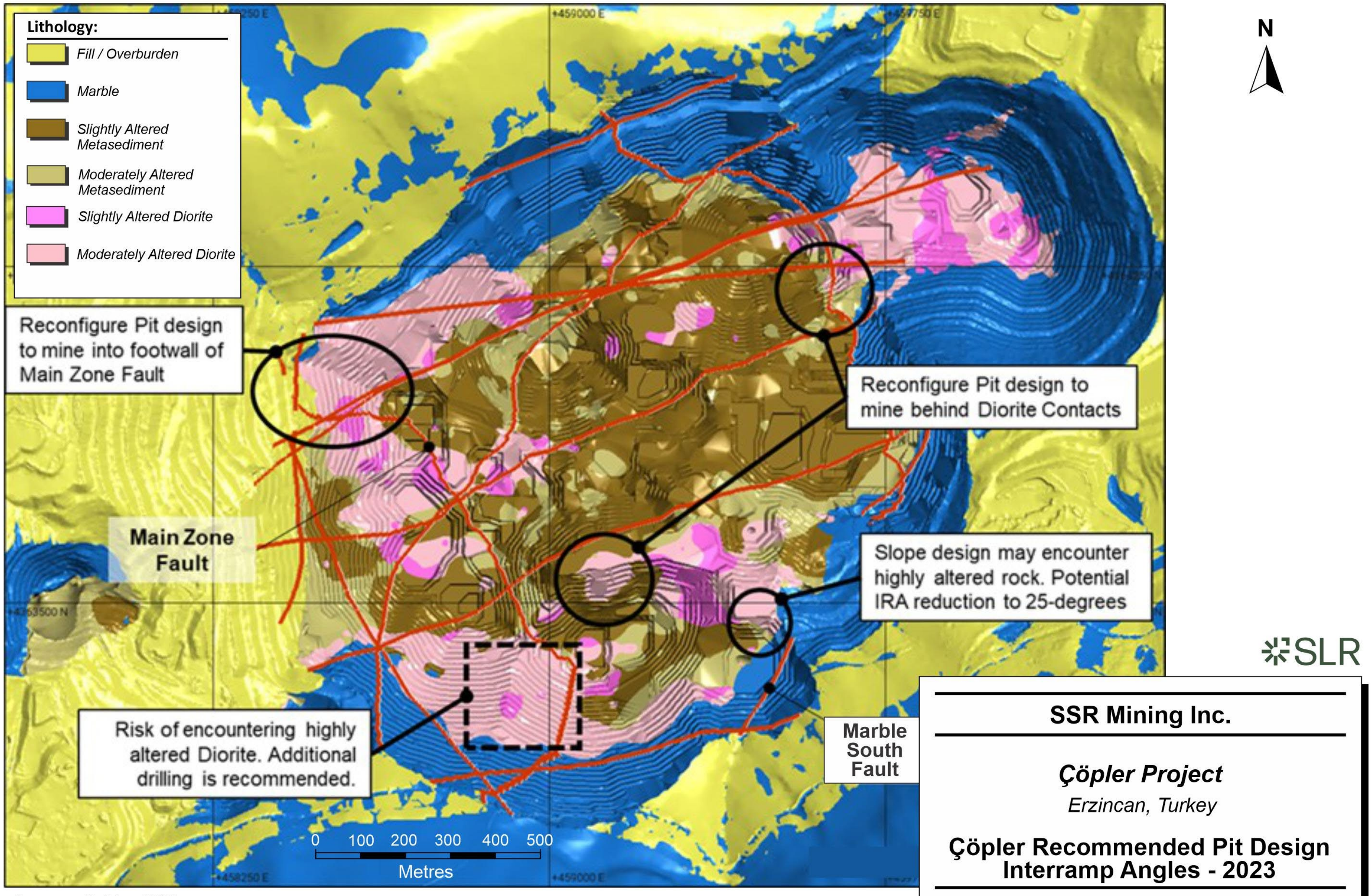
| Slope Design Sector | Wall Dip Direction (°) | Max OSA[1] (°)[1] | Max IRA[2] (°) | BFA[3] (°) | Bench Width (m) | Comments |
|---|---|---|---|---|---|---|
| 4 | 040° - 105° | 40<br>(43) | 42<br>(45) | 65<br>(70) | 6.5 | Increase in BFA when in Cataclastite or Dolomite (angles in brackets)<br>Opportunity to increase BFA to 70° and IRA 45° in Ophiolite depending on quality of Ophiolite benches. |
| 5 | 010° - 040° | 40 | 42 | 65 | 6.5 | Opportunity to increase BFA to 70° and IRA 45° in Ophiolite depending on quality of Ophiolite benches when not impacted by contacts.<br>Stability is sensitive to the presence of groundwater. Installation of a vibrating wire piezometer in this Sector is recommended. |
| 6 | 280° - 010° | 40<br>(43) | 42<br>(45) | 65<br>(70) | 6.5 | Bracketed slope angles are for areas in which Ophiolite is not the dominant bench lithology.<br>Local contact issues in isolated areas are possible. May need to apply design for fault or contact influenced rock masses (Southeast corner).<br>Opportunity to increase BFA to 70° and IRA 45° in Ophiolite depending on quality of Ophiolite benches. |
| 7 | 280° - 195° | 40 | 42 | 65 | 6.5 | BFA controlling factor, entire slope is in Ophiolite.<br>Opportunity to increase BFA to 70° and IRA 45° in Ophiolite depending on quality of Ophiolite benches. |
| 8 (SE) | 065° - 190° | 42 | 42 | 65 | 6.5 | BFA controlling factor, entire slope is in Ophiolite.<br>Opportunity to increase BFA to 70° and IRA 45° in Ophiolite depending on quality of Ophiolite benches. |

Notes:

1. Overall slope angle
2. Bench face angle
3. Interramp angle

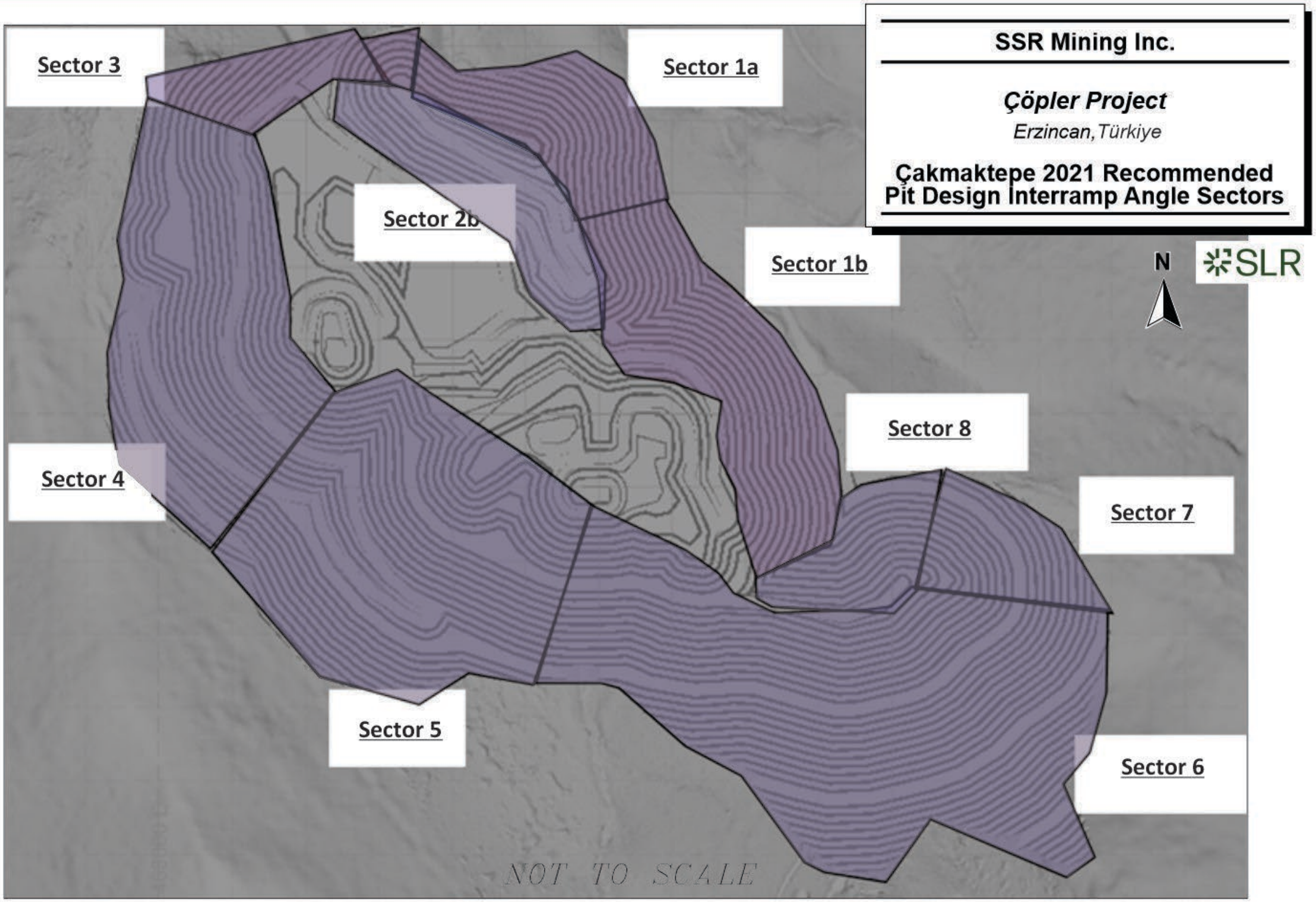
Source: WSP, 2023a

**Figure 13-6: Çöpler Recommended Pit Design Interramp Angles – 2023**




*Source: Golder, 2023.*

**Figure 13-7: Çakmaktepe 2021 Recommended Pit Design Interramp Angle Sectors**




*Source: Golder, 2021c.*

### 13.1.4 Pit Dewatering

SRK's groundwater flow model predicts that a pit lake would form over time after mining for the Çöpler pit is completed. These results, in conjunction with the acid rock drainage (ARD) work being conducted by SRK Türkiye, are being used to predict pit lake water quality. This work is on-going and a new model will be issued in 2024 for both the Çöpler and Greater Çakmaktepe pits.

Sources of groundwater recharge include direct infiltration of precipitation and/or infiltration during storm water run-off events throughout the entire site. The predominant pathways for water infiltration into the open pits are fractured or karstic openings in the bedrock and alluvial sediments along drainages. The main hydrogeological units, horizontal hydraulic conductivity al (Kh) and vertical hydraulic conductivity considered in the 2023 groundwater model are listed in were Table 13-4

**Table 13-4: Çöpler 2023 Hydraulic Conductivities**

| Hydrological Unit | 2023 Model Hydraulic Conductivities | |
|---|---|---|
| | Kh (m/d) | Kv (m/d) |
| Alluvium | 10 | 10 |
| Lacustrine Sediments | 0.1 | 0.01 |
| Conglomerate | 5 | 5 |
| Limestone (General) | 0.05 | 0.005 |
| Fractured Limestone | 100 | 20 |
| Limestone (Transition Zone) | 10 | 1 |
| Compact Marble | 0.0005 | 0.0005 |
| Diorite (mine area) | 0.00035 | 0.00035 |
| Diorite (regional) | 0.00025 | 0.0002 |
| Diorite (Greater Çakmaktepe) | 0.0002 | 0.0002 |
| Serpentinite/Ophiolite | 0.01 | 0.01 |
| Metasediments (Mine Area) | 0.0004 | 0.0004 |
| Lower K Metasediments West of Çöpler Mine Area | 0.0002 | 0.0002 |
| Metasediments | 0.005 | 0.005 |
| Clastic | 0.0001 | 0.0001 |

Source: SRK 2023

Hydraulic conductivities were based on 40 pumping tests and 15 Packer tests.

SRK estimated that water levels in and around the Çöpler pit can be considered elevated to the adjacent country rock. Inflow into the Çöpler pit is estimated to be 3 L/s to 5 L/s by SRK, which equates to 432 $m^3$/day.

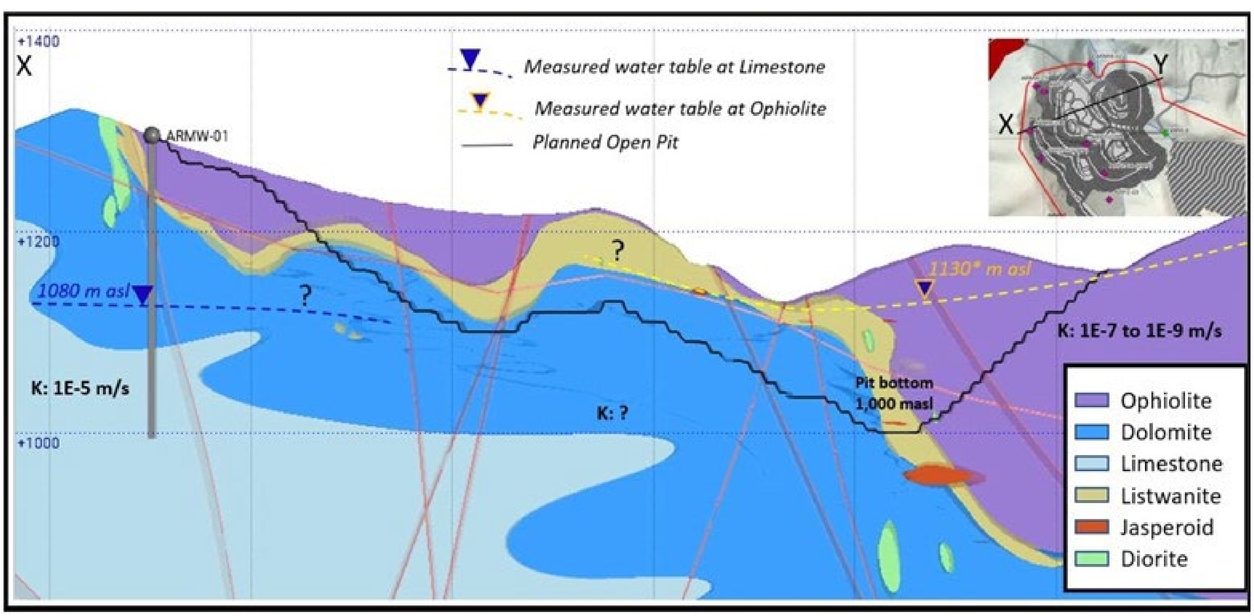
Water level information was gathered from 75 large diameter wells, 24 HQ-size core holes with vibrating wireline piezometers, and six shallow monitoring wells. Golder's study in 2021 (Golder (2021b) calibrated a groundwater model to predict pit inflows and pit lake development based on a pit design with a maximum depth to 875 m. This analysis estimated pit inflow at less than approximately 1,100 m$^3$/day. Estimations of pit lake formation suggest that over a 100-year scenario, based on a pit design with a maximum depth to 875 m, pit lake water elevations are projected to reach the 906 m elevation (±20 m). Golder's modeling results indicate that water from beneath the Lower Çöpler West waste rock dump (WRD) will take more than 1,000 years to flow to the Karasu River. Groundwater located beneath the Lower Çöpler East WRD is estimated to discharge to the Karasu River within approximately 300 years.

Revisions to the pit design since the Çöpler groundwater model was constructed and calibrated (in 2012) show that the minimum pit elevation (895 mRL) will be higher than the minimum pit elevation simulated in the model (875 mRL). Additionally, the area on the north side of the pit and the southern and southeastern portions of the pit will be mined to a lower elevation than simulated in the model. Limestone in these areas may increase discharge to the pit during dewatering and may impact the formation of a pit lake following closure. Updating and possibly recalibrating the model based on the revised ultimate pit configuration and available data since 2012 would be required to better quantify the magnitude of the increase or impact.

There have been 12 large-diameter monitoring wells and eight standpipe piezometers installed at the Greater Çakmaktepe pit area. Water table is currently measured at 1,080 MASL. Dolomites and limestones that lay to the west and beneath the ore zones have demonstrated moderate to high permeability (hydraulic conductivity ranging from $10^{-5}$ metres per second (m/s) to $10^{-7}$ m/s. Ophilites and Listwanite units overlay the dolomite and limestone formations with permeability around $10^{-6}$. Diorite dikes with permeabilities ranging from $10^{-7}$ to $10^{-9}$ m/s.

Pumping tests that vertical, in-pit and intercept wells should prevent high water flows into the pit and depressurize the highwalls.

**Figure 13-8: Greater Çakmaktepe Conceptual Groundwater Model**




Source: SRK, 2023

### 13.1.5 Monitoring and Management

Pit slopes in the Çöpler and Greater Çakmaktepe pits are monitored daily to ensure safety and stability. Daily inspections of the active mining areas are conducted by shift engineers to identify hazards such as unstable rock on benches above the active working areas, excessive water in and around the highwalls, and any visible cracking and movement of the highwalls.

In addition, Anagold employs a geotechnical management team consisting of surveyors, geologists, and geotechnical engineers. This team conducts regular highwall inspections, measurement of movement through extensometers and prism surveys, and data collection and interpretation of the long-range synthetic aperture radar measurements.

Mining at Çöpler utilizes perimeter pre-split blasting techniques in areas where competent rock is encountered (typically, limestone/marble, unaltered metasediment, and unaltered diorite). The pre-split holes are drilled according to the bench face angle recommendations as shown in Table 13-2. Blasting is conducted in a manner to minimize back-break through the use of delays and providing adequate relief for shock waves and air blast in the rock.

Where pre-splitting is not practical, highwalls are sloped by excavator to the recommended bench face angle.

## 13.2 Mine Plan

Open pit mining at the Çöpler project is carried out by Çiftay, a Turkish mining contractor, and managed by Anagold. Çiftay has been the only primary mining contract since mining commenced in 2011.

The mining method is a conventional open pit method with drill and blast and using excavators and trucks operating on bench heights of 5 m. The mining contractor provides operators, line supervisors, equipment, and ancillary facilities required for the mining operation. SSR provides management, technical, mine planning, engineering, and grade control functions for the operation.

SSR currently operates a sulfide process plant that includes pressure oxidation of sulfides using an autoclave (POX) followed by cyanidation and CIP, and a heap leach facility. Costs used in the mine plan are based on the actual operational costs and Project budget assumptions. Production schedules and costs are based on current site performance and contracts.

The parameters, costs, and throughput assumptions used to prepare cut-off grades and the production schedule are listed in the following sections.

### 13.2.1 Ore Definition

A revised set of processing parameters was used to calculate the internal gold cut-off grades for ore definition. The cut-off grades for the Mineral Reserves were calculated using the parameters described in the following sections.

#### 13.2.1.1 Assumptions, Model Variables and Other Inputs

Material routing is based on gold and sulfur grades, as illustrated in Figure 13-9.

## Figure 13-9: Material Routing Definition Decision Tree

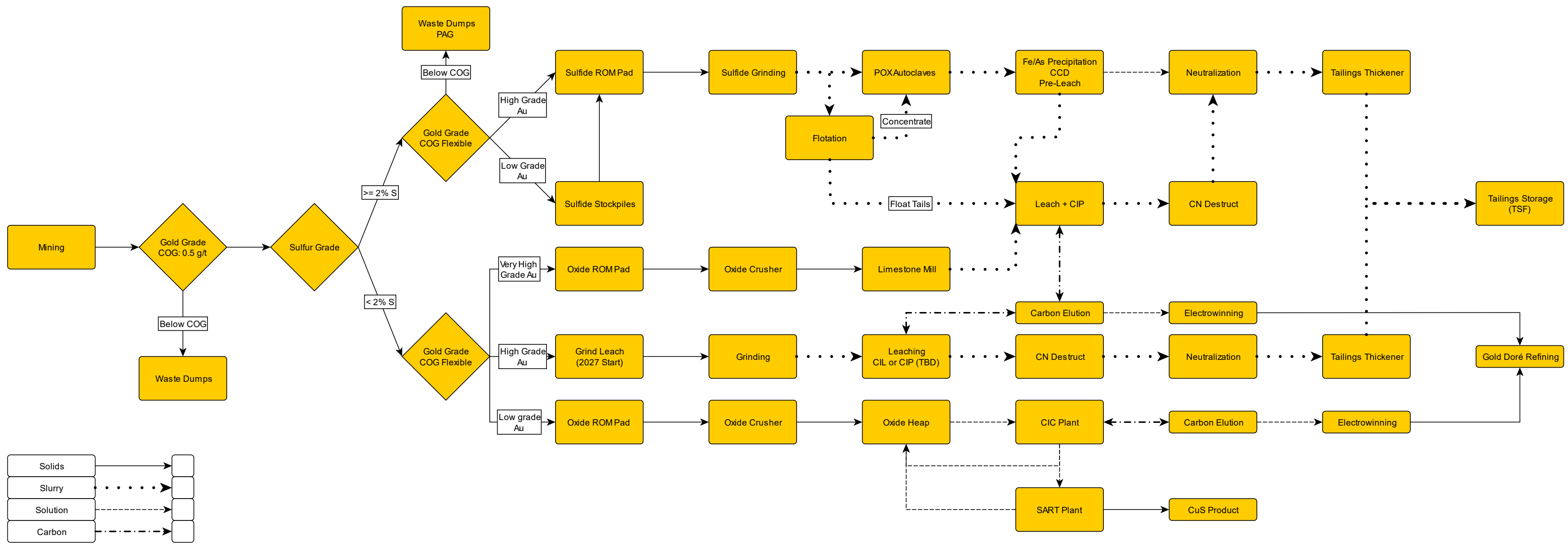


Table 13-5 details the heap leach gold recovery parameters by location, and the amount sulfur.

**Table 13-5: Heap Leach Recovery – Gold, Silver, and Copper**

| Mine Area | Recovery Zone | Lithology | S% | Au | Ag | Cu |
|---|---|---|---|---|---|---|
| Çöpler | Main | Limestone/Marble | S%<2 | 68.6% | 24.6% | 0.0% |
| | | Metasediments | | 66.8% | 32.5% | 13.8% |
| | | Gossan | | 71.2% | 27.5% | 3.3% |
| | | Diorite | | 71.2% | 37.8% | 15.8% |
| | | Manganese Diorite | | 71.2% | 37.8% | 15.8% |
| | Main East | Limestone/Marble | S%<2 | 78.4% | 27.3% | 0.0% |
| | | Metasediments | | 66.8% | 32.5% | 13.8% |
| | | Gossan | | 71.2% | 27.5% | 3.3% |
| | | Diorite | | 71.2% | 37.8% | 15.8% |
| | | Manganese Diorite | | 71.2% | 37.8% | 15.8% |
| | Main West | Limestone/Marble | S%<2 | 75.7% | 34.0% | 0.0% |
| | | Metasediments | | 66.8% | 32.5% | 13.8% |
| | | Gossan | | 65.1% | 27.5% | 3.3% |
| | | Diorite | | 62.3% | 32.0% | 15.8% |
| | | Manganese Diorite | | 62.3% | 32.0% | 15.8% |
| | Manganese | Limestone/Marble | S%<2 | 78.4% | 27.3% | 0.0% |
| | | Metasediments | | 66.8% | 32.5% | 13.8% |
| | | Gossan | | 71.2% | 27.5% | 3.3% |
| | | Diorite | | 71.2% | 37.8% | 15.8% |
| | | Manganese Diorite | | 71.2% | 37.8% | 15.8% |
| | Marble | Limestone/Marble | S%<2 | 75.7% | 34.0% | 0.0% |
| | | Metasediments | | 66.8% | 32.5% | 13.8% |
| | | Gossan | | 65.1% | 27.5% | 3.3% |
| | | Diorite | | 62.3% | 32.0% | 15.8% |
| | | Manganese Diorite | | 62.3% | 32.0% | 15.8% |
| | West | Limestone/Marble | S%<2 | 75.7% | 34.0% | 0.0% |
| | | Metasediments | | 66.8% | 32.5% | 13.8% |
| | | Gossan | | 65.1% | 27.5% | 3.3% |
| | | Diorite | | 62.3% | 32.0% | 15.8% |
| | | Manganese Diorite | | 62.3% | 32.0% | 15.8% |
| Çakmaktepe | Çakmaktepe North | Limestone/Breccia | S%<2 | 59.0% | 17.0% | 0.0% |
| | | Metasediments | | 14.0% | 19.0% | 0.0% |

| Mine Area | Recovery Zone | Lithology | S% | Au | Ag | Cu |
|---|---|---|---|---|---|---|
| | | Ophiolite | | 63.0% | 24.0% | 0.0% |
| | | Gossan | | 59.0% | 17.0% | 0.0% |
| | | Jasperoid | | 59.0% | 17.0% | 0.0% |
| | | Diorite | | 38.0% | 40.0% | 0.0% |
| | Çakmaktepe East | Limestone/Marble | S%<2 | 67.0% | 27.0% | 0.0% |
| | | Ophiolite | | 67.0% | 27.0% | 0.0% |
| | | Gossan | | 67.0% | 27.0% | 0.0% |
| | Çakmaktepe SE | Ophiolite | S%<2 | 75.0% | 45.0% | 0.0% |
| | | Gossan | | 75.0% | 45.0% | 0.0% |
| | Bayramdere | Limestone/Marble | S%<2 | 75.0% | 45.0% | 0.0% |
| | | Ophiolite | | 75.0% | 45.0% | 0.0% |
| | | Gossan | | 75.0% | 45.0% | 0.0% |
| | Çakmaktepe Central | Limestone/Breccia | S%<2 | 70.0% | 17.0% | 0.0% |
| | | Jasperoid | | 73.0% | 17.0% | 0.0% |
| | | Diorite | | 61.0% | 24.0% | 0.0% |
| | | Metasediments | | 80.0% | 28.0% | 0.0% |
| | | Ophiolite | | 70.0% | 19.0% | 0.0% |
| Greater Çakmaktepe | Main | Listwanite | S%<1 | 73.0% | 20.0% | 0.0% |
| | | | 1<=S%<2 | 58.0% | 20.0% | 0.0% |
| | | Dolomite | S%<1 | 73.0% | 20.0% | 0.0% |
| | | | 1<=S%<2 | 58.0% | 20.0% | 0.0% |
| | | Jasperoid | S%<1 | 50.0% | 20.0% | 0.0% |
| | | | 1<=S%<2 | 40.0% | 20.0% | 0.0% |
| | | All other lith. | S%<1 | 73.0% | 20.0% | 0.0% |
| | | | 1<=S%<2 | 58.0% | 20.0% | 0.0% |
| | East | Listwanite | S%<1 | 55.0% | 15.0% | 0.0% |
| | | | 1<=S%<2 | 45.0% | 15.0% | 0.0% |
| | | Dolomite | S%<1 | 55.0% | 15.0% | 0.0% |
| | | | 1<=S%<2 | 45.0% | 15.0% | 0.0% |
| | | Jasperoid | S%<1 | 50.0% | 15.0% | 0.0% |
| | | | 1<=S%<2 | 40.0% | 15.0% | 0.0% |
| | | All other lith. | S%<1 | 55.0% | 15.0% | 0.0% |
| | | | 1<=S%<2 | 45.0% | 15.0% | 0.0% |

Table 13-6 details the operating costs for oxide material.

**Table 13-6: Oxide Operating Costs**

| Parameter | Unit | Greater Çakmaktepe | Çöpler |
|---|---|---|---|
| Mining Costs | $/t mined | 1.89 | 1.59 |
| Rehandle Cost | $/t | 0.32 | 0.64 |
| Processing – Fixed | $/t | 3.05 | 3.05 |
| Processing – Variable | $/t | 8.94 | 8.94 |
| Royalty / Export Duties & Credits | $/t | $0.14 | $0.14 |
| Sustaining Capital | $/t | $2.97 | $2.97 |

Table 13-7 details the recovery for the Grind Leach plant.

**Table 13-7: Grind Leach Recovery**

| Mine Area | Lithology | S% | Recovery |
|---|---|---|---|
| Çöpler[1] | Limestone | S%<2 | 75.6% |
| | Metasediments | | 73.8% |
| | Gossan | | 78.2% |
| | Diorite | | 78.2% |
| | Manganese Diorite | | 78.2% |
| Greater Çakmaktepe | Listwanite | S%<2 | 90.0% |
| | Dolomite | | 83.0% |
| | Jasperoid | | 60.0% |
| | All other lithology | S%<1 | 68.0% |
| | | 1<=S%<2 | 53.0% |

Notes:

1. Based on historical metallurgical test work, the Çöpler oxide ores will have a higher recovery in a grind-leach circuit and will also have a tighter, less sulfur sensitive, recovery curve.

#### 13.2.1.2 Sulfide Plant Parameters

The following sections outline the processing parameters for the sulfide plant. Average life-of-mine (LOM) sulfide gold recoveries range from 88% to 91%.

**Throughput**

Total Plant Throughput = Direct POX Feed + Float Plant Feed

POX Plant Throughput = Direct POX Feed + Float Plant Concentrate

Table 13-8 details the maximum plant throughputs for each part of the plant. Plant throughput is defined as follows:

*Total Plant Throughput = Direct POX Feed + Float Plant Feed*

*POX Plant Throughput = Direct POX Feed + Float Plant Concentrate*

The front-end limit of 400 tph means when the flotation plant is running at full capacity, i.e., 150 tph, the direct feed to the pressure oxidation (POX) circuit will be limited to 250 tph.

**Table 13-8: Plant Throughput Limits**

| Parameter | Unit | Maximum Throughput |
|---|---|---|
| Float Plant | tph | 150 |
| POX Plant | tph | 280 |
| Total | tph | 400 |

The POX circuit throughput is also limited by the sulfide sulfur (SS) in the feed to the autoclave, which must be less than 13.75 tonne per hour (tph). If the SS content is too high, then the POX circuit throughput will need to be reduced until the rate is less than 13.75 tph of sulfide sulfur (SS).

**Recovery – Pressure Oxidation (POX) Gold**

Recoveries for material that has been subjected to POX will range from 88% to 91%.

**Recovery – Float Plant**

Average recovery from the flotation plant is listed below:

Float Concentrate Gold Recovery = 55%.

Float Tails Gold Recovery = 43%.

Float Concentrate SS Recovery = 75%.

#### 13.2.1.3 Operating Costs

Table 13-9 details the operating costs by location.

**Table 13-9: Sulfide Operating Costs**

| Parameter | Unit | Amount |
|---|---|---|
| Rehandle Cost | $/t | 0.90 |
| Processing – Fixed | $/t | 8.32 |
| Processing – Variable | $/t | 19.10 |
| Processing – Variable (SS) | $/t SS | 2.68 |
| G&A (Process and Site) | $/t | 6.60 |

#### 13.2.1.4 Metal Prices and Royalty Inputs

Cut-off grades were determined using a gold price of US$1,450/oz. There are no credits for silver or copper in the cut-off grade calculations. Table 13-10 details revenue and royalty inputs for the gold cut-off grades.

**Table 13-10: Au Cut-off Grade Revenue and Royalty Inputs**

| Parameter | Unit | Au Cut-off Assumption |
|---|---|---|
| **Payment and Deductions** | | |

| Parameter | Unit | Au Cut-off Assumption |
|---|---|---|
| Gold | $/oz | 1,450 |
| Payable | % | 100 |
| **Treatment and Refining** | | |
| Selling | $/oz | 8.54 |
| **Royalties** | | |
| Çöpler | % | 2 |
| Çakmaktepe | % | 4 |

### 13.2.2 Ore Cut-Off Grades

Internal cut-off grades calculated for each of the material types based on the economic inputs and assumptions are shown in Table 13-10. Internal cut-off grades have been used to calculate process quantities within the Mineral Reserve pits.

The addition of the flotation circuit to the sulfide plant required new grade control protocols and associated stockpile strategies to be implemented to manage the required sulfide plant feed blend. It is likely that there will need to be ongoing modification of the stockpiling cut-off grades and procedures for both short-term and long-term blending as the mine progresses. Measures such as increasing the number of active mining areas, increasing the mining rate, and increasing the size or number of ROM stockpiles may be required.

**Table 13-11: Internal Au Cut-off Grades**

| Mining Area | Ore Type | Rock Type | Zone | COG (Au g/t) |
|---|---|---|---|---|
| Çöpler | Oxide | Limestone / Marble | Manganese | 0.47 |
| | | | Main | 0.53 |
| | | | Marble | 0.48 |
| | | Metasediment/ Hornfels | Manganese | 0.55 |
| | | | Main | |
| | | | Marble | |
| | | Gossan | Manganese | 0.51 |
| | | | Main | 0.51 |
| | | | Marble | 0.56 |
| | | Diorite | Manganese | 0.51 |
| | | | Main | 0.51 |
| | | | Marble | 0.59 |
| | | Mn Diorite | Manganese | 0.51 |
| | | | Main | 0.51 |
| | | | Marble | 0.59 |
| | Sulfide | All | All | 1.05 |
| Greater Çakmaktepe | Oxide | Limestone / Breccia | Central | 0.60 |
| | | Jasperoid | | 0.57 |
| | | Diorite | | 0.69 |

| Mining Area | Ore Type | Rock Type | Zone | COG (Au g/t) |
|---|---|---|---|---|
| | | Metasediment/ Hornfels | | 0.52 |
| | | Ophiolite | | 0.60 |
| Greater Çakmaktepe | Sulfide | All | All | 1.12 |

### 13.2.3 Pit Design

New pit designs for the Mineral Reserves were created in 2023 based on updated Mineral Resource models, metal prices, and costs.

The key aims of the optimised pit designs are:

- Minimize mining costs and maximize economic return by exposing the highest value ore while minimizing the amount of waste mining.
- Address operational requirements for loading, hauling, slope stability, and rockfall, as follows:
- Loading – the phases were designed with a minimum operational width of 15 m to 30 m between phases (depending on bench configuration) to allow efficient mining for the equipment scale.
- Hauling – generally, two exit haul roads per phase were included: the west bound exit to the crusher, low-grade stockpile, and west dump; and the east bound exit to the potentially acid generating (PAG) and non-acid generating (NAG) dumps. Haul roads are generally 15-m wide at a 10% gradient. Single lane haulage traffic is allowed in the lower benches of each pit and is set at 10-m wide. Figure 13-10 presents the ultimate pit designs and the main haul road network.

A summary of key mine design inputs and factors is presented in Table 13-12. Pit designs for the Çöpler pit were updated in 2023. Çakmaktepe pit designs were prepared in 2021 and updated in 2023. The Çöpler and Greater Çakmaktepe ultimate pit designs, at the end of 2036, are shown in Figure 12-1 and Figure 12-4, respectively. Following completion of in-pit mining, the sulfide plant will be fed from stockpiles until 2039.

**Table 13-12: Key Mine Design Factors**

| Item | Units | Value Used |
|---|---|---|
| Gold Price | US$/oz | 1,450 |
| Silver Price | US$/oz | 18.50 |
| Copper Price | US$/lb | 3.30 |
| Off-site Costs, Copper | US$/lb | 0.413 |
| Off-site Costs, Gold | US$/oz | 6.61 (oxide) /6.87 (sulfide) |
| Copper Payable | % | 96.5 |
| Gold Payable | % | 94.0 |

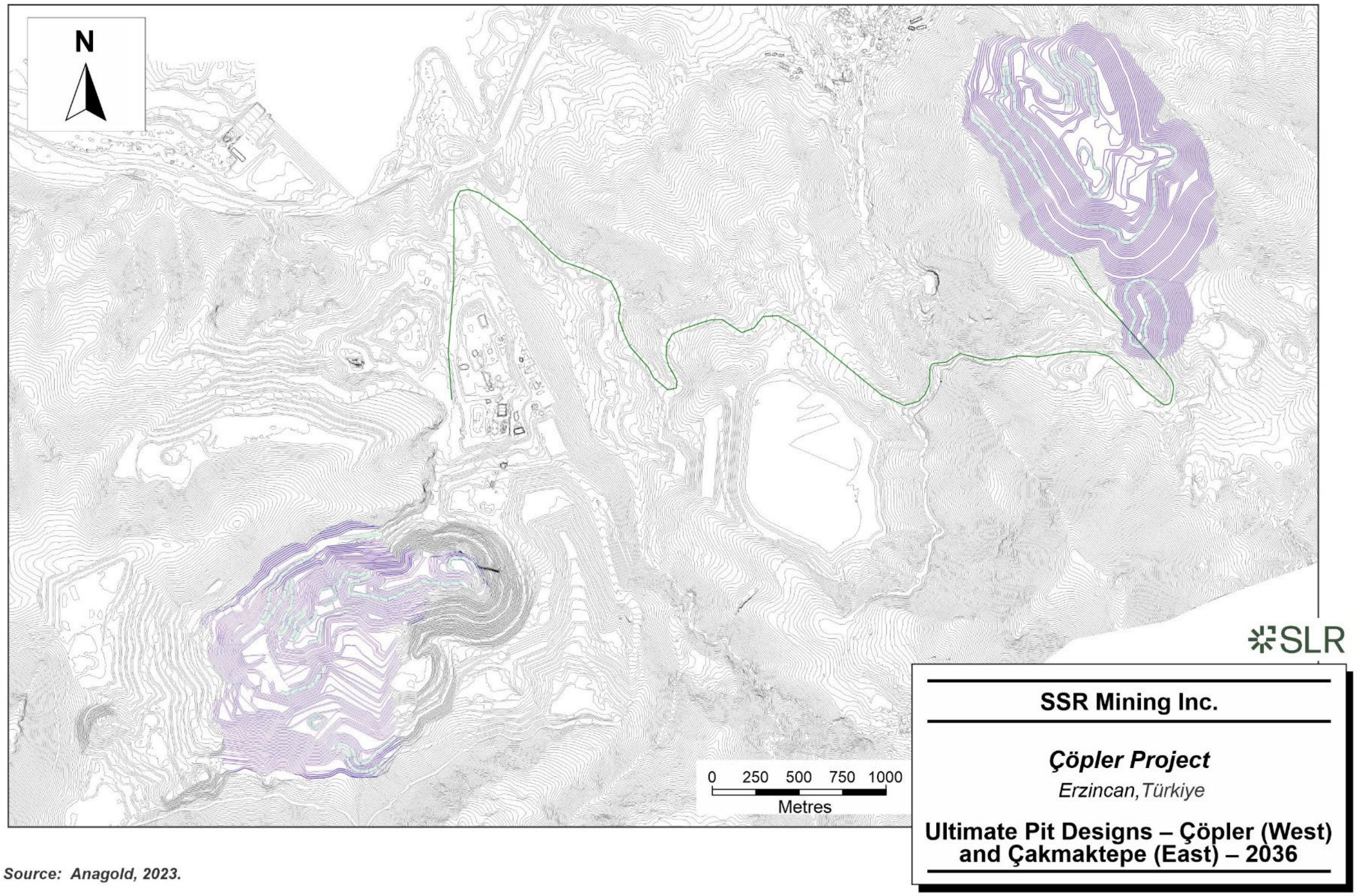
| Item | Units | Value Used |
|---|---|---|
| Mining Cost | US$/t - mined | 2.06-2.79 |
| Processing + G&A Cost | US$/t - milled Sulfide | 44.37 |
| Processing + G&A Cost | US$/t - milled Oxide | 19.26 |
| Processing + G&A Cost | US$/t - Heap Leach | 18.34 |
| Gold Recovery Range | % | 40-91 |
| Mining Loss | % | 0 |
| Bench Height | m | 10 |
| Mining Height | m | 5 |
| Minimum Mining Width | m | 15 |
| Berm Spacing | m | 6 - 9 |
| Ramp Width | m | 15 |
| Typical Road Grade | % | 10 |
| Geotechnical Berms | m | 100 |
| Number of Pit Phases | No. | 17 |
| Mine Life | years | 17 |
| Waste Rock Dump Lift Height | m | 15 |
| Final Waste Rock Dump Slope | Horizontal Distance:Vertical Distance (m:m) | 2.5H:1V |
| Natural Angle of Repose | Degree | 37° |
| Cut-off Value NSR POX | US$/t | 45.59 |
| Cut-off Value NSR Heap Leach | US$/t | 21.77 |
| Cut-off Value NSR Grind Leach | US$/t | 21.32 |
| Powder Factor (explosive to rock) | kg/t | 0.80 |
| Mining Schedule | hr/day | 24 |
| Mining Schedule | day/yr | 365 |
| Average Yearly Mined Required (yr 1 to yr 13 | Mtpa | 43.7 |
| Average Daily Mined Required (yr 1 to yr 13 | ktpd | 71(Çöpler)<br>100(Greater Çakmaktepe) |
| Bank Bulk Density | t/bcm[1] | 02.59 (waste) to 2.81 (sulfide) |
| Swell Percent | % | 22% |
| Bucket Fill Factor | % | 95 |
| Effective Loader Productivity | tph | 440 |
| Effective Excavator Productivity | tph | 627 |

| Item | Units | Value Used |
|---|---|---|
| Effective Drill Penetration Rate | m/hr | 47 |
| Blasthole Diameter | mm | 102 - 115 |
| Subdrill Length | m | 1.6 |
| Stemming Length | m | 3.6 |
| | | |
| Milling Rate | tpd | 7,397 |
| LOM Average of Annual Gold Produced | koz/yr | 280 |
| LOM Average Gold Recovery | % | 85.1 |

Notes:

1. Bank cubic metre

**Figure 13-10: Ultimate Pit Designs – Çöpler (West) and Greater Çakmaktepe (East) – 2036**




*Source: Anagold, 2023.*

### 13.2.4 Waste Rock Dump and Stockpile Design

The mine plan allows for the use of five Waste Rock Dumps (WRDs) to store mined waste rock and sulfide ore that is extracted during mining operations. These five WRDs are Lower Çöpler East, Lower Çöpler West, Upper Çöpler, West, and Marble Backfill WRDs. There are eight waste rock dump locations for the Greater Çakmaktepe area, as listed in Table 13-13. Current operations do not use the Lower Çöpler West and Marble Backfill WRDs. The Lower Çöpler West and Upper Çöpler WRDs will primarily be used as sulfide ore stockpile areas, with the Upper Çöpler WRD being mined out to allow for future pushback extension of the Marble pit towards the north and allow for leach pad extensions to the west. Figure 13-11 shows the site layout.

Table 13-13 summarizes the life of mine WRD capacities.

**Table 13-13: Waste Rock Dump (WRD) Capacities**

| Waste Rock Dump Name – Material Type | Volume ($Mm^3$) | Tonnage (Mt) | Surface Area Impacted (ha) |
|---|---|---|---|
| Lower Çöpler East - Waste | 14.9 | 26.8 | 51.5 |
| Lower Çöpler West - Waste | 94.6 | 170.3 | 206.5 |
| Lower Çöpler West – Sulfide Ore | 12.4 | 22.3 | 18.3 |
| Upper Çöpler – Sulfide Ore | 7.6 | 13.6 | 33.3 |
| West - Waste | 34.4 | 61.9 | 108.9 |
| Tailings Storage Facility | | 69.8 | |
| Koyun | 19.3 | 38.4 | 60.5 |
| Çakmaktepe Main Backfill | 1.9 | 3.7 | 8.0 |
| Çakmaktepe East Backfill | 1.0 | 2.0 | 4.9 |
| North Dump | 5.8 | 11.6 | 28.4 |
| Çakmaktepe Top | 5.9 | 11.8 | 28.8 |
| Çakmaktepe Early | 3.9 | 7.9 | 16.8 |
| Çakmaktepe South | 79.7 | 158.6 | 114.5 |
| Sabırlı Valley | 50.2 | 99.9 | 102.5 |
| Greater Çakmaktepe Backfill | 14.8 | 29.4 | 27.6 |
| **Totals** | **346.4** | **728.0** | **810.5** |

Source: SSR 2023

An estimated 69.8 Mt of waste rock will be consumed in the construction of the tailings storage facility, haul road, and tailings pipeline corridor. Total constructed waste rock storage capacity is 346.4.0 $Mm^3$ (728.0 Mt). The total surface area impacted by all WRDs and stockpiles is 810.5 ha. When possible and economically preferable, waste rock will be backfilled within mined out areas of the pits as they become available.

#### 13.2.4.1 Waste Rock Dump (WRD) Geotechnical Design

The WRDs will generally consist of 15 m tall lifts deposited at the waste material's angle of repose of approximately 1.33H:1V. The typical bench width will be 17 m, and 15 m wide haul roads will be used to construct the WRDs. The WRDs will have overall slopes ranging from 2.5H:1V to 2.6H:1V.

In February 2014, Golder completed an evaluation of the geotechnical stability of the four WRD designs (Golder, 2014a), later updated in May 2015 (Golder, 2015b) to account for the updated material properties developed by Golder during the pit slope optimisation study and the updated WRD designs and layouts developed by Anagold. Six of the most critical cross-sections were evaluated to determine the minimum Factor of Safety (FOS) for the proposed Çöpler WRDs. The sections were aligned to pass through the highest part of the waste piles, the steepest waste pile slopes, and the steepest foundation grades. The Çakmaktepe WRDs have yet to be evaluated.

In addition to static stability analyses, pseudo-static stability analyses were performed to account for seismic loading conditions for the Çöpler WRDs. The pseudo-static analyses were conducted based on the procedure proposed by Hynes-Griffin and Franklin (1984) in which a horizontal acceleration equal to 50% of the peak ground acceleration at bedrock is applied to the model. The design criteria peak ground acceleration is 0.30 g for the magnitude 7.0 operating basis earthquake (OBE). A horizontal pseudo-static acceleration of 0.15 g was applied to the WRD sections in the seismic stability analyses.

The results of the Çöpler stability analysis are summarized in Table 13-14.

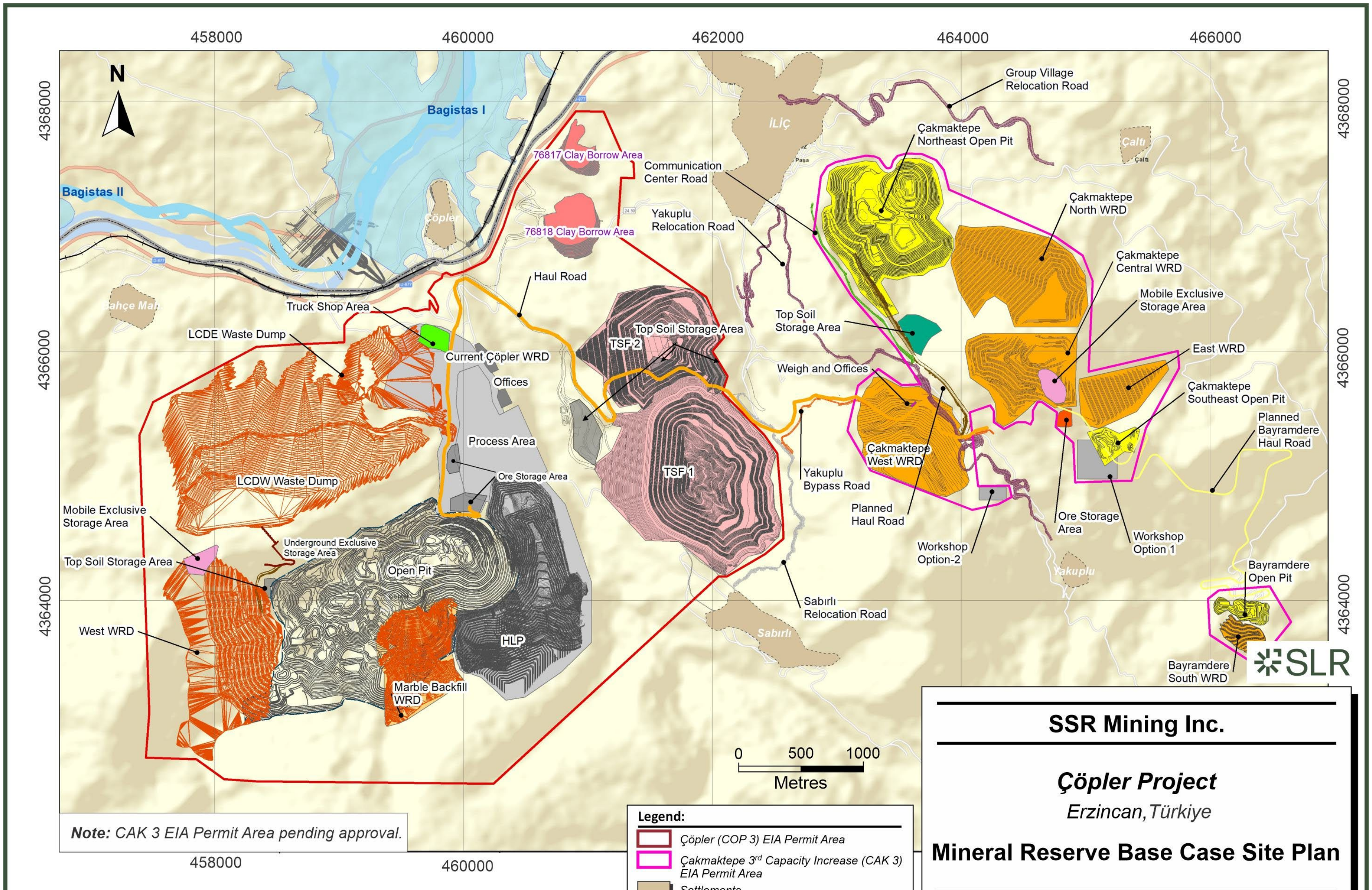
WRDs should be as stable or even more stable at the Greater Çakmaktepe as compared to the Çöpler WRDs. LOM waste rock dumps at the Greater Çakmaktepe site have been designed by SSR based on the same geometrical criteria as was applied to the design of the Çöpler site waste rock dumps:

- 15-m tall lifts deposited
- Waste material’s angle of repose at a slope of approximately 1.33H:1V
- Typical catch berm width of 17-m
- 15-m wide haul roads
- Overall slopes ranging from 2.5H:1V to 2.6H:1V.

A design review and limit equilibrium slope stability analysis for these facilities has been awarded to WSP, and it is expected to be completed by the first quarter (Q1) of 2024. Geotechnical characterization of the rock mass at the Greater Çakmaktepe pits that will ultimately make up the waste rock piles show a predominance of geotechnical domains with fair to good rock quality, generally exceeding average RMR values observed in the geotechnical domains presented at Çöpler pits. Intact rock strength, measured in Uniaxial Compressive Strength (UCS) tests, also indicate higher resistance parameters, on average, for the Greater Çakmaktepe intact rock versus Çöpler intact rock. These would indicate that, under similar blasting conditions, shear strength values for the Greater Çakmaktepe waste should be in average similar to, or better than Çöpler waste.

SSR preliminary estimations indicate that all factors of safety at critical sections should achieve or exceed the minimum acceptable factor of safety (FOS) for waste rock storage facilities of 1.4 for static loads and 1.1 under pseudo-static conditions. If the geotechnical review by WSP in Q1 2024 indicates critical sections with factors of safety lower than what was previously assessed, the geometric designs will be revised to achieve the required FOS. In that case, WSP will provide recommendations to revise the designs.

**Figure 13-11: Mineral Reserve Base Case Site Plan**




**Source: Anagold, 2023.**

**Table 13-14: Waste Rock Dump (WRD) Design Factor of Safety (FOS)**

| WRD | Section | Loading Condition | Failure Surface Location | Minimum Computed FOS |
|---|---|---|---|---|
| Lower Çöpler East | A | Static | Shallow | 1.4 |
| | | Pseudo-static | | 1.1 |
| | | Static | Deep | 1.9 |
| | | Pseudo-static | | 1.3 |
| | B | Static | Shallow | 1.7 |
| | | Pseudo-static | | 1.3 |
| | | Static | Deep | 1.9 |
| | | Pseudo-static | | 1.3 |
| Lower Çöpler West | C | Static | Shallow | 1.7 |
| | | Pseudo-static | | 1.3 |
| | | Static | Deep | 1.9 |
| | | Pseudo-static | | 1.3 |
| | D | Static | Shallow | 1.6 |
| | | Pseudo-static | | 1.2 |
| | | Static | Deep | 1.8 |
| | | Pseudo-static | | 1.3 |
| West Çöpler | E | Static | Shallow | 1.6 |
| | | Pseudo-static | | 1.1 |
| | | Static | Deep | 1.9 |
| | | Pseudo-static | | 1.3 |
| | F | Static | Shallow | 1.6 |
| | | Pseudo-static | | 1.2 |
| | | Static | Deep | 2.0 |
| | | Pseudo-static | | 1.4 |

Source: Golder 2015

The Lower Çöpler East WRD facility will be constructed over a portion of the existing Northeast WRD. Foundation conditions underlying the existing northeast WRD and the proposed Lower Çöpler East facility consist of Munzur Limestone. Minimum computed factors of safety for the Lower Çöpler East facility are 1.4 and 1.1 for static and seismic loading conditions, respectively.

The Lower Çöpler West WRD facility will be founded on Munzur limestone. Limit equilibrium stability analyses indicate minimum computed FOS of 1.6 and FOS of 1.2 for static and seismic loading conditions, respectively (Golder, 2015b).

The West WRD is to be constructed adjacent to the Çöpler open pit and will be founded on Munzur Formation limestone and metasediment with sporadic diorite intrusions. Minimum computed FOS are 1.9 and 1.3 for static and seismic loading conditions, respectively.

#### 13.2.4.2 Waste Rock Geochemical Review

Anagold mines and monitors the waste rock types to determine PAG and NAG material, as defined in the Çöpler waste rock management plan, to ensure proper disposal of PAG material as it is encountered during the grade control process. SRK (2015) established the criteria for identifying PAG and NAG material, as shown in Table 13-15.

**Table 13-15: Waste Rock Geochemical Classification**

| Lithology | Sulfide Sulfur (SS%) Cut-off Grade | Waste Rock Groups | Descriptions |
|---|---|---|---|
| Diorite | 0.8 | PAG/High-sulfide diorite | Diorite with SS ≥0.8% |
| | | NAG/Low-sulfide diorite | Diorite SS <0.8% |
| Metasediment | 0.8 | PAG/High-sulfide MTS | Metasediment with SS ≥0.8% |
| | | NAG/Low-sulfide MTS | Metasediment with SS <0.8% |
| Limestone / Marble | 2.0 | High-sulfide LMS | Limestone with SS ≥2%. |
| | | Low-sulfide LMS | Limestone with SS <2%. |
| Gossan | 0.0 | Gossan – NAG | All Gossan unit |
| MnOx | 0.0 | MnOx – NAG | All MnOx unit |
| Massive Pyrite | – | Massive Pyrite – PAG | All Massive Pyrite unit |

SRK (2015) completed a geochemical impact assessment for the Çöpler WRD facilities. The key findings from the SRK report suggests that all WRD facilities at Çöpler, except one, have a neutralising potential (NP) to acid potential (AP) ratio of greater than 20:1; indicating that the Çöpler material has excellent neutralisation capacity for ARD. The one exception to this was the West WRD, which was estimated to have a NP:AP ratio 1:3. It was recommended that Anagold optimise the WRD construction sequencing in order to take advantage of the neutralisation potential of the other WRD facilities by blending higher quantities of NAG material into the West WRD. Changes to Çöpler ultimate pit, phasing, and addition of a limestone phase has resolved the net neutralizing potential (NNP) issues going forward.

A series of waste rock samples representing the LOM distribution were tested by SRK to measure the immediate reactivity, future acid potential, and long-term acid potential of the waste rock.

Regarding immediate reactivity, a paste pH test was conducted that resulted in all samples generating near-neutral and slightly alkaline paste pH.

Regarding future acid potential, a large majority of all samples taken reside above the NP:AP 1:1 boundary. The remainder of the samples that fall below the 1:1 boundary is extremely close to the 1:1 boundary, and should only pose a minimal risk to ARD generation. In terms of long-term acid potential, for sulfide zone diorite and metasediment, the NP:AP ratio is observed to be mostly in uncertain or PAG zones.

### 13.2.5 Ore Stockpiles, Rehandle and Blending Discussion

Oxide and sulfide ore are processed through separate crushing circuits.

Oxide ore that is unable to be directly dumped into the crushing circuit is placed on the appropriate stockpile for processing later. Oxide ore is typically segregated by clay content and gold grade. The processing engineer determines the desired blend to maintain a consistent feed grade and rock type daily blend going to the heap leach pad.

All sulfide ore is currently placed in one of three primary stockpiles: High-grade, medium-grade, or low-grade. Sulfide ore is directed to the primary stockpiles or to the crusher pad. There is no allowance for material to be directly dumped into the sulfide crushing circuit. All material is rehandled by a loader from the crushing pad into the crushing circuit.

The following gold grade bin assumptions were used for the Mineral Reserves:

- High-grade Gold >4.0 g/t Au
- Medium-grade Gold 2.5 g/t Au to 4.0 g/t Au
- Low-grade Gold 1.05 g/t Au to 2.5 g/t Au

Maintaining proper sulfide sulfur (SS) feed percentages for the POX plant is a challenge. The flotation plant was designed to upgrade (increase) the sulfide sulfur POX circuit feed. For the POX autoclave to operate autogenously, SS feed must be above 10.20 tph and less than 13.75 tph to achieve target oxidation with current oxygen availability. If the SS feed rate is too high, then the feed to the plant will need to be reduced until the POX SS feed rate is less than 13.75 tph limit. Operating performance of the autoclaves to date indicates that higher than design oxygen utilisation efficiencies are possible, which may allow a higher throughput than the 13.75 tph sulfide sulfur limit. This oxygen utilisation efficiency along with increased oxygen availability is upside to the Mineral Reserve Base Case throughput.

Plant feed will therefore need to be blended to achieve the target SS feed range of 10.20 tph to 13.75 tph into POX circuit.

To blend on SS feed, new grade control protocols have been developed and implemented on site. Site grade control is currently being done on gold and sulfide sulfur grades to aid in achieving the ideal range for SS feed into the plant and assist with the development of a new stockpile strategy.

The following SS grade bin assumptions were used for the Mineral Reserves inside each Au grade bin:

- High-grade SS >4.15% SS
- Medium-grade SS 3.494% to 4.15% SS
- Low-grade SS <3.494% SS

The effectiveness of these new grade bins in controlling the SS blend will need to be monitored on an ongoing basis as the plant matures and adjustments to the grade bin parameters (and size of stockpiles) may be required. This work will need to continue as the mine progresses and new mining areas are included.

The smallest parcel size for plant feed considered for the scheduling of the Mineral Reserves was one month. The following items are key elements in optimizing the blending and throughput of the process plant.

**Mine Working Areas**

Given the relatively small size of the equipment in the mining fleet, the number of active mining working areas can be increased, increasing mining selectivity, and therefore improving the blending capacity from the mine.

**Stockpile Size**

The size of stockpiles could be adjusted to reduce feed impacts from short-term fluctuations coming from the mine.

**Mining Rate**

The site has the ability to ramp up the mining rates to reach sufficient material (of the required type) to maintain the required blend for the process plant(s), by using the contractor's ability to increase their fleet size.

**Variation of Grade Bins**

Grade bin designations can be adjusted as necessary to achieve better control of the grade bands.

### 13.2.6 Grade Control

All grade control operations are managed by Anagold technical staff. Anagold maintains an on-site laboratory with the capacity to assay an average of 600 blasthole samples per day.

Prior to sampling, blastholes are identified as 'potential ore' (oxide or sulfide) or 'potential waste' (oxide or sulfide) based on grade control data from the bench above and the mining model prediction. A 10-m wide outside buffer is then applied to the potential ore areas to ensure appropriate sampling density. All potential ore blastholes are sampled for gold fire assay (AuFA). Approximately 50% of potential ore blastholes are sampled for cyanide soluble gold assay (AuCN), total carbon, and total sulfur. Additionally, all potential sulfide ore blastholes are sampled for sulfide sulfur (SS). Approximately 25% of potential waste blastholes are sampled for gold fire assay (AuFA), cyanide soluble gold (AuCN), total carbon, and total sulfur.

Sampling of the blasthole drill cuttings is performed according to the defined procedure by using a sample scoop to extract a complete cross-section of the cuttings pile. The sampled cuttings are deposited into a canvas bag, which is labelled with a drillhole identifier (ID) and with a laboratory information management system (LIMS) bar code tag inserted into the bag of cuttings. Sample bags are then sealed and sent to the on-site laboratory for analysis. The sample scoop is cleaned prior to collecting each sample to avoid contamination between samples.

Assay results are uploaded to the grade control database with reference to each specific drillhole ID. The assay results are then estimated into a cell model with parent cell sizes of 3 m x 3 m x 5 m using ordinary kriging (OK) to estimate ore grade and type. The grade control geologist will then digitize mining shapes with a minimum width of 3 m (to match the SMU) and minimum tonnage of 500 tonnes. These mining shapes are then sent to the survey group for layout in the mine using colour coded flagging under the supervision of the grade control geologist.

To effectively blend the sulfide feed on SS content, new grade control protocols were developed and implemented on site in 2021. They are undergoing further review to optimize and improve production.

## 13.3 Mine Equipment

A summary of the mine contractor's mobile equipment list is provided in Table 13-16. The mine contractor is responsible for the manning and maintenance of the equipment.

**Table 13-16: Çöpler Mine Contractor's Mobile Equipment List**

| Equipment Category | Typical Brand Name/ Model | Typical Size | Number of Units |
|---|---|---|---|
| Explosive Truck | MERCEDES-BENES | | 2 |
| Drill Rig | AC FLEXIROC T35-11LF, EPIROC T40 | 168 kW, 64-115 mm | 6 |
| Loader | CAT 980 L, CAT 950 | 292 kW - 10 m3 | 19 |
| Excavator | CAT 330 GC, CAT 374 | 361 kW - 3.3 m3 | 30 |
| Haul Truck | MB AROCS 4145 K | 405 Hp, 40 t | 140 |
| Mine Truck | VOLVO A40G | 350 kW - 39 t | 6 |
| Water Truck | | | 8 |
| Grader | CAT 140 M | 139 kW - 4 m | 7 |
| Track Dozer | CAT D8T, CAT D7E | 233 kW - 39.4 t - 4 m | 8 |
| Forklift | MANITOU, CAT | | 4 |
| Hydraulic Breaker | ATLAS COPCO, EPIROC, KOMAC | 22t to 38 t - 170 bar | 8 |
| Compactor | CAT CS78B | 130 kW - 18.7 t - 2 m | 6 |
| Field Mechanical Services | MERCEDES-BENES, MITSUBISHI | | 4 |
| Tower | MB ACTROS 1845 LS | 330 kW | 7 |
| Fuel Truck | MB AXOR 1823 | 170kW | 5 |
| Fuel Truck | Tanker | 32 m3 | 4 |
| Breaker (Mobile Crusher) | METSO LT1213 KIRICI | 310 kW - 1.32 x 0.9 m | 3 |
| Screen | METSO ST 4.8, TEREX POWERSCREEN 2100 | | 2 |
| Light Tower | AC QLT M10, WACKER NEUSON LTN 6L | 9 kW - 4000 W | 29 |
| Light Vehicle | ISUZU, FORD RANGER | | 35 |
| Bus | ISUZU, FORD 440e | | 3 |
| Mini Bus | FORD | | 3 |

## 13.4 Personnel

Personnel associated with the mining operations is tabulated in Table 13-17.

**Table 13-17: Çöpler Project – Mining Personnel Summary**

| Disciplines | Çöpler | | Çakmaktepe | | |
|---|---|---|---|---|---|
| | Anagold | Çiftay (Contractor) | Anagold | Çiftay (Contractor) | Totals |
| Engineering/Admin. Support | 0 | 9 | 0 | 3 | **12** |
| Mine Operations | 49 | 443 | 0 | 200 | **692** |
| Mine Maintenance | 0 | 120 | 0 | 0 | **120** |
| **Totals** | **49** | **572** | **0** | **203** | **824** |

## 13.5 Mine Production Schedule

### 13.5.1 Life of Mine Plan

The Mineral Reserve Case has examined production from three open pit mining locations at the Project: the Çöpler deposit and the Greater Çakmaktepe deposit area which includes the Çakmaktepe pit and the Çakmaktepe Ext. The Çakmaktepe pit, which contains only oxide ore, is almost exhausted.

Anagold has prepared the open pit production schedules. Figure 13-9 shows total mine production and the tonnages and grades for each ore type on a 100% project basis.

**Figure 13-12: Çöpler LOM Mining Production**


Source: SSR, 2023

### 13.5.2 Scheduling Assumptions

The following scheduling criteria were used to balance mine, mill, and stockpile quantities:

**Heap leach:**

- Oxide ore is not limited by processing capacity.
- Oxide ore that is unable to be directly dumped into the oxide crushing circuit is placed in the appropriate stockpile for future processing.
- Oxide ore is segregated dependent on clay content and average grade.

**Sulfide plant:**

- All sulfide ore is segregated into one of three primary gold stockpiles: high-grade, medium-grade, and low-grade, which are each further split by sulfide sulfur (SS) grade.
  - High-Grade: Au Grade >= 4.0 g/t
  - Medium Grade: 4.0 g/t>Au Grade >= 2.5 g/t
  - Low Grade: Au Grade=<2.50 g/t
- Existing stockpiles are mined at the average grade of each stockpile.
- All material is re-handled by a loader from the crushing pad into the crushing circuit (no direct tipping).
- The flotation circuit was commissioned in December 2021 with circuit ramp up and a transition to stable operations achieved in 2022.
- Plant throughput capacity is calculated from the available mill hours and varies by material type.

**Grind Leach CIL:**

- Grind leach CIL ore begins processing in 2027.
- First year production of grind leach CIL ore is reduced by 15% to account for plant ramping up to full capacity.
- Plant throughput from 2028-LOM is 2 Mt per annum.
- Oxide CIL ore that cannot be processed due to limited capacity is stockpiled and processed at a later date.

The production schedules are based on Proven and Probable Mineral Reserves only. No Inferred Mineral Resources were used in the production schedules. The open pit schedules were based on mining inventories by bench reported within the pit stages. Low-grade stockpiling was used to balance the mining rate where necessary.

### 13.5.3 Production Schedule

The input assumptions for Mineral Reserve Case were adjusted based on current mine and production performances including throughput rates and recoveries.

All throughput rates are reported inclusive of all availability and utilization factors on a calendar year. Total mine production is limited to an annual average of 22.5 Mtpa (approximately 62 ktpd). The throughput assumptions are supported by current mining rates including productivity allowances for winter and summer conditions. Mining rates are limited based on vertical advance and bench configuration to ensure that the schedule is achievable. Production is not limited by the mining rate and increases in rate would be possible to bring forward oxide ore or increase stockpiling to bring higher grade feed to the sulfide plant.

Mining is completed in 2036, after which, the sulfide plant is fed from stockpiles until 2039.

The objective of the production schedule is to maximise the early cash flow by delaying costs and bringing revenue forward with ore feed to meet concentrator throughput capacity. Considerations for the LOM scheduling include:

- Ensuring continuous ore supply to the concentrator by delivering the highest value ore first and meeting physical mining and milling hours capacity constraints.
- Achieving excavator productivities and sinking rates to deliver ore at maximum utilisation of milling hours available at the concentrator.
- Maximizing annual utilization hours for the mine loading equipment.
- Maintaining a balance of ore throughput rates (material types) and mill cut-off grades that allows milling hours to be maximized.

The mine schedule incorporates strategic stockpiling considerations by optimising the number of excavators on the benches of early phases, increasing the opportunity to raise mill cut-off grades. This leads to stockpiling medium-grade and low-grade material and sending higher grade ore to the mill sooner. The open pit total movement is shown in Table 13-18 on a 100% Project basis.

## Table 13-18: Çöpler Mining Schedule (2023–2036)

| | Units | Totals | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Çöpler Heap Leach | kt | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Çakmaktepe Heap Leach | kt | 6,743 | 110 | 975 | 1,739 | 1,353 | 1,131 | 1,435 | - | - | - | - | - | - | - | - |
| Çöpler POX Plant | kt | 8,987 | 1 | 616 | 1,085 | 1,885 | 2,007 | 1,275 | 1,269 | 849 | - | - | - | - | - | - |
| Çakmaktepe POX Plant | kt | 8,208 | 4 | 83 | 336 | 315 | 727 | 1,075 | 1,329 | 239 | 886 | 82 | 1,949 | 1,182 | - | - |
| Çöpler Oxide Grind Leach | kt | 896 | - | - | - | - | 34 | 207 | 203 | 452 | - | - | - | - | - | - |
| Çakmaktepe Grind Leach | kt | 12,800 | - | - | - | - | 1,701 | 1,537 | 1,562 | 957 | 1,166 | 2,150 | 2,150 | 1,579 | - | - |
| Çöpler Stockpile | kt | 10,109 | 110 | 703 | 621 | 1,495 | 2,742 | 885 | 1,731 | 1,822 | - | - | - | - | - | - |
| Çakmaktepe Stockpile | kt | 6,617 | 0 | 18 | 16 | 220 | 177 | 379 | 140 | 53 | 91 | 278 | 3,579 | 1,665 | - | - |
| Çöpler Waste | kt | 157,437 | 2,480 | 20,343 | 22,823 | 25,708 | 25,078 | 18,838 | 22,133 | 12,684 | 2,058 | 2,069 | 2,074 | 1,147 | 1 | 1 |
| Çöpler Stock Waste | kt | 6,857 | 1,587 | 130 | 810 | 128 | - | 4,202 | - | - | - | - | - | - | - | - |
| Çakmaktepe Waste | kt | 355,365 | 1,328 | 8,292 | 10,050 | 20,151 | 40,718 | 40,158 | 41,428 | 43,210 | 42,317 | 42,070 | 34,948 | 30,694 | - | - |
| Çakmaktepe Stock Waste | kt | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Total Material Movement** | **kt** | **574,020** | **5,620** | **31,161** | **37,481** | **51,255** | **74,316** | **69,991** | **69,794** | **60,266** | **46,517** | **46,650** | **44,700** | **36,267** | **1** | **1** |
| | | | | | | | | | | | | | | | | |
| Total Ore | kt | 37,634 | 115 | 1,675 | 3,160 | 3,554 | 5,600 | 5,528 | 4,363 | 2,496 | 2,051 | 2,232 | 4,099 | 2,761 | - | - |
| Total Stockpile | kt | 16,727 | 111 | 722 | 637 | 1,715 | 2,920 | 1,264 | 1,871 | 1,875 | 91 | 278 | 3,579 | 1,665 | - | - |
| Total Waste | kt | 519,659 | 5,395 | 28,765 | 33,683 | 45,987 | 65,796 | 63,198 | 63,561 | 55,895 | 44,375 | 44,140 | 37,022 | 31,841 | 1 | 1 |
| **Total Material Movement** | **kt** | **574,020** | **5,620** | **31,161** | **37,481** | **51,255** | **74,316** | **69,991** | **69,794** | **60,266** | **46,517** | **46,650** | **44,700** | **36,267** | **1** | **1** |
| | | | | | | | | | | | | | | | | |
| Çöpler Heap Leach | g/t | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Çakmaktepe Heap Leach | g/t | 1.939 | 1.932 | 1.761 | 1.706 | 2.022 | 2.040 | 2.184 | - | - | - | - | - | - | - | - |
| Çöpler POX Plant | g/t | 2.339 | 2.316 | 2.910 | 2.121 | 2.324 | 2.533 | 2.254 | 1.988 | 2.430 | - | - | - | - | - | - |

| | Units | Totals | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Çakmaktepe POX Plant | g/t | 4.210 | 3.173 | 2.627 | 2.247 | 2.767 | 2.857 | 3.061 | 4.843 | 3.996 | 3.420 | 2.844 | 5.692 | 4.720 | - | - |
| Çöpler Grind Leach | g/t | 1.190 | - | - | - | - | 2.246 | 1.691 | 0.989 | 0.973 | - | - | - | - | - | - |
| Çakmaktepe Grind Leach | g/t | 2.489 | - | - | - | - | 2.438 | 2.567 | 2.544 | 2.266 | 2.015 | 2.021 | 3.098 | 2.710 | - | - |
| Çöpler Stockpile | g/t | 1.510 | 1.881 | 1.463 | 1.549 | 1.533 | 1.522 | 1.402 | 1.485 | 1.530 | - | - | - | - | - | - |
| Çakmaktepe Stockpile | g/t | 1.970 | 1.760 | 2.733 | 2.108 | 1.689 | 1.995 | 1.909 | 1.513 | 1.970 | 1.900 | 1.374 | 2.040 | 2.001 | - | - |
| **Average Grade** | **g/t** | **2.143** | **1.932** | **2.007** | **1.849** | **2.022** | **2.138** | **2.290** | **2.553** | **1.948** | **2.591** | **1.976** | **3.263** | **2.980** | **-** | **-** |
| | | | | | | | | | | | | | | | | |
| Çöpler Heap Leach | koz | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Çakmaktepe Heap Leach | koz | 420 | 7 | 55 | 95 | 88 | 74 | 101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Çöpler POX Plant | koz | 676 | 0 | 58 | 74 | 141 | 163 | 92 | 81 | 66 | 0 | 0 | 0 | 0 | 0 | 0 |
| Çakmaktepe POX Plant | koz | 1,111 | 0 | 7 | 24 | 28 | 67 | 106 | 207 | 31 | 97 | 7 | 357 | 179 | 0 | 0 |
| Çöpler Grind Leach | koz | 34 | 0 | 0 | 0 | 0 | 2 | 11 | 6 | 14 | 0 | 0 | 0 | 0 | 0 | 0 |
| Çakmaktepe Grind Leach | koz | 1,024 | 0 | 0 | 0 | 0 | 133 | 127 | 128 | 70 | 75 | 140 | 214 | 138 | 0 | 0 |
| Çöpler Stockpile | koz | 491 | 7 | 33 | 31 | 74 | 134 | 40 | 83 | 90 | 0 | 0 | 0 | 0 | 0 | 0 |
| Çakmaktepe Stockpile | koz | 419 | 0 | 2 | 1 | 12 | 11 | 23 | 7 | 3 | 6 | 12 | 235 | 107 | 0 | 0 |
| **Total Gold Ounces** | **koz** | **4,176** | **14** | **155** | **226** | **343** | **586** | **500** | **512** | **274** | **178** | **160** | **806** | **424** | **-** | **-** |

Notes:

1. Production schedule is shown at a 100% basis. SSR's portion is 80%.

### 13.5.4 Processing Schedule

The processing schedule was balanced to meet the maximum build rates for the oxide heap leach pads and the available mill hours for the sulfide plant.

Sulfide ore processing throughputs are limited dependent on ore tonnage, SS tonnage, and carbonate content (expressed as C). The sulfide plant crusher / grinding circuit is limited to 400 tph, while the limitations on SS tonnage exist due to (1) the consumption of oxygen by SS in the POX circuit and (2) carbonate content to maintain an operable acid balance through the acidulation and POX circuits. The process facilities are limited by the amount of oxygen that can be provided to the POX process. Based on current performance, high-SS is unlikely to be a problem, and any higher material would be blended down using low-SS material. The carbonate:SS ratio will potentially be an issue with declining SS grades in the final years of the mine. The main issue currently appears to be a lack of SS in the feed, forming the justification for the flotation circuit. The flotation circuit upgrades the SS content into the autoclave feed and rejects carbonate.

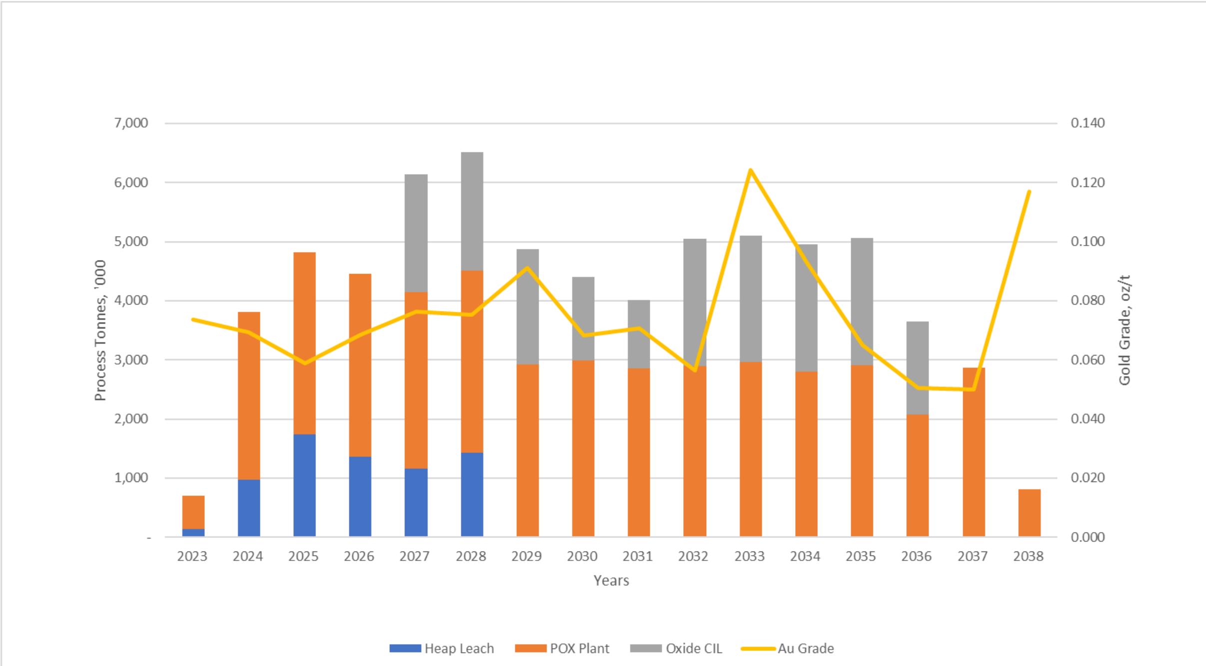
To target the highest value material, the sulfide processing schedule targets the highest value material, while also balancing the plant throughput rates and required range of sulfide sulfur into the autoclave.

The production is predominantly from sulfide ore. The oxide heap leach and sulfide plant processing schedules feed type, Au grade, and gold production are shown in Figure 13-13. Gold production and recovery is shown in Figure 13-14. The annual processing schedule is in Table 13-19. Schedules shown are on a 100% Project basis.

The production includes 6.8 Mt at 1.93 g/t Au oxide ore processed by heap leaching, 18.7 Mt at 2.26 g/t processed by direct cyanide leaching and CIP, and 41.7 Mt at 2.42 g/t Au processed in the sulfide plant. Total ore processed is 67.2 Mt at 2.32 g/t Au. Total contained gold processed is 5.0 Moz (SSR 80% share is 4.0 Moz).

Mining at the Çöpler pit is completed in 2030 and at Greater Çakmaktepe in 2034. Oxide heap leach stacking is completed in in 2028, while sulfide processing will continue from stockpiles until 2038. The processing schedule is for the period October 31, 2023, through 2038.

**Figure 13-13: Mineral Reserve Case Processing Schedule**

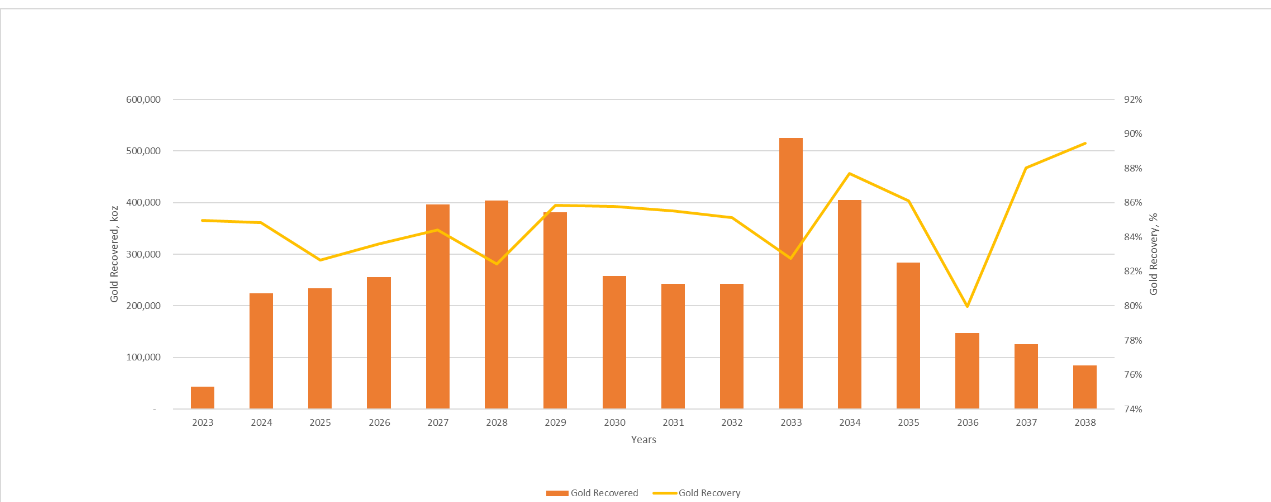



Source: SSR, 2023

Notes:

1. Processing schedule is shown at a 100% basis. SSR's portion is 80%. Oxide CIL process is also known as G-L.

**Figure 13-14: Mineral Reserve Case Gold Production and Recovery**




Source: SSR, 2023

Notes:

1. Gold production is shown at a 100% basis. SSR's portion is 80%.

## Table 13-19: Processing Production Schedule (2023–2038)

| Item | Process Description | Units | Total | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Tonnes | Heap Leach | kt | 6,811 | 144 | 975 | 1,740 | 1,361 | 1,157 | 1,435 | - | - | - | - | - | - | - | - | - | - |
| Process Tonnes | POX Plant | kt | 41,718 | 557 | 2,839 | 3,073 | 3,095 | 2,983 | 3,080 | 2,919 | 2,995 | 2,851 | 2,901 | 2,958 | 2,805 | 2,907 | 2,081 | 2,865 | 811 |
| Process Tonnes | Grind Leach | kt | 18,699 | - | - | - | - | 2,000 | 2,000 | 1,956 | 1,412 | 1,166 | 2,150 | 2,150 | 2,150 | 2,150 | 1,565 | - | - |
| **Process Tonnes** | **Process Feed Total** | **kt** | **67,229** | **700** | **3,814** | **4,813** | **4,455** | **6,140** | **6,514** | **4,875** | **4,408** | **4,016** | **5,051** | **5,108** | **4,955** | **5,057** | **3,646** | **2,865** | **811** |
| | | | | | | | | | | | | | | | | | | | |
| Contained Au | Heap Leach | koz | 424 | 9 | 55 | 95 | 88 | 75 | 101 | - | - | - | - | - | - | - | - | - | - |
| Contained Au | POX Plant | koz | 3,244 | 43 | 209 | 187 | 217 | 244 | 238 | 305 | 217 | 208 | 145 | 421 | 272 | 190 | 109 | 143 | 95 |
| Contained Au | Grind Leach | koz | 1,358 | - | - | - | - | 150 | 152 | 139 | 84 | 75 | 140 | 214 | 191 | 139 | 75 | - | - |
| **Contained Au** | **Process Feed Total** | **koz** | **5,025** | **52** | **264** | **283** | **305** | **469** | **490** | **444** | **301** | **284** | **285** | **635** | **463** | **330** | **184** | **143** | **95** |
| | | | | | | | | | | | | | | | | | | | |
| Recovered Au | Heap Leach | koz | 298 | 6 | 40 | 69 | 64 | 51 | 68 | - | - | - | - | - | - | - | - | - | - |
| Recovered Au | POX Plant | koz | 2,852 | 38 | 184 | 165 | 191 | 213 | 208 | 267 | 192 | 183 | 128 | 368 | 239 | 168 | 97 | 126 | 85 |
| Recovered Au | Grind Leach | koz | 1,104 | - | - | - | - | 131 | 128 | 114 | 66 | 60 | 114 | 157 | 166 | 115 | 50 | - | - |
| **Recovered Au** | **Process Feed Total** | **koz** | **4,254** | **44** | **224** | **234** | **255** | **396** | **404** | **381** | **258** | **243** | **243** | **525** | **406** | **284** | **147** | **126** | **85** |
| | | | | | | | | | | | | | | | | | | | |
| Contained Ag | Heap Leach | koz | 291 | 2 | 40 | 55 | 53 | 67 | 72 | - | - | - | - | - | - | - | - | - | - |
| Contained Ag | POX Plant | koz | 5,011 | 3 | 37 | 131 | 385 | 282 | 340 | 475 | 318 | 232 | 711 | 800 | 474 | 400 | 122 | 299 | 1 |
| Contained Ag | Grind Leach | koz | 2,418 | - | - | - | - | 89 | 206 | 177 | 134 | 143 | 274 | 421 | 403 | 325 | 246 | - | - |
| **Contained Ag** | **Process Feed Total** | **koz** | **7,720** | **6** | **76** | **187** | **438** | **438** | **618** | **652** | **452** | **375** | **986** | **1,221** | **877** | **725** | **368** | **299** | **1** |
| | | | | | | | | | | | | | | | | | | | |
| | Stockpile In[1] | kt | 36,690 | 1,698 | 852 | 1,447 | 1,843 | 2,920 | 5,466 | 1,871 | 1,875 | 91 | 278 | 3,579 | 1,665 | - | - | - | - |
| | Stockpile Out | kt | 36,690 | 585 | 3,587 | 2,157 | 1,843 | 541 | 986 | 3,810 | 2,815 | 1,965 | 2,819 | 1,009 | 2,194 | 5,057 | 3,646 | 2,865 | 811 |

Notes:

1. Total Stockpile In includes the opening balance of 13,106 kt.
2. Production schedule is shown at a 100% basis. SSR's portion is 80%.

# 14.0 Processing and Recovery Methods

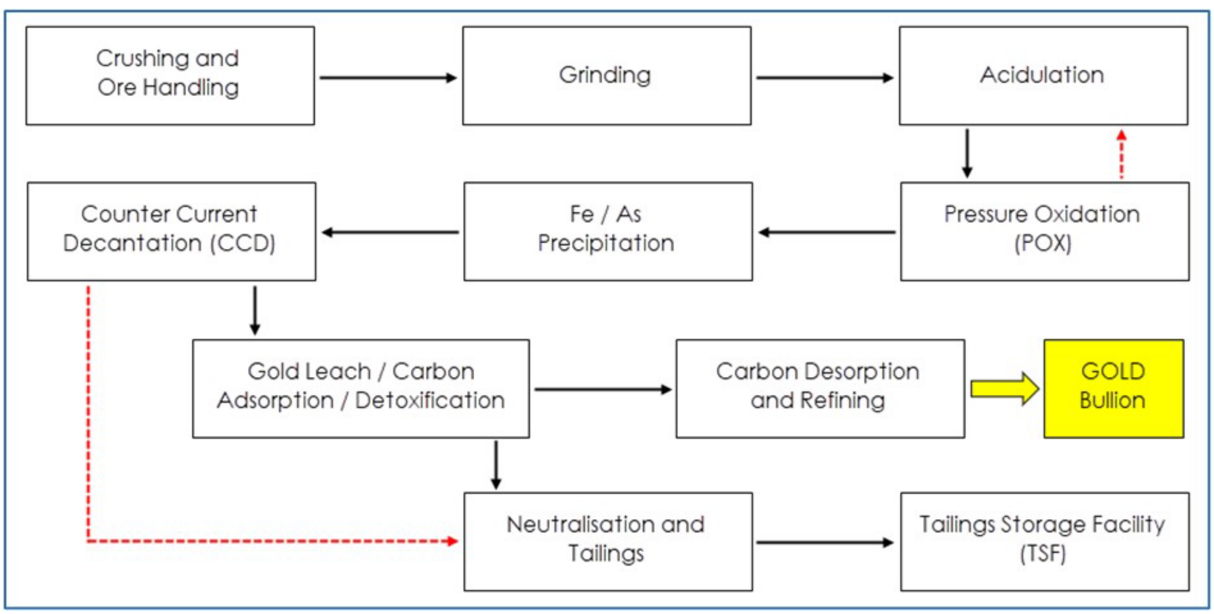
The following section describes the Projects existing and proposed processing operations.

## 14.1 Sulfide Ore Processing

The sulfide plant commenced commissioning in the fourth quarter of 2018. The basic flow sheet is shown in Figure 14-1 and comprises:

- Crushing and ore handling
- Grinding
- Acidulation
- Pressure oxidation
- Iron / arsenic precipitation
- Counter current decantation (CCD)
- Gold leach, carbon adsorption, and detoxification
- Carbon desorption and refining
- Neutralization and tailings
- Tailings storage facility (TSF)

**Figure 14-1: Çöpler Process Flow Sheet for Sulfide Plant**

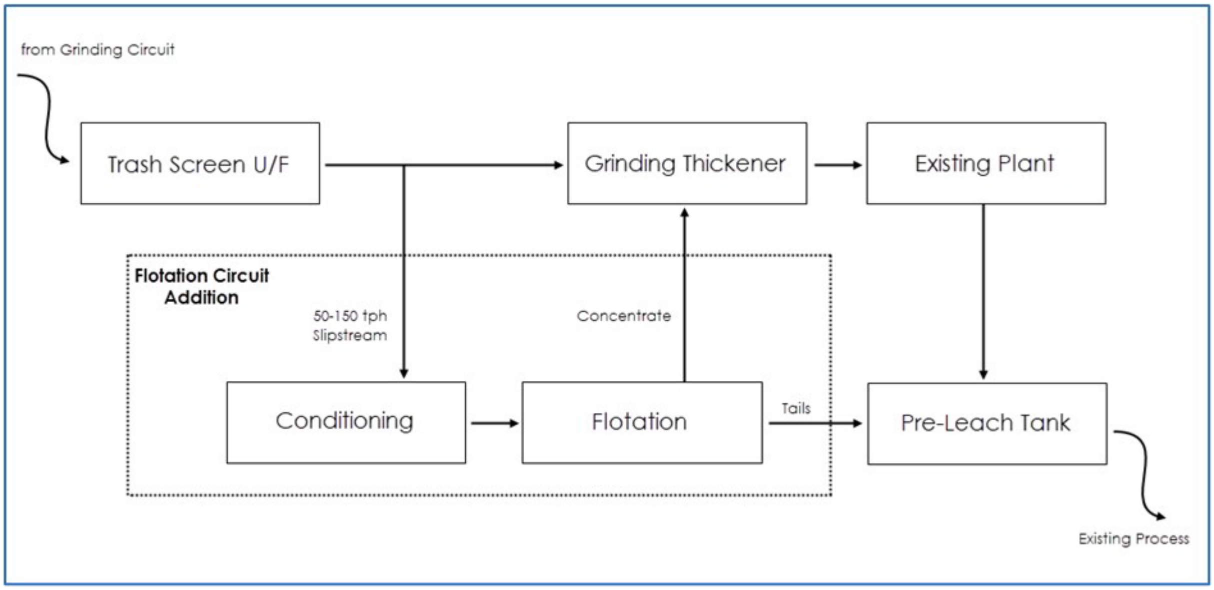



Source: Anagold, 2020

The incorporation of a flotation circuit into the sulfide plant to upgrade sulfide sulfur (SS) to fully utilize grinding and pressure oxidation (POX) autoclave capacity was commissioned in January 2022. The flotation circuit is located between grinding and acidulation, as shown in Figure 14-2. A bleed / slip stream from the grinding thickener feed, floating sulfides, and returning the sulfide concentrate to the grinding thickener to be combined with direct feed. The flotation tails bypass the sulfide oxidation portion of the plant and report directly to the leach feed for recovery of any cyanide soluble gold.

The flotation circuit also rejects carbonates to flotation tails, bypassing acidulation and POX, providing additional benefits in the acid balance through POX.

**Figure 14-2: Flotation Block Flow Diagram**




Source: Anagold, 2020

The original sulfide circuit, before the addition of flotation, demonstrated additional latent capacity in throughput controlling sections of the circuit: grinding and autoclaves. The incorporation of flotation allows the POX autoclaves to maximize throughput and sulfide sulfur oxidation capacity. Fully utilizing this latent capacity with the addition of a small flotation plant allows the increase in overall plant throughput.

The throughput from crushing and grinding was designed with a nominal volumetric capacity of 306 tph which was increased up to a maximum of 400 tph. Additionally, the POX autoclave circuit has demonstrated it can process up to a long-term average maximum of 280 tph feed (two autoclave operation) and 13.75 tph sulfide sulfur, compared to design of 245 tph and 12.5 tph respectively. The limit of 13.75 tph sulfide sulfur is dictated by the capacity of the oxygen supply to effect oxidation of the sulfides, design 96%.

The flotation plant feed rate is variable between 50–150 tph based on sulfide sulfur feed grade and the oxidation capacity of the POX autoclaves to oxidize sulfides. Operating performance of the autoclaves indicates that higher than design oxygen utilization efficiencies are possible, which may allow greater than 13.75 tph sulfide sulfur to be treated. Alternatively, increased autoclave throughput with reduced sulfide oxidation is possible, with a resultant reduction in overall gold recovery, however, at higher tonnage rates.

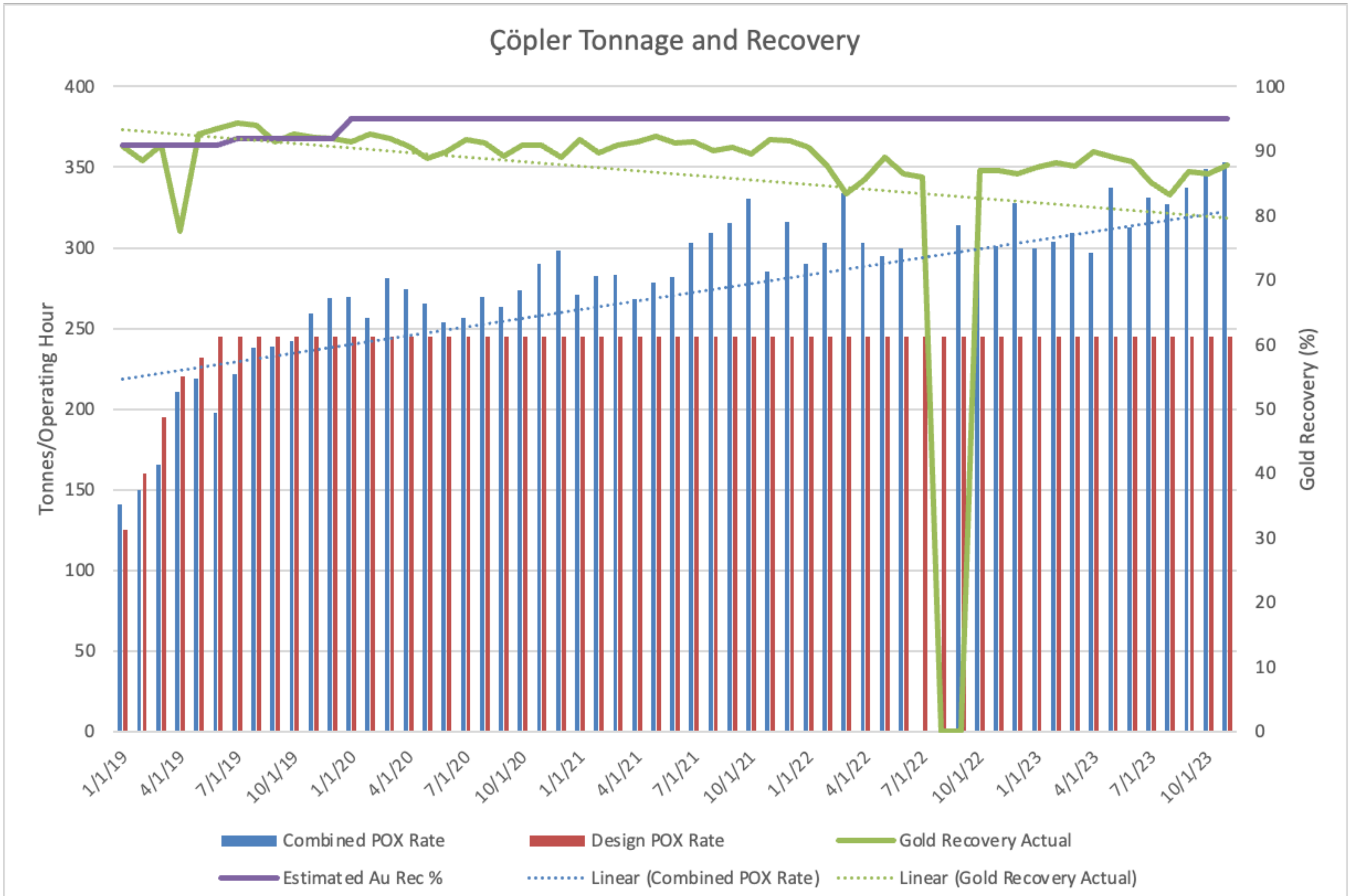
### 14.1.1 Sulfide Plant Performance

The operating performance is summarized in Figure 14-3 for throughput and recovery against the design.

Since completing ramp-up of the sulfide plant in June 2020, POX throughput has progressively improved to exceed design up to a monthly average peak of 330 tph and at the maximum SS of 13.7 tph. The gold recovery has remained at around 91%, lower than design, with the tailings grade remaining stable between 0.25–0.30 g/t Au.

Further improvements have been implemented during 2020–2021. Oxygen addition to the leach tanks to supplement air to maintain sufficient oxygen levels for gold leaching has led to improved recoveries.

**Figure 14-3: Gold Recovery and Throughput Comparison**




Source: Anagold, 2023.

Notes: Reduced throughput in mid-2022 was due to suspension of operations.

### 14.1.2 Sulfide Plant Comminution Performance

The design maximum feed rate of 306 tph is achievable. An average throughput rate of 370 tph was achieved in the period late-2019 through early-2020 with the SAG and ball mills drawing approximately half of their design power.

A study completed by Ausenco in 2023 used the Ausgrind comminution power model to assess whether the SAG and Ball Mills can achieve 450 tph. The SAG mill is able to achieve 450 tph, drawing 2.2 MW when the Axb is greater than 62. With some modifications to increase use of installed power to 2.5 MW, this could be reduced to an Axb of 52 (the lowest measured Axb for Çöpler ore is 55).

Grind size becomes a constraint for the ball mill at higher BWi values. The ball mill is able to achieve 450 tph at a grind size of 100 µm up to a BWi of 15.6 kWh/t and with a ball filling of 37% v/v.

Çakmaktepe Ext. sulfide ore (jasperoid) with an Axb of 30 and BWi of 19.9 kWh/t is significantly more competent and harder than Çöpler ore. If 100% jasperoid ore is fed to the plant, the maximum throughput with a grind size of 110 µm will be 300 tph to 350 tph. The throughput can be increased to above 400 tph by blending Çakmaktepe Ext. and Çöpler ore in a ratio of 20:80.

Due to the competency, hardness, and abrasiveness of the Çakmaktepe Ext. jasperoid ore, it cannot be crushed in the primary sizer. An alternate crushing and feeding strategy is required.

### 14.1.3 Sulfide Plant Description

The sulfide plant process flow sheet is shown in Figure 14-4.

#### 14.1.3.1 Crushing and Ore Handling

Haul trucks from the mine tip ore onto designated stockpile fingers. The ore is withdrawn from stockpiles by front end loader (FEL) and deposited into the run-of-mine (ROM) dump hopper. A static grizzly is fitted to the top of the ROM bin to remove oversize.

ROM ore is reclaimed from the bin by the sizer apron feeder, which discharges material into the mineral sizer. The sizer is a tooth roll unit which crushes the ore from a feed top size of 500 mm to a nominal top size of 250 mm.

The sizer teeth are configured to direct oversize rocks to one end where they pass through a spring-loaded oversize rejection gate and fall to a reject bunker. The crushed product is carried by the sizer product conveyor to the semi-autogenous grind (SAG) mill feed conveyor.

The SAG mill feed conveyor has a belt scale to monitor the ore flow to the SAG mill and control the sizer apron feeder speed. A moisture analyzer and Prompt-Gamma Neutron Activation Analysis (PGNAA) device, which is used for elemental analysis of the feed with an emphasis on sulfur, are installed on the same belt.

#### 14.1.3.2 Grinding

The SAG mill grinds the crushed ore to produce a $P_{80}$ of approximately 1,400 µm. The SAG mill discharge passes over a trommel screen where particles too large for ball milling are retained as oversize and discharged onto a conveyor. Slurry passes through the trommel into the grinding cyclone feed pump box where it mixes with the ball mill discharge slurry and water for density control.

The combined SAG and ball mill slurry is pumped to the grinding cyclone cluster. The cyclones produce an overflow product with a $P_{80}$ of 100 µm, which is screened to remove any trash (organic material, etc.) by the grinding trash screen. Coarse particles report to cyclone underflow, which is returned to the ball mill.

After the trash screen, the cyclone overflow enters a splitter box where a portion can be diverted to flotation. The split to flotation can be turned off completely or vary between 50 and 150 tph depending on the POX autoclave sulfide sulfur requirements. The remaining cyclone overflow slurry passes through an autosampler before it is mixed with the flotation concentrate and then thickened in a high-rate thickener. The thickener overflow is re-used within the grinding circuit. The thickened slurry is pumped to the grinding thickener underflow storage tanks.

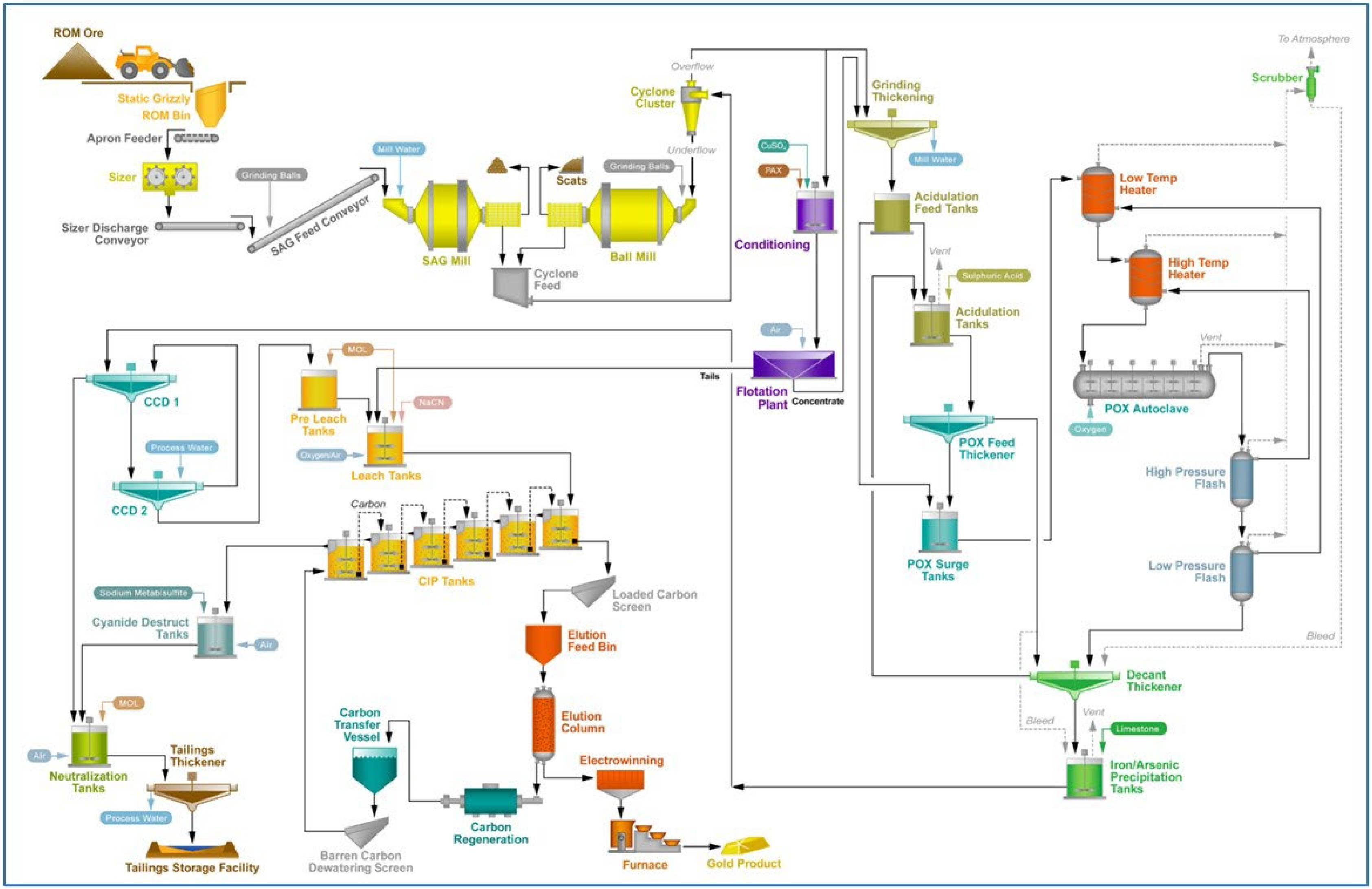
#### 14.1.3.3 Flotation

When necessary, a portion of the grinding trash screen undersize can be diverted to the flotation circuit and pumped to the conditioning tanks. This proportion, between 50 and 150 tph, depends on SS feed grade and POX autoclave requirements. The flotation circuit can operate as a single or dual train, each train has a maximum throughput of 75 tph.

The flotation plant consists of two equally sized conditioning tanks, in series, for copper sulfate and potassium amyl xanthate (PAX) addition with a nominal residence time of seven minutes each tank. From conditioning, the slurry is pumped to two equally sized flotation trains consisting of six 50 $m^3$ tank cells with a nominal residence time of 60 minutes at maximum throughput. Frother dosing and supplemental collector dosing occurs down the trains in every second cell. The plant is designed to handle high mass pull to maximize sulfide recovery, with preference to high recovery over high selectivity.

The flotation concentrate is pumped to the grinding thickener feed mixing with slurry directly from the grinding circuit upgrading the sulfide sulfur material fed to the acidulation and POX circuit. The flotation tail is pumped to the gold leach tanks for recovery of gold present in the non-sulfidic portions of the ore.

**Figure 14-4: Process Flow Sheet for Sulfide Plant**




Source: Anagold, 2020

#### 14.1.3.4 Acidulation

The grinding thickener underflow storage tanks have a residence time of 12 hours and provide process surge capacity and short-term blending to effectively decouple the upstream crushing, grinding, and flotation circuits from the downstream hydrometallurgical circuit. Antiscalant can be added to these tanks, if necessary, to reduce scale build-up in the downstream acidulation circuit.

The slurry from the grinding thickener underflow storage tanks is split between the acidulation tanks and the POX feed tanks depending on the ore type. The split is determined by how much carbonate in the feed material requires destruction to achieve the target free acid content in the POX autoclave discharge slurry of 22.5 g/L. At this free acid level, the formation of hematite is favored over jarosite, which exhibits better settling behavior in the downstream thickeners. This acid level also reduces the potential for excessive $CO_2$ gas evolution and gypsum scaling in the POX autoclaves.

The acidulation process targets nearly complete destruction of acid soluble carbonates in the ore. Acidulation is conducted in two reaction tanks. Recycled solution from the decant thickener containing free acid and additional concentrated sulfuric acid is used to leach the carbonate minerals in the ore. Slurry overflows from acidulation tank 1 into acidulation tank 2 and then discharges into the POX feed thickener mix tank. Either of the acidulation tanks can be bypassed.

When there are low carbonate levels in the feed, and little or no acidulation is required, POX feed thickener overflow solution is recycled to the acidulation tanks (instead of decant thickener overflow solution) to limit the maximum concentration in the tanks to 30% solids.

The diluted slurry from acidulation is thickened in the POX feed thickener prior to storage in the POX feed tanks. POX feed thickener overflow is transferred to either the decant thickener (as wash water), and/or to the iron / arsenic precipitation circuit (to maintain the water balance in the acidulation circuit) or is recycled to acidulation tank 1.

POX thickener underflow slurry is pumped to the POX feed thickener underflow surge tank where it is blended in the correct proportions with the un-acidulated grinding thickener underflow slurry to ensure the total level of acid soluble carbonates in the POX feed slurry is within target levels.

The decant thickener recovers acid (that is generated in the POX autoclaves) from the POX discharge slurry and recycles it to the acidulation circuit. The decant thickener underflow slurry is pumped to the iron / arsenic precipitation circuit. Thickener overflow goes to the decant thickener overflow tank from where it is pumped to the acidulation tanks. Solution is bypassed to the POX feed thickener overflow tank when processing low-carbonate ores.

#### 14.1.3.5 Pressure Oxidation

This subsection is extracted from OreWin (2022).

The POX feed surge tanks 1 and 2 are a common feed system that services both POX autoclave trains (T1 and T2). The tanks are agitated to blend the incoming slurry and provide approximately 18 hours of slurry storage to minimize disruptions to the POX circuit. For simplicity, only POX T1 is discussed in this document, as both T1 and T2 have identical configurations and controls.

Slurry is pumped to the POX low-temperature heater by the POX heating feed pumps. The low-temperature (LT) heater receives incoming feed slurry and vent gas (predominantly steam) recovered from the LT flash vessel. The gas heats the slurry to approximately 95ºC before being transferred to the high-temperature (HT) heater. The steam in the gas condenses and any excess is vented to the wetted elbow of the POX T1 Venturi scrubber.

The HT heater receives slurry from the LT heater and vent gas (predominantly steam) recovered from the HT flash vessel. The gas heats the slurry to approximately 150ºC before being pumped to the POX autoclave. The steam in the gas condenses and any non-condensing gases accumulate in the vapor space at the top of the vessel, prior to being vented.

Slurry is pumped to the autoclave by two pumping trains.

If one full autoclave train is offline, the remaining autoclave train can operate at 150% of normal capacity, provided both of its feed pumping trains are operating.

A horizontal multi-compartment autoclave is used to oxidize the sulfides in the ore at high temperature and pressure using gaseous oxygen. The oxidation of sulfide material in the autoclave generates heat and when the rate of heat generation exceeds that required to achieve the target temperature of 220°C quench water is added. Sufficient quench water is added to control the temperature to the target. The quench water is pumped through the same sparge pipe that introduces gaseous oxygen addition into the autoclave. There is one sparge pipe underneath each autoclave agitator.

A vent controls the pressure in the autoclave to prevent the water boiling. This pressure is called overpressure and results from the presence of gases such as oxygen, nitrogen, and $CO_2$.

Slurry discharges from the autoclave through a severe service let down valve to the HT flash vessel. The HT flash vessel operates at a lower pressure than the autoclave and the resulting pressure drop for the discharge slurry entering the HT flash results in steam being flashed from the slurry. The flashing of steam cools the slurry to the equilibrium temperature corresponding to the pressure in the flash vessel.

Steam vented from the HT flash is sent to the HT heater to heat the feed to the autoclave, excess steam is vented to the venturi scrubber for treatment prior to discharge.

Slurry discharges from the HT flash vessel through a severe service let down valve to the LT flash vessel. The LT flash vessel operates at a lower pressure than the HT flash vessel, the resulting pressure drop for the discharge slurry entering the LT flash results in steam being flashed from the slurry. The flashing of steam cools the slurry to approximately 100°C at a pressure just above atmospheric. Slurry is forced from the HT flash vessel to the LT flash vessel by the pressure difference between the two vessels.

Steam vented from the LT flash is sent to the LT heater to heat the feed to the HT heater, excess steam is vented from the LT heater to the Venturi scrubber for treatment prior to discharge.

Steam, entrained slurry together with gas, including carbon dioxide and unreacted oxygen vented from various points in the autoclave circuit, is scrubbed in Venturi scrubber to remove entrained acidic slurry droplets.

Demineralized water is used in the POX circuit for steam production and for seal water.

Flashed slurry is pumped from the LT flash vessel by decant thickener feed. The decant thickener was described previously and the decant thickener underflow is feed to iron / arsenic precipitation.

#### 14.1.3.6 Fe/As Precipitation

This subsection is extracted from OreWin (2022).

Iron / arsenic precipitation uses limestone slurry addition to the decant thickener underflow slurry to neutralize the free acid and raise the pH to approximately 2.8, which removes ferric iron and arsenic from solution.

The decant thickener underflow duty pump transfers the thickener underflow slurry to iron / arsenic precipitation tank 1. Limestone is added for pH control, and low-pressure air is sparged into the tanks to oxidize any ferrous iron that may be present to ferric iron. The ferric ions combine with the residual arsenic, also leached in the POX circuit, and precipitate together as the pH of the solution is raised. Limestone reacting with the free acid generates carbon dioxide gas and gypsum.

The two iron / arsenic precipitation tanks normally operate in series. The treated slurry overflows from the second iron / arsenic precipitation tank to the CCD 1 Mix Tank.

The low-pressure air and $CO_2$ generated during the limestone neutralization reactions rise above the slurry surface on top of the tanks and carry some entrained solution / slurry.

These off gases from the iron / arsenic precipitation tanks (1 and 2) are vented via the iron / arsenic precipitation tank fans 1 and 2 and fed to the iron / arsenic scrubber. The iron / arsenic scrubber is a Venturi type scrubber. The off gases are cooled and scrubbed of the entrained solution / slurry in the scrubber. The clean gases are emitted to the atmosphere.

### 14.1.3.7 Counter Current Decantation

This subsection is modified from OreWin (2022).

Counter current decantation (CCD) washes the iron / arsenic stage discharge slurry with process water using two stages of thickeners operating in counter current mode. The remaining soluble metals in solution the iron / arsenic precipitation circuit are washed from the slurry and report to CCD 1 overflow. The slurry discharging from CCD 2 underflow has the soluble metals washed from the slurry to sufficiently low levels to feed into the cyanide leach circuit.

CCD Thickener 1 overflow solution flows into the CCD Thickener 1 overflow tank which is then pumped to the neutralization circuit. Process water is added in the CCD 2 mix tank as wash solution to wash the solids. Diluted flocculant solution is added in the CCD 1 and 2 thickener feeds to aid in the settling of solids in the thickeners. The CCD Thickener 2 underflow is then pumped 2 to the pre-leach tank.

### 14.1.3.8 Cyanide Leach, Carbon Adsorption and Detoxification

This subsection is modified from OreWin (2022).

The cyanide leach circuit consists of one pre-leach tank and two leach tanks. Slurry is received in the pre-leach tank from the duty CCD thickener 2 underflow pump and flotation tails. The pre-leach tank has a volume of 150 $m^3$ and a nominal residence time of 10 minutes and is used to raise the pH of the slurry to pH 10–11 prior to the slurry entering the leach tanks where cyanide is added for gold leaching.

The leach tanks have a volume of 2,200 $m^3$ each and a total residence time of up to six hours at the maximum throughput. Slurry flows through the leach tanks by gravity and discharges the final leach tank to enter the carbon adsorption circuit. The leach tanks operate at 30% solids concentration and have low-pressure air and oxygen, from the Air Liquide oxygen plant, added to maintain sufficient oxygen in solution for gold leaching.

The carbon adsorption circuit consists of six agitated, 1,885 $m^3$ tanks with a total residence time of up to 12-hours. Each tank contains activated carbon to adsorb the leached gold contained in solution. Slurry flows by gravity from tank 1 to tank 6 and discharges into the detoxification circuit. Carbon flow is counter-current to slurry and therefore is transferred stage wise from tank 6 through to tank 1, using dedicated recessed impeller pumps. Each tank has interstage screens installed so that the carbon remains in each tank and does not follow the direction of the slurry flow.

Gold is loaded onto the carbon as it moves from tank 6 to tank 1 and reaches its maximum loading in adsorption tank 1. The loaded carbon is pumped from adsorption tank 1 to the loaded carbon screen where spray water on the screen washes the carbon prior to it entering the elution column for carbon desorption and recovery of gold through the refining circuit.

Slurry exiting adsorption tank 6 flows to the detoxification circuit where destruction of the residual cyanide contained in the slurry occurs. The detoxification circuit consists of a 1050 $m^3$ tank with a total residence time of one-hour. Air and sodium metabisulfite are added to the circuit to destroy the residual cyanide down to a concentration of less than 5.0 mg/L $CN_{WAD}$. Residual copper in the slurry catalyzes the cyanide destruction process.

### 14.1.3.9 Carbon Desorption and Refining

This subsection is modified from OreWin (2022).

The carbon desorption method selected is a split AARL elution. A single column is used for acid wash, cold cyanide strip for copper, and a hot caustic / cyanide elution cycle to recover gold. The elution column is a 6-tonne, stainless-steel vessel and is designed to handle the stripping of three carbon batches per day. Loaded carbon enters the elution column via the loaded carbon screen.

The first step of stripping the carbon is an acid wash using nitric acid solution to remove loaded impurities such as calcium. After the acid wash, a pre-soak solution is added to the elution column prior to commencement of the eluent recycle for initial stripping of copper, when required, followed by a hot elution cycle to strip gold from the carbon.

Pregnant eluate is collected in the pregnant eluate tank and pumped through electrowinning cells with gold metal plated out onto stainless steel cathodes. Smelting of gold recovered from the stainless-steel cathodes is conducted in the gold refinery.

Desorbed carbon from the elution column is regenerated through a horizontal diesel fired rotary kiln to remove organic material loaded onto the carbon and reactivate the carbon for re-use.

### 14.1.3.10 Neutralization and Tailings

This subsection is modified from OreWin (2022).

Slurry from cyanide destruction and the CCD 1 thickener overflow solution are neutralized with lime to precipitate residual metals in solution. Air is added for the oxidation and removal of ferrous iron and manganese.

Typically, the two 1050 $m^3$ neutralization tanks operate in series. Discharge from the neutralization feed box gravity flows into neutralization tank 1 prior to overflowing into neutralization tank 2. Discharge from neutralization tank 2 moves into the tailings thickener mix tank.

The first neutralization tank is equipped with a sodium metabisulfite addition system, and this allows it to be used for the detoxification step when the normal detoxification tank is bypassed for maintenance or descaling. Both neutralization tanks can also be bypassed as required to allow for maintenance.

The discharge slurry from neutralization flows by gravity into the tailings thickener mix tank before flowing into the tailings thickener. Tailings thickener overflow water overflows directly into the process water storage tank. The underflow slurry from the tailings thickener is pumped to the agitated tailings tank. The discharge slurry from the tailings tank is pumped to a TSF on a continuous basis via the 4.3 km long tailings pipeline.

#### 14.1.3.11 Tailing Storage Facility

This subsection is extracted from OreWin (2022).

The process tailings slurry is deposited into the Tailings Storage Facility (TSF) for final storage. Operators alternate the location within the facility where the tailings are deposited to maximize the settling rate and dewatering within the facility. In the TSF, the solids compact and reject excess water which is recovered for recycling to the process plant. The decant water collected within the pond area is recycled to the process water system tank via the tailings water reclaim pumps.

The TSF is developed and constructed in stages ahead of requirements.

#### 14.1.3.12 Reagents

This subsection is extracted from OreWin (2022).

There are ten major reagents used in the process plant, listed as follows:

1. Oxygen
2. Sulfuric acid
3. Limestone
4. Sodium hydroxide
5. Flocculant
6. Sodium metabisulfite
7. Milk of lime
8. Sodium cyanide
9. Nitric acid
10. Antiscalant

The flotation plant has the following main reagents:

- Frother
- Collector
- Copper Sulfate

All reagents are delivered in bulk tankers, containers, or bags with storage on site. Any reagents that require dilution or mixing prior to use are prepared on site on a batch wise basis, as required. Oxygen is produced on-site supplied from an Air Liquide owned and operated oxygen plant under a gas supply agreement. Additional oxygen can be delivered as liquid into on-site storage.

Table 14-1 presents the key unit consumptions of power, reagents, and materials for the process facilities.

**Table 14-1: Sulphide Process Plant Unit Consumptions of Power, Reagents and Materials**

| Item | Units | 2023 YTD | Inception to Date |
|---|---|---|---|
| SAG mill power | kWh/t | 5.1 | 52.0 |
| Ball mill power | kWh/t | 7.1 | 5.9 |
| Milk of lime ball mill mill power | kWh/t | 19.0 | 18.0 |
| SAG mill balls | kg/t | 258.9 | 169.6 |
| Ball mill balls | kg/t | 442.2 | 452.4 |
| Total MOL mill balls | kg/t | 0.3 | 0.4 |
| Oxygen | $Nm^3/ts^{-2}$ | 1,495.0 | 1,487.0 |
| Sulfuric acid | kg/t | 33.9 | 35.0 |
| Sodium cyanide | kg/t | 0.9 | 1.2 |
| Quicklime (CaO) | kg/t | 34.6 | 46.9 |
| Sodium metabisulfite (SMBS) | kg/t | 2.2 | 3.3 |
| Limestone | kg/t | 0.0 | 2.1 |
| Activated carbon | g/t | 54.0 | 52.0 |

Source: SSR Monthly Production Summary

#### 14.1.3.13 Utilities

This subsection is extracted from OreWin (2022).

The major utilities used in the process plant are as follows:

- Iron / arsenic low-pressure air
- Cyanide leach low-pressure air
- Plant air
- Instrument air
- Raw water
- Fire water
- Potable water
- Process water
- Diesel fuel

These utilities are reticulated throughout the process plant to their end user.

## 14.2 Oxide Heap Leach Processing

This subsection is modified from OreWin (2022).

The oxide heap leaching and associated facilities were commissioned in the second half of 2010 and initial gold production was achieved in late 2010. The process was originally designed to treat approximately 6.0 Mtpa of ore by three-stage crushing (primary, secondary, and tertiary) to 80% passing 12.5 mm, agglomeration, and heap leaching on a lined heap leach pad with dilute alkaline sodium cyanide solution. Gold is recovered through a carbon-in-column (CIC) system, followed by stripping of metal values from carbon, electrowinning, and melting to yield a doré (containing gold and silver) suitable for sale. Control of copper in leach solutions is undertaken in a sulfidization, acidification, recycling, and thickening (SART) plant which also regenerates cyanide.

### 14.2.1 Oxide Heap Leach Performance

Since commissioning through September 2023, an estimated 59.8 Mt of oxide ore has been placed on the heap at an average contained grade of 1.48 g/t Au. Of the 2,848 koz of contained gold, 1,953 koz is determined to be extractable, an ultimate expected recovery of 68.6%. At the end of September 2023, a total of 1,879 koz had been produced as bullion.

### 14.2.2 Oxide Circuit Description

A detailed oxide flow sheet is shown in Figure 14-5. The following description of the oxide plant includes the existing heap leach, CIC plant, and SART circuit.

#### 14.2.2.1 Primary and Secondary Crushing

Durable rock is fed to a primary gyratory crusher from haul trucks directly from the mine or rehandled from the oxide ROM piles (either from a front-end loader or haul trucks). The primary crusher is a METSO Superior MK-2 with a 500-kW motor, crushing to a $P_{80}$ of 150 mm. The crushed product falls into a 400-t surge bin before being fed to the primary ore conveyor belt. This belt is equipped with a magnetic separator and belt scale. The nominal capacity is 925 tph.

The primary ore belt feeds a 1,400-t secondary crushing surge bin. The ore passes through the bin onto a three-layer screen, nominally fitted with 90 mm, 45 mm, and 25 mm square opening panels. The largest oversize material flows into a METSO Nordberg HP800 cone crusher with a 450-kW motor for secondary crushing; the maximum throughput of this crusher is 500 tph. The plus 25 mm and secondary crushed material falls onto the tertiary return conveyor belt.

#### 14.2.2.2 Clay Sizer

Fines and clay-bearing ores are not suitable to be fed into the primary crusher and are instead routed to a separate feed pocket. Materials here are typically fed by a front-end loader, and the feed rate is set to maintain a specified ratio of durable to fine material. This ratio is dictated by clay content and agglomeration quality necessary for effective heap leaching and varies depending on the ore.

A 150-t feed bin is connected to an apron feeder that controls the feed rate to a MMD 625 Series mineral sizer with a 250-kW motor. The maximum throughput on this equipment is 600 tph at an output of 130 mm $P_{80}$. The sized material is then screened through two sets of double screens, with a nominal output size of 25 mm. The oversize material falls to the tertiary transfer belt.

#### 14.2.2.3 Tertiary Crushing

The midsize from the secondary feed screen, secondary crushed, and sizer screen oversize materials are combined on the tertiary feed belt and transported back to the top of the secondary / tertiary building to fill the two 700-t tertiary crushing surge bins. Each bin feeds double-decked screen, nominally fitted with 40 mm and 25 mm square opening screen panels. Each screen's oversize material then feeds a METSO Nordberg HP800 cone crusher with a 450-kW motor for tertiary crushing. The crushed product then falls onto the same tertiary return conveyor belt as the secondary crushed product to return to the tertiary screens.

#### 14.2.2.4 Agglomeration

The secondary screening undersize, clay sizer undersize, and tertiary screen undersize material all falls to the fine ore collection belt. This belt is equipped with a belt scale and a sweep-style belt sampler for collection of a representative “crushed product” sample that is assayed each shift for moisture content and composited daily for gold grade. The fine ore collection belt passes to the original leach pad feed conveyor, where lime and cement are dosed from silos to modify the ore pH and provide a binder for agglomeration.

The agglomerator is a 4-m diameter by 12-m long drum, where water is added and the material tumbled to generate small balls of material. The cement and water added to the ore, once placed on the heap leach, will cure to produce a stronger and more stable heap leach material. Regular samples are taken to check the agglomerate quality.

#### 14.2.2.5 Conveying

Once the ore has been agglomerated, it is transported over a series of overland and grasshopper conveyors to the top of the heap. The site has 35 grasshopper conveyors on hand for reaching various locations at the top of the heap. Stacking is typically conducted by dumping a pile off the last conveyor and using a dozer or loader to push the material to the edge. Alternatively, there is a radial stacker that can be used in larger areas.

#### 14.2.2.6 Heap Leaching

The heap leach pad consists of a series of constructed phases stretching south from the barren ponds up a slope, creating a natural gradient for the pregnant solution to flow to the CIC plant. In low-angle regions, a layer of clay is placed to create an impermeable base; in high-angle areas, a geosynthetic clay liner (GCL) is emplaced. The base layer is covered with a HDPE geomembrane. Next, drainpipes are arranged in a herringbone structure that feed progressively larger pipes for the transport of gold bearing solution. Finally, a layer of graded gravel is added above the drainpipe network to promote rapid transport to the pipes and reduce the hydraulic head on the liner.

The available leach pad area is divided into cells of specific sizes for inventory and irrigation control. The heap leach operating parameters include quantity and lift height of ore placed, barren solution (cyanide leach solution, very low gold grade) irrigation rate per unit area, duration of irrigation (leach cycle) and time between lifts to manage future ore placement. Barren solution is applied selectively to each cell. At any given time, approximately 100k $m^2$ of pad area is being leached, with other areas draining or being made ready to accept ore for the next lift. Typical flowrate to the leach pad is 1,000 $m^3$/hour with a target application rate of 8 to 10 L/h/$m^2$. Application is made via irrigation drip emitters.

#### 14.2.2.7 CIC Trains

The barren solution percolates through the ore collecting precious metals and exits the heap material at one of several collection areas as pregnant solution. The pregnant solution is conveyed by gravity flow to the recovery plant or recycled to the barren ponds. The recovery plant consists of two parallel Carbon-in-Column (CIC) trains comprising of six tanks each. The first train is a typical open-top design. The second, smaller train is closed vessel with integrated screens for carbon separation; it is operated in a carousel manner where carbon is not moved, but the head tank rotates. Column discharge solution reports to either the SART plant or the barren ponds where fresh and reclaim water is added to maintain the appropriate water balance and cyanide is added to bring the free CN concentration to a target level.

#### 14.2.2.8 Elution

Loaded carbon is pumped from the top tank in the CIC train to the acid wash tank. The carbon is subjected to a nitric acid wash to remove inorganic scale and neutralized with caustic; the washed carbon is then pumped to one of two elution vessels. As necessary, a cold cyanide copper strip is performed as a first stage to elution. A split pressure Zadra elution process is followed using caustic and cyanide solution to remove the gold from the carbon and concentrate for electrowinning. The stripped carbon is then transferred to a carbon regeneration kiln to remove organics and reactivate the carbon for re-use.

Pregnant eluate is collected in the pregnant eluate tank and pumped through electrowinning cells with gold metal plated out onto stainless steel cathodes. Smelting of gold recovered from the stainless-steel cathodes is conducted in the gold refinery.

#### 14.2.2.9 SART

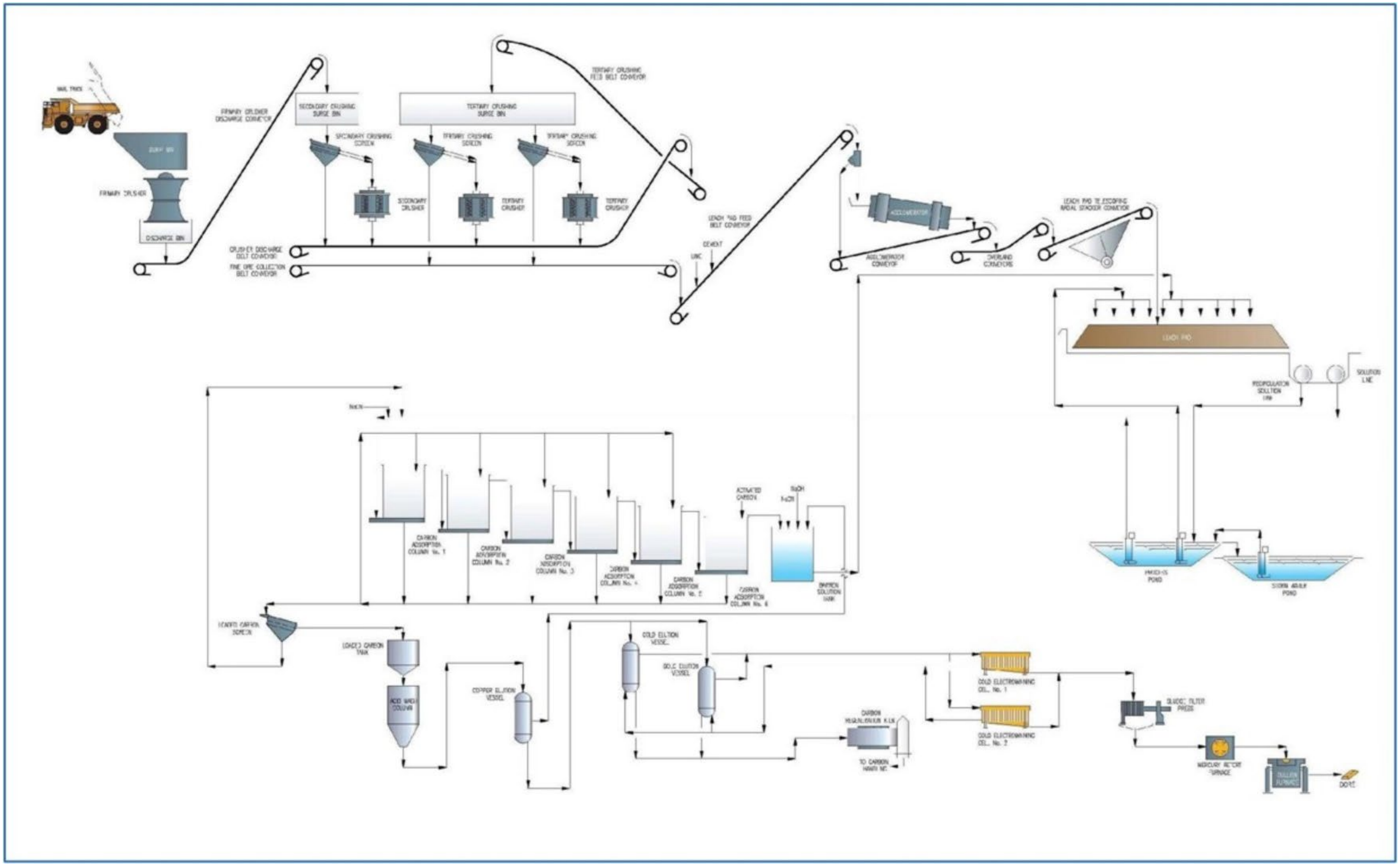
High copper levels in leach solution increase cyanide consumption and reduce the ability of the carbon circuit to effectively adsorb gold and silver. For high copper ores the Sulfidization, Acidification, Recycle, Thickening (SART) process limits the consumption of cyanide and produces a saleable copper by-product. Either pregnant leach solution (PLS) or barren leach solution (BLS) can be processed, the current method is treating the BLS at a split rate of approximately 300 $m^3$/h.

In the SART processes, copper is recovered as a synthetic chalcocite ($Cu_2S$) and copper-complexed cyanide is regenerated to yield free cyanide. The chalcocite copper product is sold for its metal value, including minor gold content, and the regenerated free cyanide solution is recycled to the heap leach.

#### 14.2.2.10Barren Ponds & Pumping

There are two HDPE lined barren ponds, PP1 and PP2, with capacities of 20,000 $m^3$ and 34,000 $m^2$, respectively. In the current operation, cyanide is only added to PP2 as it is fed to the newest ore. PP1 is used for solution recycle, water balancing, and rinsing of older regions of the leach pad. A pair (duty and standby) of submersible pumps in each pond feed a middle-booster station. The middle-booster pumps are a pair (duty and standby) of 550-kW centrifugal pumps that push the barren solution to the final-booster station. At the final-booster station, BLS1 is pumped with a single 280-kW centrifugal (plus an installed spare) to the lower, older portions of the leached pad. BLS2 goes through a pair of 280-kW centrifugal pumps in series to increase the pressure sufficiently to reach the top lift of the designed pad.

**Figure 14-5: Heap Leach Process Flow Sheet**



Source: Anagold, 2016

## 14.3 Oxide Grind Leach Processing

### 14.3.1 Oxide Grind Leach - Overview

The proposed process is to treat oxide and low sulfur (< 2% sulfur) ores from the Çakmaktepe Ext. open pit. Based on the information and metallurgical test results summarized in Section 10 the Çakmaktepe Ext. oxide and low sulfur mineralization is amenable to cyanide leaching as a recovery method.

The throughput of the proposed plant is 2 Mtpa, and the process is an industry standard crushing, grinding, and carbon-in-leach (CIL) cyanide leaching plant with recovery of gold and silver from the leach solution by carbon adsorption, desorption, electrowinning, and refining to produce a final precious metal (doré) product.

The total connected electrical load for the Oxide Grind Leach plant is 15.4 MW with an average demand of 11.6 MW. The Oxide Grind Leach plant requires 261 $m^3/h$ of make-up water from a combination of raw and process water sources.

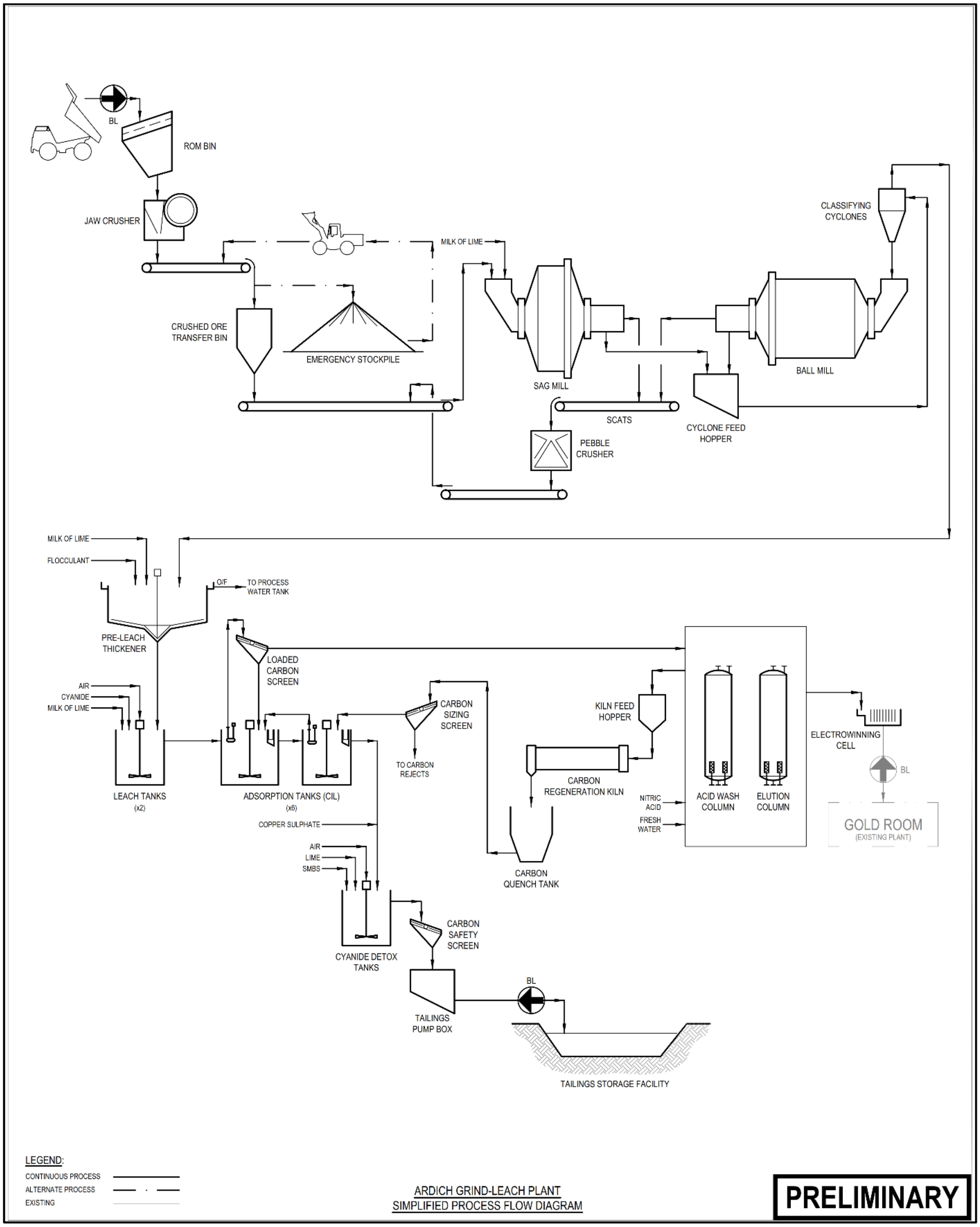
### 14.3.2 Oxide Grind Leach - Process Flowsheet

The process flowsheet includes:

- primary jaw crushing
- crushed ore bin and emergency stockpile
- SAG and ball mill grinding in closed circuit with classification by hydrocyclones
- pebble crusher circuit
- pre-leach thickening
- leaching tanks
- carbon in leach tanks
- desorption and carbon regeneration
- electrowinning
- cyanide destruction
- tailings pumping.

The simplified overall process flow diagram is shown in Figure 14-6.

**Figure 14-6: Oxide Grind Leach - Simplified Process Flow Diagram**



### 14.3.3 Oxide Grind Leach - Process Design Criteria

The process plant is designed for a treatment rate of 248 tph on an availability of 8,059 hours per year or 92%. The crushing section is set at 70% availability. Table 14-2 presents the key process design criteria.

**Table 14-2: Oxide Grind Leach - Process Design Criteria**

| Description | Units | Process Design Criteria (design) |
|---|---|---|
| JK Axb | - | 43 |
| Bond Ball Mill Work Index | kWh/t | 19.6 |
| Bond Abrasion Index (Ai) | g | 0.43 |
| Product Particle Size, P80 | µm | 75 |
| Leaching Process | | L/CIL |
| Leach time required | hours | 24 |
| Ore Head Grade, Au | g/t | 1.92 |
| Leach Recovery | % | 84 |

## 14.4 Personnel

Personnel associated with the processing operations is tabulated in Table 14-3.

**Table 14-3: Çöpler Mine – Processing Personnel Summary**

| Disciplines | Process | | |
|---|---|---|---|
| | Anagold | Contractor | Totals |
| Engineering/Admin. Support | 203 | 272 | **475** |
| Process Operations – Oxide | 57 | 5 | **62** |
| Process Operation – Sulfide | 123 | 11 | **134** |
| Process Maintenance | 125 | 53 | **178** |
| Process Engineering and Laboratory | 83 | 0 | **83** |
| **Totals** | **591** | **341** | **932** |

# 15.0 Infrastructure

The facility infrastructure supports the mine and processing facilities, including the oxide heap leach and sulfide plant. The existing infrastructure and the planned expansion, which includes the tailings storage facility (TSF) and heap leach pad area expansion, will be sufficient for the current Mineral Reserves.

The locations of the processing facilities, Çöpler mine, Greater Çakmaktepe Reserve pit, TSF, and the haul road from Greater Çakmaktepe to Çöpler are shown in the site plan in Figure 15.1.

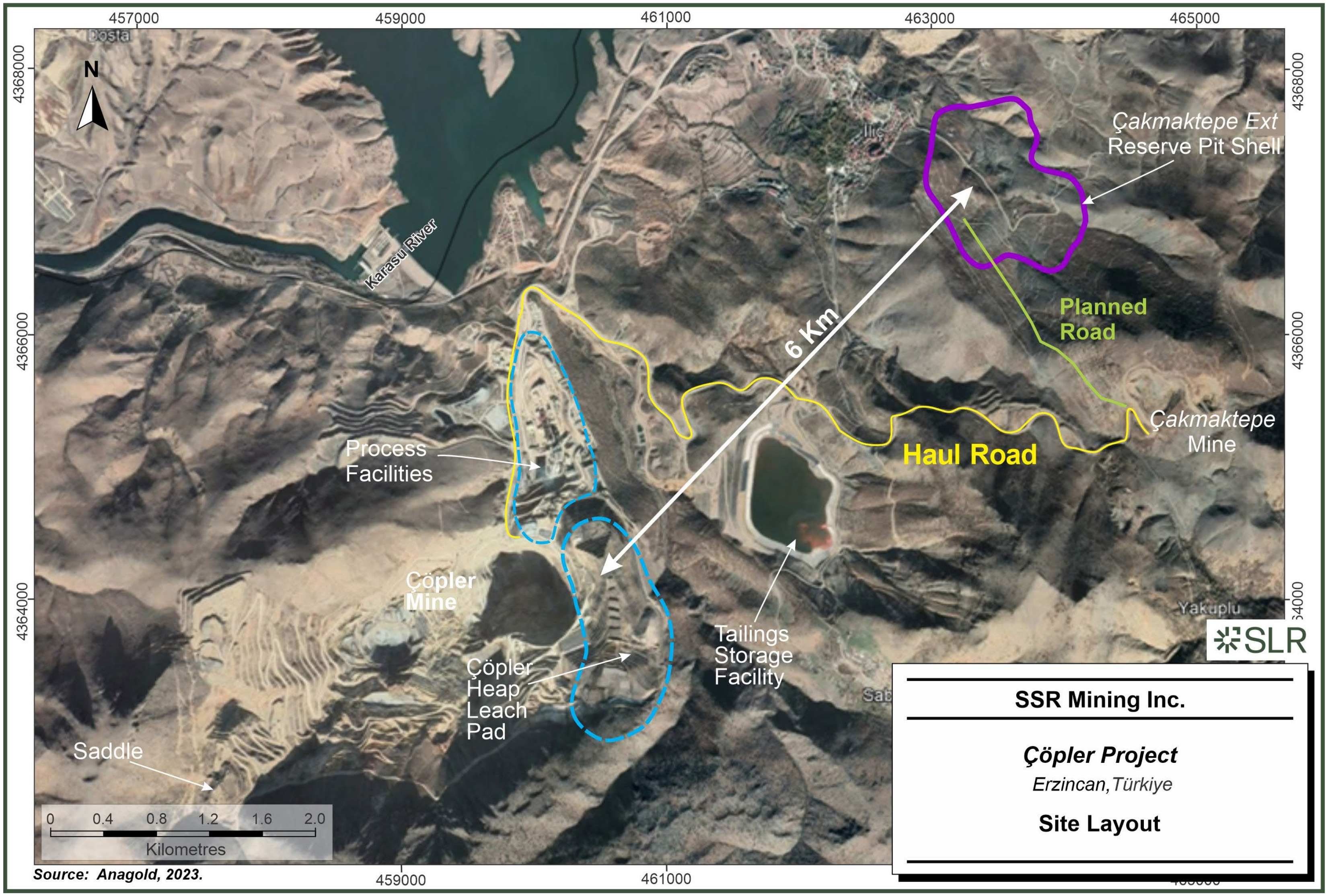
The current leach pad consists of four phases currently estimated to accommodate a total of approximately 63 Mt of oxide ore heap with a nominal maximum heap height of 100 m above the pad liner. Phase 5, with a capacity of 13.4 Mt, will be constructed during 2024 to 2026 to accommodate part of the Greater Çakmaktepe Reserve. The Phase 5 pad construction has been approved by the Ministry of Environment, Urbanisation, and Climate Change (MoEUCC).

The TSF, referred to as TSF 1, design includes a total of seven phases that are developed and constructed sequentially. TSF 1 phase 4 has been constructed, and approval for use was received in 2023 by the MoEUCC. Ongoing work in ensuring sufficient long-term capacity for storage of tailings has been undertaken. Studies by Anagold have determined that the addition of the flotation plant to the sulfide plant circuit in 2021 has resulted in an increase in the solids content and improvement in the final settled density based on an increase in the rate of tailings consolidation.

Construction and development of the remaining phases of TSF 1 will provide storage of tailings for up to 70 Mt (at an average slurry density of 1.18 t/m$^3$), sufficient to accommodate the tailings to be produced in the current LOM.

A PFS level study (TSF 2) has been carried out that identifies approximately 13.9 Mt additional tailings storage capacity, in a site adjacent to TSF 1, should it be required in the future.

**Figure 15-1: Site Layout**




*Source: Anagold, 2023.*

## 15.1 Access Roads

The Çöpler Project has access via the main access road and sulfide plant roads.

Generally, site roads have an overall width of six metres and provide everyday operational access for large trucks or facility access for site personnel vehicles. These roads are limited to a maximum grade of 9%. All access roads are paved and cross-sloped to provide positive drainage.

## 15.2 Power

The existing 154 kV line provides power to the mine and process plant. The following structures are associated with site power distribution:

- High Voltage switchyard 154 kV
- Main electrical building
- Oxygen plant substation
- CCD electrical building
- Crushing electrical building
- Grinding electrical building
- Carbon elution electrical room
- TSF area electrical buildings
- Bore field area electrical building

Motors and loads for certain critical equipment and systems were identified as requiring power in the event of a utility outage. A load shedding scheme is applied to feed critical electrical users automatically in the event of a utility outage.

Generators are diesel fueled; onsite storage includes a minimum of eight-hours of diesel based on generators operating under full load.

## 15.3 Water

### 15.3.1 Hydrology Background

The only perennial surface water in the vicinity of the Çöpler Mine is the Karasu River flowing in the northern and western part of the area. All other valleys are either ephemeral streams or dry valleys. The average flow rate of the Karasu River, measured at the Bağıştaş / Karasu Gauging Station in the upper Euphrates Basin, is approximately 145 m³/sec, draining an area of 15,562 km². A hydroelectric dam (Bağıştaş -1 Dam) was built on the Karasu River downstream of the mine site. When the reservoir is at high levels the impoundment will extend into the very lower reaches of both the Çöpler and Sabırlı creeks and the maximum inundation elevation will be 916.5 m as it is released into the spillway. The Çöpler and Sabırlı creeks in the Project area do not flow perennially. They both discharge into the Karasu River. The drainage area of the Sabırlı Creek is approximately 35 km² and that of the Çöpler Creek is approximately 10 km².

The Project submitted a Five-Year Water Management Report in December 2019, prepared by SRK Danışmanlık ve Mühendislik A.Ş., as part of the Environmental Impact Assessment's (EIA) conditions (SRK, 2019). This report benchmarks the expected results with those achieved.

Overall results achieved were generally as predicted. In 2020, as part of updating the EIA, further hydrogeology studies were undertaken by SRK Danışmanlık ve Mühendislik A.Ş. SRK updated the surface water and hydrological models based on actual data over the operating period of the mine to improve the model (SRK, 2021).

### 15.3.2 Site-Wide Surface Water Hydrology

Existing mine site facilities are located primarily within the Çöpler and Sabırlı creek watersheds immediately upstream of their confluence with the Karasu River. Site-wide surface water management for the included diversion facilities consist of a network of diversion channels and retention structures to minimise storm water run-on to the mine site facilities to prevent mine-impacted storm water run-off from exiting the site and discharging to the Karasu River.

The sub-basin areas, characterization of the surface run-off conditions, and design rainfall data were used to construct the existing conditions hydrology model. The hydrology analysis utilised HEC-HMS software to develop estimates of the peak flow rates and volumes generated by the existing watersheds.

### 15.3.3 Surface Water Management Structures

Engineered surface water management structures are constructed to minimize effects of storm water run-off to critical mine facilities and to control the release of mine-impacted water to the environment. A combination of interim and permanent diversion channels and retention ponds are utilised to achieve these goals. Interim structures will be reclaimed at closure while permanent structures will remain in place post-closure. Other flood control structures were developed to control or direct run-off away from pit crests and are planned for run-off that does not discharge to surface water drainages or streams and, therefore, do not require lining.

Sediment ponds to control run-off and sediment release are lined based on the EIA commitments. Interim diversion channels are designed to convey the 25-year storm event with 1.5 m of freeboard and the 100-year storm with no freeboard. Permanent diversion channels are designed to convey the 100-year storm with 0.5 m of freeboard. Lined sediment ponds are downgradient of the waste rock dumps and are sized to contain the 100-year run-off volume with an emergency spillway to safely discharge the peak flow. The TSF is designed to contain the volume generated by the 72-hour probable maximum precipitation (PMP) within the operating freeboard.

### 15.3.4 Fresh Water Supply

Fresh water is supplied by existing wells to the site, supporting the operation. Figure 15.2 shows the location of the mine water extraction wells. An additional three wells were developed in 2018, wells WM-45, WM-46 and WM-47, to increase water supply for the Project. Two raw water storage tanks support the demands of the heap leach and sulfide process equipment and the fire water requirements.

**Figure 15-2: Mine Water Supply Well Locations**


*Source: Anagold, 2023.*

### 15.3.5 Potable Water Treatment

The site is serviced by a potable water treatment system and distribution system. The system consists of multi-media filtration, carbon filtration, and an ultraviolet (UV) disinfection system that directly feeds the site potable water distribution system. For water used in the dining room, the water system uses further softening and reverse osmosis.

### 15.3.6 Waste Management

Waste will be generated from multiple sources such as human waste, food spoilage, and process and maintenance wastes.

Hazardous wastes will be contained, packaged, and disposed of in accordance with local, regional, and national regulations. Non-hazardous wastes will either be buried on-site or transported off site to the appropriate processing site in accordance with local, regional, and national regulations.

## 15.4 Accommodation Camps

Accommodation facilities include the following:

- Site kitchens and eating areas
- Site single living dormitory with adjacent multi-purpose room
- Site family housing
- Contractor (mining) dormitories, kitchens, and offices

## 15.5 Existing Infrastructure

The existing site infrastructure supporting the existing operation includes the following:

- Site security gate and guard station
- Site administration building
- Site warehouse
- Site assay laboratory
- Container or modular type offices
- Cyanide receiving and mixing system
- Site raw water wells, pumping system and storage tanks
- Site potable water treatment and distribution system
- Two sanitary wastewater collection and treatment systems
- Sulfide maintenance building
- Sulfide control rooms
- Combined oxide and sulfide gold refinery building
- Oxide carbon desorption and reactivation building
- Sulfidization, acidification, recovery, and thickening (SART) building

- Sulfide process buildings:
  - Grinding building
  - Flotation building
  - Pressure oxidation (POX) building
  - Carbon desorption building
  - Tailings pump building
  - Main control room and electrical building
  - HV switchyard electrical building
  - Crusher electrical building
  - POX flocculant building
  - Limestone building
  - Potable water booster pump house
  - Reagent building
  - Tailings and process water pump house
  - Plant and instrument air compressor building
  - Counter current decantation (CCD) electrical building
  - Reagent dry storage
  - Leach air compressor building
  - Water pump building
  - Lime slaking (MOL) building
  - Fe/As air compressor building
- Emergency diesel generators building
- TSF reclaim electrical building
- TSF drainage tank electrical building
- TSF Overdrain-Underdrain pond electrical building
- CIP CCD ablutions block
- Pump shelters with monorails
- Carbon elution building – electrical room
- Raw water bores P/P house and electrical building
- Gatehouse
- Fire water pump house
- Community relations centre
- Raw water wells

## 15.6 Communications

The Project uses networks for the distributed control system (DCS), the integrated process related and security CCTV system, security systems (access control / card reader), information technology (IT), and telephones and communication between the DCS and packaged control systems.

Single mode fibre and copper cabling is distributed within the sulfide plant area and selected buildings for the tailing pipeline and dam.

## 15.7 Plant Fire Protection System

A separate plant fire protection system is provided for the sulfide facility and includes the flotation building.

A combined sprinkler, hose reel and hydrant underground piping system is provided for the active fire protection of the facility.

A gas-based fire suppression system is used in the main control and electrical building.

## 15.8 Heap Leach Facility

The heap leach includes the leach pad and collection ponds that consist of process ponds and a storm pond. The existing leach pad consists of four phases and is currently estimated to accommodate approximately 63 Mt of oxide ore with a nominal maximum heap height of 100 m above the pad liner. The additional phase 5 has an ultimate capacity of 13.4 Mt of stacked ore at a density of 1.8 t/m$^3$. Phase 5 has received construction approval from MoEUCC in November 2021.

The heap leach facility is stacked in 8-m thick horizontal lifts at the natural angle-of-repose with intermediate benches to achieve an overall heap slope of 2H:1V. The pad has a composite liner system comprising a 2.0-mm (80 mil) double-sided textured high-density polyethylene (HDPE) geomembrane. In areas where grades are 3H:1V or flatter, the geomembrane is underlain by a minimum of 0.5-m thick compacted low-permeability clay liner, and when grades are steeper than 3H:1V, the geomembrane is underlain by a geosynthetic clay liner (GCL). Additionally, in pad areas with grades steeper than 2.5H:1V, the geomembrane is overlaid by a single layer of 8-oz (270-g/m$^2$) geotextile that serves as a friction break to counter potential settlement of the ore on these steep slopes.

The solution and storm flows gravity-drain towards a 600-mm solid transfer pipe located at the northeast corner of the pad. The transfer pipe conveys the flow through the pad toe berm to conveyance pipes that lead to intermediate and pregnant header pipes. The intermediate and pregnant header pipes transport the flows by gravity to the process pond and the gold recovery system (i.e., the CIC), respectively.

## 15.9 Tailings Storage Facility

The existing tailings storage facility (TSF 1) at the Çöpler mine was designed by Golder with support from Golder Associates Türkiye, Ltd (Golder Türkiye), now part of the WSP Group of Companies. TSF 1 has been designed to provide a capacity of 65.8 Mt through seven phases with a crest elevation of 1,275 m. TSF 1 was permitted through submission of a Turkish Design Application Report (DAR) to the MoEUCC and subsequently approved based on the design through Phase 5. An amendment to the DAR to obtain permits through Phase 7 is planned.

Select engineering evaluation of Phase 7 has been completed to support the updated TSF 1 design report including updated stability analysis, dynamic deformation, water balance, and consolidation modeling. The updated design report for TSF 1 was completed in October 2023 (WSP, 2023b) for use in future planning and in support of the DAR amendment.

Expansion beyond Phase 3 of TSF 1 was limited by the construction and re-routing of a new road to Sabırlı Village as well as purchase of some small tracts of private land located within the Phase 4 limits on the east side of the existing road to Sabırlı Village. Construction of the new Sabırlı Village Road commenced in Q3 2021 and was completed in Q4 2022. Acquisition of the private land parcels was also completed in 2022. Subsequently, construction of Phase 4 of TSF 1 was completed in October 2023.

Anagold is currently considering other TSF sites with potential to increase tailings capacity, should it be needed, and is working with WSP to develop TSF design options.

Figure 15-3 through Figure 15-6 show the revised TSF 1 design for Phases 4 through 7.

### 15.9.1 TSF 1 Development and Summary of Current Operations

Construction of Phase 1 of TSF 1 began in December 2016 and was completed in November 2018 with commissioning of the sulfide plant. Tailings were deposited initially from the emergency spigot and then typically from two to three spigots around the perimeter of the 1,190 m crest of the Phase 1 embankment. The tailings initially exhibited a solids content on the order of 24% for the first eight months of operations. The solids content improved and averaged around 30% for the next three years of operations and has been averaging around 32% for the last year after the addition of the flotation plant to the process circuit. Since the beginning of operations, four metres to five metres of water has been present over the top of the tailings surface. Reclaim water was managed by pumps on a rail-mounted sidehill reclaim system during Phase 1. Starting with Phase 2, the reclaim system transitioned to conventional pumps mounted on a floating barge accessible for maintenance from ramps constructed within the northern portion of the impoundment. The second raise, or Phase 2 of TSF 1, was completed in April 2020 and construction of Phase 3 was completed in December 2020. Anagold completed the Phase 4 construction in October 2023 and started the tailings deposition from Phase 4 crest elevation of 1,235 m.

Bathymetry surveys were performed monthly for the last few years and a recent survey from September 2023 indicated a tailings average dry density of 0.85 t/m$^3$ and tailings sloping at 0.2% to 0.3% subaqueously. Based on the September 2023 bathymetry survey, there is approximately 1.5 million m$^3$ of water in the TSF 1 impoundment. Current reclaim rates have averaged 7,500 m$^3$/day for the last year.

#### 15.9.1.1 Site Classification

TSF 1 is classified in accordance with the Global Industry Standard for Tailings Management (GISTM) as “High” for the operational phase and post-closure phases. In accordance with Table 1 of the GISTM, a high dam classification assumes that in the event of failure that the population at risk would be between 10 and 100 and that incremental losses would include the following criteria:

- Potential Loss of Life – Possible (1-10).
- Environmental and cultural values – Significant loss or deterioration of critical habitat or rare and endangered species. Potential contamination of livestock/ fauna water supply with no health effects. Process water moderately toxic. Low potential for acid rock

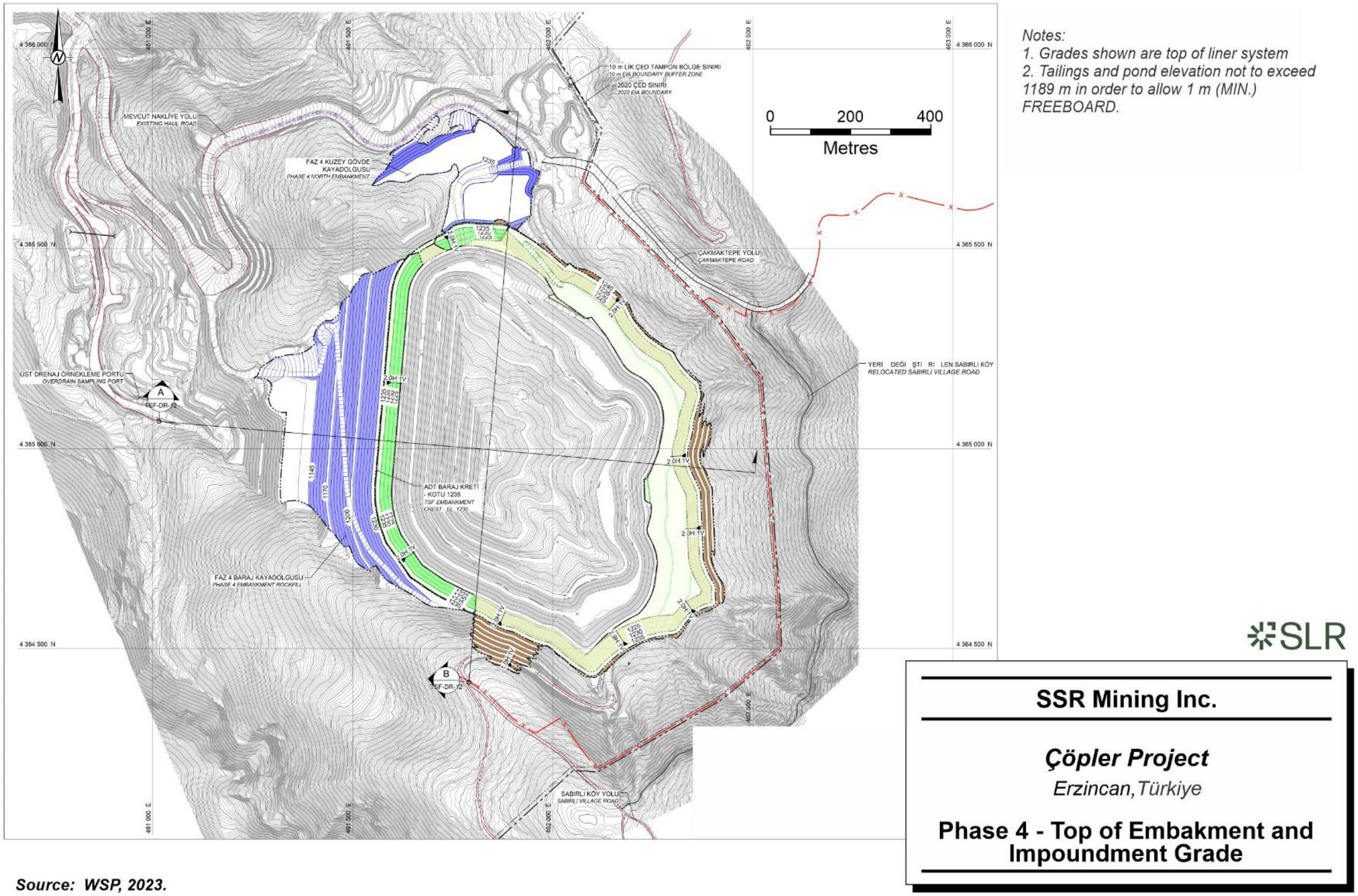
drainage or metal leaching effects of released tailings. Potential area of impact 10 km2 – 20 km2. Restoration possible but difficult and could take > 5 years.

- Infrastructure and Economics – High economic losses affecting infrastructure, public transportation, and commercial facilities, or employment. Moderate relocation/compensation to communities. <US$100 million

For TSF 1, a dam breach assessment and credible failure modes analyses were conducted. The selected potential credible failure mode was considered as a collapse due to slope failure (i.e., sliding or abutment failure) or foundation failure that leads to a sudden partial collapse of the crest followed by overtopping that progresses the breach formation. WSP assumed the crest deformation was greater than the operating freeboard. Two additional potential failure modes were also considered and determined to be non-credible or near non-credible. The likelihood of overtopping from a storm event was deemed to be very rare due to the available freeboard to store large precipitation events and the constructed upgradient diversions. The dam consists of durable waste rock that is unlikely to erode from shallow overtopping. The dam is also sized to contain the probable maximum flood (PMF), and a diversion channel located upgradient from the TSF 1 is sized to convey the 500-yr, 24-hour storm event. Given these capacities, it is unlikely that the dam will catastrophically fail from a hydrologic event alone. Similarly, catastrophic failure from internal erosion (or piping) is unlikely based on the filter capability of the liners and the robust design of the overdrain and underdrain systems. In addition, monitoring is in place to confirm the working ability of the drainage systems.

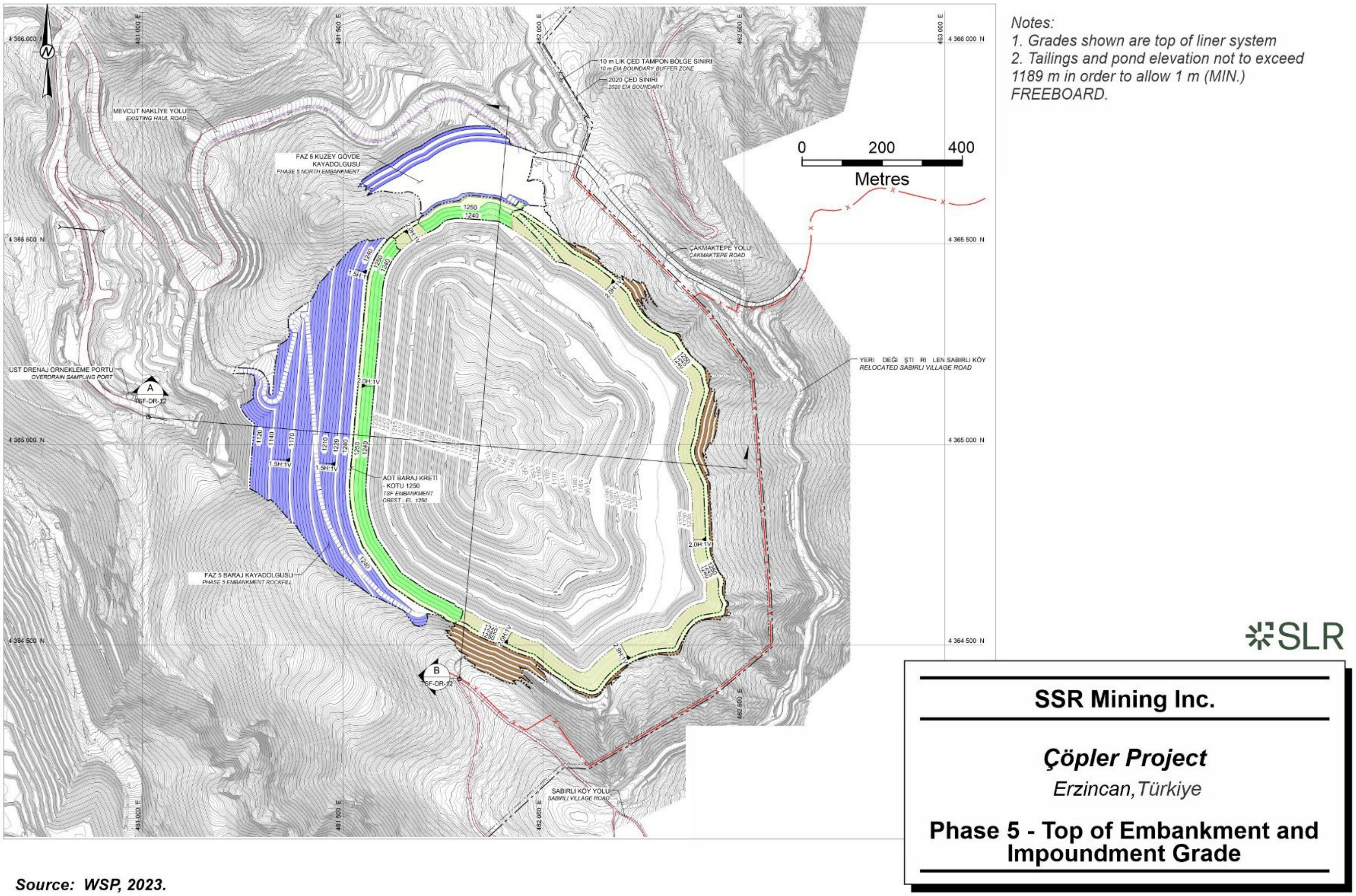
It should be noted that dam breach and related inundation studies are based on hypothetical scenarios. They are performed to inform dam consequence classification and/or as input to emergency plans enacted in the occurrence of a dam breach event. A dam breach and inundation study does not constitute, nor imply any likelihood of failure. Rather, it assumes that a breach is initiated, irrespective of likelihood, and assumes hypothetical credible failure modes based on assumed site conditions and historic dam failures at other locations.

**Figure 15-3: Phase 4 – Top of Embankment and Impoundment Grade**



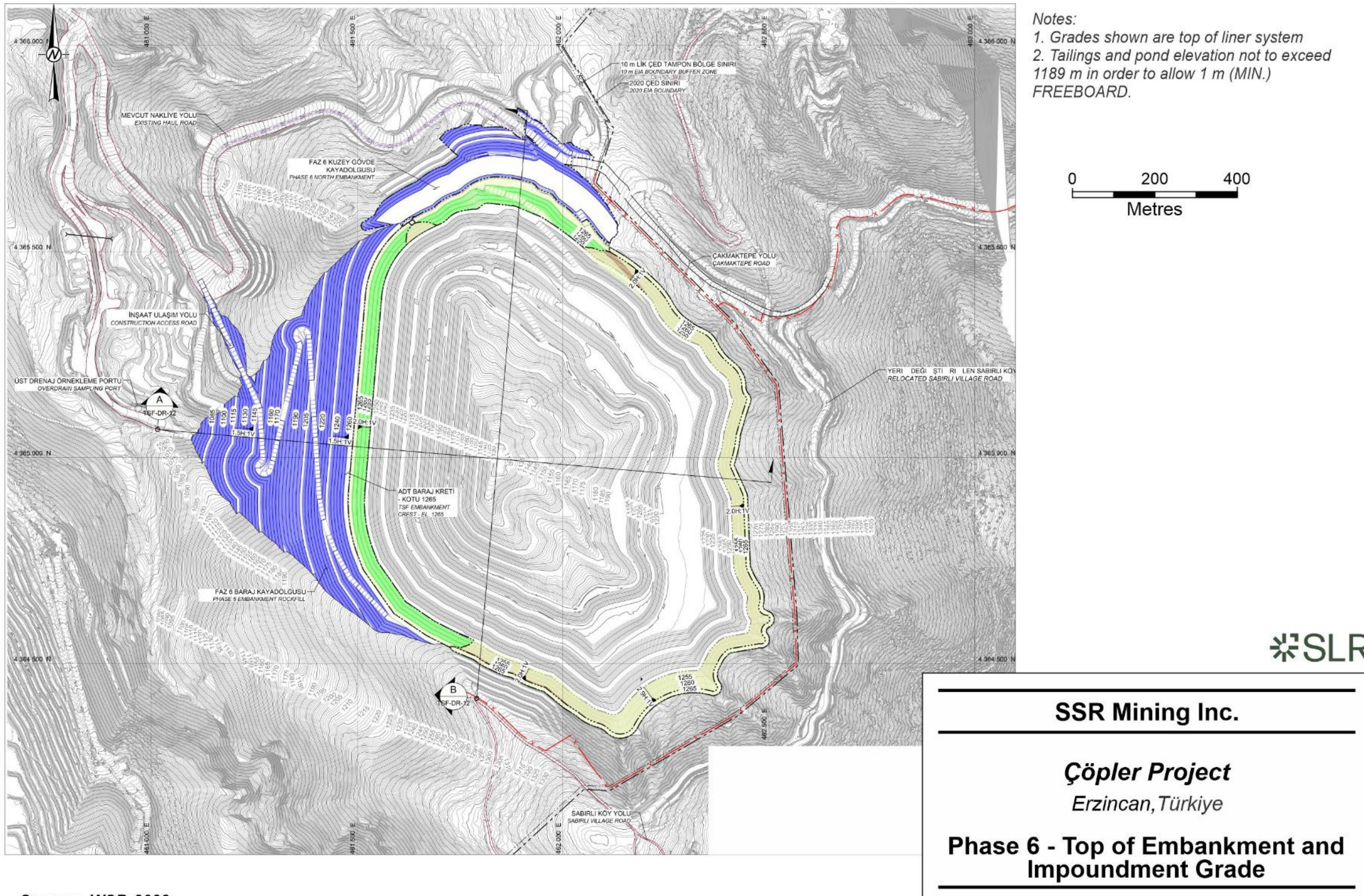

*Source: WSP, 2023.*

**Figure 15-4: Phase 5 – Top of Embankment and Impoundment Grade**



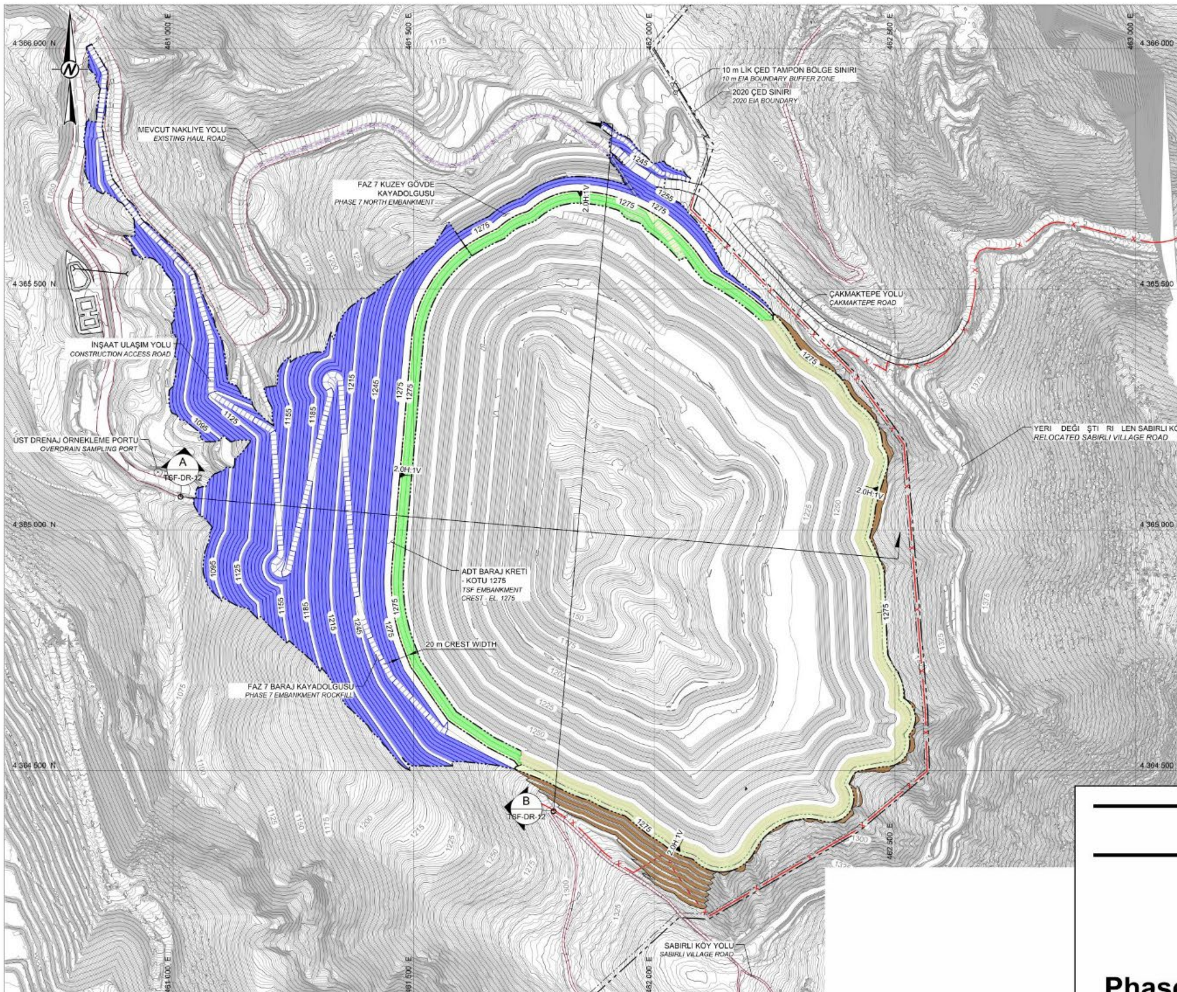

**Source: WSP, 2023.**

**Figure 15-5: Phase 6 – Top of Embankment and Impoundment Grade**




Source: WSP, 2023.

**Figure 15-6: Phase 7 – Top of Embankment and Impoundment Grade**




*Notes:*
*1. Grades shown are top of liner system*
*2. Tailings and pond elevation not to exceed 1189 m in order to allow 1 m (MIN.) FREEBOARD.*

0 200 400
Metres

**SSR Mining Inc.**

***Çöpler Project***
*Erzincan, Türkiye*

**Phase 7 - Top of Embankment and Impoundment Grade**

***Source: WSP, 2023.***

#### 15.9.1.2 Monitoring and Inspection

An Operational, Maintenance, and Surveillance (OMS) Manual was prepared by WSP with input and support from Anagold. The OMS Plan was prepared in accordance with the Turkish Mining Waste Regulations (MoEUCC, 2015) with additional guidance published by the Mining Association of Canada (MAC, 2019). The OMS Manual is a 'living document' that is updated on an annual basis. In addition to providing the basic guidance for the management of process fluids, the OMS Manual does the following:

- Summarizes the roles and responsibilities of Anagold personnel.
- Presents a description of the facility and pertinent design details.
- Provides maintenance and surveillance parameters and procedures.
- Outlines abnormal operating conditions.
- Details emergency preparedness and response protocols.
- Presents a conceptual closure plan.

The OMS Manual provides a documented framework for action, as well as a sound basis for measuring performance and demonstrating due diligence. It is intended to be a dynamic document that is reviewed and revised by site personnel and the Engineer of Record (EoR) on an annual basis and as operating conditions require. The OMS Manual (WSP, 2022) includes a requirement for the annual dam safety inspection performed by the EoR which includes a series of inspections at site that is documented in an annual Dam Safety Inspection Report. The first annual inspection for TSF 1 was conducted in Q4 2019. Since then, annual inspections have been performed by the EoR, and the findings have been presented in annual dam safety inspection reports. The results of the latest inspection in 2023 and data review indicated that the Çöpler TSF 1 is in good condition and operating in general accordance with the intended design of the facility. A review of the instrumentation indicated normal data trends and no unanticipated abnormal readings or 'triggering events' observed. Of the action items included in the report, none were considered serious in nature or otherwise a concern to the safety of the TSF 1.

In addition, TSF 1 is subject to fortnightly external official audits by the Erzincan Provincial Environmental Directorate. The authorised hydraulic structures inspection company, Ore Mineral, is always on-site during construction, on behalf of the MoEUCC. The TSF design and engineering consultant is also on-site during construction to ensure quality and conformance to design.

Anagold has engaged an Independent Tailings Review Board (ITRB), as per leading international best practices, to review tailings facilities as part of the review and oversight process. The ITRB reports directly to the senior management at a corporate level.

#### 15.9.1.3 TSF 1 Design

TSF 1 is a downstream, earth and rockfill dam. The technical specifications for the construction of TSF 1 conform with both Turkish national requirements and accepted good practice standards for tailings facilities, including the International Council on Mining and Metals' (ICMM) GISTM, World Bank Standards, Canadian Dam Association Safety guidelines, Mining Association of Canada (MAC) Guides, and the International Commission on Large Dams (ICOLD) bulletins for the dam safety.

The TSF 1 design consists of a fully lined impoundment, including a compacted earth and rockfill embankment. TSF 1 is a downstream raise construction which will consist of seven phases (six raises). The TSF 1 embankment overlies mostly the granodiorite and limestone bedrock units except for the small area on the north abutment which sits on the ophiolite bedrock unit. The ultimate embankment toe will overlie the competent limestone when the embankment reaches its final design elevation at 1,275 m. During all phases of construction, weaker alluvial materials are removed from the bottom of the TSF 1 valley. Rockfill has been keyed into the bedrock on the north and south abutments during the previous embankment phases construction and will continue to be placed as keyed-in material with the further dam raises. The unweathered granodiorite rock mass contains closely to widely space discontinuities and is classified as strong (50 to 100 MPa UCS) to very strong (100 to 200 MPa UCS) based on the Unified Rock Classification System (URCS). Similarly, limestone is also classified as medium strong to strong. Foundation shear wave velocities near the surface generally ranged between 200 and 950 m/s, with an average value of about 800 m/s. The depth to higher velocity strata varied significantly, between 0 and approximately 50 m, with an average of approximately 20 m. Velocities at depth were higher, up to approximately 4,000 m/s with an average value of approximately 2,000 m/s. Rock exhibiting seismic velocities of below 2,000 m/s is considered rippable with a D9 dozer. WSP's limit equilibrium study modeled the foundation materials based on the available laboratory and field data and indicated that TSF constructed through Phase 7 with 1.7H:1V downstream composite slopes will be stable under static loading conditions and OBE and MDE seismic conditions. The TSF 1 design includes the following primary components:

- A compacted earth and rockfill embankment with a zoned upstream granular filter protection system. TSF 1 will have 1 m minimum freeboard under its crest elevation and is designed to contain the Probable Maximum Precipitation (PMP) storm event. The downstream face of the ultimate embankment will be constructed at a composite slope of 1.7H:1V. The upstream face of the embankment will be constructed at a slightly shallower slope with slopes of 2.0H:1V to facilitate placement of the filter layers and liner system and a resultant composite slope on the order of 2.6H:1V after considering the operational benches. The filter layers and low-permeability soil layers are designed to be 1.5 m thick, as measured perpendicular to the slope. Measured horizontally, the layers are designed at 3.3 m wide each.
- A composite liner system consisting of a 2 mm thick, double-sided, textured high-density polyethylene (HDPE) geomembrane and geosynthetic clay liner (GCL) over a low-permeability soil (i.e., clay) liner system that provides an equivalent protection to that provided by 5 m of a geologic barrier with k <10-9 m/s. A GCL is also substituted with low-permeability clay on select slopes steeper than 3H:1V as allowed by Turkish regulations.
- An impoundment gravity flow underdrain system for collection and monitoring of naturally occurring seeps and springs.
- An upstream diversion channel was constructed concurrent with the Phase 4 expansion along the new Sabırlı Village Road to convey the 100-yr 24-hr storm event plus freeboard or the 500-yr, 24-hr event without freeboard. The design by INR Consulting and Engineering (INR) routes the upgradient surface water around the TSF 1 valley and to the adjacent Kuruçeşme Valley.
- An impoundment overdrain system for the collection and management of tailings seepage water through natural consolidation and drainage of excess process water.
- Perimeter roads and benches within and around the impoundment area for access and tailings distribution / reclaim water pipes.

- Tailings delivery and distribution system.
- Reclaim Systems.

**Embankment Stability Analyses**

Slope stability analyses were performed on the ultimate TSF configuration (i.e., at the end of filling of Phase 7) using Slide2 by RocScience, a two-dimensional limit equilibrium slope stability program. The Spencer (1967) method was used to compute a factor of safety as this procedure satisfies both force and moment equilibrium, thereby yielding a more rigorous solution than other commonly used methods. Per the project design criteria, the minimum allowable FOS is 1.5 for static analyses. Pseudo-static stability analyses using the Hynes-Griffin and Franklin (Hynes-Griffin and Franklin 1984) method were used as an initial screening tool to evaluate whether embankment deflections under seismic loading conditions will be acceptable.

The FOS values calculated for four different cross-sections through TSF 1 ranged from 1.8 to 2.0 therefore exceeding the minimum design criteria, indicating the TSF will be stable under static loading conditions. To achieve the minimum required FOS, it was assumed that unsuitable surficial soil near downgradient embankment toe will be excavated, removed, and replaced with structural fill as needed. This has been performed as part of construction to-date and has been documented in the daily field reports and CQA Reports for each phase constructed.

Pseudo-static stability analyses were performed on the four sections for operational and closure conditions. Under the OBE, the minimum FOS value is 1.2 for Ultimate TSF with 1.7H:1V composite downstream slopes. Under MDE, the minimum FOS value is 1.0 for the Ultimate TSF. WSP also evaluated the seismic loading conditions for an annual exceedance probability (AEP) of one-in-10,000-year event as recommended by guidelines included in the GISTM. Two of the sections resulted with FOS smaller than 1.0 under 10,000-yr earthquake event. These results indicate the TSF may experience some deflection during seismic loading conditions. Therefore, detailed seismic deformation analysis was performed to assess the magnitude of earthquake induced movements.

**Seismic Deformation Evaluation**

The current deformation model provides the deformations under seismic loading conditions for a TSF 1 with 1,275 m crest elevation, which corresponds to Phase 7 in the current design. The seismically induced deformations were evaluated against earthquake ground motions with an annual exceedance probability (AEP) of 1 in 10,000 years using the two-dimensional finite difference FLAC 8.0 software in which both the horizontal and vertical displacements are evaluated independently. Source earthquakes were of moment magnitude (M) 6.9 to 7.9 centered at M7.5 which was the preferred MCE magnitude in the project design criteria. WSP weighted the Arias Intensity (AI) and D5-75 direct measures after comparing the intensity measures of the scaled Earthquake Acceleration Time Histories (EATHs) to the predicted intensity measures. The D5-75 and AI of the scaled EATHs were generally within the 16th and 84th percentile range of the predicted values with few scaled EATHs that were outside the range. The D5-95 and CAV were on average close to or slightly larger than the 84th percentile which was relatively conservative.

Based on the average predicted deformations and the expected levels of liner strain, the TSF 1 phase 7 embankment is expected to remain stable when subjected to the design strong motion events.

**Tailings Consolidation and Capacity**

WSP updated the tailings consolidation modeling to account for the tailings characteristics obtained from 2020 laboratory tests on POX and Flotation tailings. The updated consolidation model also included the current mine plan.

Based on the results of the updated consolidation model, an overall maximum tailings elevation of 1,274 m (i.e., crest elevation of 1,275 m) above mean sea level (MASL) provides capacity within the TSF for 59.2 $Mm^3$ of tailings deposited at average end of life settled density of 1.18 $t/m^3$ resulting in capacity approximately for 70.0 Mt of tailings. This elevation considers struck-level tailings deposition only. This means that tailings beach slopes, water storage pond volumes, and freeboard are not considered. Considering a 1% tailings sub-aqueous beach slope under the water pool, the tailings capacity would be reduced to 65.8 Mt.

The tailings tonnage estimate requires the sulfide plant feed to be adjusted to allow for the limestone added during processing for pH control. The limestone reacts with the acid to form gypsum. The applicable factor is 1.146.

**TSF Schedule Assumptions**

The key assumptions related to the ongoing construction and expansion of TSF 1 as follows:

- Based on the current LOM plan and schedule, there is sufficient capacity in Phase 4 through Q1 2026.
- Phase 5 construction was initiated in 2023 and is currently ongoing with embankment rockfill placement. Construction is scheduled to be completed by 2025. Phase 5 will have approximately 39 Mt of tailings capacity at struck level.
- The LOM plan that constitutes the basis for this TRS requires approximately 60.4 Mt of tailings storage capacity.
- TSF 1 already contains approximately 13.3 Mt of tailings that have been deposited. The total required capacity for tailings storage, considering the existing stored tailings and the LOM plan, is 73.7 Mt.

### 15.9.2 TSF Expansion and Further Planned Development

There are opportunities that may offer significant reduction in capital costs with consideration of the following:

- Current TSF can be expanded to Phase 7 with crest elevation of 1,275 MASL and will provide a capacity of 65.8 Mt after consideration of the tailings beach slope and allowance for operational water storage based on current operational practices. Some additional storage capacity may be gained through improvements in tailings density and water management practices.
- WSP has developed a concept design to increase the crest elevation of Phase 7 embankment to 1,280 MASL, increasing the total capacity to approximately 77 Mt, if sufficient land can be secured within the impoundment area for this expansion.
- A site directly adjacent to TSF 1, TSF 2, was the subject of a PFS-level study in 2020; TSF 2 can provide approximately 13.9 Mt of additional tailings storage capacity, if required in the future, however, the development of this facility is not within the scope of the case presented in this TRS. A detailed design of TSF-2 was advanced to support permitting efforts, and in November 2022 an application was submitted to the MoEUCC.

- Anagold is currently considering other TSF sites, beyond TSF 1, TSF 2, and potentially dry stack tailings, with potential to increase tailings capacity should this additional capacity be needed for future expansions. In that regard, WSP is currently working with Anagold to develop PFS-level TSF design options.

# 16.0 Market Studies

## 16.1 Markets

The markets for gold and silver doré are readily accessed and available to gold producers. Currently, 100% of the gold and silver is delivered to the Istanbul Gold Refinery. Copper precipitate is currently produced from the SART plant and sold into local markets in Türkiye. However, the amounts sold to the market are de minimis and not considered as part of the economic analysis.

However, with the current Mineral Reserves estimate and production schedule which includes the addition of the Grind-Leach circuit to process mainly oxide ores from the Greater Çakmaktepe deposit, saleable silver and copper quantities are considered de minimis and not included in the economic analysis.

Metal prices for the economic analysis were estimated after analysis of consensus industry metal price forecasts and compared to those used in other published studies. The metal prices selected have taken into account the current Project life. The metal prices used for the economic analysis, shown in Table 16-1, are considered to be representative of industry forecasts.

**Table 16-1: Economic Analysis Metal Price Assumptions**

| Metal Price | Units | 2023 | 2024 | 2025 | 2026 | 2027 | Long-Term |
|---|---|---|---|---|---|---|---|
| Gold | $/oz | 1,925 | 1,930 | 1,890 | 1,810 | 1,780 | 1,755 |
| Copper | $/lb | 3.85 | 3.90 | 4.05 | 4.10 | 4.00 | 3.85 |
| Silver | $/oz | 23.50 | 24.00 | 23.95 | 23.70 | 23.35 | 22.75 |

No external consultants or market studies were directly relied on to assist with the sales terms and commodity price projections used in this TRS. The SLR QP agrees with the assumptions and projections presented.

## 16.2 Contracts

Anagold contracts the mining operations to a Turkish mining contractor. The contract contains provisions for escalation / de-escalation of fuel prices, foreign exchange rates, haul grade and distance and Turkish inflation. The terms and prices for the mining contract are within industry standards for mining contracts.

# 17.0 Environmental Studies, Permitting, and Social Plans, Negotiations, or Agreements with Local Individuals or Groups

The Çöpler mining and processing operations have a well-established and effective environmental social and permitting management program. Site staff are knowledgeable and experienced in site and regulatory requirements and supported by corporate environmental, social and governance (ESG) personnel. Budgets are reasonable and there were no critical path permitting items referenced that would limit production and reserve/resource development. A reclamation/closure plan and estimates to perform this activity are in place. The budgets and staffing to perform required programs are adequate and indicative of activities, requirements and responsibilities.

The following sections describe the existing environment, monitoring, Project operations, planned ESG activities and closure.

## 17.1 Permitting

The Çöpler mining and processing operations involve open pit mining from multiple pits, construction of multiple waste dumps to accommodate mined materials, processing of oxide ores and placement on a heap leach pad, and processing of sulfide ores with placement of tailings in a tails storage facility (TSF). Exploration/development work continues to add Mineral Resources and Mineral Reserves to extend the mine life and operations at site. These activities and facilities are carried out on treasury, pasture, and forestry lands, including some private lands.

In addition to the direct impacts on the involved lands, the operations impact on the surrounding lands and the local communities. Physical impacts may include changes to local surface and groundwater (including potential pollution), air quality impacts particularly from dust, and increased noise and vibration from mining and processing operations.

Operation of the Çöpler mining and processing facilities, and subsequent mining at Çakmaktepe, has been investigated and authorised by means of a series of Environmental Impact Assessments (EIAs), with positive decisions obtained from the Turkish Ministry of Environment, Urbanisation, and Climate Change (MoEUCC). These EIAs include specific actions designed to address all material impacts of the mining and processing operations. Anagold has remained in compliance with all aspects of the EIA and operating permits throughout the history of the Project.

The original 2008 EIA for Project, obtained on April 16, 2008, included three main open pits (Manganese, Marble, and Main zones), five waste rock dumps (WRDs), a heap leach pad, a processing plant, and a TSF. The 2008 project description involved only the oxide resources.

The Project started its open pit and heap leach operation in 2010 and first gold was poured in December 2010. Additional EIA investigations have been submitted and approved, as required, to support ongoing mining and processing operations, including:

- Çöpler
  - EIA permit dated April 10, 2012, for the operation of mobile crushing plant.
  - EIA permit dated May 17, 2012, for the capacity expansion involving:
    - Increasing operation rate to 23,500 tpd.

        - Increasing Çöpler waste rock dump (WRD) footprint area.
        - Adding a sulfidization, acidification, recovery, and thickening (SART) plant to the process to decrease the cyanide consumption due to the high copper content of the ore.
    - EIA permit, dated December 24, 2014, for the capacity expansion involving:
        - Sulfide plant expansion
        - Heap leach area expansion
    - EIA permit dated October 7, 2021, for the capacity expansion (the 2021 Çöpler EIA or COP 3) involving:
        - Heap leach pads 5 and 6
        - TSF expansion
        - Operation of a flotation plant
- Greater Çakmaktepe
    - EIA permit dated January 26, 2017, for the Çakmaktepe satellite pits expansion.
    - EIA permit dated August 9, 2018, for the Çakmaktepe expansion for the newly defined Central pit.
    - EIA permit dated March 30, 2022, for the Çakmaktepe second expansion, including the Çakmaktepe Ext starter pit. (the 2022 Çakmaktepe EIA or CAK 2 EIA)

In addition, pending EIA processes include an EIA to allow a Çöpler and Greater Çakmaktepe third capacity increase (CAK 3). In order to do this, an EIA project description file was prepared by SRK and was submitted by Anagold to the environmental regulatory authority in August 2023. Anagold has since received comments back from the Ministry. Based upon this feedback, Anagold is developing a combined Çöpler and Greater Çakmaktepe presentation that includes not only CAK 3, but also Çöpler Expansion, which includes the lime quarry, lime plant and increased daily production rates at both sites.

After the EIA positive decisions, additional permits and licenses are required to be issued by government agencies consistent with the Turkish governing laws and regulations. These include land access permits (pasture and forestry); environmental permits and licenses; workplace opening and operating permits; and licenses and certificates. The status of Project permits and operating licenses is listed in Table 3-1.

In the period following the receipt of the 2008 EIA permit, Anagold has conducted further technical studies to supplement the Turkish EIA studies and to establish plans and procedures to manage potential project impacts and meet IFC requirements. Significant operational management plans established as a result of these prior and ongoing studies include:

- Non-mining Wastes Management Plan
- Mining Waste Management Plan
- Water Resources Management Plan
- Biodiversity Management Plan
- Soil Management Plan

- Air Quality and Emissions Management Plan
- Mine Closure and Rehabilitation Plan
- Environmental Management System Framework
- Environmental Noise and Vibration Management Plan
- Hazardous Substances Management Plan
- Mine Closure Framework
- Resource Efficiency and Pollution Prevention Management Plan
- Cyanide Management Plan

## 17.2 Environmental Studies, Site Information and Management

### 17.2.1 Physical Features

The Project site is in a transition region between Central and Eastern Anatolian climates. The region has a continental climate, where summers are hot and dry, and winters are cold and relatively humid. Owing to the mountain ranges bordering Erzincan Province on all sides, the region has a milder climate than the neighbouring provinces.

The long-term annual average precipitation for the Project site is 367 mm, including snow in the winter months. The annual average wind speed is 2.6 m/s. Maximum wind speeds are observed in spring. The prevailing wind direction is south.

The project site is in a rural area with no significant commercial or industrial air pollution sources. Scattered slag piles and ore extraction sites remain from the former manganese mining operations.

The ambient air quality monitoring programme on site indicated that $SO_2$ and $NO_2$ levels, and particulate matter (PM10) and dust deposition levels in ambient air are well below the limit values defined in Turkish Air Quality Standards. Heavy metal concentrations in dust were well below the limit values defined by European Commission (EC), World Health Organisation (WHO), and Turkish standards.

The railway and the İliç-Kemaliye Road passing near the Euphrates River are the mobile sources of noise in the area. The Euphrates-Karasu River is the largest surface water body near the Project; it borders the northern edge of the Project area. Peak flow rates are observed in April and May following the snow melt and rainfalls. All other streams in the vicinity of the Project area are intermittent, flowing between March and June.

The surface water quality within the site was investigated at various water sampling locations throughout the site. Water quality is classified from class I (very good quality) to class IV (highly polluted, poor-quality water). Sampling has indicated class IV water quality for Sabırlı and Çöpler creeks, and Karabudak Stream. Similarly, the Euphrates-Karasu River is classified as a class IV water resource. For all streams, metal concentrations, including aluminium, iron, copper, and arsenic are high, especially in the drainage from Sabırlı and Çöpler creek catchments. Elevated metal concentrations in these catchments are attributed to natural metallic enrichment from the surrounding geology.

### 17.2.2 Land Use

The prevalent land use and cadastral information for the Project and its environs is presented in Figure 17-1. The land use patterns are based on maps produced by the General Directorate of Rural Services. Most of the Project area consists of pastureland, treasury, and forest. The Land Use Capability Classes (LUCC) for the Project area and environs are given in Figure 17-2.

Under the LUCC system, there are three main categories and eight classes (ranging between I and VIII).

The first category covers classes I through IV and describes lands which are suitable for cultivation and animal husbandry. This category has few limitations, except for class IV, which requires very careful management because of its greater limitations.

The second category covers classes V through VII, which are unsuitable for cultivation, but which can support perennial plants when intensive conservation and development practices are applied. Under controlled conditions, this land may also support grazing and forestry. The soil type included in class VII has severe limitations, preventing the growth of cultivated plants due to characteristics such as the formation of steep slopes (which are exposed to medium to severe erosion) and shallow soil layers, possessing stony, salty, and sodic texture. As such their utilisation for agricultural purposes is very limited.

The third category contains only the class VIII, which is suitable only for wildlife, sports, and tourism-related activities.

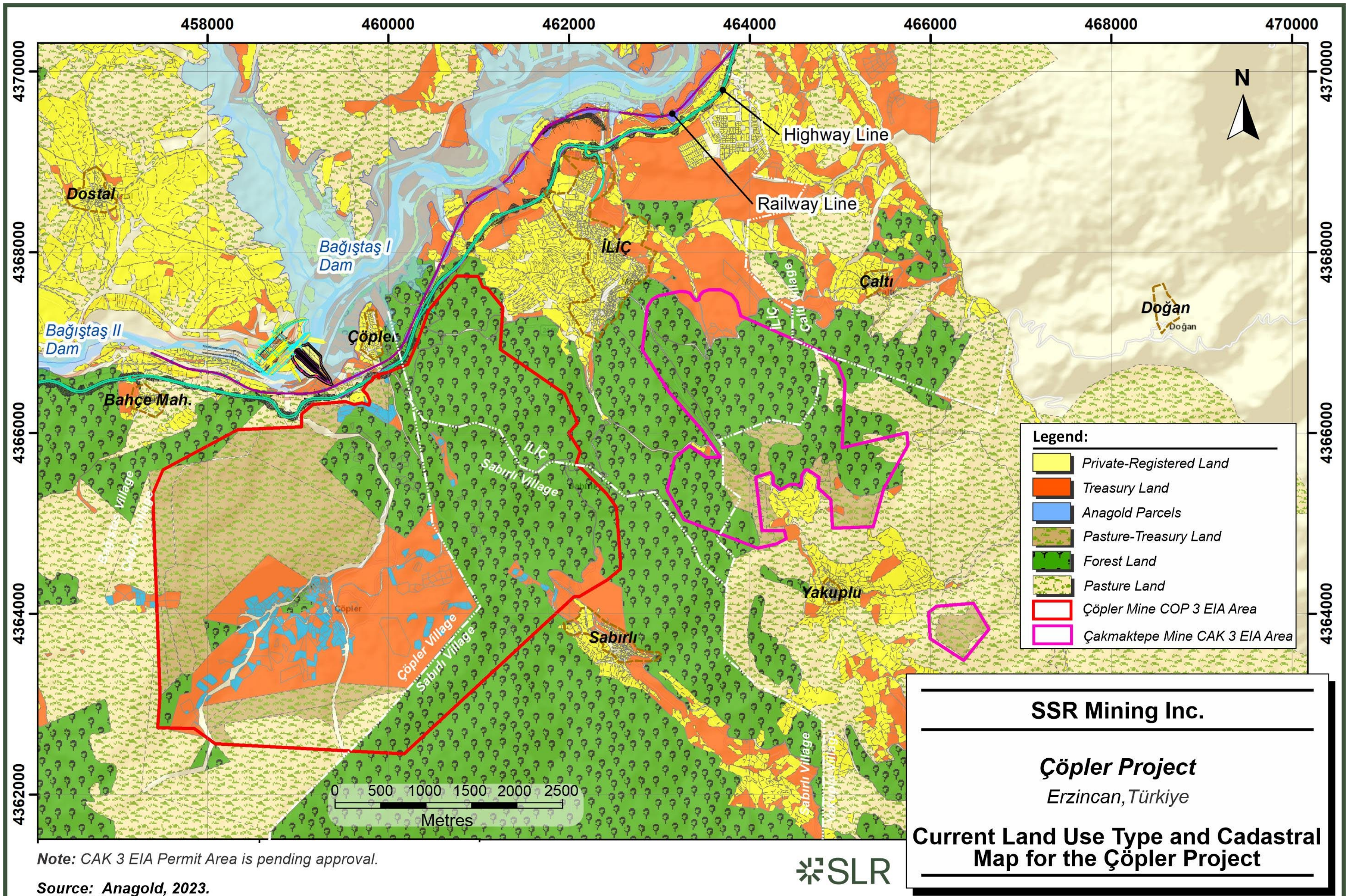
As shown in Figure 17-2, the Project area has VI, VII, and VIII classes of LUCC. The land use types in the Project area and its vicinity are listed:

- Degraded forest lands and coppice
- Barren forest lands
- Agricultural lands
- Settlements

The Project area and surroundings are generally of low-land use capability and not suitable for sustainable agricultural activities. Although the agricultural activities are limited in the area, there are several small gardens which belong to the local villagers.

The forests in the area are under stress due to high grazing and illegal land use practices; pasture lands are used for the purpose of grazing, but it is illegal to use forestry lands for grazing. In general, the local soil has poor fertility due to its nature and elevation such that it only supports limited species of vegetation.

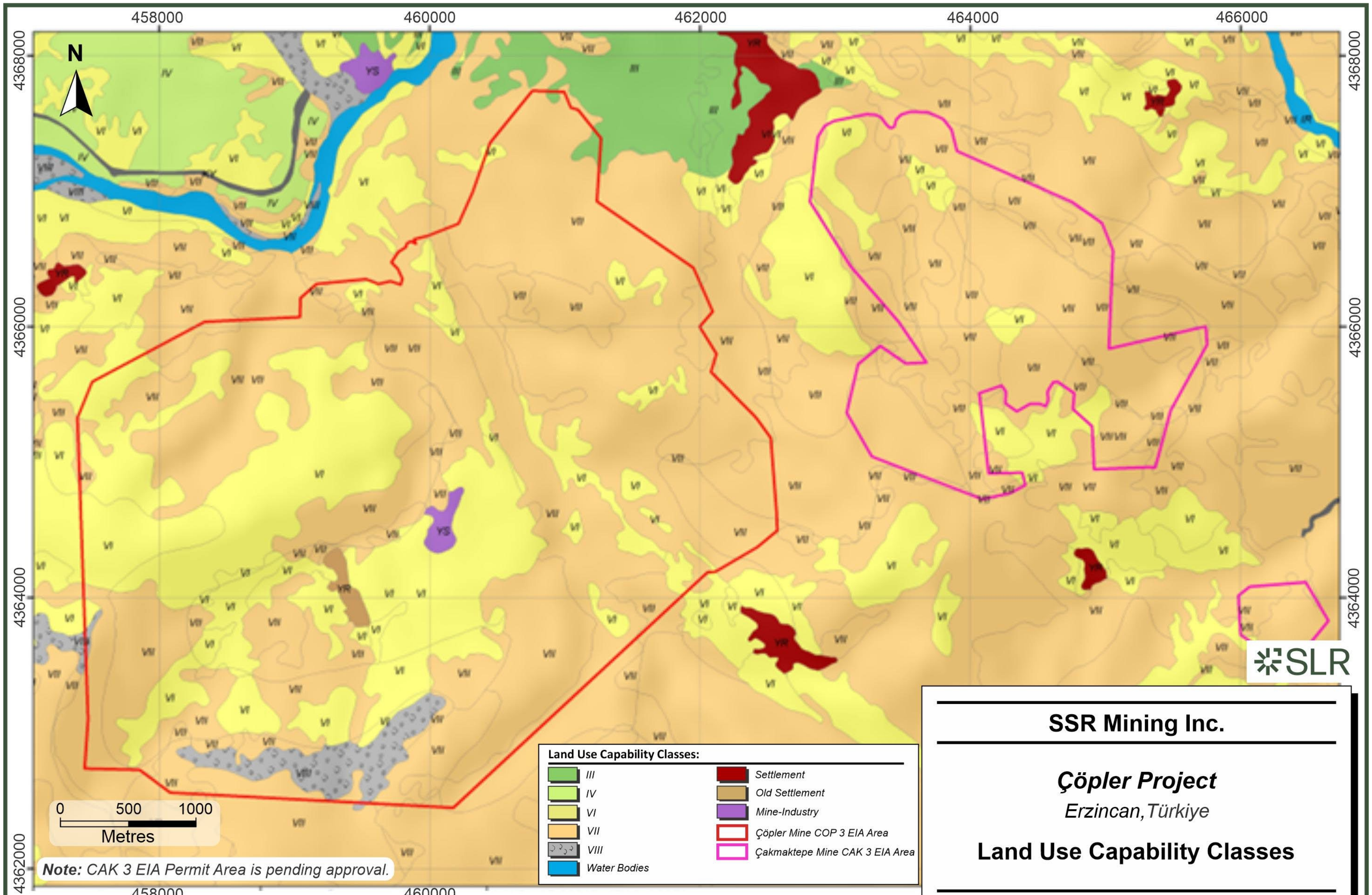
**Figure 17-1: Current Land Use Types and Cadastral Map**




***Note:*** *CAK 3 EIA Permit Area is pending approval.*

***Source: Anagold, 2023.***

**Figure 17-2: Land Use Capability Classes**




**Source: Anagold, 2023.**

### 17.2.3 Biological Features

Floral species from the Irano-Turanian and Mediterranean phytogeographic regions are dominantly observed at the site. Most of the flora species are identified in the dry meadow habitats in the Project area. Ruderal habitat (such as roadsides etc.) and rocky areas follow dry meadow habitats with respect to the floristic species diversity.

Flora and fauna surveys were conducted in the framework of the environmental baseline studies conducted between 2005 and 2007 by specialists from Hacettepe University. Biodiversity of the site has been updated by the specialists from Gazi University and Hacettepe University via three seasonal surveys conducted during 2011 and 2012. A Biodiversity Action Plan (BAP) was prepared, and a BAP Report was provided as an appendix of the Environmental and Social Impact Assessment (ESIA) Report for the Sulfide Expansion Project. The flora species were classified according to their thread status with respect to Turkish Red Data Book of Plants and the International Union for Conservation of Nature (IUCN) and European Red List (ERL) Categories and Criteria.

There are four main vegetation types in the area namely: *Quercus petraea* subsp. pinnatiloba; *Quercus libani* and *Quercus brantii* forests; Irano-Anatolian steppe vegetation; and wooded steppes and rock habitat, while the rest of the site is designated for main mining activities. The faunal composition of the site is considered weak.

## 17.3 Environmental Management

Anagold's commitment to responsible environmental management is set out in the Environmental Policy, which complies with in-country legislation, the IFC Performance Standards, and the Equator Principles. The Çöpler Environmental Management System (EMS) is certified to the international ISO 14001: 2015 standard. The latest ISO 14001: 2015 external audit was completed successfully in December 2019. A new updated audit is expected to be completed by the end of 2023.

### 17.3.1 Water Risk

The Project is in a high desert region in Eastern Türkiye near the culturally significant Euphrates River. All water used at Çöpler is governed by strict permitting rules regarding withdrawal(s) and discharge under Turkish regulations. The approach to water management is to use water as efficiently as possible and to only draw as much needed and allowed within permitted limits. All extracted water is groundwater. Water used on site is recycled and re-used in the process plant. Water is not discharged to the environment.

### 17.3.2 Energy and Climate Change

All the electricity used by the Project is drawn from the Turkish national grid. Approximately 41% of Türkiye's national grid capacity comes from hydropower stations. The treatment of sulfide ore requires a more energy and $CO_2$ intensive process than the oxide ore process that was previously the only ore treated at the Project. Anagold plans to use 2019 as the baseline year for electricity use (269 GWh) and efficiency, and to set electricity usage and greenhouse gas (GHG) targets, accordingly. The greenhouse gas emissions are published in the Anagold Sustainability Report.

### 17.3.3 Tailings Dam Management

Tailings produced by the Project are classified as class II non-hazardous. All tailings are sent to a carefully engineered TSF. Anagold has procedures in place to ensure that all parts of the TSF life cycle from construction to closure align with international best practice standards.

The TSF at the Project is a downstream mass filled dam. It became fully operational during the final quarter of 2018 with the start-up of the sulfide plant. The technical specifications for the construction of the Project TSF conforms with both Turkish national requirements and accepted good practice standards for tailings facilities, including:

- World Bank Standards
- Canadian Dam Association Safety Guidelines
- ICOLD (International Commission on Large Dams) Bulletins
- Turkish Hydraulic Works' Technical Codes
- Mining Association of Canada (MAC) Guide to the Management of Tailings Facilities.

The TSF has been designed to withstand significant earthquakes up to a magnitude of 7.5 on the Richter scale. Modelling showed that even in the most severe seismic event, the wall of the TSF will heave with minimal risk of altering facility location or strength. There are no communities living directly downstream of the TSF.

The Project uses a combination of technology, regular inspections, and external oversight and audits to monitor the TSF (Section 15.9.1.2).

In addition to stability designs and monitoring, Anagold also has three groundwater monitoring wells in place both above and below the TSF, to monitor for signs of groundwater contamination. It was designed to meet the best-in-class requirements for class I (hazardous) waste, even though all tailings are classified as class-II (non-hazardous).

### 17.3.4 Water Management

The process of removing ore from the ground and extracting gold creates significant non-hazardous and some hazardous waste, which must be appropriately dealt with over the long- and short-term. Ensuring all waste is responsibly dealt with is crucial to protecting the health of the local environment and neighbouring communities.

To ensure that all waste, whether hazardous or non-hazardous, is reduced and dealt with in a safe and responsible manner, the Project has a detailed and comprehensive Waste Management Plan. This is underpinned by the goal to reduce the amount of waste generated and to maximise the proportion of waste sent for recycling.

The bulk of the waste created at the Project is waste rock. All the waste rock created by the Project is carefully disposed of in engineered waste rock dumps. The design and management of all waste rock dumps is overseen by geotechnical engineers to ensure they have safe slope angles, maximum structural stability and management of any potentially acid forming materials are conducted appropriately by mine operations and thus meet the requirements of Turkish national regulations, industrial best practices and the IFC Performance Standards.

### 17.3.5 Cyanide Management

The use of cyanide is a critical part of the gold mining process. However, if not handled correctly, cyanide can have significant impacts on both environmental and human health. The use of cyanide at the Project is governed both by the requirements of Turkish national laws and regulations and aligned with industrial best practice. SSR became a signatory to the International Cyanide Management Code on January 23, 2023, which will require certification within three years of signing. All employees and contractors who handle, transport, or dispose of cyanide are required to undertake specialized training in cyanide handling.

### 17.3.6 Biodiversity

The size, scale, and location of mining operations means they can have a negative impact on local biodiversity. Failure to manage these risks and minimise the impacts on biodiversity could affect the social licence to operate and reputation. The Anagold aim is to restore sites (both operational and exploratory) and repair any damage done to the extent practicable. To do this, detailed records of the full range of biodiversity present are a part of feasibility studies of any project or expansion. These studies form the basis for a Biodiversity Action Plan (BAP). The BAP sets out how impacted ecosystems are to be restored to their original state (or as close as possible) at the time of closure. The Project, including the TSF and exploration prospects, have Biodiversity Action Plans in place. Anagold also conducts biodiversity monitoring studies each quarter with experts from Gazi and Hacettepe Universities.

### 17.3.7 Air Quality

There is a potential for dust to be generated across many parts of the operation, including blasting, crushing, and milling, and the movement of large vehicles on haul roads. Dust management is a key focus across all facets of the operation. Air quality and the presence of dust is an important factor for local communities and workers. Ensuring management air quality for workers and communities is an important part of environmental management. Anagold has put in place a dust management plan at the Project to minimise the levels of dust in the air and ensure they fall within Turkish and IFC guideline limits. There are several monitoring stations across site and in the local communities. These stations record levels of airborne particulate matter and dust fall out. The results from the monitoring stations are reported to the relevant national authorities, and to local communities.

Anagold is currently modeling the air quality impact(s) of increasing operational throughput from 70 ktpd to 100 ktpd and the potential impact(s) to support future permitting.

### 17.3.8 Compliance

The most recent integrated regulatory environmental audit was performed in June 2023 by the Erzincan Provincial Environmental Directorate and it is reported that no issues were reported with this official audit. No notice(s) of violation or fines were issued as of the writing of this Report.

## 17.4 Mine Closure

Mine rehabilitation and closure obligations are prepared and updated annually for the Project. Scheduling and costing of the closure tasks are made in accordance with the Anagold mine plan.

Cost estimates rely on data from mine operations including labour and equipment rates, material costs, groundwater well inventories, and electronic topography data.

Closure costs are estimated using the Standardised Reclamation Cost Estimator (SRCE) Model developed by SRK Consultants. The SRCE is an industry standard tool developed to facilitate accuracy, completeness, and consistency in the calculation of costs for mine site reclamation.

SRCE uses lengths, areas, volumes, flow rates, quantities, etc., provided or estimated by the user (based on the reclamation or closure actions). Some actions require crews and fleets with productivities either provided by the SRCE default settings or those provided by Anagold to estimate the time it takes to perform the work. Where available, these times are then multiplied by labour and equipment rates provided by Anagold.

The Heap Leach Draindown Estimator (HLDE) model is another industry standard tool used for estimating heap leach pad draindown curves for reclamation bonding purposes. The HLDE inputs are derived from site-specific data.

### 17.4.1 Closure Cost Estimate Assumptions – Waste Rock Dumps

All slopes on the WRDs will be regraded to 2.5H:1V to prepare them for covering, scarification, and revegetation. The sequence of costs in the schedule corresponds to the assumption that reclamation will occur as soon as each WRD reaches final configuration.

Anagold plans to encapsulate all potentially acid-generating (PAG) waste rock within the WRDs as part of mining operations, leaving no PAG material on the surface or outer portions of the WRDs at closure. Therefore, although some PAG cells are currently exposed, costs for construction of a buffer layer encapsulating PAG waste rock are accounted under operational costs and no additional costs for mitigation of current configurations are included in the ARO estimates.

Per the EIA Report, waste rock management will be carried out to allow for the construction of a buffer layer to prevent degradation of seepage and these costs are accounted under operational costs. The seepage collection ponds active during the operations period will be reclaimed during closure. Seepage from the WRDs will not be monitored during closure and post-closure.

### 17.4.2 Closure Cost Estimate Assumptions – Pits

Berms will be constructed around the perimeter of the pit to discourage public access. There are no other physical reclamation measures assumed for the pit walls.

Rapid refilling of the pits with water is the preferred method for the western part of the pit. Costs for pit refilling by pumping flow of 66 litres per second (L/s) for four years are included in the ARO estimates.

Some PAG rock will remain exposed in the pit walls after formation of a pit lake; therefore, some reclamation work will be necessary to address the requirement (legal obligation) to cover remaining PAG materials exposed in the pit after mining ceases.

It is assumed that areas within the pit where PAG materials are exposed will be covered with one metre of non-PAG (or non-acid-generating – NAG) material. The PAG materials exposed within the pit walls are assumed to be located on gentle or nearly flat slopes. Additional measures (e.g., reduction of pit wall slopes in exposed PAG areas to facilitate cover placement) are not taken into consideration at this time. No PAG cover will be required below the final pit lake elevation.

### 17.4.3 Heap Leach Pad

All slopes on the heap leach pads will be regraded to 2.5H:1V or flatter to establish a geotechnically stable closure configuration. Following regrading, the areas will be covered, scarified, and revegetated. The ARO estimates reflect the requirement per the EIA report that identifies two to three metres of cover placement on the heap leach pad followed by growth medium placement after the reduction of heap and pond fluid inventory.

Although not a requirement in the EIA plan, there is a provision for extending half of the heap leach pad perimeter liner to contain heap material regraded beyond the existing liner during reclamation.

East and west buttresses are considered part of the heap leach pad area. The physical reclamation of this area by growth media placement and revegetation is included as a WRD.

The 2014 EIA discusses rinsing of the heap with fresh water with no subsequent fluid management. Rinsing of heap leach pads has been shown to be typically unnecessary and potentially detrimental to long-term chemical stability of gold heap leach.

Per the approach of the HLDE model mentioned above, heap drain-down will be initially managed for inventory reduction via recirculation and active evaporation, followed by active evaporation only. Active evaporation will continue until drain-down flows are reduced to a rate amenable to management with passive evaporation.

Following active solution management, when the heap drain-down flow rate decreases to a level where it can be managed exclusively within available emergency and process pond via passive evaporation, the two ponds will be converted to evapotranspiration (ET) cells. To convert process ponds to ET-cells, the ponds will require relining followed by backfilling with select material and revegetation.

Conversion costs are calculated based on experience from multiple Nevada sites.

In scheduling costs, the cost of construction of ET-cells is included at a time when drain-down rates reach a level that will allow fluid to be managed through the evapo-transpirative capacity of ET-cells.

### 17.4.4 Tailings Storage Facility

Anagold submitted an EIA in 2014 that included TSF 1 and TSF 2. The current designs for TSF 1 and TSF 2 are within the 2014 EIA boundaries, except for a small portion of TSF 1 phase 7. TSF 1 phase 4 has been constructed and approved for use in October 2023 by the MoEUCC. The current mine plan only requires construction of TSF 1. Long-term management costs are included in the estimate and proportioned for the size of the TSF construction.

Reclamation of the life-of-mine (LOM) TSF includes the following actions:

- Reclamation of the TSF surface by placing a traffic layer and growth media followed by revegetation.
- Reclamation of the final TSF embankment.
- Fluid management including managing drainage from the TSF and removal of water ponding on the TSF surface due to consolidation of the tailings.

The estimate includes costs for placement of a traffic layer over the tailings material in addition to the growth media layer. The starter embankment is built at 1.5H:1V with the final embankment at 2.0H:1V. The costs of placing 1 m cover over the embankment are also included.

Costs are included for tailings fluid management crews, pumping for recirculation and forced evaporation, as well as removal of the supernatant in the period soon after the TSF operations end.

### 17.4.5 Other

SRCE estimates costs to demolish buildings using productivities in conjunction with building volumes, wall areas, and slab volumes. Decontamination costs are included in the estimate for a decontamination crew to pressure-wash the plant site over a nominal number of weeks.

Production wells are assumed to be closed at the end of operation of the sulfide plant and monitoring wells are assumed to be abandoned at the end of the post-closure monitoring period.

#### 17.4.5.1 Monitoring

The water quality and flow monitoring schedule during the operation, closure and post-closure monitoring period includes numbers of samples, frequencies, and durations for each closure phase. The monitoring locations include the groundwater monitoring wells around the heaps, WRDs, TSF and springs as well as pit lake water quality once the rapid filling begins.

#### 17.4.5.2 Closure Planning

Closure planning costs are typical industry costs for development of closure plans and studies, reporting and preparation of closure designs and engineering.

#### 17.4.5.3 Construction Management

Construction management costs include one supervisor during active reclamation. Costs are included for road maintenance, which will be carried out with a water truck and grader during active reclamation.

#### 17.4.5.4 Human Resources

Closure personnel include a closure general manager, environmental manager, environmental technician, security, and surveyor for whom terminal benefits are included. Under the LOM schedule, the closure general manager would be present during the years of active reclamation and closure. Camp costs are included under general and administration costs.

For solution management, the cost of the heap drain-down management crew is assumed to be shared with those of the TSF.

#### 17.4.5.5 Closure Schedule

Closure is scheduled separately for the oxide and sulfide projects according to the mine plan and is consistent with the long-term management obligations expected for the TSF.

Heap drain-down management starts at the end of heap leaching operations in the mine plan. Ore will be sent to the leach pad until the end-of-2030, although it has been at a reduced rate since 2020. Management and reclamation on the heap will take place while other components of the Çöpler sulfide project continue to operate, with the active closure period starting after the end of deposition in the TSF.

### 17.4.6 Closure Cost Estimates

The annual Asset Retirement Obligation (ARO) reports for EOY 2022 and EOY 2023 have been completed. Current estimates for the close of 2023 are US$69.1 million. These amounts are updated annually using the SRCE Model which uses a unit cost approach and categorizes direct cost estimates into seven elements, representing different property closure aspects. These seven elements are: 1) Earthwork/Contouring, 2) Revegetation/Stabilization, 3)

Detoxification/Water Treatment/Disposal of Wastes, 4) Structure, Equipment, and Facility Removal, 5) Monitoring, 6) Construction Management and Support, and 7) Closure planning, G&A, Human Resources. The total reclamation cost is the sum of these seven elements (direct costs) plus the indirect costs (a percentage of the direct costs).

The life of mine closure cost has been estimated in the economic analysis at $100 million with some estimates ranging up to approximately $114 million.

No financial assurance is required to guarantee that reclamation/closure will occur; however, Anagold does pay a fee to the government based upon disturbance that can be used for reclamation should reclamation not occur.  The amount collected to date is no where close to equaling the total closure estimated amount.

## 17.5 Social and Community Plans

The EIA studies are conducted according to the format stipulated by the Turkish EIA Regulation. The scope of the Turkish EIA studies differs from the scope of international ESIA studies (as established by the International Finance Corporation's (IFC)'s Environmental and Social Performance Standards), especially in terms of social impacts and public disclosure processes. While the social impact assessment and public disclosure processes are also parts of the Turkish EIA studies, they are treated less rigorously than in IFC standards.

Anagold has conducted further investigations to supplement the Turkish EIA studies, initially to support the original project establishment and, then subsequently, to monitor the social and community attitudes and the impacts of ongoing mining operations on the adjacent communities. The fundamental data to assess social impact is derived from direct survey of the local community members in villages impacted by the mining operation. Significant (primary) surveys have included:

- Initial survey of 51 households in three villages (Sabırlı, Bağıştaş, and Dostal) presented collectively as part of the 2009 Çöpler Gold Project Social Impact Assessment (SIA) by KORA.
- Survey of 153 households in six villages (Çöpler, Bağıştaş, Bahcecik, Dostal, Yakuplu, and Sabırlı) presented individually performed by Middle East Technical University (January 2013).
- Survey of six villages performed by UDA Consulting (December 2014).
- SIA by SRK (2015).
- Survey by TANDANS Company (2017).
- Çöpler Mine Phase 2 SIA Peer Review Report by Intersocial Company.
- Çakmaktepe 2nd Expansion Project SIA Works by SRK (2021-2022).
- Survey by TANDANS Company (Ongoing).
- Çakmaktepe 3rd Expansion Project SIA Works by SRM Consulting (ongoing)

Anagold has considered the outcomes from the community surveys and SIA assessments as a key input to establish and monitor the social action plans associated with the Project. These are also the basis to develop a strategic and planned approach to community investment and development programmes. Some significant social and community plans and policies developed as a result of these investigations address the following:

- Community health and safety
- Local employment
- Local procurement
- Community development fund (SKF)
- Donations
- Stakeholder engagement and community relations
- Grievance management
- Environmental and social sustainability
- Training management
- Cultural Heritage
- Land access and resettlement
- Communications

The performance and effectiveness of social and community plans are monitored, reviewed, and updated, as required, to meet changing community needs and expectations.

### 17.5.1 Social and Sustainability

Anagold aims to provide sustainability governance that not only meet or exceed the requirements of Turkish legislation, but also align with the expectations of ICMM (International Council of Mining & Metals) guidance and International Finance Corporation (IFC) Performance Standards, and the World Gold Council. The Anagold approach to policy development is to identify the most stringent standards and integrate them into project policy.

Çöpler project policies are supplemented by site-specific environmental and safety standards, management plans and procedures that are specifically tailored to the unique environmental and social challenges and permitting regulations of the site. These plans are certified to the requirements of international standards including ISO14001: 2015 and ISO45001.

Anagold maintains annual sustainability reporting for the Project, the report is produced to be in accordance with GRI Standards. The 2022 Sustainability Report has been completed and is publicly available. The 2023 Sustainability Report is currently under development.

Anagold has a dedicated Environmental, Health, Safety and Sustainability (EHS&S) Committee. The EHS&S Committee oversees, monitors, and reviews practice and performance in areas of safety, health, stakeholder relationships, environmental management, and other sustainability issues.

Sustainability is also a key responsibility for group level executives and site teams. The approach to sustainability is underpinned by the principle of collective responsibility and a belief that every employee must contribute to our sustainability performance – particularly on issues of health and safety and reporting of incidents.

### 17.5.2 Stakeholder Engagement

At the Çöpler project, Anagold has a wide-ranging stakeholder engagement programme which sets out the ways in which Anagold engages with stakeholders and ensures regular communication with stakeholder groups.

Stakeholder consultations included meetings with shareholders, analysts, local communities, local and national authorities, contractors, government representatives, NGOs, universities, political parties, and trade union officials. Some of the key topics discussed included the Mine Expansion Project, Social Development Fund, exploration activities, cyanide and environmental awareness, local procurement, local contracting opportunities, training, and job creation.

The grievance mechanism is an important part of the Anagold local stakeholder engagement programme and the overall governance of sustainability. The community grievance mechanism has been developed to meet the requirements of both Turkish regulations and the IFC Performance Standards. The mechanism is designed to be widely accessible and there are access points available throughout each of the affected communities. There is also a dedicated access point for suppliers.

### 17.5.3 Health and Safety

Health and Safety Policy is guided by two key goals. First, to eliminate fatalities and serious injuries from our operations, and second, to continually reduce the number of minor injuries occurring on site. To fulfill these goals on the ground we implement:

- Robust systems and plans
- Risk assessment and controls
- Employee engagement
- Training

Anagold measures safety performance by tracking a range of leading and lagging safety indicators, the safety statistics reported also include exploration activities. All significant incidents are investigated and, based on findings, corrective action plans are developed to prevent recurrence.

### 17.5.4 Training and Development

The approach to the development of people is to strategically and continuously invest in staff training to ensure the business and operational needs both now and in the future are met. The development opportunities provided include technical skill development, leadership and business literacy skills, procedures and standards, and career development for staff. Çöpler has a specialized training centre with a capacity of 150 trainees.

Anagold carries out training and capability development programmes for our neighbouring community. Training is directed to future roles with the Project, while other training is focused on general skills development to enable people to seek gainful employment in other industries and locations throughout Türkiye. This will help to broaden the economy and skills base in the Iliç District.

### 17.5.5 Industrial Relations

The workforce has no restrictions on union representation. Approximately 60% of the workforce at the Çöpler project are union members and have collective agreements in place. There have been no instances of industrial action.

### 17.5.6 Diversity and Inclusion

Anagold does not set diversity or gender quotas for the workforce. Personnel are appointed based on merit and have specific objectives in place to ensure that the candidate pools for any position available throughout the company are made up of a range of qualified and diverse candidates. Women are paid equal with men in similar positions. The Anagold Diversity Policy commits the Project to provide:

- An environment in which all employees are treated with fairness and respect; and
- Equal access to opportunities, regardless of race, gender, sexual orientation and/or religious beliefs.

The approach to recruitment is to first look to local communities with appropriate skills. If unsuccessful, this is followed by recruiting from the wider region, followed by nationally, before finally looking internationally. The Anagold commitment to employing and developing local and national workers is reflected by the targets set for the Çöpler project:

- 90% of unskilled workers to be drawn from communities impacted and affected by Anagold operations.
- 80% of semi-skilled workers to be drawn from impacted and affected communities.
- 80% of skilled workers to be Turkish citizens.

Suppliers are also encouraged to employ local workers whenever possible.

Local supply chains are preferred. Where supplier skills are lacking, Anagold works with the suppliers to build capacity by providing training and mentoring.

### 17.5.7 Sustainable Community Development

To promote economic development in the communities neighbouring the Çöpler mine a Social Development Fund (SDF) was established in 2018. The SDF provides a structure under which Anagold will work in partnership with communities neighbouring the Çöpler mine, applicable Government agencies, third-party development partners and other relevant stakeholders, with the objectives of:

- Ensuring Anagold's SDF funding of community programs and projects is managed and distributed in a fair, transparent, and equitable manner.
- Building capacity within the local communities to participate in the benefits afforded by the mine and related regional economic and social development more actively.
- Moving away from donations type community relations expenditure by developing sustainable projects and programs which address agreed social and community development priorities in the areas of agriculture, health, education, non-mine related income generation, and empowerment of underrepresented and disadvantaged groups.
- Where appropriate, reviving and promoting traditional customs and practices.
- Promoting independence from Anagold operations and assisting the communities to prepare for life beyond mining.
- Where appropriate, community relations expenditure by developing sustainable projects and programs which address agreed social and community development priorities and/or benefit of public such as infrastructure, renovation, sponsorship, and construction.

Anagold will work with the community and other development partners in a manner that reflects the core values and principles of the SDF which include:

- Fairness and Equality – Impartial administration of the SDF, with all sectors of the SDF communities treated equally.
- Transparency – Clear, publicly available processes for how the SDF is managed, and timely and fulsome reporting of decisions that are made, including financial reporting. Everyone has access to the same information.
- Cooperation and Partnership – Anagold working with the Community to focus on agreed development priorities. The SDF will not initiate programs that are not requested by the community and in which the community does not have active and meaningful participation.
- Mutual respect – Everyone has a right to be heard and their opinion considered.
- Sustainability – Focusing on what counts over the long term and preparing for life beyond mine closure.
- At all times being fully compliant with relevant Turkish and International laws and conventions, and Anagold corporate policies and commitments.

While recipients of the SDF expenditure are the communities neighbouring the Çöpler mine, Anagold will retain ownership and governance control over all aspects of Anagold's financial and in-kind contributions to the SDF. Anagold's contribution to the SDF includes direct financial support, managerial/administrative support, and limited technical support.

Direct financial support has been approved by Anagold's partners (SSR and Lidya) for ongoing annual funding to the SDF of $2 per ounce of gold produced from the Çöpler orebody. The SDF will replace a substantial proportion of Anagold's existing discretionary community expenditure and direct funding towards development proprieties which are agreed with the community. The continuation of Anagold's support to the SDF is at Anagold's discretion, and will be influenced by, among other things, the success of the SDF and the community's participation in ensuring the objectives of the SDF are achieved.

Managerial and administration support will be provided to the recipients of the SDF and Anagold's policies, procedures, and management plans. Anagold will also cover the costs associated with stakeholder communication and consultation during the roll-out of the SDF, including support for the first three years in establishing a helpdesk facility for SDF applicants to receive assistance in preparing their applications.

While support to the SDF applicants on how to apply and administer their applications and projects will be available through a dedicated SDF helpdesk, where appropriate, and where relevant skills exist within the Company (and timing permits), Anagold will also support the SDF applicants with limited ad-hoc technical support as projects are being developed, and during the implementation phase. However, where a project requires specific and ongoing technical support, project applicants must ensure this is identified and resourced appropriately using third-party technical resources.

Anagold's intensions for the SDF initiative are based on goodwill and respect for its neighbouring communities, however, Anagold acknowledges that other individuals, organisations, and government agencies may be more skilled and adept at identifying and implementing social and community development programmes and projects. As such it is Anagold's desire that the SDF be implemented in such a way that third parties are attracted to participate in supporting community-based SDF initiatives. In this way, the SDF can realise a greater funding base as well as attract leading skills in social and community development programme implementation. Third-party partners can include organisations providing development support or financial support including Government agencies, NGOs, or other credible development organisations. The SDF will not be used to fund third-party projects outside the approved SDF catchment area. Where a third-party partnership is part of an SDF application, the working relationships between Anagold, project applicants, and third-party partners must be clearly detailed in the Project application. Details of these relationships will form part of the application review process and be thoroughly scrutinised with respect to Anagold's FCPA policy.

While Anagold's annual contribution to the SDF is substantial, not every project will receive funding. The SDF will be established to focus on participatory needs-based development priorities which support the abovementioned purpose. It is proposed that development priorities will be re-assessed every three-years.

# 18.0 Capital and Operating Costs

SSR's forecasted capital and operating costs estimates related to the development of Mineral Reserves are derived from annual budgets and historical actuals over the long life of the current POX and heap leach operations, as well as a detailed cost estimate for the new Grind-Leach (G-L) circuit.

## 18.1 Capital Costs

SSR's forecasted capital cost estimates related to the development of Mineral Reserves are derived from annual budgets and historical actuals over the long life of the current operation. According to the American Association of Cost Engineers (AACE) classifications, these estimates would mainly be Class 2 with an accuracy range of -5% to -15% to +5% to +20% except where noted in this section. LOM project capital costs total $632.8 million, which considers all costs incurred before November 1, 2023, as sunk; the capital costs are summarized in Table 18 1.

**Table 18-1: Capital Cost Summary**

| Description | Unit | Value |
|---|---|---|
| Growth | $ million | 475.1 |
| Sustaining | $ million | 61.3 |
| Final Closure/Reclamation | $ million | 100.3 |
| **Total** | **$ million** | **636.6** |

### 18.1.1 Growth Capital

The $475.1 million growth capital estimate includes $193.8 million for installing the Grind-Leach (G-L) circuit for processing Greater Çakmaktepe ore which is summarized in Table 18-2 and includes a 28% contingency factor. In the SLR QP's opinion, these estimates are an AACE Class 3 classification (-10% to -20% to +10% to +30%) based on the amount of engineering completed by Ausenco and SSR.

In addition, $29.4 million has been estimated for the initial starter pit at Greater Çakmaktepe. The TSF 1 expansion to the 77 Mt capacity includes a cost estimate of $186.3 million based on an average unit rate of $3.96/t ore and averages approximately $14.3 million over a 13 year period from 2024 to 2036. Capitalized stripping costs of limestone waste for the TSF total $65.5 million over LOM.

**Table 18-2: Growth Capital Cost Summary**

| Work Breakdown Structure | US$ Millions |
|---|---|
| **Total Greater Çakmaktepe Starter Pit** | **29.4** |
| **G-L Circuit** | |
| Process Plant | 75.1 |

| Work Breakdown Structure | US$ Millions |
|---|---|
| Additional Process Facilities | 7.2 |
| On Site Infrastructure | 6.0 |
| **Subtotal Direct Costs** | **88.3** |
| Project Indirects | 16.8 |
| Project Delivery | 24.1 |
| Owner's Costs | 21.9 |
| **Subtotal Indirect Costs** | **62.8** |
| Contingency | 42.7 |
| **Total G-L Circuit** | **193.8** |
| **Total TSF Expansion Construction** | **186.3** |
| **Total Capitalized Waste Stripping for TSF** | **65.5** |
| **Grand Total Growth Capital** | **475.1** |

### 18.1.2 Sustaining Capital

Sustaining capital costs estimates are shown in Table 18-3. Annual plant maintenance costs of $2.5 million and $1.2 million for the POX and G-L circuits, respectively, were estimated at 0.625% of initial capital costs. Provision for an on site lime plant to commence operations in 2027 have been added to lower lime costs in POX circuit.

**Table 18-3: Sustaining Capital Summary**

| Description | Unit | Avg Cost/Year | Total LOM |
|---|---|---|---|
| On Site Lime Plant | $ million | 8.3 | 16.7 |
| POX Maintenance | $ million | 2.5 | 35.0 |
| G-L Maintenance | $ million | 1.2 | 9.6 |
| **Total** | **$ million** | **32.2** | **61.3** |

### 18.1.3 Final Closure/Reclamation Costs

The costs associated with reclamation and closure activities were estimated to be $100.3 million spent over two years after the end of mine production in 2039.

## 18.2 Operating Costs

Operating costs were estimated based on current site cost performance and contract costs including actual operational costs for labor, consumables, contracts, and budget assumptions.

According to the AACE classifications, these estimates would mainly be Class 2 with an accuracy range of -5% to -15% to +5% to +20% except where noted in this section.

The projected average LOM unit operating cost estimate is summarized in Table 18-4.

**Table 18-4: Average Operating Costs Unit Rates**

| Activity | Unit | Avg LOM |
|---|---|---|
| Mining (contract) | $/t mined | 2.11 |
| Mining (contract) | $/t ore processed | 18.04 |
| Processing – All Types | $/t ore processed | 29.73 |
| General and Administrative | $/t ore processed | 6.56 |
| VAT[1] Payments | $/t ore processed | 0.13 |
| **Total Operating Costs** | **$/t ore processed** | **54.45** |

Notes:

1. Value-Added Tax payments through 2025

### 18.2.1 Mining Costs

Mining operations for the mine are currently contracted to a Turkish mining contractor. No capital cost is included for mining equipment or facilities. All such costs are built into the unit rate for mining operations included in the operating cost estimate. Average mining unit rates are summarized in Table 18-5.

**Table 18-5: Mine Operating Cost Summary**

| Description | Average Annual Mining Costs (US$ million) | LOM Average ($/t moved) |
|---|---|---|
| Mining Çöpler Total (ore + waste) | 37.2 | 1.83 |
| Mining Greater Çakmaktepe Ore | 7.5 | 2.52 |
| Mining Greater Çakmaktepe Waste | 73.5 | 2.29 |
| Mining Çöpler Rehandle | 3.0 | 1.26 |
| **Total Mining** | **121.2** | **2.11** |

### 18.2.2 Processing Costs

The following processing costs in Table 18-6 for POX and heap leach process circuits are based on the 2024 operating budget estimates. The G-L operating costs were estimated by Ausenco as part of their 2023 work and are considered to be classified as an AACE Class 3 estimate (-10% to -20%, +10% to +30%).

**Table 18-6: Process Operating Cost Summary**

| Description | Average Annual Processing Costs (US$ million) | LOM Average ($/t ore) |
|---|---|---|
| POX (2024-2037) | 111.0 | 40.47 |
| Heap Leach (2024-2028) | 12.8 | 9.63 |
| Grind-Leach (2027-2036) | 21.9 | 12.04 |
| **Total (2024-2037)** | **138.4** | **29.73** |

### 18.2.3 General and Administration Costs

The General and Administrative (G&A) costs include costs not directly attributable to operational output such as the mining and processing operations. The following costs in Table 18-7 are based on the 2024 operating budget estimates.

**Table 18-7: G&A Operating Cost Summary**

| Description | Average Annual G&A Costs (US$ million) | LOM Average ($/t ore) |
|---|---|---|
| Salaries | 4.6 | 1.03 |
| Consultants and Services | 3.2 | 0.73 |
| Insurance | 4.4 | 1.00 |
| Supplies, rents, land lease | 1.0 | 0.22 |
| Permit | 2.4 | 0.54 |
| Community Outreach & Donations | 1.7 | 0.38 |
| Social Development Fund | 0.6 | 0.14 |
| Other | 3.5 | 0.79 |
| Corp Allocations | 7.6 | 1.73 |
| **Total** | **29.0** | **6.56** |

### 18.2.4 Personnel

The current Çöpler workforce totals 478 persons, consisting of 408 salaried and 70 hourly employees, as of the effective date of this report. The breakdown by department is shown in Table 18-8.

**Table 18-8: Current Workforce**

| | Hourly FTE | Salary FTE | Total |
|---|---|---|---|
| Mine | 234 | 13 | 247 |
| Plant | 41 | 11 | 52 |
| G&A | 30 | 17 | 47 |
| Tech Services | 8 | 15 | 23 |

| | Hourly FTE | Salary FTE | Total |
|---|---|---|---|
| **Total** | **408** | **70** | **478** |

The LOM workforce is expected to be similar throughout the remaining 15 years of mine life with a reduction of workforce during the last three years of stockpile processing.

The Çöpler full time equivalent (FTE) workforce for the years 2020 to 2023 (actuals) and the LOM plan (projected) is summarized in Table 18-9.

**Table 18-9: LOM Workforce Levels**

| | Hourly FTE | Salary FTE | Total |
|---|---|---|---|
| 2020 Actual | 367 | 73 | 440 |
| 2021 Actual | 358 | 79 | 437 |
| 2022 Actual | 375 | 86 | 461 |
| 2023 Actual | 395 | 83 | 478 |
| 2024 to 2036 Projected | 405 | 90 | 495 |

# 19.0 Economic Analysis

An after-tax Cash Flow Projection has been generated by SLR from the Life of Mine production schedule and capital and operating cost estimates and is summarized in Table 19 1. A summary of the key criteria is provided below. The complete cash flow is presented in Section 27.0 Appendix. The analysis is based on Q4 2023 real US dollar basis with no escalation.

## 19.1 Economic Assumptions

### 19.1.1 Revenue

- Approximately 13,000 tonnes per day processed (4.5 Mt per year) at an average overall head grade of 2.32 g/t gold, including the following circuits:
  - POX: Approximately 7,800 tpd milled (2.7 Mt per year) averaging 2.42 g/t gold,
  - Heap Leach: 3,800 tpd stacked (1.3 Mt per year) averaging 1.93 g/t gold, and
  - Grind-Leach: 5,340 tpd milled (1.9 Mt per year) averaging 2.26 g/t gold.
- LOM average 281,000 ounces per year gold recovered with LOM recovery averaging 84.7% over the 15 years of full process capacity (2024 to 2038). Total 4.25 Moz gold recovered over LOM with the following recovery rates:
  - POX: 87.9%; Heap Leach: 70.4%, and Grind-Leach: 81.3%
- The economic analysis was carried out on a total of 100% basis of Mineral Reserves, of which SSR owns 80%.
- Metal price: US$1,780 per ounce gold (LOM realized), US$1,755 per ounce gold long term price (2028+),
- Gold at refinery 100% payable (with de minimis silver and copper production not included in this analysis).
- Net Smelter Return of $106/t processed includes freight/transport costs averaging $3.84/oz gold. Refining costs are included in process operating costs.
- Revenue is recognized at the time of gold production.

### 19.1.2 Costs

- Mine life: 15 years (11 years of mining with four years of stockpile processing).
- Life of Mine production plan as summarized in Table 13-18.
- Greater Çakmaktepe starter pit, TSF-1 expansion to 77 Mt capacity, and G-L circuit construction growth capital totals $475.1 million.
- Mine life sustaining capital totals $61.3 million.
- Final reclamation costs total $100 million at end of mine life.
- Average site operating cost over the mine life is $54.45 per tonne processed.

### 19.1.3 Taxation and Royalties

#### 19.1.3.1 Corporate Income Taxes

In Türkiye, the standard income tax rate is 25% but some of the site's income streams qualify for a reduced rate, thus the effective LOM income tax rate is 24.5%.

For tax purposes, a 10 year double declining balance methodology is used for all new and replacement capital starting in 2024 totaling $536 million. For the existing depreciation balance of $290 million as of Q3 2023, a combination of accelerated, straight line, and unit of production depreciation methods is used as modeled by the SSR tax group. All remaining depreciation at the end of the mine life is written off in the last year of production.

Investment incentive certificates (IIC) are available for investments that promote economic development. IIC's can be classified as strategic in specific circumstances, thereby providing additional incentives. An IIC generates credits that offset corporate income taxes generated by the investment. In this analysis, income tax credits totalling 29% over the LOM were applied to the income tax payable estimate as 90% credits applied in 2024 and 2025 and 80% credits applied in 2026 to 2028, as modeled by the SSR tax group.

#### 19.1.3.2 VAT and Import Duties

This analysis assumes the annual operating and capital cost are subject to value-added tax (VAT) in Türkiye. VAT is levied at 4% of all operating and capital costs (less labor costs) starting July 2023, and the Project is eligible for the Turkish exemptions for mining projects and mining equipment purchases. VAT payments are expected to end in 2025.

Import duties are not included in the capital cost estimate for mining related imported equipment because they are exempted in the IICs.

#### 19.1.3.3 Royalties

Under Turkish Mining Law, the royalty rate for precious metals is variable and tied to metal prices. The Çöpler Project is subject to a mineral production royalty which is based on a sliding scale to gold price and is payable to the Turkish government.

Table 19-1 details the current prescribed royalty rates applicable to POX, heap leach and G-L production (revised September 2020). The royalties are calculated on total revenue with deductions allowed for processing and haulage costs of ore. Royalty rates are reduced by 40% for ore processed in country, as an incentive to process ore locally.

**Table 19-1: Gold Royalty Rates**

| Metal Price ($/oz Gold) | | Prescribed Royalty Rate (%) | Royalty After 40% In-Country Processing Incentive (%) |
|---|---|---|---|
| From | To | | |
| 0 | 800 | 1.25 | 0.75 |
| 800 | 900 | 2.50 | 1.50 |
| 900 | 1,000 | 3.75 | 2.25 |
| 1,000 | 1,100 | 5.00 | 3.00 |
| 1,100 | 1,200 | 6.25 | 3.75 |

| Metal Price ($/oz Gold) | | Prescribed Royalty Rate (%) | Royalty After 40% In-Country Processing Incentive (%) |
|---|---|---|---|
| From | To | | |
| 1,200 | 1,300 | 7.50 | 4.50 |
| 1,300 | 1,400 | 8.75 | 5.25 |
| 1,400 | 1,500 | 10.00 | 6.00 |
| 1,500 | 1,600 | 11.25 | 6.75 |
| 1,600 | 1,700 | 12.50 | 7.50 |
| 1,700 | 1,800 | 13.75 | 8.25 |
| 1,800 | 1,900 | 15.00 | 9.00 |
| 1,900 | 2,000 | 16.25 | 9.75 |
| 2,000 | 2,100 | 17.50 | 10.50 |
| 2,100 | + | 18.75 | 11.25 |

The Çöpler Project effective LOM royalty rate based on the metal price assumptions and applicable deductions is approximately 8.4%.

Other than the royalty payments, there are no other known back-in rights, payments, or other agreements and encumbrances to which the Project is subject.

## 19.2 Cash Flow Analysis

Considering the Çöpler Project on a stand-alone basis, the undiscounted after-tax cash flow totals $2,368 million over the mine life. The after-tax Net Present Value (NPV) at a 5% discount rate (midpoint with November 1, 2023 as time zero) is $1,643 million, as shown in Table 19-2. An Internal Rate of Return (IRR) metric is not reported as the operation is cash positive in each year of the mine plan until closure.

**Table 19-2: After-Tax Cash Flow Summary**

| Description | US$ million |
|---|---|
| **Realized Market Prices** | |
| Au ($/oz) | $1,780 |
| **Payable Metal** | |
| Au (koz) | 4,254 |
| **Total Gross Revenue** | **7,564** |
| Mining Cost | (1,213) |
| Process Cost | (1,998) |
| G & A Cost | (441) |
| VAT Payments | (9) |
| Dore Freight/Insurance | (16) |
| Mining Royalties | (429) |

| Description | US$ million |
|---|---|
| **Total Operating Costs** | **(4,107)** |
| **Operating Margin (EBITDA)** | **3,457** |
| Cash Taxes Payable | (452) |
| Working Capital[1] | 0 |
| **Operating Cash Flow** | **3,005** |
| Development Capital | (475) |
| Sustaining Capital | (61) |
| Total Closure/Reclamation Capital | (100) |
| **Total Capital** | **(637)** |
| | |
| **Pre-tax Free Cash Flow** | **2,821** |
| **Pre-tax NPV @ 5%** | **1,931** |
| | |
| **After-tax Free Cash Flow** | **2,368** |
| **After-tax NPV @ 5%** | **1,643** |

Notes:

1. All working capital adjustments net to zero at end of mine life

The World Gold Council Adjusted Operating Cost (AOC) is S$965/oz Au. The mine life capital unit cost, including sustaining and closure/reclamation, is $38/oz, for an All in Sustaining Cost (AISC) of US$1,003/oz Au. The average annual gold production during operation is 281,000 ounces per year over ROM operations.

## 19.3 Sensitivity Analysis

Project risks can be identified in both economic and non-economic terms. Key economic risks were examined by running cash flow sensitivities:

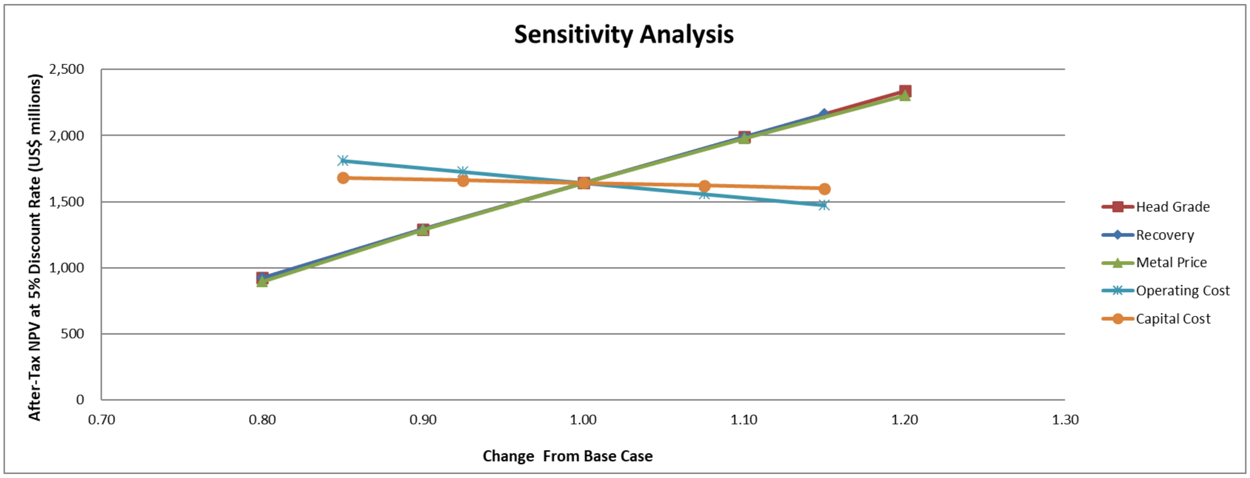
- Head grade
- Metallurgical recovery
- Gold price
- Operating costs
- Capital costs

After-tax IRR sensitivity over the base case has been calculated for -20% to +20% variations for head grade, recovery (only -20% to +15% variation), and gold price, and -15% to +15% variations for operating and capital costs. The sensitivities are shown in Figure 19-1 and Table 19-3. The Project is most sensitive to changes in head grade, metallurgical recovery, and metal price (usually with same magnitude of impact) followed by operating cost and finally capital costs.

**Table 19-3: After-Tax Sensitivity Analyses**

| Variance | Head Grade (g/t Au) | NPV at 5% (US$ million) |
|---|---|---|
| 80% | 1.59 | 925 |
| 90% | 1.94 | 1,291 |
| 100% | 2.32 | 1,643 |
| 110% | 2.74 | 1,991 |
| 120% | 3.20 | 2,338 |
| **Variance** | **Recovery (% Au)** | **NPV at 5% (US$ million)** |
| 80% | 67.7 | 925 |
| 90% | 76.2 | 1,291 |
| 100% | 84.7 | 1,643 |
| 110% | 93.1 | 1,991 |
| 115% | 97.3 | 2,164 |
| **Variance** | **Metal Prices (US$/oz Au)** | **NPV at 5% (US$ million)** |
| 80% | 1,420 | 895 |
| 90% | 1,600 | 1,289 |
| 100% | 1,780 | 1,643 |
| 110% | 1,960 | 1,978 |
| 120% | 2,130 | 2,304 |
| **Variance** | **Operating Costs (US$M)** | **NPV at 5% (US$ million)** |
| 85% | 3,369 | 1,810 |
| 93% | 3,515 | 1,727 |
| 100% | 3,661 | 1,643 |
| 108% | 3,807 | 1,559 |
| 115% | 3,952 | 1,474 |
| **Variance** | **Capital Costs (US$M)** | **NPV at 5% (US$ million)** |
| 85% | 468 | 1,681 |
| 93% | 548 | 1,662 |
| 100% | 637 | 1,643 |
| 108% | 734 | 1,622 |
| 115% | 841 | 1,601 |

**Figure 19-1: After-Tax Sensitivity Analysis**



# 20.0 Adjacent Properties

There are no adjacent properties that are applicable to the Çöpler Project.

# 21.0 Other Relevant Data and Information

No additional information or explanation is necessary to make this TRS understandable and not misleading.

# 22.0 Interpretation and Conclusions

The QPs offer the following conclusions by area.

## 22.1 Geology and Mineral Resources

- The Çöpler district deposits (Çöpler, Greater Çakmaktepe, and Bayramdere) are best classified as epithermal, disseminated, and skarn deposits related to a porphyry copper-gold system. Mineralizing fluids, derived from the intrusions, were primarily controlled by structural fluid pathways and lithology, including traps controlled by lithological contacts, resulting in replacement, vein and stockwork mineralization.
- The Çöpler property has been the site of considerable mining and exploration, including the drilling and logging of more than 4,800 drill holes totaling over 725,000 metres drilled.
- The QP has estimated and prepared the Mineral Resources in accordance with the U.S. Securities and Exchange Commission (US SEC) Regulation S-K subpart 1300 rules for Property Disclosures for Mining Registrants (S-K 1300).
- The QP has classified the Mineral Resources in accordance with the U.S. Securities and Exchange Commission (US SEC) Regulation S-K subpart 1300 rules for Property Disclosures for Mining Registrants (S-K 1300).
- Mineral Resource estimates were prepared using a domain-controlled, predominantly ordinary kriging technique with verified drillhole location, density and sample data derived from exploration activities conducted by various companies from 2000 to 2023. Inverse distance algorithms were used for estimating minor elements, densities, and where kriging results were sub-optimal.
- The QP is of the opinion that the drilling and sampling procedures adopted at Çöpler are consistent with generally recognized industry best practices. The diamond and reverse circulation (RC) samples were collected by competent personnel using common practices. The process was conducted or supervised by qualified geologists.
- Overall, the drilling pattern is sufficiently dense to interpret the geometry and the boundaries of gold mineralization with confidence. Several areas at Çöpler are based on approximately 60-m spaced drilling which carries a moderate risk; the impact of this has been limited by classifying these areas as Inferred. The QP considers the overall risk associated with data location, spacing and distribution to be low to moderate and has considered this risk when classifying the Mineral Resources.
- The data informing the Mineral Resources are collected using RC and core drilling. Overall, the QP is of the opinion that the samples are representative of the source materials.
- In the RSC QP’s opinion, the sample preparation, security, and analytical procedures are adequate and meet industry standards, and the QA/QC program, as designed and implemented at Çöpler is adequate. The assay results within the drillhole database are considered suitable for the purpose of mineral resource estimation and classification in relevant categories. Neither the SSR in-house quality control nor SSR predecessor’s quality control yielded any indication of material quality concerns.

- The QP was provided unlimited access by SSR for data verification purposes during the site visit. The QP is of the opinion that data verification procedures for the Project comply with industry standards and are adequate for the purposes of Mineral Resource estimation.
- Based on the site visit, data validation and the results of quality acceptance testing, the QP is of the opinion that the sampling methods, chain of custody procedures, and analytical techniques are adequate and meet acceptable industry standards. The assay and bulk density databases are of sufficient quality for Mineral Resource estimation at the Çöpler district deposits (Çöpler, Greater Çakmaktepe, and Bayramdere).
- The QP considers that the knowledge of the deposit setting, lithologies, controls on mineralization, and the mineralization style and setting, is sufficient to support the Mineral Resource classifications assigned. Alternative geological interpretations are possible. At Çöpler and Greater Çakmaktepe, the domains were updated to better align with previous mining reconciliation, however, a moderate–high risk is inherently carried in the domaining. It is anticipated that alternative geological interpretations could lead to tonnage or grade swings of up to ±20% in Inferred parts of the Mineral Resources.
- The assumptions, parameters and methods used in the estimations have been transparently reported. The estimation settings are considered conservative and have been reconciled with previous mining at Çöpler and Greater Çakmaktepe to provide a robust result. Sensitivity testing has demonstrated that the estimation settings carry a moderate risk.
- The Mineral Resource estimates for Çöpler, Greater Çakmaktepe, and Bayramdere have an effective date of October 31, 2023.
- Appropriate cut-off grades and pit optimization parameters have been used to establish those portions of the block models that meet the requirement for reasonable prospects for economic extraction for this style of gold-copper deposit and mineralization. In assessing the potential of economic extraction, the QP reviewed mining, metallurgical, economic, environmental, social and geotechnical factors.
- The Mineral Resources estimates exclusive of Mineral Reserves at the Property include the following by deposit area (SSR 80% attributable share):
  - Çöpler: 5.0 million tonnes (Mt) Measured Mineral Resources at an average grade of 1.31 g/t gold (Au) containing 0.21 million ounces (Moz) Au, 11.1 Mt Indicated Mineral Resources at an average gold (Au) grade of 1.29 g/t containing 0.46 million ounces (Moz) Au and an additional 14.0 Mt at an average grade of 1.53 g/t Au containing 0.69 Moz Au of Inferred Mineral Resources.
  - Greater Çakmaktepe: 3.6 Mt Measured Mineral Resources at an average grade of 0.94 g/t Au containing 0.11 Moz Au, 7.3 Mt Indicated Mineral Resources at an average grade of 1.10 g/t Au containing 0.26 Moz Au and an additional 4.8 Mt at an average grade of 1.87 g/t Au containing 0.29 Moz Au of Inferred Mineral Resources.
  - Bayramdere: 0.1 Mt Indicated Mineral Resources at an average grade of 2.36 g/t Au containing 0.01 Moz Au. There are no Measured or Inferred Resources at Bayramdere.
- The level of uncertainty has been adequately reflected in the classification of Mineral Resources for the Çöpler Project. The Mineral Resources presented may be materially impacted by any future changes in the break-even cut-off grade, which may result from

changes in mining method selection, mining costs, processing recoveries and costs, metal price fluctuations, or significant changes in geological knowledge.

The QP is of the opinion that with consideration of the recommendations summarized in Sections 1 and 23 of this TRS, any issues relating to all relevant technical and economic factors likely to influence the prospect of economic extraction can be resolved with further work.

## 22.2 Mining and Mineral Reserves

- The total Mineral Reserve for the Çöpler Project is estimated to be approximately 67.4 Mt at an average grade of 2.32 g/t gold, totaling 5.1 Moz of contained gold, and SSR's (80%) portion is 4.1 Moz of contained gold. Average oxide gold recoveries are 61% and average sulfide gold recoveries range from 81% to 91%. SSR's portion of the Mineral Reserves for both Çöpler pit and Greater Çakmaktepe pit is 80%. The Çöpler pit represents approximately 41% of the total Mineral Reserve and the Greater Çakmaktepe pit represents the remaining 59%.
- The SLR QP reviewed the assumptions, parameters, and methods used to prepare the Mineral Reserves Statement and is of the opinion that the Mineral Reserves are estimated appropriately and disclosed in accordance with S-K 1300.
- This mine has operated profitably since 2011. Open pit mining at the Çöpler Project is carried out by a mining contractor and managed by Anagold.
- The mining method is a conventional open pit method with drill and blast operations and using excavators and trucks operating on bench heights of 5 m. The mining contractor provides operators, line supervisors, equipment, and ancillary facilities required for the mining operation. Anagold provides management, technical, mine planning, engineering, and grade control functions for the mining operation.
- Production schedules and costs associated with the Mineral Reserves have been updated by SSR based on current site performance and contracts.

## 22.3 Mineral Processing

**Pressure Oxidation Sulfide Plant**

- The throughput from crushing and grinding was designed with a nominal capacity of 306 tph which was increased up to a maximum of 400 tph. The pressure oxidation (POX) autoclave circuit has demonstrated it can process a long-term average maximum of 280 tph feed (two autoclaves operating in parallel) and 13.75 tph sulfide sulfur, compared to design of 245 tph and 12.5 tph respectively. The limit of 13.75 tph sulfide sulfur is dictated by the capacity of the oxygen supply to effect oxidation of the sulfides, design 96%. The gold recovery has remained at approximately 87.5%.
- The flotation plant feed rate is variable between 50–150 tph based on sulfide sulfur feed grade and the oxidation capacity of the POX autoclaves to oxidize sulfides.
- The addition of a flotation circuit to the sulfide plant provides stability and flexibility to the POX circuit operation to maximize throughput and oxygen utilization by maintaining optimum sulfur grade to the autoclaves.
- A large amount of POX test work has been performed on Çöpler sulfide ore across several pilot plant campaigns. The current POX process works well, as demonstrated by actual operational performance.

- Comminution test work indicates that Çakmaktepe Ext. sulfide ore (jasperoid) is significantly harder and more abrasive than Çöpler sulfide ores and is not amenable for feeding to the existing Sulfide plant primary sizer. The ore will be crushed using the heap leach crushing plant and then delivered to POX plant grinding circuit.
- No test work has been completed for direct POX processing of Çakmaktepe Ext. sulfide ores or flotation concentrates.
- Further metallurgical testing of Çakmaktepe Ext. material types, both oxide and sulfide, is recommended to optimize the feeds to POX and slip stream flotation circuit. Further mineralogical work is recommended to understand the main gold associations.
- The silver recovery pattern is much less clear than gold because silver is not released by the oxidation process. Silver recovery is determined from actual plant recovery over the period January 2019 through February 2020. The silver recovery calculates to 3.0%.
- From the test work, it is estimated that the flotation concentrate reporting to the POX circuit will achieve the same overall recovery as the ore directly reporting to POX. Gold recovery to the flotation concentrate is estimated to be 55%.
- The flotation tails reporting directly to the leach circuit are estimated to have a gold recovery of 43%, based on test work using samples collected while processing large amounts of formerly stockpiled ore. When processing freshly mined sulfide ore, flotation tails recoveries can vary between 10% and 30% in CIP.

**Heap Leach**

- The oxide heap leaching facilities were commissioned in late 2010. The process was originally designed to treat approximately 6.0 Mtpa of ore by three-stage crushing (primary, secondary, and tertiary) to 80% passing 12.5 mm, agglomeration, and heap leaching on a lined heap leach pad with dilute alkaline sodium cyanide solution. Gold is recovered through a carbon-in-column (CIC) adsorption system, followed by carbon elution, electrowinning and smelting of the precipitate to produce doré ingots for sale.
- The ore contains cyanide soluble copper that consumes cyanide increasing operating cost. Copper cyanide in the leach solutions is treated in a sulfidation, acidification, recycling, and thickening (SART) plant which precipitates the copper as copper sulfide and regenerates sodium cyanide, which is recycled in the leach solutions.
- Metallurgical test work on Çakmaktepe oxide ore for heap leaching was performed in the on-site Çöpler metallurgical laboratory, initially under the supervision of Kappes, Cassiday & Associates (KCA). The results compare to the Çöpler oxide ore, with similar behavior and leach kinetics. Subsequently, Çakmaktepe oxide ore was heap leached together with Çöpler oxide ore.
- Metallurgical test work on Çakmaktepe Ext. oxide material for heap leaching was performed at McClelland Laboratories Inc. and supervised by Metallurgium consulting. The initial program in 2019 identified two distinct domains with respect to gold recovery based on sulfide sulfur (SS) content of <1% and between 1% to 2%.
- Metallurgical heap leach test work has been completed to characterize the Bayramdere oxide mineralization. In the column test, final gold extraction was 84% in the two duplicate columns with reasonable leach kinetics.
- The current heap leaching gold recovery assumptions are summarized for Çöpler oxide zone, Çakmaktepe oxide zone (including Bayramdere), and Çakmaktepe Ext. oxide

zone in the report and vary by ore type and location. The main ore types include diorite, metasediment (Hornfels), limestone/marbles, gossan, manganese diorite, Jasperoid and ophiolite. The Çakmaktepe Ext. oxide ores include Jasperite, Listwanite and Dolomite and were extensively tested during 2023 by Ausenco and ALS.

**Grind Leach**

- The proposed process to treat oxide and low sulfur (< 2% sulfur) ores from the Çakmaktepe Ext. open pit is a conventional grind leach process. The grind leach process plant is designed to treat 248 tph of ore during 8,059 hours per year of operation or 92% availability for a total of 2 Mtpa. The operating availability of the crushing section will be 70%. The process will comprise primary jaw crushing, SAG mill and ball mill grinding closed by hydrocyclones, carbon-in-leach (CIL) cyanidation, carbon elution, electrowinning, and refining of electrowinning precipitate to produce a final precious metal (doré) product.
- In 2023, ALS Metallurgy - Kamloops completed a metallurgical test program supervised by Ausenco to evaluate grind/leach processing of Çakmaktepe Ext. oxide ores. Both standard and CIL bottle roll tests were completed at a grind size $P_{80}$ of 75 µm. Testing on master composite samples indicated that gold recovery is insensitive to grind size over a range from 53 µm to 212 µm.
- Samples were selected to be representative of spatial, lithological and grade variability. Sample selection also took into consideration the preliminary mining sequence, with higher sample density in areas expected to be mined in the earlier years of the grind/leach plant operation.
- Test work is planned to understand metallurgical and mineralogical variability across the deposit. Gold recovery for the Jasperoid, Listwanite, and Dolomite lithologies were 60%, 90%, and 83%, respectively.

## 22.4 Infrastructure

- The existing heap leach pad comprises four phases with an estimated capacity of 63 Mt of oxide ore heaps, with a maximum heap height of 100 m above the pad liner. Two additional phases (phase 5 and phase 6), with a total of 18.5 Mt capacity (13.5 Mt and 5.0 Mt, respectively), will be added to accommodate oxide ore extracted from Greater Çakmaktepe.
- The current tailings storage facility (TSF-1) is in the process of development and construction and will have seven phases when it reaches the ultimate phase. Currently the TSF holds 13.3 Mt of tailings as of the Effective Date of this report. Construction of Phase 4 of TSF-1 has been finalized, and it received approval for operation from the Ministry of Environment, Urbanisation and Climate Change (MoEUCC) in November 2023. The design capacity for TSF-1 is currently 65.8 Mt.
- However, the ultimate capacity required for TSF-1 that will have to incorporate the 60.4 Mt of tailings generated from the LOM plan is estimated to be 73.7 Mt (13.3 Mt plus 60.4 Mt). There are a number of options currently being studied to further expand TSF-1 capacity but have not been finalized. A conceptual design to increase the crest elevation of Phase 7 embankment to from 1,275 MASL to 1,280 MASL, thus increasing the total capacity to approximately 77 Mt, has been selected for the LOM plan.

- Limestone and marble overburden are currently used as embankment rockfill for TSF construction. According to the current mine plan, there will be a limestone shortage in 2025 but SSR has plans to quarry limestone near the mine area to produce the required amount required for the TSF expansion.
- The existing infrastructure, as well as the areas designated for tailings storage and the leach pad, will meet the demands of the current Mineral Reserves once the planned expansions are completed.

## 22.5 Environment

- The Çöpler mining and processing operations have a well-established and effective environmental, social and permitting management program (10+ years) that follows National and International Standards.
- Site staff is knowledgeable and experienced in site and regulatory requirements and supported by corporate technical and Environmental, Social and Governance (ESG) personnel as well as outside (Türkiye and International) technical experts.
- Budgets and planned schedules for permit development are reasonable and there were no critical path permitting items noted that would limit production and Reserve/Resource development. A reclamation/closure plan and estimates to perform this activity are in place.
- The budgets and staffing to perform required programs are adequate and indicative of site activities, requirements, and responsibilities.
- The SLR QP's opinion is that it is reasonable to rely on the information provided by SSR as outlined above for use in the this TRS because a significant environmental and social analysis has been conducted for the project over an extended period, the Project has been in operation for a number of years, and SSR employs professionals and other personnel with responsibility in these areas and these personnel have a good understanding of the permitting, regulatory, and environmental requirements for the Project.

## 22.6 Capital and Operating Costs

- SSR's forecasted capital and operating costs estimates related to the development of Mineral Reserves are derived from annual budgets and historical actuals over the long life of the current operation. According to the American Association of Cost Engineers (AACE) classifications, these estimates would be Class 2 with an accuracy range of -5% to -15% to +5% to +20% except where noted elsewhere.

# 23.0 Recommendations

The QPs offer the following recommendations by area.

## 23.1 Geology and Mineral Resources

1 Carry out an infill drill program of 50,000 m with a proposed budget of US$11.3 million over the next three years at Çöpler and Greater Çakmaktepe. The objective of the infill drill program is to increase orebody knowledge and improve the confidence in resource estimates and classification.

2 Carry out resource extension drill program of 30,000 m with a proposed budget of US$6.8 million over the next three years at Çöpler and Greater Çakmaktepe. The drill program is planned to convert Inferred Resources to Indicated Resources within the current reserve pit. The drill program will also target higher-grade structures closer to the current resource boundary with an objective of expanding the Mineral Resources.

3 Carry out continuous pit mapping and updating of the structural and geological model at Çöpler and Greater Çakmaktepe. The data will be incorporated in resource models to increase the confidence in resource estimates and classification.

4 Audit the grade control process in 2024. Based on the outcomes of the audit, any changes, if warranted, will be implemented.

The RSC QP agrees with the objectives and overall scope of these planned activities.

## 23.2 Mining and Mineral Reserves

1 Complete the Greater Çakmaktepe pit area hydrological model within the upcoming year (2024).

2 Update geotechnical model updates for the Greater Çakmaktepe pit area in 2024.

3 Pit dewatering should become a higher priority in both the Çöpler and Greater Çakmaktepe pit areas within the next few years as the pits are deepened.

4 Perform a study to optimize Waste Rock Dump (WRD) locations to improve the haulage profiles.

## 23.3 Mineral Processing

1 Carry out additional test work to understand the significant metallurgical and mineralogical variability across the deposit, including gold recovery and grind size for the Jasperoid mineralization.

2 Implement further testing to determine optimum circuit design parameters including grind size.

## 23.4 Infrastructure

1 Develop an execution plan for constructing TSF 1 phase 5 within the next 2.5 years to account for the current rate of rise in the facility and to mitigate any risk of reduced tailings capacity in the TSF-1 impoundment driven by excess water from the heap leach operations.

2 Evaluate and plan for the operation of water treatment facilities to filter the TSF reclaim water and manage discharges as soon as possible.

3 Expedite the permitting and initiation of limestone quarry operations to avoid delays in the construction of future TSF phases given the projected limestone shortage in 2025 in the current mine plan.

4 Develop a well-defined closure plan for the current TSF. The closure plan should be integrated with operations and life-of-mine planning.

5 Conduct further studies and install instrumentation for TSF-1 as the facility is expanded beyond Phase 5. The instrumentation should include inclinometers within the downstream abutments used to supplement the existing monitoring and instrumentation plan. These changes are proposed for the 2024 fiscal year.

6 Conduct further studies for the proposed TSF options, as listed below, during the next stage of their design.

- Geotechnical Investigation with Boreholes & Test pits
- Tailings Sample (pilot) and testing
- Tailings Large Strain Consolidation Modeling
- Seismic Deformation Modeling
- Probabilistic Water Balance Modeling
- Closure Plan
- Instrumentation Plan
- Diversion Channel Design
- Dam Breach Analysis
- Credible Failure Modes Analysis

## 23.5 Environment

1 Evaluate whether there may be an opportunity to use the heap drain-down solution in the sulfide circuit rather than disposing of it by forced evaporation, potentially reducing costs. This would require changes to the design of the evapotranspiration cells included in the current estimate.

2 Evaluate the technical and regulatory/permitting requirements for treating and discharging water. The SLR QP understands that the current operations are designed as "Zero Discharge"; however, suggests that treating and discharging water may enhance sustainability goals by reducing fresh-water make-up and expedite closure timing.

3 Conduct further studies and design work for the mitigation of PAG materials exposed in the pits to verify whether the proposed one metre of non-PAG cover is practical and effective to implement.

4 Compare the growth media inventory and expected amount to be recovered over the course of the Project to the sum of the growth media requirements of the Project facilities. Further work (as part of a Test Plot Program) is recommended to determine the most sustainable revegetation covers to be employed.

5 Evaluate and, where possible, implement additional concurrent reclamation opportunities to minimize costs and requirements at the end of operations.

6 Track and, if necessary, participate in the development of new environmental and mine permitting regulations.

7 Continue to perform internal and external (independent) ESG Audits.

8 Continue to update Asset Retirement Obligations (ARO) as well as overall reclamation/closure cost estimates on a regular basis.

## 23.6 Capital and Operating Costs

1 Evaluate the technical and regulatory/permitting requirements for treating and discharging water. The SLR QP understands that the current operations are designed as “Zero Discharge”; however, suggests that treating and discharging water may enhance sustainability goals by reducing fresh-water make-up and expedite closure timing.

# 24.0 References

AACE International, 2012, Cost Estimate Classification System – As applied in the Mining and Mineral Processing Industries, AACE International Recommended Practice No. 47R-11, 17 p.

Abzalov, M.Z., 2008. Quality Control of Assay Data: A Review of Procedures for Measuring and Monitoring Precision and Accuracy, Exploration and Mining Geology, 17(3–4): 1–14, 2008.

Altman, K, Liskowich, M, Mukhopadhyay, D K, Shoemaker, S J, 2011. Çöpler Sulfide Expansion Project Prefeasibility Study. March 27, 2011.

Altman, K, Bascombe, L, Benbow, R, Mach, L, Shoemaker, SJ, 2012. Çöpler Resource Update, Erzincan Province Turkey. March 30, 2012.

Altman, K, Bair, D, Bascombe, L, Benbow, R, Mach, L, Swanson, B, 2013. Çöpler Resource Update, Erzincan Province Turkey.March 28, 2013.

Amec Foster Wheeler, 2015. Çöpler Sulfide Expansion Project Feasibility Update 2015.

Anatolia, 2009. Çöpler Project, East Central Turkey Preliminary Mine Reclamation & Closure Plan, 2009, Anatolia Minerals Development, Limited.

Barr, 2012. Pit Wall Stability Analysis, Çöpler Mine, August 2012

Bloom, L., 2002. Analytical Services and QA/QC, for Society of Exploration Geologists, April 2002. Project Documents.

Cube Consulting, 2016b, Database Validation and Verification, and QAQC Review for Çöpler Near Mine Projects by Adrian Shepard, Cube Consulting, January 4, 2016

Easton, C L, Pennstrom, W J, Malhotra, D, Moores, R C, Marek, J M., 2008. Çöpler Gold Project East Central Turkey Preliminary Assessment Sulfide Ore Processing. February 4, 2008.

Golder, 2013a. Çöpler Mine Sulfide Expansion Project, Flood Management Plan, May 2013 Golder Associates.

Golder, 2013b. Çöpler Mine Sulfide Expansion Project, Groundwater Modeling Report, September 2013 Golder Associates.

Golder, 2013c. Çöpler Sulfide Project Tailings Storage Facility Siting Study, 17 December 2013, Golder Associates.

Golder, 2014a. Çöpler Sulfide Project – Stability Evaluation of Planned Waste Dump Facilities, Technical Memorandum, 28 February 2014, Golder Associates.

Golder, 2014b. Geotechnical Report, Sulfide Plant Facilities – Updated Report Çöpler Sulfide Project, 10 March 2014, Golder Associates.

Golder, 2014c. Çöpler Mine – Pit Slope Design Review, April 2014, Golder Associates.

Golder, 2014d. Çöpler Sulfide Project – Tailings Storage Facility Analysis and Design, 28 July 2014, Golder Associates.

Golder, 2015a. Çöpler Sulfide Project – Tailings Storage Facility, Summary of Design and Expansion to 46.6Mt Capacity, Technical Memorandum, March 2015.

Golder, 2015b. Çöpler Sulfide Expansion Project – Stability Evaluation of Planned Waste Dump Facilities, Technical Memorandum, 14 May 2015, Golder Associates.

Golder, 2015c. Geotechnical Report, Sulfide Plant Facilities – Detailed Design Recommendations, Çöpler Sulfide Project, 8 October 2015, Golder Associates.

Golder, 2016a. Tailings Storage Facility, Detailed Design Criteria, Revision 3, February 2016.

Golder, 2016b. Çöpler Sulfide Project – Tailings Storage Facility Summary of Design and Expansion to 45.9Mt Capacity, Technical Memorandum, April 2016.

Golder, 2019. Pit Slope Stability Evaluation, Çöpler Open Pit Mine, November 2019.

Golder, 2021a. Data Review and Geotechnical Model, Çöpler Geotechnical Design Review 2021, October 2021.

Golder, 2021b. Çöpler Pit Slope Design Review, November 2021.

Golder, 2021c. 2021 Greater Çakmaktepe Project Slope Stability Study, Geotechnical Support for the Pre Feasibility Study, December 2021.

Hacettepe University, Gazi University (Hacettepe and Gazi Universities, 2014 (Interim), İliç (Erzincan) Çöpler Complex Mine Capacity Increase Project – Report on Biological Diversity, 2014 (Interim).

Independent Mining Consultants, Inc. (IMC), 2005. Çöpler Project Resource Estimate Technical Report, October 19, 2005.

International Union for Conservation of Nature (IUCN), 1994: Red List: http://www.iucnredlist.org/static/categories_criteria_3_1.

Imer, A., Richards, J.P., and Creaser, R.A., 2013, Age and tectonomagmatic setting of the Çöpler-Kabatas¸ magmatic complex and porphyry-epithermal Au deposit, east central Anatolia, Turkey: Mineralium Deposita, v. 48, 557-583.

Jacobs, 2012. Çöpler Sulfide Project Feasibility Study, Site Conditions, May 30, 2012.

Jacobs, 2014a. Çöpler Sulfide Expansion Project Definitive Feasibility Report, June 15, 2014

Jacobs, 2014b. Crushing and Grinding Systems for Handling Clayey Ore Trade-Off Study, January 21, 2014.

Marek, J M, Pennstrom, W J, Reynolds, T, 2006. Technical Report Çöpler Gold Project Feasibility Study, Prepared by Samuel Engineering, Inc. May 30, 2006.

Marek, J M, Moores, R C, Pennstrom, W J, Reynolds, T, 2007. Technical Report Çöpler Gold Project, Prepared by Independent Mining Consultants, Inc. March 2, 2007 as amended April 30, 2007

Marek, J M, Benbow, R D, Pennstrom, W J, 2008. Technical Report Çöpler Gold Project East Central Turkey, December 5, 2008 (Amended and Restated; supersedes 11.07.2008 version).

Marsden, J. O., 2014. Çöpler Project – Heap Leach Model Review, October 24, 2014, Metallurgium, Phoenix, AZ.

Marsden, J. O., 2015a. Çöpler Heap Leach Project Gold Recovery Assumptions – Rev 1. March 26, 2015, Metallurgium, Phoenix, AZ.

Mining Association of Canada (MAC), 2019. Developing an Operation, Maintenance and Surveillance Manual for Tailings and Water Management Facilities (the OMS Guide).

MoEUCC, Turkish Republic, The Ministry of Environment, Urbanization and Climate Change, The Regulation on Mining Wastes, Official Gazette Numbered 29417, July 15, 2015

Marsden, J. O., 2015b. Çöpler Project Heap Leach Model Development and Gold Recovery Assessment – Final Rev 2. March 27, 2015. Metallurgium, Phoenix, AZ.

OreWin Pty. Ltd. (OreWin), 2020. Çöpler District Master Plan 2020. Prepared for SSR Mining Inc. November 27, 2020.

OreWin, 2021. Çöpler District Mineral Resource 2021 Technical Report Summary.  Prepared for SSR Mining Inc. 29 September 2022.

OreWin, 2022. Çöpler District Master Plan 2021 Technical Report Summary. Prepared for SSR Mining Inc. September 29, 2022.

Outotec, 2015a. Thickening Test Report S1482TE Çöpler, September 16, 2015, Perth, Australia.

Outotec, 2015b. Thickening Test Report S1482TE_B Çöpler, September 16, 2015, Perth, Australia.

Outotec, 2015c. Thickening Test Report S1482TF Çöpler Appendix, September 16, 2015, Perth, Australia.

Outotec, 2015d. Thickening Test Report S1482TF Çöpler (repeats), November 20, 2015, Perth, Australia.

Outotec, 2015e. Thickening Test Report S1482TE_B Çöpler (Repeats), November 20, 2015, Perth Australia.

Ozgul, N. and Tursucu, A., 1984. Stratigraphy of the Mesozoic carbonate sequence of the Munzuer Mountains (Easter Taurides), http://pascal-francis.inist.fr/vibad/index.php?action=getRecordDetail&idt=9240403

Parrish, I.S. 1997. Geologist's Gordian knot: to cut or not to cut. Mining Engineering, vol. 49. pp 45–49.

Pyper, R., Description of Process Gold Production Model and Assumptions, 4 February 2015, Kappes, Cassiday & Associates, Australia Pty Ltd., Perth, Western Australia.

Samuel Engineering Inc., 2011. Çöpler Sulfide Expansion Project Prefeasibility Study, March 27, 2011.

SGS Lakefield Oretest, 2015. Anagold Çöpler Sulfide Pilot Plant and Batch Testing Program, Pressure Oxidation and Cyanidation Campaign 5 Main Report, Job No: CP100, October 30, 2015, Perth, Australia.

SRK, 2008. Çöpler Complex (Manganese, Gold, Silver, Copper) Mining Project EIA Report, 2008, SRK Consulting.

SRK, 2012a. Assessment of Çöpler Sulfide Tailings According to Waste Acceptance Criteria, August 17, 2012 (Memorandum) SRK Consulting.

SRK, 2012b. Çöpler Mine Sulfide Expansion Feasibility Study – Environment and Permitting, November 2012, SRK Consulting (Turkey).

SRK, 2012c. Çöpler Gold Mine-Sulfide Project Waste Geochemical Assessment, September 2012, SRK Consulting (Turkey).

SRK, 2014. Çöpler Complex Mine Capacity Expansion Project, Final EIA Report. October 2014, SRK Consulting (Turkey).

SRK, 2015. Volume 1: Çöpler Gold Mine Sulfide Expansion Project, ESIA Report. September 2015, SRK Consulting (Turkey).

SRK, 2019. Five-Year Water Management Report. December 2019, SRK Consulting (Türkiye).

SRK, 2021. Çöpler Complex Mine 2nd Capacity Expansion and Flotation Plant Project, Final EIA Report. March 2021, SRK Consulting (Türkiye).

SSR Mining Inc., 2023. Form 10-K. Annual Report for the Fiscal Year Ended December 31, 2022. Filed on EDGAR on February 22, 2023.

SSR, 2022. Announcement: SSR Mining Announces Exploration Results on the In-pit Copper-Gold Porphyry C2 Target at Çöpler, November 25, 2002.

Watts, Griffis and McQuat Limited, 2003. Update of the Geology and Mineral Resources of the Çöpler Prospect, May 1, 2003.

WSP Golder, 2022. Çöpler Tailings Storage Facility Operations Maintenance and Surveillance (OMS) Manual. June 2022. Golder Associates USA Inc.

WSP, 2023a. Copler Expansion Pit Slope Designs. Prepared by WSP Danışmanlık ve Mühendislik Ltd.Şti

WSP, 2023b. Çöpler Mine Tailings Storage Facility TSF-1 Design Report. October 2023. WSP USA Inc.

# 25.0 Reliance on Information Provided by the Registrant

This TRS has been prepared by SLR for SSR Mining Inc. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to SLR at the time of preparation of this TRS.
- Assumptions, conditions, and qualifications as set forth in this TRS.
- Data, reports, and other information supplied by SSR and other third party sources.

For the purpose of this TRS, SLR has relied on ownership information provided by SSR in a legal opinion by Travis A. Cottrell, Land Manager & Permit Compliance Advisor, dated December 14, 2023, entitled Çöpler Land Tenure Status Report. SLR has not researched property title or mineral rights for the Çöpler Project as we consider it reasonable to rely on SSR and their legal counsel who is responsible for maintaining this information.

SLR has relied on SSR for guidance on applicable taxes, royalties, and other government levies or interests, applicable to revenue or income from the Project in the Executive Summary and Section 19. As the Project has been in operation for over ten years, SSR has considerable experience in this area.

The Qualified Persons have taken all appropriate steps, in their professional opinion, to ensure that the above information from SSR is sound.

Except as provided by applicable laws, any use of this TRS by any third party is at that party's sole risk.

# 26.0 Date and Signature Page

This report titled “Technical Report Summary on the Çöpler Property, Türkiye” with an effective date of October 31, 2023 was prepared and signed by:

**(Signed)** ***SLR International Corporation***

Dated at Lakewood, CO
February 12, 2024

SLR International Corporation

**(Signed)** ***RSC Consulting Ltd.***

Dated at Dunedin, New Zealand
February 12, 2024

RSC Consulting Ltd.

**(Signed)** ***WSP USA Inc.***

Dated at Lakewood, CO
February 12, 2024

WSP USA Inc.

**(Signed)** ***Ausenco Services Pty Ltd***

Dated at South Brisbane, Australia
February 12, 2024

Ausenco Services Pty Ltd

# 27.0 Appendix 1

**Economic Model Annual Summary**

| | |
|---|---|
| Company | SSR Mining Inc. |
| Project Name | Copler Mine |
| Scenario Name | $1450 Au Reserve Price |
| Analysis Type | S-K 1300 TRS |

| Calendar Year | | | Nov-23 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Discounting Timeline By Date | | | Dec-23 | Jun-24 | Jun-25 | Jun-26 | Jun-27 | Jun-28 | Jun-29 | Jun-30 | Jun-31 | Jun-32 | Jun-33 | Jun-34 | Jun-35 | Jun-36 | Jun-37 | Jun-38 | Jun-39 | Jun-40 | Jun-41 | Jun-42 | Jun-43 |
| Discounting Timeline By Number | | | 0.08 | 0.66 | 1.66 | 2.66 | 3.66 | 4.66 | 5.66 | 6.66 | 7.66 | 8.66 | 9.66 | 10.66 | 11.66 | 12.66 | 13.66 | 14.66 | 15.66 | 16.66 | 17.66 | 18.66 | 19.66 |
| Project Timeline in Years | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Time Until Closure In Years | US$ & Metric Units | LoM Avg / Total | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | -1 | -2 | -3 | -4 | -5 |
| **Market Prices** | | | | | | | | | | | | | | | | | | | | | | | |
| Gold, Forecast | US$/oz | $1,780 | 1,925 | 1,930 | 1,890 | 1,810 | 1,780 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 | 1,755 |
| **Physicals** | | | | | | | | | | | | | | | | | | | | | | | |
| Total Ore Mined | kt | 54,361 | 226 | 2,396 | 3,797 | 5,268 | 8,519 | 6,792 | 6,234 | 4,371 | 2,142 | 2,510 | 7,678 | 4,426 | - | - | - | - | - | - | - | - | - |
| Total Waste Mined | kt | 519,659 | 5,395 | 28,765 | 33,683 | 45,987 | 65,796 | 63,198 | 63,561 | 55,895 | 44,375 | 44,140 | 37,022 | 31,841 | 1 | 1 | - | - | - | - | - | - | - |
| Total Material Mined | kt | 574,020 | 5,620 | 31,161 | 37,481 | 51,255 | 74,316 | 69,991 | 69,794 | 60,266 | 46,517 | 46,650 | 44,700 | 36,267 | 1 | 1 | - | - | - | - | - | - | - |
| Stripping Ratio | W:O | 9.56 | 23.90 | 12.00 | 8.87 | 8.73 | 7.72 | 9.30 | 10.20 | 12.79 | 20.72 | 17.58 | 4.82 | 7.19 | - | - | - | - | - | - | - | - | - |
| Total Ore Rehandled | kt | 36,690 | 585 | 3,587 | 2,157 | 1,843 | 541 | 986 | 3,810 | 2,815 | 1,965 | 2,819 | 1,009 | 2,194 | 5,057 | 3,646 | 2,865 | 811 | - | - | - | - | - |
| Total Material Moved | kt | 610,710 | 6,206 | 34,749 | 39,638 | 53,098 | 74,857 | 70,977 | 73,604 | 63,081 | 48,482 | 49,469 | 45,709 | 38,461 | 5,058 | 3,647 | 2,865 | 811 | - | - | - | - | - |
| Capitalized Waste Mined | kt | 35,870 | 146 | 4,846 | 4,641 | - | 2,935 | 9,375 | 2,968 | 4,316 | 2,000 | 2,000 | 2,000 | 644 | - | - | - | - | - | - | - | - | - |
| Net Expensed Material Moved | kt | 574,839 | 6,060 | 29,903 | 34,997 | 53,098 | 71,922 | 61,601 | 70,637 | 58,765 | 46,482 | 47,469 | 43,709 | 37,817 | 5,058 | 3,647 | 2,865 | 811 | - | - | - | - | - |
| *POX Ore Processed* | *kt* | *41,718* | *557* | *2,839* | *3,073* | *3,095* | *2,983* | *3,080* | *2,919* | *2,995* | *2,851* | *2,901* | *2,958* | *2,805* | *2,907* | *2,081* | *2,865* | *811* | - | - | - | - | - |
| *HL Ore Processed* | *kt* | *6,811* | *144* | *975* | *1,740* | *1,361* | *1,157* | *1,435* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *G-L Ore Processed* | *kt* | *18,699* | - | - | - | - | *2,000* | *2,000* | *1,956* | *1,412* | *1,166* | *2,150* | *2,150* | *2,150* | *2,150* | *1,565* | - | - | - | - | - | - | - |
| Total Ore Processed | kt | 67,229 | 700 | 3,814 | 4,813 | 4,455 | 6,140 | 6,514 | 4,875 | 4,408 | 4,016 | 5,051 | 5,108 | 4,955 | 5,057 | 3,646 | 2,865 | 811 | - | - | - | - | - |
| Gold Grade, Processed | g/t | 2.32 | 2.29 | 2.15 | 1.83 | 2.13 | 2.38 | 2.34 | 2.83 | 2.12 | 2.20 | 1.76 | 3.86 | 2.90 | 2.03 | 1.57 | 1.55 | 3.64 | - | - | - | - | - |
| Contained Gold, Processed | koz | 5,025 | 52 | 264 | 283 | 305 | 469 | 490 | 444 | 301 | 284 | 285 | 635 | 463 | 330 | 184 | 143 | 95 | - | - | - | - | - |
| Gold Recovery, Processed | % | 84.7% | 85.0% | 84.8% | 82.6% | 83.6% | 84.4% | 82.4% | 85.9% | 85.8% | 85.5% | 85.1% | 82.8% | 87.7% | 86.1% | 80.0% | 88.0% | 89.5% | -- | -- | -- | -- | -- |
| *POX Recovered Gold* | *koz* | *2,852* | *38* | *184* | *165* | *191* | *213* | *208* | *267* | *192* | *183* | *128* | *368* | *239* | *168* | *97* | *126* | *85* | - | - | - | - | - |
| *HL Recovered Gold* | *koz* | *298* | *6* | *40* | *69* | *64* | *51* | *68* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *G-L Recovered Gold* | *koz* | *1,104* | - | - | - | - | *131* | *128* | *114* | *66* | *60* | *114* | *157* | *166* | *115* | *50* | - | - | - | - | - | - | - |
| Recovered Gold, Processed | koz | 4,254 | 44 | 224 | 234 | 255 | 396 | 404 | 381 | 258 | 243 | 243 | 525 | 406 | 284 | 147 | 126 | 85 | - | - | - | - | - |
| *POX Produced Gold* | *koz* | *2,852* | *38* | *184* | *165* | *191* | *213* | *208* | *267* | *192* | *183* | *128* | *368* | *239* | *168* | *97* | *126* | *85* | - | - | - | - | - |
| *HL Produced Gold* | *koz* | *298* | *4* | *30* | *59* | *64* | *55* | *64* | *18* | *3* | *1* | - | - | - | - | - | - | - | - | - | - | - | - |
| *G-L Produced Gold* | *koz* | *1,104* | - | - | - | - | *131* | *128* | *114* | *66* | *60* | *114* | *157* | *166* | *115* | *50* | - | - | - | - | - | - | - |
| Total Produced Gold | koz | 4,254 | 42 | 215 | 225 | 255 | 399 | 400 | 399 | 260 | 243 | 243 | 525 | 406 | 284 | 147 | 126 | 85 | - | - | - | - | - |
| Total Payable Gold | koz | 4,254 | 42 | 215 | 225 | 255 | 399 | 400 | 399 | 260 | 243 | 243 | 525 | 406 | 284 | 147 | 126 | 85 | - | - | - | - | - |
| **Cash Flow** | | | | | | | | | | | | | | | | | | | | | | | |
| Gold Gross Revenue | $000s | 7,564,253 | 81,294 | 414,277 | 424,361 | 461,594 | 711,004 | 702,091 | 700,203 | 457,068 | 427,006 | 425,774 | 921,885 | 711,999 | 498,048 | 257,862 | 221,029 | 148,756 | - | - | - | - | - |
| By-Product Credits | $000s | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Gross Revenue After By-Product Credits | $000s | 7,564,253 | 81,294 | 414,277 | 424,361 | 461,594 | 711,004 | 702,091 | 700,203 | 457,068 | 427,006 | 425,774 | 921,885 | 711,999 | 498,048 | 257,862 | 221,029 | 148,756 | - | - | - | - | - |
| Mining Cost | $000s | (1,212,690) | (13,548) | (63,502) | (69,564) | (100,865) | (149,381) | (135,086) | (149,912) | (129,553) | (104,814) | (106,317) | (94,973) | (79,248) | (6,424) | (4,872) | (3,610) | (1,021) | - | - | - | - | - |
| Process Cost | $000s | (1,998,432) | (28,283) | (149,593) | (146,118) | (142,753) | (153,772) | (160,066) | (140,250) | (136,269) | (127,377) | (142,029) | (144,288) | (138,272) | (142,282) | (102,189) | (112,938) | (31,952) | - | - | - | - | - |
| G&A Cost | $000s | (441,258) | (6,204) | (35,152) | (35,152) | (35,152) | (35,152) | (35,152) | (33,457) | (33,457) | (33,457) | (33,457) | (33,457) | (33,457) | (16,729) | (16,729) | (16,729) | (8,364) | - | - | - | - | - |
| VAT Payments | $000s | (8,548) | - | (4,540) | (4,009) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Refining and Freight Cost | $000s | (16,332) | (163) | (837) | (899) | (1,018) | (1,557) | (1,567) | (1,523) | (987) | (920) | (917) | (1,986) | (1,534) | (1,073) | (555) | (476) | (320) | - | - | - | - | - |
| Royalties | $000s | (429,495) | (4,548) | (22,298) | (21,797) | (25,440) | (42,943) | (41,688) | (43,310) | (23,624) | (21,883) | (20,573) | (61,228) | (44,446) | (27,882) | (11,417) | (7,498) | (8,920) | - | - | - | - | - |
| Subtotal Cash Costs Before By-Product Credits | $000s | (4,106,757) | (52,747) | (275,922) | (277,539) | (305,229) | (382,805) | (373,559) | (368,453) | (323,891) | (288,451) | (303,292) | (335,932) | (296,956) | (194,389) | (135,763) | (141,250) | (50,578) | - | - | - | - | - |
| By-Product Credits | $000s | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total Cash Costs After By-Product Credits | $000s | (4,106,757) | (52,747) | (275,922) | (277,539) | (305,229) | (382,805) | (373,559) | (368,453) | (323,891) | (288,451) | (303,292) | (335,932) | (296,956) | (194,389) | (135,763) | (141,250) | (50,578) | - | - | - | - | - |
| Operating Margin 46% | $000s | 3,457,496 | 28,547 | 138,355 | 146,822 | 156,365 | 328,199 | 328,532 | 331,750 | 133,178 | 138,555 | 122,482 | 585,954 | 415,043 | 303,658 | 122,100 | 79,779 | 98,178 | - | - | - | - | - |
| EBITDA | $000s | 3,457,496 | 28,547 | 138,355 | 146,822 | 156,365 | 328,199 | 328,532 | 331,750 | 133,178 | 138,555 | 122,482 | 585,954 | 415,043 | 303,658 | 122,100 | 79,779 | 98,178 | - | - | - | - | - |
| Depreciation Allowance | $000s | (826,651) | (47,897) | (64,915) | (82,921) | (83,509) | (142,934) | (55,089) | (46,479) | (39,885) | (35,006) | (31,458) | (36,888) | (39,837) | (27,697) | (20,241) | (25,020) | (46,874) | - | - | - | - | - |
| Earnings Before Taxes | $000s | 2,630,845 | (19,350) | 73,440 | 63,902 | 72,856 | 185,264 | 273,443 | 285,271 | 93,292 | 103,549 | 91,024 | 549,066 | 375,206 | 275,962 | 101,859 | 54,759 | 51,304 | - | - | - | - | - |
| Federal Income Tax | $000s | (452,498) | - | (1,828) | (1,657) | (3,556) | (9,078) | (13,399) | (50,455) | (15,185) | (15,862) | (16,066) | (129,423) | (87,714) | (63,829) | (18,478) | (13,409) | (12,562) | - | - | - | - | - |
| Net Income | $000s | 2,178,347 | (19,350) | 71,612 | 62,245 | 69,300 | 176,186 | 260,044 | 234,817 | 78,108 | 87,687 | 74,958 | 419,643 | 287,492 | 212,133 | 83,381 | 41,350 | 38,742 | - | - | - | - | - |
| Non-Cash Add Back - Depreciation | $000s | 826,651 | 47,897 | 64,915 | 82,921 | 83,509 | 142,934 | 55,089 | 46,479 | 39,885 | 35,006 | 31,458 | 36,888 | 39,837 | 27,697 | 20,241 | 25,020 | 46,874 | - | - | - | - | - |
| Working Capital | $000s | (0) | - | 4,122 | (5,137) | (2,725) | (5,083) | (883) | (1,719) | 4,768 | (243) | 35 | (14,709) | 4,189 | 1,591 | 2,622 | 1,765 | (5,476) | 16,884 | - | - | - | - |
| Operating Cash Flow | $000s | 3,004,998 | 28,547 | 140,649 | 140,029 | 150,084 | 314,038 | 314,250 | 279,576 | 122,761 | 122,450 | 106,451 | 441,822 | 331,518 | 241,420 | 106,244 | 68,135 | 80,140 | 16,884 | - | - | - | - |
| Growth Capital | $000s | (475,067) | (341) | (77,013) | (141,083) | (77,131) | (32,060) | (32,865) | (20,480) | (18,556) | (14,473) | (12,142) | (12,746) | (10,530) | (9,454) | (16,194) | - | - | - | - | - | - | - |
| Sustaining Capital | $000s | (61,260) | - | (2,500) | (10,830) | (10,830) | (2,500) | (3,700) | (3,700) | (3,700) | (3,700) | (3,700) | (3,700) | (3,700) | (3,700) | (2,500) | (2,500) | - | - | - | - | - | - |
| Final Closure/Reclamation Costs | $000s | (100,300) | - | (3,387) | (286) | (286) | - | - | (1,915) | (1,018) | (15,176) | (5,626) | - | - | - | - | (30) | (30) | (21,900) | (18,425) | (12,059) | (12,113) | (8,050) |
| Total Capital | $000s | (636,628) | (341) | (82,900) | (152,199) | (88,247) | (34,560) | (36,565) | (26,095) | (23,274) | (33,348) | (21,468) | (16,446) | (14,230) | (13,154) | (18,694) | (2,530) | (30) | (21,900) | (18,425) | (12,059) | (12,113) | (8,050) |
| Cash Flow Adj/Reimbursements | $000s | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **LoM Metrics** | | | | | | | | | | | | | | | | | | | | | | | |
| Economic Metrics | | | | | | | | | | | | | | | | | | | | | | | |
| Discount Rate MidPoint | 5% | | 0.9960 | 0.9681 | 0.9220 | 0.8781 | 0.8363 | 0.7965 | 0.7585 | 0.7224 | 0.6880 | 0.6553 | 0.6240 | 0.5943 | 0.5660 | 0.5391 | 0.5134 | 0.4890 | 0.4657 | 0.4435 | 0.4224 | 0.4023 | 0.3831 |
| a) Pre-Tax | | | | | | | | | | | | | | | | | | | | | | | |
| Free Cash Flow | $000s | 2,820,868 | 28,206 | 59,577 | (10,513) | 65,393 | 288,556 | 291,084 | 303,936 | 114,671 | 104,964 | 101,049 | 554,798 | 405,002 | 292,095 | 106,028 | 79,014 | 92,672 | (5,017) | (18,425) | (12,059) | (12,113) | (8,050) |
| Cumulative Free Cash Flow | $000s | | 28,206 | 87,783 | 77,270 | 142,663 | 431,218 | 722,303 | 1,026,239 | 1,140,910 | 1,245,874 | 1,346,923 | 1,901,721 | 2,306,723 | 2,598,818 | 2,704,845 | 2,783,860 | 2,876,532 | 2,871,516 | 2,853,090 | 2,841,031 | 2,828,918 | 2,820,868 |
| NPV @ 5% | $000s | 1,930,206 | 28,093 | 57,677 | (9,693) | 57,421 | 241,315 | 231,838 | 230,546 | 82,840 | 72,217 | 66,213 | 346,221 | 240,706 | 165,334 | 57,157 | 40,566 | 45,313 | (2,336) | (8,172) | (5,093) | (4,873) | (3,084) |
| Cumulative NPV @ 5% | $000s | | 28,093 | 57,677 | 18,400 | 75,821 | 317,136 | 548,974 | 779,520 | 862,360 | 934,576 | 1,000,789 | 1,347,010 | 1,587,716 | 1,753,050 | 1,810,207 | 1,850,774 | 1,896,087 | 1,893,751 | 1,885,579 | 1,880,486 | 1,875,613 | 1,872,529 |
| b) After-Tax | | | | | | | | | | | | | | | | | | | | | | | |
| Free Cash Flow | $000s | 2,368,370 | 28,206 | 57,749 | (12,170) | 61,837 | 279,478 | 277,686 | 253,481 | 99,486 | 89,101 | 84,983 | 425,375 | 317,289 | 228,266 | 87,550 | 65,606 | 80,110 | (5,017) | (18,425) | (12,059) | (12,113) | (8,050) |
| Cumulative Free Cash Flow | $000s | | 28,206 | 85,956 | 73,786 | 135,622 | 415,100 | 692,786 | 946,267 | 1,045,754 | 1,134,855 | 1,219,838 | 1,645,214 | 1,962,503 | 2,190,768 | 2,278,318 | 2,343,924 | 2,424,034 | 2,419,018 | 2,400,592 | 2,388,533 | 2,376,420 | 2,368,370 |
| NPV @ 5% | $000s | 1,642,828 | 28,093 | 55,908 | (11,221) | 54,299 | 233,723 | 221,166 | 192,275 | 71,870 | 61,303 | 55,686 | 265,465 | 188,575 | 129,205 | 47,196 | 33,682 | 39,170 | (2,336) | (8,172) | (5,093) | (4,873) | (3,084) |
| Cumulative NPV @ 5% | $000s | | 28,093 | 84,001 | 72,780 | 127,079 | 360,802 | 581,968 | 774,243 | 846,113 | 907,416 | 963,101 | 1,228,556 | 1,417,131 | 1,546,337 | 1,593,533 | 1,627,215 | 1,666,386 | 1,664,050 | 1,655,878 | 1,650,784 | 1,645,912 | 1,642,828 |
| Operating Metrics | | | | | | | | | | | | | | | | | | | | | | | |
| Mine Life | Years | 15 | | | | | | | | | | | | | | | | | | | | | |
| Average Daily Mining Rate | t/d moved | 137,000 | 92,138 | 85,374 | 102,687 | 140,425 | 203,605 | 191,755 | 191,217 | 165,113 | 127,444 | 127,807 | 122,466 | 99,360 | 3 | 3 | - | - | - | - | - | - | - |
| Average Daily Processing Rate | t/d processed | 13,000 | 11,483 | 10,897 | 13,751 | 12,730 | 17,544 | 18,612 | 13,929 | 12,594 | 11,475 | 14,430 | 14,594 | 14,158 | 14,449 | 10,417 | 8,186 | 2,316 | - | - | - | - | - |
| Mining Cost (Expense only) | $ / t moved | $2.11 | 2.24 | 2.12 | 1.99 | 1.90 | 2.08 | 2.19 | 2.12 | 2.20 | 2.25 | 2.24 | 2.17 | 2.10 | 1.27 | 1.34 | 1.26 | 1.26 | - | - | - | - | - |
| Mining Cost (Expense only) | $ / processed | $18.04 | 19.34 | 16.65 | 14.45 | 22.64 | 24.33 | 20.74 | 30.75 | 29.39 | 26.10 | 21.05 | 18.59 | 15.99 | 1.27 | 1.34 | 1.26 | 1.26 | - | - | - | - | - |
| Processing Cost | $ / processed | $29.73 | 40.38 | 39.22 | 30.36 | 32.04 | 25.04 | 24.57 | 28.77 | 30.91 | 31.72 | 28.12 | 28.25 | 27.90 | 28.14 | 28.03 | 39.42 | 39.42 | - | - | - | - | - |
| G&A Cost | $ / processed | $6.56 | 8.86 | 9.22 | 7.30 | 7.89 | 5.72 | 5.40 | 6.86 | 7.59 | 8.33 | 6.62 | 6.55 | 6.75 | 3.31 | 4.59 | 5.84 | 10.32 | - | - | - | - | - |
| VAT Payments | $ / processed | $0.13 | - | 1.19 | 0.83 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Subtotal Direct Operating Costs | $ / processed | $54.45 | 68.58 | 66.28 | 52.95 | 62.57 | 55.09 | 50.70 | 66.38 | 67.90 | 66.15 | 55.80 | 53.39 | 50.65 | 32.71 | 33.95 | 46.52 | 51.00 | - | - | - | - | - |
| Refining and Freight Cost | $ / processed | $0.24 | 0.23 | 0.22 | 0.19 | 0.23 | 0.25 | 0.24 | 0.31 | 0.22 | 0.23 | 0.18 | 0.39 | 0.31 | 0.21 | 0.15 | 0.17 | 0.40 | - | - | - | - | - |
| NSR Royalty | $ / processed | $6.39 | 6.49 | 5.85 | 4.53 | 5.71 | 6.99 | 6.40 | 8.88 | 5.36 | 5.45 | 4.07 | 11.99 | 8.97 | 5.51 | 3.13 | 2.62 | 11.00 | - | - | - | - | - |
| Total Operating Cost | $ / processed | $61.09 | 75.30 | 72.35 | 57.67 | 68.51 | 62.34 | 57.34 | 75.58 | 73.48 | 71.82 | 60.05 | 65.77 | 59.93 | 38.44 | 37.24 | 49.30 | 62.40 | - | - | - | - | - |
| Sales Metrics | | | | | | | | | | | | | | | | | | | | | | | |
| Au Sales | koz | 4,254 | | | | | | | | | | | | | | | | | | | | | |
| Total Cash Cost | $ / oz Au | 965 | | | | | | | | | | | | | | | | | | | | | |
| Total AISC | $ / oz Au | 1,003 | | | | | | | | | | | | | | | | | | | | | |
| Avg. LOM Annual Au Sale | koz/yr | 281 | | | | | | | | | | | | | | | | | | | | | |

Making Sustainability Happen