Technical Report on the El Bagre Gold Mining Complex and Nechí Project, Department of Antioquia, Colombia Report for NI 43-101

Soma Gold Corp.

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Signature Date:
January 18, 2023

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1.0 SUMMARY

1.1 Executive Summary

In April 2022, SLR Consulting (Canada) Ltd (SLR), was retained by Soma Gold Corp. (Soma or the Company) to prepare an independent Technical Report to document the results of a Preliminary Economic Assessment (PEA) for the planned production expansion for the Cordero mine, part of Soma's El Bagre Gold Mining Complex (El Bagre), and to support public disclosure of Mineral Resources at Soma's El Bagre and Nechí Gold Projects (Nechí) (the Properties). This Technical Report conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

The effective date of the Mineral Resource estimate in this Technical Report is December 31, 2022, and information in this Technical Report is current as of that date unless otherwise specified. SLR visited Cordero from February 28 to March 3, 2022, and previously, visited El Bagre and Nechí from August 7 to 11, 2018.

Soma is a junior gold mining company listed on the TSX Venture Exchange (TSXV) with a focus on South American gold properties.

On May 28, 2020, Soma Gold Corp. completed its acquisition of 100% of the shares of Mineros S.A.'s (Mineros) wholly owned subsidiary, Operadora Mineras S.A.S. (Operadora), for US$5.5 million in cash. The purchase of Operadora includes the shares and assets (including mineral properties and all mining assets), mining and environmental permits, exploration equipment, data, inventory, and administrative assets, including El Bagre and Nechí.

The transaction details include:

- The aggregate consideration paid to Mineros for 100% of the shares of Operadora and all of its assets was US$5.5 million in cash payable in two installments. Both payments were made in 2020.
- The Royalty Agreement (Royalty Agreement) with Mineros for a 1% net smelter return (NSR) applies to all the production of the mines, after 17,000 ounces have been produced. The 17,000-ounce threshold was reached and the NSR commenced in early 2022.

Additionally, Soma has agreed to purchase electrical power from Mineros' hydroelectric plant for Colombian Pesos (COP$) COP$300 per kilowatt-hour (kWh) at 90% availability from April to December and during summer months (January, February, and March) for COP$350/kWh at 75% availability. In case of the termination of the collaboration agreement between the two parties, the Power Purchase Agreement (the PPA) will remain in place for a term of five years.

El Bagre, comprising the Cordero, La Ye, and Los Mangos underground gold mines and the gold processing plant (El Bagre Plant), and Nechí are located in the Department of Antioquia, Colombia.

In 2018, Roscoe Postle Associates (RPA), now SLR, reviewed and adopted the Mineral Resource estimates completed by Mineros for the La Ye and Los Mangos deposits. While mining of the remnants at La Ye and Los Mangos is ongoing, the Mineral Resources and Mineral Reserves defined in 2018 for these deposits are considered mined out and do not warrant updating. There has been no drilling or sampling for these two projects that would support a Mineral Resource or Mineral Reserve update. The current Mineral Resource estimate prepared by SLR for the Properties comprises the Cordero deposit at El Bagre, and Santa Elena, Santa Maria, and El Catorce deposits at Nechí. As of December 31, 2022, Indicated Mineral Resources are estimated to total 355,000 tonnes (t) at an average grade of 6.9 g/t Au and containing

78,000 oz Au at Cordero and 310,000 t at an average grade of 4.9 g/t Au and containing 49,000 oz Au at Nechí. Inferred Mineral Resources are estimated to total 761,000 t at an average grade of 7.9 g/t Au and containing 192,000 oz Au at Cordero and 405,000 t at an average grade of 6.5 g/t Au and containing 85,000 oz Au at Nechí.

El Bagre Plant has a nominal capacity of 500 tonnes per day (tpd) of material and has historically produced approximately 20 thousand ounces (koz) of gold doré annually. In addition to the underground mines and processing plant, the El Bagre site includes a tailings complex, a fine ore bin, administration buildings, an assay laboratory, and related infrastructure including electric power, heat, water treatment and supply, sewage treatment, kitchen/dining and accommodation complex, and drill core logging and storage facilities.

Based on the results of the PEA as at the effective date of this Technical Report, the Life of Mine (LOM) plan for Cordero is just over three years, ending in early 2026. The production rate of 84 thousand tonnes (kt) in 2022 is scheduled to ramp up to a peak mining production rate of 248 kt (680 tpd) in 2024. The LOM plan consists of a high proportion of Inferred material; therefore, no Mineral Reserves are being reported. The LOM plan includes applying a risk factor of 0.7 to Inferred Resources and it is anticipated that further drilling will both upgrade existing Resources and add new Resources to extend Cordero's mine life.

Achieving the planned peak production rate of 248 kt per annum would allow the Company to restart its previously operating El Limon Mill, which has been idled since 2020, with feed from Cordero in late 2023. The El Limon Mill has a capacity of 225 tpd, is located 47 km by gravel and paved roads from the El Bagre Mill, and is wholly-owned by a subsidiary of Soma.

Nechí includes the El Catorce, Santa Elena, and Santa Maria gold exploration projects, which are envisioned to be mined using underground methods.

This report is considered by SLR to meet the requirements of a Preliminary Economic Assessment as defined in Canadian NI 43-101 regulations. The economic analysis contained in this report is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that economic forecasts on which this Preliminary Economic Assessment is based will be realized.

1.1.1   Conclusions

El Bagre Operation is a traditional "follow the vein" type of operation, where Mineral Resources and Mineral Reserves are not defined in large quantities in advance of mining.   A PEA-level cash flow analysis demonstrates profitable operations for more than three years at Cordero, approximately half based on Indicated Resources. There is potential to expand the Mineral Resource base and continue mining, both along the known veins and elsewhere on the Property.

In the short-term, the current tailings storage facility (Stage 2) presents a risk to continued operations, as it is past the original design capacity. Water management during a storm event could present significant challenges. The mitigation is to complete construction (currently underway) on a new cell (Stage 3) before the next rainy season. Soma developed a schedule for the TSF Stage 3 construction, which started in November 2022 and shows completion of the starter dam targeted for April 2023.

The SLR Qualified Persons (QPs) offer the following conclusions for El Bagre and Nechí by area:

1.1.1.1 Geology and Mineral Resources

- Mineral Resources are unchanged at Nechí since the previous Technical Report.

- Mineral Resources at Cordero have been updated with data collected since the last Mineral Resource estimate of December 31, 2018.

- In 2018, Roscoe Postle Associates (RPA), now SLR, reviewed and adopted the Mineral Resource estimates completed by Mineros for La Ye and Los Mangos. While mining of the remnants at La Ye and Los Mangos is ongoing, the Mineral Resources and Mineral Reserves defined in 2018 for these advanced stage projects are considered mined out and do not warrant updating. There has been no drilling or sampling for these two projects that would support a Mineral Resource or Mineral Reserve update.

- There is good potential to increase the Mineral Resource base for the Cordero underground deposit at depth and to the east, and additional exploration is warranted.

- There is good understanding of the nature of gold mineralization at the Properties, although the dykes at Cordero are not yet well defined. The deposits are all hosted in shear zones with fragile-ductile deformation within carboniferous granite rocks, with individual morphologies and structural controls, but similar mineralization styles.

- The sample collection, preparation, analytical, and security procedures, as well as the quality assurance/quality control (QA/QC) program as designed and implemented by Soma is adequate, and the assay results within the database are suitable for use in Mineral Resource estimation.

- Underground Mineral Resources are estimated as follows:

    o Indicated Mineral Resources are estimated to total 355,000 tonnes (t) at an average grade of 6.9 g/t Au and containing 78,000 oz Au at Cordero and 310,000 t at an average grade of 4.9 g/t Au and containing 49,000 oz Au at Nechí. Total Indicated Mineral Resources are thus estimated at 665,000 t, at an average grade of 5.9 g/t Au containing 127,000 oz Au.

    o Inferred Mineral Resources are estimated to total 761,000 t at an average grade of 7.9 g/t Au and containing 192,000 oz Au at Cordero and 405,000 t at an average grade of 6.5 g/t Au and containing 85,000 oz Au at Nechí. Total Inferred Mineral Resources are thus estimated at 1,165,000 t, at an average grade of 7.4 g/t Au containing 277,000 oz Au.

1.1.1.2 Exploration

- Building on exploration work completed by previous operators, including geological and structural mapping and sampling, surveying of old and new artisanal mine workings, etc., Soma has developed a prioritized list of prospective exploration targets for follow up exploration activities at El Bagre.

- The SLR QPs are of the opinion that there is good potential to expand the Mineral Resource base at Cordero and to discover additional Mineral Resources on Soma's larger regional land package.

1.1.1.3 Mining and Mineral Reserves

- There are currently no Mineral Reserves calculated for El Bagre.

- The Cordero mining solids encompass a large amount of Inferred material, which makes up much of the life of mine (LOM) plan. Inferred Resources are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. For this reason, Soma is not reporting Reserves until drilling results can support an upgrade to the resource base. A preliminary economic assessment has been completed for Cordero that considers the mechanized cut and fill mining method and the re-start of the El Limon Mill which is currently on care and maintenance.

- Test mining production from Cordero is currently from non-mechanised cut and fill methods using jackleg and winch equipment. Mechanized cut and fill mining is planned to be introduced in 2023. Mechanized development of levels and ramps is currently done with a contracted fleet and workforce, though Soma is currently purchasing equipment with the intent to take over development and future mechanized cut and fill production using an owner operated fleet.

- As at the effective date of this Technical Report, the LOM plan for Cordero is just over three years, ending in early 2026. The production rate of 84 kt in 2022 is scheduled to ramp up to a peak mining production rate of 248 kt in 2024. The increase in production rate is expected to support the re-start of the El Limon Mill.

1.1.1.4 Mineral Processing

- SGS test work on Los Mangos and La Ye blended ore in 2015 had an overall gold and silver recovery after flotation and cyanidation of the blend concentrate of 88.26% and 87.97% respectively.

- The Au feed grades from 2010 to October 2022 ranged from 3.51 g/t Au to 9.24 g/t Au with an average for the period of 5.6 g/t Au. Au recovery ranged from 81.4% to 87.8% with an average for the period of 85.5%. The Ag feed grades ranged from 5.0 g/t Ag to 30.6 g/t Ag with an average for the period of 14.6 g/t Ag. Ag recovery ranged from 77.2% Ag to 83.5% Ag with an average for the period of 80.9% Ag.

- Mill production is averaging just under the 500 tpd nominal and has reportedly been limited by the supply of feed from the mine. The average production rate from 2015 to 2022 is 410 tpd.

- The gold and silver recoveries have been consistent but lower than the design projections of 96% for gold and 90% for silver.

- The gold and silver grades have decreased from inception to date, but metal production has been maintained by increased mill throughput. In 2021, metal grades started to increase again as more mineralized material is being supplied by the Cordero Mine.

- The El Limon Mill will be restarted to process the additional tonnage required to meet the current mine plan. The mill is located 47 km from the El Bagre Plant and has a capacity of 225 tpd.

1.1.1.5 Infrastructure

- The El Bagre Gold Mining Complex is the base for the mining operations at La Ye, Los Mangos, and Cordero.

- Mineralized material from the underground mines is processed at the El Bagre Plant and tailings storage facility (TSF). In addition to the mill and tailings complex, the site includes a fine ore bin, administration buildings, an assay laboratory, and related infrastructure including electric power, heat, water treatment and supply, sewage treatment, kitchen/dining and accommodation complex, and drill core logging and storage facilities.

- Site access to the El Bagre Gold Mining Complex is accomplished on gravel roads.

- There is limited infrastructure at Nechí, with a small electrical plant, camp, office, and storage buildings close to the El Catorce and Santa Elena deposits. The property is actively being mined by artisanal miners, and several adits and hand-dug shafts can be found proximal to the veins. Underground exploration tunnels have been developed totalling over 1,600 m at El Catorce and over 500 m at Santa Elena.

1.1.1.6 Environment

- No environmental issues that could materially impact the ability to extract the Mineral Resources were identified from the documentation available for review.

- Operadora has the permits required to continue the mining operations.

- Several environmental management programs were developed as part of the overall Environmental Management Plan implemented by Operadora.

- Surface water quality monitoring takes place at sampling locations upstream and downstream of the points of discharge of water to the environment.

- Operadora informed SLR that no compliance issues have been raised by the environmental authorities. The SLR QP is not aware of any environmental issues related to non-compliance with respect to underground mining or milling operations.

- Continued operation of the El Bagre Tailings Storage Facility (TSF) Stage 2 is considered to be high-risk, due to the upstream raise design, ad hoc capacity expansions via Geotube containers, and gaps on design and operating documentation. The TSF has no emergency spillway and relies on pumping to control water levels in the tailings pond.

- Operadora has established a Social Management Plan as part of the approved Environmental Management Plan and carries out a number of social initiatives and programs within the area of influence of El Bagre.

- A conceptual Mine Closure Plan has been prepared for the El Bagre Gold Mining Complex and for the future expansion of the TSF (Stage 3).

1.1.2   Recommendations

The SLR QPs offer the following recommendations by area.

1.1.2.1 Geology and Mineral Resources

1. Complete an infill drilling program to upgrade Inferred Mineral Resources within the Cordero LOM plan to at least a classification of Indicated.
2. Incorporate channel samples in the database used for the Mineral Resource estimation of Cordero.
3. Increase the collection of density samples at Cordero to obtain a better understanding of the behaviour of density across lithologies and mineralized domains.
4. Update Cordero's dyke 3D model using available data (photos, core angle, logs, underground mapping) to better understand their nature and to reduce material risk in the Mineral Resource estimate.

5. While the data collection, management, and verification procedures at site are considered to be adequate for this level of study, the development of standard protocols and actions with respect to drilling, sampling, QA/QC, and drill hole database management and storage will improve the overall Project integrity. Detailed recommendations are provided in each section.

1.1.2.2 Exploration

Soma has proposed an exploration plan and budget to expand the Resource base at El Bagre, as presented in Table 1-1. SLR has reviewed and concurs with Soma's proposed exploration plans and budget.

1. Complete an initial phase of exploration drilling comprising 20,000 m.

   o Approximately 50% of the drilling should be focussed on converting the Inferred material in the current mine plan to the Indicated category with the goal of preparing an updated mine plan supported by Mineral Reserves.

   o Approximately 25% of the drilling should be focussed on near mine exploration with the goal of expanding the Resource at or near Cordero.

   o Approximately 25% of the drilling should focus on initial drill testing of approximately five prospects. Base target prioritization on the synthesis of exploration information, and complete exploration and drilling activities using a staged approach, with revisions as results are received and reviewed.

2. Complete additional grass roots exploration to identify additional targets for future drilling. This work is to include an airborne magnetic, radiometric, and topographic survey, prospecting, mapping, and soil and stream sediment sampling.

Table 1-1: Proposed Exploration Budget
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Item	C$
Diamond Drilling (20,000 m)	1,500,000
Airborne Geophysics Survey	350,000
Regional Mapping and Sampling	100,000
Management and Support	150,000
Contingency (10%)	21,000
Total	**2,121,000**

Contingent upon the results of this initial phase, complete additional studies including metallurgical testing and geotechnical studies.

1.1.2.3 Mining and Mineral Reserves

1. Complete a detailed geotechnical analysis at Cordero to confirm ground support techniques and the mineral extraction factors used in the LOM. Typically, in semi-vertical deposits with dip shallower than 45°, post pillars are necessary to support the hanging wall, as rockfill will be unlikely to do so alone, and/or cemented rockfill may require increased cement content.

2. Evaluate the use of other mining methods such as Alimak raise climbers and/or Shallow Angle Mining System (S.A.M.S.).

3. Complete the work required to upgrade Inferred material in the current mine plan to the Indicated category and to convert existing Indicated Resources to Mineral Reserves to allow the inclusion of material in a Mineral Reserve production plan. It is noted that further work will be required to expand the Mineral Resource base and convert additional Mineral Reserves.

1.1.2.4 Mineral Processing

1. Complete metallurgical testing, including ore hardness, flotation, and cyanidation for all new ore types or changes in ore characteristics and sources. There is a long history of consistent operation, however, optimization may be beneficial.

2. The El Limon mill was upgraded to 225 tpd in 2017. Specific information on the mill flowsheet, installed equipment and recent performance should be reviewed with respect to the processing of El Bagre materials. Metallurgical testing should be performed in conjunction with the El Bagre testing program recommended.

1.1.2.5 Infrastructure

1. Complete a detailed risk assessment on the impacts to the electrical system of the transition to mechanized cut and fill mining to ensure that there is sufficient capacity to support the additional equipment.

1.1.2.6 Environment

1. Complete a risk assessment and define mitigation measures for the continued operation of the existing TSF.

2. Prior to the next rainy season, decommission the TSF Stage 2 cell and commission the TSF Stage 3 (new cell to the east).

3. Complete a comprehensive Dam Safety Review for the existing TSF to determine the remediation requirements for closure.

4. Complete a dam breach study and a detailed closure plan for the existing TSF (Stage 2).

5. Appoint an Engineer of Record (EOR) for the TSF (Stages 2 and 3).

6. Complete additional studies for the TSF Stage 3 cell, ideally prior to its commissioning as discussed in Section 20.3.2 of this report.

7. Prepare an Operation, Maintenance and Surveillance (OMS) Manual for the TSF following the most recent guidelines as documented in the OMS Guide published by the Mining Association of Canada (MAC).

8. Consider the implementation of groundwater quality monitoring in line with best industry practices.

1.2 Economic Analysis

The economic analysis contained in this report is based on Cordero Indicated Resources and a portion of the Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that economic forecasts on which this Preliminary Economic Assessment is based will be realized.

1.2.1 Economic Criteria

1.2.1.1 Revenue

- Project life: 3.23 years (2023 to early 2026), based on Cordero Indicated and Inferred Mineral Resources

- Cordero underground mineralized material tonnes processed: 666 kt at 7.31 g/t Au

    o Contained Gold: 156,502 koz

    o Average LOM Mill Recovery 87%

    o Recovered Gold: 136,156 koz

- Revenue is estimated based on a gold metal price of US$1,700/oz, C$0.75/US$ exchange rate, and COP$3,225/C$ exchange rate. Gold payable percentage of 97.8% which includes the Treatment Charge/Refining Charge (TC/RC). For more details, refer to Section 19 Market Studies and Contracts. It is noted that the cut-off grade calculation used a gold price of US$1,600 per troy ounce and a foreign exchange rate of COP$3,800/US$.

- NSR royalty of 5.52% (see taxation and royalties below).

- A silver credit of 1.5% of gold revenue.

- The LOM Net Revenue for this scenario is C$289.5 million.

1.2.1.2 Costs

1.2.1.2.1 Capital Costs

- LOM capital costs of C$15.63 million.
- Closure costs of C$1,456,863 included in the analysis at the end of the LOM.

1.2.1.2.2 Operating Costs

- LOM Unit operating costs average of:

    o Underground Mining: C$154.40

    o Processing: C$58.25

    o G&A: C$23.29

    o G&A Indirect Costs: C$8.67

    o Total: C$244.61

- LOM average unit operating cash costs of C$1,289/oz Au.
- All-in Sustaining Cost (AISC) of C$1,418/oz Au.
- LOM operating costs total C$163.0 million.

1.2.1.3 Taxation and Royalties

- Income tax rate in Colombia is between 30% and 40%.

- A cost model, including depreciation and tax losses, was provided by the Soma finance team for use in the cash flow model.

- In Colombia, RPP properties with gold and silver produced from underground operations are subject to a 4% production tax and a 0.4% royalty, both adjusted by a factor of 0.8 (80% of gold price as outlines by the Central Bank of Colombia for the settlement of gold royalties), which results in an effective royalty of 3.52%. This effective royalty value was used in the cash flow model.

- An additional royalty of 2% for Mineros and Sun Valley (1% each) was included in the cash flow model.

1.2.2 Cash Flow Analysis

An after-tax cash flow model has been developed for El Bagre to evaluate the economic viability of restarting the El Limon Mill. The inputs for the cash flow model, mine production schedule, and capital and operating costs were provided to SLR by the Soma finance and technical teams and are summarized in the Economic Criteria section above. The model does not take into account the following components:

- Insurance

- Corporate costs

- An after-tax cash flow summary is presented in Table 1-2. All costs are in Q4 2022 C$ with no allowance for inflation.

The pre-tax net present value (NPV) at 8% discount rate is C$94.6 million and after-tax NPV at 8% discount is C$55.9 million.

The summary of the results of the cash flow analysis is presented in Table 1-2.

Table 1-2: **El Bagre Cash Flow Analysis**
Soma Gold Corp. - El Bagre Gold Mining Complex and Nechí Project

Item	Discount Rate	Units	Value
Pre-tax NPV at 8% discount	8%	C$ million	94.6
Pre-tax NPV at 10% discount	10%	C$ million	91.5
Pre-tax NPV at 12% discount	12%	C$ million	88.6
After-Tax NPV at 8% discount	8%	C$ million	55.9
After-Tax NPV at 10% discount	10%	C$ million	54.1
After-tax NPV at 12% discount	12%	C$ million	52.4

The undiscounted pre-tax cash flow is C$108.8 million, and the undiscounted after-tax cash flow is C$64.2 million. For this cash flow analysis, the internal rate of return (IRR) metric is non-applicable since there is no negative initial cash flow (no initial investment to be recovered).

The World Gold Council Adjusted Operating Cost (AOC) is C$1,289/oz of gold. The mine life capital cost, including sustaining unit cost, is C$129 per ounce, for an All-In Sustaining Cost (AISC) of C$1,418/oz of gold. Average annual gold production is approximately 44,376 ounces per year from 2023 to 2025.

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 on pre-tax NPV at a 10% discount rate. The following items were examined:

- Gold metal price
- Gold head grade
- Gold metallurgical recovery
- Operating costs
- Capital costs

Pre-tax sensitivity over the base case has been calculated for -20% to +20% for grade and gold price, -20% to +15% for recovery, and -15% to +35% for capital and operating costs variations to determine the most sensitive parameter of this Project. The sensitivities are shown in Table 1-3 and Figure 1-1.

Table 1-3: El Bagre Sensitivity Analysis – Pre-Tax
Soma Gold Corp. - El Bagre Gold Mining Complex and Nechí Project

Item	Units	Low %	Mid-Low %	Base	Mid-High %	High %
Au Head Grade	g/t	5.84	6.58	7.31	8.04	8.77
Au Metallurgical Recovery	%	69.6%	78.3%	87.0%	95.7%	100.0%
Au Metal Price	C$/oz	1813	2040	2267	2493	2720
Operating Cost	C$ million	138.5	150.7	163.0	191.5	220.0
Capital Cost (incl Closure)	C$ million	14.9	16.3	17.6	20.6	23.7

Pre-Tax NPV at 10%	Units	Low %	Mid-Low %	Base	Mid-High%	High%
Au Head Grade	C$ million	43.8	67.6	91.5	115.3	139.2
Au Metallurgical Recovery	C$ million	43.8	67.6	91.5	115.3	127.2
Au Metal Price	C$ million	43.8	67.6	91.5	115.3	139.2
Operating Cost	C$ million	111.3	101.4	91.5	68.3	45.1
Capital Cost (incl Closure)	C$ million	93.7	92.6	91.5	88.9	86.4

Figure 1-1: NPV Sensitivity Graph

The pre-tax NPV is most sensitive to the gold price, metallurgical recovery, and head grade followed by operating costs, and is least sensitive to fluctuations in exchange rate and capital costs.

1.3   Technical Summary

1.3.1   Property Description and Location

The underground El Bagre Gold Mining Complex and Nechí Gold Project are located approximately 167 km and 350 km north-northeast of Medellín, respectively, in the Department of Antioquia. El Bagre hosts three operating mines: remnant mining is continuing at Los Mangos and La Ye, following production since 2009, and Cordero has been in development since 2021. The Nechí Gold Project consists of three exploration projects, El Catorce, Santa Elena, and Santa Maria, and is located approximately 150 km from the El Bagre Gold Mining Complex.

1.3.2   Land Tenure

Soma, through its wholly owned subsidiary, Operadora Mineras S.A.S. (Operadora), has a 100% interest in El Bagre and Nechí. The principal concession over El Bagre is in the exploitation phase and covers an area of 3,786 ha. A very small portion of the La Ye Mine lies within a corner of RPP 55011, which covers a large area of Mineros' adjacent alluvial operations. Nechí is covered by a single exploration concession of 2,000 ha. At El Bagre, surface rights are held by Soma, or land is occupied with permission from the Government of Colombia, under a combination of Terreno Baldío regulations and permanent and time-

based easements. At Nechí, much of the surface rights overlying the concession area is held by Soma. As the project is not currently being actively explored, there are no active easements.

1.3.3 History

Soma acquired both the Properties in 2020 from Mineros, who had been operating there since 2004. Prior to Mineros' acquisition in 2004, artisanal underground mining was carried out at both properties. Commercial production from El Bagre started in December 2009, with a total of 588 kt of ore mined at an average grade of 6.38 g/t Au and 20.59 g/t Ag for a total of 120 koz of gold recovered.

1.3.4 Geology and Mineralization

El Bagre and Nechí lie within the Central Cordillera of the Andes Mountains. The area is part of the Bagre-Nechí gold mining district, and the vast majority of historical gold production to date has come from alluvial deposits within river basins, including the Nechí River. In addition to alluvial gold, structurally controlled mesozonal gold-silver and sulphide-bearing quartz vein lode deposits are hosted within intrusive rocks. Nechí and El Bagre are two examples of such mineralization; mineralized veins at Nechí are hosted within the Mesozoic aged Segovia batholith and mineralized veins at El Bagre are hosted within the Carboniferous aged El Carmen intrusive. The veins average approximately one metre in thickness and extend for up to five kilometres.

1.3.5 Exploration Status

Only a small amount of non-drilling exploration work has been completed at El Bagre since acquisition by Soma. It includes geological mapping and sampling as well as employing a structural geologist consultant to compile the available exploration information and to generate new exploration targets.

Nechí has not seen substantial exploration or drilling activity since 2013.

1.3.6 Mineral Resources

The Mineral Resource estimates for the Properties comprise the Cordero deposit at El Bagre, and Santa Elena, Santa Maria, and El Catorce deposits at Nechí. All estimates were completed by SLR.

In 2018, RPA, now SLR, reviewed and adopted the Mineral Resource estimates completed by Mineros for the La Ye and Los Mangos deposits. While mining of the remnants at La Ye and Los Mangos is still occurring, the Mineral Resources and Mineral Reserves defined in 2018 for these deposits are considered mined out and do not warrant updating. There has been no drilling or sampling for these two projects that would support a Mineral Resource or Mineral Reserve update.

The Mineral Resource estimate for Cordero was prepared by SLR using available drill hole sample data as of April 25, 2022, while the Nechí estimates were based on drill hole and underground channel data collected as at December 31, 2013. There has been no additional information collected at Nechí between 2013 and the effective date of the Mineral Resource. The Cordero and Nechí Mineral Resource estimates are based on the following drill hole and underground channel information:

- Cordero: 421 drill holes totalling 63,014 m of drilling up to April 25, 2022.
- Nechí: 1,154 underground channels totalling 2,000 m and 329 drill holes totalling 41,442 m.

Wireframes were generated using Leapfrog Geo and grades were interpolated into blocks using inverse distance squared (ID^2) and inverse distance cubed (ID^3) methodologies using Surpac and Leapfrog Edge.

Blocks were classified as Indicated and Inferred considering local drill hole spacing and proximity to existing development. Drill hole spacing criterion was informed by variography completed over the deposits and observed continuity of mineralization and was modified to reflect geological understanding and to ensure cohesive classification shapes. SLR validated the estimates using industry standard validation techniques.

Underground constraining shapes at Cordero for Mineral Resource reporting were generated using Deswik Stope Optimizer (DSO) software which considered a 2.4 g/t Au cut-off grade and a 1.0 m minimum thickness. For Nechí, Reasonable Prospects for Eventual Economic Extraction (RPEEE) were considered by applying a 1.3 m minimum thickness to the vein wireframes and visually reviewing results to ensure mineralization continuity.

A limited amount of mining has occurred at both Cordero and Nechí, and these mined out areas have been excluded from the Mineral Resource statement.

Mineral Resources, as at December 31, 2022, for El Bagre and Nechí are presented in Table 1-4.

Table 1-4: Summary of Mineral Resources – December 31, 2022
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Category	Tonnage (kt)	Grade (g/t Au)	Contained Metal (koz Au)
Indicated			
Cordero	355	6.9	78
Nechí	310	4.9	49
Indicated Total	**665**	**5.9**	**127**
Inferred			
Cordero	761	7.9	192
Nechí	405	6.5	85
Inferred Total	**1,165**	**7.4**	**277**

Notes:
1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 2.40 g/t Au for Cordero and 3.1 g/t Au for Nechí.
3. Mineral Resources are estimated using a long-term gold price of US$1,800 per ounce at Cordero and US$1,500 per ounce at Nechí.
4. At Cordero, Mineral Resources are reported within underground reporting shapes.
5. A minimum mining width of 1 m for Cordero and 1.3 m for Nechí was used.
6. Bulk density ranges between 2.0 t/m^3 and 2.2 t/m^3 for saprolite and ranges between 2.64 t/m^3 and 2.75 t/m^3 for fresh rock.
7. Numbers may not add due to rounding.

While SLR has noted that the TSF is at capacity and that this should be addressed moving forward, the SLR QPs are not aware of any other environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

1.3.7 Mineral Reserves

There are currently no Mineral Reserves calculated for El Bagre or Nechí.

The Cordero mining solids encompass a large amount of Inferred material, which makes up much of the life of mine plan (LOM). Inferred Resources are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. For this reason, Soma is not reporting reserves until drilling results can support an upgrade to the resource base.

A preliminary economic assessment has been done for Cordero that considers the mechanized cut and fill mining method and the re-start of the El Limon Mill which is currently on care and maintenance.

1.3.8   Mining Method

Development of Cordero began in September 2020. Test mining production is currently continuing via non-mechanised cut and fill mining using jackleg and winch equipment. Mechanized cut and fill mining will be introduced in 2023. Mechanized development of levels and ramps is currently done with a contracted fleet and workforce, though Soma is currently purchasing equipment with the intent to take over development and future mechanized cut and fill production using an owner operated fleet.

As at December 31, 2022, the LOM plan for Cordero was just over three years, consisting of a ramp up in production from 84 kt in 2022 to 248 kt in 2024.

In the LOM, the Cordero deposit is proposed to extend approximately 1,280 m on strike and 300 m deep, with veins dipping from 30° to 45°.

In the central portion of the Mineral Resource area, mining is carried out by a narrow, near vertical, non-mechanized cut and fill mining method. All production work, including development, is done by teams using pneumatic handheld drilling equipment. Raises are developed at either end of the stope, 30 m apart. An initial cut is developed between these raises 4 m above the drive, creating the bottom of the stope. Holes are drilled into the vein in the hanging wall in three distinct rounds, each deeper than the previous, with depths of 0.8 m, 1.2 m, and 1.8 m. Excess ore is removed, and a level working platform is created by a scraper rigged between raises. The ore is scraped into one of the raises where a box front has been installed, so that the ore can be loaded into hoppers. After the third round, all the material is scraped out of the panel. A reinforced wooden wall is built in the scraped-out area and filled with waste tipped in from above via the raise. The waste is spread with the scraper. This cycle is repeated until the top line of pillars is reached and the stope is mined out.

Ground conditions are generally good, so minimal ground support is required in most areas. Support requirements are decided based on a geotechnical evaluation.

The LOM plan does not account for any post pillars in the deposit as it has assumed that cemented rockfill will be sufficient to support the hanging wall as the deposit is depleted. The SLR QPs note that more geotechnical evaluation, specific to Cordero, is necessary to verify this assumption.

Fill material is cemented rock fill or unconsolidated fill that is either river pebbles and gravel or fresh waste from development. Fill is placed through a waste pass from surface and hoppers tipping into the raise.

In the deeper portions and north-south extents of the Cordero mine, the LOM incorporates a mechanized overhand cut and fill mining method using mining equipment owned and operated by Soma. Mining panels are designed on four-level blocks. The lowest level of each block is filled with cemented rock fill, and the subsequent levels with run of mine waste rockfill.

By mechanizing the mining method, Soma will be able to materially increase production and mill feed to potentially justify re-starting the El Limon Mill. The SLR QPs note that increasing the Mineral Resource

base and upgrading to Mineral Reserves as soon as possible will be necessary to confidently inform this decision.

1.3.9 Mineral Processing

The processing facility at the El Bagre Plant consists of the following unit operations:

- Three-stage crushing
- Single stage grinding
- Flash coarse rougher flotation in the grinding circuit
- Gravity concentration and intensive cyanide leaching
- Flotation, thickening, and clarification
- Concentrate regrinding and cyanidation
- Filtration and cyanide detoxification
- Merrill Crowe gold recovery
- Smelting
- Reagent preparation
- Tailings disposal

The El Bagre Plant was originally designed with the intent of treating ore at a nominal capacity of 500 tpd, or 168,000 tpa, at 92% overall availability. Plans involved an expansion to 1,000 tpd, by duplicating the 500 tpd processing line. The expansion was not completed due to availability of mining feed. The original design gold recovery was 96%, with silver recovery of 90%. The gold and silver recoveries have been consistent, averaging 85.5% for Au and 80.9% for Ag, but lower than the design projections. SGS metallurgical testing indicated recoveries of 88.3% for Au and 88.0% for Ag, so the design figures may have been optimistic.

The gold and silver grades have decreased from inception to date, but metal production has been maintained by increased mill throughput. The average mill throughput from 2015 to 2022 is 410 tpd.

El Bagre Plant has historically treated both La Ye and Los Mangos ore, however, both mines are near the end of production and feed from Cordero will be the sole source of ore from 2023 onwards. In addition to fully supplying the El Bagre Plant, achieving the planned peak mine production rate of 248 kt per annum would allow the Company to restart its previously operating El Limon Mill, which has been idled since 2020, with feed from Cordero in 2024.

The El Limon Mill is located approximately 47 km from the El Bagre Plant and has a similar flowsheet, comprising two stage crushing, ball milling, gravity concentration, flotation, cyanidation, Merrill Crowe precipitation, and smelting to produce doré. The mill was upgraded in 2017 to a capacity of 225 tpd. The mill and tailings are permitted for a total of 400 tpd.

1.3.10 Project Infrastructure

The El Bagre Gold Mining Complex is the base for the mining operations at La Ye, Los Mangos, and Cordero.

Ore from the underground mines is processed at the El Bagre Plant and TSF, located at the El Bagre Gold Mining Complex. In addition to the mill and tailings complex, the site includes a fine ore bin, administration buildings, an assay laboratory, and related infrastructure including electric power, heat,

water treatment and supply, sewage treatment, kitchen/dining and accommodation complex, and drill core logging and storage facilities. Site access to El Bagre Gold Mining Complex can be accomplished by water and on gravel roads.

The TSF is a ring dyke type facility with perimeter dams raised in an upstream direction. Excess water is reclaimed from the TSF via a floating barge and pump. The TSF is currently at capacity. An expansion of the active TSF area (referred to as Stage 2) is underway with the use of Geotubes. Continued operation of the existing TSF (Stage 2) is considered to be high risk. The TSF Stage 3 development is currently underway and scheduled to become operational in 2023. The expansion is adjacent to the existing TSF between the access road to the La Ye mine and the left bank of San Pedro creek.

There is limited infrastructure at Nechí, with a small electrical plant, camp, office, and storage buildings close to the El Catorce and Santa Elena deposits, however, the property is actively being mined by artisanal miners, and several adits and hand-dug shafts can be found proximal to the veins. Underground exploration tunnels have been developed at over 1,600 m at El Catorce and over 500 m at Santa Elena.

1.3.11 Market Studies

Soma sells its gold and silver through a Purchase and Refining Agreement with MVPR International Incorporated (MVPR). The prices Soma receives are based on current market prices and Soma does not hedge any of its gold production. The principal commodities, gold and silver, are freely traded, at prices that are widely known.

1.3.12 Environmental, Permitting and Social Considerations

Various environmental impact assessments (EIAs) have been submitted and approved in previous years for El Bagre in compliance with national regulations for mining activity in Colombia. The most recent EIA was submitted in 2019 to permit the expansion of the TSF. Several environmental management programs were developed as part of the overall Environmental Management Plan (EMP).

Tailings from the El Bagre Plant are currently deposited in the onsite TSF. Excess water is reclaimed from the TSF via a floating barge and pump. An expansion of the TSF is underway with the use of Geotube containers. An additional TSF expansion is planned to the east of the current facility with commissioning planned for 2023.

There are two points of industrial wastewater discharge to the environment: the discharge from the TSF and the discharge from the Los Mangos mine. Surface water quality monitoring takes place at sampling locations upstream and downstream of the discharge points.

Permits to continue operating El Bagre in the near future are in place. A new EIA is being prepared for modification of the Environmental Licence. The modification has two main objectives:

- Update maximum discharge (flow) limits
- Receive approval of CORANTIOQUIA for new discharge permits for Cordero (CORANTIOQUIA is the Autonomous Regional Corporation (Corporación Autónoma Regional, CAR) responsible for the region of Colombia where the mining activities of El Bagre take place)

The socio-economic setting in which Soma operates is particularly sensitive as the area is one of the poorest regions in the Department of Antioquia, with poverty indices of more than 50%. Given this context, Soma is one of the most important companies in the region and one of the primary engines of

the regional economy. The local communities are supportive of the formal mining activities such as El Bagre given the employment opportunities they bring and the social projects they support.

The operation has an established Social Management Plan. In addition to environmental, health and safety, and quality programs, a Corporate Social Responsibility program is in place.

Activities within the social program include assisting regional and municipal governments in various initiatives, environmental education, restoration of lands impacted by past artisanal mining, and providing support to regional municipalities on housing development and cultural program initiatives. Various awareness and education programs are being supported including coordinated efforts with the state education agency (SENA) to develop and support various skill development and job training programs.

A conceptual closure plan was prepared for the El Bagre Gold Mining Complex and the future TSF Stage 3, but no detailed closure plan has been developed for the current TSF Stage 2, which will cease operations in 2023.

1.3.13 Capital and Operating Cost Estimates

A summary of the LOM sustaining capital costs for the Mine is given in Table 1-5.

Table 1-5: **El Bagre Life of Mine Capital Costs**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Area	Units	Total	2023	2024	2025	2026
Mine Equipment	C$ 000	8,436	2,759	2,839	2,839	-
El Limon Mill Re-start	C$ 000	1,200	1,200	-	-	-
Mine Services and Infrastructure	C$ 000	5,347	2,875	1,200	1,272	-
TSF Stage 3 Expansion	C$ 000	648	648	-	-	-
Reclamation and Closure	C$ 000	1,457				1,457
Total Capital Cost	**C$ 000**	**17,089**	**7,482**	**4,039**	**4,111**	**1,457**

Mine closure costs are explained in Section 20 of this Technical Report. The current mine closure cost estimate is C$1,456,863 to be incurred in the last year of the LOM. Any new operational plans developed in association with the Cordero Mine will require updating closure cost estimates.

The following items are excluded from the capital cost estimate:

- Working capital
- Sunk costs
- Exploration drilling
- Future expansion

The operating costs to mine and process an estimated 666 kt of material are estimated to total C$163 million over the LOM (Table 1-6).

Table 1-6: **El Bagre Life of Mine Operating Costs**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Item	Total (C$ million)	2023 (C$ million)	2024 (C$ million)	2025 (C$ million)	2026 (C$ million)
Underground Mining	102.9	23.6	35.5	39.6	4.2
Processing	38.8	8.9	14.4	13.9	1.6
G&A	15.5	4.8	4.8	4.8	1.1
G&A Indirect costs	5.8	1.5	1.9	1.9	0.5
Total Operating Cost	**163.0**	**38.8**	**56.6**	**60.2**	**7.4**

Table 1-7 summarizes the LOM unit operating costs.

Table 1-7: **El Bagre Life of Mine Unit Operating Costs**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Item	Unit	LOM Average
UG Mining	C$/t milled	154
Processing	C$/t milled	58
General and Administrative	C$/t milled	23
General and Administrative – Indirect Costs	C$/t milled	9
Total Operating Cost	**C$/t milled**	**245**

2.0 INTRODUCTION

In April 2022, SLR Consulting (Canada) Ltd. (SLR), was retained by Soma Gold Corp. (Soma) to prepare an independent Technical Report to document the results of a Preliminary Economic Assessment (PEA) for the planned production expansion for the Cordero mine, part of Soma's El Bagre Gold Mining Complex (El Bagre), and to support public disclosure of current Mineral Resources at Soma's El Bagre and Nechí Gold Projects (Nechí). This Technical Report conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

The effective date of the Mineral Resource estimate in this Technical Report is December 31, 2022, and information in this Technical Report is current as of that date unless otherwise specified. SLR visited Cordero from February 28 to March 3, 2022, and previously, visited El Bagre and Nechí from August 7 to 11, 2018.

Soma is a junior gold mining company listed on the TSX Venture Exchange (TSXV) with a focus on South American gold properties.

On May 28, 2020, Soma Gold Corp. completed its acquisition of 100% of the shares of Mineros S.A.'s (Mineros) wholly owned subsidiary, Operadora Mineras S.A.S. (Operadora), for US$5.5 million in cash. The purchase of Operadora includes the shares and assets (including mineral properties and all mining assets), mining and environmental permits, exploration equipment, data, inventory, and administrative assets, including El Bagre and Nechí.

The transaction details include:

a. The aggregate consideration paid to Mineros for 100% of the shares of Operadora and all of its assets was US$5.5 million in cash payable in two installments. Both payments were made in 2020.

- The Royalty Agreement (Royalty Agreement) with Mineros for a 1% net smelter return (NSR) applies to all the production of the mines, after 17,000 ounces have been produced. The 17,000-ounce threshold was reached and the NSR commenced in early 2022.

Additionally, Soma has agreed to purchase electrical power from Mineros' hydroelectric plant for Colombian Pesos (COP$) COP$300 per kilowatt-hour (kWh) at 90% availability from April to December and during summer months (January, February, and March) for COP$350/kWh at 75% availability. In case of the termination of the collaboration agreement between the two parties, the Power Purchase Agreement (the PPA) will remain in place for a term of five years.

El Bagre, comprising the Cordero, La Ye, and Los Mangos underground gold mines and the gold processing plant (El Bagre Plant), and Nechí are located in the Department of Antioquia, Colombia.

In 2018, Roscoe Postle Associates (RPA), now SLR, reviewed and adopted the Mineral Resource estimates completed by Mineros for the La Ye and Los Mangos deposits. While mining of the remnants at La Ye and Los Mangos is ongoing, the Mineral Resources and Mineral Reserves defined in 2018 for these two deposits are considered mined out and do not warrant updating. There has been no drilling or sampling for these two projects that would support a Mineral Resource or Mineral Reserve update.

The 2022 Mineral Resource estimates completed by SLR for the Properties comprise the Cordero deposit at El Bagre, and Santa Elena, Santa Maria, and El Catorce deposits at Nechí.   As of December 31,2022, Indicated Mineral Resources are estimated to total 355,000 tonnes (t) at an average grade of 6.9 g/t Au and containing 78,000 oz Au at Cordero and 310,000 t at an average grade of 4.9 g/t Au and containing

49,000 oz Au at Nechí. Inferred Mineral Resources are estimated to total 761,000 t at an average grade of 7.9 g/t Au and containing 192,000 oz Au at Cordero and 405,000 t at an average grade of 6.5 g/t Au and containing 85,000 oz Au at Nechí.

The El Bagre Plant has a nominal capacity of 500 tonnes per day (tpd) of material and has historically produced approximately 20 thousand ounces (koz) of gold doré annually. In addition to the underground mines and processing plant, the El Bagre site includes a tailings complex, a fine ore bin, administration buildings, an assay laboratory, and related infrastructure including electric power, heat, water treatment and supply, sewage treatment, kitchen/dining and accommodation complex, and drill core logging and storage facilities.

As at the effective date of this Technical Report, the Life of Mine (LOM) plan for Cordero is just over three years, ending in early 2026. The production rate of 84 thousand tonnes (kt) in 2022 is scheduled to ramp up to a peak mining production rate of 248 kt (680 tpd) in 2024. The LOM consists of a high proportion of Inferred material; therefore, no Mineral Reserves are being reported.

Achieving the planned peak production rate of 248 kt per annum would allow the Company to restart its previously operating El Limon Mill , which has been idled since 2020, with ore feed from Cordero in 2024. The El Limon Mill has a capacity of 225 tpd, is located 47 km by gravel and paved roads from the El Bagre Plant and is wholly-owned by a subsidiary of Soma.

Nechí includes the El Catorce, Santa Elena, and Santa Maria gold exploration projects, which are envisioned to be mined using underground methods.

This report is considered by SLR to meet the requirements of a Preliminary Economic Assessment as defined in Canadian NI 43-101 regulations. The economic analysis contained in this report is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that economic forecasts on which this Preliminary Economic Assessment on Cordero is based will be realized.

2.1 Sources of Information

The SLR QPs Marie-Christine Gosselin, P. Geo., Chelsea Hamilton, P. Eng., and Luis Vasquez, P. Eng. visited the site from February 28 to March 3, 2022. While at site, the SLR QPs held discussions with site personnel; visited the Cordero and Los Mangos underground operations; reviewed core; reviewed data collection and QA/QC procedures; and reviewed geological interpretations, geological modelling, and resource estimation procedures. The SLR QP Sean Horan, P. Geo. visited the site from August 7 to 11, 2018.

Discussions were held with personnel from Soma and Operadora Minera:

- Mr. Gregory Hayes, Chief Financial Officer, Soma
- Mr. Chris Buchanan, P.Geo., Vice President of Exploration, Soma
- Mr. Alejandro Noreña Velásquez, General Manager of Finance and Administration, Operadora
- Mr. Juan Camilo Orozco Garcia, Exploration Geologist, Operadora
- Mr.Edwin Jesús Castro Leiva, General Manager of Operations (Acting), Operadora
- Mr. Edwin Cardona, Manager of Mine Planning, Operadora
- Mr. Narcés Mosquera, Environmental Director, Operadora
- Mrs. Gina Muñoz, Director of Human Resources and Safety, Operadora

- Mr. Chris Turek, Independent Mining Consultant to Soma

Table 2-1 presents a summary of the qualified persons (QPs) responsibilities for this Technical Report.

Table 2-1:   List of SLR Qualified Persons and Responsibilities
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Qualified Person	Title/Position	Sections
Marie-Christine Gosselin, P.Geo.	Project Geologist	1.1, 1.1.1.1, 1.1.1.2, 1.1.2.1, 1.1.2.2., 1.3.1 – 1.3.6, 2 – 12, 14, 23, 24, 25.1, 25.2, 26.1, 26.2
Sean Horan, P.Geo.	Principal Geologist and Geostatistician	1.1, 1.1.1.1, 1.1.1.2, 1.1.2.1, 1.1.2.2., 1.3.1 – 1.3.6, 2 – 12, 14, 23, 24, 25.1, 25.2, 26.1, 26.2
Chelsea Hamilton, P.Eng.	Project Mining Engineer	1.1.1.3, 1.1.1.5, 1.1.2.3, 1.1.2.5, 1.2, 1.3.7, 1.3.8, 1.3.10, 1.3.11, 1.3.13, 15, 16, 18.1.1-18.1.3, 18.2, 19, 21, 22, 25.3, 25.5, 26.3, 26.5
Andrew P. Hampton, P.Eng.	Principal Metallurgist	1.1.1.4, 1.1.2.4, 1.3.9, 13, 17, 25.4, 26.4
Luis Vasquez, M.Sc. P.Eng.		1.1.1.6, 1.1.2.6, 1.3.12, 18.1.4, 20, 25.6, 26.6
All	-	27.0

The documentation reviewed, and other sources of information, are listed at the end of this report in Section 27 References.

2.2   List of Abbreviations

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

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

3.0 RELIANCE ON OTHER EXPERTS

This report has been prepared by SLR for Soma. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to SLR at the time of preparation of this report, and
- Assumptions, conditions, and qualifications as set forth in this report.

For the purpose of this report, SLR has relied on a title opinion by M&NC Consultaria S.A.S. dated December 5, 2022, a copy of which has been provided to and relied upon by SLR with the consent of M&NC Consultaria S.A.S. This applies to Section 4 and the Summary of this Technical Report. SLR has not researched property title or mineral rights for the Projects and expresses no opinion as to their ownership status.

SLR has relied on Soma for guidance on applicable taxes, royalties, and other government levies or interests, applicable to revenue or income from El Bagre and Nechí.

Except for the purposes legislated under provincial securities laws, any use of this report by any third party is at that party's sole risk.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The El Bagre Gold Mining Complex (El Bagre) is located approximately 167 km north-northeast of Medellín in the northeast of the Department of Antioquia within the jurisdiction of the municipalities of El Bagre and Zaragoza. Approximate coordinates for the centre of El Bagre are 74°49'7.35" W and 7°32'9.38" N, corresponding to UTM Zone 18N, 520,000 E, 833,000 N in the World Geodetic System 1984 (WGS84). El Bagre consists of three deposits, La Ye, Los Mangos, and Cordero, which present as individual north trending mineralized veins. The Los Mangos and La Ye mines are located 1.4 km from each other, and the Cordero project is located 2.6 km to the southwest of the Los Mangos site.

The underground Nechí Project (Nechí) is located within the municipality of Nechí (population: 27,000) within Bajo Cauca, the most northern subregion of the department of Antioquia. The municipality is bordered to the south by the municipality of El Bagre. Nechí is approximately 350 km from the city of Medellín. Approximate coordinates for the centre of the Nechí Gold Project are UTM Zone 18N, 525,500 E, 897,000 N in the World Geodetic System 1984 (WGS84). Nechí deposits El Catorce, Santa Elena, and Santa Maria present as individual mineralized veins trending north-northeast, east, and north-northwest, respectively.

Figure 4-1 shows the location of El Bagre and Nechí.

Figure 4-1

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project

Department of Antioquia, Colombia

Location Map

4.2 Land Tenure

4.2.1 Mineral Rights in Colombia

Mineral rights in Colombia belong to the federal government and are governed by the Colombian Mining Code. This code has been amended on several occasions. The oldest version relevant to Soma's properties is Decree 2685 of 1988, which was replaced entirely by Law 685 of 2001, which now stands as the currently valid mining legislation (the mining code). Mining is administered by the Ministry of Mines and Energy (MME), which has delegated the administrative duties concerning concession issues to Agencia Nacional de Minería (ANM; ministerial decree #4134, November 3, 2011) and to INGEOMINAS (the Colombian Geological Survey which changed its name to Servicio Geologico Colombiano (SGC); ministerial decree #4131, November 3, 2011).

In Colombia, concessions have three phases: exploration, mine development ("construction assembly"), and exploitation. The exploration phase is for a three-year period, which can be extended by up to four additional two-year periods giving a maximum of eleven years. The mining code includes the obligation for the concessionary to pay an amount in consideration of the concession's area and during the exploration phase, annual surface payments, Cánon Superficiario (Canon), are payable to the Colombian government. The Canon is one minimum daily salary per hectare per year, payable in advance, calculated using a multiplier of 0.75, 1.25, and 2, for concessions held for less than five years, five to eight years, and eight to eleven years, respectively, for a concession size from 151 ha to 5,000 ha.

After completion of the exploration phase, the mine development phase is for a period of three years and may be extended for a period of one year.

The exploitation stage covers a period of 30 years, including the previous years of exploration and development, i.e., effectively a duration of 21 to 24 years, with the option of a 20-year extension. Canon fees are no longer paid and are replaced by a production royalty payable to the Colombian government, equal to 4% mouth of mine value of production for gold and silver. Mouth of mine value is deemed as 80 percent of the international gold price, as determined by the mining authority.

In addition to these concession types, some older mining contracts, known as Private Property Acknowledgements (RPPs) are still valid in Colombia. RPPs were originally acquired as private land while the State of Antioquia (now the Department of Antioquia) Mining Code, Act 127 of October 21, 1867, was in force and conferred rights for surface and mining exploitation. The 1867 code was replaced by Act 20 of 1969, which eliminated the former rights to private ownership, however, the rights of existing RPPs were grandfathered.

4.2.2 Land Tenure

Soma has a 100% interest in El Bagre and Nechí, through its wholly owned subsidiary, Operadora. The interests are held in three separate titles (Table 4-1):

- The principal concession over El Bagre is in the exploitation phase and covers an area of 3,786 ha.
- A very small portion of the La Ye Mine lies within RPP 55011, which also covers a large area of Mineros' adjacent alluvial operations.
- The concession over Nechí is 2,000 ha and is designated as an exploration concession.

Figure 4-2 shows the exploitation concession of El Bagre and the location of the La Ye Mine, Los Mangos Mine, and Cordero deposit. Figure 4-3 shows the exploration concession of Nechí and the location of the El Catorce, Santa Elena, and Santa Maria deposits.

Table 4-1: Land Tenure
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Project	Concession Phase	File Code	NMRC[1]	Area (ha)	Registration Date	Expiry Date
El Bagre	Exploitation	L5682005	HCIO-64	3,786	June 12, 2002	April 1, 2034
El Bagre	RPP	R55011	EDKA-03	36,877	-	-
Nechí	Exploration	GJJ- 101	GJJ-101	2,000	June 5, 2007	June 4, 2037

Notes:

1. NMRC: National Mining Registration Code
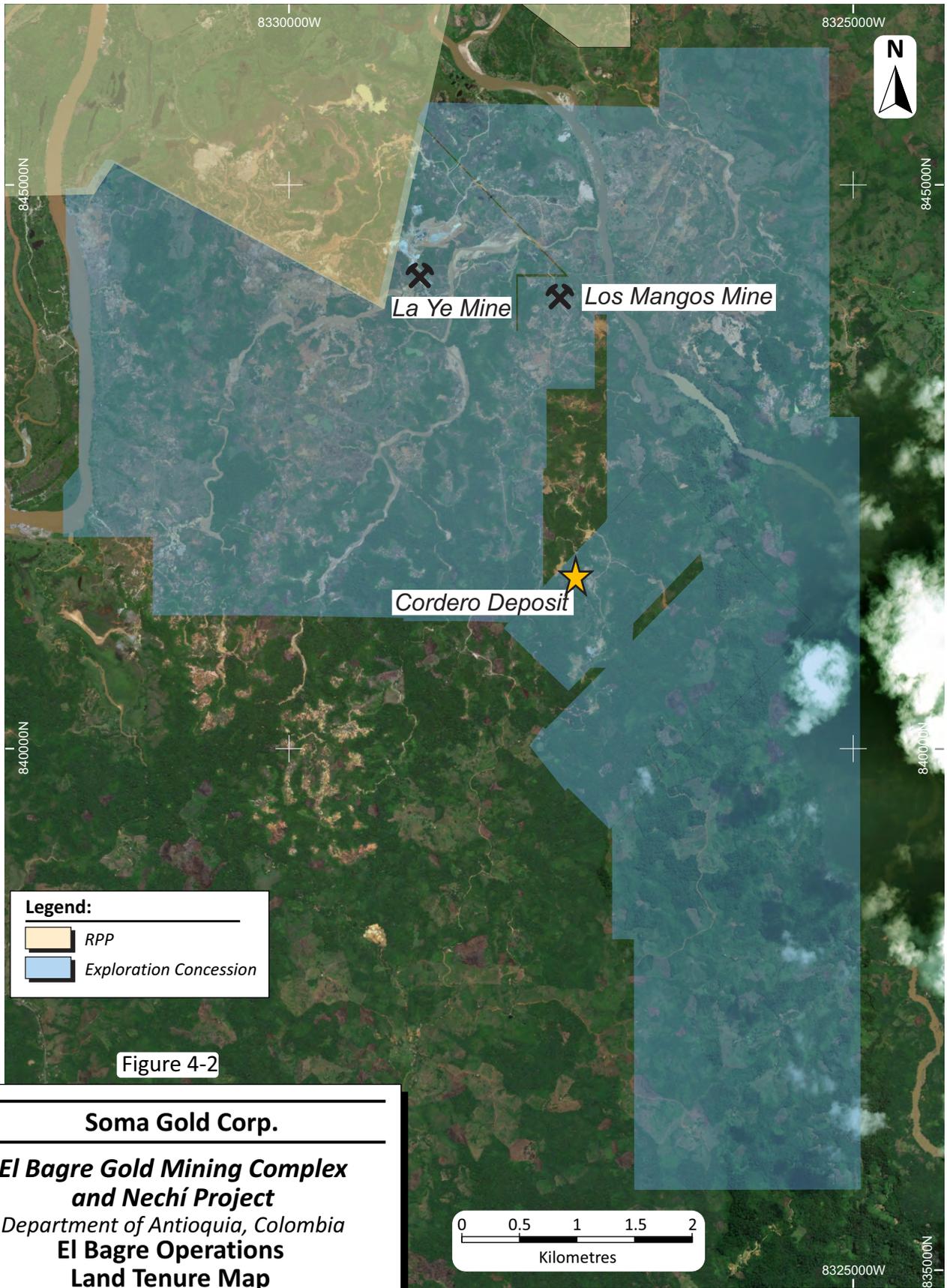
Figure 4-2

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
El Bagre Operations Land Tenure Map

January 2023 — Source: RPA, 2020.

Legend:
- RPP
- Exploration Concession

La Ye Mine
Los Mangos Mine
Cordero Deposit
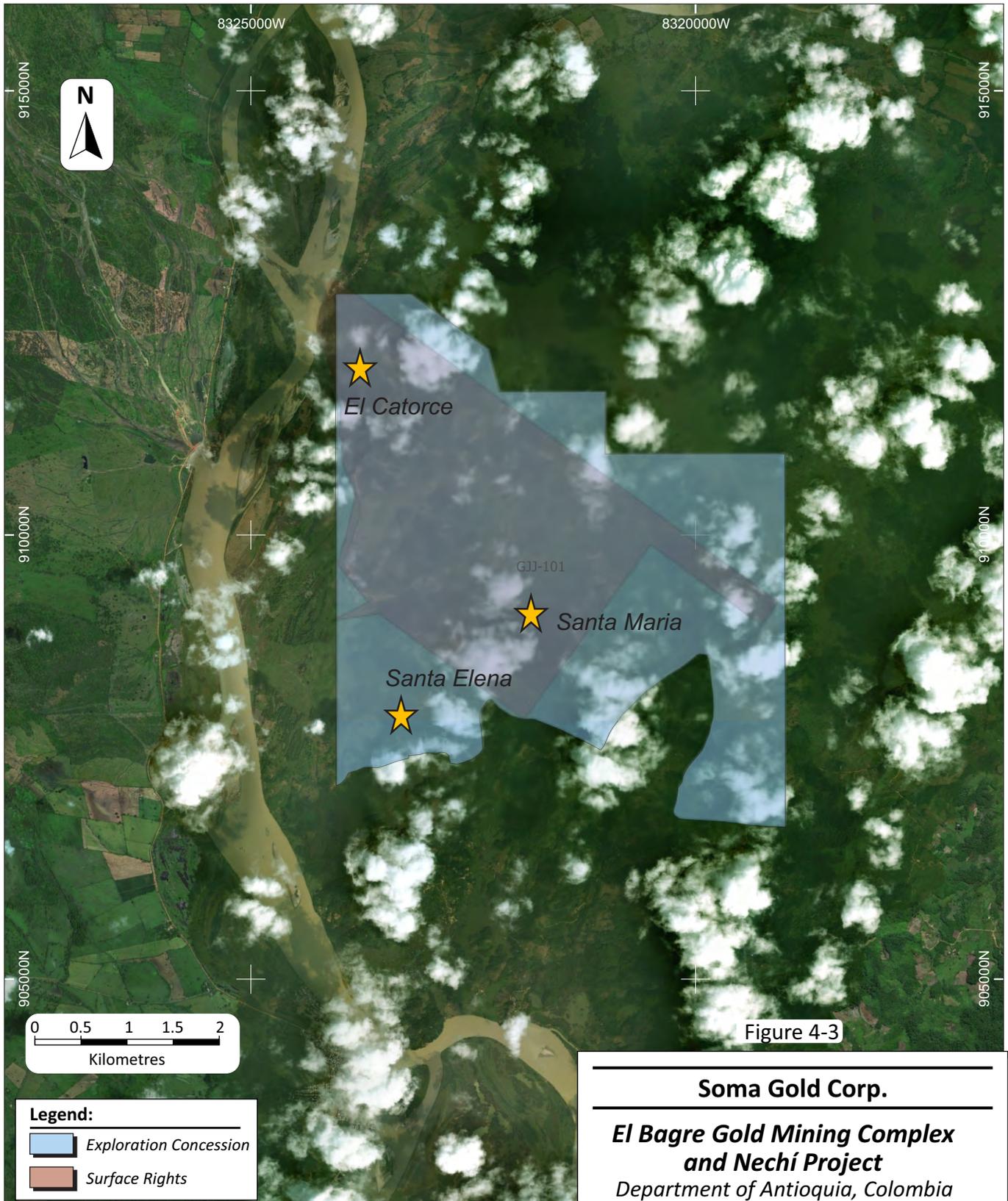
Figure 4-3

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Nechí Project Land Tenure Map

Legend:
- Exploration Concession
- Surface Rights

El Catorce

Santa Maria

Santa Elena

GJJ-101

4.2.3 Surface Rights

A total of 101 ha of land encompassing the mine infrastructure, including plant and camp areas at El Bagre, is either owned by Soma directly, or occupied with permission from the Government of Colombia, under the Terreno Baldío regulations. In addition, permanent easements totalling 30 ha have been negotiated over the Tailings 2 and Tailings 3 areas, as well as seven adits over the Property used to facilitate the transit of personnel, material, and equipment. Within one of the Los Mangos adits, Plaza Mangos, two hectares of Terreno Baldío are currently under negotiation with the National Agency of Lands. In addition, time-based easements are negotiated depending on local exploration activities.

Hacienda Santa Elena, part of a significant area of the Nechí concessions since 2011, totals 1,020 ha, and is shown in Figure 4-3. As Nechí is not currently being actively explored, there are no active easements.

Soma's surface and mineral rights are adequate to accommodate the El Bagre and Nechí project areas.

4.3   Royalties

In Colombia, RPP properties with gold and silver produced from underground operations are subject to a 4% production tax and a 0.4% royalty, both adjusted by a factor of 0.8 (80% of gold price as outlined by the Central Bank of Colombia for the settlement of gold royalties), which results in an effective royalty of 3.52%. This royalty is applicable for the small area of La Ye Mine which lies within RPP R57011. Mining concessions are subject to a 4% royalty, also adjusted by a factor of 0.8, resulting in an effective royalty of 3.20%. This royalty is applicable over the remainder of El Bagre. An additional royalty is payable to Mr. Orlando Correa over the former El Bagre concession 5766 (876 ha, 23% of exploitation concession area at El Bagre), based on the price and grade of both gold and silver. Concessions over El Bagre were joined in 2019 into a single concession, however, this royalty payment will be calculated based on the original concession location and area. For the current production scenario, Soma has projected grades of 2.25 g/t and 1.5 g/t for gold and silver, respectively, produced from the concession, resulting in a royalty equal to a value between 2% and 3% for this period. As the magnitude of Mr. Correa's royalty represents only 0.4% of total gross revenue, it is not considered in Soma's cost analysis.

4.4   Environmental/Permitting

While SLR has noted that the La Ye tailings storage facility (TSF) is at capacity and that this should be addressed moving forward, SLR is not aware of any environmental liabilities on the property. Soma has all required permits to conduct the proposed work on the property. 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 property.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

5.1.1 El Bagre Operation

El Bagre is located in the northeast portion of the Department of Antioquia, Colombia, approximately 167 km from the city of Medellín. The operation is accessed from Medellín via the paved road Route 25, followed by the Caucasia-El Bagre road, or by air on commercial ADA flight from the Enrique Olaya Herrera airport in the city of Medellín to El Tomín airport in the municipality of El Bagre.

5.1.2 Nechí Project

The Nechí Project is located within the municipality of Nechí within Bajo Cauca, the most northern subregion of the department of Antioquia. The municipality is bordered in the south by the municipality of El Bagre. The Nechí Project is approximately 350 km from the city of Medellín and is accessed via Route 25 (290 km), and Nechí Road, of which 15 km is unpaved. By air, the Nechí Project is reached by commercial flight to Caucasia, and from Caucasia to Nechí by river boat. The Nechí Project is approximately 150 km, or three hours drive, from El Bagre Gold Mining Complex.

5.2 Climate

Climate information is available in a baseline study prepared by Mineros for the Ministry of Environment in 1999, with the annual temperature updated to 2017 (Climate-data, 2017). The 1999 study relied on climate-related measurement data obtained over 11 years from 1970 to 1980 at the Santa Margarita weather station, as well as data collected from 1953 to 1963 at El Bagre airport. The climate supports year-round mining operations.

The ambient temperature is very uniform throughout the year, fluctuating by ±1°C and averaging 28.3°C. Higher temperatures correspond to periods of low rainfall.

Monthly precipitation as rainfall ranges from 70 mm to 550 mm, and average annual precipitation is 4,138 mm. Relative humidity is medium to high and averages 81.2%, with 79% during the dry season from December to March and 83% during the wet season from May to November. The high humidity is typically manifested in hazy to cloudy skies and frequent electric thunderstorms that commonly occur in late evening and overnight.

5.3 Local Resources

El Bagre and Nechí area has a long history of artisanal alluvial mining activity, however, mining supplies needed for modern commercial operations are not available locally. General labour is readily available in the area, but skilled labour must be found elsewhere in Colombia or trained on site. The Colombian army has a base at El Bagre and its operations are supported in part by Soma since the army provides security services for projects in the El Bagre District. The economy in the local area is primarily based on agriculture (rice, corn, cassava, banana, purple yam, cattle) and gold and silver mining. Fishing, wood, and jewellery and craft making also contribute to the local economy.

5.4　Infrastructure

This Technical Report encompasses one actively operating underground mine, Cordero.　Mining operations are expected to cease at the La Ye and Los Mangos mines in the first quarter of 2023 and they have not been included in the Technical Report.　Mineralized material from Cordero is processed at the El Bagre Plant, located at El Bagre Gold Mining Complex.　In addition to the mill and tailings complex, El Bagre site includes a fine ore bin, administration buildings, an assay laboratory, and related infrastructure including electric power, heat, water treatment and supply, sewage treatment, kitchen/dining and accommodation complex, drill core logging facilities, and small core shed.　Site access to El Bagre is by gravel roads.

There is limited infrastructure at the Nechí Project.　A small electric plant, camp, office, and storage buildings are located close to the El Catorce and Santa Elena deposits.　The property is actively being mined by artisanal miners, and several adits and hand-dug shafts can be found proximal to the veins. Underground exploration tunnels have been developed at over 1,600 m at El Catorce and over 500 m at Santa Elena.

5.5　Physiography

The Soma underground mining concessions are located in the Central Cordillera foothills within the Lower Cauca River physiographic region, which includes the Cauca and Nechí River valleys.　The municipalities of Taraza, Caceres, Caucasia, Zaragoza, El Bagre, and Nechí are situated in the valleys and are surrounded by a predominance of pastureland for livestock, jungle, and land developed for alluvial mining.

The Nechí River flood plain has low topographic relief with elevation in the order of 50 MASL.　To the east, the area is mountainous over the Segovia batholith and San Lucas gneisses where elevations are up to 600 MASL.　Low hills and terraces are found west of the Nechí River.

6.0 HISTORY

6.1 Prior Ownership

Prior to Mineros' acquisition in 2004, underground mining was carried out at La Ye for approximately 12 years by artisanal miners who developed the veins by means of two inclined shafts. Mineros was the soul owner of El Bagre and Nechí until 2019, when Soma acquired the Projects.

6.2 Exploration and Development History

6.2.1 El Bagre Gold Mining Complex

Following acquisition, Mineros surveyed the artisanal workings and carried out prospecting, mapping, trenching, and diamond drilling. Mineros developed an exploratory tunnel for both La Ye and Los Mangos and developed underground access and workings in order to carry out underground exploration, including channel sampling, underground mapping, and drilling. La Ye started preproduction development in 2007, stockpiling development muck near the process plant. In December 2009, the mine operating company Operadora, a company created by Mineros, acquired the La Ye project to manage exploration activities, and commercial production was achieved at La Ye in 2010 and at Los Mangos in 2013. Since 2016, exploration activities have focused on the Cordero vein and proximal exploration targets.

In 2018, the greenfields exploration program at El Bagre was developed and focused on the discovery of new prospective mine targets. The Mineros approach was to refine areal extents for exploration by ranking exploration targets with a priority related to their prospectivity. This was accomplished by undertaking the following targeting techniques and integrating the results within a three-dimensional geological-structural inversion model of the district:

- Lithological and structural mapping programs with focus on lithology, age, structure, structure order and structure order intersection.
- Surface sampling program.
- Interpretation of guideline intersections within digital elevation models (DEM).
- Results of re-logged historical drill holes.
- Geochemical anomalies.
- Geophysical anomalies (high resolution magnetic surveys).

Limited follow up exploration took place subsequently prior to the properties changing hands in 2020, passing from Mineros to Soma, who continued to focus exploration on Cordero.

In 2020, Soma began underground development of Cordero. Development of the decline reached level 5 in 2022. This has allowed mechanized mining of quartz veins on levels 2, 3, and 4.

6.2.2 Nechí Project

The district has witnessed artisanal and small-scale alluvial mining since antiquity and illegal hard rock and alluvial miners continue to mine gold on a small scale throughout the district. By the end of the 19th century, a number of gold mining companies operated in the northeast of Antioquia. Exploration drilling to establish the alluvial gold potential of the Nechí River was initiated in 1903, and in 1906

mining of the west riverbank terraces using water monitors and conveyors began close to the mouth of Pato Creek.

In 2004, two mining licences covering Morro Puto, Alacran, and Santa Elena were acquired under the Segovia joint venture between Mineros and AngloGold. In 2008, AngloGold stopped participation in the Segovia joint venture, and Mineros acquired four additional Concession Contracts.

Approximately 300 illegal artisanal miners are still active on site carrying out subsistence underground mining by means of hand-dug shafts, or cubicos, developed in the laterite/saprolite and developing headings on the gold-bearing quartz veins. Cubicos are numerous at the site along a northerly trend. Four old adits are known from at Morro Puto Hill to Santa Elena and one overgrown entry was observed at El Catorce in the north where approximately 400 artisan cubicos have been dug.

Artisanal processing on site is by means of crushing by hand using a hammer, mercury amalgamation in small motorized ball mills, and cyanidation in pits and vats. The workers act as a co-op: independent miners, millers, and cyanide processors, sharing in the gold sales.

In 2013, Mineros extracted approximately 6,000 tonnes of material from the Santa Elena and El Catorce veins at Nechí at a grade of 3.29 g/t Au, as part of a test mining program.

6.3   Historical Resource Estimates

Previous operator Mineros oversaw the completion of several Mineral Resource estimates at the Projects. All previous estimates are superseded by the current Mineral Resource estimate included in Section 14 of this Technical Report. The SLR QPs have not reviewed these historical estimates and are not treating the historical estimates as current Mineral Resources or Mineral Reserves.

6.4   Past Production

Production has been by cut and fill, shrinkage, and room and pillar depending on the sector of the Mine. From 2010 to 2021, a total of 1,380,000 tonnes of ore was mined at La Ye and Los Mangos with an average grade of 5.20 g/t Au and 13.83 g/t Ag, resulting in the extraction of 231,000 ounces of gold. In addition, 16,000 ounces of ore at an average grade of 6.88 g/t Au and 14.46 g/t Ag was produced from development work at Cordero. Table 6-1 shows the production history of the El Bagre Gold Mining Complex.

Table 6-1: El Bagre Production History
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

		Total	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022[1]
Combined															
Ore	t	1,518,139	74,659	83,947	66,189	68,458	123,674	135,384	134,269	137,918	147,910	147,605	139,983	136,245	121,898
	Au (g/t)	5.27	7.04	7.55	8.31	6.79	6.38	5.26	4.22	3.51	4.17	4.17	4.50	5.09	5.83
	Ag (g/t)	13.71	31.15	26.43	30.5	21.69	19.86	14.19	7.61	5.12	7.40	8.40	9.54	10.69	12.24
	Au (oz)	256,994	16,903	20,378	17,694	14,934	25,389	22,920	18,206	15,558	19,817	19,805	20,243	22,299	22,847
	Ag (oz)	669,194	74,775	71,323	64,905	47,736	78,981	63,114	32,851	22,719	35,195	39,858	42,929	46,829	47,979
Waste	t	389,088	15,876	28,238	22,056	23,949	29,756	41,573	23,373	33,710	20,553	18,873	8,614	69,717	52,800
La Ye															
Ore	t	736,554	74,659	83,947	66,189	58,831	96,121	94,071	49,989	41,461	22,738	36,295	49,315	42,833	20,105
	Au (g/t)	6.35	7.04	7.55	8.31	6.84	6.75	5.37	3.88	3.61	6.21	6.45	5.48	6.88	6.22
	Ag (g/t)	19.11	31.15	26.43	30.5	21.46	21.16	14.79	7.48	5.27	11.5	13.30	11.64	14.44	13.06
	Au (oz)	150,328	16,903	20,378	17,694	12,935	20,869	16,248	6,236	4,816	4,541	7,527	8,690	9,470	4,021
	Ag (oz)	452,481	74,775	71,323	64,905	40,597	65,389	45,721	12,023	7,026	8,410	15,521	18,460	19,887	8,444
Waste	t	181,683	15,876	28,238	22,056	21,417	20,371	21,333	11,901	12,990	9,546	7,379	1,736	8,840	0
Los Mangos															
Ore	t	696,706				9,627	27,553	41,313	84,280	96,457	125,172	111,310	90,668	77,332	32,994
	Au (g/t)	3.96				6.46	5.1	5.02	4.42	3.46	3.80	3.43	3.96	3.73	4.13
	Ag (g/t)	7.99				23.06	15.34	12.81	7.69	5.06	6.66	6.80	8.39	7.83	8.67
	Au (oz)	88,658				1,999	4,520	6,672	11,970	10,742	15,276	12,278	11,553	9,270	4,378
	Ag (oz)	178,897				7,139	13,592	17,393	20,828	15,693	26,785	24,337	24,469	19,467	9,194
Waste	t	96,296				2,532	9,385	20,240	11,472	20,720	11,007	11,495	6,878	2,567	

		Total	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022[1]
								Cordero								
Mineralized Material	t	84,879												16,080	68,799
	Au (g/t)	6.60												6.88	6.53
	Ag (g/t)	13.86												14.46	13.72
	Au (oz)	18,007												3,559	14,448
	Ag (oz)	37,816												7,475	30,341
Waste	t	111,109												58,309	52,800

Notes:

1. As of October 1, 2022.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Soma underground mining concessions lie within the Central Cordillera, one of the three physiographic subdivisions (Central, Western, and Eastern Cordillera) of the Andes Mountains in northern South America. The area is part of the Bagre-Nechí mining district that includes gold mineralization within the Bagre, Zaragoza, and Nechí regions. The vast majority of historical gold production comes from alluvial deposits within the river basins, including the Nechí River. In addition to alluvial gold, vein-type gold mineralization is present and can be followed for up to three kilometres. Mineralization is hosted within intrusive rocks observed near Nechí, El Bagre, and Zaragoza.

Cordilleran rocks in the area have had a complex geological and tectonic evolution, spanning from the Precambrian era to the Quaternary age. Figure 7-1 shows the regional geology of the Nechí Valley and El Bagre.

At El Bagre, the veins of La Ye, Mangos, and Cordero are hosted in shear zones with brittle-ductile deformation within carboniferous granite rocks of the El Carmen stock. At the regional level, the main structure to the west is the sinistral Otú fault system which trends north-south to north-northwest near the municipality of Zaragoza. This fault which brings into contact carboniferous plutonic rocks from the El Carmen stock with metamorphic Permo-Triassic rocks grouped regionally as the Cajamarca Complex (Londoño et al., 2009). The Otú fault is the most northern expression of the Otú-Pericos fault system. To the east is the El Bagre fault, interpreted regionally as an overrun fault, which brings the Segovia batholith into contact with Precambrian metamorphic rocks grouped in the San Lucas Gneiss. To the southeast are volcano-sedimentary deposits of Segovia and to the north are the sedimentary rocks of the Caucasia Formation, the Tarazá Formation, and the recent deposits of the Nechí and Tiguí rivers, which mask the trace of the Otú fault and cover discordantly the granite rocks of the Segovia batholith (Londoño et al., 2009) and El Carmen stock.

7.1.1 Precambrian San Lucas Gneisses and Amphibolites (MP3NP1)

East of the Nechí Valley, Precambrian San Lucas quartz-feldspathic gneisses are exposed in an elongated body extending 50 km along the east side of the Otú-Pericos regional fault. The San Lucas gneisses incorporate lenses of amphibolite and marble. The rocks have been affected by granulite facies metamorphism and are correlated with the 1300 ± 100 Ma to 752 ± 70 Ma Sierra Nevada de Santa Marta granulites.

7.1.1.1 Carboniferous El Carmen Intrusive (C-Pi)

The El Carmen Intrusive (333–310 Ma) is located between the Cajamarca Complex and the Segovia batholith and was previously undistinguished from the Segovia batholith (Cediel and Shaw, 2018). The intrusive hosts two main granitoid types: (1) early, fine grained melanocratic, phaneritic to weakly porphyritic gabbro diorites, and (2) the more dominant, coarse grained, phaneritic leucocratic tonalites. The intrusive is unique in the area as it is of Carboniferous age; the only granitoid of this Period to have been reported in the Colombian Andes. El Carmen hosts the mineralized vein structures at El Bagre.

7.1.1.2 Paleozoic Cajamarca Complex (T-Mng3)

Metamorphic rocks of the Cajamarca Complex are bounded on the east by the Otú fault and on the west by the San Jeronimo fault. The complex is composed mainly of quartzose metasedimentary rocks, alumina-rich siliceous and basic schists, with some calcareous bodies that were formed during the Lower Paleozoic and have undergone several metamorphic events. Cajamarca Complex rocks are mapped on the east and west of the Nechí River, where they are represented by quartz-feldspathic gneisses that have variable fabrics from schistose to gneissic and migmatitic.

N

74° W

SLR

NECHÍ

8° N

Q-al

EL BAGRE

El Bagre Fault

Palestina Fault

MP3NP1

J-Pi

Otú-Pericos Fault

T-Mng3

7° N

Legend:

Quaternary Sediments (Q-al)
Segovia Volcaniclastics (K1-VCm)
Antioqueño Batholith (K2-Pi)
Segovia Batholith (J-Pi)
Cajamarca Complex (T-Mng3)
El Carmen Intrusive (C-Pi)
San Lucas Gneiss (MP3NP1)
Strike - Slip Fault
Reverse Fault

0   10   20   30   40
Kilometres

Figure 7-1

Soma Gold Corp.

*El Bagre Gold Mining Complex
and Nechí Project*
Department of Antioquia, Colombia
Regional Geology

January 2023   **Source: RPA, 2020.**

7.1.1.3 Mesozoic Segovia Batholith (Jdse)

Diorites composing the Segovia batholith lie east of the Nechí River, in fault contact (Bagre fault) with the San Lucas gneisses to the east and in intrusive contact with the Cajamarca Complex to the west. The batholith is elongated north-south, coinciding with the regional tectonic framework, and extends for 270 km attaining a width on surface of 50 km in its central part. The latest U-Pb dating indicates an isotopic age of 154 ± 1.6 Ma. The Segovia batholith hosts the Nechí Gold Project mineralization.

7.1.1.4 Quaternary Alluvium (Qal)

Quaternary alluvium borders the Nechí River from Zaragoza to the Cauca River. These deposits are slightly consolidated and are composed of gravel (60% to 70%) and sand (30% to 40%). The gravels contain coarse clasts/cobbles commonly composed of quartz diorite, amphibolite, sericite schist, vein quartz, andalusite, quartzite, quartz-feldspathic gneisses, and, locally, conglomeratic beds characterized by white quartz fragments. Clay lenses within the alluvium are also common. Most of the alluvial dredging is carried out in this unit.

7.2 Local Geology

7.2.1 El Bagre

Locally, the El Carmen plutonic body corresponds to a leucocratic tonalite, of medium to coarse grain and phaneritic texture, composed of quartz, plagioclase, amphibole, and biotite. The geology of the El Bagre property is shown in Figure 7-2.

Inside the underground operations, close to the vein contact, the intrusion shows a mylonitic texture, orientated quartz crystals, and chloritization of biotite. In vein exposures, it is common to find xenoliths with phyllic alteration.

7.2.2 Nechí

Segovia batholith coarse to medium grained, equigranular granodiorite and diorite dominate the local lithology. Adjacent to fault zones, the phenocrysts in the intrusive rocks may exhibit a preferred orientation, forming a local foliation. Dykes of fine grained or aphanitic texture intrude the felsic bodies. Like El Bagre, clasts of foliated rocks, thought to have originated within shear zones are associated with mineralized structures. The geology of Nechí is shown in Figure 7-3.

The principal structures observed at Nechí are:

- North-south structure coinciding with trench data revealing low levels of mineralization.
- A set of three lineament trending N60°–80°E of apparent displacement corresponding to strong argillic alteration.
- Lineaments trending N50°–30°W, trending to the north to northwest.

The temporal relationships between the structures are still unknown.

Soma Gold Corp.

***El Bagre Gold Mining Complex
and Nechí Project***
Department of Antioquia, Colombia
El Bagre Property Geology

Figure 7-2

Legend:
- Quaternary Sediments (Q-al)
- Diorite (CPi-D)
- Tonalite (CPi-T)
- Mesothermal Vein

El Carmen Intrusive

January 2023   ***Source: RPA, 2020.***

SLR

El Catorce Vein

8°10'0"N

Santa María Vein

Santa Elena Vein

8°8'0"N

Cauca River

J-Pi

8°6'0"N

NECHÍ MUNICIPALITY

0   0.5   1   1.5   2
Kilometres

Nechí

Figure 7-3

Legend:

Segovia Batholith (J-Pi)

Mesothermal Veins

74°46'0"W

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Nechí Property Geology

January 2023   **Source: RPA, 2020.**

7-6
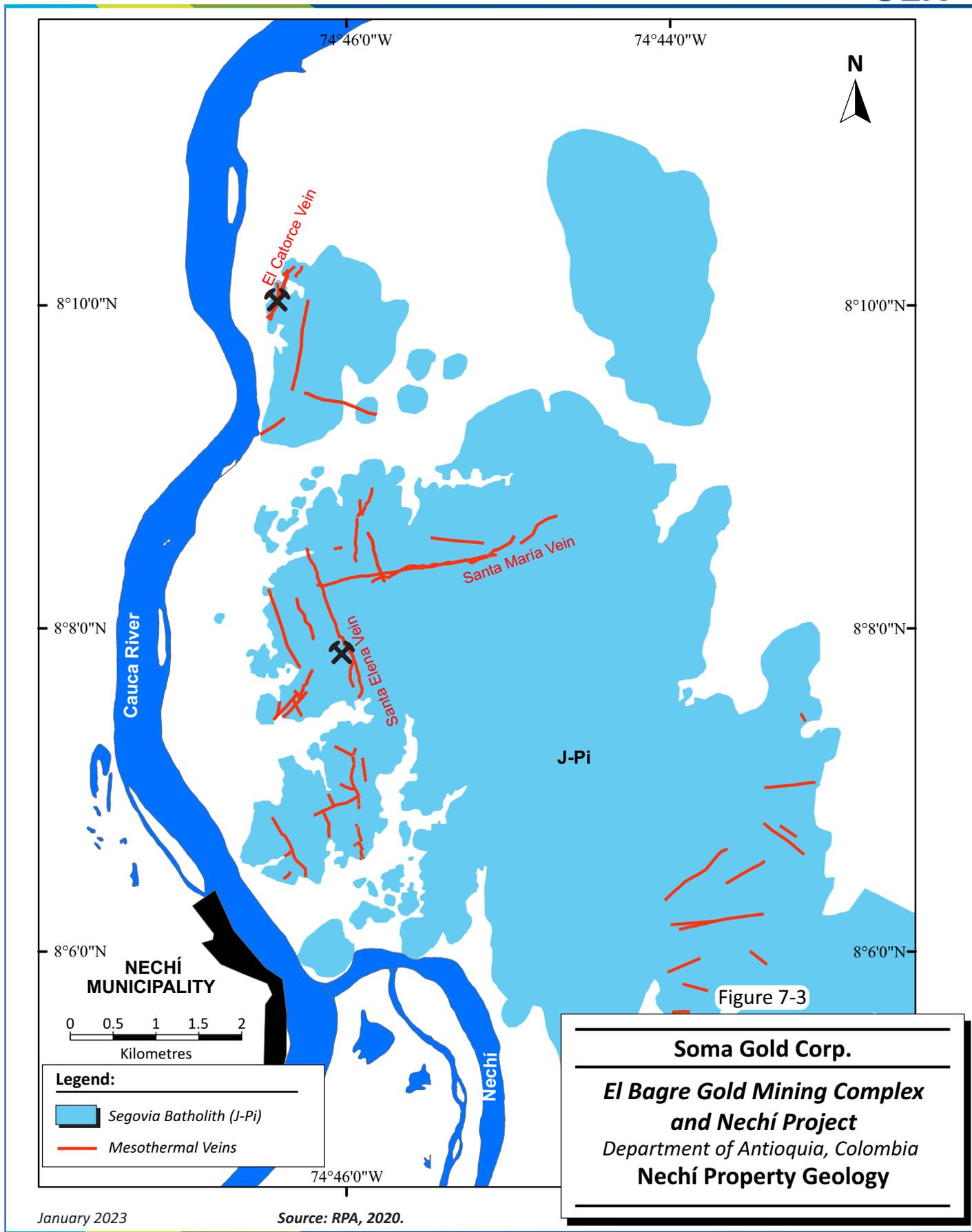
7.3   Mineralization

7.3.1   El Bagre

Auriferous quartz-sulphide veins are hosted within the El Carmen – El Cordero stock (Leal-Mejía, 2011). The numerous veins trend north-northwest to north-northeast, the most important of which include the El Carmen and La Ye systems, which can be traced over five kilometres. Mineralization is hosted in the structurally controlled quartz veins and is often associated with late, brittle reactivation of the fault zones.

The veins consist of a milky white quartz containing native gold and up to 20% mixed sulphides, dominated by pyrite with occasional galena, and chalcopyrite. Sulphide and native gold distribution within the veins is patchy. The veins average approximately one metre in thickness and range from half a metre to four metres in length. Related wall rock alteration includes haloes of moderate to pervasive sericite ± chlorite and carbonate replacing feldspar within the host intrusive.

7.3.2   Nechí

Auriferous quartz-sulphide veins are hosted within the Segovia batholith (Leal-Mejía, 2011). Veins are relatively narrow, averaging between 0.5 m and 1.0 m in thickness, but have excellent continuity both along strike and down dip. The veins host abundant pyrite, sphalerite, and chalcopyrite within a gangue of massive, milky white quartz. Pyrite crystals contain inclusions of pyrrhotite, galena, sphalerite, and electrum (Cediel and Shaw, 2018). Wall rock alteration associated with vein development includes intense sericitization with carbonatization and disseminated pyrite in haloes locally extending one to two metres from the vein contact. Mineralization was previously thought to be related to the cooling history of the host rock, however, more recently, Leal-Mejía (2011) has presented evidence which supports a relationship with ca. 89 to 82 Ma magmatism in the Antioquia batholith suite.

8.0 DEPOSIT TYPES

Deposits found at El Bagre and Nechí are best described as a structurally controlled mesozonal gold-silver sulphide-bearing quartz vein lode deposits, with veining emplaced in shear zones within competent intrusive host rocks.

Mesozonal veins occur in rock assemblages of Archean, Proterozoic, and Phanerozoic age, commonly hosted in metamorphosed mafic volcanic flows (greenstone-hosted type) and sedimentary rocks (slate-belt or turbidite-hosted type). In other cases, the veins are located within the contact aureole of granitic intrusions in various host rocks, as is the case at the Properties. Gold mineralization can have a variety of forms and may occur in shear zones, discordant quartz veins or quartz-vein sets (e.g., stockworks) as well as stratabound zones. Although free gold does occur in quartz veins in some deposits, much of the gold occurs in association with pyrite and/or arsenopyrite in the altered wallrocks surrounding the veins.

Mesozonal vein deposits are structurally controlled, complex epigenetic deposits that are hosted in deformed and metamorphosed terranes. They consist of simple to complex networks of gold-bearing, laminated quartz-carbonate fault-fill veins in moderately to steeply dipping, compressional brittle-ductile shear zones and faults, with locally associated extensional veins and hydrothermal breccias. They are dominantly hosted by mafic metamorphic rocks of greenschist to locally lower amphibolite facies and formed at intermediate depths (5 km to 10 km). Greenstone-hosted quartz-carbonate vein deposits are typically associated with iron-carbonate alteration. The relative timing of mineralization is syn- to late-deformation and typically post-peak greenschist-facies or syn-peak amphibolite-facies metamorphism. They are formed from low salinity, H_2O-CO_2-rich hydrothermal fluids with typically anomalous concentrations of methane (CH_4), nitrogen (N_2), potassium (K), and sulphur (S). Gold is mainly confined to the quartz-carbonate vein networks but may also be present in significant amounts within iron-rich sulphidized wall rock. Greenstone-hosted quartz-carbonate vein deposits are distributed along major compressional to transpressional crustal-scale fault zones in deformed greenstone terranes of all ages, but are more abundant and significant, in terms of total gold content, in Archean terranes. However, a significant number of world-class deposits (>100 t Au) are also found in Proterozoic and Paleozoic terranes (Dubé and Gosselin, 2007).

Figure 8-1 illustrates where mesothermal (orogenic) deposits occur in the gold mineralization continuum.
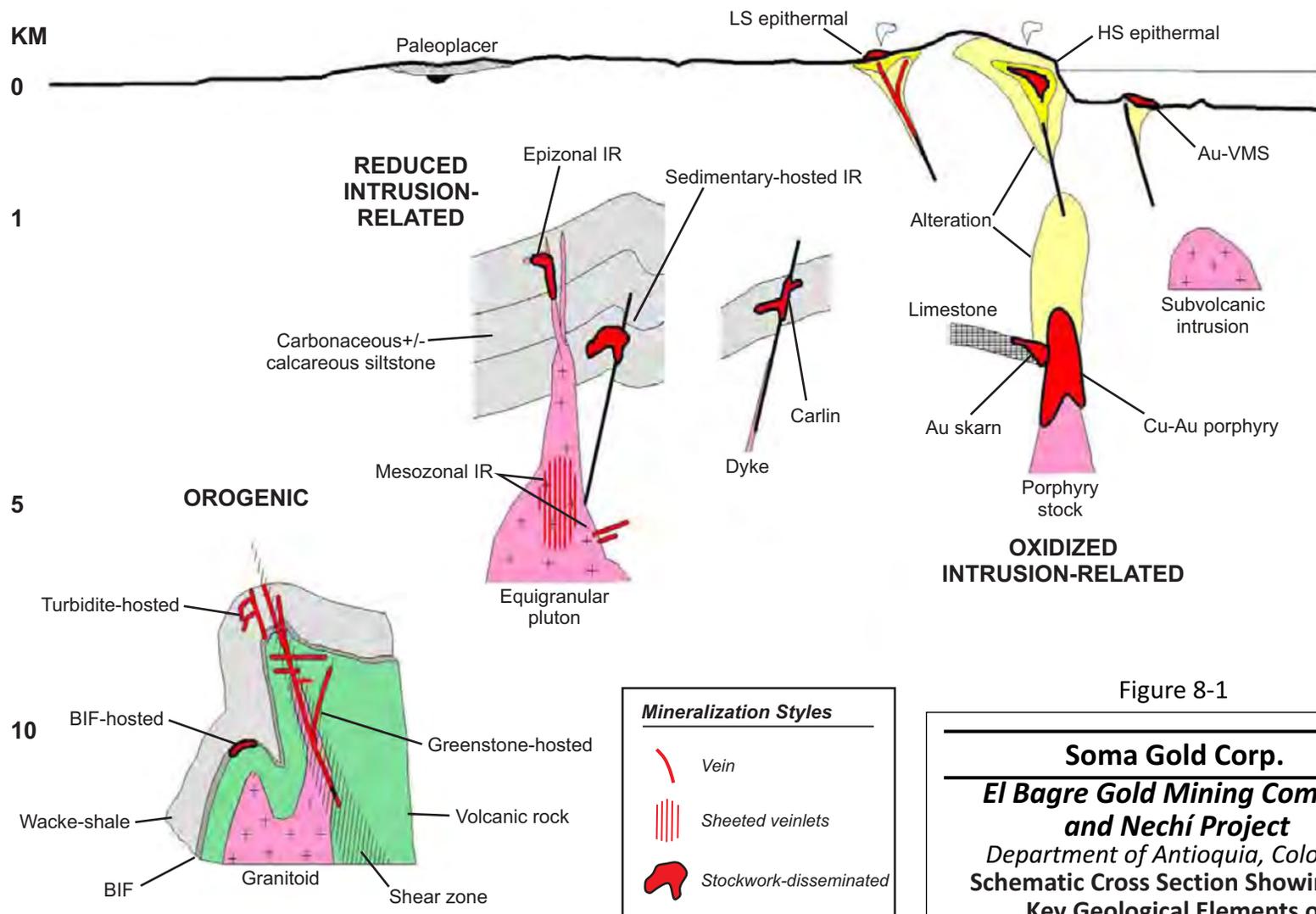
KM

Paleoplacer

LS epithermal

HS epithermal

0

Au-VMS

Epizonal IR

**REDUCED
INTRUSION-
RELATED**

Sedimentary-hosted IR

Alteration

1

Carbonaceous+/-
calcareous siltstone

Limestone

Subvolcanic
intrusion

Carlin

Au skarn

Cu-Au porphyry

Mesozonal IR

Dyke

OROGENIC

5

Porphyry
stock

**OXIDIZED
INTRUSION-RELATED**

Equigranular
pluton

Turbidite-hosted

Figure 8-1

BIF-hosted

Greenstone-hosted

Mineralization Styles

10

Wacke-shale

Volcanic rock

Vein

Soma Gold Corp.

*El Bagre Gold Mining Complex
and Nechí Project*
Department of Antioquia, Colombia
**Schematic Cross Section Showing the
Key Geological Elements of
Mesothermal Gold Systems**

Sheeted veinlets

BIF

Granitoid

Shear zone

Stockwork-disseminated

9.0 EXPLORATION

9.1 El Bagre

Only a small amount of non-drilling exploration work has been completed at El Bagre since acquisition by Soma, as summarized in Table 9-1.

Importantly, in 2022, a synthesis of available exploration information was completed, and which generated a series of targets for follow-up work and drilling.

Rock sampling results, including historical (Section 6.2) and Soma's activities, are outlined in Figure 9-1 and these in part inform the exploration targets shown in Figure 9-2.

Table 9-1:   **Summary of 2019 – 2022 Exploration Activities at El Bagre**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Year	Target	Exploration Activity
2019	Los Mangos	A program of detailed geological mapping and rock sampling was conducted across the El Bagre area. The surveyed targets included: Guajiro, BF, Sardina, Carmen North, East, and South. The intent of the program was to identify additional drill targets with the potential to provide ore to the mill.
2022	Cordero	A structural consultant was hired to provide insight into structural controls on the quartz vein system and the distribution of gold. The intent of this study is to identify under-explored targets along strike of the Cordero deposit.

Figure 9-1

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia

El Bagre Surface Sample Results

January 2023

Source: Soma, 2022.

Figure 9-2

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
El Bagre Exploration Target Generation Map
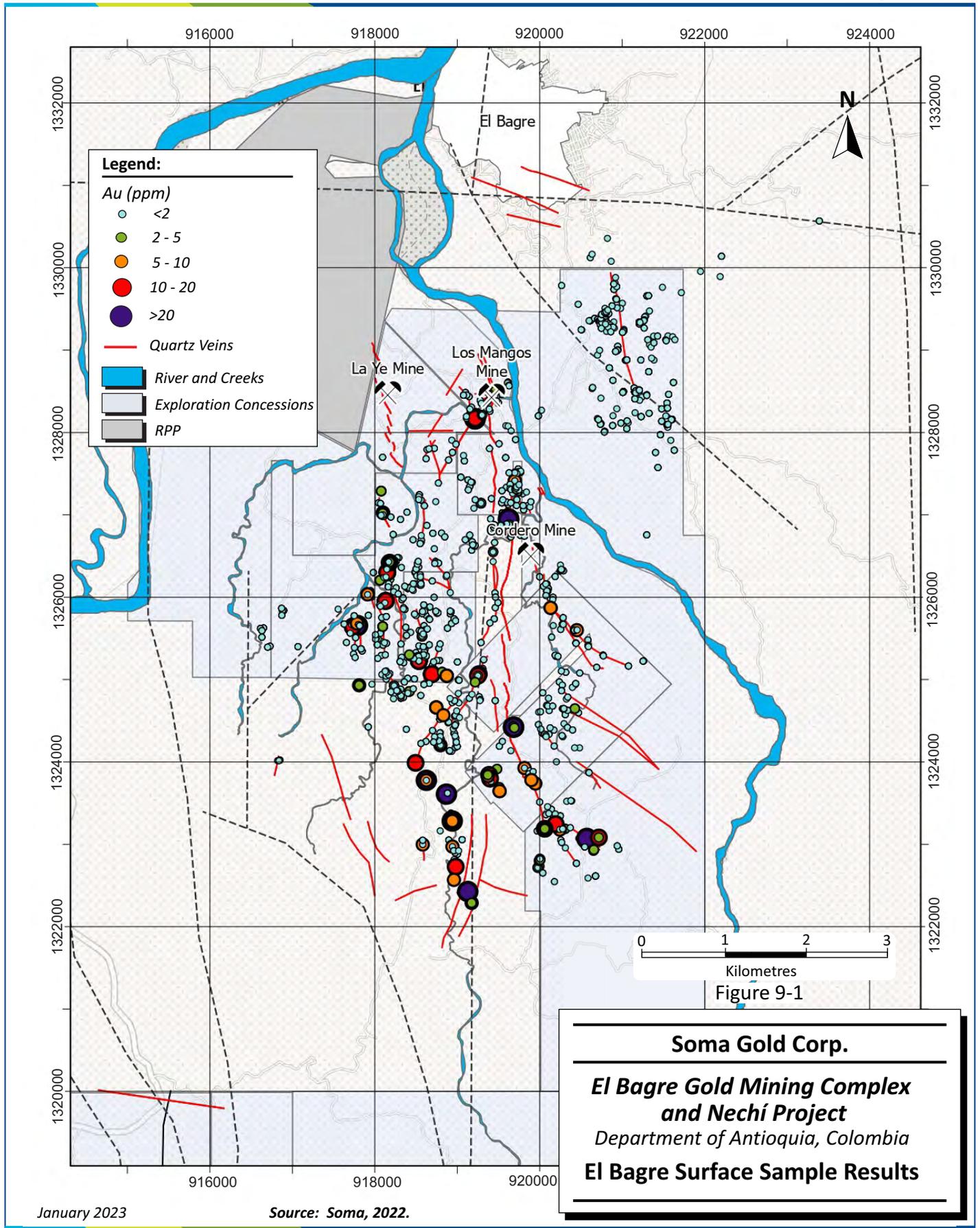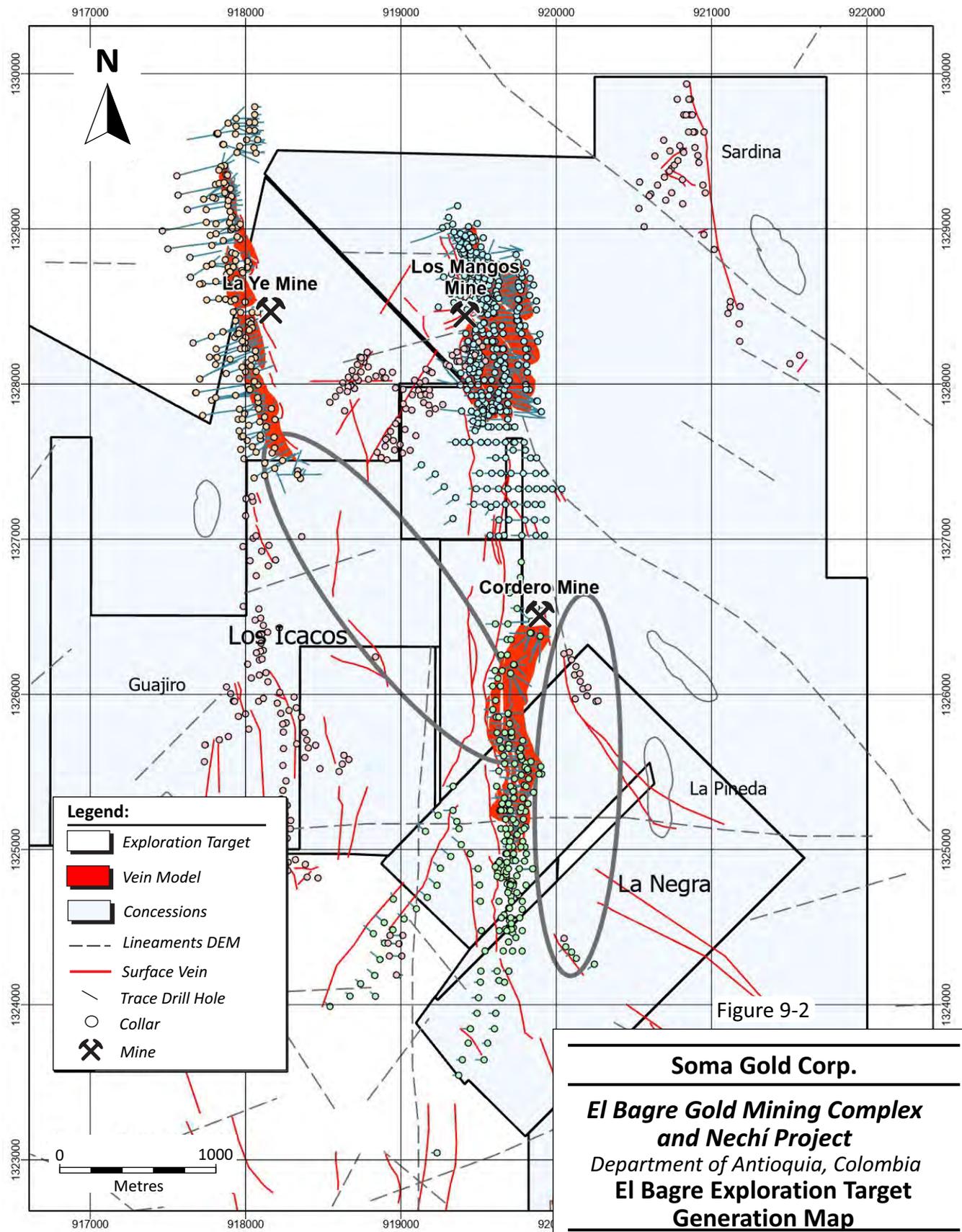
January 2022   *Source: Soma, 2022.*

Legend:

☐	Exploration Target
■	Vein Model
☐	Concessions
– – –	Lineaments DEM
——	Surface Vein
\	Trace Drill Hole
○	Collar
⚒	Mine

9.2   Nechí

Soma has not undertaken any exploration activities at Nechí.

10.0 DRILLING

Diamond drilling completed at the Properties is used for exploration and resource delineation and definition. Total drilling consists of 1,578 diamond drill holes (DDH) at El Bagre totalling 231,165.9 m and 403 DDH at Nechí totalling 49,244 m. A drilling summary by deposit up to and including all drilling information available as at April 25, 2022, is presented in Table 10-1 (El Bagre) and Table 10-2 (Nechí). No drilling has been undertaken over the Nechí property since 2013. Drill hole collar maps of El Bagre and Nechí are shown in Figure 10-1 and Figure 10-2, respectively. Greenfields exploration drilling is completed using BQ (36.5 mm) drills, and Mineral Resource delineation and definition drilling has been completed using BQ, NQ (47.6 mm), and HQ (63.5 mm) core.

Drilling is completed from surface and underground locations on a grid size ranging from 25 m x 25 m to 100 m x 100 m, dependent on stage. Collars are located by Global Positioning System (GPS)-Total Station survey. Approximately 84% and 13% of holes at El Bagre and Nechí, respectively, have been surveyed downhole for azimuth and dip deviation using Reflex EZ shot instrumentation.

Diamond drill core is placed in wooden boxes and labelled at the rig site prior to transport. The drill core is moved by truck to a secure core processing, sample preparation, and storage facility at El Bagre. At the facility, the core is logged using conventional industry standard practices as follow:

- Geotechnical logging: core recovery, rock quality designation (RQD), fracture density, core loss areas indicated by wood markers.
- Photographed: both wet and dry. Photos are stored on the site local server.
- Geologic core logging: lithology, alteration, mineralization, and structures were recorded and digitally entered into MX software.
- Samples for assay are marked using labelled wood markers placed in the core box.

Following logging and sampling, drill core is stored in wooden boxes within the storage facility at El Bagre.

All drill hole information is stored within the Geological Data Management MX Software. Lithology and minor lithologies, alteration, mineralization, and oxidation are recorded directly within the software. Observations are noted where relevant.

There are no drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the results.

In the SLR QPs' opinion, the drilling procedures at El Bagre and Nechí are adequate for use in the estimation of Mineral Resources.

At the same time, the SLR QPs recommend that Soma undertake a detailed drill hole database audit and rebuild for the Projects. Specifically, the SLR QPs recommend Soma confirm that drill hole and sample nomenclature are consistent across databases, that all assay values are related back to their original source certificate, and that relevant metadata, such as date and project are upheld across the Projects.

Table 10-1:   Summary of Diamond Drilling at El Bagre
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Deposit	La Ye	Los Mangos	Cordero	Greenfields	Total
Drilling Period	2004-2019	2008 – 2019	2006 - 2022	2006-2022	2004-2022
No. Drill holes	363	541	421	253	1,578
No. Meters	53,337.55	87,061.41	63,014.13	27,752.85	231,165.94

Table 10-2:   Summary of Diamond Drilling at Nechí
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Year	Number of Holes	Metres
2007	25	3,167
2009	50	5,900
2010	11	1,407
2011	81	7,272
2012	151	17,819
2013	85	13,681
Total	**403**	**49,244**

Note:

Includes drilling over Santa Maria, Santa Elena, and El Catorce.
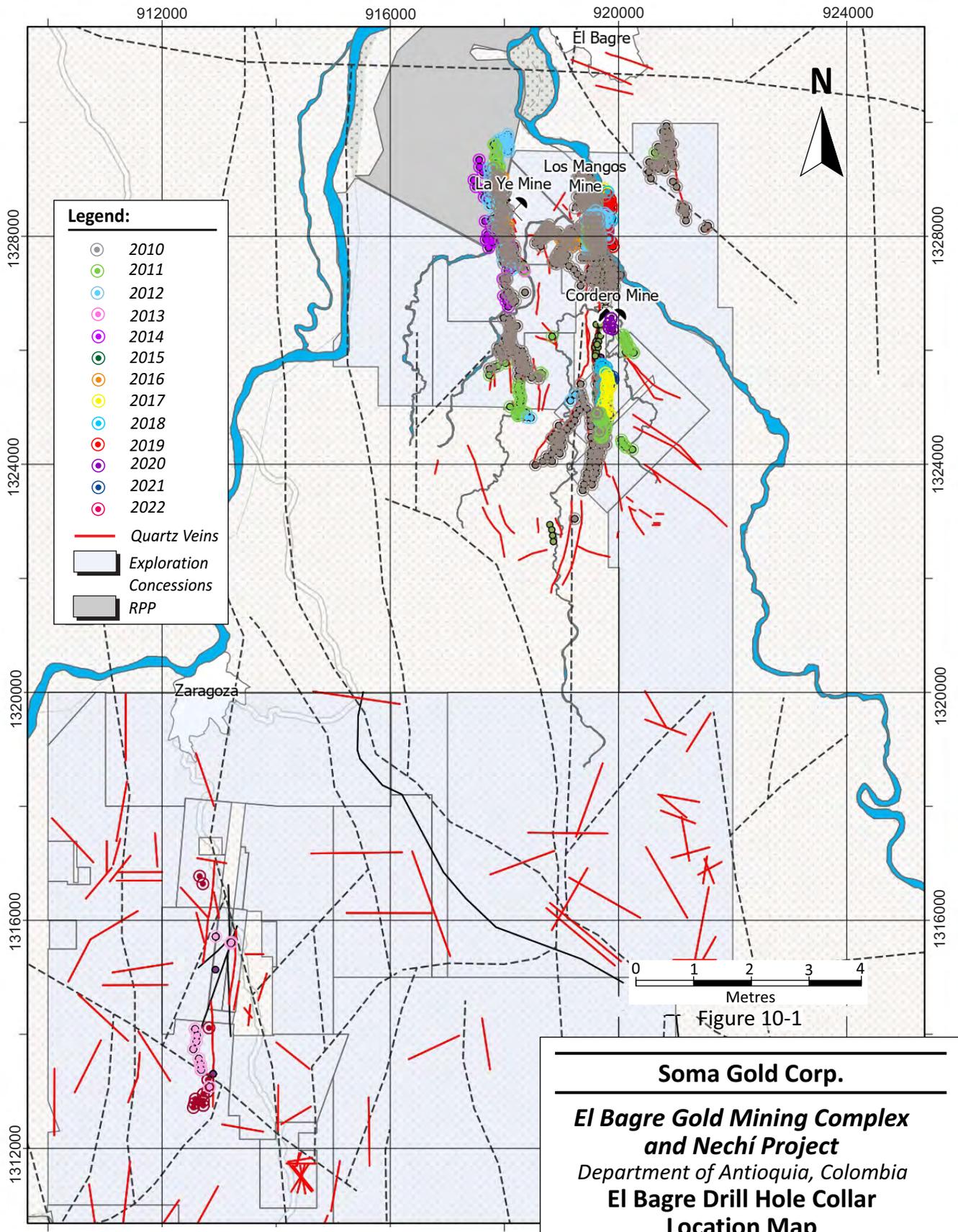
Figure 10-1

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
El Bagre Drill Hole Collar Location Map

January 2023

Source: Soma, 2022.
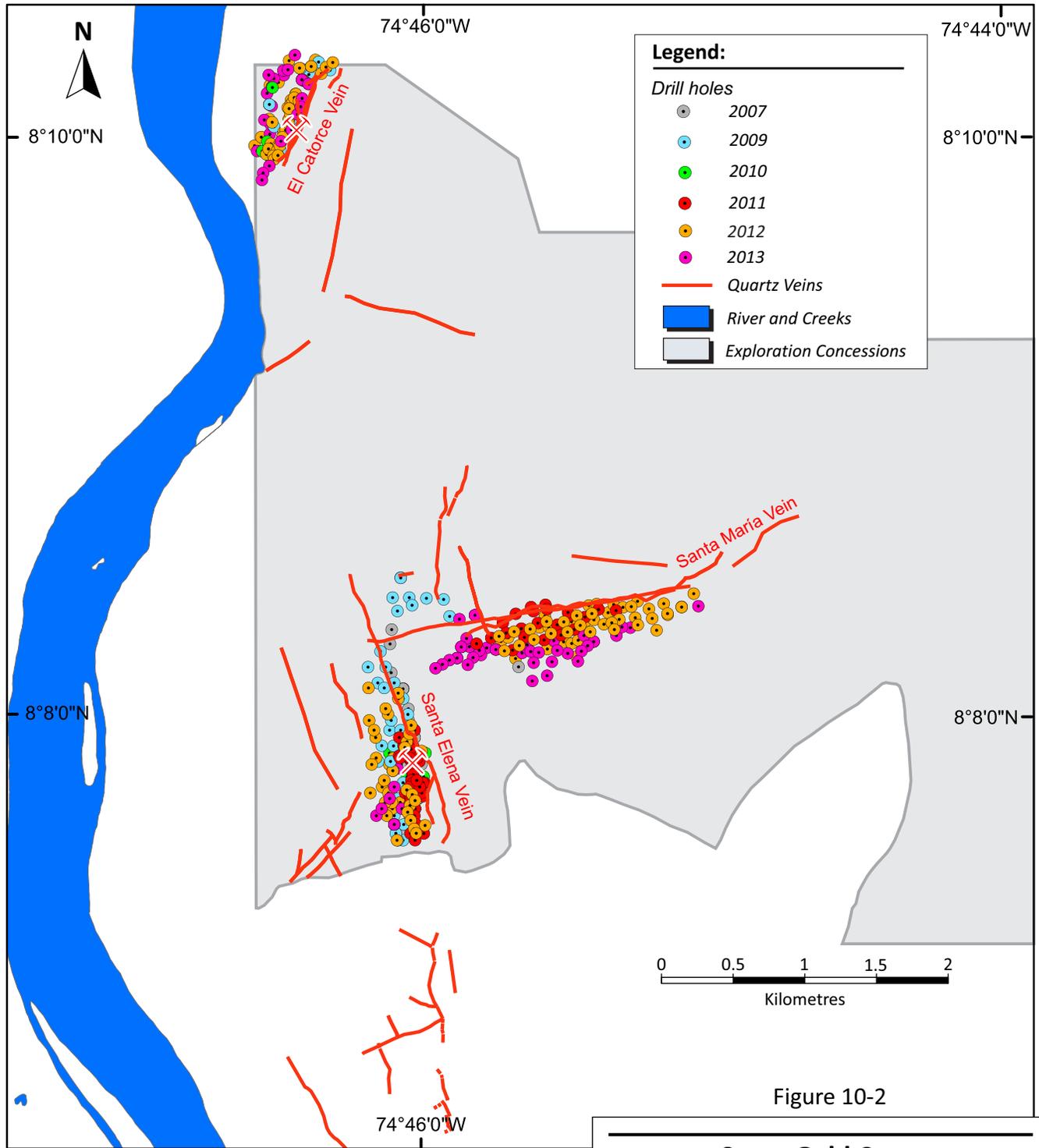
Figure 10-2

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Nechí Drill Hole Collar Location Map

January 2023 **Source: RPA, 2020.**

11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Sampling Method and Approach

Mineral Resource estimation at El Bagre and Nechí is based on drill core from surface and underground locations and underground chip/channel samples.

11.1.1 Drill Core

Samples are marked directly on drill core. Sample length is generally 1.0 m and respects geological contacts. Diamond drill core of NQ and HQ size is sawn in half using a diamond saw, returning half of the split core to the core box, and submitting the other half for sample preparation and analysis. Where weathered core is broken or rubbly, the sampling geologist attempts to gather approximately 50% of the material recovered; in these intervals, recovery is generally low. Split core returned to the core box is covered with a wooden lid and nailed closed for transfer back to the core shack. Intervals selected for sampling of BQ sized core is sampled in its entirety.

Samples are placed in labelled clear plastic bags alongside three sample tags, with a fourth stapled to the top of the bag. The bags are sealed and placed in rice bags.

11.1.2 Chip/Channel Samples

Underground sampling has been carried out in the form of chip sampling of the drift backs and a limited amount of drift faces of the La Ye and Los Mangos mines. The face sampling is not used for resource and reserve estimation.

Underground chip/channels are taken with a four-pound hammer and chisel, with chips caught in plastic bags or pails and labelled clearly on both sides of the sample bag. The sample site is then marked with spray paint and photographed. Samples range in length from a minimum of 0.3 m to a maximum of 1.2 m across the vein. Where the vein exceeds 1.2 m, the vein width is divided into equal sample lengths no greater than 0.6 m.

11.2 Sample Preparation, Analysis and Security

11.2.1 Sample Preparation

Prior to 2010, samples were prepared at Mineros' laboratory in the town of El Bagre. Since February 2010, samples have been prepared at the onsite El Bagre Mining Complex laboratory (El Bagre laboratory).

The sample preparation method employed by both the Mineros and El Bagre laboratories is:

- Weigh and record samples.
- Oven dry rock at <110°C to 120°C for six hours; reweigh sample. Unconsolidated surficial (laterite/saprolite) and fine material is dried at 60°C for eight hours.
- Crush the entire sample to 10 mesh (-2 mm) in a Bico jaw crusher.
- Riffle split in Jones type 14 gate splitter (¾") to one kilogram.
- Pulverize (8" disk pulverizer) one kilogram to -200 mesh (-75 μm).
- Riffle split in Jones type 14 gate splitter (¾") to 250 g.

All equipment was cleaned using a paint brush and compressed air between samples. Neither laboratory holds any international accreditation for the preparation methods employed.

11.2.2 Sample Analysis

Following preparation, greenfield samples, including exploration drill holes samples taken from the Cordero vein, are shipped to the ALS laboratory (ALS) in Val d'Or, Quebec, Canada, for analysis. The following sample analysis is undertaken at the ALS Val d'Or facilities:

- **Gold Analysis:** Au-AA25. A 30 g fire assay standard fusion method with an atomic absorption spectroscopy (AAS) finish. The lower limit of detection is 0.01 g/t Au and the upper limit of detection is 100 g/t Au.
- **Silver Analysis:** Ag-AA45. A 0.5 g standard aqua regia digestion method with an AAS finish. The lower limit of detection is 0.2 g/t Ag and the upper limit of detection is 100 g/t Ag.
- **Gold/Silver Analysis (over limit):** Au/Ag-GRAV21 / Au/Ag-GRAV22. A 30 g or 50 g fire assay standard fusion method with a gravimetric finish. The lower and upper limits of gold detection is 0.05 g/t and 10,000 g/t. The lower and upper limits of silver detection is 5 g/t and 10,000 g/t.

ALS facilities in Val D'or are independent of Soma and are accredited to ISO 9001-2008 for quality management and to ISO/IEC 17025:2005 for all relevant procedures.

Prior to 2010, pulps for core and trench/grab samples were analyzed by the SGS Minerals Barranquilla laboratory (SGS) in Barranquilla, Colombia. The following sample analysis was undertaken at the SGS facilities:

- **Gold Analysis:** FA30_5. A 30 g fire assay standard fusion method with an AAS finish. The lower limit of detection is 0.005 g/t Au and the upper limit of detection is 5 g/t Au.
- **Silver Analysis:** AA_TO2. A standard three acid digestion method with an AAS finish. The lower limit of detection is 0.3 g/t Ag.
- **Gold Analysis (over limit):** FA30_G. A 30 g fire assay standard fusion method with gravimetric finish. The lower limit of detection is 0.02 g/t Au.

Since 2010, samples taken from the La Ye, Los Mangos and Cordero mines, including the processing plant, have been prepared and assayed on site at the El Bagre laboratory. The following sample analysis is undertaken at the El Bagre laboratory for Mineral Resource samples.

- **Gold and Silver Analysis:** A 30 g fire assay standard fusion method with an AAS finish.

The El Bagre laboratory does not hold international accreditation for the analysis methods undertaken.

Currently, the mine laboratory is analyzing 50 solid (30 g) samples and 50 liquid samples for gold and silver per shift. Five granulometric assays are performed per day and 20 gold bar assays per month. The laboratory also analyzes samples for cyanide, pH, dissolved oxygen, moisture in solid samples, and specific gravity.

The laboratory has the capacity to analyze 2,700 solid samples by fire assay per month, and currently averages 2,000 solid samples/month and 2,900 solution samples from the plant per month by AAS. The SLR QPs note that the capacity is insufficient to handle all the samples that the mines can generate, and this has placed limits on the underground sampling.

11.2.3 Density Analysis

Approximately 170 density samples were collected for El Bagre between 2017 and 2018, of which 22 were from Cordero. Samples were taken within different lithologies for a better understanding of the behaviour of density across the deposits. Results were either submitted for analysis to ALS Chemex in Vancouver, Canada, or to the El Bagre laboratory. At ALS, results were analyzed using technique code OA-GRA08a, whereby a sample of rock or core (up to 6 kg) is covered in a paraffin wax coat and weighed both in air and suspended in water. The density is calculated using the following equation:

$$Density = \frac{A}{(B-C)-(\frac{B-A}{D_{wax}})}$$

$Where$:

$A = Weight\ of\ sample\ in\ air$

$B = Weight\ of\ waxed\ sample\ in\ air$

$C = Weight\ of\ waxed\ sample\ suspended\ in\ water$

$D_{wax} = Density\ of\ wax$

Pycnometry on pulp samples was preferred at the La Ye laboratory, which determines density of a homogeneous solid in water. The density equation for this method goes as follows:

$$Density = \frac{Ms}{Vs}$$

Where:

Ms = Weight of the solid

Vs=Volume of the solid

11.3   Security

Exploration and development sampling are performed at a secure site and samples are processed in the El Bagre laboratory, a gated site with armed security and patrols.

Drill hole information is stored in MX Software drill hole data storage system. Assay results are directly imported into a secure central version of MX Software database upon completion.

In the SLR QPs' opinion, the Soma drilling, sampling, sample preparation, and gold analysis security are industry standard and adequate for the estimation of Mineral Resources.

11.4   Quality Assurance/Quality Control

The following Quality Assurance/Quality Control (QA/QC) protocols are in place at El Bagre. Each batch of 25 samples submitted for sample preparation and analysis to the primary laboratory (El Bagre laboratory for mine samples; ALS for greenfields exploration) includes 20 regular samples, one coarse duplicate sample, one pulp duplicate sample, one Certified Reference Material (CRM) sample, one coarse blank sample, and one fine blank sample.

A QA/QC report is prepared monthly by the onsite geologist. Batches of samples identified by QA/QC as anomalous are repeated by the laboratory at the request of Soma.

Soma has recently transitioned from Microsoft Access to MX Deposit relational database which now also holds all QA/QC data. SLR reviewed the raw data provided by Soma for Cordero. Although a few minor biases were found locally, the SLR QPs find the QA/QC database to be appropriate to support the Mineral Resource database at Cordero.

While mining of some remnants at La Ye and Los Mangos is ongoing, there are no current Mineral Resources and Mineral Reserves for the two deposits. As such, SLR did not review the QA/QC supporting the database for each of these deposits.

A summary of annual QA/QC submittals from 2018 to 2022 (as of August 2, 2022) at El Bagre is presented in Table 11-1. Samples supporting the Cordero Mineral Resource estimate are analyzed at the El Bagre laboratory, where within or near mining areas, and at ALS Chemex, where in vein extension and exploration areas.

Table 11-1: Summary of QA/QC Submittals from 2018 to 2022[1] at El Bagre Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Type of Submission	ALS Chemex	El Bagre Lab	Total
CRM Submission (Cordero)	44	77	121
CRM Submission (El Bagre)	49	644	693
Blank Submission (Cordero)	55	86	141
Blank Submission (El Bagre)	55	1,272	1,327
Field Duplicate Submission	-	-	-
Coarse Duplicate Submission (Cordero)	11	33	44
Coarse Duplicate Submission (El Bagre)	-	576	576
Coarse Check Assay	13	-	13
Pulp Duplicate Submission (Cordero)	21	20	41
Pulp Duplicate Submission (El Bagre)	-	516	516
Pulp Check Assay	23	-	23

Notes:

1.   As at August 2, 2022

11.4.1 Certified Reference Material

Results of the regular submission of CRMs (standards) are used to identify problems with specific sample batches and biases associated with the primary assay laboratory. Soma sourced CRMs from several different international laboratories. Results of the CRMs were plotted in control charts, and failure rates, defined as a gold value reporting more than three standard deviations (SD) from the expected value, and warning rates, defined as gold values reporting more than two SD but less than three SD from the expected values, were tabulated monthly and annually for review by onsite and head office personnel.

Twelve different CRM were inserted in the sample stream at El Bagre for 693 samples, and eight of these CRM (in bold in Table 11-2), totalling 121 individual samples, were used at the Cordero deposit from 2018 to 2022. SLR received and reviewed the Certificates of Analysis of these CRMs, which vary in grade from 1.11 g/t Au to 9.13 g/t Au. The technique used to assay the CRM material, expected value, and standard deviation of each CRM are listed in Table 11-2.

SLR selected three CRMs, representing grades close to the cut-off grade, average grade, and high grade material at site, and, where possible, spanning several years of use, for additional review. Given the limited inclusion of CRMs within the Cordero sample stream between 2018 and 2022, the SLR QPs reviewed all CRM samples from El Bagre and Cordero together to evaluate laboratory performance, and to help draw firmer conclusions using a larger dataset. SLR prepared control charts and analyzed temporal and grade trends, looked for low and high biases, and tabulated the failure rate of each CRM. Control charts for CRMs G913-8 (20192022) and Oreas 256 (20202021), supporting samples from Cordero, are shown in Figure 11-1 and Figure 11-2.

The control chart of G913-8 shows a low bias between 2019 to 2020 and part of 2021. A number of failures is observable between 2019 to 2020, and an improved performance is noticeable towards the end of 2020. A total of seven samples were found below the accepted three standard deviations, for a failure rate of 4%.

Throughout 2021, the results for the CRM Oreas 256 CRM are generally consistent with expected results, with the exception of a couple of erratic values which may indicate submission mix-ups between other high grade CRMs or with blank samples. The high-grade fluctuation could also come from equipment performance between calibrations. Oreas 256 presents a failure rate of 13%, including three samples which failed in 2021.

In 2020 and 2022 a low bias was observed in CRM G308-02 while in 2021, and high number of failures above three standard deviations was noticed. The overall performance of this standard is quite low, with a failure rate of 14%. It can be noticed that most of the failures falls within the same range of gold values (4.67 g/t Au to 4.82 g/t Au), similar to the expected value of CRM G913-08. A sample mix-up could therefore be the cause of these failures.

Results of CRM analysis indicate fair to good performance of samples submitted to the El Bagre laboratory. The SLR QPs recommend that Soma perform periodic reviews of El Bagre laboratory and implement an external check assay program. The performance of El Bagre samples submitted to ALS Chemex between 2018 and 2022 is harder to define with a small population of samples (49) spread across eight different CRMs.

SLR notes that a high number of CRMs have been employed over small time periods across the El Bagre Project. Low or infrequent insertions of CRMs can compromise the ability to observe and correct, temporal trends and grade bias. Furthermore, some of the CRM in use at Cordero have an expected value that does not correspond to the grade range of interest at the site. The SLR QPs recommend that, in future, Soma limit their CRM use to a maximum of four at any one time. CRM expected values should approximate the cut-off grade, average grade, and high grade of the Mineral Resources.

Table 11-2: **Expected Values and Ranges of Selected Gold Certified Fine Blanks and CRM at El Bagre between 2018 to 2022**

Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Standard	Au (g/t)	Two SD	Assay Technique	Source	Date in Use Range	Number El Bagre	Number Cordero
Fine Blanks							
STD GLG910-4	0.00636	0.00814	FA n/s	Geostats Pty Ltd	2021-2022	35	28
STD GLG912-2	0.0025	0.00296	FA n/s	Geostats Pty Ltd	2021	2	2
CRM							
STD G308-2	**1.11**	**0.1**	**FA 50g**	**Geostats Pty Ltd**	**2020-2022**	**42**	**35**
STD G913-8	**4.87**	**0.32**	**FA 50g**	**Geostats Pty Ltd**	**2019-2022**	**175**	**2**
STD G915-1	4.56	0.34	FA 50g	Geostats Pty Ltd	2018-2019	74	-
STD G915-7	12.38	0.92	FA 50g	Geostats Pty Ltd	2018-2019	43	-
STD Oreas 240	**5.51**	**0.278**	**FA 30g**	**Ore Research & Exploration P/L**	**2021-2022**	**25**	**19**
STD Oreas 256	**7.66**	**0.476**	**FA 30g**	**Ore Research & Exploration P/L**	**2021**	**22**	**21**
STD Oreas 60d	2.47	0.158	FA 30g	Ore Research & Exploration P/L	2021	1	-
STD Oreas 62c	**8.79**	**0.42**	**FA 30g**	**Ore Research & Exploration P/L**	**2018,2021**	**5**	**5**
STD Oreas 62e	**9.13**	**0.82**	**FA 30g**	**Ore Research & Exploration P/L**	**2021**	**17**	**15**
STD Oreas 61f	**4.60**	**0.268**	**FA 30g**	**Ore Research & Exploration P/L**	**2019,2021-2022**	**89**	**21**
STD SH-82	**1.333**	**0.054**	**FA 30g**	**Rocklabs**	**2018-2019,2022**	**95**	**3**
STD SL-76	5.96	0.384	FA 30g	Rocklabs	2018	105	-
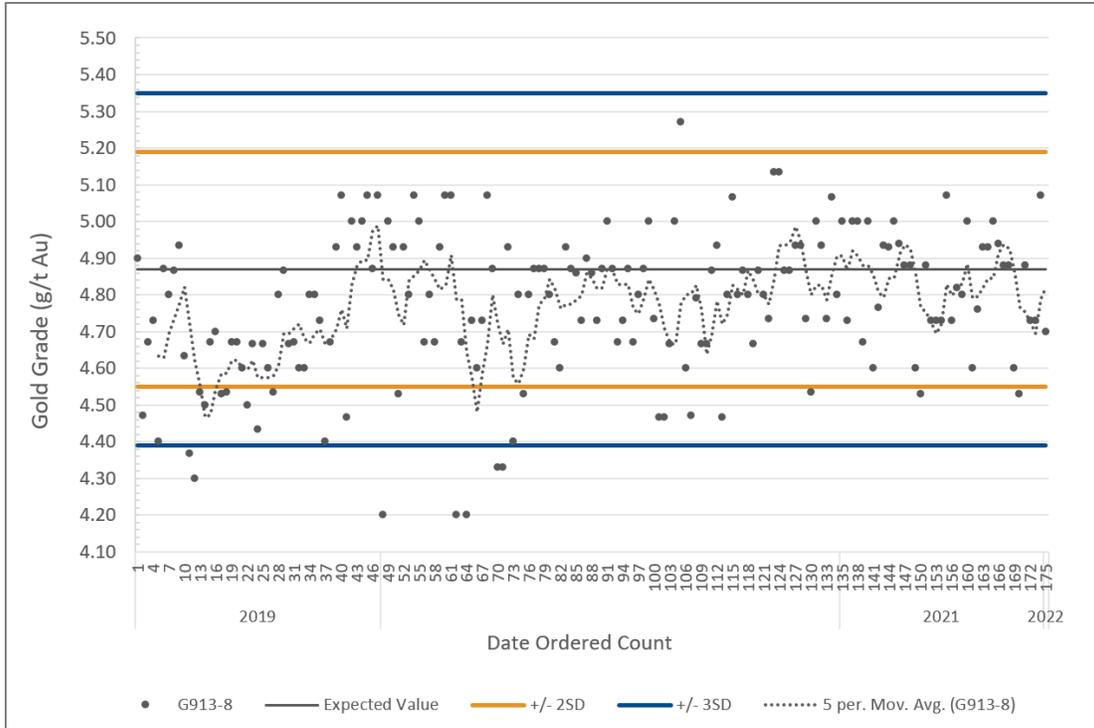
Figure 11-1:   **Control Chart of CRM G913-8: 2019-2022**
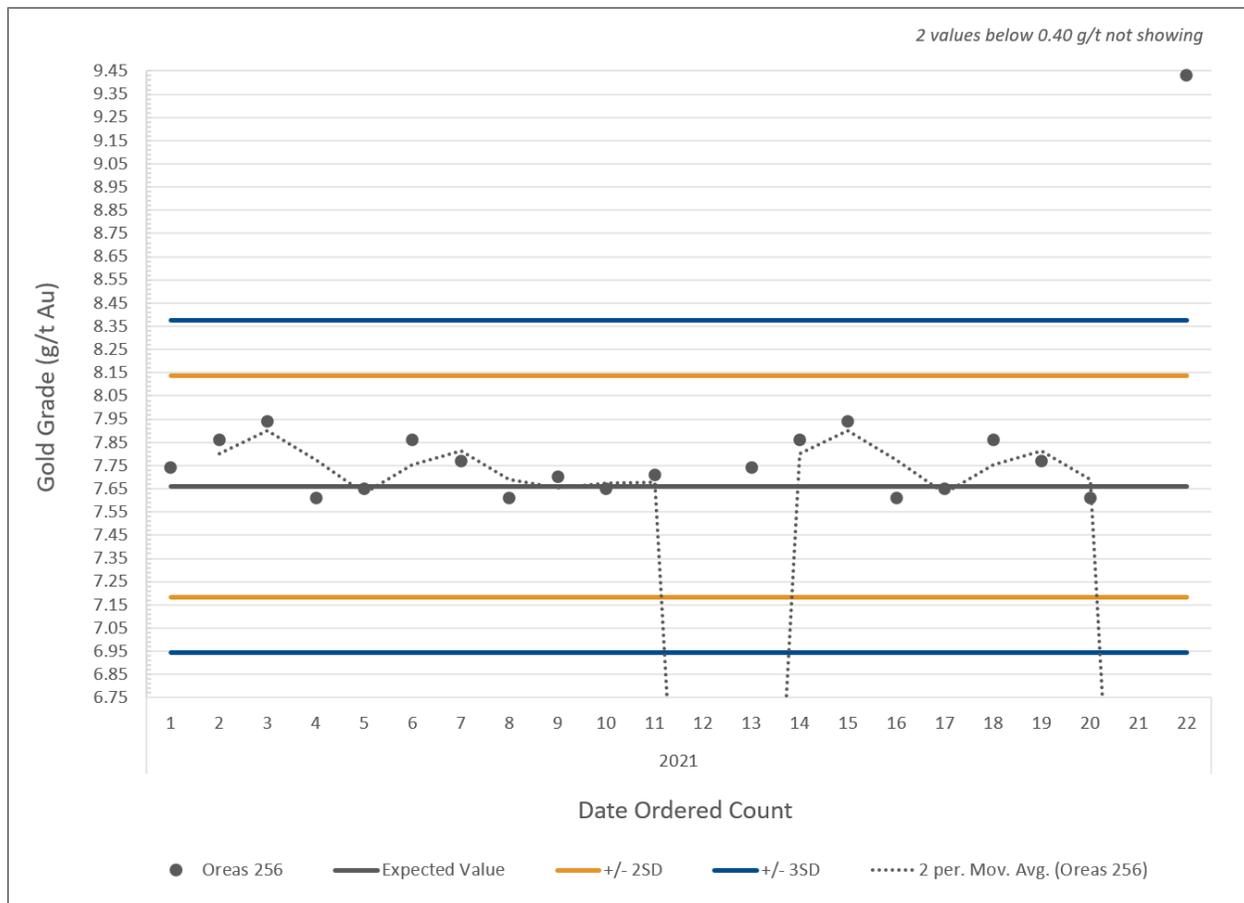
Figure 11-2: **Control Chart of CRM Oreas 256: 2020-2021**

11.4.2 Blank Material

The regular submission of blank material is used to assess contamination during sample preparation and to identify sample numbering errors. Coarse and fine blank material was inserted in the sample stream at ALS Chemex and El Bagre laboratory. SLR prepared charts of fine and coarse blank submission results for both labs (not shown). Results indicate a negligible amount of sample contamination from Cordero samples, with only one failed coarse blank at the El Bagre laboratory between 2018 and 2022.

11.4.3 Field, Coarse Reject, and Pulp Duplicates

Duplicate samples help to monitor preparation and assay precision and grade variability as a function of sample homogeneity and laboratory error. The field duplicate includes the natural variability of the original core sample, as well all levels of error including core splitting, sample size reduction in the preparation laboratory, sub-sampling of the pulverized sample, and the analytical error. Coarse reject and pulp duplicates provide a measure of the sample homogeneity at different stages of the preparation process (crushing and pulverizing).

SLR QPs analyzed the complete database of coarse and pulp duplicate data compiled by Soma using basic statistics, scatter, quantile-quantile, and percent relative difference plots. Field duplicates are no longer collected as part of the QA/QC program at El Bagre.

A total of 1,128 sample pairs, collected from 2018 to 2022 were included in SLR's analysis. The SLR QPs reviewed coarse and pulp duplicates analyzed at El Bagre laboratory and ALS Chemex individually, although ALS Chemex results only account for 3% of the total coarse and fine duplicate samples submitted.

Although few coarse sample duplicates were analyzed at ALS Chemex, it is possible to distinguish in the Quantile-Quantile plot a high bias for gold values up to 20 g/t. In the case of pulp duplicates from ALS Chemex, a high bias for samples with grades below 3 g/t Au and a low bias for grade ranging between 3 g/t Au to 6 g/t Au are noticeable. Results from El Bagre laboratory are generally well behaved, with insignificant low bias locally in the coarse duplicates. Results indicate good correlation coefficient of 0.99 for the samples of El Bagre laboratory.

Coarse and pulp duplicate pairs show good and excellent, respectively, correlation over the sampling campaigns.

Table 11-3: Duplicate Samples Statistics from El Bagre Operation-El Bagre Laboratory: 2018–2022
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

	Coarse		Pulp	
	Original	Duplicate	Original	Duplicate
No. Samples	575	575	516	516
Mean (g/t):	6.31	6.24	6.74	6.69
Maximum Value (g/t):	151.63	135.87	170.11	170.11
Minimum Value (g/t):	0.00	0.00	0.01	0.00
Median (g/t):	0.90	0.87	1.12	1.13
Variance:	229.07	219.87	63.31	269.88
Std. Dev:	15.14	14.83	16.46	16.43
Coefficient of Variation:	2.40	2.38	2.44	2.46
Correlation Coefficient	0.996		0.998	

11.4.4 Check Assays

A total of 13 coarse and 23 pulp samples initially assayed at El Bagre laboratory were sent for analysis at ALS Chemex. Results are presented within a scatterplot in Figure 11-3. While the population was too small to draw firm conclusions, only moderate reproducibility was observed, with pulp check assays values having a higher correlation than coarse values, as is typical. Preliminary observations indicate that the coarse samples analyzed at ALS returned higher gold values than those analyzed at El Bagre laboratory. While firm conclusions cannot be drawn, the SLR QPs strongly recommend an audit of both the preparation and analytical laboratory and procedures at El Bagre, and either a high submittal of check assay samples (such as 1 in 10) or submit all samples intended to support Mineral Resources to an accredited laboratory.

Zoomed in
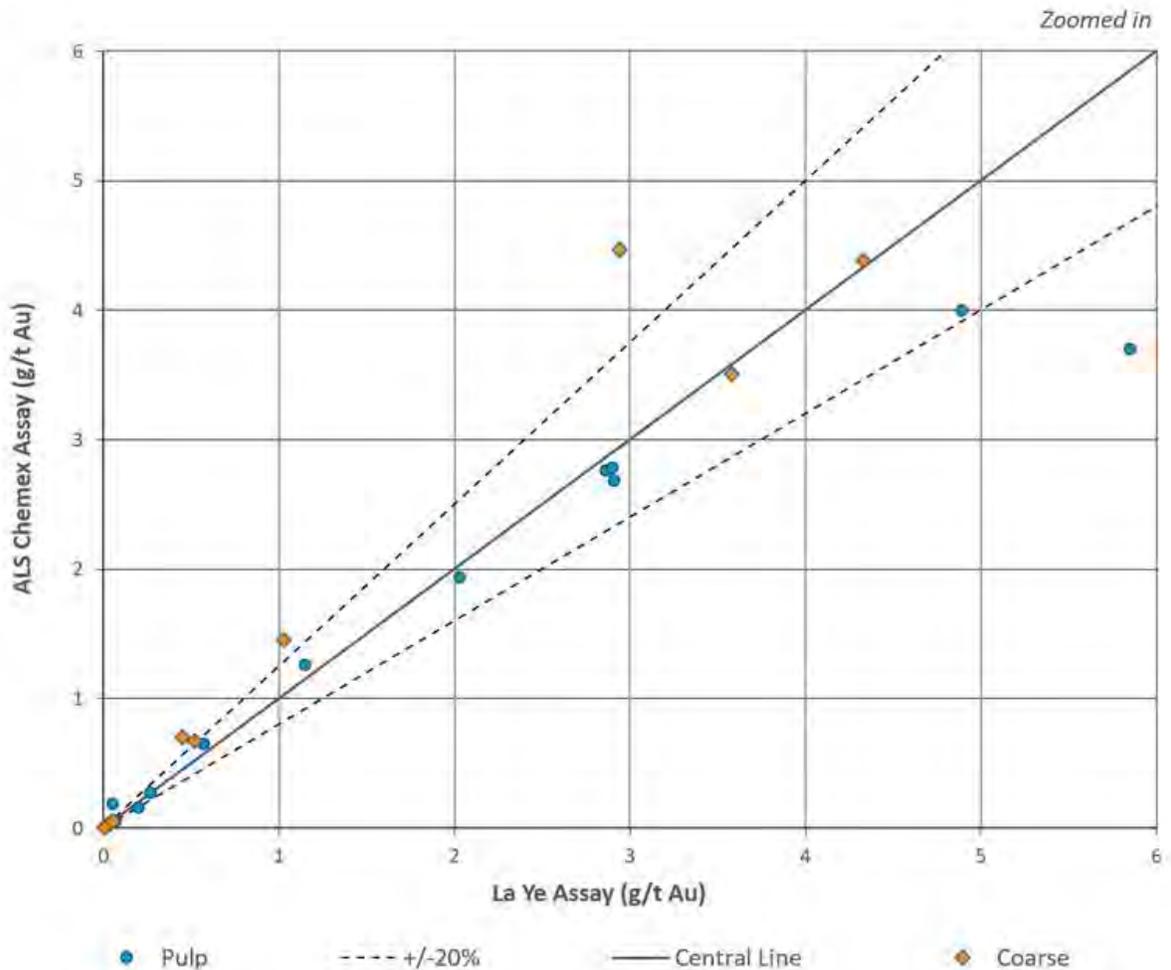
Figure 11-3: Scatterplot of Coarse and Pulp Check Assay Samples

11.4.5 QA/QC Conclusions and Recommendations

The SLR QPs have reviewed Soma's QA/QC program and are of the opinion that the results are sufficient to support Mineral Resource estimation, however, improvements are warranted, and the highest priority recommendations are detailed below:

1. Develop a well-defined protocol for QA/QC sample insertion and monitoring, failure criteria, and follow up actions.

2. Complete more frequent QA/QC internal reviews.

3. Limit the number of CRM in use at the Project to three or four within the grade range of interest. More specifically, use CRM with expected values that approximate the cut-off grade, average grade, and high grade of the Mineral Resources.

4. Implement a purposeful external check assay program.

5. Conduct an audit of both the preparation and analytical laboratories at El Bagre and complete periodic reviews following the original audit.

6. Support Mineral Resources with samples analyzed at an accredited laboratory, or samples analyzed at a non-accredited internal laboratory, but supported by a high number (1 in 10) of check assays to an accredited laboratory.

7. Include field duplicate samples in future programs to investigate the natural variability of the original core sample in new target areas.

12.0 DATA VERIFICATION

12.1 Site Visit Verification Procedures

SLR visited the site from August 7 to 11, 2018, and again from February 28 and March 3, 2022. While at site, SLR held discussions with site personnel; visited the Cordero and Los Mangos underground operations; reviewed core; reviewed data collection and QA/QC procedures; and reviewed geological interpretations, geological modelling, and resource estimation procedures.

12.2 Audit of Drill Hole Database

12.2.1 2022

The QPs reviewed the drill hole database for Cordero in Leapfrog software and conducted a standard review of import errors and visual checks. While mining of some remnants at La Ye and Los Mangos is still occurring, due to a lack of sufficient support information, there are no current Mineral Resources and Mineral Reserves for the two deposits. As such, SLR did not review the supporting database for each of these deposits.

The SLR QPs requested a spatially and temporally representative set of assay certificates for the deposit, sourced directly from the laboratory where possible, or MS Excel spreadsheet records in the case of El Bagre laboratory. The QPs performed assay certificate verification exercises comparing drilling certificates for the period of 2017 through 2022 to the assays in the Cordero El Bagre drill hole databases. A thorough database verification was also completed by SLR for drill holes completed between 2003 and 2018. A total of 11 recent Soma drill holes were reviewed with attention to assay values, interval recording, and labelling. A summary of the certificate matching results is presented in Table 12-1. No significant or impactful errors were identified by the QPs for information being used in the Mineral Resource estimate, although slight discrepancies in sample naming were found.

Table 12-1:   Drill Hole Assay Database Certificates Verification – Cordero
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Drill Hole ID	Year	Sample Number	Assay Result in Leapfrog Database (g/t Au)	Assay Result in certificate (g/t Au)	Δ g/t	Comments
BCDDH_17_018	2017	DH_19245	114.5	114.5	0	-
BCDDH_17_031	2017	BDH-19871	61.5	61.5	0	-
BCDDH_18_051	2018	BDH-12905	237	237	0	-
BC1NGDDH_026	2018	DH10096	97.6	97.6	0	-
BECDDH_136	2018	DH06169	11.2	11.2	0	DH6169 is the certificate sample number
ECDDH_036	2018	10007413	4.91	4.91	0	-
BCNDDH_20_006	2020	YL-6646	176.71	176.71	0	-

Drill Hole ID	Year	Sample Number	Assay Result in Leapfrog Database (g/t Au)	Assay Result in certificate (g/t Au)	Δ g/t	Comments
BCNDDH_20_011	2020	YL-6712	92	92	0	-
BCNDDH_20_016	2020	YL-6777	3.67	3.67	0	-
BCDDH_20_101	2020	YL-7286	4.01	4.01	0	Sample not labelled the same between MS Excel Spreadsheet and ALS pdf
BCDDH_21_104	2021	YL-7310	8.02	8.02	0	-

12.2.2 2018

The SLR QPs compared lithology logs contained within the digital drill hole database to the original lithology logs stored on site and found the logs and geological interpretations to be consistent.

The SLR QPs compared 1,696 assays, or 16%, of the exploration samples to Assay Certificates from ALS. No major discrepancies were found.

The SLR QPs imported the drill hole database into Leapfrog Geo version 4.5. No significant errors were returned.

12.3 QP Opinion

Overall, the SLR QPs are of the opinion that the results of Soma's database workflows and controls comply with industry standards and are adequate for the purposes of Mineral Resource estimation. However, the SLR QPs recommend correcting the sample naming errors in the master database and assigning final certificate numbers to each sample to improve efficiency of data management.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Mineral Processing

In 2008, due to the exploration success at El Bagre and anticipated future production from other deposits in the area, the decision was made to build a gold processing plant, the El Bagre Plant, with an eventual capacity of 1,000 tpd. To achieve this objective and to spread out the capital investment over a period of years, Mineros initially constructed the following:

- A crushing plant with a capacity of 1,000 tpd based on a 16-hr per day operation
- A processing plant with a capacity of 500 tpd based on 24-hr per day operation

The original plan was to progressively expand the plant in stages to 700 tpd and then to 1,000 tpd by the end of 2013 by duplicating the first processing line, to double the throughput once the first line had been commissioned. The expected gold recovery was 96%, with silver recovery of 90%. Due to availability of process feed, the El Bagre Plant was not expanded and remains at a nominal 500 tpd capacity.

The intent in designing the process plant was to utilize well-known global technology suppliers and to construct a modern plant with a high level of automation based on the earlier metallurgical test work results. Mineros commissioned FLSmidth Peru (FLS), an equipment supplier, in 2008 to design, engineer, and construct the process plant.

FLS subcontracted the detailed engineering phase of the work to Buenaventura Ingenieros S.A. (BISA). Mineros was responsible for the construction and assembly of the plant and directly purchased some of the equipment including the tertiary crusher, ball mills, intensive cyanide leaching system, and electrowinning equipment. The processing plant consists of the following main circuits:

- Three-stage crushing
- One-stage grinding
- Flash coarse rougher flotation in the grinding circuit
- Gravity concentration and intensive cyanide leaching
- Flotation, thickening, and clarification
- Regrinding and cyanidation
- Filtration and cyanide detoxification
- Merrill Crowe gold recovery
- Smelting
- Reagent preparation
- Tailings disposal

El Bagre Plant construction was initiated in January 2009 and was essentially completed in February 2010, with plant commissioning occurring until April 2010. El Bagre Plant has been in full operation since the start of May 2010. Plant annual production from 2010 through October 2022 is shown in Table 13-1 and Figure 13-1. The mill production rate ranged from 192 tpd to 453 tpd with an average rate of 353 tpd. The average production rate from 2015 to 2022 was 410 tpd. The gold feed grades ranged from 3.51 g/t to 9.24 g/t with an average for the period of 5.6 g/t Au. Gold recovery ranged from 81.4% to 87.8% with an average for the period of 85.5% Au. The silver feed grades ranged from 5.0 g/t to 30.6 g/t with average

for the period of 14.6 g/t Ag. Silver recovery ranged from 77.2% to 83.5% with an average for the period of 80.9% Ag.

Table 13-1: **El Bagre Plant Statistics 2010 through October 31, 2022**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Description	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022[1]
Tonnes Milled	t	70,180	110,547	93,966	76,087	126,904	136,624	132,386	140,511	147,912	147,306	138,075	133,868	120,098
Tonnes/day	tpd	192.27	302.87	256.74	208.46	347.68	374.31	361.71	400.36	453.00	443.62	407.39	402.25	436.38
Au Feed Grade	g/t	7.48	6.98	9.24	7.08	6.3	5.22	4.23	3.51	4.16	3.89	4.32	4.77	5.62
Au Recovery	%	81.4	83.15	87	83.18	86.74	87.76	84.78	84.48	86.1	85.8	86.7	86.9	87.5
Au Recovered	oz	13,735	20,639	24,297	14,400	22,294	20,131	15,626	13,404	17,025	15,792	16,622	17,830	18,994
Ag Recovery	%	77.23	79.15	82.31	79.45	83.46	82.74	78.14	82.9	82.4	82.1	82.4	81.5	77.9
Ag Recovered	oz	45,468	69,395	80,517	42,266	66,630	52,351	24,330	19,201	28,950	30,755	38,041	42,837	33,016
Ag to Au Ratio	Ag:Au	3.31	3.36	3.31	2.94	2.99	2.6	1.56	1.43	1.70	1.95	2.29	2.40	1.74
EqAu Produced	oz	14,487	22,216	25,791	15,141	23,284	20,810	15,609	13,665	17,382	16,168	16,945	18,297	19,262
Mill Availability	%	74.6	85.7	73.6	56.2	84	86.8	85	86.2	91.4	91.8	93.2	92.7	92.3

Notes:

1.   Through October 31, 2022
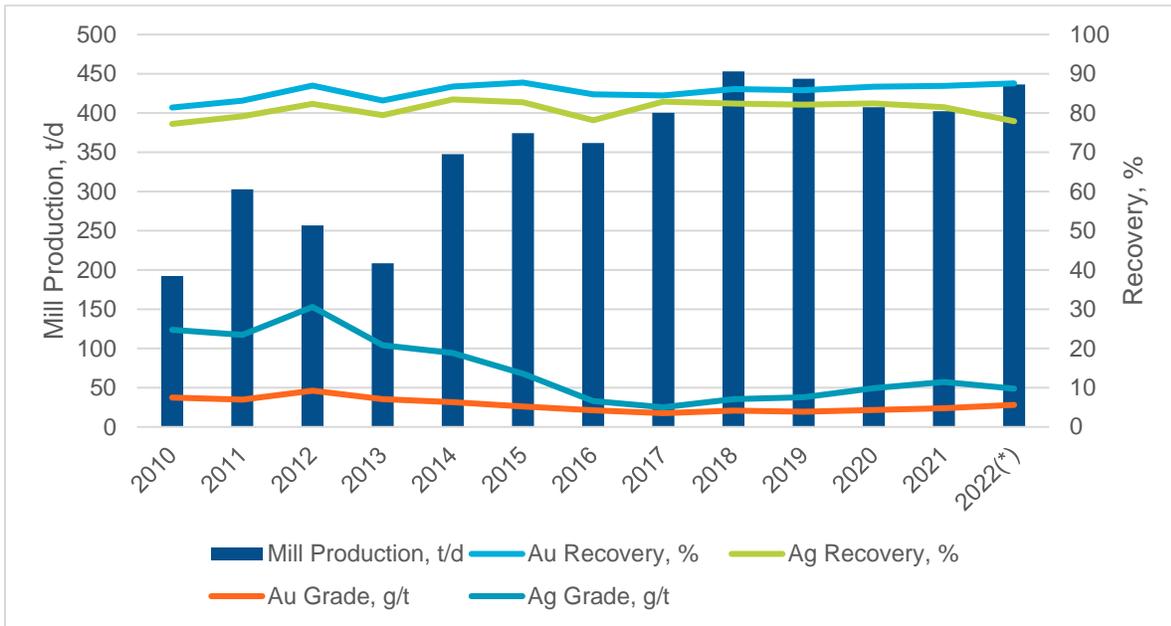
Figure 13-1:   **El Bagre Plant Production from 2010 through October 2022**
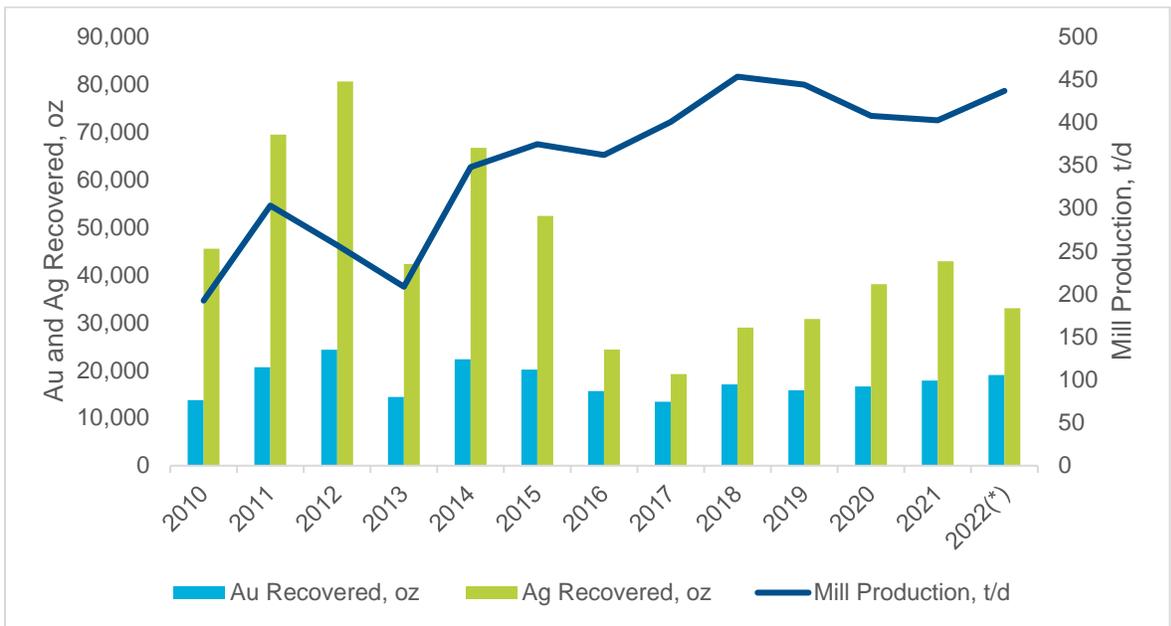
Notes: *Production through October 31, 2022

Figure 13-2:   **El Bagre Plant Production and Au and Ag Ounces Recovered**

Mill production is just under the 500 tpd nominal capacity and has reportedly been limited by supply of feed material from the mines. The gold and silver recoveries have been consistent but lower than the design projections of 96% for gold and 90% for silver. It should be noted that Au and Ag recoveries in the 2015 SGS metallurgical testing program yielded Au and Ag recoveries of 88.3% and 88.0%, respectively.

The Au and Ag grades decreased between 2010 to 2022, however, metal production has been maintained as mill throughput increased.

The El Bagre Plant has been treating La Ye and Los Mangos ore as presented in Table 13-2. Los Mangos and La Ye are in the last stage of production and Cordero is in a test mining phase, making up most of the current production, with 16,080 kt at 6.88 g/t Au mined in 2021 from Cordero. From January 2023 onward, 100% of production from El Bagre is expected to come from Cordero.

Table 13-2 shows the historical proportion of ores from the La Ye and Los Mangos properties.

<div align="center">

Table 13-2:   El Bagre Plant Feed Proportion
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

</div>

Year	La Ye/Los Mangos/Cordero % of Feed
2014	80/20
2015	60/40
2016	30/70
2017	20/80
2018	15/85
2019	25/75
2020	30/70
2021	32/55/10
2022	16/36/48
2023	0/0/100

13.2 Metallurgical Testing

Metallurgical test work programs have been completed both internally and externally.

In 2015, SGS carried out test work to determine the compatibility of Los Mangos ore to the El Bagre Plant using a 70/30 blend of La Ye and Los Mangos ores. The results were summarized in a report, prepared for Mineros S.A.C. dated June 2015 titled "Pruebas Metalúrgicas de Flotación y Análisis Mineralógico."

The ball mill work index (BWI) was 16.93 kWh/st for La Ye, 15.39 kWh/st for Los Mangos, and 15.97 kWh/st for the blend.

After flotation and cyanidation of the blend concentrate, overall gold and silver recovery was 88.26% and 87.97%, respectively.

TOMRA was requested to carry out an ore sorting study in 2015 ("Test Report Sorting of Gold Mineros", dated September 2, 2015), using laser and X-ray transmission (XRT) sorting. Using run of mine (ROM) material and two stages of sorting, gold and silver recoveries to product versus waste were in the 90% to 95% range.

There are no known processing factors or deleterious elements that could have a significant effect on potential economic extraction.

14.0 MINERAL RESOURCE ESTIMATE

14.1 Summary

The Mineral Resource estimates for the Properties comprise the Cordero deposit at El Bagre, and Santa Elena, Santa Maria, and El Catorce deposits at Nechí. All estimates were completed by SLR.

In 2018, RPA, now SLR, reviewed and adopted the Mineral Resource estimates completed by Mineros for the La Ye and Los Mangos deposits. While mining of the remnants at La Ye and Los Mangos is still happening, the Mineral Resources and Mineral Reserves defined in 2018 for these deposits are considered mined out and do not warrant updating. There has been no drilling or sampling at these two projects that would support a Mineral Resource or Mineral Reserve update.

The estimates for both Nechí and Cordero were based on diamond drill hole and underground channel sample data. Wireframes were generated using Leapfrog Geo and grades were interpolated into blocks using inverse distance squared (ID^2) and inverse distance cubed (ID^3) methodologies using Surpac and Leapfrog Edge software (Leapfrog Edge). Blocks were classified as Measured, Indicated, and Inferred using a distance-based criterion. SLR validated the estimates using industry standard validation techniques.

Underground constraining shapes at Cordero for Mineral Resource reporting were generated using Deswik Stope Optimizer (DSO) software and considering underground mining costs. The underground optimization at Cordero considered a 2.4 g/t cut-off grade and 1.0 minimum thickness. For Nechí, Reasonable Prospects for Eventual Economic Extraction (RPEEE) was assured by applying a 1.3 m minimum thickness to the vein wireframes.

A limited amount of test mining has occurred at both Cordero and Nechí, and these mined out areas were excluded from the Mineral Resource statement.

A summary of the underground Mineral Resources for Cordero and Nechí, as at December 31, 2022, is provided in Table 14-1. A summary of the Mineral Resource estimation details is given in Table 14-2 and the relative locations are shown in Figure 14-1. Mineral Resources conform to Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves dated May 10, 2014 (CIM (2014) definitions).

While SLR has noted that the La Ye tailings storage facility (TSF) is at capacity and that this should be addressed moving forward, the QPs are not aware of any other environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

Table 14-1:   Summary of Mineral Resources – December 31, 2022
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Category	Tonnage (kt)	Grade (g/t Au)	Contained Metal (koz Au)
Indicated			
Cordero	355	6.9	78
Nechí	310	4.9	49
Indicated Total	**665**	**5.9**	**127**

Category	Tonnage (kt)	Grade (g/t Au)	Contained Metal (koz Au)
Inferred			
Cordero	761	7.9	192
Nechí	405	6.5	85
Inferred Total	**1,165**	**7.4**	**277**

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 2.40 g/t Au for Cordero and 3.1 g/t Au for Nechí.
3. Mineral Resources are estimated using a long-term gold price of US$1,800 per ounce for Cordero and US$1,500 per ounce for Nechí.
4. At Cordero, Mineral Resources are reported within underground reporting shapes (DSO shapes)
5. A minimum mining width of 1 m for Cordero and 1.3 m for Nechí was used.
6. Bulk density ranges between 2.0 t/m^3 and 2.2 t/m^3 for saprolite and ranges between 2.64 t/m^3 and 2.75 t/m^3 for fresh rock.
7. Numbers may not add due to rounding.

Table 14-2:   Summary of Mineral Resource Estimates by Deposit
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Project	Deposit	Project Stage	Completed By	Database Cut-off	Estimate Type	Software	Estimation Technique
El Bagre	Cordero	Operation	SLR	25-Apr-22	Block Model	Leapfrog Edge	Inverse Distance
Nechí	Santa Elena	Exploration	RPA (now SLR)	31-Dec-13	Block Model	Leapfrog Edge	Inverse Distance
Nechí	Santa Maria	Exploration	RPA (now SLR)	31-Dec-13	Block Model	Surpac	Inverse Distance
Nechí	El Catorce	Exploration	RPA (now SLR)	31-Dec-13	Block Model	Leapfrog Edge	Inverse Distance
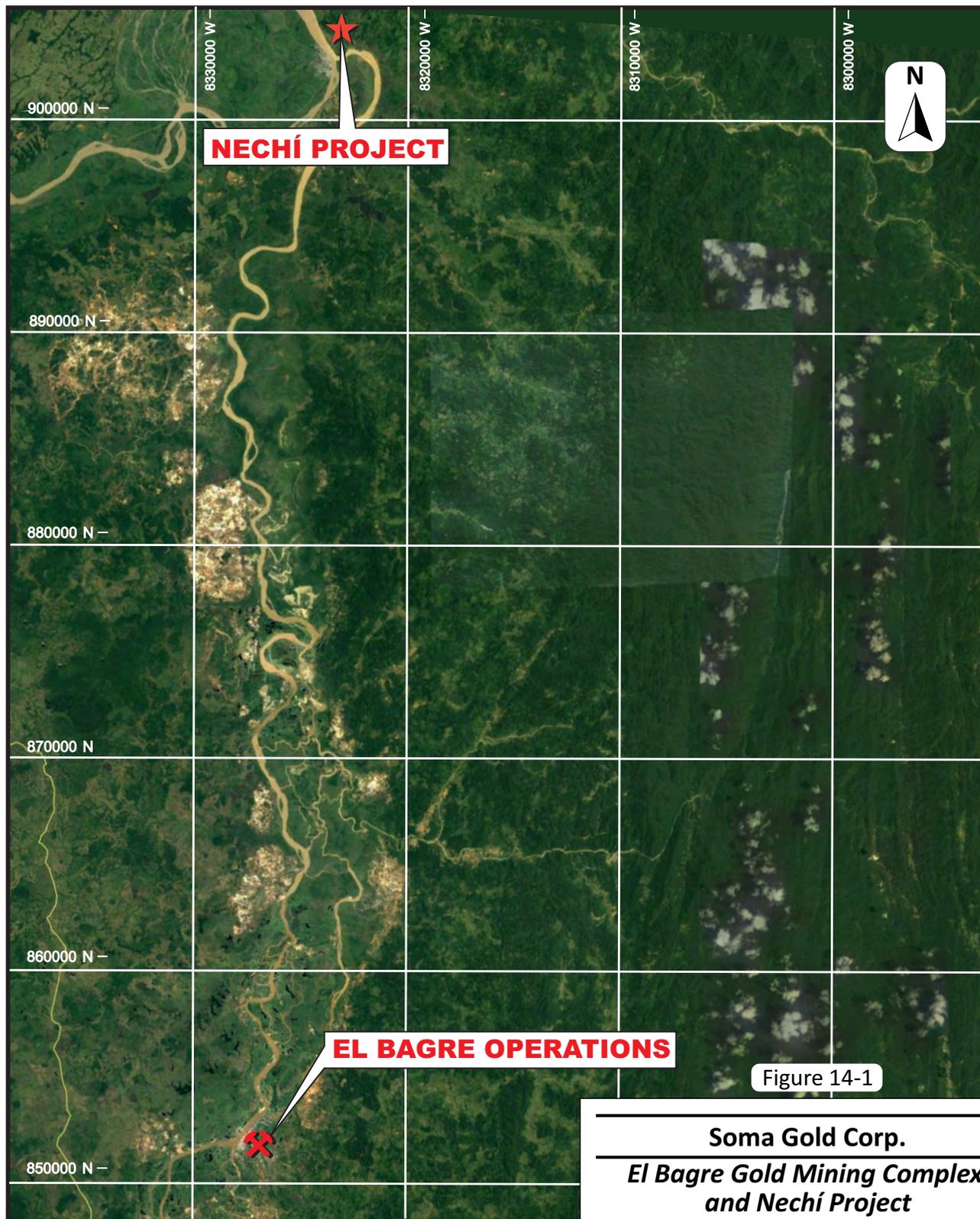
Figure 14-1

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project

Department of Antioquia, Colombia

El Bagre and Nechí Underground Mineral Resource Locations
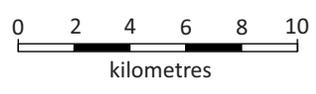
January 2023   **Source: Digital Globe, 2019.**

14.2 Cordero

14.2.1 Summary

An updated Mineral Resource estimate for the Cordero deposit was prepared by SLR using available drill hole data as of April 25, 2022.

Cordero has been updated following 52 additional drill holes totaling 14,771.3 m.

The Mineral Resource estimate is defined by nine wireframes oriented north-south and dipping east, named MIN01 to MIN09. The veins were not modelled with a minimum thickness; instead a minimum of 0.3 g/t Au cut-off was used to develop the wireframes and Mineral Resources have been reported within underground reporting shapes using a minimum thickness criteria of 1.0 m.

Capped gold assays within the veins were composited to the full-length of the mineralization intersection, using the Leapfrog Geo numeric compositing subset of codes function. Composite values were estimated into a sub-blocked model using a two-pass inverse distance cubed (ID^3) interpolation approach. Indicated and Inferred Mineral Resources represent areas with approximate drill hole spacings of up to 25 m and no greater than 50 m, respectively, and are limited to areas of continuous mineralization. SLR has assumed that the deposit would be mined using underground methods and has applied underground reporting shapes to ensure RPEEE.

Mineral Resource domains and block modelling work was performed using Leapfrog Geo and Edge software. In addition to standard historical data and database validation techniques, wireframe and block model validation procedures including wireframe to block volume confirmation, statistical comparisons with composite and nearest neighbour (NN) estimates, and visual reviews in longitudinal section were also completed.

A summary of Cordero Mineral Resources is provided in Table 14-3.

The SLR QPs recommend that a program of infill drilling be completed to increase the level of confidence of the Inferred Mineral Resources at Cordero to the Indicated category.

Table 14-3: **Summary of Cordero Mineral Resource Estimate as at December 31, 2022 Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project**

Category	Tonnage (000 t)	Grade (g/t Au)	Contained Metal (000 oz Au)
Indicated	355	6.9	78
Inferred	761	7.9	192

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 2.40 g/t Au.
3. Mineral Resources are estimated using a long-term gold price of US$1,800 per ounce for Cordero.
4. Mineral Resources are reported within underground reporting shapes (DSO shapes).
5. A minimum mining width of 1.0 m was used.
6. Bulk density is 2.2 t/m^3 for saprolite and ranges between 2.64 t/m^3 and 2.73 t/m^3 for fresh rock.
7. Numbers may not add due to rounding.

14.2.2 Topography Surface

The Shuttle Radar Topography Mission (SRTM) is an international research effort that obtained digital elevation models (DEM) on a near-global scale. SRTM data has a resolution of approximately 30 m at the equator. The data and supporting information are available to the public from the NASA website at https://search.earthdata.nasa.gov/. SLR obtained the SRTM topographic information for the area which covers the location of the Cordero property and created a subset of the topographic surface in the immediate area of the project, for use in preparation of the Mineral Resource estimate. SLR reviewed the topographic surface against the surveyed drill hole collar locations and found good agreement. The SLR QPs recommend obtaining a higher resolution topographic survey over the Project area.

14.2.3 Resource Database

Soma maintains a master database containing the results from all drill hole, trenching, channel sampling and grab samples collected from sampling programs. The Mineral Resource estimate is based on the drill hole database made available to SLR on April 25, 2022. A subset of drill holes from the master database was extracted by SLR for the purpose of the Mineral Resource estimate at Cordero. The Cordero subset included a total of 421 drill holes that were completed during the 2003 to 2021 period. The location of the drill holes within the Cordero deposit were presented in Figure 10-1.

A number of new tables and variables were created during the estimation process to store such information as those gold samples contained within the mineralized wireframe interpretations, the capped assay values, the composited sample data, the density information, grouped lithological codes for geologic modelling, and the wireframe coding information for use in the grade estimation process. All drilling and sampling location information for Cordero is stored in the UTM Datum MAGNA-SIRGAS. A summary of the Cordero drill hole is presented in Table 14-4.

Table 14-4: **Summary of Drill Hole Database, Cordero Deposit**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Table Name	Data Type	Number of Records
collar		421
survey		5,724
COR_Assay	interval	4,018
COR_Lith	interval	6,797
COR_DENSITY	interval	21
SLR_Working	interval	371
COR_FL_CMP	interval	10,595

As part of the database validation exercise, inspection of the collar data by SLR (with the underground drilling data filtered out) showed 87 drill hole collars having a vertical distance of more than five metres from the modelled topographic surface. SLR decided to not adjust these collar elevations to bring them into better agreement with the topographic surface and surrounding drilling due to the relative low accuracy of the topographic (SRTM) data available.

The raw assay table for the Cordero drill hole subset contained a number of intervals for which no sample information was available for gold, as the logging geologist did not observe sufficient indications of mineralization in the drill core to justify the placement of a sample for assaying.

Very small negative numbers were inserted into the raw assay table as placeholder values to indicate the presence of unsampled intervals. These small negative numbers were subsequently converted to grades of 0 g/t Au as part of the estimation workflow prior to applying capped assays and prior to compositing. Intervals with pending assays were assigned null values and ignored.

14.2.4 Geological Interpretation

Wireframe interpretation began with the creation of a model of the bottom of the overburden and saprolite for subsequent use in creating the mineralized wireframe interpretations. This bottom of overburden was created by first grouping lithologic intervals in the Cordero subset database associated with the overburden. The topography was then offset downwards with respect to the lower contacts of the grouped overburden intervals, and the resulting surface subsequently used for coding of the block model. The same process was repeated for the saprolite intervals, which sit below the overburden. The extents of the overburden and saprolite surfaces were projected outwards by a distance judged sufficient to provide coverage for the envisioned maximum possible extent of any mining shapes that may be generated for this deposit. All gold mineralization wireframes were terminated at the bottom of the combined overburden and saprolite surface.

The mineralization at Cordero is crosscut by dacitic dykes, which trend approximately north-south and have an interpreted sub-vertical orientation. From drill hole and underground mapping data, these dykes can range in thickness up to approximately 30 m true thickness. The dykes were modelled as a system of sub-parallel, tabular, and lenticular volumes, from the drill hole and underground mapping data available. Where gold mineralization wireframes come into contact with these dykes, their volumes were clipped against the dykes to represent the cross-cutting relationship. Interpretation of the dykes are based on available information, however a more detailed study would add confidence to the model.

Interpretations of the gold mineralization were guided by existing modelling (RPA, 2020), and underground mapping provided by Soma, which were imported into Leapfrog Geo (2021.2.5) modelling software. As limited outcrop information was available due to the depth of the overburden, the distribution of gold mineralization was interpreted primarily using drill hole information, with the supplied mapping and modelling serving as the basis of the mineralization model.

The interpretations were carried out with mineralization captured using wireframes modelled at a nominal grade of 0.3 g/t Au, as presented in Figure 14-2. No minimum thickness was used for this exercise. The modelling thresholds were established using the operational scenario in which mineralization is extracted my means of underground mining methods. Wireframes were extended outwards from drilling intercepts a nominal distance of 50 m.

The resulting gold wireframes consisted of nine separate zones, modelled as tabular bodies, as illustrated in Figure 14-2, and combined into one final wireframe. Overall, the wireframes outline gold mineralization by means of drill hole data along a strike length measuring approximately 2,400 m in a north-south direction, approximately 250 m in an east-west direction, and to a depth of approximately 300 m beneath the surface.

The wireframes were then used to code the drill hole database, such that the gold assay values could be assigned to the correct location, and wireframe code.

Looking North - Width 15 m
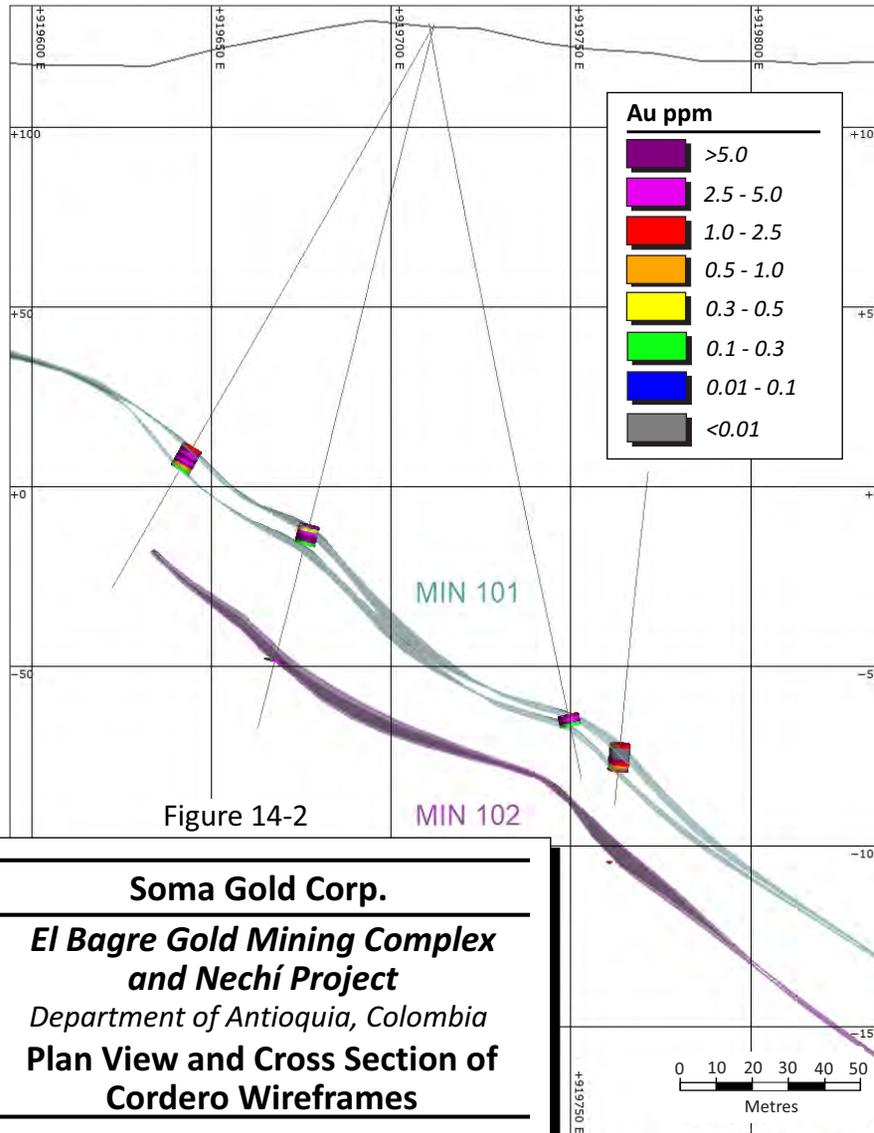
Au ppm

▮ (purple)	>5.0
▮ (magenta)	2.5 - 5.0
▮ (red)	1.0 - 2.5
▮ (orange)	0.5 - 1.0
▮ (yellow)	0.3 - 0.5
▮ (green)	0.1 - 0.3
▮ (blue)	0.01 - 0.1
▮ (grey)	<0.01

Figure 14-2

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Plan View and Cross Section of Cordero Wireframes
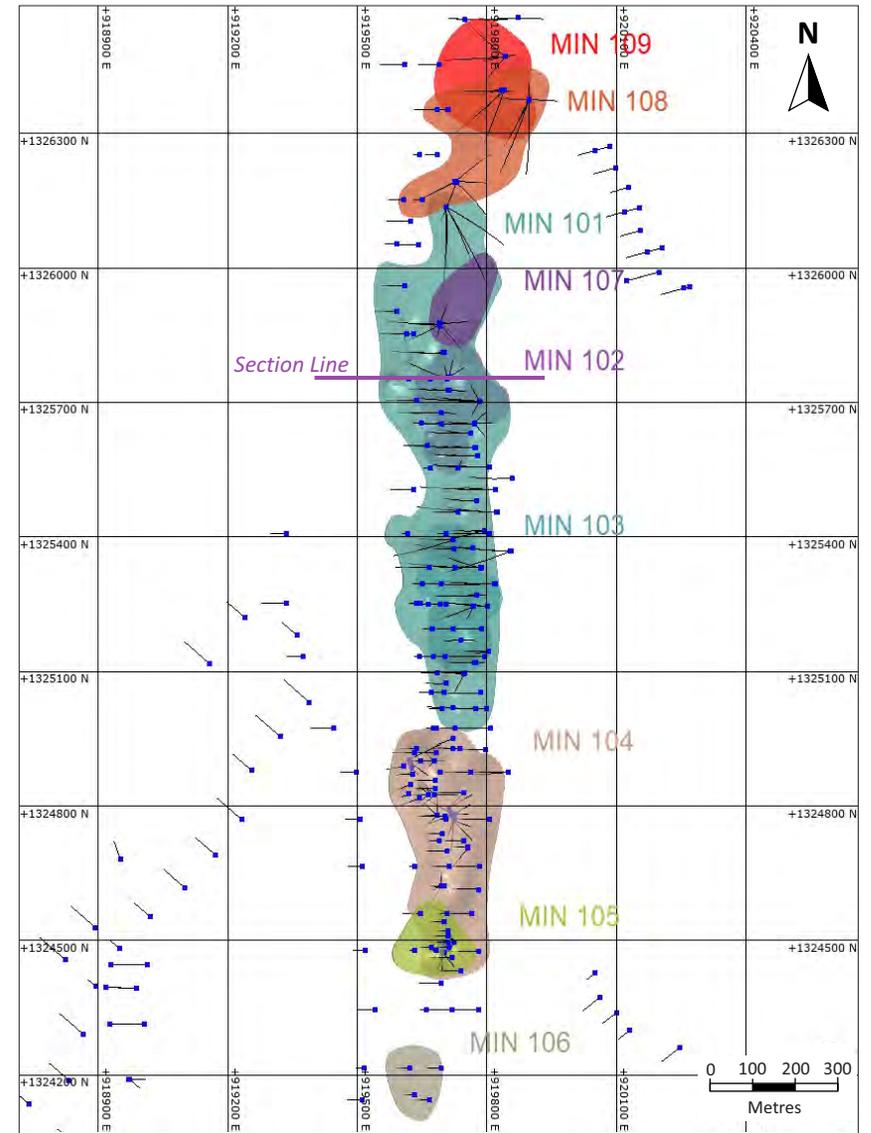
January 2023

Source: SLR, 2022.

14.2.5 Resource Assays

Raw assay samples, or resource assays, contained within the gold mineralization wireframes were used for block model grade estimation. While each mineralization wireframe was assigned a unique integer code for use during the grade estimation process, due to the limited number of samples, a single domain was used for statistical analysis. The distribution of the gold grades within the mineralization domains were examined by means of histograms and log probability plots to assist in the selection of an appropriate capping value. Log probability plots and histograms are shown in Figure 14-3. The resource sample statistics are summarized in Table 14-5.

14.2.6 Treatment of High Grade Assays

The influence of high-grade gold assays within each of the mineralization domains was addressed by applying capping values. Gold grades were capped at 75 g/t Au. Summary statistics for the capped assay values are presented in Table 14-6.

Table 14-5: **Summary Statistics of the Capped and Uncapped Resource Assays, Cordero Deposit Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project**

Wireframe	Cap Value (g/t Au)	Mean (g/t Au)	Median (g/t Au)	SD (g/t Au)	CV	Variance (g/t Au)	Min (g/t Au)	Max (g/t Au)	Count
				Uncapped					
MIN_101	-	3.98	0.33	15.45	3.88	238.65	0	237.00	417
MIN_102	-	1.76	0.11	5.54	3.15	30.64	0	38.90	31
MIN_103	-	2.79	0.19	12.51	4.48	156.49	0	114.50	86
MIN_104	-	1.21	0.00	5.50	4.56	30.26	0	97.60	213
MIN_105	-	0.41	0.00	1.40	3.45	1.97	0	11.20	45
MIN_106	-	0.59	0.48	0.88	1.49	0.77	0	4.91	10
MIN_107	-	16.24	0.78	37.95	2.34	1439.95	0	176.71	23
MIN_108	-	12.15	0.91	24.82	2.04	615.91	0	100.00	47
MIN_109	-	0.60	0.10	0.94	1.57	0.89	0	3.67	18
				Capped					
MIN_101	75	3.38	0.33	9.83	2.91	96.66	0	75.00	417
MIN_102	75	1.76	0.11	5.54	3.15	30.64	0	38.90	31
MIN_103	75	2.49	0.19	9.98	4.01	99.70	0	75.00	86
MIN_104	75	1.17	0.00	4.87	4.17	23.76	0	75.00	213
MIN_105	75	0.41	0.00	1.40	3.45	1.97	0	11.20	45
MIN_106	75	0.59	0.48	0.88	1.49	0.77	0	4.91	10
MIN_107	75	12.57	0.78	24.95	1.98	622.39	0	75.00	23
MIN_108	75	11.06	0.91	21.20	1.92	449.58	0	75.00	47
MIN_109	75	0.60	0.10	0.94	1.57	0.89	0	3.67	18
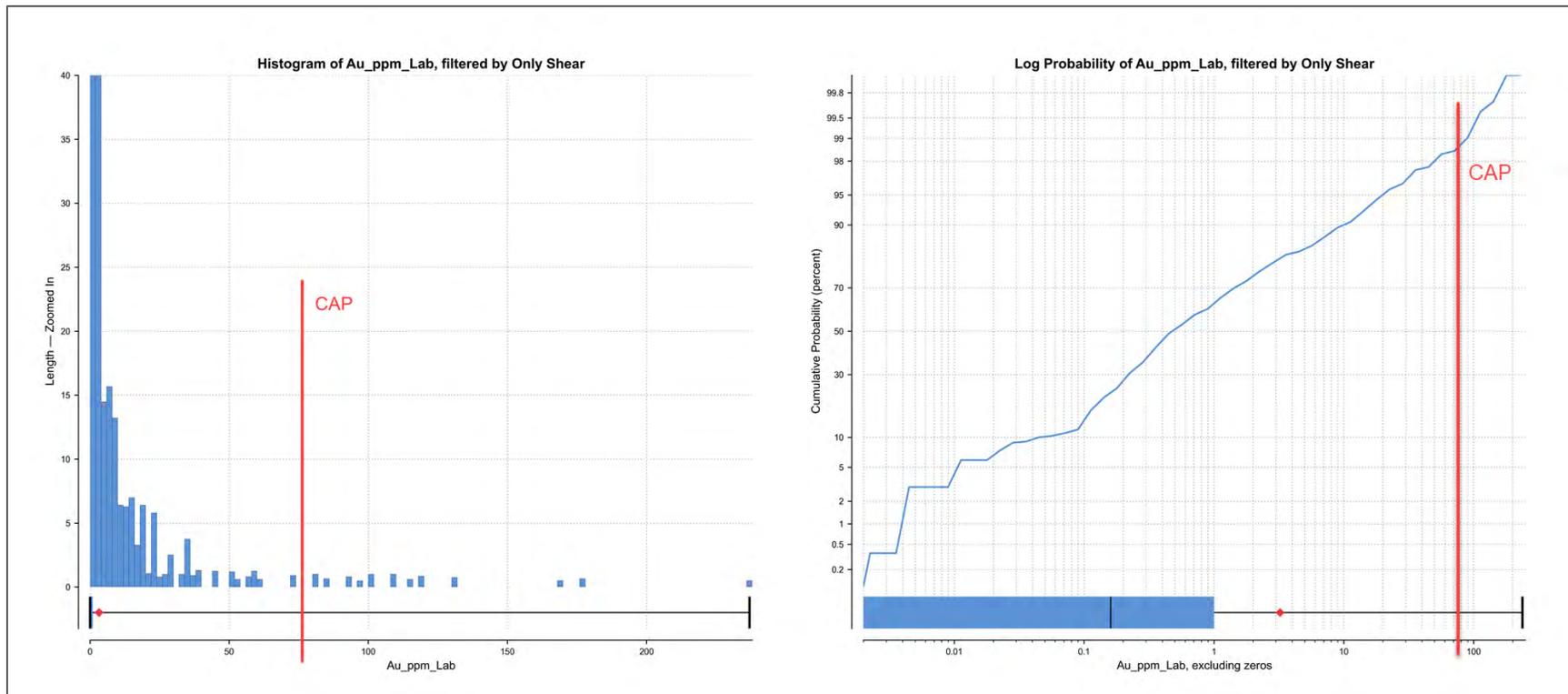
Figure 14-3: **Log Probability Plot and Histogram for Cordero**

14.2.7 Compositing

All samples contained within the gold wireframe domains were composited to the full-length of the mineralization intersection. The descriptive statistics of the capped and uncapped composite gold samples are provided in Table 14-6.

Table 14-6: **Descriptive Statistics of Capped and Uncapped Composites, Cordero Deposit Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project**

MIN	Cap Value (g/t Au)	Mean (g/t Au)	Median (g/t Au)	SD (g/t Au)	CV	Variance (g/t Au)	Min (g/t Au)	Max (g/t Au)	Count
				Uncapped					
MIN_101	-	3.98	0.99	7.45	1.87	55.50	0	43.69	138
MIN_102	-	1.76	0.23	5.59	3.18	31.28	0	38.90	24
MIN_103	-	2.79	0.36	5.54	1.99	30.71	0	21.66	35
MIN_104	-	1.21	0.24	2.87	2.38	8.24	0	15.90	106
MIN_105	-	0.41	0.11	0.78	1.91	0.61	0	3.66	22
MIN_106	-	0.59	0.62	0.41	0.70	0.17	0	1.23	6
MIN_107	-	16.24	21.13	16.33	1.01	266.83	0	33.85	6
MIN_108	-	12.15	5.83	15.59	1.28	243.02	0	42.11	20
MIN_109	-	0.60	0.69	0.73	1.21	0.53	0	2.53	14
				Capped					
MIN_101	75	3.38	0.99	5.40	1.60	29.12	0	36.48	138
MIN_102	75	1.76	0.23	5.59	3.18	31.28	0	38.90	24
MIN_103	75	2.49	0.36	5.07	2.04	25.68	0	21.66	35
MIN_104	75	1.17	0.24	2.68	2.29	7.19	0	14.35	106
MIN_105	75	0.41	0.11	0.78	1.91	0.61	0	3.66	22
MIN_106	75	0.59	0.62	0.41	0.70	0.17	0	1.23	6
MIN_107	75	12.57	20.15	11.92	0.95	142.07	0	22.53	6
MIN_108	75	11.06	5.83	13.66	1.23	186.48	0	37.65	20
MIN_109	75	0.60	0.69	0.73	1.21	0.53	0	2.53	14

Note: SD – Standard Deviation, CV - Coefficient of Variation

14.2.8 Trend Analysis

14.2.8.1 Variography

SLR attempted to model variograms of the gold grades using full-length capped composites for the principal zones. Stable variograms could not be defined. A description of the workflow is below. The SLR QPs recommend revisiting the variography following the completion of closer spaced drilling

The exploratory variography analysis involved the preparation of omni-directional variograms of the gold values to provide a basis for the selection of the variogram nugget. Multiple variograms were then created in the plane of the mineralization wireframes with a range of orientations to identify those orientations that provided the best variogram models. A constant nugget was used for all variogram models, while the lag distances were adjusted to accommodate the data spacing characteristics along the given direction under examination. An angular tolerance of 22.5° was used in most cases, however, analysis of the impacts of alternate angular tolerances on the resulting variogram models were also examined.

14.2.8.2 Grade Contouring

As an aid in understanding the distribution and continuity of the gold grades in the mineralized domains, a short study to examine the overall trends was conducted. For this exercise, four of the larger wireframe domains were selected to attempt to provide information for as much of the strike length of the mineralization outlined by drilling as possible. Due to the presence of multiple tabular, sub-parallel mineralized gold domains, only one of the domains, MIN 101 is presented. Gold grades within these domains were contoured in three dimensions using the full-length composited assay data, using the Radial Basis Function (RBF) Interpolant feature of Leapfrog Geo, and the results were visualized. For ease of viewing, a maximum contour value of 5 g/t Au was imposed upon the contouring process. The result for MIN 101 is shown in longitudinal section in Figure 14-4.

While the contours appear to demonstrate a gentle to moderate plunge towards the south, further drilling will be required to clearly define the deposits anisotropy for use in the Mineral Resource estimation process. For the current update, the major directions are set to parallel to the dip and dip direction of the deposit.

Looking West

Au ppm

▨	>5.0
▨	2.5 - 5.0
▨	1.0 - 2.5
▨	0.5 - 1.0
▨	0.3 - 0.5
▨	0.1 - 0.3
▨	0.01 - 0.1
▨	<0.01
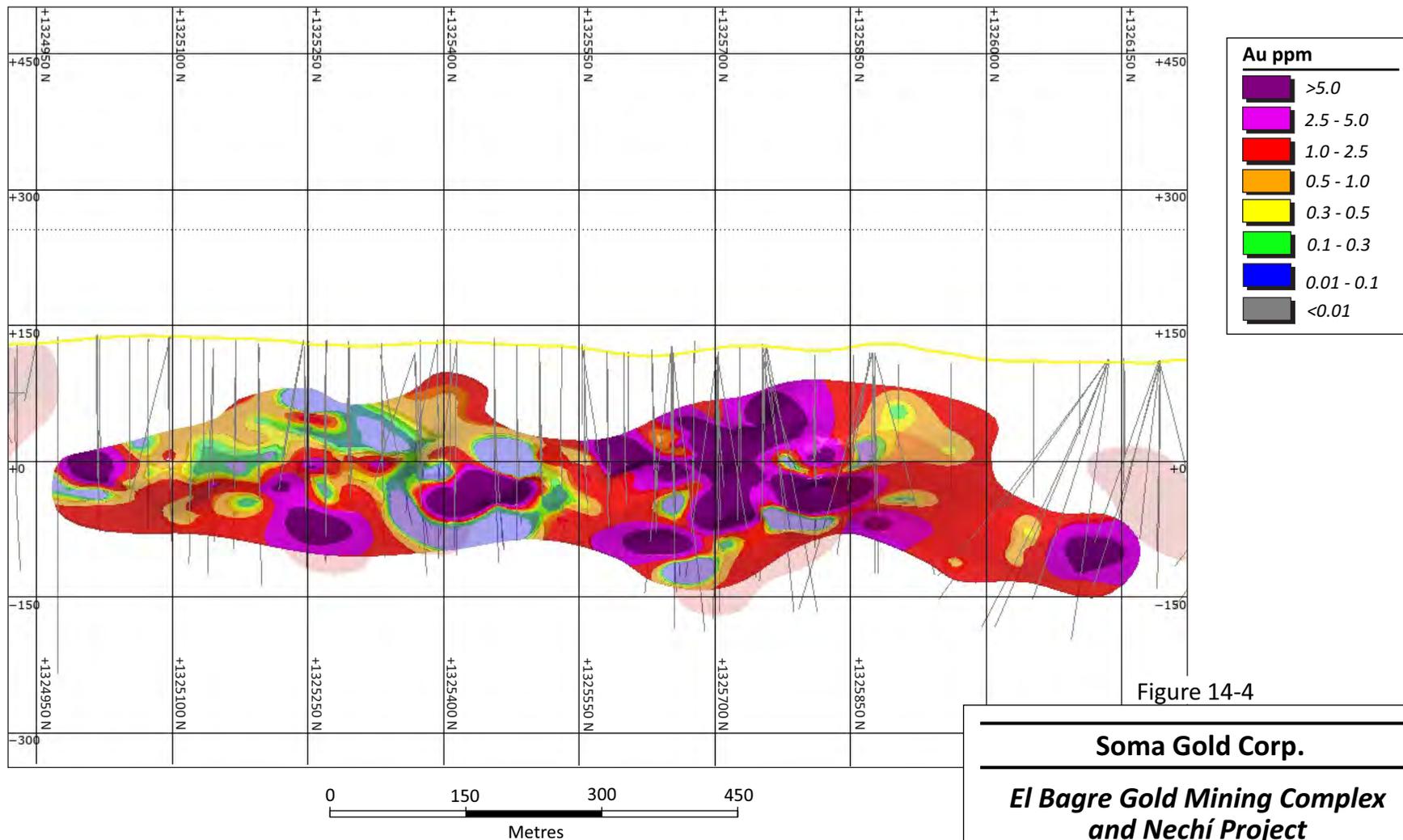
Figure 14-4

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Longitudinal Section of MIN 101 Showing Grade Countours

January 2023   *Source: SLR, 2022.*

14.2.9 Search Strategy and Grade Interpolation Parameters

Gold grades were estimated into the blocks for the wireframes separately, using the ID^3 interpolation method. A two-pass approach was used as presented in Table 14-7. The first estimation pass corresponded to the average drill hole spacing. Due to the widespread nature of the drill holes in many areas of the deposit, a second estimation pass was required populate all blocks within the wireframes with grade. The search distances used in the second estimation passes were double the first estimation pass. Search ellipses for grade interpolation were oriented using dynamic anisotropy (in Leapfrog Edge called Variable Orientation) with the longest axis aligned with the dip and dip direction of the deposit.

Hard domain boundaries were used for all mineralization wireframe volumes such that only those composite samples contained within a specific wireframe were used to estimate the grades for the specific wireframe, and only those blocks with centroids located within the given wireframe were permitted to receive estimated grades. A total of nine estimation runs were carried out for the mineralization wireframes. A summary of the search parameters used to estimate the gold grades is presented in Table 14-7.

Table 14-7: **Summary of Search Strategies, Cordero Deposit**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Search Parameters	Pass #1	Pass #2
Inverse Distance Cubed		
Minimum number of composites	2	1
Maximum number of composites	8	8
Maximum Samples per Hole	2	3
Constrain by Drill Hole	N	N
Inverse Distance Power	3	3
Length of Major Axis (X) (m)	100	200
Length of Intermediate Axis (Y) (m)	70	140
Length of Minor Axis (Z) (m)	10	10
Variable Orientation	Y	Y

14.2.10 Bulk Density

Bulk density measurements were collected for host rock and mineralization samples from drill holes completed during the 2017 and 2018 drilling campaigns. For more information see section 11.2.3.

Density values were assigned to model blocks by rock type according to the average densities listed in Table 14-8.

Table 14-8: **Average Bulk Densities, Cordero Deposit**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Material	Density Value	Number of Measurements
Overburden	2.2	-

Material	Density Value	Number of Measurements
Saprolite	2.2	-
Dacite	2.66	2
Gabbro	2.7	-
Shear	2.64	17
Diorite	2.68	3
Tonalite	2.73	-

The SLR QPs recommend that additional density measurements be collected from representative samples of the mineralized intervals to improve the level of accuracy of the density values used to code the block model. A minimum of fifty density measurements per rock unit should be collected at Cordero to have a better understanding of the density behavior across the deposit.

14.2.11 Cut-off Grade

Metal prices used for reserves are based on consensus, long term forecasts from banks, financial institutions, and other sources. For resources, metal prices used are slightly higher than those for reserves.

The underground cut-off grades and assumptions are given in Table 14-9.

Table 14-9:   Cordero Mineral Resource Cut-off Grade Assumptions
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Parameter	Cordero
Cut-off Grade (g/t Au)	2.4
Au Price (US$/oz)	$1,800
Mining Cost (US$/t)	$56
Processing and G&A (US$/t)	$52
Haulage Cost (US$/t)	-
Total Operating Cost (US$/t)	$108
Metallurgical Recovery (%)	87%

The cut-off grade described was an input for the generation of underground reporting shapes using DSO.

14.2.12 Block Model

In order to remain compatible with the requirements of the DSO software package, an upright, rotated, sub-blocked, block model was constructed for the mineralization contained within the Cordero deposit using the Leapfrog Geo software package. The block model used a parent block size of 2 m x 2 m x 2 m (across strike, along strike, elevation), one level of sub-blocking across strike and along strike, and two levels of sub-blocking through elevation using the octree sub-blocking format (i.e., minimum sub-block sizes of 1 m x 1 m x 0.5 m across strike, along strike, elevation). The block model block sizes were selected in consideration of the sizes and geometries of the mineralized wireframes and mining method.

Details regarding the block model origin, dimensions, rotation, and block sizes are provided in Table 14-10 and plan views of the block model are provided in Figure 14-5. Several attributes were created during the estimation process to store information such as material types, densities, gold grades, estimation results, and classification information, as summarized in Table 14-11.

Table 14-10: Block Model Definition, Cordero Deposit
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Type	Units	Easting (X)	Northing (Y)	Elevation (Z)
Parent Block Size	m	2	2	2
Sub-block Size	m	1	1	0.5
Base Point	m	919,530	1,324,060	160
Boundary Size	m	440	2,550	358
Rotation	°	0	0	0
Size in Blocks		220	1,275	179

Table 14-11: List of Block Model Attributes, Cordero Deposit
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Attribute Name	Type	Description
COR_CLASS	Calculated category column	Final classification
COR_GM	Category evaluation, on sub-block centroids	Geology codes
COR_SHEAR	Category evaluation, on sub-block centroids	Mineralization codes
AU_FIN	Calculated numeric column	Final Au values
DENSITY	Calculated numeric column	Final density values
Workings	Category evaluation, on sub-block centroids	Underground workings
AUC75_ID3	Numeric evaluation, on parent block centroids	ID^3 Estimated Au Values, full-length, capped composites
AUC75_ID3: Dom	Evaluation attribute	ID^3 estimation domains
AUC75_ID3: Est	Evaluation attribute	ID^3 estimation pass
NN_AUC75	Numeric evaluation, on parent block centroids	NN estimated Au values, full-length capped composites

Extents and Mineralization   Block Grade   Classification

Legend:
- MIN_101
- MIN_102
- MIN_103
- MIN_104
- MIN_105
- MIN_106
- MIN_107
- MIN_108
- MIN_109

Au ppm
- > 5.0
- 2.5 - 5.0
- 1.0 - 2.5
- 0.5 - 1.0
- 0.3 - 0.5
- 0.1 - 0.3
- < 0.1
- 0

Legend:
- Indicated
- Inferred
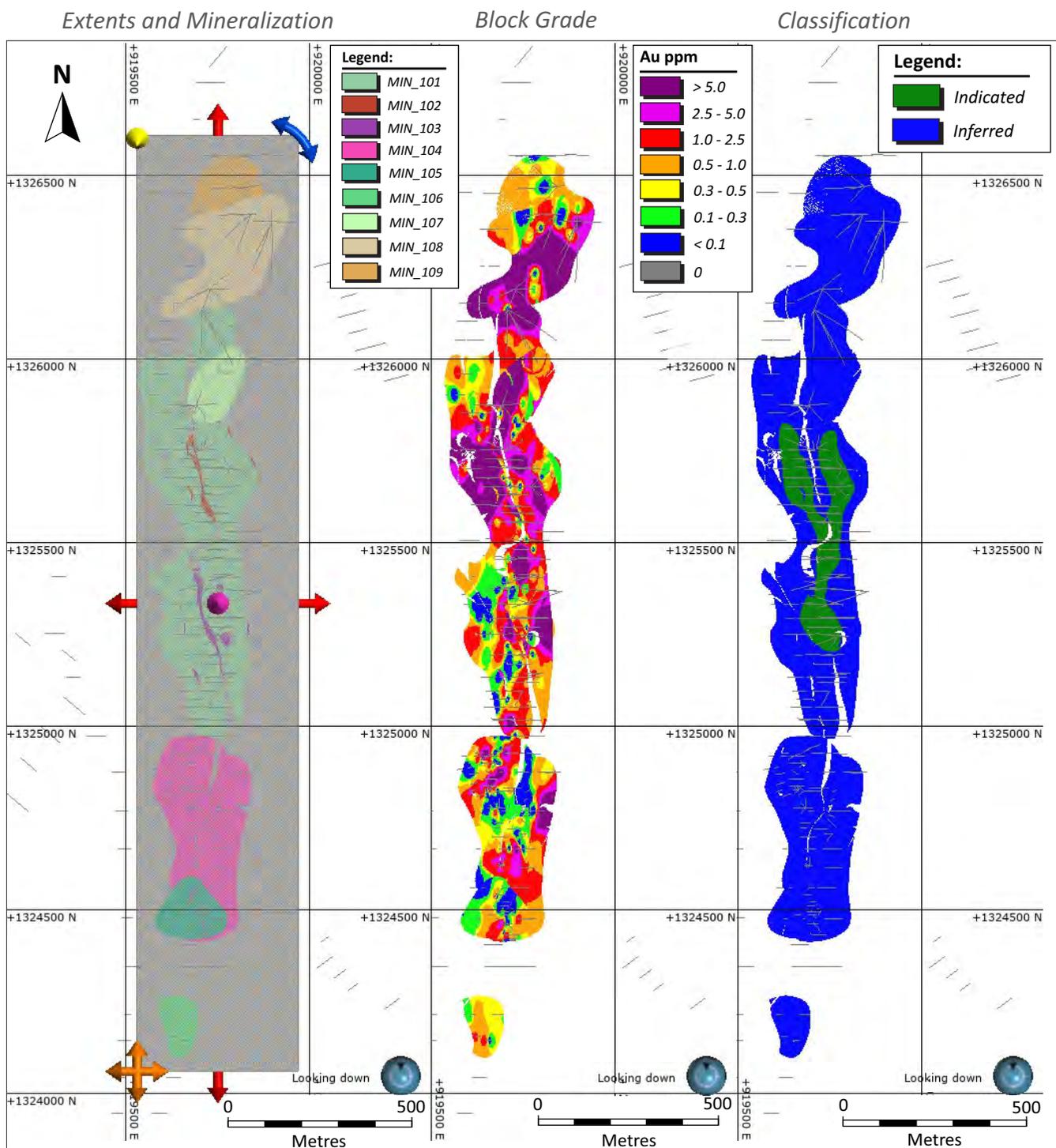
Figure 14-5

Soma Gold Corp.

**El Bagre Gold Mining Complex
and Nechí Project**
Department of Antioquia, Colombia
**Plan Views of the Cordero
Block Model**

January 2023   **Source: SLR, 2022.**

14.2.13 Classification

Definitions for resource categories used in this report are consistent with those defined by CIM (2014) and adopted by NI 43-101. In the CIM classification, a Mineral Resource is defined as "a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction". Mineral Resources are classified into Measured, Indicated, and Inferred categories. A Mineral Reserve is defined as the "economically mineable part of a Measured and/or Indicated Mineral Resource" demonstrated by studies at Pre-Feasibility or Feasibility level as appropriate. Mineral Reserves are classified into Proven and Probable categories.

All Mineral Resources within the wireframes have been classified as Inferred. For Indicated, classification was based on a nominal 25 m drill hole spacing, which is more conservative than the criteria which was used previously at the La Ye and Los Mangos mines, due to the risks associated with the dyke. Some Indicated has been defined based on drill spacing beyond 25 m where the continuity of mineralization is well supported.

A plan view of the final classification applied to blocks is shown in Figure 14-5.

14.2.14 Block Model Validation

Blocks were validated using industry standard techniques including:

- Visual inspection of composite versus block grades (Figure 14-6)
- Comparison between ID^3 and NN mean swath plots (Figure 14-7)
- Wireframe to block model volume confirmation (Table 14-12)

SLR viewed gold grades and proportions relative to the blocks, drilled grades, composites, and modelled solids. SLR observed that the block grades exhibited general accord with drilling and sampling and did not appear to over extrapolate significantly beyond high grade sampled grades. Swath plots generally demonstrated good correlation between the block model and the input data, with gold block grades being somewhat smoothed relative to composite grades, as expected.

Table 14-12: Block Model and Wireframe Volumes
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

| Zone | Mean Thickness | Volume | | Difference |
| | | Block Model | Geologic Model | |
	m	m^3	m^3	%
MIN_101	3.01	614,401	614,380	0.0%
MIN_102	0.91	27,827	27,803	-0.1%
MIN_103	2.89	108,559	108,590	0.0%
MIN_104	2.47	294,672	294,780	0.0%
MIN_105	3.95	74,427	74,465	0.1%
MIN_106	1.80	28,260	28,260	0.0%
MIN_107	2.99	55,798	55,823	0.0%

| Zone | Mean Thickness | Volume | | Difference |
| | | Block Model | Geologic Model | |
	m	m³	m³	%
MIN_108	1.93	114,558	114,520	0.0%
MIN_109	0.82	35,485	35,527	0.1%

A visual comparison of the estimated gold values with the composited drill hole grades for MIN 101 is presented in Figure 14-6.   Swath plots for the combined mineralized domains are presented in Figure 14-7.

Looking West

Au ppm
- >5.0
- 2.5 - 5.0
- 1.0 - 2.5
- 0.5 - 1.0
- 0.3 - 0.5
- 0.1 - 0.3
- 0.01-0.1
- <0.01
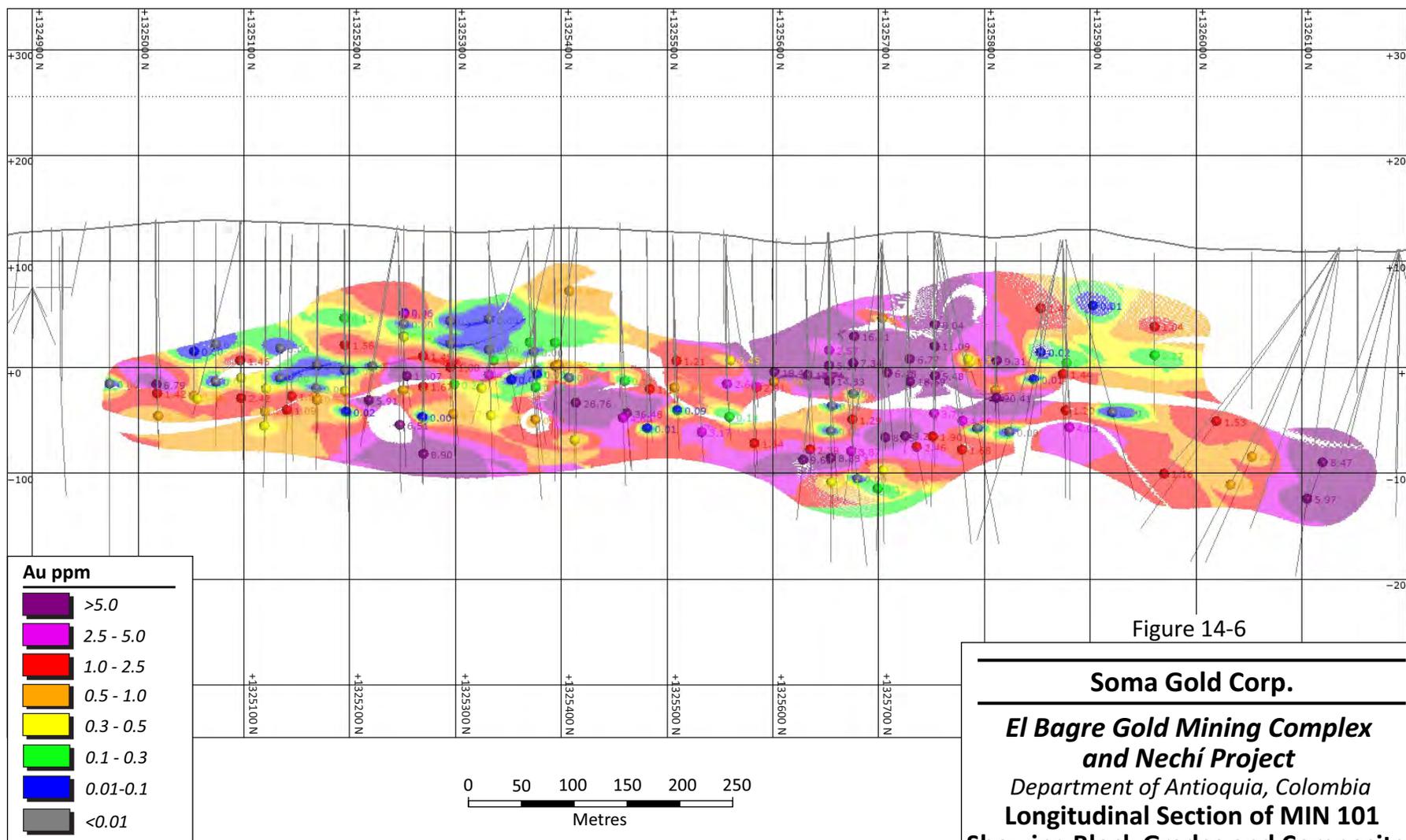
Figure 14-6

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Longitudinal Section of MIN 101 Showing Block Grades and Composites

0 50 100 150 200 250
Metres

January 2023   *Source: SLR, 2022.*
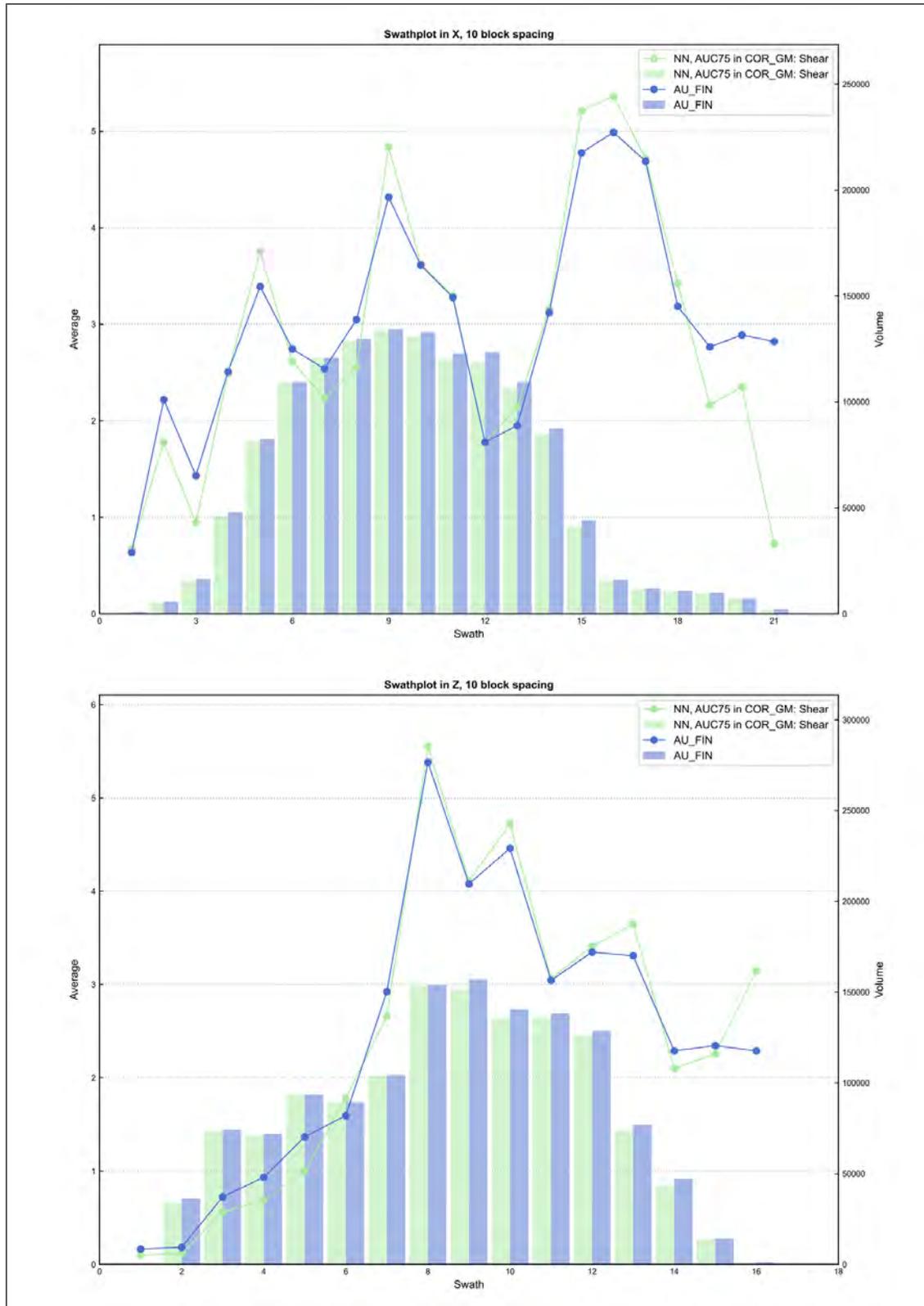
Figure 14-7: **Cordero Northing and Elevation Swaths**

14.3 Nechí

14.3.1 Summary

The Nechí Mineral Resources were estimated and disclosed by RPA (now SLR) in the previous technical report (RPA, 2020). The QPs have reviewed the inputs used and consider them to be appropriate. The SLR QPs consider the cut-off grade used appropriate and consider the estimate to be current. The SLR QPs recommend updating the estimate in the future if additional sample information becomes available, or if economic parameters such as forecasted gold prices or estimated operating costs change significantly.

Nechí consists of the El Catorce, Santa Elena, and Santa Maria deposits. Test mining was performed on one level at both El Catorce and Santa Elena with underground sampling along the levels and in raises driven up the dip of the veins. Material from the test mining was processed at the El Bagre Plant. There has been no drilling or any other type of investigation to provide additional support data at Nechí since the last Mineral Resource estimate completed in 2018. A summary of the Nechí Mineral Resources, as of December 31, 2022, unchanged from December 31, 2018, is given in Table 14-13. The relative locations of each deposit are shown in Figure 14-8.

Table 14-13:   Nechí Mineral Resource Estimate by Zone – December 31, 2022
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Category	Tonnage (kt)	Grade (g/t Au)	Contained Metal (koz Au)
Indicated			
El Catorce	55.6	5.1	9.0
Santa Elena	37.6	6.7	8.1
Santa Maria	216.6	4.5	31.5
Total Indicated	**309.8**	**4.9**	**48.6**
Inferred			
El Catorce	187.6	7.6	45.9
Santa Elena	54.3	7.6	13.3
Santa Maria	162.7	4.9	25.5
Total Inferred	**404.7**	**6.5**	**84.7**

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 3.1 g/t Au.
3. Mineral Resources are estimated using a long-term gold price of US$1,500 per ounce.
4. A minimum mining width of 1.3 m was used.
5. Bulk density is 2.0 t/m³ for saprolite and ranges between 2.68 t/m³ and 2.75 t/m³ for fresh rock.
6. There are no Mineral Reserves estimated for Nechí.
7. Numbers may not add due to rounding.
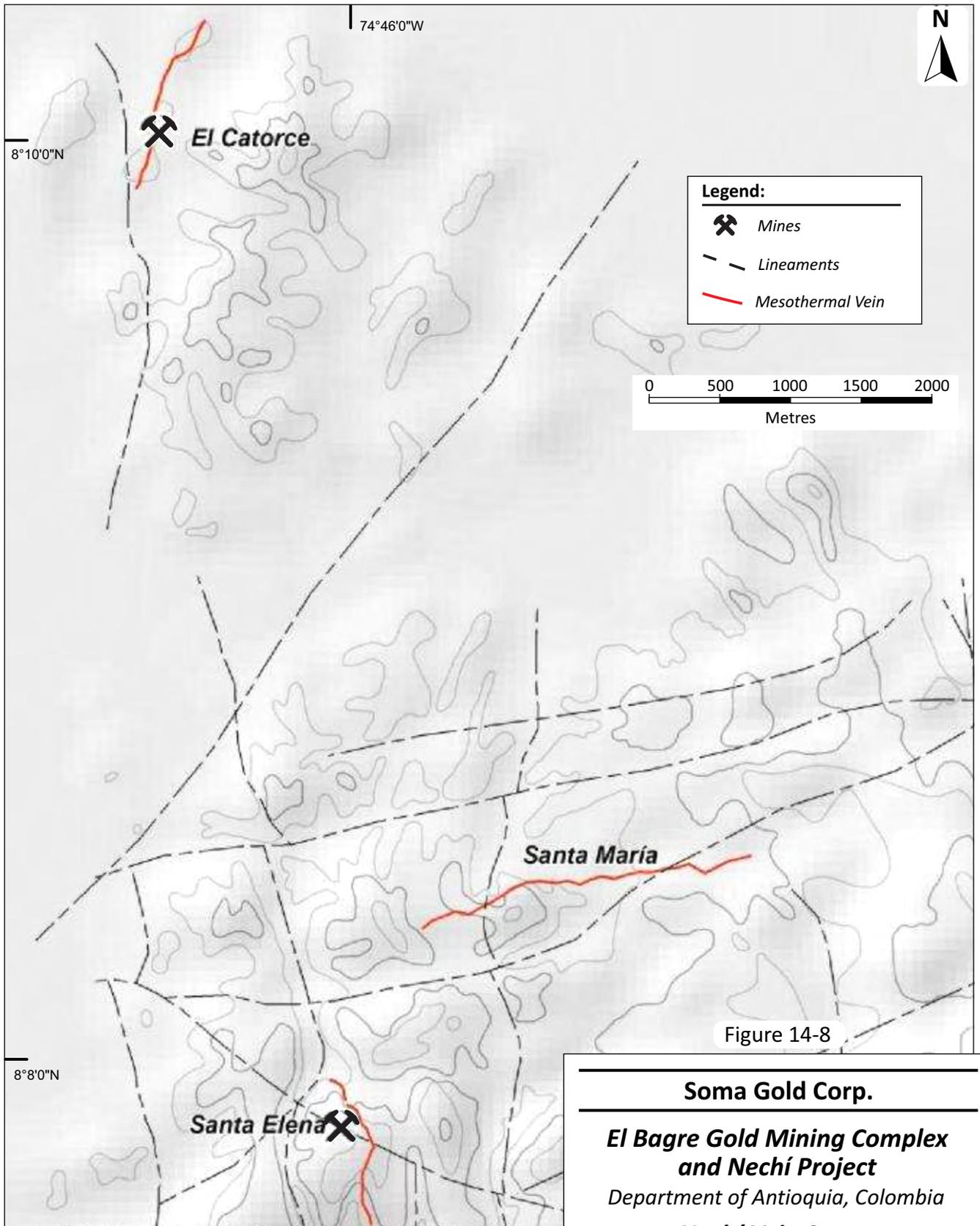
Figure 14-8

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project

Department of Antioquia, Colombia

Nechí Vein System

14.3.2 Resource Database

The Mineral Resource estimates for the Nechí deposits were based on 329 surface drill holes totalling 41,442 m of drilling and 1,154 underground channel samples totalling 2,000 m of sampling. The databases provided by Mineros, the previous owner, for Mineral Resource estimation represent subsets of the master database, only covering the areas estimated. The database includes information up to December 31, 2018. There has been no additional drilling completed at Nechí for the 2022 Mineral Resource estimate and the resource database remains unchanged.

A summary of the database is presented in Table 14-14 and the drill hole collars for the Mineral Resource database are shown in Figure 14-9.

Table 14-14:   Nechí Mineral Resource Database
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

	DDH		UG Channels		Combined	
Deposit	DDH	Total Length (m)	Channel Samples	Total Length (m)	DDH + Channels	Total Length (m)
El Catorce	94	13,243.8	772	1,469.3	866	14,713.1
Santa Elena	138	16,900.0	382	530.7	520	17,430.7
Santa Maria	97	11,298.1			97	11,298.1
Total	329	41,441.9	1,154	2,000.0	1,483	43,441.9

N

El Catorce

0 300 600 900 1200 1500
Metres

Drill Hole Collar
and Traces

Santa Maria

Santa Elena
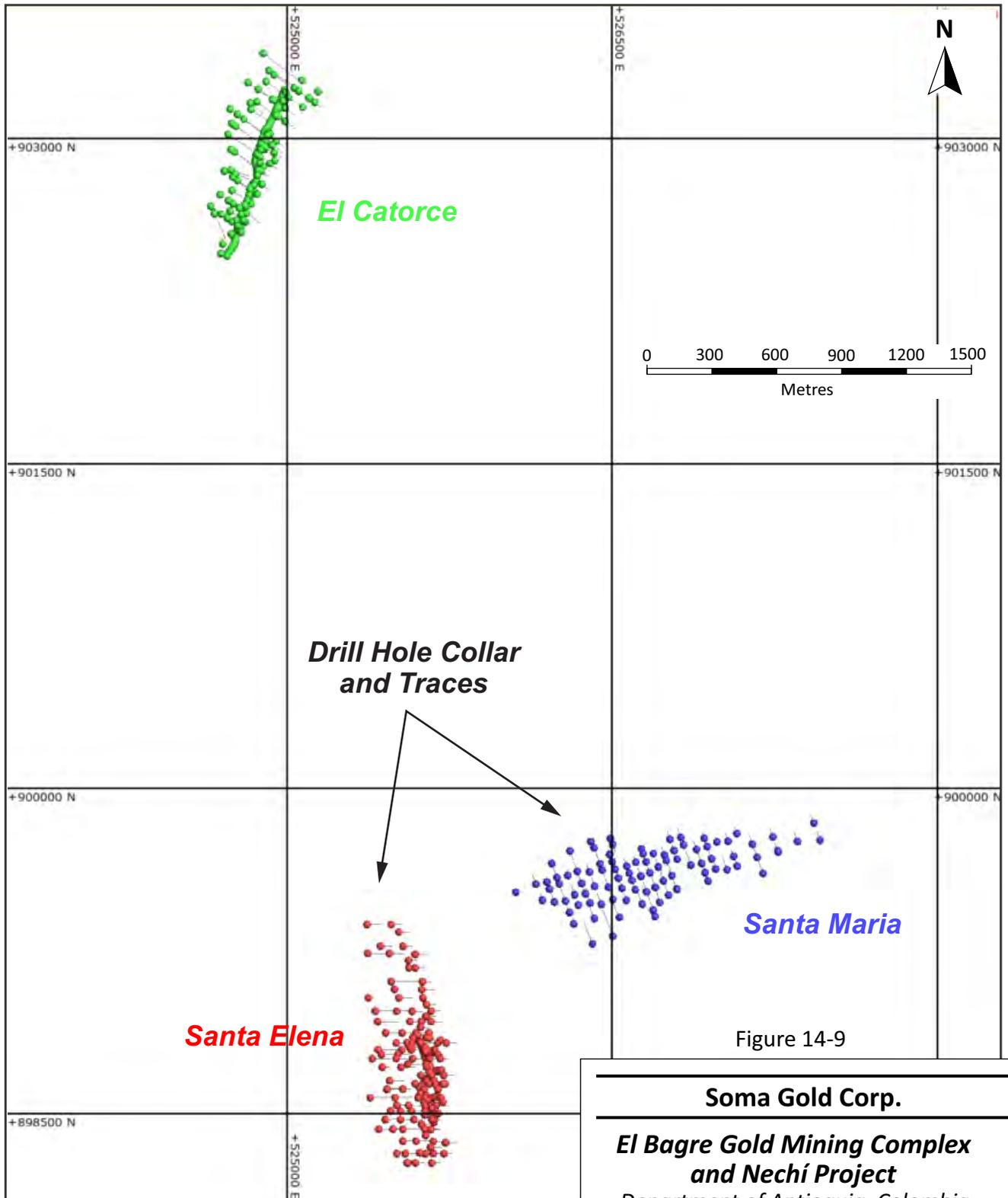
Figure 14-9

Soma Gold Corp.

*El Bagre Gold Mining Complex
and Nechí Project*
Department of Antioquia, Colombia
**Nechí Mineral Resource
Drill Holes**

+525000 E
+526500 E
+903000 N
+901500 N
+900000 N
+898500 N
+525000 E

14.3.3 Geological Interpretation

Wireframes solids for Nechí were completed by RPA, now SLR, using Leapfrog version 4. The interpretations were primarily based on vein and shear entries from the drill hole and underground channel sample logs but were also aided by geological mapping of underground drifts and raise mapping in the cases of El Catorce and Santa Elena where test mining took place. In instances where the vein logs were missing from the database, RPA inferred continuity of the vein by selecting grade intervals in the plane of the vein. In all cases the wireframes represent a series of closely spaced vein wireframes for each area.

Mineralization for all the Nechí structures exhibit a large amount of short-range variability and sample grades of economic interest tend to occur in clusters intermixed with low grades. Grade estimates constrained only by the overall structures tend to exhibit large amounts of smearing. For this reason, for El Catorce and Santa Elena, RPA applied additional high-grade constraints to areas which, on average, exceeded a nominal 1.0 g/t Au cut-off grade.

The El Catorce, Santa Elena, and Santa Maria wireframes are shown in Figure 14-10 to Figure 14-12 and the El Catorce and Santa Elena high grade wireframes are shown in Figure 14-13 and Figure 14-14.

14.3.4 Density

Density values were assigned to blocks based on arithmetic averages of density measurements taken within the veins for fresh rock, and a value of 2.0 g/cm^3 was assigned to saprolite. A summary of the density assignments is provided in Table 14-15.

Table 14-15:   Assigned Density Data for Nechí
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Deposit	Min Density (t/m^3)	Max Density (t/m^3)	Average Density (t/m^3)	Number of Measurements
El Catorce	2.06	3.75	2.68	107
Santa Elena	1.3	4.6	2.75	110
Santa Maria	No values available, 2.74 assigned			

Looking East

Legend

Au (g/t)

- ■ < 0.5
- ■ 0.5 - 1.0
- ■ 1.0 - 2.0
- ■ 2.0 - 5.0
- ■ > 5.0

January 2023

Source: RPA, 2020.

0 50 100 150 200 250

Metres
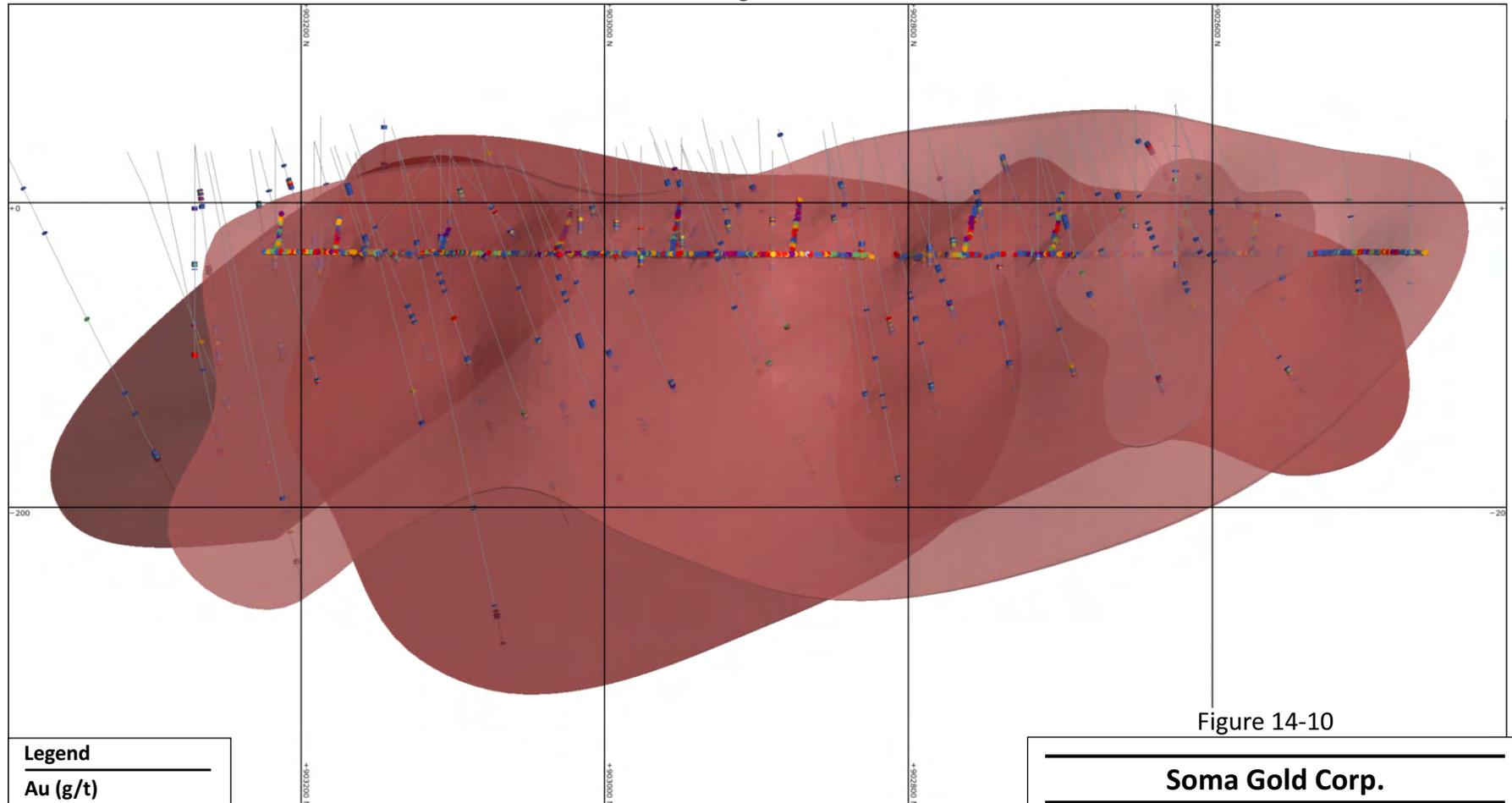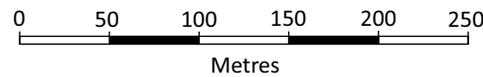
Figure 14-10

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Longitudinal View of the El Catorce Mineralization Wireframes

Legend

Au (g/t)

▢ (blue)	< 0.5
▢ (green)	0.5 - 1.0
▢ (orange)	1.0 - 2.0
▢ (red)	2.0 - 5.0
▢ (purple)	> 5.0

January 2023

Source: RPA, 2020.

0   50   100   150   200   250

Metres
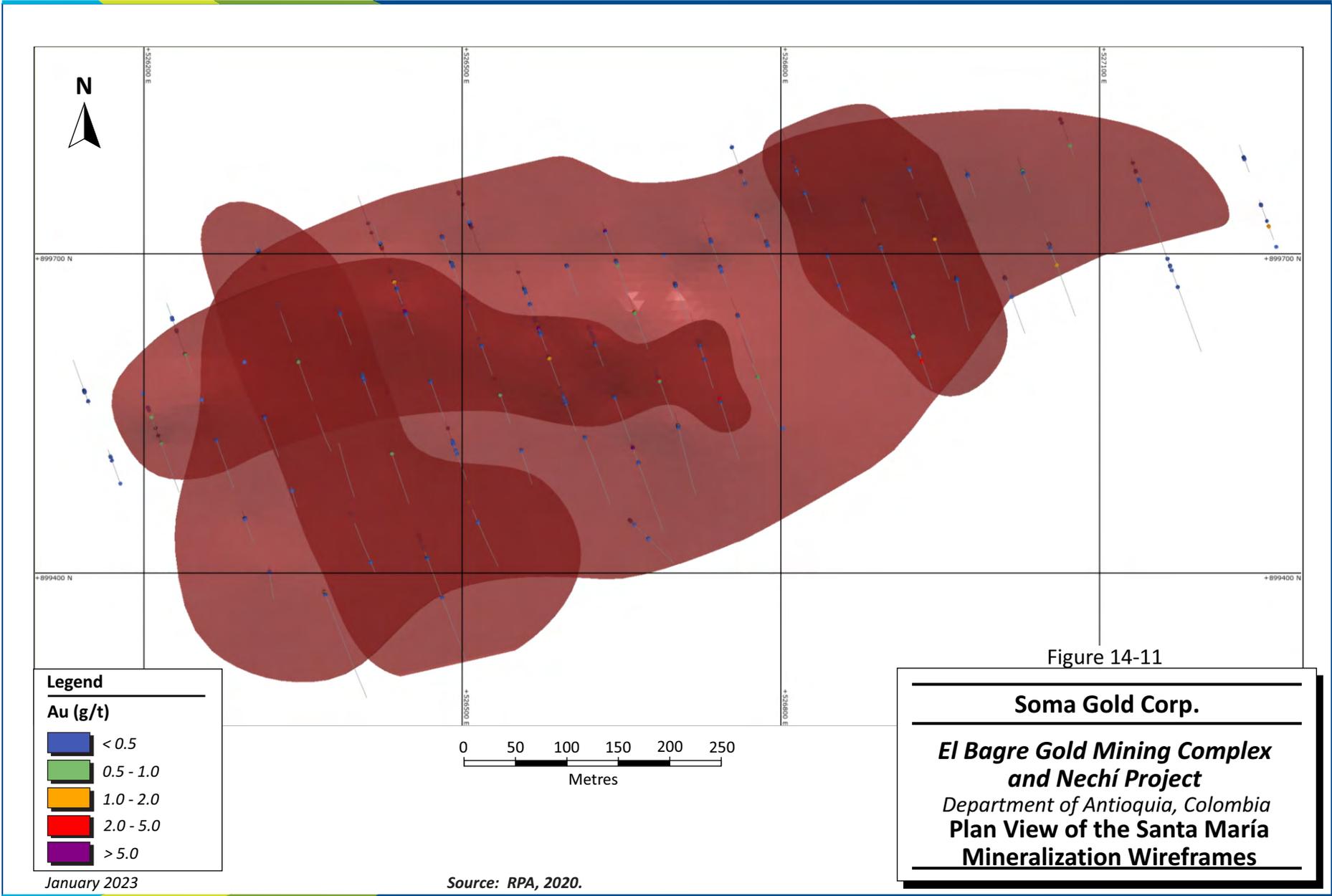
Figure 14-11

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Plan View of the Santa María Mineralization Wireframes
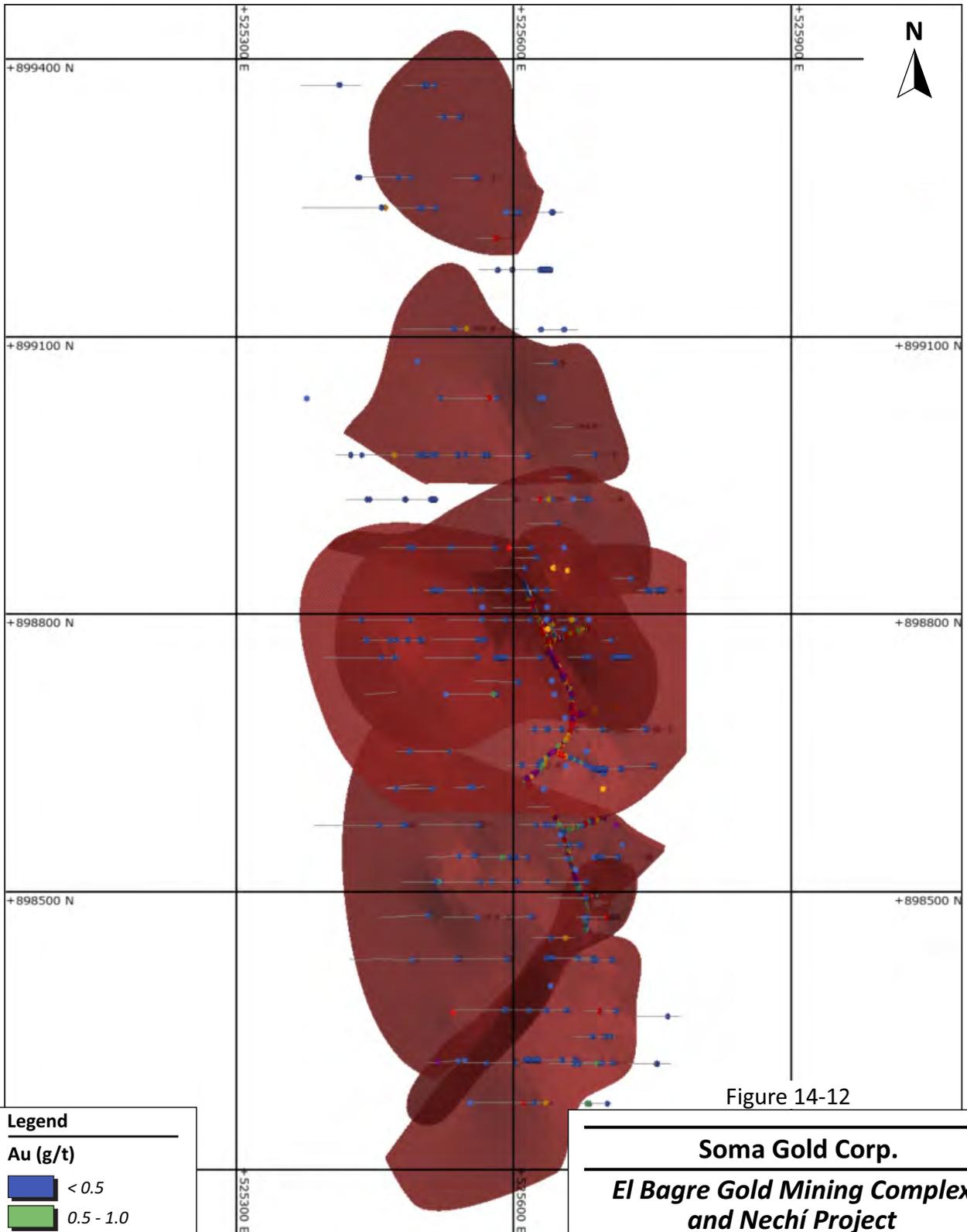
Figure 14-12

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Plan View of the Santa Elena Mineralization Wireframes

Legend

Au (g/t)

- < 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- 2.0 - 5.0
- > 5.0

January 2023

Source: RPA, 2020.

Looking East
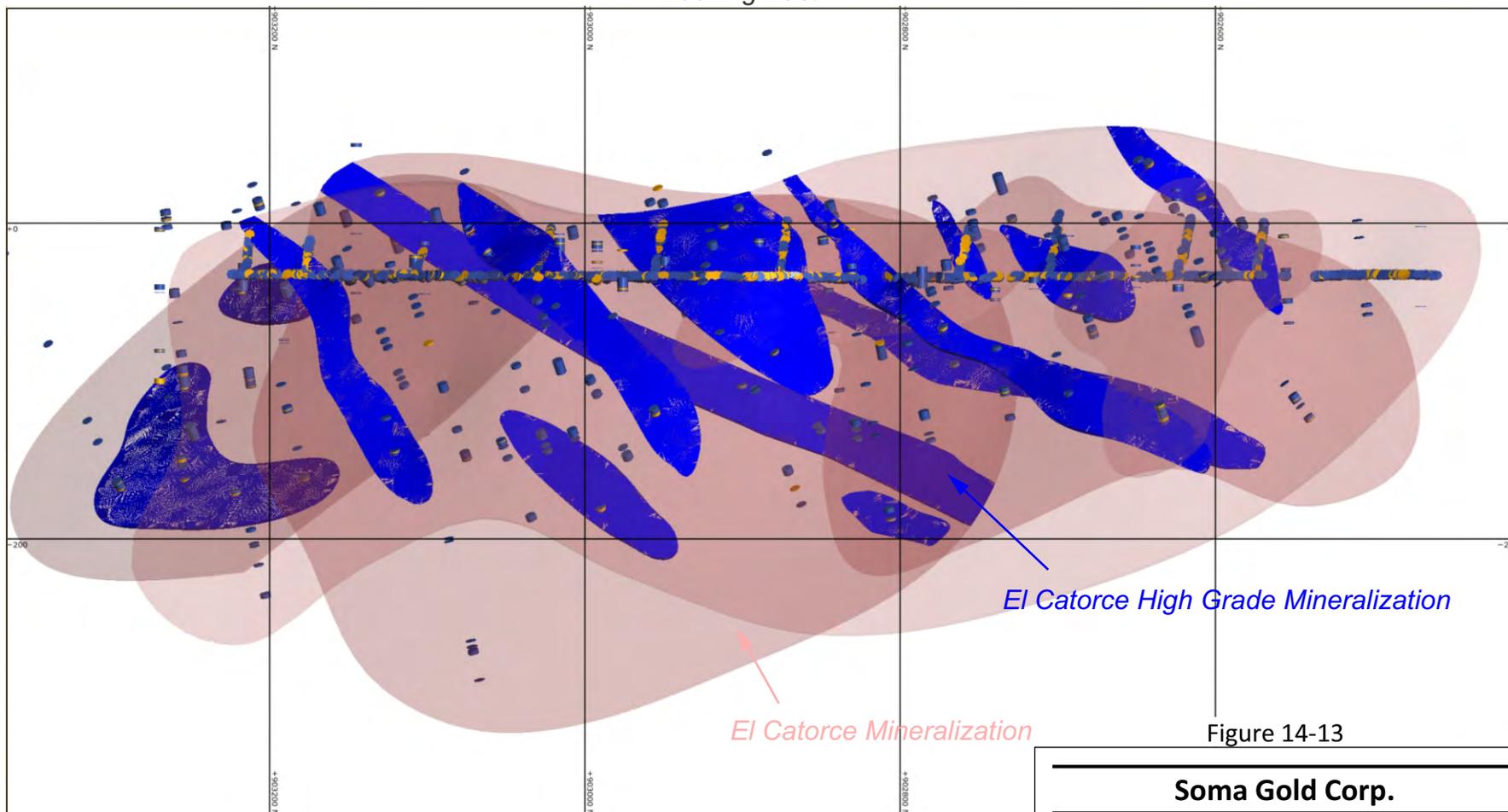
El Catorce High Grade Mineralization

El Catorce Mineralization

Figure 14-13

Au (g/t)

🟧	< 2.0
🟦	> 2.0

0   50   100   150   200   250

Metres

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Longitudinal View of the El Catorce High Grade Wireframes
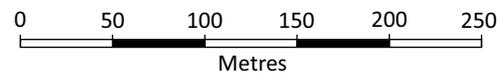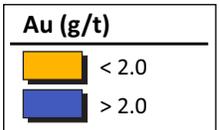
January 2023

Source: RPA, 2020.
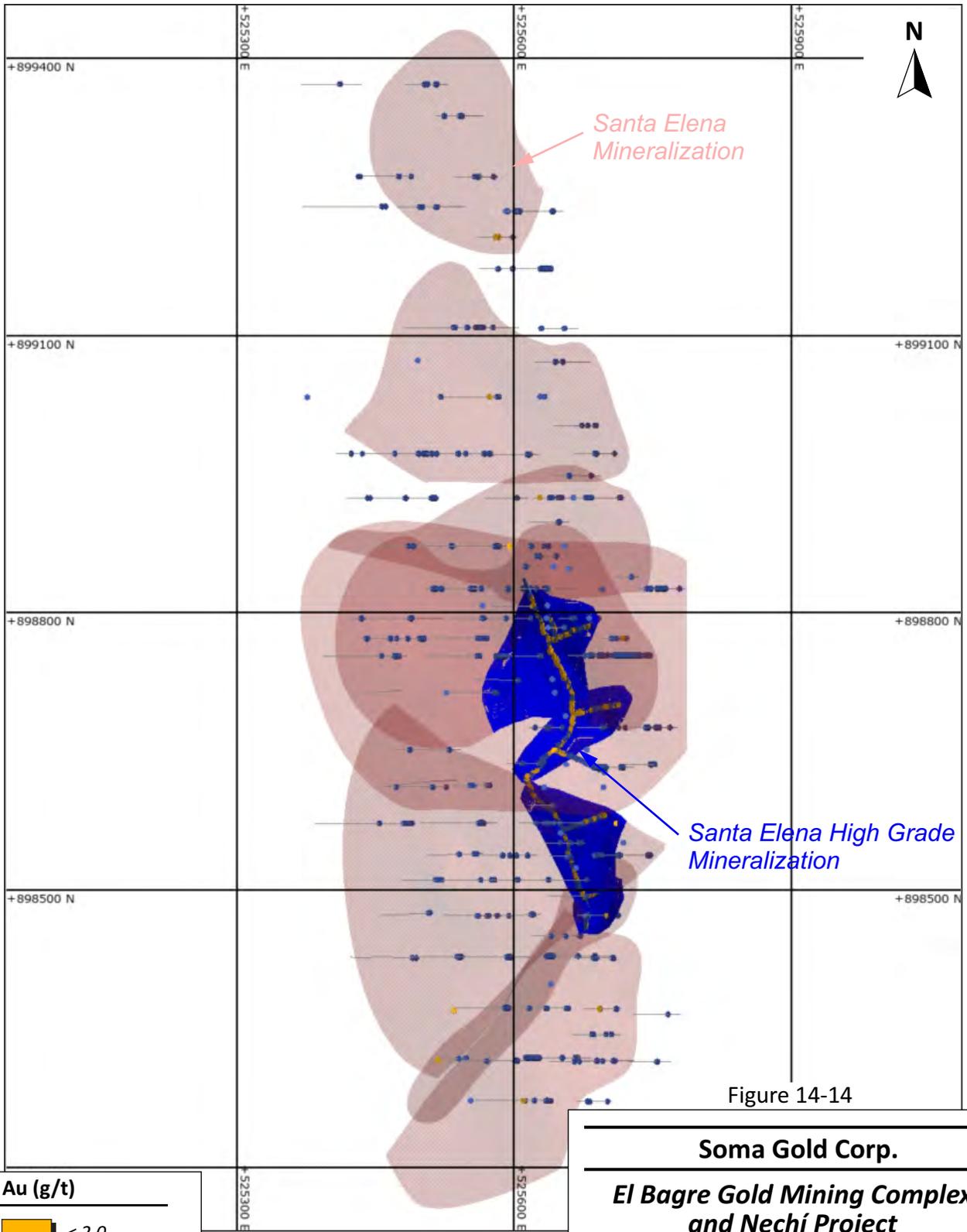
Figure 14-14

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Plan View of the Santa Elena High Grade Wireframes

January 2023   **Source: RPA, 2020.**

14.3.5 Capping and Compositing

Raw assays were capped at different levels for each deposit based on a consensus between a number of capping analysis techniques including histograms, spatial analysis, and probability plots. A summary of the raw and capped assays is given in Table 14-16.

Assays were composited over the full width of the wireframe intercept and zeros were substituted for unsampled intervals. Boxplots for the composite widths are shown in Figure 14-15 and composite statistics are given in Table 14-17.

Table 14-16:   Assay and Capping Statistics Nechí
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

	El Catorce	Santa Elena	Santa Maria
Uncapped			
Count	2,267	804	208
Mean (g/t Au)	2.45	4.03	3.61
Standard Deviation (g/t Au)	6.71	11.19	10.21
CV	2.74	2.78	2.83
Variance	45.04	125.26	104.27
Min (g/t Au)	0.01	0.01	0.01
Max (g/t Au)	148.00	171.00	130.00
Capped			
Capping Grade (g/t Au)	50	35	20
Count	2,315	1,041	279
Mean (g/t Au)	2.29	3.02	1.84
Standard Deviation (g/t Au)	5.33	6.22	3.99
Coefficient of Variation	2.33	2.06	2.17
Variance	28.39	38.66	15.90
Max (g/t Au)	0.00	0.00	0.00
Metal Loss	-7%	-25%	-49%

Table 14-17:   Capped Composite Statistics for Nechí
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

	El Catorce	Santa Elena	Santa Maria
Count	910	561	114
Mean (g/t Au)	2.29	3.02	1.84
Standard Deviation (g/t Au)	3.25	5.30	2.42

	El Catorce	Santa Elena	Santa Maria
Coefficient of Variation	1.42	1.76	1.32
Variance	10.58	28.05	5.87
Min (g/t Au)	0.00	0.00	0.00
Max (g/t Au)	28.80	35.00	20.00
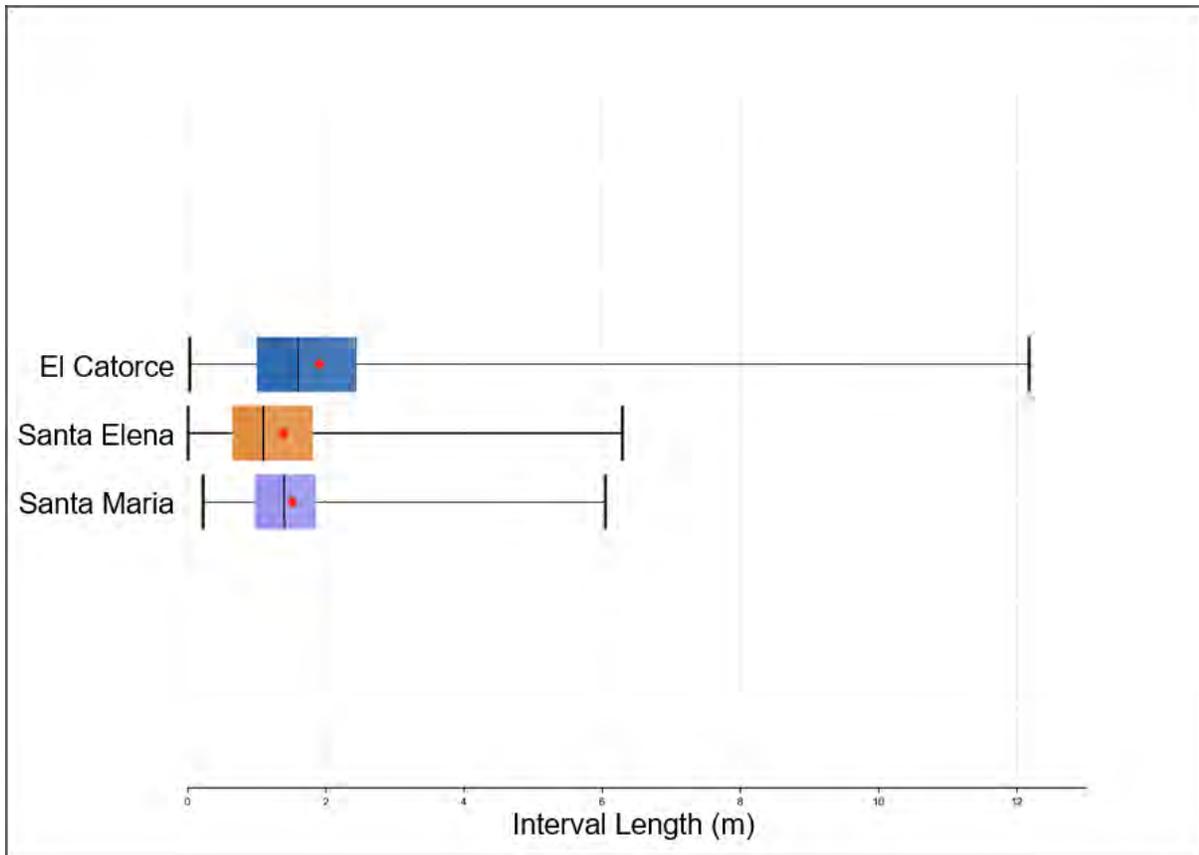
Figure 14-15: **Composite Lengths for Nechí**

14.3.6 Cut-off Grade

Metal prices used for reserves are based on consensus, long term forecasts from banks, financial institutions, and other sources. For resources, metal prices used are slightly higher than those for reserves.

The underground cut-off grades and assumptions are given in Table 14-18.

Table 14-18:   Nechí Mineral Resource Cut-off Grade Assumptions
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Parameter	All Nechí
Cut-off Grade (g/t Au)	3.1
Au Price (US$/oz)	$1,500
Mining Cost (US$/t)	$56
Processing and G&A (US$/t)	$52
Haulage Cost (US$/t)	$23
Total Operating Cost (US$/t)	$131
Metallurgical Recovery (%)	87%

14.3.7 Block Model

The wireframes were filled with parent cells measuring 2 m x 2 m x 2 m in each direction, except for Santa Maria, which used 4 m x 4 m x 2 m blocks. For all Nechí models, the parent cells were sub-celled at wireframe boundaries. A summary of the block model setups is given in Table 14-19.

Table 14-19:   Nechí Block Model Setups
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

	El Catorce	Santa Elena	Santa Maria
Min Coordinates (X,Y,Z (m))	(524,630, 902,420, -342)	(525,360; 898,150 ; -148)	(526,040; 899,660; 60)
Max Coordinates (X,Y,Z (m))	(525198; 903,436; 70)	(525,794; 899,438 ; 100)	(526,808; 900,940; 316)
Block Sizes (m)	(2; 2; 2)	(2; 2; 2)	(4; 4; 2)
Min Sub-cell (m)	(0.5; 0.5; 0.5)	(0.5; 0.5; 0.5)	(1; 1; 0.5)
Rotation	(0; 0; 0)	(0; 0; 0)	(65; -30; 0)

14.3.8 Interpolation Strategy

Grades were interpolated into blocks using ID^2 for all Nechí domains. Estimates were length weighted by interpolating a grade accumulation attribute (grade multiplied by thickness). The intercept length attribute was interpolated for weighting purposes using the same strategy as the grade accumulation. A vein thickness attribute based on the perpendicular distance between the hanging wall and footwall surfaces of the vein wireframes was assigned to the model using Leapfrog's RBF and was used to determine diluted tonnes and grades for resource reporting to a minimum mining width of 1.3 m.

Where a high-grade domain existed, only composites and blocks inside the high grade domains were used, with the exception of El Catorce, where the main structure allowed a 1.0 m soft boundary with the rest of the mineralization wireframe.

The interpolation parameters used are listed in Table 14-20.

Table 14-20: **Nechí Interpolation Parameters**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

	El Catorce	Santa Elena	Santa Maria
Rotation 1	59.44	32.97	090
Rotation 2	288.33	254.5	0
Rotation 3	35.33	50	0
Pass 1			
Major Range (m)	120	60	60
Semi-Major Range (m)	25	15	40
Minor Range (m)	25	15	60
Min Samples per Block	1	1	1
Max Samples per Block	8	8	4
Pass 2			
Major Range (m)	150	150	120
Semi-Major Range (m)	35	35	80
Minor Range (m)	35	35	120
Min Samples per Block	1	1	1
Max Samples per Block	8	8	4

14.3.9 Block Model Validation

The block models were validated using industry standard techniques including:

- Visual inspection of block versus composite grades (Figure 14-16 to Figure 14-18)
- Global comparisons between block and composite means (Table 14-21)
- Swath plots (Figure 14-19 to Figure 14-21)

In general, there is a good visual agreement between the composites and block grades. The swath plots show a reasonable reproduction of the underlying data.

For all models, there is a reasonable agreement between the estimate and NN means. For El Catorce and Santa Elena, there is a poor agreement between the block and composite means due to the clustering of high grade underground channel samples in the mined-out areas.

In the SLR QPs' opinion, the validation results are reasonable.

Table 14-21: **Nechí Comparison Between Means**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Deposit	Blocks (g/t Au)	NN (g/t Au)	Composites (g/t Au)	Blocks/NN	Blocks/Composites
El Catorce	3.0	2.8	3.5	105%	86%
Santa Elena	2.3	2.5	4.0	91%	56%
Santa Maria	1.8	1.6	1.8	112%	97%

Looking East

Legend

Au (g/t)
- < 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- 2.0 - 5.0
- > 5.0

January 2023

Source: RPA, 2020.

0   50   100   150   200   250
Metres

Figure 14-16

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Comparison of Block and Composite Gold Grades - El Catorce
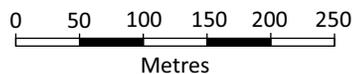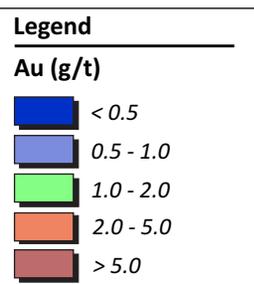
Looking East

Legend

Au (g/t)

■ (blue)	< 0.5
■ (light blue)	0.5 - 1.0
■ (green)	1.0 - 2.0
■ (orange)	2.0 - 5.0
■ (dark red)	> 5.0

January 2023

0 50 100 150 200 250

Metres

Source: RPA, 2020.

Figure 14-17

Soma Gold Corp.

***El Bagre Gold Mining Complex
and Nechí Project***
Department of Antioquia, Colombia
**Comparison of Block and Composite
Gold Grades - Santa Elena**

Figure 14-18

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Comparison of Block and Composite Gold Grades - Santa María

Legend

Au (g/t)

< 0.5
0.5 - 0.75
0.75 - 2.0
2.0 - 5.0
> 5.0

January 2023

Source: RPA, 2020.
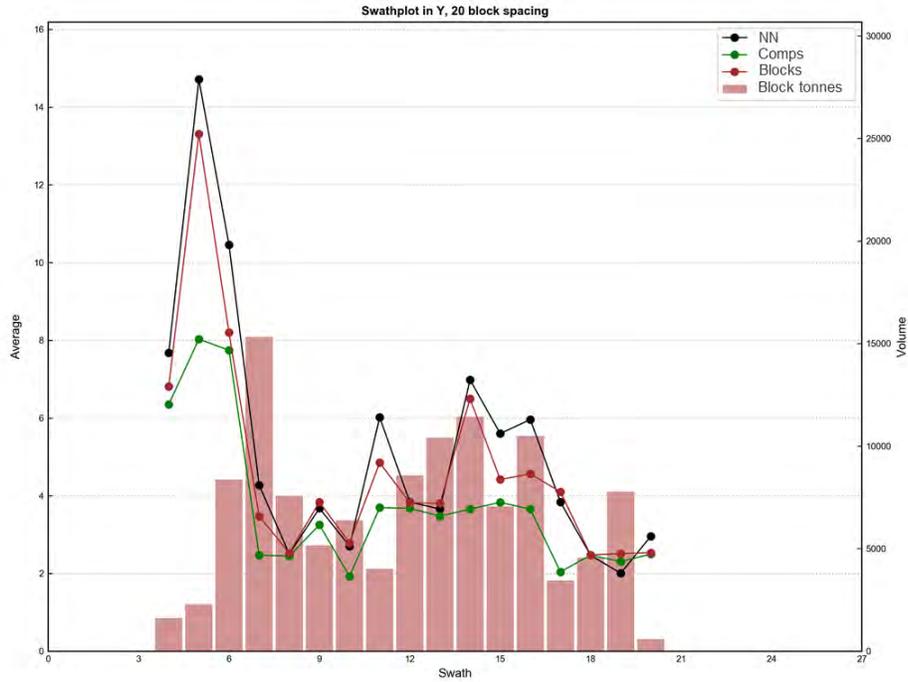
Figure 14-19:   El Catorce Au Northing Swath Plot
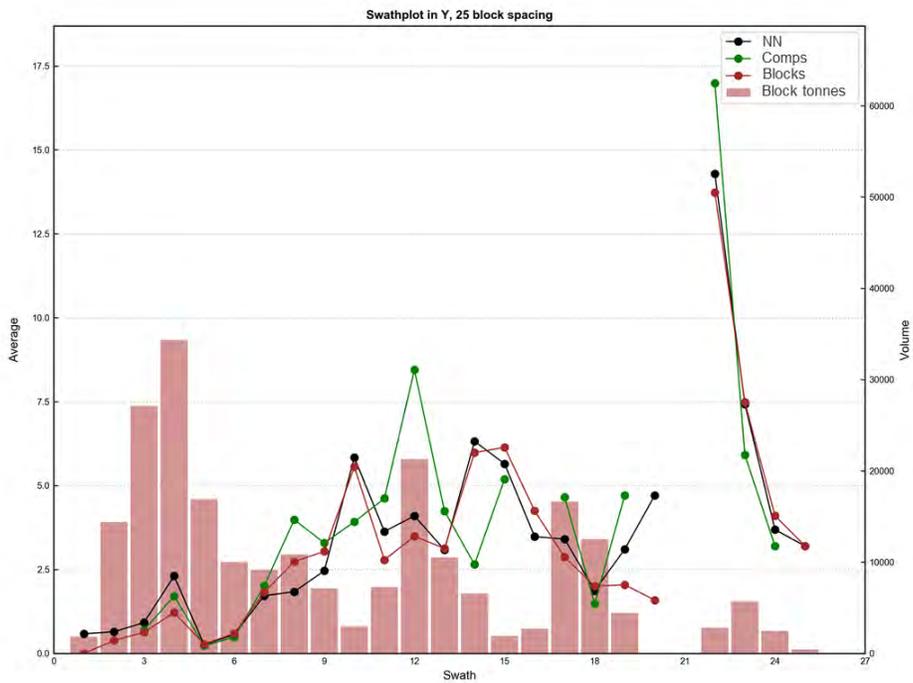
Figure 14-20:   Santa Elena Au Northing Swath Plot
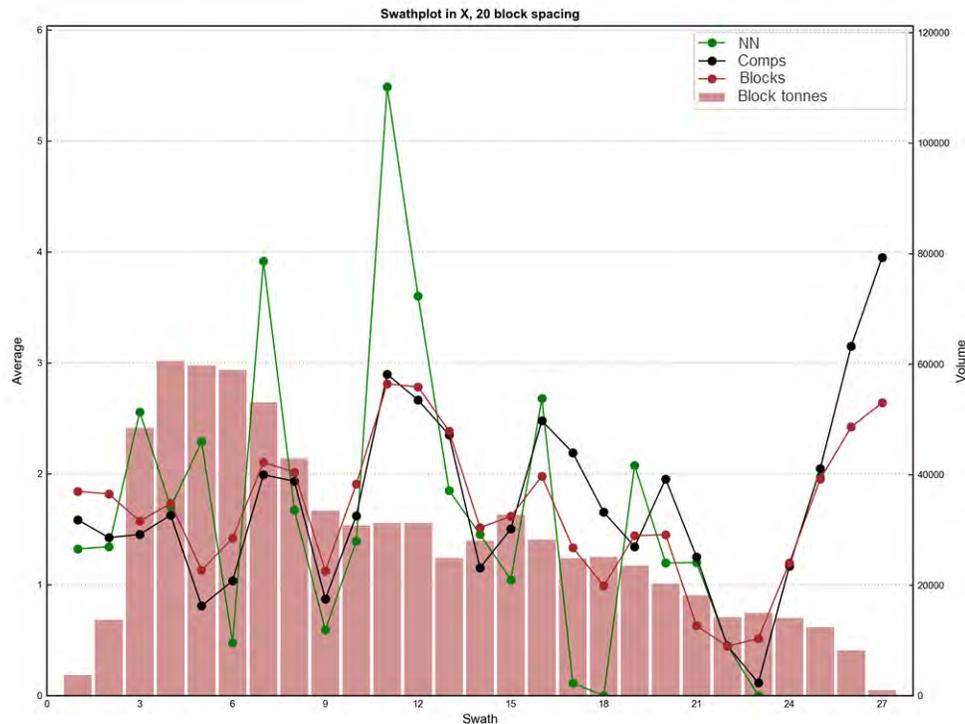
Figure 14-21: **Santa Maria Au Easting Swath Plot**

Definitions for resource categories used in this Technical Report are consistent with those defined by CIM (2014) and adopted by NI 43-101. In the CIM classification, a Mineral Resource is defined as "a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction". Mineral Resources are classified into Measured, Indicated, and Inferred categories. A Mineral Reserve is defined as the "economically mineable part of a Measured and/or Indicated Mineral Resource" demonstrated by studies at Pre-Feasibility or Feasibility level as appropriate. Mineral Reserves are classified into Proven and Probable categories.

Given the variability encountered during mining at El Catorce and Santa Elena, the SLR QPs are of the opinion that the current drill hole spacing grids are too wide to support Measured Mineral Resources. Blocks were classified as Indicated in areas within 25 m of an underground excavation and underground samples. Inferred was assigned to all interpolated blocks with more than 90% of the blocks located within 100 m of the closest composite.

For Santa Maria, the grades of economic interest tend to be more consistent. SLR classified blocks in areas of good economic grade continuity where the drill hole spacing was less than or equal to 35 m as Indicated. Inferred was assigned to all interpolated blocks with more than 98% of the blocks located within 100 m of the closest composite.

The final classification assigned to block models is given in Figure 14-22 to Figure 14-24.

Looking East
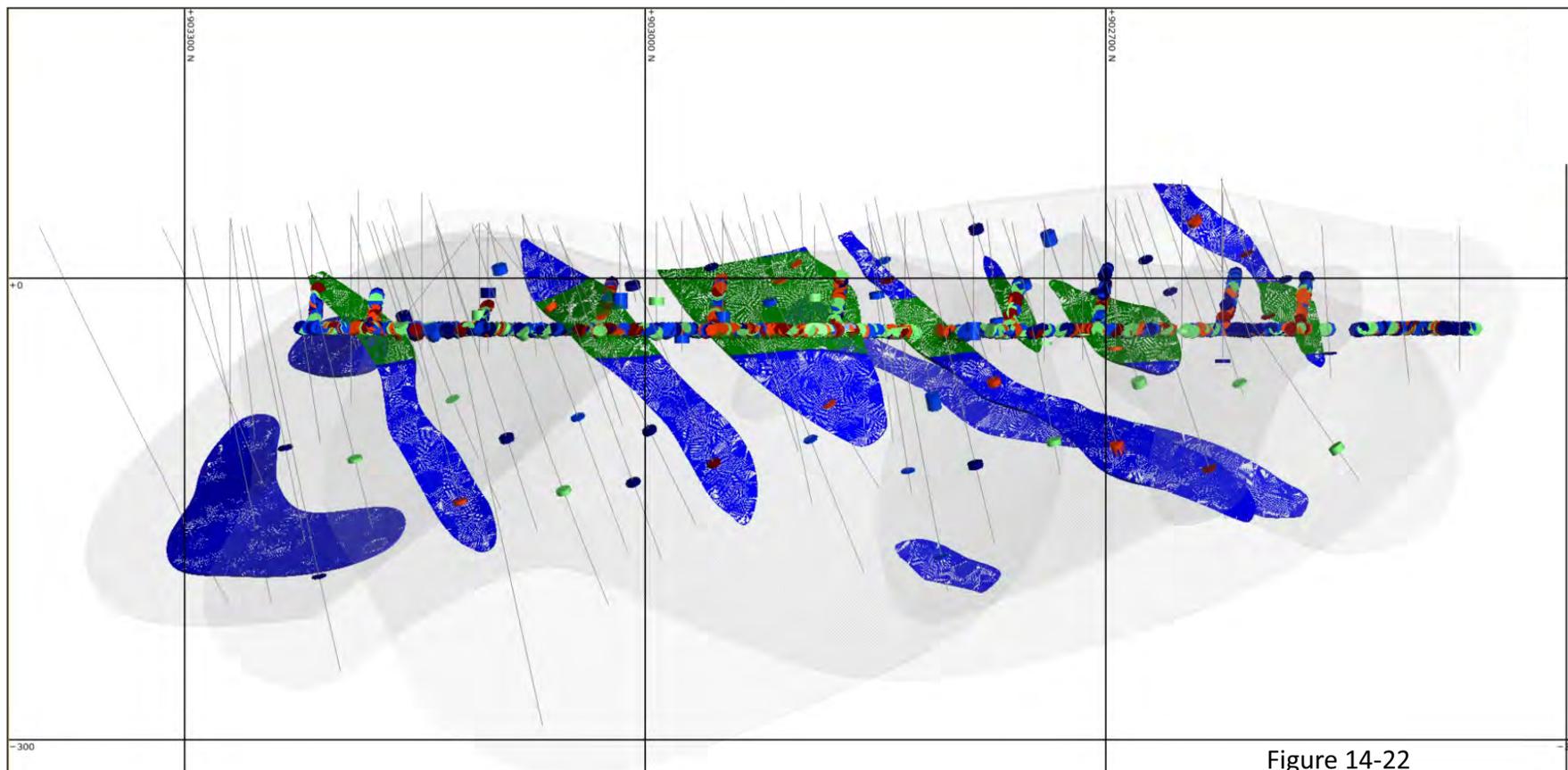
Legend

Au (g/t)
- < 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- 2.0 - 5.0
- > 5.0

Classification
- Indicated
- Inferred

0   50   100   150   200   250

Metres

January 2023

Source: RPA, 2020.
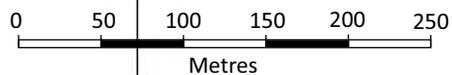
Figure 14-22

Soma Gold Corp.

***El Bagre Gold Mining Complex
and Nechí Project***
Department of Antioquia, Colombia
El Catorce
Mineral Resource Classification

Looking East

Legend

Au (g/t)

■	< 0.5
■	0.5 - 1.0
■	1.0 - 2.0
■	2.0 - 5.0
■	> 5.0

Classification

■	Indicated
■	Inferred

January 2023

Source: RPA, 2020.

0   50   100   150   200   250
Metres

Figure 14-23

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Santa Elena
Mineral Resource Classification
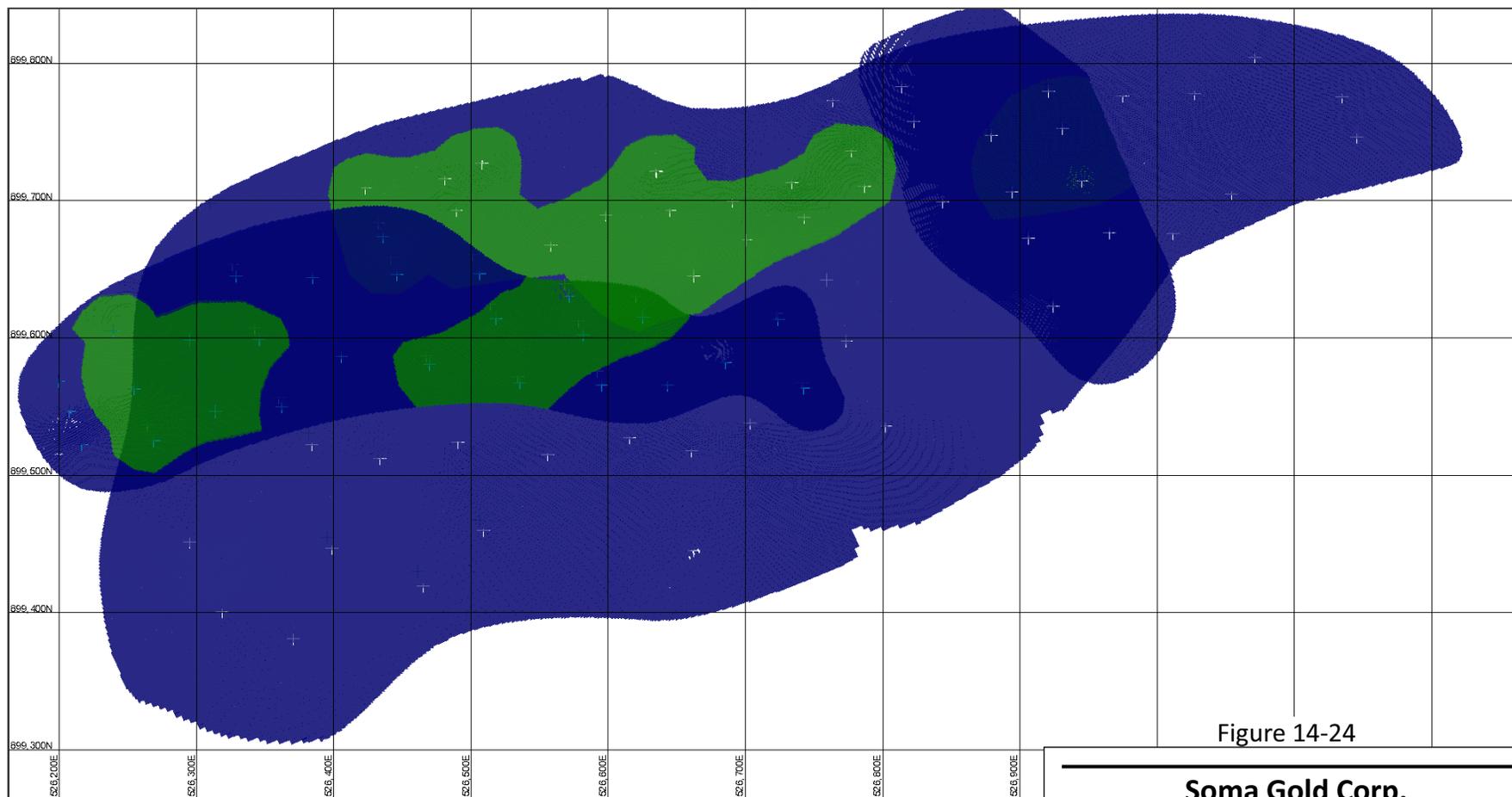
Looking East

Legend

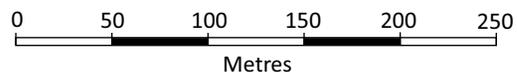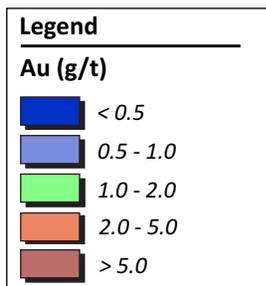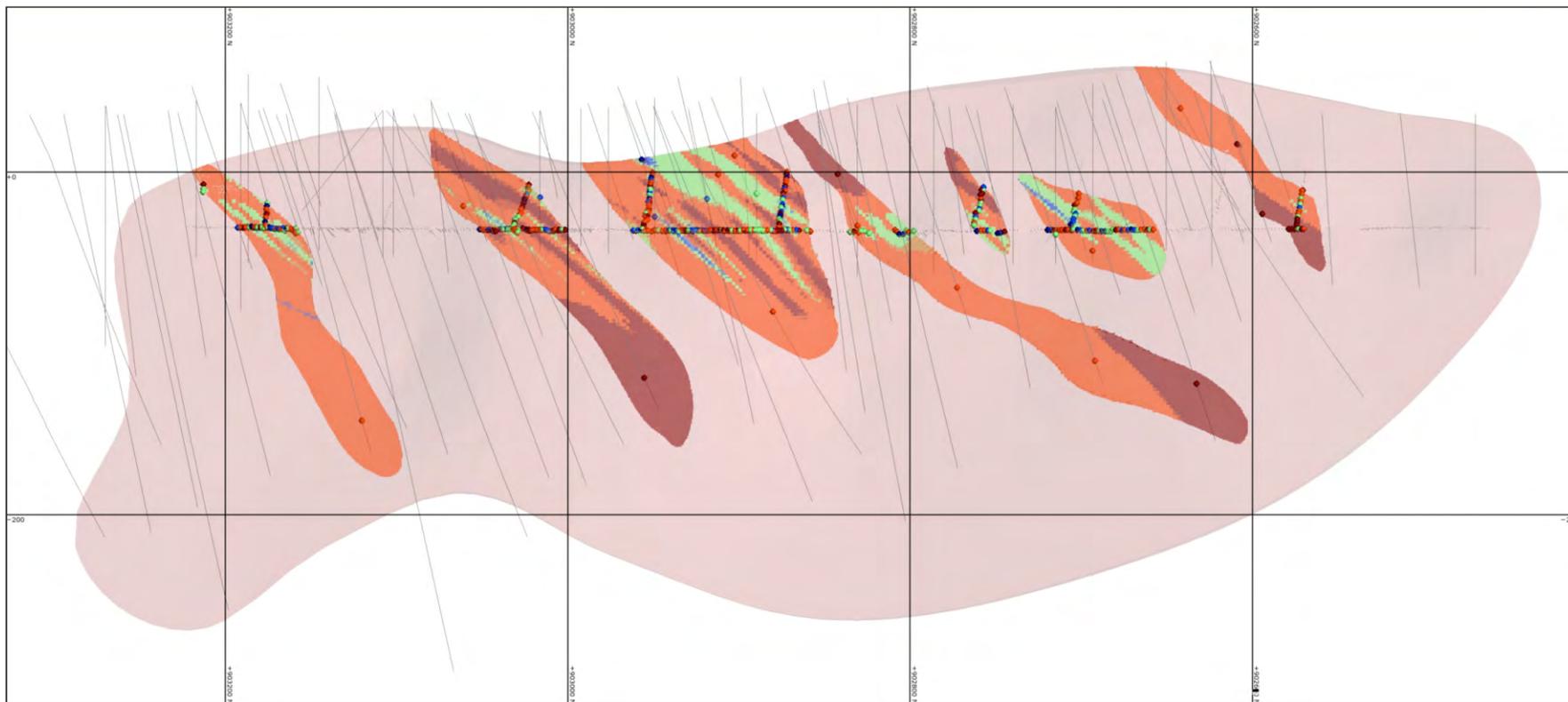**Classification**
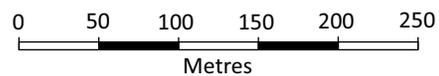
- Indicated
- Inferred

0 50 100 150 200 250

Metres

Figure 14-24

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia
Santa María
Mineral Resource Classification

January 2023

Source: RPA, 2020.

15.0 MINERAL RESERVE ESTIMATE

There are currently no Mineral Reserves estimated for El Bagre or Nechí.

16.0 MINING METHODS

El Bagre consists of two mature mines that are transitioning into closure, La Ye and Los Mangos, and one mine in the test mining phase, Cordero. La Ye is 1.4 km north of Los Mangos and Cordero is 2.6 km southwest of Los Mangos. The mines use, or will use, the same processing plant - the El Bagre Plant.

Test mining production from Cordero is currently from non-mechanised cut and fill mining using jacklegs and winches. Mechanized cut and fill mining will be introduced in 2023 (Figure 16-1). Mechanized development of levels and ramps is currently done with a contracted fleet and workforce, though Soma is currently purchasing equipment with the intent to take over development and future mechanized cut and fill production using an owner operated fleet.

The Cordero mining solids encompass a large amount of Inferred material, which makes up much of the life of mine plan (LOM) as outlined in Figure 16-1. Inferred Resources are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. For this reason, Soma is not reporting reserves until drilling results can support an upgrade to the resource base. An economic assessment has been done for the Cordero deposit that considers the mechanized cut and fill mining method and the re-start of the El Limon Mill, which is currently on care and maintenance.

SLR

Plan View

Looking West
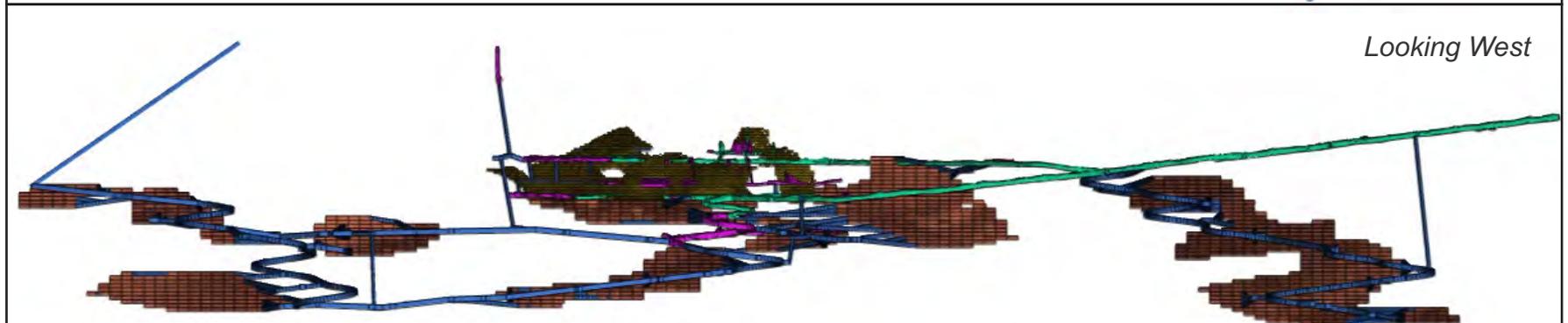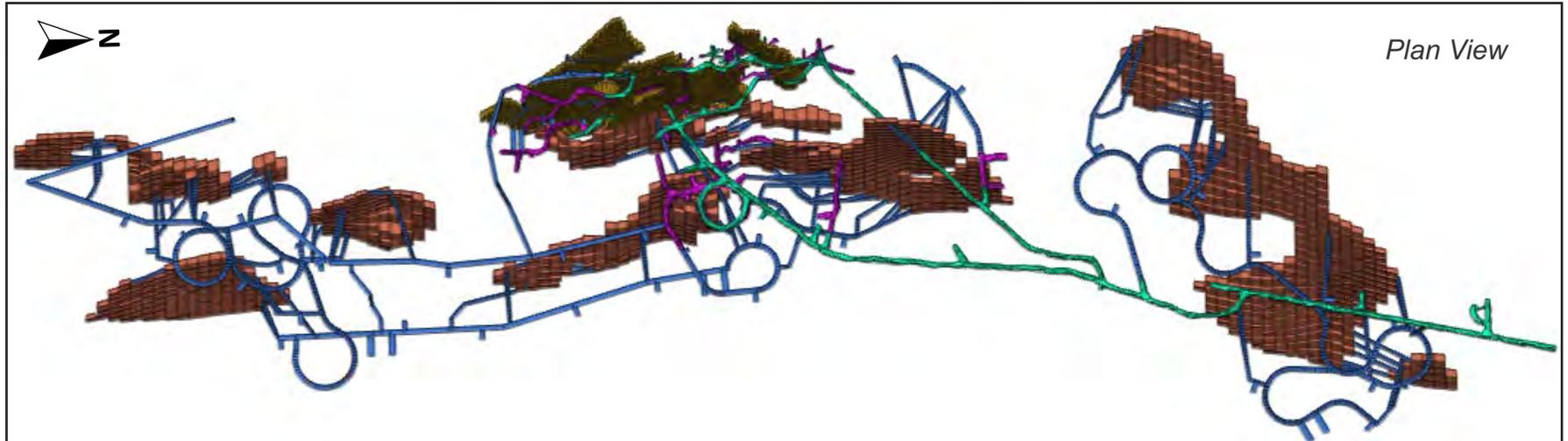
Figure 16-1

Legend:
- Planned Development
- Mechanized Cut and Fill
- Non-Mechanized Cut and Fill
- Development at EOY2021
- 1H2022 Development

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia

Cordero Mine Layout

January 2023

Source: SLR, 2022.

16.1 Non-Mechanized Cut and Fill Mining

The Cordero mine is proposed to be approximately 1,280 m on strike and 300 m deep, with veins dipping from 30° to 45°. In the central portion of the Mineral Resource area, mining is carried out by a narrow, near vertical, non-mechanized cut and fill mining method. A 98% mining extraction factor is applied due to the use of cemented rock fill and the expectation that post pillars will not be required. The SLR QP notes that a detailed geotechnical analysis is required to confirm the exclusion of post pillars from the LOM.

Non-mechanized cut and fill headings are designed in DSO software, applying a 1.0 m minimum width, 2.0 m height, and dilution of 0.3 m in both the hanging wall and footwall. Raises are developed on either end of the stope, 30 m apart. An initial cut is developed between these raises 4 m above the drive, creating the bottom of the stope. Holes are drilled into the vein in the hanging wall in three distinct rounds, each deeper than the previous, with depths of 0.8 m, 1.2 m, and 1.8 m. Excess ore is removed, and a level working platform is created by a scraper rigged between raises. The mineralized material is scraped into one of the raises where a box front has been installed, so that the mineralized material can be loaded into hoppers or mucked with a scoop from the drawpoint and carried to loading chambers in different levels of the mine. After the third round, all the material is scraped out of the panel. A reinforced wooden wall is built in the scraped-out area and filled with waste tipped in from above via the raise. The waste is spread with the scraper. This cycle is repeated until the top line of pillars is reached and the stope is mined out. The mining method is illustrated in Figure 16-2.

The initial backfilling is done with cemented rock fill after unconsolidated fill that is fresh waste from development. Fill is placed through a waste pass from surface and hoppers tipping into the raise.

Ore is transported out the main decline via contracted truck fleet to the El Bagre Plant.

All production work, including development, is done by teams using pneumatic handheld drilling equipment. Ground conditions are generally good, so not much support is required. Support requirements are decided based on a geotechnical evaluation in localized areas.

Production takes place over two shifts of twelve hours each.

Blasting uses ammonium nitrate/fuel oil (ANFO) with an emulsion booster and electronic detonators. Hoppers are loaded with a pneumatic rocker shovel or a small bobcat loader.
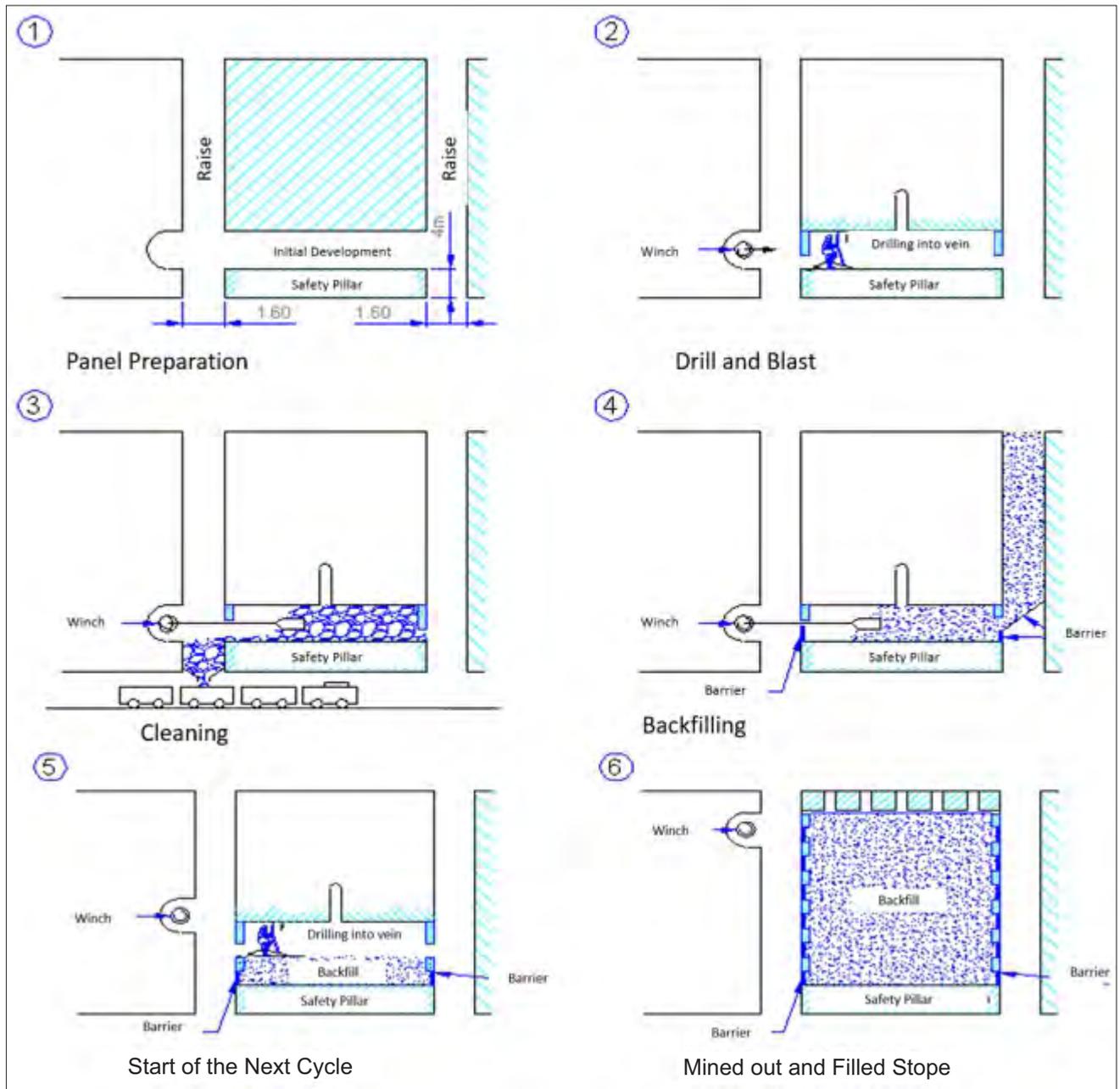
Figure 16-2

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia

No-Mechanized Cut and Fill Method

16.2 Mechanized Cut and Fill Mining

The LOM incorporates a mechanized overhand cut and fill mining method for the deeper and north-south extents of the Cordero mine, using equipment owned and operated by Soma. By mechanizing the mining method Soma will be able to materially increase production and mill throughput to potentially justify re-starting the El Limon Mill. SLR notes that increasing the Mineral Resource base and upgrading to Mineral Reserves as soon as possible will be necessary to confidently inform this decision.

Using the overhand mechanized cut and fill mining method, mining panels are designed on four-level blocks. The lowest level of each block is filled with cemented rock fill, and the subsequent levels with run of mine waste rockfill. The cut and fill access design, presented in Figure 16-3, starts with developing the lowest level in each block first, the level is mined out and backfilled, and the next level is developed above.

A 95% mining extraction factor is applied due to the use of cemented rock fill, with the expectation that post pillars will not be required. SLR notes that a detailed geotechnical analysis is required to confirm the exclusion of post pillars from the LOM.

Mechanized cut and fill headings are designed in DSO software, using 3.5 m height and 3.5 m minimum width, and dilution of 0.5 m in the hanging wall and 0.3 m in the footwall.

Looking West
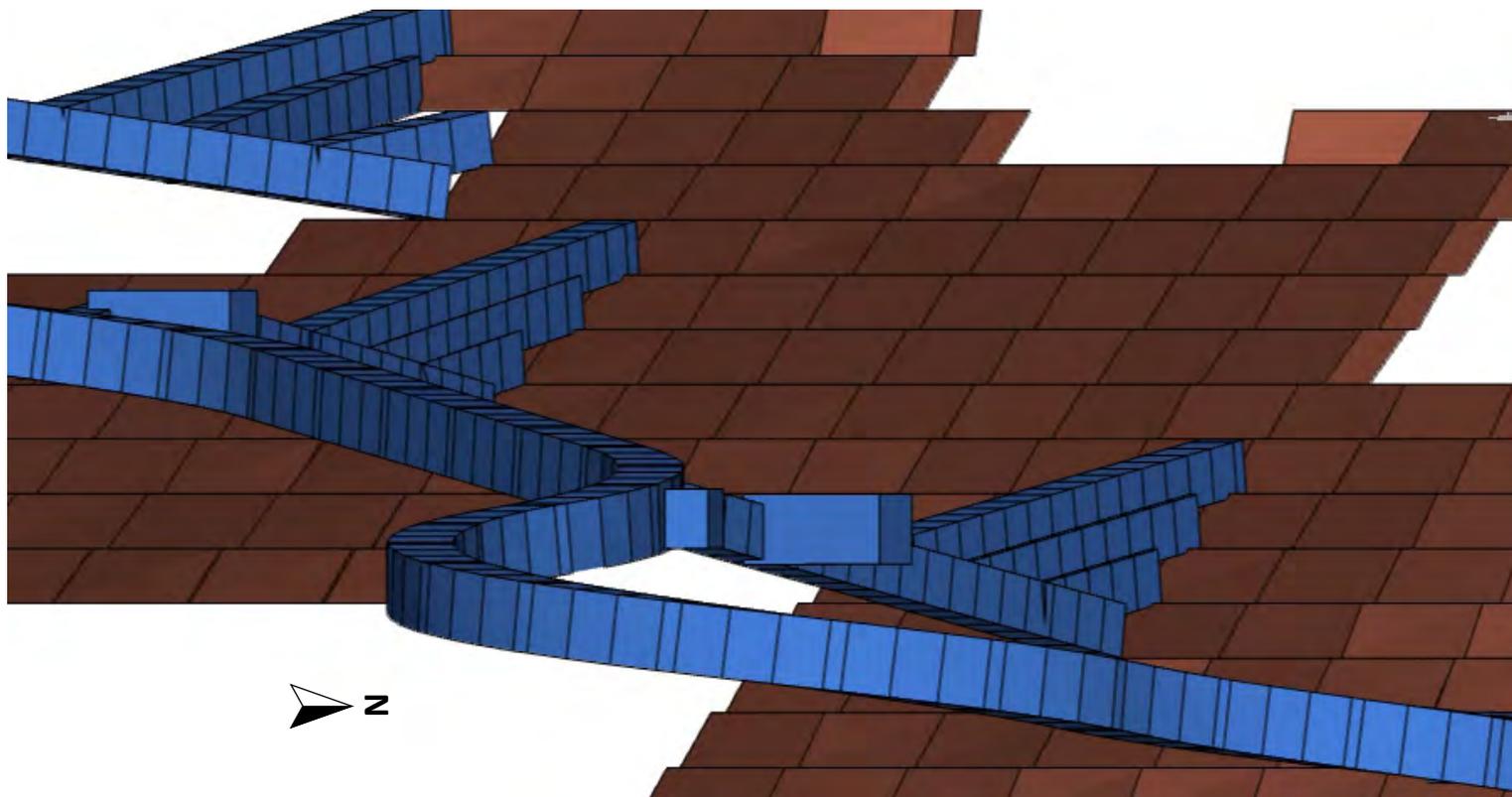
N

Figure 16-3

Soma Gold Corp.

***El Bagre Gold Mining Complex
and Nechí Project***
Department of Antioquia, Colombia
**Mechanized Overhand Cut and
Fill Method**

16.3   Production

Cordero Mine is in a test mining phase. As of January 2023 onward, substantially all of the production at El Bagre is expected to come from Cordero.

16.3.1 Mine Design

Underground mining areas at Cordero were determined with the application of the cut-off grade to the respective block model. Development and panels are laid out to suit the selected mining method.

Development layouts were converted into design wireframes, while stopes were designed as solids. The wireframes and solids were evaluated against the block model, then modified with historical operating factors. The modified wireframes and solids were then scheduled based on historical mining rates. Costs were subsequently applied for each area to confirm the viability of the planned work.

16.3.1.1   Geotechnical Parameters

La Ye was in operation from 2010 to 2022, while Los Mangos operated from 2013 to 2022. The geotechnical conditions at the mines are well understood. The Cordero area is similar to that of Los Mangos, although it contains an extensive network of dykes.

Geotechnical reports were completed for La Ye and Los Mangos in August 2014, which covered a geotechnical survey, rock characterisation, and numerical modelling of pillar designs with and without fill.

Hanging wall unconfined compressive strength (UCS) values range from 54 MPa to 80 MPa, footwall UCS values range from 40 MPa to 70 MPa, and the veins have a wider UCS range, from 40 MPa to 80 MPa. In general, La Ye has better rock strengths than Los Mangos, and the ground conditions are classified as good to medium.

The planned support and pillar sizes depend on the Modified Geological Strength Index (GSI) (Hoek, 1994), which takes into account both intact rock qualities and discontinuities. The footwall, vein, and hanging wall GSI values for La Ye are an average of 66, 69, and 74, respectively. For Los Mangos, these are 67, 60, and 70, respectively.

The GSI values assumed for Cordero are based on the work completed for Los Mangos. Cordero is adjacent to Los Mangos and is a geological continuation of the deposit. Data from the Los Mangos operation shows that Cordero shares the rock type and characteristics of the deposit at Los Mangos. While no comprehensive geotechnical work particular on Cordero has been completed, the presence of adjacent workings and matching characteristics at Los Mangos are considered sufficient to support the geotechnical assumptions used at Cordero.

The workings at Cordero are currently 150 m to 170 m deep.

At Cordero, the orebody dip is 30º to 45º, with an average vein thickness of six metres. The production method used is non-mechanized cut and fill and will transition to mechanized cut and fill in 2023. The LOM plan does not account for any post pillars in the orebody as it has assumed that cemented rockfill will be sufficient to support the hanging wall as the orebody is depleted. SLR notes that more geotechnical evaluation is necessary to verify this assumption.

Faults and areas with local failures are supported with roof bolts and wooden struts. Decline portals are kept small and are supported with steel arches and shotcrete until the transition into hard rock.

16.3.1.2   Dilution and Extraction

Dilution is measured through face mapping. The source of this dilution is the hanging wall and footwall, and the dilution is caused by blasting or geotechnical weaknesses. Given that vein widths range from below 1.0 m to 25.0 m, the application of dilution based on the average amount of linear dilution (the thickness of waste from the hanging wall and footwall that can be expected in the stope), also known as Equivalent Linear Overbreak Slough (ELOS), over a trailing 12 months is the best metric to use.

Non-mechanized cut and fill headings are designed in DSO software at 2.0 m height and 1.0 m minimum width, with 0.3 m hanging wall dilution and 0.3 m footwall dilution included.

Mechanized cut and fill headings are designed in DSO software at 3.5 m height and 3.5 m minimum width 0.5 m hanging wall dilution and 0.3 m footwall dilution included.

Extraction is estimated based on the mine design. For non-mechanized cut and fill panels a 98% mining extraction factor has been applied and for mechanized cut and fill panels a 95% mining extraction factor has been applied.

DSO shapes were created for each mining method in their respective mining areas. The parameters for each DSO run are summarized in Table 16-1.

Table 16-1:   Deswik Stope Optimizer Parameters
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Item	Unit	Value
Non-Mechanized Cut and Fill		
Fixed Height	m	2.00
Minimum Variable Width	m	1.00
ELOS Hanging Wall	m	0.30
ELOS Footwall	m	0.30
Mining Extraction Factor	%	98
Mechanized Cut and Fill		
Fixed Height	m	3.50
Minimum Variable Width	m	3.50
ELOS Hanging Wall	m	0.50
ELOS Footwall	m	0.30
Mining Extraction Factor	%	95

While the SLR QP is supportive of the move to a mechanized production method to improve production rates, it is noted that a detailed geotechnical analysis will be required to confirm the mining extraction factors used in the LOM plan. Typically, in semi-vertical orebodies with dip shallower than 45°, post pillars are necessary to support the hanging wall, as rockfill will be unlikely to do so alone, and/or cemented rockfill may require increased cement content.

16.3.1.3 Economic Parameters and Cut Off Grades

The cut-off grade calculation assumed a gold price of US$1,600 per troy ounce and a foreign exchange rate of COP$3,800/US$. It is noted that the financial model in Section 21 used long-term price forecast for gold of US$1,700 per troy ounce, and a foreign exchange rate of COP$4,300/US$.

A head grade cut-off of 2.70 g/t Au was applied to Cordero, and an incremental cut-off grade of 1.76 g/t Au was applied after excluding fixed mining costs. Silver was not considered in the determination of the cut-off grade, although it is recovered in the plant. SLR recommends that the Project review cut-off grade calculations on an ongoing basis.

The inputs and cut-off grades used by Soma at Cordero are listed in Table 16-2.

Table 16-2: **El Bagre Underground Cut-Off Grades**
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

	Unit	Cordero
Mining Costs	US$/t	70.19
Processing Costs	US$/t	21.49
G&A Costs	US$/t	20.04
Total Operating Costs	**US$/t**	**111.72**
Au Price	US$/oz	1,600
Foreign Exchange Rate	COP$/US$	3,800
Recovery	%	87
Au Payable	%	97.8
Royalty	%	5.52
Head Grade Cut-off	**g/t Au**	**2.70**

16.3.2 Development

Cordero is accessed through a 4.5 m x 5.0 m decline (the Fenix decline) at the north end of the mine. A central ramp is being developed to access the non-mechanized cut and fill areas, and below that, the mechanized cut and fill areas. An additional ramp system is being planned closer to the main decline access to reach another mechanized cut and fill area. At the far south end, an incline (the Athena incline) is being developed which will be used to transport personnel and mine production. Another ramp system is being planned for the south end of the mine.

Mine development at Cordero has been done with a contracted fleet of jumbos, trucks, and scoops, but Soma has purchased its own fleet of equipment and will be self-performing mining and development work going forward.

A basic water pumping scheme and electrical and compressed air reticulation network are in place at Cordero.

16.3.3 Schedule

To account for the uncertainty in the Mineral Resource, in the LOM plan a risk factor of 1.0 was applied to designed Indicated tonnes and 0.7 to designed Inferred tonnes. The result is 49.3% of the tonnage in the LOM plan is Indicated, and 50.7% is Inferred. Further, tonnes from mechanized cut and fill make up 86.0%, non-mechanized cut and fill make up 12.2%, and development makes up 1.8%.

Production rates were applied to the LOM plan based on the arrival of equipment as presented in Table 16-3, accounting for up to six months of training and ramp up.

Table 16-3: Cordero LOM Rates
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Heading Type	Task Rate	Resource	Resource Rate	Number of Available Units			
				2023	2024	2025	2026
Non-Mechanized cut and Fill Development	50 m/mo	Jackleg horizontal	50 m/mo	4.0	4.0	4.0	4.0
Non-Mechanized Cut and Fill Production	2.4 m/d	Winch	1,200 t/mo	6.0	6.0	6.0	6.0
Mechanized Cut and Fill	60 m/mo	Jumbo	180 m/mo	4.0	6.0	6.0	4.0
Horizontal Development	60 m/mo	Jumbo	180 m/mo	4.0	6.0	6.0	4.0
Vertical Development (jackleg)	30 m/mo	Jackleg vertical	40 m/mo	7.0	7.0	7.0	7.0
Backfill Non-Mechanized (winch)	40 m³/d	Winch backfill	440 m³/mo	6.0	6.0	6.0	6.0
Backfill Mechanized	120 m³/d	Backfill (haul truck)	2778 m³/mo	3.0	4.0	4.0	3.0
All Production and Waste Tasks		20 t haul truck	7,518 t/mo	3.00	4.00	4.00	3.00

Cordero is expected to ramp up to 400 tpd in the second half of 2023, with the introduction of additional mechanized cut and fill mining equipment, and to 650 tpd by early 2024.

The LOM schedule is outlined in Table 16-4.

Table 16-4: Cordero LOM Schedule
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

	Unit	LOM	2023	2024	2025	2026
Production						
Daily Throughput	tpd	587	442	680	635	615
Indicated	t	296,138	73,317	69,309	142,700	10,812
Inferred	t	370,126	88,083	179,020	89,217	13,806
TOTAL	**t**	**666,264**	**161,400**	**248,329**	**231,917**	**24,619**
Indicated	g/t	6.30	7.31	6.52	5.86	3.85
Inferred	g/t	8.11	8.73	8.93	6.35	4.83
TOTAL	**g/t**	**7.31**	**8.08**	**8.26**	**6.05**	**4.40**
Non-mechanized cut and fill	t	19,952	18,406	1,227	270	49
Mechanized cut and fill	t	641,782	141,926	245,763	229,710	24,383
Development ore	t	4,530	1,067	1,339	1,937	187
Non-mechanized cut and fill	g/t	5.84	5.78	6.91	5.27	4.11
Mechanized cut and fill	g/t	7.38	8.41	8.30	6.08	4.42
Development ore	g/t	3.04	4.99	2.90	2.17	1.87
Development						
Horizontal	m	7,766	1,787	2,620	3,225	134
Vertical	m	280	167	30	83	-
TOTAL	**m**	**8,045**	**1,953**	**2,651**	**3,307**	**134**
Ore	m	220	88	55	68	9
Waste	m	7,826	1,865	2,596	3,239	125

16.3.4 Depletion

The first test processable material production from Cordero was in 2021. Past mine production is summarized in Section 6.4. All production to date has been carried out using the non-mechanized cut and fill mining method.

16.4 Ventilation

At Cordero, air is drawn in at the Fenix decline by 117 hp and 75 hp fans located at the top of the decline and working areas are ventilated through force exhaust fans with a capacity ranging from 20 hp to 15 hp, depending on the location and distance from the main ventilation circuit. Air is exhausted through the Fenix decline.

A ventilation raise of 3 m diameter (the Ares raise) has been completed in the south-central part of the mine which connects to the top of the non-mechanized mining area. Two 300 hp fans are installed on surface to supply air to the mine, while exhausting out the Fenix decline.

The LOM includes future vertical development for ventilation purposes as the mine grows and deepens. At the surface of the Athena incline, another 300 hp fan is expected to be installed once the incline is completed.

The ventilation layout is illustrated in Figure 16-4.
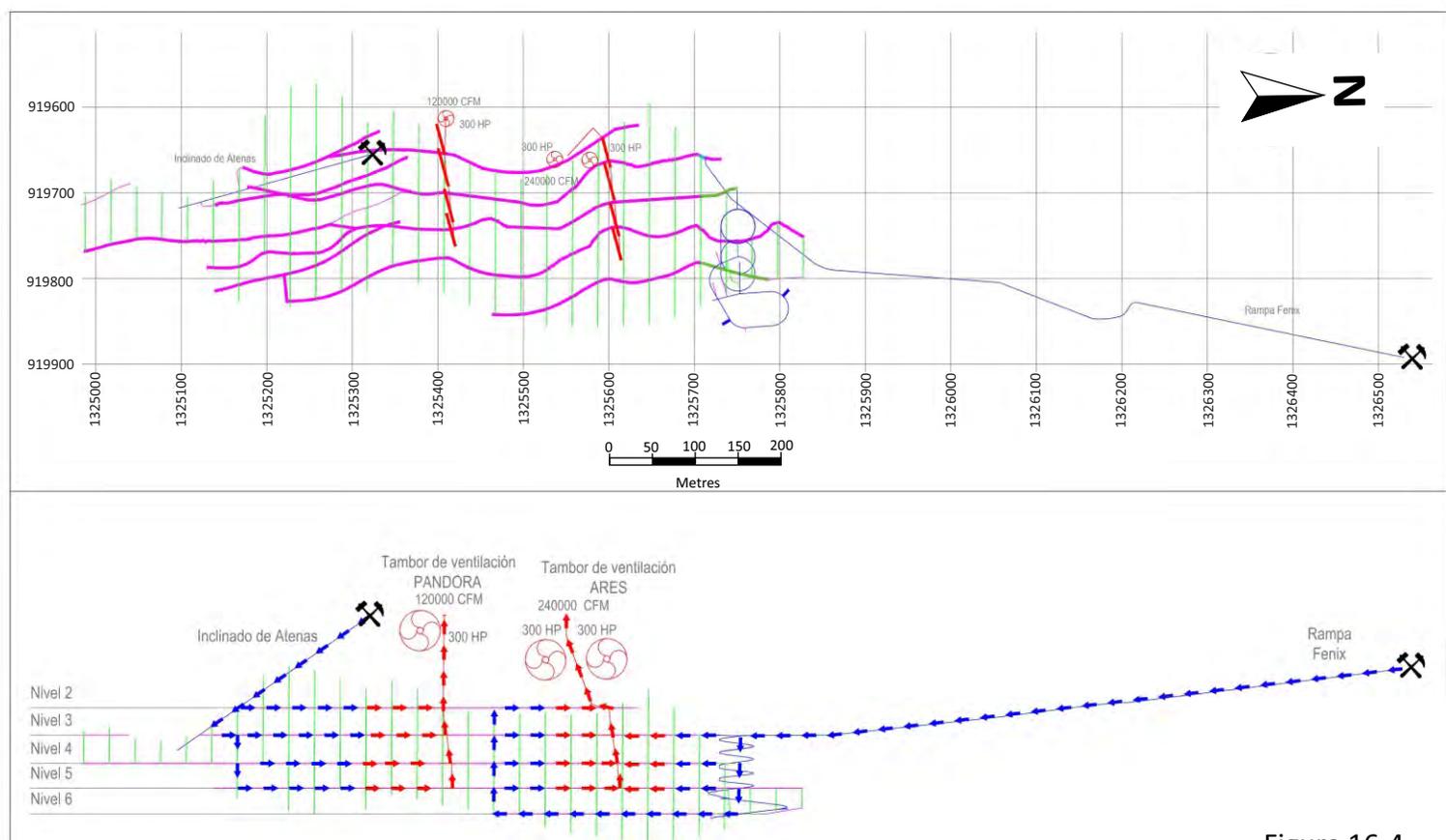
Figure 16-4

Legend

General Conventions | Specific Conventions

— Ventilation drift | ➡ Exhaust airflow
— Ventilation raise | ➡ Fresh airflow
⚒ Portal access | ⊗ Extractor fan

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia

Cordero Mine Ventilation Layout

January 2023

Source: Soma, 2022.

16.5   Mining Equipment

Mine development at Cordero to-date has been done with a contracted fleet of two jumbos (S1D and T1D), two trucks (MT2010), and three scoops (R1300, ST-1030 and ST-2G).

The current production fleet is listed in Table 16-5.

Table 16-5:   Cordero Mine Fleet
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Item	Model	Approximate Power (hp)	Units
Underground Equipment			
Small loader	Bobcat S530	49	3
	Bobcat S175	46	5
	Bobcat S100	24	1
Pneumatic Rocker Shovel	IMIM LB-12	12	8
Winch		30	2
		20	36
		10	7
Fan	Axial	4 - 10	18
	Axial	20 - 45	16
	Axial	60	4
	Axial	300	1
Pumps	Centrifugal	25 - 100	58
Rock Breaker	Husqvarna	30	1
Surface Equipment			
Tipper Truck	Volqueta International		1
Pick-up truck	Nissan		1
	Toyota Land Cruiser		1
Telehandler	Manitou		1
Bulldozer	Komatsu D65EX		1
Loader	Komatsu WA250-6		1
Backhoe excavator	WB97R-5E0		1

Soma has purchased its own production and development equipment to help increase development rates and to be used for mechanized cut and fill production. Soma's new Sandvik equipment fleet consists of two jumbos (DD311s), one bolter (DS311), three trucks (TH320s), and three scoops (LH410 and 2 x

LH407s). Soma anticipates adding two jumbos and one additional scoop in 2023 and two more jumbos and one truck in 2024. Table 16-6 lists the proposed equipment fleet.

Table 16-6: Cordero Underground Fleet Expansion – El Bagre
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Mechanized Mining Resources	Number of Available Units			
	2023 Owned	2024 Owned	2025 Owned	2026 Owned
Single Boom Jumbo	4	6	6	4
Bolter	1	1	1	1
20 t Haul Truck	3	4	4	3
Scoop	4	4	4	4

SLR notes that while mechanization of the mining method is expected to help increase the production rate, there could be some risk to the electrical load at the mine site. A detailed risk assessment should be undertaken to ensure that electrical system has the capacity to support the additional equipment.

16.6   Labour

Table 16-7 lists the current labour used at Cordero.

Table 16-7: Cordero Underground Labour
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Department	Average for 2022
Administration	57
Planning	1
Production	345
Maintenance	72
Technical Services and Apprentices	68
Supervision	19
Management	2
Total	**564**

16.7   Dewatering

For Cordero, two pump stations are being planned on level 3 and level 5 (64 m and 128 m, respectively, from the decline surface) consisting of one 58 hp pump in each. These pumps are supplied by a network of smaller pumps on each level and water is decanted on surface and recirculated for use in the plant or as machine water in the mine.

The LOM includes future sump and pump station development for dewatering purposes as the mine grows and deepens. The mine dewatering layout is illustrated in Figure 16-5.
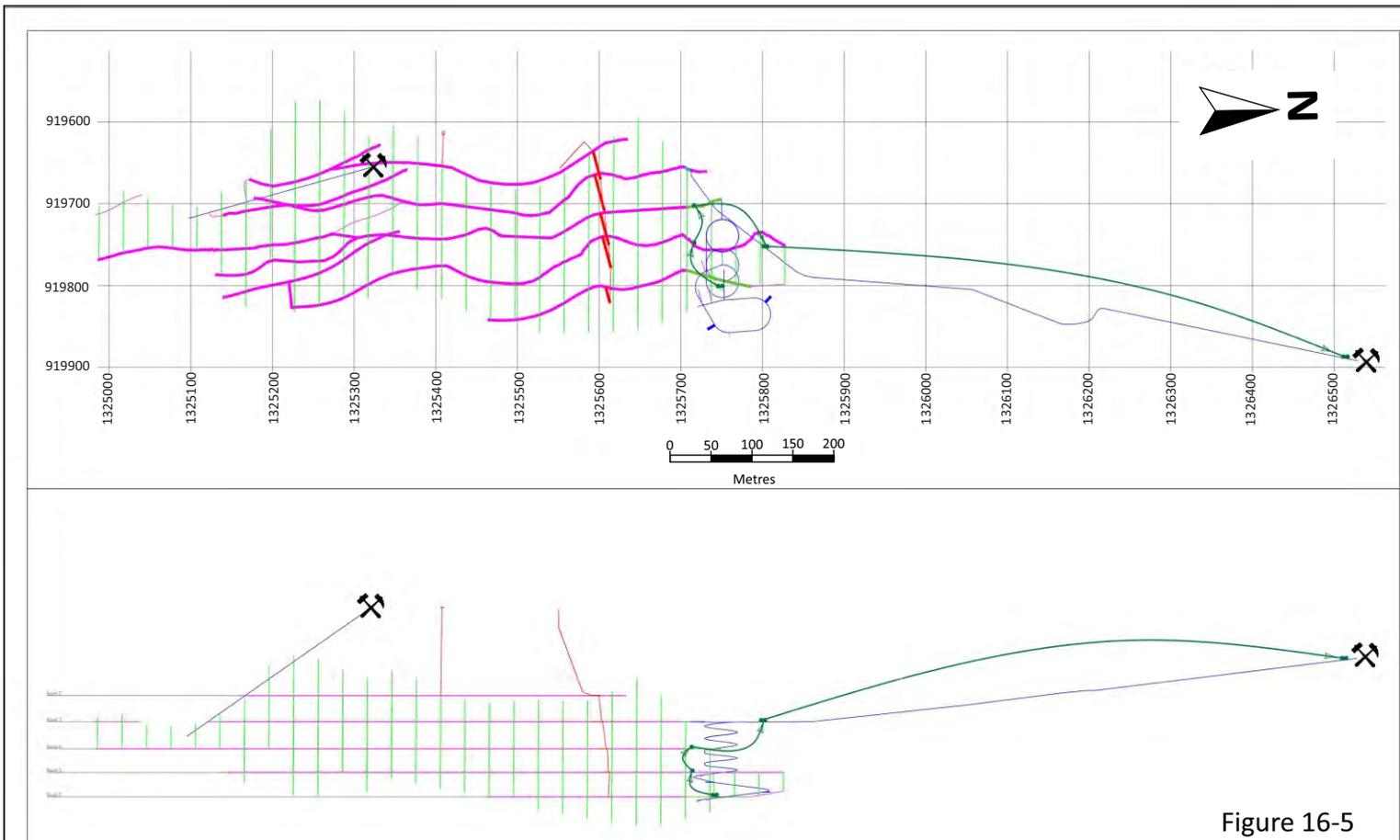
Figure 16-5

Legend

General Conventions | Specific Conventions
Ventilation drift | Twin pumping lifts
Ventilation raise | Pumping chambers
Portal access

Soma Gold Corp.

El Bagre Gold Mining Complex and Nechí Project
Department of Antioquia, Colombia

Cordero Mine Dewatering Layout

January 2023

Source: Soma, 2022.

16.8 Recommendations

While the SLR QP is supportive of the move to a mechanized production method to improve production rates, it is noted that a detailed geotechnical analysis will be required for Cordero to confirm ground support techniques and the ore extraction factors used in the LOM. Typically, in semi-vertical orebodies with dip shallower than 45°, post pillars are necessary to support the hanging wall, as rockfill will be unlikely to do so alone, and/or cemented rockfill may require increased cement content.

Other methods which can be considered are the use of Alimak raise climbers or Shallow Angle Mining System (S.A.M.S.), which would both also increase the production rate above a non-mechanized mining method, though would require a significant paradigm shift.

SLR recommends completing the work required to convert existing Measured and Indicated Resources to Mineral Reserves and to upgrade Inferred material in the current mine plan to Indicated. This will allow material with a higher confidence to be included in a Mineral Reserve production plan, thereby extending the LOM and reducing scheduling inconsistencies. However, to maintain production at current levels, further work will be required to increase both the available Mineral Resources and introduce Mineral Reserves.

The SLR QP recommends that Soma conduct a review of the electrical load system within the mine, to determine whether the addition of mechanized mining equipment is supported by the current infrastructure.

17.0 RECOVERY METHODS

17.1 Process Description

Figure 17-1 shows the overall process flowsheet for the El Bagre Plant. The following sections describe the El Bagre Plant.

17.1.1 Crushing

The crushing circuit consists of three stages of crushing. The size of the mineral is reduced from a top size of 203 mm to 7 mm (P_{80} 5 mm) at the rate of 1,000 tpd. The crushed product is stored in the fine ore silo, from which ore is fed to the grinding circuit.

17.1.2 Grinding

Crushed ore from the fine ore silo is fed by vibratory feeder and belt conveyor to a 2.44 m (8 ft) x 2.44 m (8 ft) ball mill with a 298 kW (400 hp) drive. The ball mill discharges into the flash flotation cell feed sump, from which it is pumped to a flash flotation cell. The flash flotation cell concentrate is gravity fed to a centrifugal gravity concentrator and the flash flotation cell tailings flow to the hydrocyclone (cyclone) feed sump.

The gravity concentrate is sent to an intensive cyanide leach reactor (ILR) circuit for gold recovery. The gravity concentrator tailings flow by gravity to the dewatering concentrate thickener feed sump. The flash flotation tailings are then pumped from the cyclone feed sump to a cluster of cyclones for classification. The cyclone overflow slurry flows by gravity to the flotation circuit. The cyclone underflow slurry returns to the primary ball mill feed chute, with a portion of the underflow split to high frequency screen. The screen undersize feeds a centrifugal gravity concentrator. The gravity concentrate is processed in the ILR circuit and the gravity tailings flow by gravity to the primary ball mill feed chute.

17.1.3 Intensive Cyanidation

The gravity concentrate is leached with a high concentration of cyanide solution to dissolve most of the gold and silver. The equipment is a package that consists of the intensive cyanide leach reactor (ILR100BM), a concentrate feed tank, a mixing drum, two solution tanks, pumps, and a concentrate recirculation tank. One product is obtained: a gold and silver solution. The dissolved gold and silver solution is pumped to the gold cyanide solution tank and then to the Merrill-Crowe precipitation stage. The tailings are pumped to the regrind ball mill feed.

17.1.4 Flotation

Cyclone overflow flows by gravity to a closed conditioner tank where flotation reagents are added. The slurry is then fed by gravity to the flotation circuit consisting of three rougher, two scavenger, and one cleaner tank cells. The three rougher flotation cell concentrates are final concentrate and are pumped to the dewatering concentrate thickener feed sump. The rougher tailings feed two scavenger tank flotation cells in series. The scavenger tank cell concentrates are recycled to the cleaner cell feed. The cleaner concentrate gravity feeds to the dewatering concentrate thickener feed sump. The cleaner tailings feed the scavenger tank flotation cells. The tailings from the scavenger flotation cells are pumped to the tailings pond. The dewatering concentrate thickener is a deep cone type static thickener where the concentrate is thickened to obtain an underflow product of 60% solids. The thickened concentrate is

pumped to a pre-treatment agitator, while the overflow is sent by gravity to the Recycle Water Tank to be redistributed to flotation and grinding.

17.1.5 Pretreatment

The final flotation concentrate is pumped to a pre-treatment agitator where oxygen, air, lime, lead acetate and sodium hypochlorite are added. The agitator discharges to a high rate thickener (HR1), where the overflow is pumped with the flotation tailings to the tailings pond and the underflow is pumped to the regrind circuit.

17.1.6 Regrind and Cyanidation

The flotation pretreated concentrate and the ILR tailings are pumped to the regrind circuit where initial cyanidation takes place. A 1.5 m (5 ft) diameter x 2.44 m (8 ft) secondary ball mill with a 56 kW (75 hp) drive in closed circuit with a set of four 76.2 mm (3 in) diameter cyclones.

Sodium cyanide solution and lime are added at the regrind stage to start the cyanidation process. The cyclone overflow is gravity fed to the DCT #1 thickener feed sump. The DCT #1 thickener overflow is gravity fed to the gold cyanide solution tank. The thickener underflow is pumped to seven agitated tanks in series, where secondary cyanidation takes place. The discharge from these tanks is pumped to three thickeners in a series: a high rate (HR2) thickener, DCT #2 thickener and DCT #3 thickener, where the overflow contains gold and silver cyanide solution which is gravity fed to the DCT #1 thickener feed sump. The underflow from HR2 is pumped to the DCT #2 thickener and the overflow is pumped to the DCT #3 thickener. The DCT #3 thickener underflow is pumped to filtration and detoxification.

17.1.7 Merrill-Crowe Precipitation and Smelting

In the Merrill-Crowe process, the dissolved gold and the silver from conventional cyanidation are recovered through the addition of zinc dust to form a solid "precipitate". The gold cyanide solution is pumped to two filters where the suspended solids in the solution are extracted. The clarified solution is sent to a vacuum tower where dissolved oxygen is removed by means of a vacuum pump.

Zinc powder and a lead acetate solution are added in-line to the clarified gold cyanide solution which is pumped to the precipitation filters where the precipitate is removed. The precipitate is unloaded onto trays to be transported to the smelting stage.

The depleted solution or filtrate from the filters is pumped to the Barren Solution Tank, which is 4.27 m (14 ft) in diameter x 4.27 m (14 ft) high.

The precipitate from the filters is dried in a drying oven to eliminate the contained barren solution and then mixed with flux and loaded to the reverb smelting furnace. The gasoil-fired furnace operates at high temperature (>1,100°C) to produce molten metal and slag, which is then poured into moulds to produce mixed gold and silver doré bars. Smelting of precipitates takes place approximately three times a month.

17.1.8 Filtration and Detoxification

The cyanide tailings from the DCT #3 underflow are extensively washed in a closed circuit consisting of filtration–attrition-wash–detoxification. The cyanidation tailings are sent to a filter press that separates the solids from the cyanide solution in the tailings. Some of the initial solution is gravity fed to the agitator #6 feed sump to be recirculated to the process, while the remainder of the wash solutions are mixed with hydrogen peroxide in a three-stage detoxification tank circuit.

The solids from the filter are sent by belt conveyor to an attrition tank, where they are repulped using the detoxified solution (free of cyanide). This slurry is then pumped to a series of three tanks for further detoxification. The cycle finishes when the cyanide levels are below the permissible limits.

Once the cyanide in the tailings is below the permissible emission limits, the cyanide tailings are pumped to the tailings pond where they are mixed with the flotation tailings.

17.1.9 Reagents

Flotation reagents are added in the conditioning tank and include:

- Xanthate
- Copper Sulphate
- Frother
- Promoter

The most important reagent in the dissolution stage is sodium cyanide, which is added in the feed chute of the regrind mill. Lime is also used for cyanidation.

The reagents used for the solid-liquid separation include anionic and non-anionic flocculants. The reagents for the Merrill-Crowe process are lead acetate, zinc powder, and diatomite.

Sodium hydroxide is used to increase the pH in the intensive cyanide leach process. The sodium hydroxide is prepared with water and added to the concentrate pulp, so that it stabilizes the pH in the intensive cyaniding process, since the cyanide must stay in solution with pH > 9. At lower pH, the cyanide forms hydrocyanic acid, a lethal gas, which causes loss of cyanide by evolution of the gas from solution.

Flux is used in the process of smelting of Merrill-Crowe precipitates. A mixture of sodium carbonate 15%, potassium nitrate 30%, and borax 25% is added to the gold and silver precipitates to form a slag which collects impurity metal oxides during the smelting process.

CRUSHING

GRINDING

GRAVITY CONCENTRATION

INTENSIVE CYANIDATION

FLOTATION

PRETREATMENT

REGRIND/ CYANIDATION

FILTRATION/ DETOXIFICATION

MERRILL CROWE PRECIPITATION

TAILINGS

SMELTING

GOLD & SILVER DORÉ

Figure 17-1

Soma Gold Corp.

El Bagre Gold Mine Complex and Nechí Project
Department of Antioquia, Colombia

El Bagre Process Flowsheet

17.1 El Limon Mill

The El Limon mill is located approximately 47 km from the El Bagre Plant and has a similar flowsheet comprising two stage crushing, ball milling, gravity concentration, flotation, cyanidation, Merrill Crowe precipitation, and smelting to produce doré. The mill was upgraded in 2017 to a capacity of 225 tpd. The mill and tailings are permitted for a total of 400 tpd.

Upgrades to the mill included a second ball mill, a new thickener, a new flotation circuit and upgrades to the CIP circuit. The upgraded mill was tested up to 150 tpd during operation in 2019.

18.0 PROJECT INFRASTRUCTURE

18.1 El Bagre

18.1.1 Site and Accommodation Camp

The El Bagre camp complex is located west of and adjacent to the El Bagre Plant and stockpiles, and covers 5,085 m^2. The El Bagre camp complex is the base for the mining operations at La Ye, Los Mangos, and Cordero.

The complex includes an administration and technical operation building (390 m^2), a kitchen, and accommodation buildings (645 m^2) to house 126 persons. The complex has four dormitory modules for hosting the technical and administrative personnel. Other facilities include a changing room, restaurant, mechanical shop, core storage warehouse, and mess room.

The El Bagre Plant occupies 801 m^2 and has primary and secondary crushing buildings and a main building housing milling, flotation, cyanidation, and Merrill Crowe gold recovery equipment. The mine assay laboratory (393 m^2) is also contained within the plant. The tailings disposal facility is adjacent to the plant and extends to the northeast. It covers an area 350 m x 110 m (3.85 ha).

A heliport is located near the El Bagre Plant, which allows for secure and efficient transportation of El Bagre's gold product.
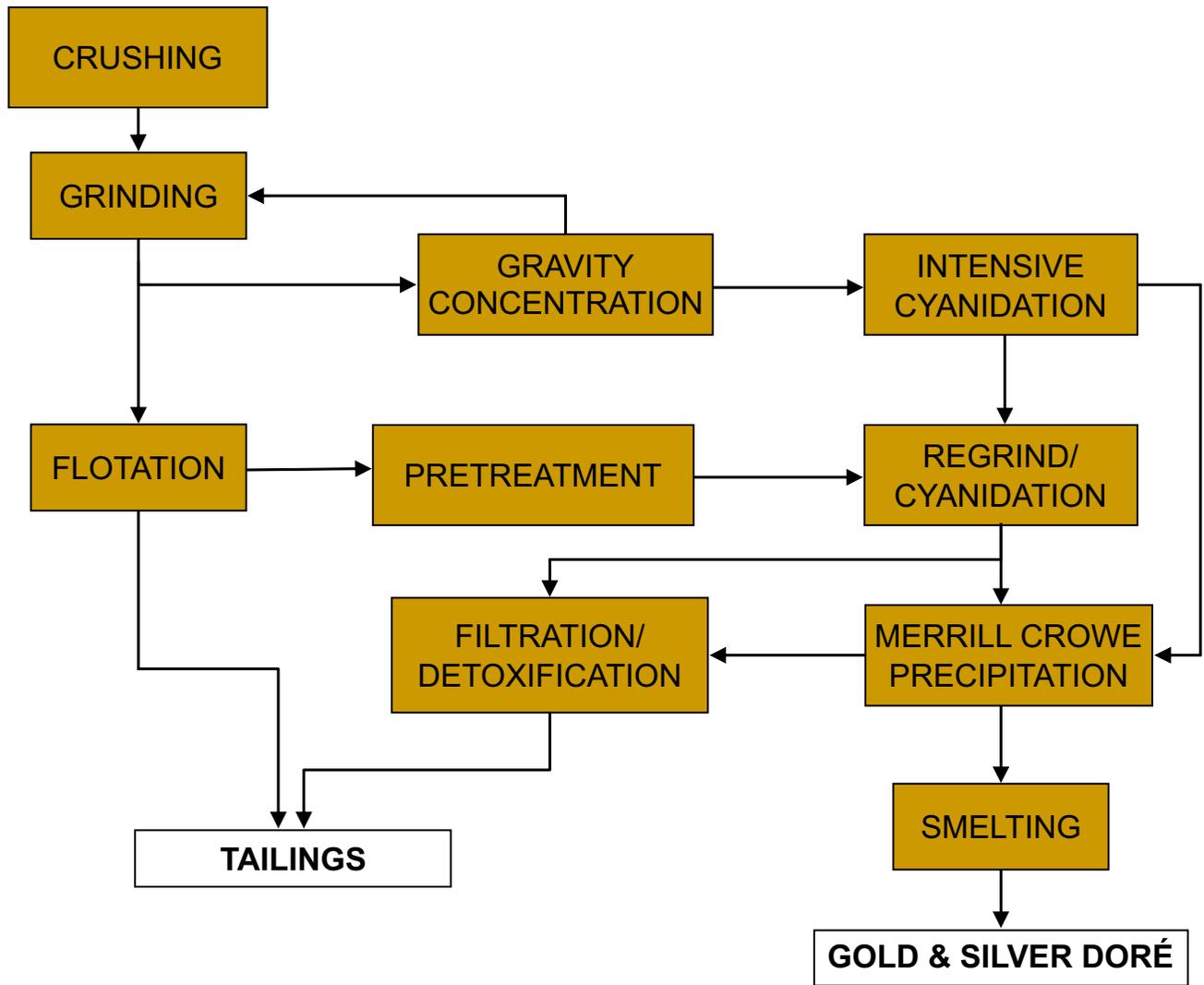
El Bagre infrastructure layout is illustrated in Figure 18-1.

Figure 18-1

Soma Gold Corp.

***El Bagre Gold Mine Complex
and Nechí Project***
Department of Antioquia, Colombia

El Bagre Mine Site
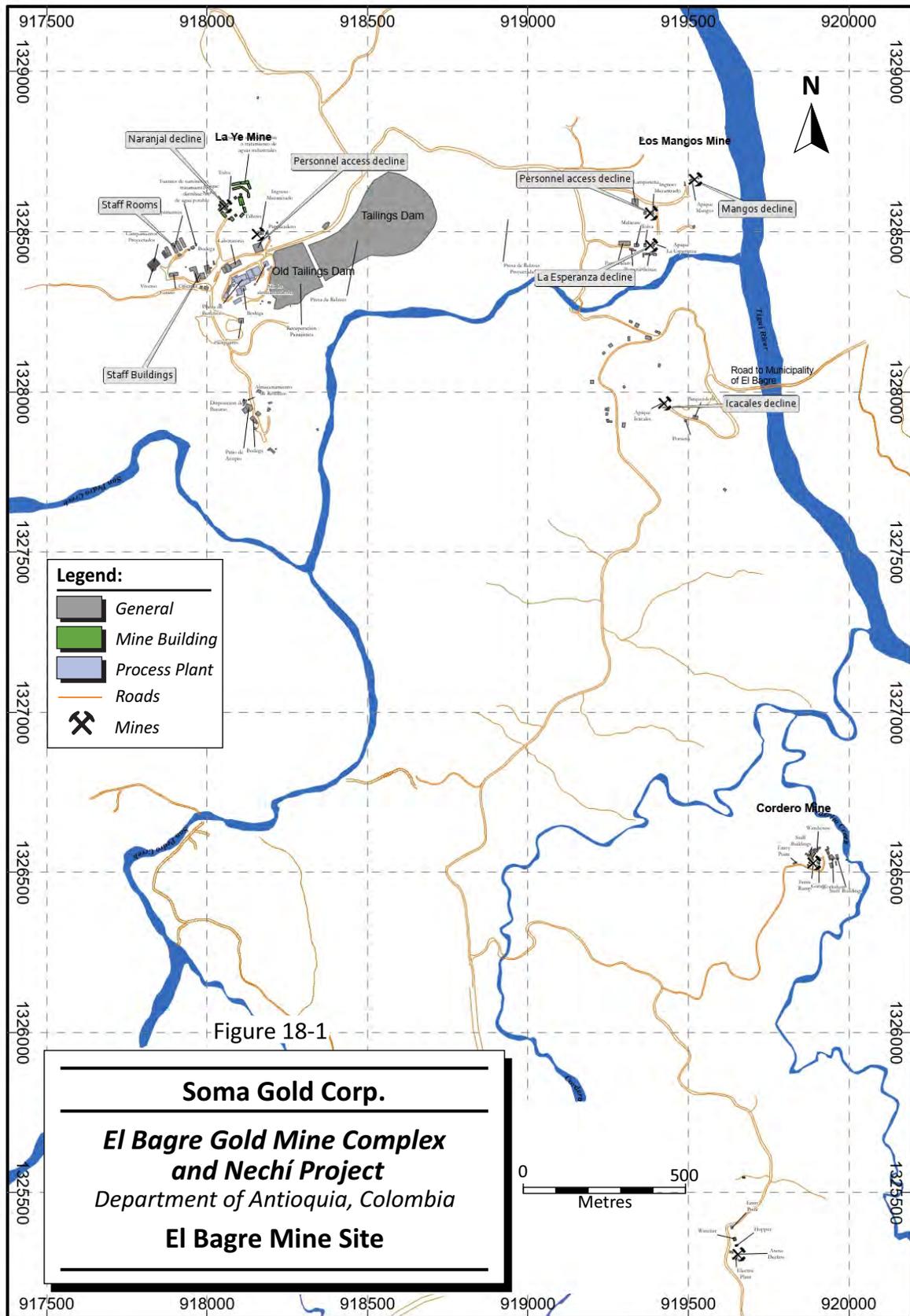
18.1.2 Power

18.1.2.1 Electric System

El Bagre electrical infrastructure consists of two transformers – a 2,500/3,200 kVA, 44/7.2 kV transformer used for mining processes and a 2,000/3,200 kVA, 44/7.2 kV transformer used for plant processes; two substations with transformers of 1,000 kVA and 1,200 kVA, 7.2/0.48 kV for the process plant, three transformers of 1,000 kVA, 7.2/0.48 kV for the North and South zones and Cordero; and one transformer of 225 kVA, 7.2/0.48 kV for the Los Mangos shaft. In addition, several distribution transformers of 7.2 kV to 480/220/110 V are available for auxiliary services, camp, workshops, warehouses, restaurant, public lighting, etc.

SLR notes that while mechanization of the mining method should help to increase production rates, there could be some risk to the electrical load at the mine site. A detailed risk assessment should be undertaken to ensure that the electrical system has the capacity to support the additional equipment.

18.1.3 Water

18.1.3.1 Potable Water System

The potable water supply system at El Bagre consists of an intake, an aqueduct, and a treatment plant. The intake is located at a close-by creek, in the northern part of the mine site. The treatment plant consists of four different units, filtration, neutralization, water clarifying, and disinfection, with a capacity of 0.5 L/s.

This plant has a proximate storage capacity of 66 m^3, sufficient for supplying two camps of 45 persons, and for operation activities, including the Cordero Mine, El Bagre Plant, and laboratory, whenever they require potable water.

18.1.3.2 Industrial Water Supply

Industrial water used for the El Bagre Plant is pumped from the Los Mangos mine with no prior treatment at 13.5 L/s.

Additional superficial water taken from the mines is treated in a sediment pond and then recirculated to the mines, where it is used at the mine front for cleaning and drilling.

18.1.4 Tailings Management

The TSF is a ring dyke type facility with perimeter dams raised in an upstream direction. It is referred to as Stage 2 following the expansion of the original TSF, which has been decommissioned and rehabilitated. The TSF receives tailings from the El Bagre Plant, which is located about 500 m to the southwest. Excess water is reclaimed from the TSF via a floating barge and pump. The maximum dam height is approximately 20 m, and the footprint is approximately 10 ha. An expansion of the TSF (referred to as Stage 2) is underway with the use of Geotube containers. The Geotube containers are placed on the tailings beach around the perimeter prior to hydraulic filling with tailings. The water in the slurry dissipates through the permeable engineered fabric and the tailings settle out within the Geotube by gravity.

A procedure for operation and control of the TSF was prepared by Soma in August 2022. No regular inspections are scheduled by third parties. There is no Engineer of Record (EOR) appointed for the El Bagre TSF.

An additional TSF expansion (referred to as Stage 3) is underway. The expansion is adjacent to the existing TSF, between the access road to the La Ye mine and the left bank of San Pedro Creek. The design of the TSF Stage 3 was completed by Ingeniería de Rocas y Suelos S.A.S (IRYS, 2019a). The geomechanical characterization of the materials required for the construction of the dam was completed as part of an exploration campaign and the geological field surveys completed in April and May 2019. Stage 3 has a footprint of 12.7 ha and a maximum dam height of 18 m. It will provide storage for approximately 10 years, as informed by Soma. The embankments will be constructed in three stages and raised in a downstream direction. The perimeter embankments will be constructed with waste rock with a low permeability compacted soil zone on the upstream side.

SLR provides no conclusions or opinions regarding the stability of the TSF dam and impoundment.

18.2   Nechí

There is limited infrastructure at Nechí, with a small electrical plant, camp, office, and storage buildings close to the El Catorce and Santa Elena deposits, however, the property is actively being mined by artisanal miners, and several adits and hand-dug shafts can be found proximal to the veins. Underground exploration tunnels have been developed at over 1,600 m at El Catorce and over 500 m at Santa Elena.

19.0 MARKET STUDIES AND CONTRACTS

19.1 Markets

Soma sells its gold and silver through a Purchase and Refining Agreement with MVPR International Incorporated (MVPR). The prices Soma receives are based on current market prices and Soma does not hedge any of its gold production. The principal commodities, gold and silver, are freely traded, at prices that are widely known.

19.2 Contracts

19.2.1 Offtake Agreement

On September 4, 2020, Soma entered into an Offtake Agreement (the Offtake Agreement) with Nueva Granada Gold Corp. (NG). Under the Offtake Agreement, Soma is required to pay a percentage of the gold mined at Operadora (market price of gold multiplied by the ounces delivered), as follows:

- Tranche 1: 12% on the first 24,500 gold ounces delivered (completed in January 2022)
- Tranche 2: 6% on the next 22,000 gold ounces of delivered
- Tranche 3: 1% on the remaining gold ounces until the end of production

The offtake obligation encompasses only gold mined on existing Operadora titles and is not applicable on the Company's other properties. As of October 31, 2022, there were 4,931 ounces remaining to be delivered under the Tranche 2 obligation and Soma anticipates that the Tranche 2 obligation will be substantially complete by the end of 2022.

19.2.2 Purchase and Refining Agreement

Under the Purchase and Refining Agreement, Soma sells 100% of its precious metal production to MVPR. Final refining may occur at the facility in Medellín or the doré may be exported to an MVPR-designated facility in another country.

The doré bars are to contain a minimum of 25% gold. The gold price is determined by reference to either the London FIX PM or to or the New York Spot Price, at Soma's discretion. MVPR pays Soma 97.8% of the value of the delivered gold and 70.3% of the delivered silver.

19.2.3 Mine Development

Soma has a contract in place with Stracon International SAC (Stracon) to provide mine development services to Soma. Under the contract, Stracon has been providing underground mining equipment (jumbos, haul trucks and scoops) and operators to advance the development of the main ramp and level drifts at the Cordero mine. The contract terminates at the end of 2022, at which point Soma plans on taking over the development activity with their new fleet of underground mining activity purchased from Sandvik.

In the SLR QP's opinion, the marketing and gold sales contracts are within mineral industry norms.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 Regulatory Overview

Mining activity in Colombia is regulated by the Constitution of 1991 and Law 99 (1993), according to which the responsibilities related to environmental management are shared between the Ministry of Environment and Sustainable Development (Ministerio de Ambiente y Desarrollo Sostenible, MADS) and the National Authority of Environmental Licences (ANLA) at the national level; and by the Autonomous Regional Corporations (Corporaciones Autónomas Regionales, CARs) at the regional level. The MADS sets the national standards for mineral activities, while the CARs are responsible for administering the natural resources and controlling environmental deterioration associated with extraction activities, such as mining, in their territorial jurisdictions and issue project specific rules and requirements consistent with national regulations as suited to their jurisdictions.

20.1.1 Regulatory Framework

The Constitution of 1991, under the influence of international environmental law, provided a major step towards the modernization of the legal environmental management framework in Colombia. It recognized the rights and obligations to its citizens, and power was allocated to different state entities to enforce the tasks of planning, prevention, and protection of the environment. In 1993, Law 99 created the Ministry of Environment as the highest government authority with responsibility for environmental matters. In 2003, Decree 216 expanded its role from the Ministry of the Environment to also include the Ministry of Housing and Territorial Development (MAVDT). In 2011, Law 1444 reorganized the MAVDT splitting its functions between two new entities: the MADS and the Ministry of Housing, City and Territory.

20.1.2 Ministry of Environment and Sustainable Development

The MADS is the lead agency for the management of environment and natural renewable resources and, as such, defines policies and regulations for the recovery, conservation, management, handling, and use of renewable natural resources and environment over all Colombian territory. The MADS' responsibilities related to mining activities are, among others, the following:

- Issue rules, policies, and technical standards for the control of pollution, prevention of environmental damage, establishment of standards and limits for the levels of atmospheric and aquatic emissions, etc.

- Through Decree 3573 in 2011, the ANLA was created and is in charge of ensuring that the projects, works, or activities subject to licensing, environmental permits, or procedures comply with environmental regulations.

- In December 2016, through Resolution 2206, the MADS issued the new terms of reference for the preparation of environmental impact studies required for the processing of environmental licences for mining projects.

In order to compile and rationalize environmental regulations and have a single legal instrument for it, Decree 1076, the only regulatory decree of the Environment and Sustainable Development sector, was issued in 2015. According to article 2.2.2.3.2.2 of Decree 1076 (2015), the ANLA can grant licences to mining projects of metals and gemstones when the exploitation of material is projected to be greater than

or equal to 2,000,000 tpa. The ANLA also has a role in monitoring and control of the obligations established in environmental management plans.

20.1.3 Autonomous Regional Corporations and Urban Environmental Units

The CARs are regional public bodies. Colombia has 33 CARs organized in accordance with areas that constitute an ecosystem or comprise a geopolitical, biographic, or hydro-geographic unit. Each unit is autonomous, with independent financial and administrative functions. In regard to mining, the CARs have the following responsibilities:

- Monitor and inspect the rules and national policies issued by the MADS, as well as impose sanctions on violators of the rules. It is important to note that the CARs have within their jurisdiction the right to issue more stringent rules, policies, and standards than national standards, if it is technically justified.

- Issue permits, authorizations, and environmental licences for works or projects to be developed within CARs' territorial jurisdictions. According to article 2.2.2.3.2.3 of Decree 1076 (2015), the CARs grant environmental licences to mining projects of metals and gemstones when the exploitation of material is projected to be less than 2,000,000 tpa.

20.2 Environmental Aspects

20.2.1 Environmental Studies and Key Environmental Issues

Various EIAs have been submitted and approved in previous years for El Bagre in compliance with national regulations for mining activity in Colombia. The most recent EIA was submitted in 2019 (the 2019 EIA) to permit the expansion of the TSF. SLR has been provided with the following documents and reports by Soma to support the review of environmental aspects of El Bagre:

- EIA from April 2019 for modification of the environmental licence for La Ye Mine – Tailings Dam 3 (SAS Consultores Ltda., 2019)

- Environmental compliance report (Operadora Minera, 2021)

- Monitoring results report for surface water (Hidroasesores, 2022)

Baseline characterization is required for the preparation of an EIA in Colombia and, in general, as mining industry best practice. The EIA includes a characterization of the area of influence of the El Bagre Gold Mining Complex including the physical, biological, and socio-economic environment. The description of the existing environment in the study area from the 2019 EIA included geology, geomorphology, soils and land uses, seismicity, landscape, hydrogeology, hydrology, water quality, meteorology, atmospheric emissions, air quality, ambient noise, flora, fauna, and socio-economic aspects.

Several environmental management programs were developed as part of the overall EMP implemented by Operadora. The programs are as follows:

- Wastewater management (domestic and non-domestic)

- Solid waste management

- Potable water management for human consumption

- Particulate matter, gases, and noise management

- Chemical substances management

- Order and cleaning management

- Erosion and sediment control

- Revegetation

- Wild fauna

- Wood acquisition control

- Environmental education

- Institutional management and community strengthening

- Community information and participation

- Water quality monitoring

- Emissions, air quality, and noise monitoring

- Waste management monitoring

Environmental Compliance Reports (ICA for the acronym in Spanish) are a prevention, monitoring and control tool and focus on the verification of compliance and effectiveness of the responsibilities assumed by the beneficiary of the environmental licence before the competent environmental authority. Environmental authorities such as the ANLA and the CARs are called upon to carry out the environmental monitoring of mining projects through tools such as the ICA.

For El Bagre, Operadora submits the ICA to CORANTIOQUIA, the CAR responsible for the region of Colombia where the mining activities of El Bagre take place. The most recent ICA submitted in May 2022 documents the environmental performance during 2021. The ICA addressed activities and monitoring results for the programs included in the EMP listed above.

In December 2021, CORANTIOQUIA awarded Operadora their Environmental Sustainability Award in the "A" Category which, according to Soma Gold's website, recognizes Operadora's efforts to go beyond the current legal regulations to implement the highest level of environmental best practices. In addition, the award recognizes the donation of 1,500 native trees as part of a reforestation program in the area.

Operadora informed SLR that no compliance issues have been raised by the environmental authorities. SLR is not aware of any environmental issues related to non-compliance with respect to underground mining or milling operations.

While SLR has noted that the El Bagre tailings storage facility (TSF) is at capacity and that this should be addressed moving forward, the QP is not aware of any other environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

20.2.2 Environmental Management System

The environmental guidelines are formulated by the operations management, which uses the ISO 14001 standard and international standards, such as the Environmental and Social Performance Standards, as benchmarks for environmental management. One of Soma's priorities for the year 2023 is to implement all remaining actions required to be certified under the ISO 14001 standard. This standard requires continuous improvement, reduction of emissions, reduction of greenhouse gas emissions, efficient use of water and energy, and protection of biodiversity.

The matrix of legal requirements is updated regularly with the support of external advisors and the Legal Vice Presidency of the Company. The matrix of environmental risks and impacts is also regularly identified and updated (once a year).

Operadora seeks to report and discuss relevant environmental issues in a timely manner with local communities and environmental authorities.

20.3 Waste and Water Management

20.3.1 Environmental Geochemistry

According to the conceptual closure plan presented in Operadora Minera S.A.S. (2022b), and consistent with the conclusions presented in the waste characterization report (LTMA, 2016), the tailings deposited in the TSF are not acid generating, do not exhibit significant metal leaching, and do not exhibit cyanide content based on the results of geochemical characterization carried out on samples collected on January 28, 2015.

Operadora informed SLR that historical environmental monitoring upstream and downstream of the TSF discharge has not shown signs of acid generation nor metal leaching that would contravene applicable regulatory water quality standards. Results of environmental monitoring in 2022 are consistent with this observation (see Section 20.3.3).

20.3.2 Tailings Management

Limited data are available to support the design, operation, or closure of the TSF Stage 2. There is no geotechnical investigation report, design report for the expansion of the TSF with Geotube containers, facility water balance, or closure report available for review. The TSF Stage 2 dam has not been assigned a dam hazard classification and there is no evidence of a dam breach study, an emergency response plan that addresses catastrophic dam failure, or a monitoring and surveillance plan for Stage 2. The procedure for operation and control of the TSF prepared by Soma in August 2022 does not address maintenance and surveillance aspects.

The TSF is located in an area of relatively high seismicity and very high rainfall. The current facility is operated with the tailings pond adjacent to the perimeter dam and there is no emergency spillway. Upstream construction methods are generally not considered best practice as the stability relies on the consolidation of tailings on the beach for the foundation of dam raises.

Continued operation of the existing TSF (Stage 2) is considered to be high-risk, due to the upstream raise design, ad hoc capacity expansions via Geotube containers, and gaps on design and operating documentation. The SLR QP recommends that a risk assessment be completed and mitigation measures defined for the continued operation of the TSF. Once the risks are identified, a decision can be made regarding its continued operation. Decommissioning the TSF prior to the next rainy season and commissioning the TSF Stage 3 (new cell to the east) is also recommended. Soma developed a schedule for the TSF Stage 3 construction, which started in November 2022 and shows completion of the starter dam targeted for April 2023. A comprehensive Dam Safety Review for the existing facility should then be completed to determine the remediation requirements for closure.

The design report for the TSF Stage 3 expansion (IRYS, 2019a) includes seepage, stability, and deformation analyses. As Stage 3 is adjacent to the San Pedro creek, a hydrological review of the anticipated flows in the creek was completed (IRYS, 2019b). The TSF Stage 3 cell has not been assigned a dam hazard

classification. A dam breach study was completed in 2020 for the TSF Stage 3. No OMS manual, facility water balance, emergency response plan, monitoring and surveillance plan were available for review. The SLR QP recommends that these additional studies be completed prior to the commissioning of the TSF Stage 3. It is also recommended that the OMS Manual for the TSF be prepared following the most recent guidelines as documented in the OMS Guide published by the Mining Association of Canada (MAC).

The SLR QP recommends appointing an EOR for the TSF (Stages 2 and 3). The EOR designation is an industry standard for tailings management, as the EOR typically verifies that the TSFs are being constructed and operated as designed and meet all applicable regulations, guidelines, and standards.

20.3.3 Water Management

There are only two locations of discharge of industrial wastewater to the environment, as follows:

- Discharge from the TSF to the San Pedro creek, involving pumping from the TSF internal pond and the discharge from the underdrain system
- Gravity discharge from the Los Mangos mine

Surface water quality monitoring takes place at sampling locations upstream and downstream of points of interest, as follows:

- Tiguí River, 100 m upstream of the underground operations
- Tiguí River, 100 m downstream of the underground operations
- Unnamed creek, 100 m upstream, of the La Ye mine
- Unnamed creek, 100 m downstream, of the La Ye mine
- San Pedro Creek, 100 m upstream of the TSF discharge
- San Pedro Creek, 100 m downstream of the TSF discharge
- San Pedro Creek, 100 m upstream of the Los Mangos mine discharge
- San Pedro Creek, 100 m downstream of the Los Mangos mine discharge
- Corderito Creek, upstream of the Cordero mine
- Corderito Creek, downstream of the Cordero mine

The monitoring program is undertaken by an external consultant (Hidroasesores S.A.S) accredited by the National Institute of Hydrology, Meteorology and Environmental Studies (IDEAM for its acronym in Spanish). According to the monitoring results presented in the most recent report prepared in 2022, when comparing upstream and downstream conditions, the results showed either similar water quality or slightly better at the downstream location. The overall observation is that the El Bagre Gold Mining Complex is not having a negative effect on water quality of the receiving environment. It should be noted that the water quality of the waterbodies in the area of the El Bagre Gold Mining Complex (e.g., San Pedro Creek, Tiguí River, and Nechí River) is severely affected by the numerous artisanal mining activities that have been present for an extended period of time in the region and background water quality is poor in general.

There are currently no requirements for Soma to monitor groundwater quality, but it is anticipated that two groundwater monitoring locations will be set up in 2023 in conjunction with an updated environmental licence.

20.4 Environmental Permitting

20.4.1 Current Permits, Approvals & Authorizations

Permits to continue operating El Bagre in the near future are in place. The environmental authorizations issued as permitting resolutions or administrative acts are listed in Table 20-1. The environmental authorizations do not have expiration dates and are valid for the duration of the mine life.

Table 20-1:   Environmental Authorizations
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Type of Permit	File Number	Status	Date of Request	Approval Certification
La Ye Mine Exploitation (Contracts 5766 and 5805)	PZ3-07-01	Awarded	October 6, 2007	Resolution 130PZ-1461 from April 2008
Environmental Licence Modification	PZ3-07-01	Awarded	October 28, 2009	Resolution 130PZ-1893 from July 2010
Environmental Licence Modification (Contracts 6862, 7483 and 5766)	PZ3-07-01	Awarded	November 8, 2011	Resolution 130PZ-1306-2519 from June 2013
Icacales Mine Expansion	PZ3-07-01	Awarded	February 5, 2015	Administrative Act 160PZ-1507-3691 from July 2015
Environmental Licence Modification (Ciénaga Grande)	PZ3-07-01	Awarded	January 20, 2014	Resolution 160PZ-1602-3538 from February 2016
Environmental Licence Modification	PZ3-07-01	Awarded	August 28, 2014	Resolution 160PZ-1912-8271 from December 2019
Environmental Licence Modification (TSF expansion)	PZ3-07-01	Awarded	July 10, 2019	Resolution 160PZ-RES1912-8271 from December 2019
Environmental Licence Modification (Code L5682005 of integrated title)	PZ3-07-01	Awarded	August 21, 2019	Resolution 160PZ-RES1908-4309

20.4.2 Permits and Authorizations

Operadora is currently developing a new EIA for modification of the Environmental Licence. The modification has two main objectives:

- Update maximum discharge (flow) limits
- Receive approval of CORANTIOQUIA for new discharge permits for Cordero mine.

20.5 Social and Community Impacts

20.5.1 Social Baseline (Setting)

The area of influence of El Bagre includes the rural districts (veredas for its Spanish designation in Colombia) of Naranjal La Tolva, Naranjal El Puerto, Cordero Icacales, Corderito, Caño La Tres, Cimarroncito

El Tigre, El Doce, and El Doce #2 in the municipality of Zaragoza; and Puente del Tigüí and La Sardina within the municipality of El Bagre. The Zaragoza and El Bagre municipalities are located in the Bajo Cauca subregion of the Department of Antioquia.

The socio-economic setting in which Soma operates is particularly sensitive as the area is one of the poorest regions in the Department of Antioquia, with poverty indices of more than 50%. Given this context, Soma is one of the most important companies in the region and one of the primary engines of the regional economy.

The current labor market is characterized by a high rate of informality that is exacerbated by the lack of sources of employment generation. The main economic activities in the area of influence are artisanal mining, agricultural activities, commerce, and other activities such as motorized rickshaws, various trades, and employment at Soma.

The dynamics of violence and armed conflict that have occurred in recent years in the Bajo Cauca subregion of Antioquia due to the presence of various illegal armed groups in the territories may affect demographic changes in this area, triggering displacements to urban areas in municipalities of the region. The unemployment that prevails in the area, the search for opportunities, and the presence of mining operations promotes migration from rural areas to urban areas.

20.5.2 Key Social Issues

The central elements of the Colombian conflict (drug trafficking, illegal armed groups, and gross inequality) can all be found in the Bajo Cauca subregion. The high poverty indices and lack of formal employment are among the main social issues in the area of influence of El Bagre and Nechí.

The local communities are supportive of the formal mining activities such as the El Bagre Gold Mining Complex given the employment opportunities they bring and the social projects they support.

20.5.3 Social Management System

In recognition of the socio-economic setting, Operadora developed a corporate social responsibility policy framework to conform with the requirements established by MADS. The Social Management Plan (SMP) established in the Environmental Management Plan was approved by Resolution 125 of 2015. The SMP includes, among others, the following requirements:

- Prioritize local labour hiring, use of suppliers and contractors, and the acquisition of goods and services in the region where the company conducts its operations.

- Develop and implement at least three initiatives for "productive alternatives" per year for each of the two municipalities that are within Operadora's area of influence. "Productive alternatives" are activities that Operadora carries out with the communities that contribute to local consumption and income generation of these communities.

- In association with community representatives, carry out evaluations of the social management programs every two years, assessing, among other aspects, the effectiveness of the programs, program results, and program quality with respect to objectives. Using these evaluations, consider whether changes should be made for the continuity of the programs or whether new programs should be considered for implementation.

- Provide support for the formalization of informal mining.

20.5.4 Community Engagement

According to the principles guiding the Colombian environmental legislation, the process of developing a new policy of community relations must be public, transparent, participatory, and disseminated widely among the affected communities. From site observations and discussions, and from the review of company and third party information, it appears that all of these criteria are being met by Operadora.

In carrying out the social obligations under its social program, Operadora works with regional and municipal governments to assist them in various initiatives, environmental education, restoration of lands impacted by past artisanal mining, and providing support to regional municipalities on road maintenance and cultural program initiatives. Operadora has been working on various awareness and education programs including coordinated efforts with the state education agency (SENA) to develop and support various skill development and job training programs.

In addition to Operadora's environmental, health and safety, and quality programs, Operadora has also implemented a Corporate Social Responsibility (CSR) program, which is both a broad yet well-focussed program, aimed at assisting local and regional communities/peoples in developing sustainable programs and initiatives that extend beyond mining operations.

The objectives of the program are to facilitate and support opportunities for people in the region. The model used by Operadora focusses on the following areas:

- Health – support for basic needs and services, specialist services, family planning, and programs to promote healthy habits and manage health risks
- Education – promoting opportunities and access to education
- Organizational and Community Strengthening – provide support to community leaders and promote citizen participation for the economic, community, and social administration of the territory inhabited by the communities
- Production Alternatives – promote and support economic revitalization with the different farming and non-farming initiatives in the social area of influence
- Equipment and Community Infrastructure – support the improvement and equipping of the community infrastructure (e.g., donation of furniture to community action boards).

Operadora has a core team supported by contractors that direct the CSR efforts. These individuals work with local and regional governments and community organizations, non-government organizations (NGOs), and strategic alliances to support improvements in community well-being (RPA, 2020). Examples of program achievements in the area of education include improving schools resources, road maintenance to support school access, and development of academic environmental learning modules. Examples of program elements in health care include sponsorship of the medical fly in services and support to family planning programs. Economic development initiatives focus on poverty reduction through provision of strategic advice and direct support to productive alternative projects (RPA, 2020).

The 2022 sustainability report presents metrics (employment, social projects, reforestation, protected fauna species, occupational health and safety, local procurement, etc.) as well as information and achievements on staff's training and skills development (for mechanization of underground mining), health and safety, community relations, community development, environment, and corporate governance. The report captures the following five corporate values:

- Safety
- Social Commitment

- Ethics and Transparency
- Respect
- Responsibility

According to the 2022 sustainability report, the main social achievements on regional development in 2021–2022 are as follows:

- Strengthening of 11 community action boards (nine in Zaragoza and two in El Bagre) and three ethnic communities in La Sardina, Puente Tiguí and Naranjal La Tolva

- Collection of data from 607 family units to support socio-economic characterization

- Donation of resources for local schools (e.g., students' uniforms) and granting partial scholarships for post-secondary education in Uniminuto (a local educational institution in the municipality of El Bagre);

- Delivery of traffic signaling in the local roads with higher traffic volume to improve road safety

- Alliances with SENA to facilitate access to courses on aviculture and the "SENA Emprende Rural" (SER) program developed to promote the inclusion of people and rural communities in production activities

Outreach and community participation within the social area of influence take place through:

- Grievance procedure to register and manage petitions, complaints, concerns, and requests from the community and other interest groups

- Socializing with the different interest groups in agreement with the Environmental Management Plan

- Consultations about the perception of interest groups regarding the operation of the Company and socio-economic characterization of the communities

The grievance procedure allows for collection of written and oral information from the community. Oral information must be documented by Operadora using the form developed for this specific purpose. Received petitions, complaints, concerns, and requests are evaluated by Operadora's social team and a response is provided to the community. The response from the social team and the actions implemented as part of the response are documented by Operadora.

20.6 Mine Closure

A conceptual closure plan for the El Bagre Gold Mining Complex is presented as a section of the report on Sole Program of Exploitation for Integrated Title L5682005 (Operadora Minera S.A.S., 2022b). The closure plan section, which focuses mainly on the closure of the underground mines and the ancillary infrastructure, describes the following activities:

- Dismantling of infrastructure
- Closure of mine portals
- Closure of ventilation shafts and other conduits
- Revegetation and remediation
- Identification of species suitable for ground surface remediation
- Design of an ecological restoration model

- Definition of an action plan for execution of remediation activities
- Maintenance program for revegetation and remediation

The closure plan includes a brief discussion on progressive reclamation that refers mainly to the TSF, which is identified as the only facility where progressive reclamation could be implemented.

The closure plan also presents maintenance and monitoring activities to be implemented for a period of five years during the post-closure phase. The monitoring program is oriented to track physical and chemical stability, as well as the level of success of remediation activities to restore the landscape.

A conceptual closure plan for the TSF Stage 3 is included in the 2019 EIA (SAS Consultores Ltda, 2019).

There is a nursery at the El Bagre accommodation camp with native species where some soil tests are also carried out. The response to revegetation with Brachiaria and Vetiver grass is evaluated, on different soil substrates made up of A, B and Saprolite horizons of the soil associations present in the area of influence of the El Bagre Gold Mining Complex.

The total closure cost provided to SLR by Operadora for the El Bagre Gold Mining Complex is US$1,456,863. A detailed closure cost breakdown was not reviewed by SLR. No financial assurance is required by the Colombian legislation. According to Decree No. 1076 from 2015 (Article 2.2.2.3.9.2), the environmental authority has a period of one month to verify the status of the mining project and declare the start of the closure phase. From that moment the owner has five business days to provide a policy that covers the costs of the activities described in the closure plan, which must be constituted in favor of the competent environmental authority. Renewal of the policy must be carried out annually and for three more years after the completion of the closure phase.

21.0 CAPITAL AND OPERATING COSTS

The capital and operating costs presented in this section include the costs for Cordero. Soma finance and technical teams supplied to SLR capital and operating costs required for mining and processing of the LOM plan. The capital and operating cost estimates were prepared based on recent operating performance at El Bagre and the current operating budget. The SLR QP considers these cost estimates to be reasonable, as long as the production targets are realized.

The Cordero mine is in a test mining phase using already owned equipment from La Ye and Los Mangos, and material is being processed at the El Bagre Plant.

21.1 Capital Costs

21.1.1 Sustaining Capital

The capital costs for underground operations support LOM sustaining requirements based on the current LOM plan. Approximately C$15.63 million in sustaining capital is expected to be spent between years 2023 and 2026, including machinery and equipment, underground mine development, re-start of the El Limon Mill, and the TSF Stage 3 expansion. A summary of the LOM sustaining capital costs for Cordero is presented in Table 21-1.

Table 21-1:   El Bagre Life of Mine Capital Costs
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Area	Units	Total	2023	2024	2025	2026
Mine Equipment	C$ 000	8,436	2,759	2,839	2,839	-
El Limon Mill Re-start	C$ 000	1,200	1,200	-	-	-
Mine Services and Infrastructure	C$ 000	5,347	2,875	1,200	1,272	-
TSF Stage 3 Expansion	C$ 000	648	648	-	-	-
Reclamation and Closure	C$ 000	1,457				1,457
Total Capital Cost	**C$ 000**	**17,089**	**7,482**	**4,039**	**4,111**	**1,457**

21.1.2 Mine Closure Capital

Mine closure costs are explained in Section 20 of this Technical Report. The current mine closure cost estimate is C$1,456,863 to be incurred in the last year of the LOM. Any new operational plans developed in association with Cordero will require updating the closure cost estimates.

21.1.3 Capital Cost Exclusions

The following is excluded from the capital cost estimate:

    a. Working capital

- Sunk costs
- Exploration drilling
- Future expansions

21.2 Operating Costs

The operating cost estimates for the underground operations were prepared based on recent operating performance and the current operating budget. The SLR QP considers these operating cost estimates to be reasonable.

Operating costs are reported in C$ for the following cost centres: underground mining costs, processing costs, and general and administration (G&A) costs.

Mining operating costs have a split of 77% fixed and 23% variable. Even in years of very low production, the cost model includes the full fixed costs for purposes of demonstrating economic viability of the LOM.

Processing operating costs have a split of 8% fixed and 92% variable costs. G&A costs are 100% fixed.

The operating costs to mine and process an estimated 666 kt of material are estimated to total C$163 million over the LOM (Table 21-2).

Table 21-2:   El Bagre Life of Mine Operating Costs
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Item	Units	Total	2023	2024	2025	2026
Underground Mining	C$ millions	102.9	23.6	35.5	39.6	4.2
Processing	C$ millions	38.8	8.9	14.4	13.9	1.6
G&A	C$ millions	15.5	4.8	4.8	4.8	1.1
G&A Indirect costs	C$ millions	5.8	1.5	1.9	1.9	0.5
Total Operating Cost	**C$ millions**	**163.0**	**38.8**	**56.6**	**60.2**	**7.4**

Table 21-3 summarizes the LOM unit operating costs.

Table 21-3:   El Bagre Life of Mine Unit Operating Costs
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Item	Unit	LOM Average
UG Mining	C$/t milled	154
Processing	C$/t milled	58
General and Administrative	C$/t milled	23
General and Administrative - Indirect Costs	C$/t milled	9
Total Operating Cost	**C$/t milled**	**245**

22.0 ECONOMIC ANALYSIS

The economic analysis contained in this report is based on Cordero Indicated Resources and a portion of the Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that economic forecasts on which this Preliminary Economic Assessment is based will be realized.

22.1 Economic Criteria

22.1.1 Revenue

- Project life: 3.23 years (2023 to early 2026), based on Cordero Indicated and Inferred Mineral Resources

- Cordero underground mineralized material tonnes processed: 666 kt at 7.31 g/t Au

    - Contained Gold: 156,502 koz

    - Average LOM Mill Recovery   87%

    - Recovered Gold: 136,156 koz

- Revenue is estimated based on a gold metal price of US$1,700/oz, C$0.75/US$ exchange rate, and COP$3,225/C$ exchange rate. Gold payable percentage of 97.8% which includes the Treatment Charge/Refining Charge (TC/RC). For more details, refer to Section 19 Market Studies and Contracts. It is noted that the cut-off grade calculation used a gold price of US$1,600 per troy ounce and a foreign exchange rate of COP$3,800/US$.

- NSR royalty of 5.52% (see taxation and royalties below).

- A silver credit of 1.5% of gold revenue.

- The LOM Net Revenue for this scenario is C$289.5 million.

22.1.2 Costs

22.1.2.1 Capital Costs

- LOM capital costs of C$15.63 million.
- Closure costs of C$1,456,863 included in the analysis at the end of the LOM.

22.1.2.2 Operating Costs

- LOM Unit operating costs average of:

    - Underground Mining: C$154.40

    - Processing: C$58.25

    - G&A: C$23.29

    - G&A Indirect Costs: C$8.67

        o   Total: C$244.61

- LOM average unit operating cash costs of C$1,289/oz Au.
- All-in Sustaining Cost (AISC) of C$1,418/oz Au.
- LOM operating costs total C$163.0 million.

22.1.3 Taxation and Royalties

- Income tax rate in Colombia is between 30% and 40%.
- A cost model, including depreciation and tax losses, was provided by the Soma finance team for use in the cash flow model.
- In Colombia, RPP properties with gold and silver produced from underground operations are subject to a 4% production tax and a 0.4% royalty, both adjusted by a factor of 0.8 (80% of gold price as outlines by the Central Bank of Colombia for the settlement of gold royalties), which results in an effective royalty of 3.52%. This effective royalty value was used in the cash flow model.
- An additional royalty of 2% for Mineros and Sun Valley (1% each) was included in the cash flow model.

22.2 Cash Flow Analysis

An after-tax cash flow model has been developed for El Bagre to evaluate the economic viability of restarting the El Limon Mill. The inputs for the cash flow model, mine production schedule, and capital and operating costs were provided to SLR by the Soma finance and technical teams and are summarized in the Economic Criteria section above. The model does not take into account the following components:

- Insurance
- Corporate costs
- An after-tax cash flow summary is presented in Table 22-1. All costs are in Q4 2022 C$ with no allowance for inflation.

The pre-tax net present value (NPV) at 8% discount rate is C$94.6 million and after-tax NPV at 8% discount is C$55.9 million.

The summary of the results of the cash flow analysis is presented in Table 22-1.

Table 22-1: El Bagre Cash Flow Analysis
Soma Gold Corp. - El Bagre Gold Mining Complex and Nechí Project

Item	Discount Rate	Units	Value
Pre-tax NPV at 8% discount	8%	C$ million	94.6
Pre-tax NPV at 10% discount	10%	C$ million	91.5
Pre-tax NPV at 12% discount	12%	C$ million	88.6
After-Tax NPV at 8% discount	8%	C$ million	55.9
After-Tax NPV at 10% discount	10%	C$ million	54.1

Item	Discount Rate	Units	Value
After-tax NPV at 12% discount	12%	C$ million	52.4

The undiscounted pre-tax cash flow is C$108.8 million, and the undiscounted after-tax cash flow is C$64.2 million. For this cash flow analysis, the internal rate of return (IRR) metric is non-applicable since there is no negative initial cash flow (no initial investment to be recovered).

The World Gold Council Adjusted Operating Cost (AOC) is C$1,289/oz of gold. The mine life capital cost, including sustaining unit cost, is C$129 per ounce, for an All-In Sustaining Cost (AISC) of C$1,418/oz of gold. Average annual gold production is approximately 44,376 ounces per year from 2023 to 2025.

22.3   Sensitivity Analysis

Project risks can be identified in both economic and non-economic terms. Key economic risks were examined by running cash flow sensitivities on pre-tax NPV at a 10% discount rate. The following items were examined:

- Gold metal price
- Gold head grade
- Gold metallurgical recovery
- Operating costs
- Capital costs

Pre-tax sensitivity over the base case has been calculated for -20% to +20% for grade and gold price, -20% to +15% for recovery, and -15% to +35% for capital and operating costs variations to determine the most sensitive parameter of this Project. The sensitivities are shown in Table 22-2 and Figure 22-1.

Table 22-2:   El Bagre Sensitivity Analysis – Pre-Tax
Soma Gold Corp. - El Bagre Gold Mining Complex and Nechí Project

Item	Units	Low %	Mid-Low %	Base	Mid-High %	High %
Au Head Grade	g/t	5.84	6.58	7.31	8.04	8.77
Au Metallurgical Recovery	%	69.6%	78.3%	87.0%	95.7%	100.0%
Au Metal Price	C$/oz	1813	2040	2267	2493	2720
Operating Cost	C$ million	138.5	150.7	163.0	191.5	220.0
Capital Cost (incl Closure)	C$ million	14.9	16.3	17.6	20.6	23.7

Pre-Tax NPV at 10%	Units	Low %	Mid-Low %	Base	Mid-High%	High%
Au Head Grade	C$ million	43.8	67.6	91.5	115.3	139.2
Au Metallurgical Recovery	C$ million	43.8	67.6	91.5	115.3	127.2
Au Metal Price	C$ million	43.8	67.6	91.5	115.3	139.2
Operating Cost	C$ million	111.3	101.4	91.5	68.3	45.1
Capital Cost (incl Closure)	C$ million	93.7	92.6	91.5	88.9	86.4

Figure 22-1: **NPV Sensitivity Graph**

The pre-tax NPV is most sensitive to the gold price, metallurgical recovery, and head grade followed by operating costs, and is least sensitive to fluctuations in exchange rate and capital costs.

23.0 ADJACENT PROPERTIES

The Property is contiguous with claims held by various companies and individuals. SLR has not relied upon any information from the adjacent properties in the writing of this report.

24.0 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

El Bagre Operation is a traditional "follow the vein" type of operation, where Mineral Resources and Mineral Reserves are not defined in large quantities in advance of mining. A PEA-level cash flow analysis demonstrates profitable operations for more than three years at Cordero, approximately half based on Indicated Resources. There is potential to expand the Mineral Resource base and continue mining, both along the known veins and elsewhere on the Property.

In the short-term, the current tailings storage facility (Stage 2) presents a risk to continued operations, as it is past the original design capacity. Water management during a storm event could present significant challenges. The mitigation is to complete construction (currently underway) on a new cell (Stage 3) before the next rainy season. Soma developed a schedule for the TSF Stage 3 construction, which started in November 2022 and shows completion of the starter dam targeted for April 2023.

The SLR Qualified Persons (QPs) offer the following conclusions for El Bagre and Nechí by area:

25.1 Geology and Mineral Resources

- Mineral Resources are unchanged at Nechí since the previous Technical Report.

- Mineral Resources at Cordero have been updated with data collected since the last Mineral Resource estimate of December 31, 2018.

- In 2018, Roscoe Postle Associates (RPA), now SLR, reviewed and adopted the Mineral Resource estimates completed by Mineros for La Ye and Los Mangos. While mining of the remnants at La Ye and Los Mangos is ongoing, the Mineral Resources and Mineral Reserves defined in 2018 for these advanced stage projects are considered mined out and do not warrant updating. There has been no drilling or sampling for these two projects that would support a Mineral Resource or Mineral Reserve update.

- There is good potential to increase the Mineral Resource base for the Cordero underground deposit at depth and to the east, and additional exploration is warranted.

- There is good understanding of the nature of gold mineralization at the Properties, although the dykes at Cordero are not yet well defined. The deposits are all hosted in shear zones with fragile-ductile deformation within carboniferous granite rocks, with individual morphologies and structural controls, but similar mineralization styles.

- The sample collection, preparation, analytical, and security procedures, as well as the quality assurance/quality control (QA/QC) program as designed and implemented by Soma is adequate, and the assay results within the database are suitable for use in Mineral Resource estimation.

- Underground Mineral Resources are estimated as follows:

  o Indicated Mineral Resources are estimated to total 355,000 tonnes (t) at an average grade of 6.9 g/t Au and containing 78,000 oz Au at Cordero and 310,000 t at an average grade of 4.9 g/t Au and containing 49,000 oz Au at Nechí. Total Indicated Mineral Resources are thus estimated at 665,000 t, at an average grade of 5.9 g/t Au containing 127,000 oz Au.

  o Inferred Mineral Resources are estimated to total 761,000 t at an average grade of 7.9 g/t Au and containing 192,000 oz Au at Cordero and 405,000 t at an average grade of 6.5 g/t Au and containing 85,000 oz Au at Nechí. Total Inferred Mineral Resources are thus estimated at 1,165,000 t, at an average grade of 7.4 g/t Au containing 277,000 oz Au.

- SGS test work on Los Mangos and La Ye blended ore in 2015 had an overall gold and silver recovery after flotation and cyanidation of the blend concentrate of 88.26% and 87.97% respectively.

- The Au feed grades from 2010 to October 2022 ranged from 3.51 g/t Au to 9.24 g/t Au with an average for the period of 5.6 g/t Au. Au recovery ranged from 81.4% to 87.8% with an average for the period of 85.5%. The Ag feed grades ranged from 5.0 g/t Ag to 30.6 g/t Ag with an average for the period of 14.6 g/t Ag. Ag recovery ranged from 77.2% Ag to 83.5% Ag with an average for the period of 80.9% Ag.

- Mill production is averaging just under the 500 tpd nominal and has reportedly been limited by the supply of feed from the mine. The average production rate from 2015 to 2022 is 410 tpd.

- The gold and silver recoveries have been consistent but lower than the design projections of 96% for gold and 90% for silver.

- The gold and silver grades have decreased from inception to date, but metal production has been maintained by increased mill throughput. In 2021, metal grades started to increase again as more mineralized material is being supplied by the Cordero Mine.

- The El Limon Mill will be restarted to process the additional tonnage required to meet the current mine plan. The mill is located 47 km from the El Bagre Plant and has a capacity of 225 tpd.

25.2 Exploration

- Building on exploration work completed by previous operators, including geological and structural mapping and sampling, surveying of old and new artisanal mine workings, etc., Soma has developed a prioritized list of prospective exploration targets for follow up exploration activities at El Bagre.

- The SLR QPs are of the opinion that there is good potential to expand the Mineral Resource base at Cordero and to discover additional Mineral Resources on Soma's larger regional land package.

25.3 Mining and Mineral Reserves

- There are currently no Mineral Reserves calculated for El Bagre.

- The Cordero mining solids encompass a large amount of Inferred material, which makes up much of the life of mine (LOM) plan. Inferred Resources are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. For this reason, Soma is not reporting Reserves until drilling results can support an upgrade to the resource base. A preliminary economic assessment has been completed for Cordero that considers the mechanized cut and fill mining method and the re-start of the El Limon Mill which is currently on care and maintenance.

- Test mining production from Cordero is currently from non-mechanised cut and fill methods using jackleg and winch equipment. Mechanized cut and fill mining is planned to be introduced in 2023. Mechanized development of levels and ramps is currently done with a contracted fleet and workforce, though Soma is currently purchasing equipment with the intent to take over development and future mechanized cut and fill production using an owner operated fleet.

- As at the effective date of this Technical Report, the LOM plan for Cordero is just over three years, ending in early 2026. The production rate of 84 kt in 2022 is scheduled to ramp up to a peak mining production rate of 248 kt in 2024. The increase in production rate is expected to support the re-start of the El Limon Mill.

25.4 Mineral Processing

- SGS test work on Los Mangos and La Ye blended ore in 2015 had an overall gold and silver recovery after flotation and cyanidation of the blend concentrate of 88.26% and 87.97% respectively.

- The Au feed grades from 2010 to October 2022 ranged from 3.51 g/t Au to 9.24 g/t Au with an average for the period of 5.6 g/t Au. Au recovery ranged from 81.4% to 87.8% with an average for the period of 85.5%. The Ag feed grades ranged from 5.0 g/t Ag to 30.6 g/t Ag with an average for the period of 14.6 g/t Ag. Ag recovery ranged from 77.2% Ag to 83.5% Ag with an average for the period of 80.9% Ag.

- Mill production is averaging just under the 500 tpd nominal and has reportedly been limited by the supply of feed from the mine. The average production rate from 2015 to 2022 is 410 tpd.

- The gold and silver recoveries have been consistent but lower than the design projections of 96% for gold and 90% for silver.

- The gold and silver grades have decreased from inception to date, but metal production has been maintained by increased mill throughput. In 2021, metal grades started to increase again as more mineralized material is being supplied by the Cordero Mine.

- The El Limon Mill will be restarted to process the additional tonnage required to meet the current mine plan. The mill is located 47 km from the El Bagre Plant and has a capacity of 225 tpd.

25.5 Infrastructure

- The El Bagre Gold Mining Complex is the base for the mining operations at La Ye, Los Mangos, and Cordero.

- Mineralized material from the underground mines is processed at the El Bagre Plant and tailings storage facility (TSF). In addition to the mill and tailings complex, the site includes a fine ore bin, administration buildings, an assay laboratory, and related infrastructure including electric power, heat, water treatment and supply, sewage treatment, kitchen/dining and accommodation complex, and drill core logging and storage facilities.

- Site access to the El Bagre Gold Mining Complex is accomplished on gravel roads.

- There is limited infrastructure at Nechí, with a small electrical plant, camp, office, and storage buildings close to the El Catorce and Santa Elena deposits. The property is actively being mined by artisanal miners, and several adits and hand-dug shafts can be found proximal to the veins. Underground exploration tunnels have been developed totalling over 1,600 m at El Catorce and over 500 m at Santa Elena.

25.6 Environment

- No environmental issues that could materially impact the ability to extract the Mineral Resources were identified from the documentation available for review.

- Operadora has the permits required to continue the mining operations.

- Several environmental management programs were developed as part of the overall Environmental Management Plan implemented by Operadora.

- Surface water quality monitoring takes place at sampling locations upstream and downstream of the points of discharge of water to the environment.

- Operadora informed SLR that no compliance issues have been raised by the environmental authorities. The SLR QP is not aware of any environmental issues related to non-compliance with respect to underground mining or milling operations.

- Continued operation of the El Bagre Tailings Storage Facility (TSF) Stage 2 is considered to be high-risk, due to the upstream raise design, ad hoc capacity expansions via Geotube containers, and gaps on design and operating documentation. The TSF has no emergency spillway and relies on pumping to control water levels in the tailings pond.

- Operadora has established a Social Management Plan as part of the approved Environmental Management Plan and carries out a number of social initiatives and programs within the area of influence of El Bagre.

- A conceptual Mine Closure Plan has been prepared for the El Bagre Gold Mining Complex and for the future expansion of the TSF (Stage 3).

26.0 RECOMMENDATIONS

The SLR QPs offer the following recommendations by area.

26.1 Geology and Mineral Resources

1. Complete an infill drilling program to upgrade Inferred Mineral Resources within the Cordero LOM plan to at least a classification of Indicated.

2. Incorporate channel samples in the database used for the Mineral Resource estimation of Cordero.

3. Increase the collection of density samples at Cordero to obtain a better understanding of the behaviour of density across lithologies and mineralized domains.

4. Update Cordero's dyke 3D model using available data (photos, core angle, logs, underground mapping) to better understand their nature and to reduce material risk in the Mineral Resource estimate.

5. While the data collection, management, and verification procedures at site are considered to be adequate for this level of study, the development of standard protocols and actions with respect to drilling, sampling, QA/QC, and drill hole database management and storage will improve the overall Project integrity. Detailed recommendations are provided in each section.

26.2 Exploration

Soma has proposed an exploration plan and budget to expand the Resource base at El Bagre, as presented in Table 26-1. SLR has reviewed and concurs with Soma's proposed exploration plans and budget.

1. Complete an initial phase of exploration drilling comprising 20,000 m.

   o Approximately 50% of the drilling should be focussed on converting the Inferred material in the current mine plan to the Indicated category with the goal of preparing an updated mine plan supported by Mineral Reserves.

   o Approximately 25% of the drilling should be focussed on near mine exploration with the goal of expanding the Resource at or near Cordero.

   o Approximately 25% of the drilling should focus on initial drill testing of approximately five prospects. Base target prioritization on the synthesis of exploration information, and complete exploration and drilling activities using a staged approach, with revisions as results are received and reviewed.

2. Complete additional grass roots exploration to identify additional targets for future drilling. This work is to include an airborne magnetic, radiometric, and topographic survey, prospecting, mapping, and soil and stream sediment sampling.

Table 26-1:   Proposed Exploration Budget
Soma Gold Corp. – El Bagre Gold Mining Complex and Nechí Project

Item	C$
Diamond Drilling (20,000 m)	1,500,000
Airborne Geophysics Survey	350,000

Item	C$
Regional Mapping and Sampling	100,000
Management and Support	150,000
Contingency (10%)	21,000
Total	**2,121,000**

Contingent upon the results of this initial phase, complete additional studies including metallurgical testing and geotechnical studies.

26.3 Mining and Mineral Reserves

1. Complete a detailed geotechnical analysis at Cordero to confirm ground support techniques and the mineral extraction factors used in the LOM. Typically, in semi-vertical deposits with dip shallower than 45°, post pillars are necessary to support the hanging wall, as rockfill will be unlikely to do so alone, and/or cemented rockfill may require increased cement content.

2. Evaluate the use of other mining methods such as Alimak raise climbers and/or Shallow Angle Mining System (S.A.M.S.).

3. Complete the work required to upgrade Inferred material in the current mine plan to the Indicated category and to convert existing Indicated Resources to Mineral Reserves to allow the inclusion of material in a Mineral Reserve production plan. It is noted that further work will be required to expand the Mineral Resource base and convert additional Mineral Reserves.

26.4 Mineral Processing

1. Complete metallurgical testing, including ore hardness, flotation, and cyanidation for all new ore types or changes in ore characteristics and sources. There is a long history of consistent operation, however, optimization may be beneficial.

2. The El Limon mill was upgraded to 225 tpd in 2017. Specific information on the mill flowsheet, installed equipment and recent performance should be reviewed with respect to the processing of El Bagre materials. Metallurgical testing should be performed in conjunction with the El Bagre testing program recommended.

26.5 Infrastructure

1. Complete a detailed risk assessment on the impacts to the electrical system of the transition to mechanized cut and fill mining to ensure that there is sufficient capacity to support the additional equipment.

26.6 Environment

1. Complete a risk assessment and define mitigation measures for the continued operation of the existing TSF.

2. Prior to the next rainy season, decommission the TSF Stage 2 cell and commission the TSF Stage 3 (new cell to the east).

3. Complete a comprehensive Dam Safety Review for the existing TSF to determine the remediation requirements for closure.

4. Complete a dam breach study and a detailed closure plan for the existing TSF (Stage 2).

5. Appoint an Engineer of Record (EOR) for the TSF (Stages 2 and 3).

6. Complete additional studies for the TSF Stage 3 cell, ideally prior to its commissioning as discussed in Section 20.3.2 of this report.

7. Prepare an Operation, Maintenance and Surveillance (OMS) Manual for the TSF following the most recent guidelines as documented in the OMS Guide published by the Mining Association of Canada (MAC).

8. Consider the implementation of groundwater quality monitoring in line with best industry practices.

27.0 REFERENCES

Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2014, CIM Definition Standards for Mineral Resources and Mineral Reserves, adopted by the CIM Council on May 10, 2014.

Cediel, F and Shaw, R.P., 2018, Geology and Tectonics of Northwestern South America: The Pacific-Caribbean-Andean Junction. Springer Nature Switzerland.

Climate-data, 2017, Climate: Antioquia, https://en.climate-data.org/south-america/colombia/antioquia-72/. Accessed December 5, 2022.

Dubé, B., and Gosselin, P., 2007, Greenstone-Hosted Quartz-Carbonate Vein Deposits, Geological Survey of Canada, in Goodfellow, W.D., ed., Mineral deposits of Canada: a synthesis of major deposit-types, district metallogeny, the evolution of geological provinces, and exploration methods - an introduction, Geological Association of Canada, Mineral Deposits Division, Special Publication no. 5, 2007

Hidroasesores S.A.S., 2022, Informe de Resultados de Monitoreo No. 2251-C, prepared for Operadora Minera S.A.S., July 29, 2022.

Hoek E., 1994, "Strength of rock and rock masses". ISRM News Journal, 2(2), 4-16.

Ingeniería de Rocas y Suelos S.A.S. (IRYS), 2018, Estudios de Geología y Geotecnia para Análisis de Estabilidad de la Presa de Relaves 2 Mina La Ye, March 9, 2018.

Ingeniería de Rocas y Suelos S.A.S. (IRYS), 2019a, Ingeniería de Detalle para Construcción de la Tercera Etapa de la Presa de Relaves de la Mina La Ye, Diseño Geotécnico de la Presa Final, August 29, 2019.

Ingeniería de Rocas y Suelos S.A.S. (IRYS), 2019b, Ingeniería de Detalle para Construcción de la Tercera Etapa de la Presa de Relaves de la Mina La Ye, Hidrología e Hidráulica, August 29, 2019.

Laboratorio de Tecnología y Medio Ambiente (LTMA), 2016, Waste Characterization Report prepared for Mineros S.A., April 7, 2016.

Leal-Mejía, H., 2011, Phanerozoic Gold Metallogeny in the Colombian Andes: A Tectono-magmatic Approach, Universitat de Barcelona. Departament de Cristal·lografia, Mineralogia i Dipòsits Minerals.

Londoño et al., 2009, Characteristics of lode mineralizations in the Bagre-Nechí Mining District, Antioquia – Boletin de Ciencias de la Tierra – Number 26.

Mineros S.A., 2009, Modificación de la Licencia Ambiental Mina La Ye, October 2009.

Mineros, 2015, Pruebas Metalúrgicas de Flotación y Análisis Mineralógico, Internal Report Dated June 2015

M&NC Consultaria S.A.S., 2022, Soma Gold Corp Solicitor's Report – Title Opinion, dated December 05, 2022

Operadora Minera S.A.S., 2021, Responsabilidad Social Corporativa, slide deck OP-RH-RYS-FOR-025 Version 1.

Operadora Minera S.A.S., 2022a, Informe de Cumplimiento Ambiental (ICA) Año 2021, May 12, 2022.

Operadora Minera S.A.S., 2022b, Avance Programa Único de Explotación Título Integrado L5682005, Unidad de Operaciones Mineras Subterráneas, June 2022.

Operadora Minera S.A.S., 2022c, Informe de Sostenibilidad Año 2022.

RPA, 2020, Technical Report on the El Bagre Operations and the Nechí Gold Project, Department of Antioquia, Colombia, Prepared for Mineros S.A. with an effective date of July 31, 2019, Published May 31, 2020.

SAS Consultores Ltda, 2019, Modificación Licencia Ambiental Mina La Ye: Presa Relaves 3, prepared for Operadora Minera S.A.S., April 2019.

S&R Ingeniería, 2020, Mina La Ye Realce de Dique, design drawings Rev. 0, January 2020.

SGS, 2015, Pruebas Metalúrgicas de Flotación y Análisis Mineralógico, prepared for Mineros S.A.C., June 2015.

TOMRA, 2015, Test Report Sorting of Gold Mineros, Report Dated September 2, 2015

28.0 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the El Bagre Gold Mining Complex and Nechí Project, Department of Antioquia, Colombia" with an effective date of December 31, 2022 was prepared and signed by the following authors:

(Signed & Sealed) *Marie-Christine Gosselin*

Dated at Quebec City, QC   Marie-Christine Gosselin, P.Geo.
January 18, 2023   Project Geologist

(Signed & Sealed) *Sean Horan*

Dated at Toronto, ON   Sean Horan, P.Geo.
January 18, 2023   Principal Geologist and Geostatistician

(Signed & Sealed) *Chelsea Hamilton*

Dated at Whitehorse, YT   Chelsea Hamilton, P.Eng.
January 18, 2023   Project Mining Engineer

(Signed & Sealed) *Andrew P. Hampton*

Dated at Lakewood, CO   Andrew P. Hampton, M.Sc., P.Eng.
January 18, 2023   Principal Metallurgist

(Signed & Sealed) *Luis Vasquez*

Dated at Toronto, ON   Luis Vasquez, M.Sc., P.Eng.
January 18, 2023   Senior Environmental Consultant and
                                                           Hydrotechnical Engineer

29.0 CERTIFICATE OF QUALIFIED PERSON

29.1 Marie-Christine Gosselin

I, Marie-Christine Gosselin, P.Geo., as an author of this report entitled "Technical Report on the El Bagre Gold Mining Complex and Nechí Project, Department of Antioquia, Colombia" with an effective date of December 31, 2022, prepared for Soma Gold Corp., do hereby certify that:

1. I am a Project Geologist with SLR Consulting (Canada) Ltd, of Suite 501, 55 University Ave., Toronto, ON M5J 2H7.

2. I am a graduate of Université Laval, Québec, QC in 2014 with a B.Sc. degree in geology.

3. I am registered as a Professional Geologist with l'Ordre des Géologues du Québec (Reg.#02060). I have worked as a geologist for a total of 8 years since my graduation. My relevant experience for the purpose of the Technical Report is:

    - Lithology and mineralization modelling
    - Target generation and drill hole planning
    - Data analysis
    - Experience as Production Geologist, Exploration Geologist with porphyry copper, sediment hosted copper, Canadian Archaean gold, and VMS deposits in Canada
    - Experienced user of Leapfrog Geo, Vulcan, ArcGIS, and acQuire

4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

5. I visited the El Bagre Gold Mining Complex on February 28 to March 3, 2022.

6. I am responsible for Sections 1.1, 1.1.1.1, 1.1.1.2, 1.1.2.1, 1.1.2.2., 1.3.1 – 1.3.6, 2 – 12, 14.1, 14.2, 23, 24, 25.1, 25.2, 26.1, 26.2 of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.

8. I have had no prior involvement with the property that is the subject of the Technical Report.

9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, Sections 1.1, 1.1.1.1, 1.1.1.2, 1.1.2.1, 1.1.2.2., 1.3.1 – 1.3.6, 2 – 12, 14.1, 14.2, 23, 24, 25.1, 25.2, 26.1, 26.2 contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 18th day of January, 2023,

(Signed & Sealed) *Marie-Christine Gosselin*

Marie-Christine Gosselin, P.Geo.

29.2 Sean Horan

I, Sean Horan, P.Geo., as an author of this report entitled "Technical Report on the El Bagre Gold Mining Complex and Nechí Project, Department of Antioquia, Colombia" with an effective date of December 31, 2022, prepared for Soma Gold Corp., do hereby certify that:

1. I am Technical Manager – Geology and Mineral Resources, and Principal Geologist and Geostatistician with SLR Consulting (Canada) Ltd, of Suite 501, 55 University Ave., Toronto, ON M5J 2H7.

2. I am a graduate of Rhodes University, South Africa, in 2003 with a B.Sc. (Hons.) degree in Environmental Studies, and in 2004 with a B.Sc. (Hons.) degree in Geology. I also have a post-graduate certificate in Geostatistics from the University of Alberta, Canada.

3. I am registered as a Professional Geologist in the Province of Ontario (Reg. #2090). I have worked as a geologist for a total of 15 years since my graduation. My relevant experience for the purpose of the Technical Report is:

   - Geological consulting to the mining and exploration industry in Canada and worldwide, including resource estimation and reporting, due diligence, geostatistical studies, QA/QC, and database management.
   - Geologist responsible for all geological aspects of underground mine development, underground exploration, resource definition drilling planning, and resource estimation at a gold mine in Ontario, Canada.
   - Grade control and prospecting geologist for an alluvial diamond mining company in Angola.
   - Experienced user of AutoCAD, Datamine Studio 3. SQL Database Administration, Visual Basic, Javascript (Datamine Studio 3), Century Systems (Fusion SQL drill hole database tools), Snowden Supervisor, X10, python, and GSLIB.

4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

5. I visited El Bagre and Nechí from August 7 to 11, 2018.

6. I am responsible for Section 14.3 of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.

8. I was previously involved in the preparation of the Technical Report dated July 13, 2019, on El Bagre and Nechí.

9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, Section 14.3 in the Technical Report, for which I am responsible, contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 18th day of January, 2023,

(Signed & Sealed) *Sean Horan*

Sean Horan, P.Geo.

29.3 Chelsea Hamilton

I, Chelsea Hamilton, P.Eng., as an author of this report entitled "Technical Report on the El Bagre Gold Mining Complex and Nechí Project, Department of Antioquia, Colombia" with an effective date of December 31, 2022, prepared for Soma Gold Corp., do hereby certify that:

1. I am a Project Mining Engineer with SLR Consulting (Canada) Ltd, of 6131 6th Avenue, Whitehorse, YT Y1A 1N2.

2. I am a graduate of the University of Toronto in 2007 with a BASc in Mineral Engineering.

3. I am registered as a Professional Engineer in the Province of Ontario (Licence No. 100127897) and the Yukon Territory (License No. 3578). I have worked as a mining engineer for a total of 8 years since my graduation. My relevant experience for the purpose of the Technical Report is:

    *   Mine planning, underground mine design and scheduling, ventilation design and implementation for numerous projects in Canada and USA.

    *   Mining engineer for an underground gold mine in Ontario, Canada and an underground gold mine in Nevada, USA for a total of 3.5 years.

    *   Precious Metals Equity Research Associate/Analyst in Toronto for a total of 2.5 years.

    *   Mineral reserve estimation and preparation of NI 43-101 Technical Reports.

    *   Experienced user of Deswik mine planning software.

4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

5. I visited the El Bagre Gold Mining Complex on February 28 to March 3, 2022.

6. I am responsible for Sections 1.1.1.3, 1.1.1.5, 1.1.2.3, 1.1.2.5, 1.2, 1.3.7, 1.3.8, 1.3.10, 1.3.11, 1.3.13, 15, 16, 18.1 – 18.3, 19, 21, 22, 25.3, 25.5, 26.3, and 26.5 of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.

8. I have had no prior involvement with the property that is the subject of the Technical Report.

9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, Sections 1.1.1.3, 1.1.1.5, 1.1.2.3, 1.1.2.5, 1.2, 1.3.7, 1.3.8, 1.3.10, 1.3.11, 1.3.13, 15, 16, 18.1 – 18.3, 19, 21, 22, 25.3, 25.5, 26.3, and 26.5 in the Technical Report, for which I am responsible, contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 18th day of January, 2023,

(Signed & Sealed) *Chelsea Hamilton*

Chelsea Hamilton, P.Eng.

29.4 Andrew P. Hampton

I, Andrew P. Hampton, P.Eng., as an author of this report entitled "Technical Report on the El Bagre Gold Mining Complex and Nechí Project, Department of Antioquia, Colombia" with an effective date of December 31, 2022, prepared for Soma Gold Corp., do hereby certify that:

1. I am Principal Metallurgist with SLR International Corporation, of Suite 100, 1658 Cole Boulevard, Lakewood, CO, USA 80401.

2. I am a graduate of Southern Illinois University in 1979 with a B.S. Degree in Geology, and a graduate of the University of Idaho in 1985, with an M.S. Degree in Metallurgical Engineering.

3. I am registered as a Professional Engineer in the Province of British Columbia, Licence No. 22046. I have worked as an extractive metallurgical engineer for a total of 37 years since my graduation. My relevant experience for the purpose of the Technical Report is:

    *   Process plant engineering, operating and maintenance experience at mining and chemical operations, including the Sunshine Mine, Kellogg, Idaho, Beker Industries Corp, phosphate and DAP plants in Florida and Louisiana respectively, and the Delamar Mine in Jordan Valley Oregon.

    *   Engineering and construction company experience on a wide range of related, precious metal projects and studies, requiring metallurgical testing, preliminary and detailed design, project management, and commissioning and start-up of process facilities and infrastructure. EPCM companies included Kilborn Engineering Pacific Ltd., SNC Lavalin Engineers and Constructors, Washington Group International Inc. and Outotec USA, Inc.

4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

5. I did not visit the El Bagre Gold Mining Complex.

6. I am responsible for Sections 1.1.1.4, 1.1.2.4, 1.3.9, 13, 17, 25.4, and 26.4 of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.

8. I have had no prior involvement with the property that is the subject of the Technical Report.

9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Sections 1.1.1.4, 1.1.2.4, 1.3.9, 13, 17, 25.4, and 26.4 contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 18th day of January, 2023,

(Signed & Sealed) *Andrew P. Hampton*

Andrew P. Hampton, P.Eng.

29.5   Luis Vasquez

I, Luis Vasquez, M.Sc., P.Eng., as an author of this report entitled "Technical Report on the El Bagre Gold Mining Complex and Nechí Project, Department of Antioquia, Colombia" with an effective date of December 31, 2022, prepared for Soma Gold Corp., do hereby certify that:

1. I am Senior Environmental Consultant and Hydrotechnical Engineer with SLR Consulting (Canada) Ltd, of Suite 501, 55 University Ave., Toronto, ON M5J 2H7.

2. I am a graduate of Universidad de Los Andes, Bogotá, Colombia, in 1998 with a B.Sc. degree in Civil Engineering, and in 1999 with a M.Sc. degree in Water Resources Engineering.

3. I am registered as a Professional Engineer in the Province of Ontario (Reg. #100210789). I have worked as a civil engineer on mining related projects for a total of 17 years since my graduation. My relevant experience for the purpose of the Technical Report is:

    • Reviews and reports as an environmental consultant on numerous mining operations and projects for due diligence and regulatory requirements.

    • Preparation of numerous environmental impact assessments for mining projects located in Canada, and Perú for regulatory approval.

    • Preparation of multiple mine closure plans for mining projects in Canada and Perú.

    • Preparation of several scoping, prefeasibility, feasibility, and detailed design level studies for projects located in North America, South America, the Caribbean and Asia with a focus on planning, design and safe operation of water management systems and waste disposal facilities.

4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

5. I visited the El Bagre Gold Mining Complex on February 28 to March 3, 2022.

6. I am responsible for Sections 1.1.1.6, 1.1.2.6, 1.3.12, 18.4, 20, 25.6, 26.6 and related disclosure in Section 27 of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.

8. I have had no prior involvement with the property that is the subject of the Technical Report.

9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, Sections 1.1.1.6, 1.1.2.6, 1.3.12, 18.4, 20, 25.6, and 26.6 contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 18th day of January, 2023,

(Signed & Sealed) *Luis Vasquez*

Luis Vasquez, M.Sc., P.Eng.