Magistral Project

NI 43-101 Technical Report on Preliminary Economic Assessment

Magistral de Oro, Durango, Mexico

Effective Date: 12 December 2021

Prepared for: Tarachi Gold Corp.

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Prepared by: Ausenco Engineering Canada Inc.

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Scott Weston, P.Geo., – Hemmera Envirochem Inc.
Paul Daigle, P.Geo., AGP – AGP Mining Consultants Inc.
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CERTIFICATE OF QUALIFIED PERSON

Scott C. Elfen

I, Scott C. Elfen, P.E., certify that I am employed as the Global Lead Geotechnical and Civil Services of Ausenco Engineering Canada Inc., 855 Homer Street, Vancouver, BC V6B 2W2, Canada. This certificate applies to the technical report titled "Magistral Project NI 43-101 Technical Report on Preliminary Economic Assessment, Magistral del Oro, Mexico" that has an effective date of 12 December 2021 (the "Technical Report").

I graduated from I graduated from the University of California, Davis, CA, in 1991 with Bachelor of Science degree in Civil Engineering (Geotechnical). I am a Registered Civil Engineer in the State of California (No. C56527) by exam since 1996 and I am also a member of the American Society of Civil Engineers (ASCE), Society for Mining, Metallurgy & Exploration (SME) that are all in good standing. I have practiced my profession continuously for 24 years and have been involved in geotechnical, civil, hydrological, and environmental aspects for the development of mining projects; including feasibility studies on numerous underground and open pit base metal and precious metal deposits in North America, Central and South America, Africa and Australia.

I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.

I have not visited the Magistral Project site. I am responsible for the preparation of Sections 1.20, 1.21.1.6, 1.21.2.3, 1.22, 2.6–2.8, 18.9, 21.2.2.3.4, 25.9, 25.14.2.8, 25.14.3.3, 26.6.1 and 27 of the Technical Report.

I am independent of Tarachi Gold Corp. independence is defined in Section 1.5 of NI 43-101. I have had no prior involvement with the property that is the subject of the Technical Report.

I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: 19 January 2022

"Signed and sealed"

Scott C. Elfen, P.E.

CERTIFICATE OF QUALIFIED PERSON

Edward James McLean

I, Edward J. McLean, certify that I am employed as Manager Minerals Consulting, with Ausenco Services Pty Ltd ("Ausenco"), with an office address of 169 Grey Street, South Brisbane. This certificate applies to the technical report titled "Magistral Project NI 43-101 Technical Report on Preliminary Economic Assessment, Magistral del Oro, Mexico," that has an effective date of 12 December 2021 (the "Technical Report").

I graduated from University of Queensland, Brisbane, Australia, 1975 with a Bachelor of Science (Metallurgy). I am a Fellow of Australasian Institute of Mining and Metallurgy, 103625. I have practiced my profession for 45 years since graduation. I have been directly involved in gold and silver extraction and recovery processes, tailing retreatment design and operation, management, and mitigation of deleterious elements in the process including cyanide soluble copper and mercury, integration and upgrades to brownfields plant, equipment and services relevant to the metallurgical testing, mineral processing and recovery methods, and operating cost sections of the Technical Report.

I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.

I have not visited the site of the Magistral Project. I am responsible for Sections 1.11, 1.14, 1.20, 1.21.1.4, 1.21.2.2, 1.22, 2.6–2.8, 13, 17, 25.5, 25.8, 25.14.2.4, 25.14.3.2, 26.5 and 27 of the Technical Report.

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Dated: 19 January 2022

"Signed and sealed"

Edward James McLean, Fellow AusIMM

CERTIFICATE OF QUALIFIED PERSON
Kevin Murray

I, Kevin Murray, P.Eng., certify that I am employed as a Manager Process Engineering with Ausenco Engineering Canada Inc. ("Ausenco"), with an office address of 1050 West Pender Street, Suite 1200, BC V6E 3S7, Canada. This certificate applies to the technical report titled "Magistral Project NI 43-101 Technical Report on Preliminary Economic Assessment, Magistral del Oro, Mexico" that has an effective date of 12 December 2021 (the "Technical Report").

I graduated from graduated from the University of New Brunswick, Fredericton NB, in 1995 with a Bachelor of Science in Chemical Engineering. I am a member in good standing of Engineers and Geoscientists British Columbia, License# 32350 and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists, Registrant# L4940. I have practiced my profession for 21 years. I have been directly involved in all levels of engineering studies from preliminary economic analysis to feasibility studies. I have been directly involved with test work and flowsheet development from preliminary testing through to detailed design and construction.

I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.

I have not visited the Magistral project site. I am responsible for Sections 1.1, 1.2, 1.15, 1.16, 1.18–1.20, 1.21.1.1, 1.21.1.2, 1.22, 2.1–2.3, 2.5-2.8, 3.1, 3.4, 3.5, 18.1–18.8, 19, 21.1, 21.2.1, 21.2.2.1, 21.2.2.3.1, 21.2.2.3.2, 21.2.2.3.3, 21.2.2.3.5, 21.2.3-21.2.6, 21.3.1, 21.3.3, 21.3.4, 21.4, 22, 24, 25.1, 25.9, 25.10, 25.12, 25.13, 25.14.1, 25.14.2.1, 25.14.2.2, 25.14.2.5, 25.14.2.6, 26.1 and 27 of the Technical Report.

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Dated: 19 January 2022

"Signed and sealed"

Kevin Murray, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

Scott Weston

I, Scott Weston, P. Geo., certify that I am employed as Vice President of Business Development Hemmera Envirochem Inc, a wholly owned subsidiary of Ausenco Engineering Canada ("Ausenco"), with an office address of 4730 Kingsway, Burnaby, BC, V5H 4J5, Canada. This certificate applies to the technical report "NI 43-101 Technical Report on Preliminary Economic Assessment, Magistral del Oro, Mexico," that has an effective date of 12 December 2021 (the "Technical Report").

I graduated from the University of British Columbia, Vancouver, BC, Canada, in 1995 with a Bachelor of Science, Physical Geography, and from Royal Roads University, Victoria, BC, Canada, in 2003 with a Master of Science, Environment and Management. I am a Professional Geoscientist of Engineers and Geoscientists British Columbia; 124888. I have practiced my profession for 25 years. I have been directly involved in . I have been directly involved in the review of environment, social and permitting for projects of similar nature in Mexico.

I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.

I have not visited the Magistral Project site. I am responsible for Sections 1.17, 1.20, 1.21.1.5, 1.22, 2.6–2.8, 3.3, 18.10, 18.11, 20, 25.11, 25.14.2.7, 26.6.2, 26.7 and 27 of the of the Technical Report.

I am independent of Tarachi Gold Corp. as independence is defined in Section 1.5 of NI 43-101. I have had no prior involvement with the property that is the subject of the Technical Report.

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Dated: 19 January 2022

"Signed and sealed"

Scott Weston, P. Geo.

CERTIFICATE OF QUALIFIED PERSON
Paul Daigle

I, Paul Daigle, P.Geo., certify that I am employed as a Principal Resource Geologist with AGP Mining Consultants Inc., with a business address at #246-132K Commerce Park Dr., Barrie, Ontario, L4N 0Z7, Canada. This certificate applies to the technical report titled "NI 43-101 Technical Report on Preliminary Economic Assessment, Magistral del Oro, Mexico" that has an effective date of 12 December 2021 (the "Technical Report").

I graduated from Concordia University in Montreal, Quebec, Canada, in 1989 with a B.Sc. in Geology. I am a member in good standing of the Association of Professional Geoscientists of Ontario (#1592). I have practiced my profession in the mining industry continuously since graduation. My relevant experience includes over 30 years in mineral exploration and diamond drill programs, managing data, and estimating resources. I have been involved in several alluvial precious metal and industrial metal projects with similar depositional environments including but not limited to the Rio Claro gold project, Brazil and the Xai Xai mineral sands project, Mozambique.

I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.

My most recent site visit to the Magistral Project Site was from May 13 to 18, 2021 for a duration of 2 days. I am responsible for Sections 1.3–1.10, 1.12, 1.20, 1.21.1.3, 1.22, 2.4, 2.6–2.8, 3.2, 4–12, 14, 15, 23, 25.2–25.4, 25.6, 25.14.2.3, 26.2, 26.3 and 27 of the Technical Report.

I am independent of independent of Tarachi Gold Corp., as independence is defined in Section 1.5 of NI 43-101. I have had no previous involvement with Magistral Tailing Project.

I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: 19 January 2022

"Signed and sealed"

Paul Daigle, P.Geo.

CERTIFICATE OF QUALIFIED PERSON
Gordon Zurowski

I, Gordon Zurowski, P. Eng., certify that I am employed as a Principal Mining Engineer with AGP Mining Consultants (AGP), with an office address of 132 Commerce Park Drive, Unit K #246 Barrie, Canada L4N 0Z7. This certificate applies to the technical report titled "NI 43-101 Technical Report on Preliminary Economic Assessment, Magistral del Oro, Mexico" that has an effective date of 12 December 2021 (the "Technical Report").

I graduated from the University of Saskatchewan with a Bachelor of Applied Science in Geological Engineering in 1989. I am a Professional Engineer of the Professional Engineers of Ontario, member #100077750. I have practiced my profession for 30 years. I have been directly involved in open pit mining including operating, design and evaluation in Canada and worldwide.

I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.

I have not visited the Magistral Project. I am responsible for Sections 1.13, 1.20, 1.21.2.1, 1.22, 2.6–2.8, 16, 21.2.1.1, 21.3.2, 25.7, 25.14.3.1, 26.4 and 27 of the Technical Report.

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I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: 18 January 2022

"Signed and sealed"

Gordon Zurowski, P. Eng.

Important Notice

This report was prepared as National Instrument 43-101 Technical Report for Tarachi Gold Corp.(Tarachi) by Ausenco Engineering Canada Inc. (Ausenco) and AGP Mining Consultants Inc., collectively the Report Authors. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in the Report Authors' services, based on i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Tarachi, subject to terms and conditions of its contracts with each of the Report Authors. Except for the purposed legislated under Canadian provincial and territorial securities law, any other uses of this report by any third party is at that party's sole risk.

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1 SUMMARY

1.1 Introduction

Tarachi Gold Corp. (Tarachi) is a Canadian exploration and development company, based in Vancouver, Canada, and is publicly listed on the OTCQB® Venture Market (OTCQB:TRGGF) (FRA:4RS) AND (CSE:TRG). Tarachi is focused on the development of several gold projects in Sonora, Mexico, and the Magistral Tailings and Mill Project in Durango, Mexico.

The Magistral project consists of an existing 1,000-tonnes-per-day (t/d) cyanide leach tailings reprocessing plant with a Merrill-Crowe recovery circuit and a tailings resource containing an estimated 1.26 million tonnes of tailings material (M&I) with a grade of 1.93g/t Au t/d.

Ausenco Engineering Canada Inc. (Ausenco) and AGP Mining Consultants Inc. (AGP) prepared this technical report (the Report) on the Magistral Project on behalf of Tarachi. This Report presents the results of a Preliminary Economic Assessment (PEA) completed in 2021 (2021 PEA) for the Magistral Mill and Tailings Project (Magistral Project or the Project). Tarachi holds a 100% interest in the tailings processing facility through its wholly owned subsidiary TGMEX Silver S.A. de C.V. (TGMEX) and exclusive rights to reprocess the tailings material through TGMEX and Tarachi's other subsidiary Proyecto Magistral S.A. de C.V.

The Qualified Persons (QPs) for this report are:

- Scott C. Elfen, P.E., Global Lead Geotechnical Services, Ausenco Engineering Canada Inc.;
- Edward J McLean, FAusIMM, Manager Mineral Consulting, Ausenco Services Pty Ltd;
- Kevin Murray, P.Eng., Manager Process Engineering, Ausenco Engineering Canada Inc;
- Scott Weston, P.Geo., Vice President, Business Development, Hemmera Envirochem Inc.;
- Gordon Zurowski, P.Eng., Principal Mining Engineer, AGP Mining Consultants Inc.;
- Paul Daigle, P.Geo., Senior Resource Geologist, AGP Mining Consultants Inc.

A site inspection was completed by Mr. Daigle from May 13 to May 18, 2021, with two days on site. The 2021 drilling program was in progress during the site visit. Drilling, sampling and logging procedures were witnessed during the site visit. Logging and sampling facilities and exploration offices were also inspected and included verifying drillhole collar locations for the current drill campaign.

1.2 Property Description, Location and Ownership

The Magistral Property is located in northern Durango, Mexico, on the Ejido Magistral del Oro (Ejido), approximately 335 km north of the city of Durango. The Magistral Property is defined by three agreements between Tarachi and the local ejido. These include: a Tailings Lease Agreement and a Land Lease Agreement for the Project, which includes two temporary occupancy agreements for purchase of the land use of the mill facility. The property also has two temporary occupancy agreements. The Property, as defined by the agreements, covers a total area of approximately 51.6 ha.

Figure 1-1: Project Location Map

Note: Figure prepared by Tarachi, 2021.

1.3 Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

The Magistral tailings are above surface and, therefore, are not required to have a mine concession for exploration and development activities which pertains to subsurface mineral substances. The Property consists of three principal surface lease agreements between Tarachi and the Ejido consisting of:

- Tailings Lease Agreement for the tailings material, approximately 20 ha;
- Land Lease Agreement consisting of two temporary occupancy agreements for the use of land that cover the Magistral tailings and the plant facility; and the plant tailings storage facility; approximately 20.6 ha; and

The property also includes two temporary occupancy agreements. As of the date of issue of this report, Tarachi is negotiating to include a land use agreement for the area between the mill and tailings storage facility (11 ha).

1.4 History

Magistral del Oro is one of the oldest mining districts in the Mexican Republic; the first recorded discovery of gold was in the year 1620. Small scale mining grew in the 18th century with the production of gold, which was sent to New Spain. Mining continued until 1810 when the mines were largely abandoned due to the War of Independence (1809–1820). The region was largely forgotten until the mid-1800s. when small scale exploitation of the gold veins and placers slowly developed at El Oro.

From 1950–1960, the Compañía Magistral del Oro S.A. de C.V. (Cía. Magistral del Oro) took over operations, mining and milling the Cocineras and Colorados veins, part of Recompensa, Los Angeles, and Santa Ana (using flotation), concluding with its activities in 1960 due to labour problems. Cía. Magistral del Oro held the property until at least 1985 (Ash et.al., 2018). Majority of the tailings at Magistral were deposited during these mining operations. Production records were not available at the time of writing.

In 2016, MX Gold Corp. (MX Gold) entered into a joint venture to develop the Magistral tailings. A 24 hollow stem auger drill program was completed, and a Mineral Resource and PEA was issued in 2018. In November 2018, MX Gold relinquished its interest in the Project.

1.5 Geological Setting and Mineralization

The geology in the State of Durango, Mexico is dominated by extensive volcanic fields that form one of the world's largest deposits of rhyolitic ignimbrite and tuff. The volcanic field has been divided into an early, Lower Volcanic Group (LVG) consisting mainly of intermediate composition volcanic and volcaniclastic rocks and a later (Oligocene), Upper Volcanic Group (UVG) consisting of acidic volcanic rocks. Early Tertiary to Mesozoic age, sedimentary rocks occur in the eastern part of the State of Durango and as windows in the extensive Tertiary volcanic fields. Locally younger intrusive bodies, quartz feldspar porphyry, dioritic or granodioritic units, intrude limy sedimentary rocks (Hodson, 2014).

This region of northern Durango (southern Chihuahua) is comprised of two physiographic provinces; to the east is that of Basin and Range (Sierras y Cuencas), and the western part is the province of Upland with Basins (*Tierras Altas con Cuencas*) (Raisz, 1964). The Project resides in the Upland with Basins province.

The Magistral District, in the foothills of the Sierra Madre Occidental, is a Tertiary Volcanic Province composed of dacites, diorites, rhyolitic breccia and rhyolitic ignimbrites and tuffs, mainly rhyolites between terrains of Quaternary sediments.

The deposit of the Magistral tailings derives from the described geology. The tailings are the rejects from the historic mill workings from the mid-1900s. The tailings are the resulting waste from the mill operations whose provenance are granodiorites and quartz veins which were mined as the primary source of gold.

1.6 Deposit Types

The primary mineral deposits of the Magistral del Oro district are classified as epithermal gold–silver-bearing quartz–sulphide vein deposits of Oligocene age. Epithermal gold–silver-bearing deposits can exhibit variable metal zonation between one another within a district, and even within different portions of individual deposits and veins. Therefore, the tailings resulting from mining and processing of such deposits should also be expected to contain varying contents of the metals and/or minerals (Ash et.al. 2018).

1.7 Exploration

In March and April 2021, Tarachi completed a property survey by photogrammetry and GPS. In April 2021, a drone LiDAR survey was flown to complete a new topographic survey and surface.

1.8 Drilling

In May 2021, Tarachi completed a hollow auger drill campaign over the tailings deposit. The drill program consisted of 37 hollow stem drillholes, sampled by Shelby tubes, for a total of 242.62 m and 178 samples. Each sample consisted of two Shelby tubes of material.

1.9 Sample Preparation and Analysis

All samples from 37 drillholes were sent to Base Metallurgical Laboratories Ltd. (BaseMet) and Activation Laboratories (Actlabs) in 2021, both located in Kamploops, British Columbia, for metallurgical testwork and assay analysis, respectively. Tarachi carried out a QA/QC program that consisted of the insertion and analysis of blanks, Certified Reference Materials (CRMs or standards), and duplicate samples to monitor the precision and accuracy or the reliability of the assay results from their drilling and sampling program.

1.10 Data Verification

AGP received the laboratory certificates and drillhole sample intervals. A total of 178 samples were collected from the 2021 auger drillhole program. AGP reviewed 100% of the assay analyses and no errors were encountered. The downhole drillhole survey is assumed to be vertical drillholes.

1.11 Metallurgical Testwork and Mineral Processing

Three metallurgical testwork programs were undertaken on Magistral samples in 2012, 2016 and 2021 in support of the evaluations of tailings retreatment for the Magistral Project by Kappes, Cassiday & Associates (KCA), Metsolve labs, and Base Metallurgical Laboratories, respectively. The tests would validate the performance of the existing flowsheet onsite and identify the need for any additional equipment.

Results from gravity and flotation testing from Base Metallurgical Laboratories showed no gravity gold was present and flotation gold recovery was low. The presence of water-soluble copper was negligible.

The cyanidation bottle roll tests from each laboratory indicated that Magistral material is amenable to cyanide leaching to recover gold and silver.

For this NI-43-101 Technical Report, a flowsheet incorporating cyanidation followed by SART process was considered to be the most appropriate design for the Magistral retreatment material. Over the range of samples tested, overall gold and copper recoveries were forecasted as shown in Table 1-1.

Table 1-1: Forecast for Plant Recovery

Element	Cyanide Extractions %	CCD Recovery %	SART Plant Recovery %	Merrill-Crowe Recovery %	Merrill-Crowe Overall Recovery %	SART Plant Overall Recovery %
Au	84.4	95.7	11.0	99.5	71.8	8.9
Ag	75.2	95.7	95.0	99.5	3.6	68.4
Cu	53.6	95.7	90.0	8.0	0.4	46.2

Note: Table prepared by Ausenco, 2021.

1.12 Mineral Resource Estimate

The Mineral Resources for the Magistral Tailings are reported at a cut-off grade of 0.50 g/t Au within a constraining shell. The Mineral Resources are: Measured resources of 1.1 Mt at 1.95 g/t Au, 0.17% Cu and 3.22 g/t Ag; Indicated Resources of 0.2 Mt at 1.80 g/t Au, 0.17 %Cu and 3.11 g/t Ag; and, and Inferred Resources of 0.02 Mt at 1.78 g/t Au ,0.16 %Cu and 2.43 g/t Ag. The effective date of the Mineral Resources is 15 November 2021.

Definitions for Mineral Resource categories used in this report are consistent with those defined by CIM (2014) and referenced 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 that are not Mineral Reserves do not have demonstrated economic viability.

1.13 Mining Methods

The mining method is excavation of the tailings by excavator or front-end loader, followed by haulage to the plant and tailings screening to remove coarse clumps, vegetation and other unwanted material, before processing. Two 20-t haul trucks are required to maintain the plant production due to the proximity of the feed material to the process plant. Some dilution along the original topographic contact is expected but should not be significant as the use of the excavator can help minimize this. Support equipment includes a track dozer, grader and water truck. No drilling and blasting is required.

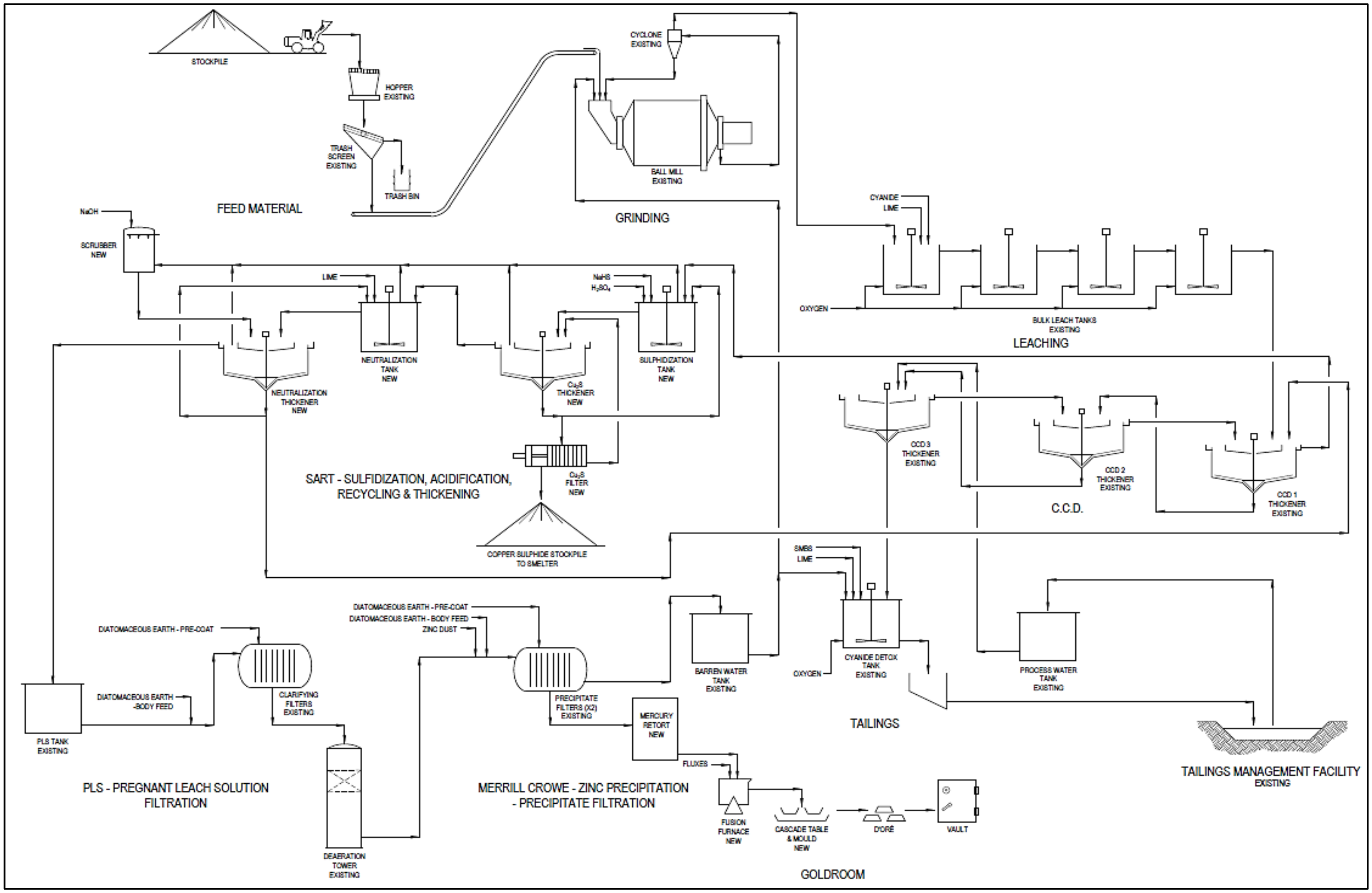
1.14 Recovery Methods

Based on the metallurgical test results and Ausenco’s design expertise, the planned flowsheet, which is designed for treatment of Magistral tailings material, is flexible and robust. The flowsheet is based on well-proven unit operations in the industry and there are no unique or novel processing methods required for gold and copper recovery.

The key project design criteria for the plant are:

- Major equipment designed for a nominal throughput of 1,000 t/d.
- Process flowsheet (Figure 1-2) including regrinding, cyanide leaching circuit, countercurrent decantation (CCD), Sulfidization, Acidification, Recycling and Thickening (SART), Merrill-Crowe circuit, and cyanide destruction, with an overall availability of 95%.

Figure 1-2: Process Flowsheet



Note: Figure prepared by Ausenco, 2021.

1.15 Project Infrastructure

The mine site at Magistral includes existing infrastructure in good condition which can be used during the operation. To complement it, additional infrastructure is required as described in this section.

The proposed flowsheet uses a majority of the existing equipment and requires addition of SART and an oxygen plant, SMBS area, refinery and gold room, and conveyors. The existing areas are the screening, grinding, leaching, CCD area and Merrill-Crowe.

The site is well connected by public roads and there are existing onsite roads which will require grading.

Figure 1-3 provides an overview of overall project site and shows the new and existing mine site infrastructure for the Magistral Project.

Figure 1-3: Overall Site Layout

Note: Figure prepared by Ausenco, 2021.

The site is located very close to the town of Magistral del Oro. No camps will be built onsite as all staff are assumed to be living in the town.

The dry weather condition in Mexico allows operation of equipment without enclosed buildings. The existing buildings include the Merrill-Crowe facility which will house the new gold room, administration office, mill workshop and laboratory. Addition of the SART plant will include a small building over the concentrate filter. Other new buildings include a gate house and truck workshop.

Electric power is available on site and is supplied by the federal government. No changes are required. The supply to the site is approximately 2MW and the maximum power demand is expected to be 1.5MW.

Freshwater is available from a well near the old mine or from the shaft of the original Magistral del Oro mine, as well as recirculated water from the existing tailings pond. The freshwater requirement for the plant operation is 16.9m^3/hr.

Solum Consulting Group (Solum) developed a conceptual design for the Tailings Storage Facility (TSF). For the final tailings density of 1.4 t/m^3 (which is consistent with tailings placed as a slurry at about 50% solids by mass), the currently permitted TSF facility design raised to its fully permitted elevation of 1,770m will accommodate additional storage of approximately 900,000 mt, which falls short of the tailings resource currently being considered for reprocessing (1.29 million mt). The existing TSF will be expanded in phases during the operation to accommodate the additional tailings generated.

The primary water management systems and components includes diversion ditches, collection ditches, and collection ponds. Two diversion ditches were designed to divert the clean runoff approaching the tailings deposit area and process plant areas. A collection system, including two collection ditches was designed to manage contact water from the tailings deposit area. The collected contact water will be retained in a collection pond.

1.16 Market Studies and Contracts

No market studies have been undertaken by Tarachi or its consultants for the present NI 43-101. Tarachi has had discussions with reputed marketing companies which have been the basis for the terms used in this study. Two saleable products are produced, a precipitate from the SART plant containing Cu-Au-Ag and doré from the Merrill-Crowe plant containing Au.

The filter cake will be sent to a suitable facility for smelting (doré). For this technical report, a gold price of US$1,600/oz, a silver price of US$22/oz, and a copper price of US$3.4/lb were assumed and a US$:C$ exchange rate of 1.00:1.28 was used.

Tarachi has not entered into any material contracts. The smelter and refinery terms used in this NI 43-101 are summarized in Table 1-2.

Table 1-2: Smelter and Refinery Terms

Item		Units	Value
Metal Payable	Copper (SART) (Deduction from the concentrate grade)	%	3.0
	Gold (SART) (For concentrate gold grade over 1kg Au/mt)	%	96.0

Item		Units	Value
	Gold (SART) (For concentrate gold grade under 1kg Au/mt)	%	95.0
	Gold (Merrill-Crowe)	%	99.5
Treatment Smelting and Refining Terms	Gold Treatment Charges	$/dmt	1,500
	Gold Concentrate Refining Charges	$/oz	15
	Copper Concentrate Refining Charges	$/kg	0.9
	Silver Concentrate Refining Charges	$/oz	1.5
	Dore Refining Charges	$/oz	4.4
Penalty	per 0.01% of Mercury in a dmt	$	35.0
Transportation		$/wmt	150.0

Note: Table prepared by Tarachi, 2021.

1.17 Environmental Studies, Permitting, and Social or Community Impact

Mining activity has occurred in the Santa María District for over 400 years. Numerous old workings, mine dumps, tailings dams, and other evidence of former mining activities exist throughout the area.

The Federal Attorney for Environmental Protection (PROFEPA) and the Secretary of Environmental and Natural Resources (SEMARNAT) are the two environmental regulatory agencies with jurisdiction over mining in Mexico. The Magistral Project is a tailings recovery mining process and will not involve drilling and blasting. Tarachi Gold has the following permits in place or are under application:

SEMARNAT – Environmental Impact Manifest (MIA) – The report was submitted on 30 January 2013, and valid for 17 years from the authorization notice date. Three modifications to the MIA were submitted and authorized on 5 November 2013, 31 March 2015, and 23 April 2018. The later modification, valid for a total of 6 years including closure was for the incorporation of an absorption method using activated carbon-by-zinc precipitate (Merrill-Crowe).

SEMARNAT – Change of use of land (zoning) – 2013 (compliant), 2017 requires extension to complete construction of water management structures.

EJIDO MAGISTRAL – Authorization of the owner of the surface land for access expires on 28 October 2022.

EJIDO MAGISTRAL – Authorization of the owner of the surface land to authorize the change of land use and to carry out all the procedures before the environmental dependencies whether federal, state and/or municipal expires on 26 July 2025.

MUNICIPALITY –	In accordance with local legislation, an operating licence may be required, which will be granted based on the authorization of the environmental impact manifesto authorized by SEMARNAT
Registration –	Public Registry of MX Gold required once in production.
Water Permit –	Submit notice and request for grant of use of water on 30 October 2012, before the National Water Commission. Proyecto Magistral has the authorization for the use of 360,000 m^3 annually; if it increases, then MX Gold must notify the government. There is no expiry date on the permit.
Social Security –	Register as employer to the Mexican Institute of Social Security (IMSS) and INFONAVIT. Tarachi Gold is registered as current; needs to pay off the INFONAVIT portion. There is no expiry date for permit.
Electric Permit –	Tarachi Gold has a provisional electric permit/contract until plant is up and running to establish a baseline and have final contract and additional deposit. There is no expiry date.

1.18 Capital and Operating Costs

The capital cost estimate has a -30% to +50% accuracy range to AACE Class 5 Order of Magnitude/Conceptual requirement which includes the cost to complete the design, procurement, construction, and commissioning of all facilities within the scope of work. The capital cost (Capex) is estimated at US$11.1M and LOM sustaining cost is estimated at US$2.1M. A summary of the capital cost and sustaining cost estimate is shown in Table 1-3.

Table 1-3: Summary of Capital and Sustaining Cost Estimate

WBS L1	Description	Initial Capital (M US$)	Sustaining Capital (M US$)
1000	MINING	$0.2	$0.1
2000	ONSITE INFRASTRUCTURE	$0.4	$0.3
3000	PROCESS PLANT	$5.8	
4000	TAILINGS MANAGEMENT	$1.0	$1.2
	TOTAL DIRECT COST	**$7.4**	
6000	Total Indirect Costs	$0.7	$0.1
7000	Project Delivery Costs	$0.8	
8000	Owner's Costs	$0.3	
9000	Contingency and growth	$2.0	$0.3
	TOTAL CAPITAL COST	**$11.1**	**$2.1**

Note: Table prepared by Ausenco, 2021.

The average annual operating cost during steady production for the Project is estimated to be US$21.05/tonne feed over the proposed 3.4 year-life, based on the 1,000 tonne/day plant capacity. A summary of the operating cost estimate is shown in Table 1-4.

Table 1-4: Summary of Operating Cost Estimate

Cost Centre	US$/tonne Feed	Percentage (%)
G&A	1.09	5.2%
Contractors for excavate and haul	5.79	27.5%
Labour	2.28	10.8%
Power	1.69	8.0%
Maintenance Consumables	0.89	4.2%
Reagents and Consumables	6.50	30.9%
SART plant	2.83	13.4%
TOTAL	**21.05**	**100.0%**

Note: Table prepared by Ausenco, 2021.

1.19 Economic Analysis

The economic analysis was performed assuming a 5% discount rate. The pre-tax NPV discounted at 5% is US$31.2 million; the internal rate of return IRR is 120%, and payback period is 10 months. On a post-tax basis, the NPV discounted at 5% is US$21.0 million; the IRR is 85%, and the payback period is 1.0 year. A summary of project economics is shown in Table 1-5. The analysis was done on an annual cashflow basis; the cashflow output is shown Table 22-2.

Readers are cautioned that the PEA is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Table 1-5: Economic Analysis Summary

General	LOM Total / Avg	
Gold Price (US$/oz)	$1,600	
Silver Price (US$/oz)	$22.00	
Copper Price (US$/lb)	$3.40	
Mine Life (years)	3.4	
Total Mill Feed Tonnes (kt)	**1,112.8**	
Production	**LOM Total / Avg**	
Mill Head Grade - Au (g/t)	1.87	
Mill Head Grade - Ag (g/t)	3.10	
Mill Head Grade - Cu (%)	0.17%	
Mill Recovery Rate (Merrill-Crowe) - Au (%)	71.8%	
Mill Recovery Rate (SART) - Au (%)	8.9%	
Mill Recovery Rate (SART) - Ag (%)	68.4%	
Mill Recovery Rate - Cu (%)	46.2%	
Total Mill Recovered - Au (koz)	53.9	
Total Mill Recovered - Ag (koz)	75.8	
Total Mill Recovered - Cu (mlbs)	1.9	
Average Annual Production - Au (koz)	16.0	
Average Annual Production - Ag (koz)	22.5	
Average Annual Production - Cu (mlbs)	0.6	
Operating Costs	**LOM Total / Avg**	
Mining Cost (US$/t Mined)	$5.79	
Processing Cost (US$/t Milled)	$14.18	
G&A Cost (US$/t Milled)	$1.09	
Total Operating Costs (US$/t Milled)	$26.2	
Cash Costs (US$/oz)	$647.5	
AISC (US$/oz)	$704.8	
Capital Costs	**LOM Total / Avg**	
Initial Capital (US$M)	$11.1	
Sustaining Capital (US$M)	$2.1	
Closure Costs (US$M)	$1.0	
Financials	**Pre-Tax**	**Post-Tax**
NPV (5%) (US$M)	$31.2	$21.0
IRR (%)	120%	85%
Payback (years)	0.79	1.04

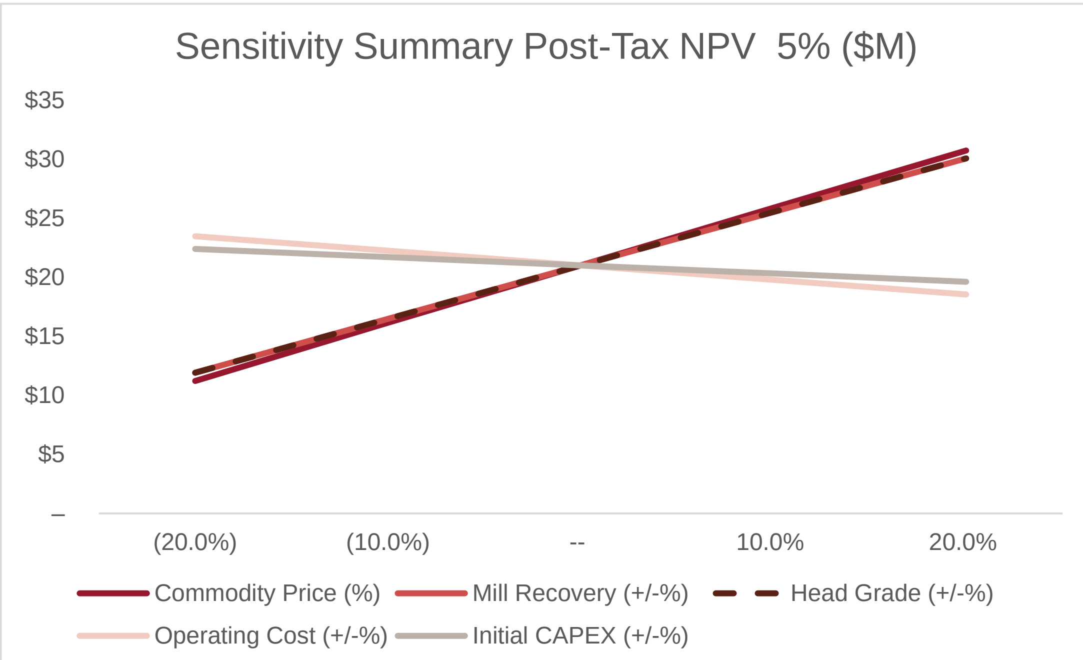
* Cash costs consist of mining costs, processing costs, mine-level G&A and refining charges and royalties
** AISC includes cash costs plus sustaining capital and closure costs.

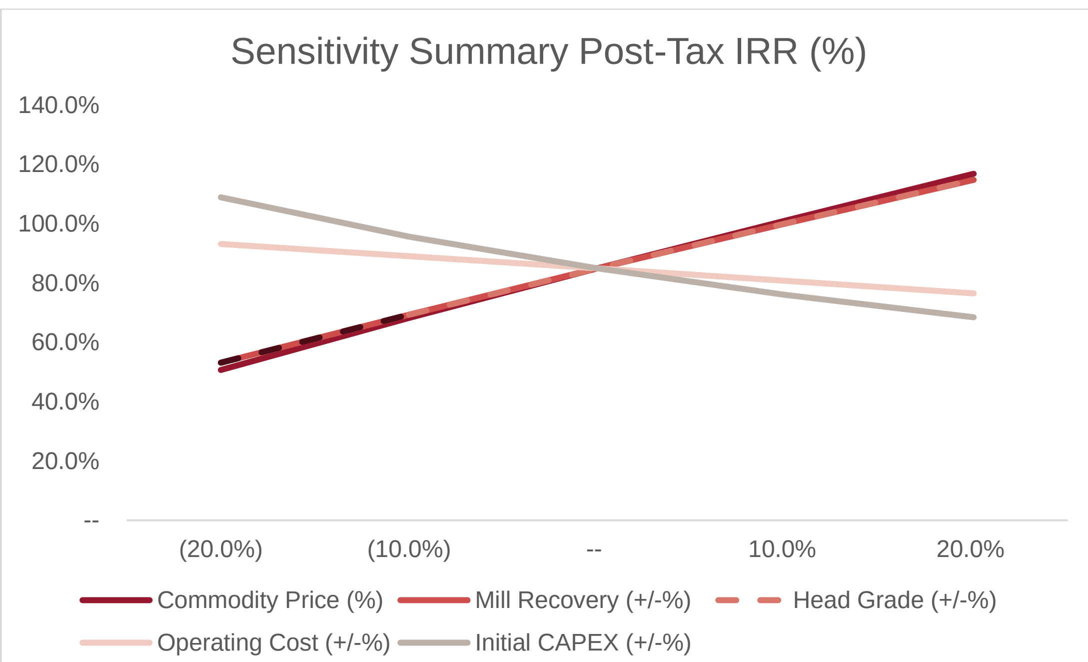
Note: Table prepared by Ausenco, 2021.

A sensitivity analysis was conducted on the base case pre-tax and post-tax NPV and IRR of the project, using the following variables: metal prices, discount rate, head grade, total operating cost, and initial capital cost.

As shown in Figure 1-4, the sensitivity analysis revealed that the project is most sensitive to changes in commodity price and head grade, and less sensitive to discount rate, total operating cost, and initial capital cost.

Figure 1-4: Post-Tax NPV and IRR Sensitivity Results





Note: Figure prepared by Ausenco, 2021.

1.20 Conclusions

The Mineral Resources for the Magistral tailings are reported at a 0.50 g/t Au cut-off grade within a constraining shell. The Mineral Resources are: Measured Resources of 1.1 Mt at 1.95 g/t Au, 0.17% Cu and 3.22 g/t Ag; Indicated Resources of 0.2 Mt at 1.80 g/t Au, 0.17 %Cu and 3.11 g/t Ag; and, and Inferred Resources of 0.02 Mt at 1.78 g/t Au ,0.16 %Cu and 2.43 g/t Ag.

Based on the selected flowsheet for plant operation, the recoveries for gold in the Merrill-Crowe plant and SART plant are 71.8% and 8.9%, respectively. Total gold recovery of 80.70% (combined SART and Merrill-Crowe), silver recovery of 68.4% in the SART plant and copper recovery of 46.2% in the SART plant will be achieved.

The total Capital Cost is estimated at US$11.1M including 21.7% contingency factor. The estimated operating unit cost is projected at US$ 21.05 per tonne

Based on a capital cost of US$11.1M and operating cost of $21.05, the PEA shows positive economics with post-tax NPV (5%) of US$21.0 million and post-tax IRR of 85%.

1.21 Risks and Opportunities

Following are the risks and opportunities with for the development of Magistral project.

1.21.1 Risks

1.21.1.1 Commodity Prices

The ability of mining companies to fund the advancement of their projects through exploration and development is always influenced by commodity prices. The World Bank Commodities Price Forecast for October 2021 (World Bank, 2021) projects stable prices for each of Cordero's anticipated revenue-producing metals; the metal with the most volatile price forecast is gold, which accounts for less than 10% of Cordero's in-situ value. Since the World Bank's forecasts of silver, gold, lead and zinc prices from 2021 to 2035 are above the prices that Discovery Silver assumes for the Cordero Project, the company anticipates that commodity price fluctuations are not likely to create difficulties for funding the advancement of Cordero.

1.21.1.2 COVID-19 and Evolving Variants

The major risk to project development or further drilling is disruption due to COVID-19 or to evolving variants on site or in the local communities. To reduce the likelihood of this risk occurring, Tarachi will take measures to keep any infected personnel isolated from the local communities. Testing is required prior to authorization to access the site and quarantine periods are enforced if applicable.

1.21.1.3 Mineral Resource

One risk to the mineral resources is the lack of original, or bottom, topography of the Magistral tailings. This is considered a low risk and is anticipated to have a low impact on the resource volume. It is understood that the original topography may undulate, or the ground may have been altered/prepared prior to the deposition of tailings from historic operations. Current bottom topography was modelled based on current drilling information but does not include the edges of the deposit, where the edges of the deposit were pinched off from the last known drillhole to the current boundary of the tailings.

1.21.1.4 Recovery

The recovery of Cu and Ag from the SART plant is based on the speciation data of the samples produced by Base Metallurgical Lab and BQE Water's experience in operating SART plants. No additional tests were conducted to confirm the recoveries or performance which should be completed in the future work.

There is a risk that no solid/liquid separation testwork has been conducted on the Magistral tailings. Solid/liquid separation testwork is recommended in the next stage of study. Thickener settling performance (yield stress) is required due to increasing underflow density, which will result in a material with a higher yield stress being raked and will increase the rake torque and limit the achievable underflow density.

When treating very high-grade gold–copper grades that require high cyanide and zinc reagent additions, there is potential for impurities to build up in the recirculating process water. To mitigate this, the cyanide detoxification circuit was designed to treat an additional barren bleed stream to purge impurities from the process water.

1.21.1.5 Environmental Studies, Permitting and Social or Community Impact

Potential environmental risks could be:

- Use of cyanide may require additional design compliance both in the process area and TSF;
- A more robust environmental baseline may be requested; and
- Closure requirements on the historic tailings area may change when the project ends.

Potential permitting risks could be:

- The new agreement has not passed the vote of Ejido which is schedule for 23 January 2022;
- Possible delays in permit approvals may impact the project schedule;
- Additional requirements established by PROFEPA or SEMANART not indicated in the original MIA;
- Implementation of the new circuit (SART) in the process may require the submittal of new permits at the federal level such as a Risk Analysis Study; and
- Conventional tailings deposition may need additional studies to ensure safety due to the unauthorized discharge of solution into the creek breach in 2014.

1.21.1.6 Tailings Storage Facility

- Storage capacity of the existing facility may not be enough to process any additional tailings within the project vicinity;
- Construction delays due to supply chain demands; and
- Water supply demands for conventional tailings may require additional water wells and water right permits.

1.21.2 Opportunities

1.21.2.1 Mining

By implementing smaller mining fleet with ability for high selectivity mining, the dilution rate could be lowered and increase the recovery of the resource.

1.21.2.2 Metallurgy

There may be opportunity to improve the process plant recovery by testing variability samples from different locations in the tailings deposit.

1.21.2.3 Tailings Storage Facility

The footprint of the new expanded TSF may be reduced by dry stacking of tailings which should be considered in the next stage of the study.

1.22 Recommendations

The results presented in this technical report demonstrate that the Magistral Project is technically and economically viable. It is recommended to continue developing the project through additional studies. Table 1-6 summarizes the proposed budget to advance the project through additional studies.

Table 1-6: Proposed Budget Summary

Area of Study	Cost (US$)
Geology	$ 22,000
Geotechnical	$ 150,000
Mining	$ 30,000
Metallurgy	$ 150,000
Infrastructure	$ 180,000
Environmental	$ 100,000
Total Recommended Study Budget	**$ 632,000**

Note: Table prepared by Ausenco, 2021.

It is recommended that a minimum of 15 drillholes and trenching be completed to determine the true thickness at the edges of the deposit and upgrade the inferred resources. The estimated cost of this recommended work is US$ 22,000.

It is recommended as the project advances additional deposit base topography and end wall analysis be completed prior to a production decision. The estimated cost of this recommended work is US$150,000.

It is recommended mining plan and quantities be updated with new deposit base topography and additional discussions completed with local contractors. The estimated cost for this recommended work is US$30,000.

It is recommended that additional metallurgical work be completed for an estimated cost of US$150,000 which includes solids/liquid separation test to demonstrate that a higher pulp density for the thickener underflow is practical, and the SART process metallurgical test program to demonstrate the maintaining precious metal recovery without a major increase in cyanide consumption related to copper and confirming additional value generation through the production of high-grade copper sulphide concentrate.

Solum recommended additional studies including geotechnical field program, topographic survey, geotechnical testing, geochemical testing, TSF design update, rheology and dewatering testing, and filtered tailings alternative study be completed for an estimated cost of US$155,000.

It is recommended further work be completed on water management for an estimated cost of US$25,000. This work includes a detailed water balance of the collection pond, geochemistry analysis of the collected runoff, and the geometry of the ditches and pond.

Environmental recommendations include geochemical characterization of the anticipated final process residues, testing of residual soils and development of any blending strategies with minor residual tailings, post-excavation, with emphasis on specific requirements for amendment and growth media to provide the basis for successful site restoration, development and implementation of strategies for excavation, handling, and transportation of the in situ historic tailings to the processing facility that minimize fugitive dust generation and off-site sediment excursion, and evaluation of possible waste management optimizations to improve project economics and overall environmental performance. The estimated cost for this recommended work is US$100,000.

2 INTRODUCTION

2.1 Introduction

Tarachi Gold Corp. (Tarachi) is a Canadian exploration and development company, based in Vancouver, Canada, and is publicly listed on the OTCQB® Venture Market OTCQB:TRGGF) (FRA:4RS) AND (CSE:TRG). Tarachi is focused on the development of several gold projects in Sonora, Mexico and the Magistral Tailings and Mill Project in Durango, Mexico.

Ausenco Engineering Canada (Ausenco) and AGP Mining Consultants Inc. (AGP) prepared this technical report (the Report) on the Magistral Project on behalf of Tarachi Gold Corp. (Tarachi). This Report presents the results of a Preliminary Economic Assessment (PEA) completed in 2021 (2021 PEA) for the Magistral Mill and Tailings Project (Magistral Project or the Project). The Project is located in the north-central part of the State of Durango and situated approximately 335 km north of the city of Durango. Tarachi holds a 100% interest in the tailings processing facility through its wholly owned subsidiary TGMEX Silver S.A. de C.V. (TGMEX) and exclusive rights to reprocess the tailings material through TGMEX and Tarachi's other subsidiary Proyecto Magistral S.A. de C.V.

2.2 Terms of Reference

The report supports disclosures by Tarachi Gold Corp in a news release dated December 13, 2021, entitled "Tarachi Announces Positive Results of Magistral PEA and Mineral Resource Estimate".

Readers are cautioned that the PEA is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

2.3 Qualified Persons

The qualified persons (QPs) for this technical report are listed in Table 2-1. By virtue of their education, experience, professional association, and independence from Tarachi Gold Corp., the individuals presented in Table 2-1 are considered QPs as defined by NI 43-101.

Table 2-1: Report Contributors

Qualified Person	Professional Designation	Position	Employer	Independent of Tarachi Gold Corp.	Report Section
Scott C. Elfen	P.E.	Global Lead Geotechnical and Civil Services	Ausenco Engineering Canada Inc.	Yes	1.20, 1.21.1.6, 1.21.2.3, 1.22, 2.6–2.8, 18.9, 21.2.2.3.4, 25.9, 25.14.2.8, 25.14.3.3, 26.6.1 and 27
Edward J McLean	Fellow FAusIMM	Manager Minerals Consulting	Ausenco Services Pty Ltd.	Yes	1.11, 1.14, 1.20, 1.21.1.4, 1.21.2.2, 1.22, 2.6–2.8, 13, 17, 25.5, 25.8, 25.14.2.4, 25.14.3.2, 26.5 and 27

Qualified Person	Professional Designation	Position	Employer	Independent of Tarachi Gold Corp.	Report Section
Kevin Murray	P. Eng.	Manager Process Engineering	Ausenco Engineering Canada Inc.	Yes	1.1, 1.2, 1.15, 1.16, 1.18–1.20, 1.21.1.1, 1.21.1.2, 1.22, 2.1–2.3, 2.5-2.8, 3.1, 3.4, 3.5, 18.1–18.8, 19, 21.1, 21.2.1, 21.2.2.1, 21.2.2.3.1, 21.2.2.3.2, 21.2.2.3.3, 21.2.2.3.5, 21.2.3-21.2.6, 21.3.1, 21.3.3, 21.3.4, 21.4, 22, 24, 25.1, 25.9, 25.10, 25.12, 25.13, 25.14.1, 25.14.2.1, 25.14.2.2, 25.14.2.5, 25.14.2.6, 26.1 and 27
Scott Weston	P. Geo.	Vice President of Business Development	Hemmera Envirochem Inc..	Yes	1.17, 1.20, 1.21.1.5, 1.22, 2.6–2.8, 3.3, 18.10, 18.11, 20, 25.11, 25.14.2.7, 26.6.2, 26.7 and 27
Paul Daigle	P. Geo.	Principal Resource Geologist	AGP Mining Consultants Inc.	Yes	1.3–1.10, 1.12, 1.20, 1.21.1.3, 1.22, 2.4, 2.6–2.8, 3.2, 4–12, 14, 15, 23, 25.2–25.4, 25.6, 25.14.2.3, 26.2, 26.3 and 27
Gordon Zurowski	P. Eng.	Principal Mining Engineer	AGP Mining Consultants Inc.	Yes	1.13, 1.20, 1.21.2.1, 1.22, 2.6–2.8, 16, 21.2.2.2, 21.3.2, 25.7, 25.14.3.1, 26.4 and 27

Note: Table prepared by Ausenco, 2021.

2.4 Site Inspections

Mr. Daigle conducted a site visit to the Magistral Project from May 13 to 18, 2020. The Project was inspected for two days during the site visit. Mr. Daigle was accompanied on the site visit by:

- Mr. Lorne Warner, Vice President, Exploration and Director, Tarachi;
- Braulio Rivera Enriquez, Project Geologist, Tarachi;
- Lalo Gracia, Project Geologist, Tarachi; and
- Juan Fernando Gurrola Peral, Tarachi.

The drilling program was in progress during the site visit. Drilling, sampling and logging procedures were witnessed during the site visit. Logging and sampling facilities and exploration offices were also inspected and included verifying drillhole collar locations for the current drill campaign.

2.5 Effective Date

The Report incorporates a number of effective dates as follows:

- Date of the Mineral Resource estimate: 15 November 2021;

- Date of the most recent information on the drilling programs: 20 September 2021;
- Date of the economic analysis that supports the 2021 PEA: 12 December 2021;

The overall effective date of the Report is taken to be the date of the economic analysis in the 2021 PEA and is 12 December 2021.

2.6 Information Sources and References

The main sources of information in preparing this report are based on information located within internal reports obtained from Tarachi and from public documents available on SEDAR. Information, conclusions, and recommendations contained herein are based on a field examination, including a study of relevant and available technical data which include but are not limited to the reports listed in the Reference section. This report is prepared with the most recent information available at the time of study.

2.7 Previous Technical Reports

The Magistral Project has previously been the subject of several technical reports. The technical reports are found in the References section and are summarized in Table 2-2.

Table 2-2: Summary of Previous Technical Reports

Reference	Date	Company	Name
Ash et.al., 2018	15 Mar 2018	MX Gold Corp.	Preliminary Economic Assessment Technical Report on the Magistral Mill Tailings Property, Durango State Mexico
CAM, 2012	20 Jan 2012	Promociones Metrópolis S.A. de C.V.	*Perforación y Muestreo en Presa de Jales, Estimación Volumétrica, Tonelaje y Ley Promedio* (Tailings Dam Drilling and Sampling; Volumetric, Tonnage, and Average Grade Estimate)

Note: Table prepared by Ausenco, 2021.

2.8 Abbreviations and Units of Measurement

Table 2-3: Abbreviations

Abbreviation	Description
AACE	Association for the Advancement of Cost Engineering
AICA	Area of Importance for the Conservation of Birds
AMM	American Mining Mexico, S.A. de C.V.
AMSL	metres above mean sea level
As	arsenic

Abbreviation	Description
Au	gold
Az	azimuth
CAM	Corporación Ambiental de México
Cía	*Compañía* (Company)
CCD	countercurrent decantation
CIL	Carbon-in-Leach
CIM	Canadian Institute of Mining
CN_{WAD}	weak acid dissociable cyanide
CONAGUA	Comisión Nacional del Agua
CRM	Consejo de Recurso Minerales
CRM	Certified Reference Materials
CTO	Cease Trade Order
Cu	copper
CUSTF	Change in Langue Use for Forestal Land
CV	coefficient of variation
DEM	Digital elevation model
E&I	Electrical and instrumentation
ECCC	Environment and Climate Change Canada
EIS	Environmental Impact Statement
EPC	Engineer, Procure and Construct
EPCM	Engineering, Procurement, and Construction Management
G&A	General and Administration
GEMS	Geovia GEMS Version 6.8™ software
H	leach kinetics
HCN	hydrogen cyanide
Hg	mercury
INEGI	National Institution of Statistics, Geography and Informatics
IVA	added value tax
LGEEPA	General Law of Ecologic Balance and Environment Protection
LOI	letter of interest
LVG	Lower Volcanic Group
MASL	metres above sea level
MIA	*Manifestación de Impacto Ambiente*
NN	nearest neighbour
OK	ordinary kriging
PAX	potassium amyl xanthate
PEA	Preliminary Economic Assessment

Abbreviation	Description
PLS	pregnant leach solution
PMA	particle mineral analysis
PROFEPA	Procuraduría Federal de Protección al Ambiente
QA/QC	quality assurance/quality control
QP	Qualified Person
RAN	*Registro Agrario Nacional*
RSF	Rock Storage Facilities
S.A. de C.V.	*Sociedad Anónima de Capital Variable*
S. de R.L. de C.V.	*Sociedad de Responsabilidad Limitada de Capital Variable*
SART	Sulphidation, Acidification, recycle and Thickening
SCS	Soil Conservation Service
SMBS	Sodium metabisulfite
SRM	Standard Reference Material
ToC	Time of Concentration
TSF	Tailings Storage Facility
UVG	Upper Volcanic Group
VSA	vacuum swing adsorption
WBS	work breakdown structure
wt.	weight
% w/w	weight to weight

Note: Table prepared by Ausenco, 2021.

Table 2-4: Units of Measurement

Unit	Description
C$	Canadian dollars
MXN$	Mexican pesos
US$	United States dollars
dmt	Dry metric tonne
g	gram
ha	hectare
Kg	kilogram
km	kilometre
kVA	kilovolt-ampere
kWh	Kilowatt-hour
m^2	Square metres
m^3	cubic metres
ml	millilitres

Unit	Description
mm	millimetres
Mt	Metric tonne
oz	ounce
ppm	parts per million
psig	pounds per square inch gauge
t	tonnes
t/d	tonnes per day
µm	micrometre
Wmt	wet metric tonne

Note: Table prepared by Ausenco, 2021.

3 RELIANCE ON OTHER EXPERTS

3.1 Introduction

The QPs have relied upon the following other expert reports, which provided information regarding mineral rights, surface rights, property agreements, royalties, permitting, social or community impacts, taxation, and marketing for sections of this Report.

3.2 Property Agreements, Mineral Tenure, Surface Rights and Royalties

The QPs have not independently reviewed legal status and ownership of the Project area and any underlying property agreements, mineral tenure, surface rights, or royalties. The QPs have relied upon information derived from Tarachi Gold Corp. and legal experts retained by Tarachi Gold information with respect to property agreements, surface rights, mineral tenure and royalties.

This information is used in Section 4 of the Report and has been reviewed by Tarachi and was accepted on 21 December 2021, by Cameron Tymstra.

3.3 Environmental, Permitting, Closure, and Social and Community Impacts

The QPs have fully relied upon, and disclaim responsibility for, information supplied by Tarachi Gold Corp. and their environmental consultant Joel Carrasco from Solum Consulting Group for information related to environmental permitting (including tailings and water management) and, social and community impacts.

The information is used in Section 20 of this report.

3.4 Taxation

The QPs have fully relied upon, and disclaim responsibility for, information supplied by experts retained by Tarachi Gold Corp., for information related to taxation as applied to the financial model, received by email from Tarachi Gold on 18 November 2021.

This information is used in Section 22 of the Report.

3.5 Markets

The QPs have not independently reviewed the marketing information. The QPs have fully relied upon, and disclaim responsibility for, information received by email from Tarachi Gold Corp. on 01 December 2021.

This information is used in Section 19 of the Report. The information is also used in support of Section 22.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Location

The Magistral Project is defined by three agreements with the Ejido Magistral del Oro (the Ejido). These include: a 'Tailings Lease Agreement' (Tailings Lease) and a 'Land Lease Agreement' (Land Lease) for the Project, and a 'Purchase and Land Use Agreement' (Purchase Agreement) for the mill facility. The Project, as defined by the agreements, covers a total area of approximately 63.9 ha.

The Project is situated:

- on 1:250,000 scale INEGI Mapsheet G1308 Santiago Papasquiaro;
- on 1:50,000 scale INEGI Mapsheet G13C18 Santa María del Oro;
- on 1:20,000 scale INEGI Mapsheet G13C18c; and
- at approximately 25°59.0' North and 105°23.5' West, or at approximately 460900 mE; 2873800 mN, Zone 13R (WGS84 datum) Universal Transverse Mercator (UTM) coordinates.

The Project is located:

- in the Municipality of El Oro, in the State of Durango;
- adjacent to the funda legal (town site) of Ejido Magistral del Oro; and
- approximately 5 km north of Santa María del Oro, and approximately 6 km northeast of Rio Sextín.

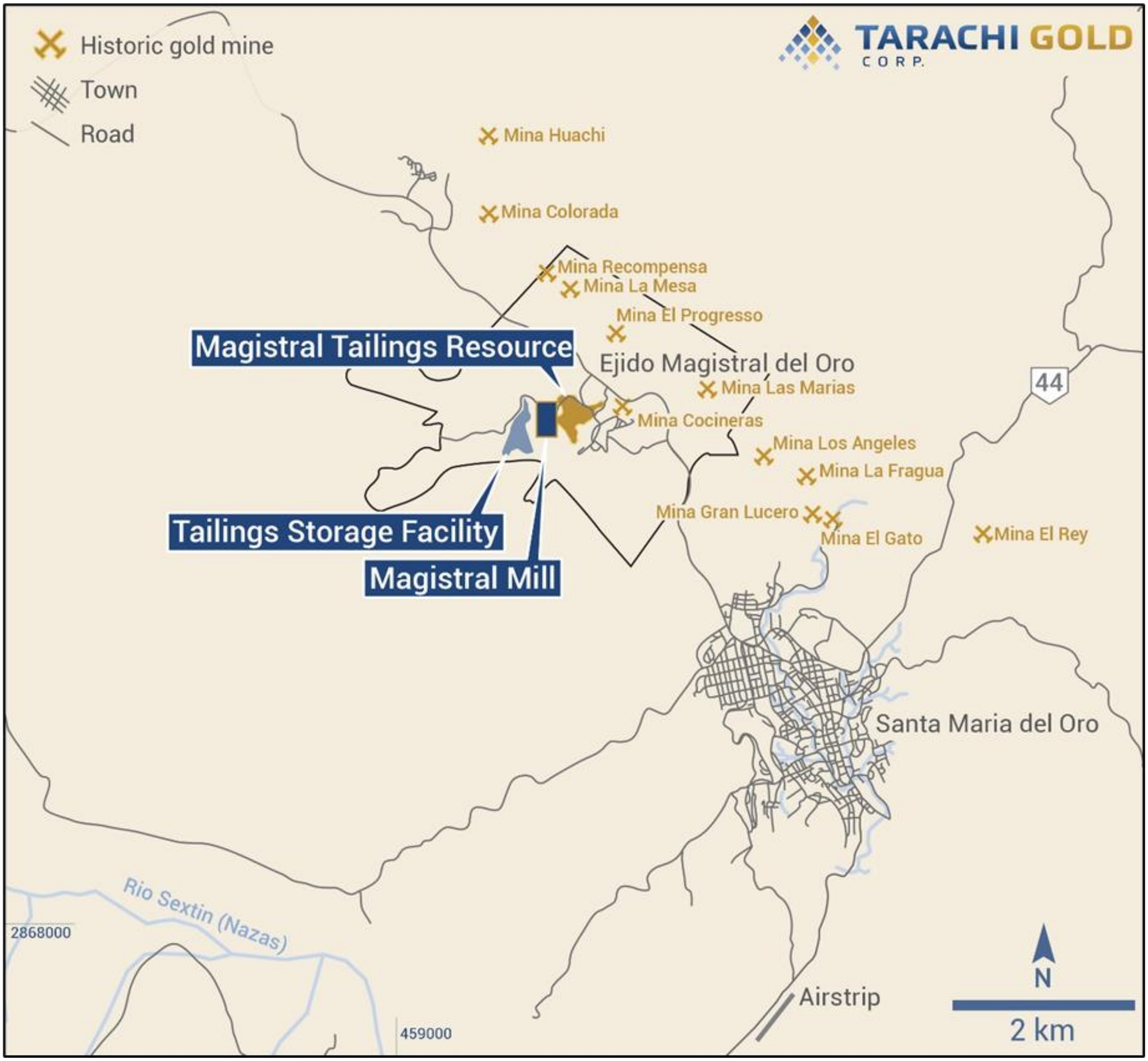
The Project is also located approximately 335 km north of the city of Durango, in the State of Durango, approximately 100 km south of Hidalgo del Parral, State of Chihuahua, and approximately 400 km south of the city of Chihuahua, in the State of Chihuahua.

Figure 4-1 and Figure 4-2 show the location of the Magistral Project.

Figure 4-1: Location Map

Note: Figure prepared by Tarachi, 2021.

Figure 4-2: Magistral Project Location Map Showing Approximate Locations of the Lease Agreements



Note: Figure prepared by Tarachi, 2021.

4.2 Property Description

The Magistral tailings are above surface and, therefore, are not required to have a mine concession for exploration and development activities that pertains to subsurface mineral substances.

The Project consists of three principal surface lease agreements between Tarachi and the Ejido consisting of:

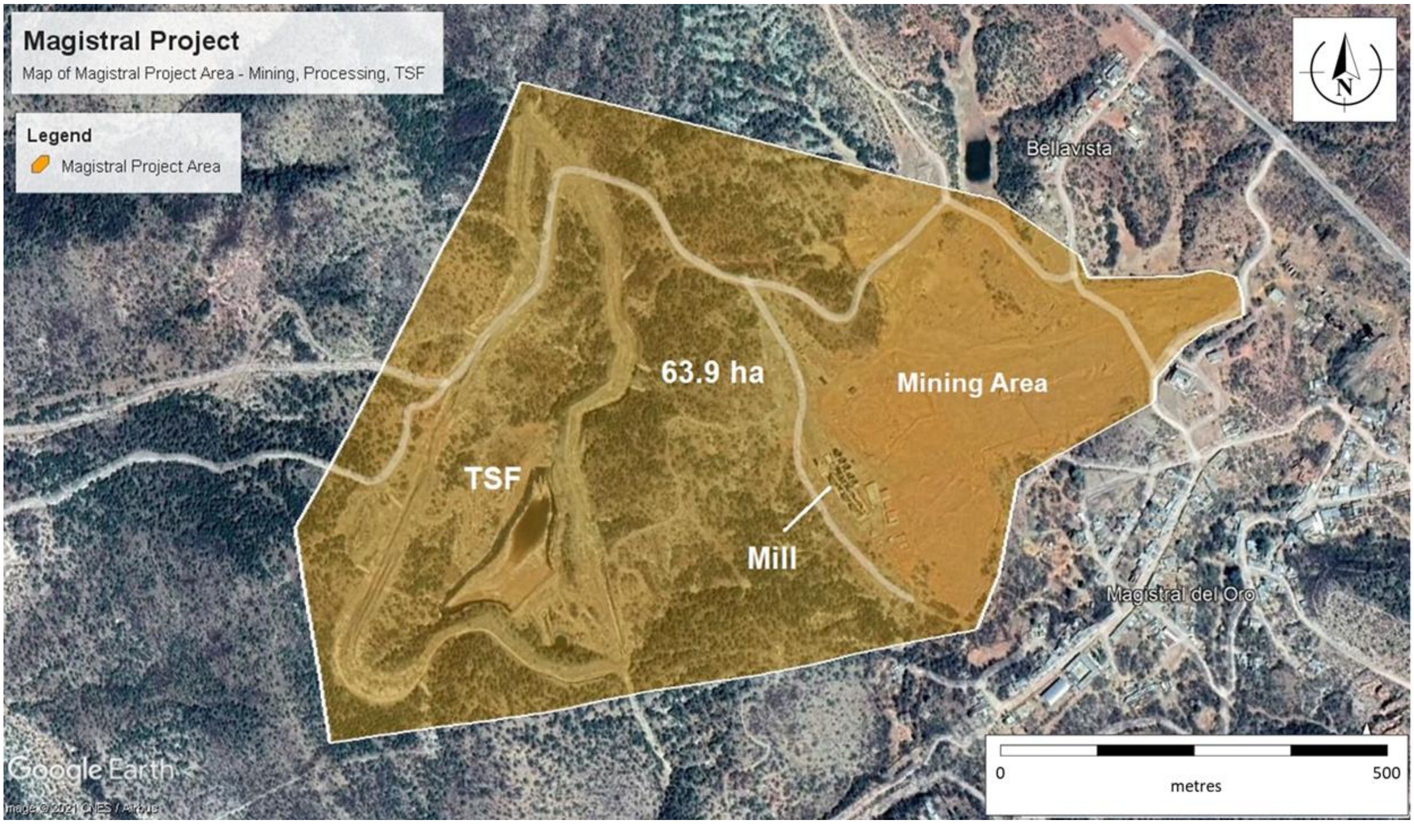
- A Tailings Lease Agreement for the mining and processing of tailings material owned by the Ejido;
- A Land Lease Agreement, consisting of two Temporary Occupancy Agreements for the use of land that covers the Magistral tailings and processing facility, and the tailings storage facility (TSF);
    - The first Temporary Occupancy Agreement, signed 28 October 2012, for a period of 10 years, over an 8.5-ha area; and
    - The second Temporary Occupancy Agreement, signed 26 July 2015, for a period of 10 years, over a 25-ha area.

Tarachi has concluded negotiations with the Ejido Magistral Council members to replace the pre-existing Temporary Occupancy agreements with a comprehensive agreement ("New Agreement") to cover the tailings mining area, TSF, process plant and additional land between the plant and the TSF for a total of 63.9 hectares (Figure 4-3). The New Agreement will be for a term of 30 years and include access to water rights within the Ejido Magistral lands for mill process water. The existing Tailings Lease Agreement will also be replaced with a new agreement under similar terms, transferring the rights from Proyecto Magistral to TGMEX. An Assembly of the Ejido Magistral members has been scheduled for 23 January 2022, to vote on acceptance of the New Agreements. The New Agreements will be signed between the Ejido Magistral and TGMEX Silver S.A. de C.V. ("TGMEX"), a wholly owned subsidiary of Tarachi.

In addition to the surface rights agreements, Tarachi owns, through its subsidiary TGMEX, a 100% interest in the Magistral processing facility which was acquired from Manto Resources in a Purchase Agreement in February of 2021.

Figure 4-3 illustrates the boundary of the New Agreement.

Figure 4-3: Magistral New Agreement Map



Note: Figure prepared by Tarachi, 2021.

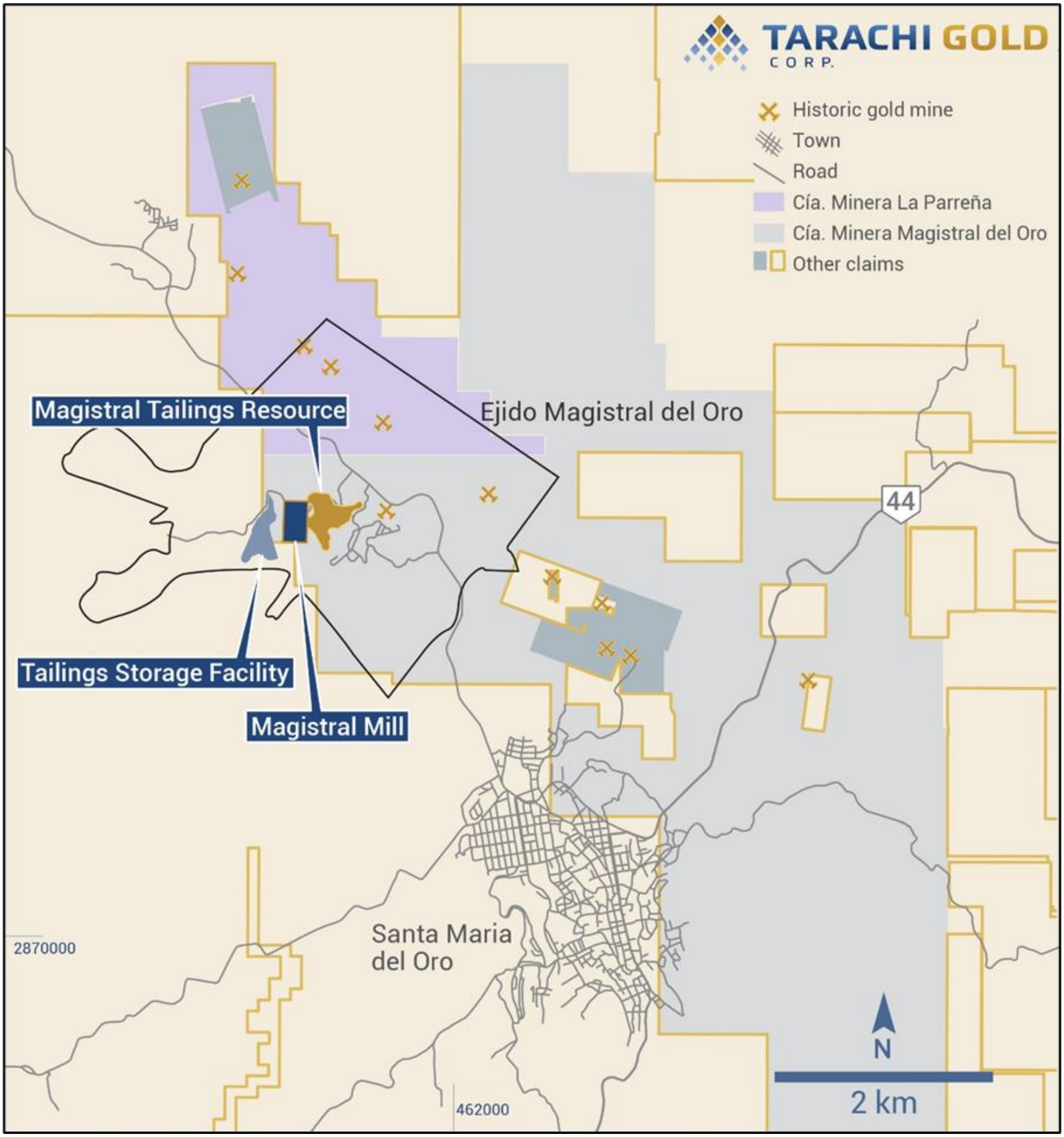
4.2.1 Mineral Rights

There are two mine concessions (mine claims) that cover the Project area: MM-23 (525.52 ha) and JM-29 (50.00 ha). The mineral rights are held by Compañía Minera Magistral del Oro S.A. de C.V. (Cía. Minera Magistral del Oro); however, these rights only pertain to subsurface mineral substances, and are specifically for the development of the primary source of gold and copper. Compañía Monte del Real y Pachuco (Cía. Monte del Real y Pachuco), a wholly owned subsidiary of Altos Hornos de Mexico S.A. (AHMSA), based in Monclova, in the State of Coahuila, is the current operator for the exploration and development on these mine claims. There are currently no known exploration activities on the lease agreement lands between Tarachi and the Ejido.

The Magistral Project is not affected by these mineral rights and Tarachi is not required to conclude any agreements with these exploration companies.

Figure 4-4 presents a map showing the mineral rights around the Project and the lease agreement areas for the Project.

Figure 4-4: Magistral Property Mineral Rights and Lease Agreements Map



Note: Figure prepared by Tarachi, 2021.

4.3 Property Ownership

On 9 October 2020, Tarachi, through its 100% owned subsidiary, TGMEX, entered into a non-binding letter of intent (LOI) with Manto Resources S.A. de C.V. (Manto) pursuant to which Tarachi may acquire assets related to the Magistral tailings and processing plant (Tarachi, 2020, News Release 15 October 2020). On 8 February 2021, Tarachi announced that the Purchase Agreement was signed with Manto.

The Purchase Agreement gives Tarachi, through TGMEX, a 99% ownership of Proyecto Magistral S. de R.L. de C.V. (Proyecto Magistral SRLCV), which includes the Tailings Lease Agreement and the Land Lease Agreement for the Magistral tailings.

The Purchase Agreement gives Tarachi, through TGMEX, 100% ownership of the mill facility. The mill facility is situated on the Ejido Magistral del Oro and adjacent to the west of the tailings.

As outlined in the LOI, the final terms of the Purchase Agreement with Manto are:

- Consideration for the acquisition will consist of 4,000,000 common Tarachi shares;
- Tarachi grants Manto a 15% net profits royalty on the estimated 1.3 Mt of tailings material expected to be processed and reimburse Manto for US$ 1,179,500 of cash outlays; and
- Tarachi will satisfy certain obligations to Manto by paying a total of approximately US$ 1,111,000 plus any Mexican value added tax (IVA) and issuing 1,685,916 Common Shares within 90 days of closing.

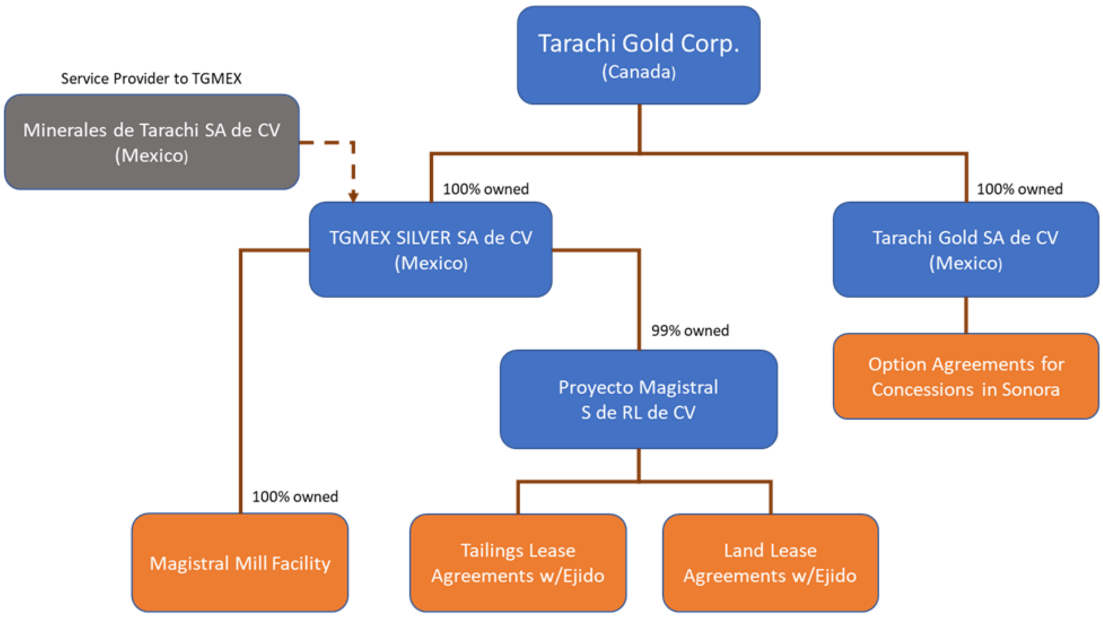
Manto will be entitled to the following staged bonus payments:

- An additional 4,000,000 common shares 60 days after the closing date;
- 4,000,000 Common Shares 180 days after the closing date;
- 4,000,000 Common Shares 365 days after the closing date;
- US$ 500,000 in cash following 6 months of commercial production at Magistral; and
- US$ 500,000 in cash following 12 months of commercial production at Magistral.

Upon Tarachi earning US$ 15,000,000 in revenue from Magistral, Tarachi will pay Manto US$ 1,000,000, and a finder's fee of 1,000,000 Common Shares will be issued to Spirit Exploration Corp.

Figure 4-5 shows Tarachi's ownership interest.

Figure 4-5: Tarachi Ownership Organigram



Note: S.A. de C.V. = *Sociedad Anónima de Capital Variable*
S. de R.L de C.V. = *Sociedad de Responsabilidad Limitada de Capital Variable*
Figure prepared by Tarachi, 2021, modified by AGP, 2021.

4.4 Royalties and Encumbrances

Under the Purchase Agreement, Tarachi will grant Manto a 15% net profits royalty on the estimated 1.3 Mt of tailings material expected to be processed and reimburse Manto for US$ 1,179,500 of cash outlays. This has been reimbursed in full by Tarachi. The base figure used for net profits royalty calculations will be in Earnings Before Interest and Taxes (EBIT)

Tarachi will pay certain leasing fees to the Magistral de Oro Ejido under terms of the existing tailings leasing agreement for the mining and processing of tailings material owned by the Ejido as those materials are processed. Details of those leasing fees can be found in Section 22.

4.5 Surface Rights

The Magistral Project lies completely within the Ejido and is held by Tarachi through the Land Lease and Tailings Lease agreements between Proyecto Magistral SRLCV and the Ejido.

Under the New Agreement with the Ejido, to be voted on by the Assembly (Ejido) on 23 January 2022, Tarachi is expecting to pay approximately MXN$ 480,000 per year (or US$ 25,000) to the Ejido to maintain the rights and access to the land. Additionally, Tarachi is expected to pay approximately MXN$ 5,000 per month (or US$ 250) for water rights access.

While Tarachi awaits a final vote on the New Agreement, Tarachi continues to have full access to the Property under existing agreements and relations between Tarachi and the Ejido are positive.

4.6 Ejido

An "ejido" in Mexico is an area of communal land where the community may use the land, mainly agriculture and livestock, and derive the profits from the land. The ejidos are overseen by the Mexican government agency *Registro Agrario Nacional* (RAN).

The ejido consists of cultivated land, pastureland, other uncultivated lands, and the fundo legal (town site). In most cases, the cultivated land is divided into separate family holdings or plots, which cannot be sold although they can be handed down to heirs (Encyclopedia Britannica; most recently viewed 20 May 2021). In 1991, the Constitution was amended to allow communities to sell ejido land and allow the land to be put up as collateral for a loan. (Wikipedia; Ejido; most recently viewed 20 May 2021)

For historical context, land reform for ejidos was developed after the Agrarian Decree of January 1915 passed during the Mexican Revolution of 1910-1920. After 1920, land reform was set up to distribute land to the landless and to restore communal holdings (ejidos) to villages. In 1934, with the election of Lázaro Cardenas, land reform, in the form of expropriation and distribution, was stepped up where communities were awarded land but it was worked as a single unit (Encyclopedia Britannica, Wikipedia; Ejido; most recently viewed 20 May 2021).

4.7 Permits

There are no permits required for Tarachi's exploration activities on the Magistral tailings deposit.

However, several permits are required for the development and exploitation of the tailings and the processing operations at the mill facility. These are described in Section 20 of this Report.

4.8 Environmental Liabilities

Ausenco and AGP are unaware of any environmental liabilities associated with the Project.

In August 2014, there was an overflow issue at the TSF following a storm event, described below, that was mitigated in 2015. The permit to use the TSF was suspended at that time and Tarachi is required to apply for a new permit to have the suspension lifted in order to use the TSF.

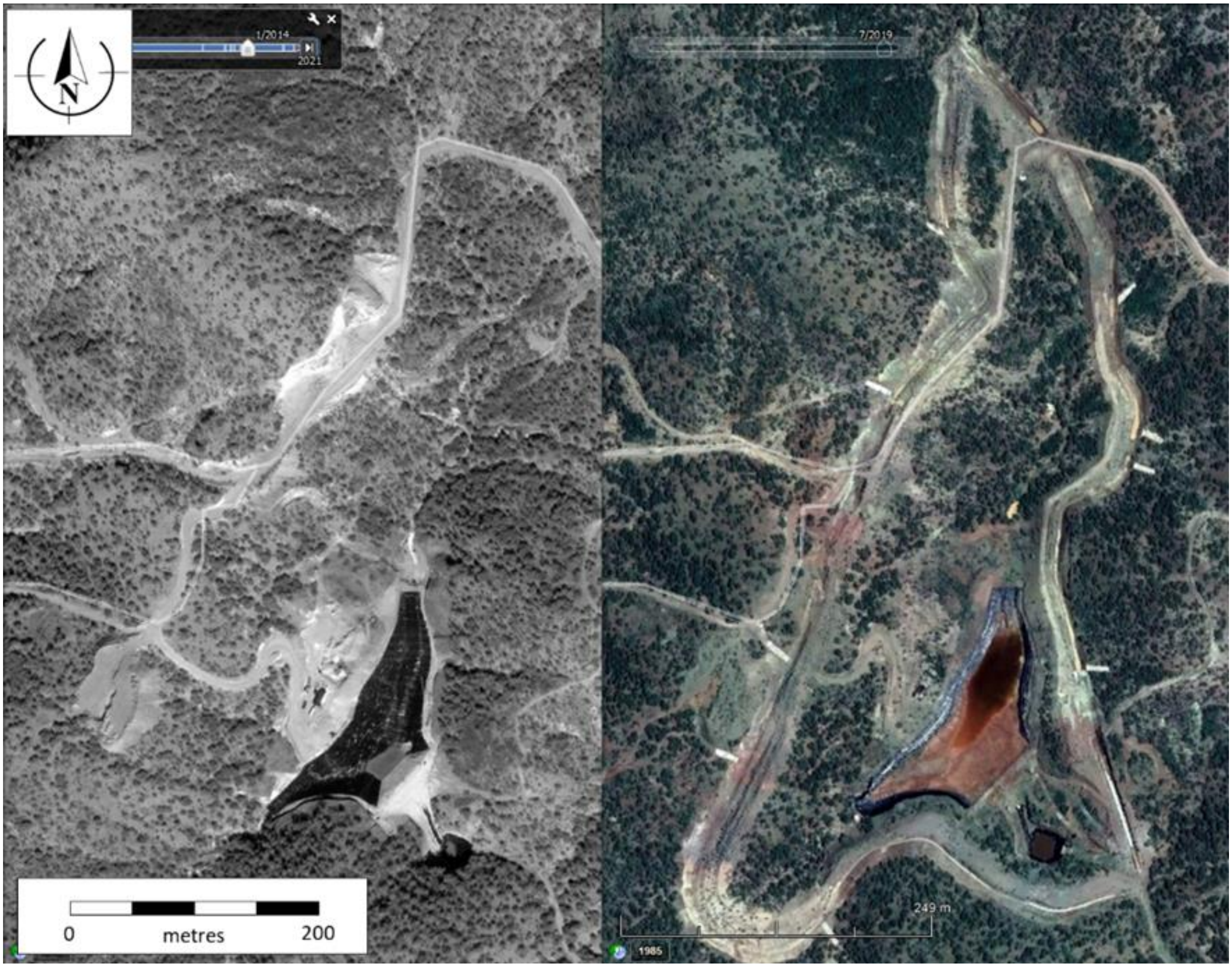
4.8.1 2014 – Storm Event

In 2014, the Environmental Impact Statement (MIA for the Spanish acronym) permit was suspended for the mill tailings dam on west side of CIL plant. Due to a lack of a diversion ditch around the leakage pond (downslope of the tailings dam), a storm event resulted in the pond overflowing and discharging 4 ppm cyanide into a waterway. The government forced the closure of the plant at that time, with the proviso that production could not re-commence until such time as a diversion ditch was constructed to prevent the re-occurrence (Ash et.al., 2018).

4.8.2 2015 – Diversion Trench

In March 2015, a reinforced diversion trench was constructed around the mill tailings facility to divert any surface runoff water around the mill tailing dam (Figure 4-6 and Figure 4-7). Proyecto Magistral SRLCV made a second modification to the MIA to complete the construction.

Figure 4-6: Plant Rejects Pond; 2014 (pre-diversion trench) and 2019 (post-diversion trench)



Note: Google Earth, 2021; modified by AGP, 2021.

Figure 4-7: Diversion Trench

Note: Figure prepared by Tarachi, 2020.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

The Project is located 335 km north of the City of Durango via road as shown in Figure 4-1 and Figure 4-2. From the Durango airport, the site is easily accessed by:

- Driving north on paved Highway DGO 45 for approximately 280 km to the village of El Carrizo.
- Turning southwest on paved Highway DGO 44 for approximately 50 km to the town of Santa María del Oro.
- Highway DGO 44 becomes Via Peñasco in Santa María del Oro. Continuing northwest through town, north and northwest on DGO 44 for approximately 5 km, turning off onto an unpaved and unmarked road for 200 m to the Project site and the site of the town of Magistral del Oro.

The drive from Durango is typically 4 hours. It is possible to access the Project from Chihuahua, driving south on Highway DGO 45 where the drive is typically 5 hours. There are regularly scheduled flights from Durango to Chihuahua.

There is an unpaved and uncontrolled airstrip (575 m; 2,000 ft) approximately 3 km south of Santa María del Oro, which is suitable for small charter aircraft. Bylsa Drilling S.A. de C.V. (Bylsa), Tarachi's drilling contractor based in Hermosillo, owns two Cessna 206 Stationair aircraft, and Tarachi has chartered these aircraft for transport between Hermosillo and the Project.

5.2 Climate

The Project is situated in a hot semi-arid climate (BSk; Köppen climate classification) characterized by a dry climate with little precipitation and cool winters. The Magistral Project region has long, hot and humid summers with convective showers in summer and a peak seasonal rainfall in the hottest months. In winter, the air is generally mild during the day, but at night the temperature drops rapidly, and can drop to a few degrees below freezing. Sometimes there may be cold periods lasting a few days, in which the minimum temperature drops down to -14 °C. Total annual rainfall is 576.2mm, of which 81% occurs in the 4 warmest months (June–September). This climate is typical of the eastern flank and foothills of the Sierra Madre Occidental in Mexico.

Monthly mean temperatures range from 9°C in January to 23°C in June (Santa María del Oro; weatherbase.com; 22-year average). Monthly mean precipitation ranges from 5 mm in March to 160 mm in July (Santa María del Oro; weatherbase.com; 51-year average).

Exploration and mining activities may be carried out year-round.

5.3 Local Resources and Infrastructure

The nearest village to the Project is Magistral del Oro (population 143, INEGI, 2010). The nearest town is Santa María del Oro (population 5,878, INEGI, 2010), 5 km to the south, and is the municipal seat for El Oro municipality. The main industry for the area is livestock, mainly cattle.

Santa María del Oro is a fully serviced town and is a supply source for consumables and fuel. Santa Marta del Oro is potentially a source of unskilled or semi-skilled workers, whereas skilled and professional workers must be sourced elsewhere. Durango is the nearest largest city where most other supplies and fuel may be sourced.

Santa Marta del Oro and Magistral del Oro are connected to the national electrical grid. The Project is set up for 500 kVA service for the processing plant on site but power is currently disconnected. Electricity on the site is currently provided by portable generator.

Water is not abundant but may be sourced from local wells.

Road access is paved up to the Project site, with dirt roads for access on the Property. There is cellular telephone coverage on the Project site.

Infrastructure proposed for the 2021 PEA is discussed in Section 18.

5.4 Physiography

The municipality of El Oro is situated in the foothills of the eastern flank of the Sierra Madre Occidental between valley (*valles*) and foothill (*piedemonte* and *sierras*) ecoregions (*Ecorregiones* II and IIIa) (González Elizondo, 2006). The municipality has moderate to high relief with elevations ranging roughly from 1,500 metres above sea level (masl) in the valleys to 2,200 masl in the peaks. The Project lies within a valley at approximately 1,760 masl.

Vegetation varies between low scrub and sparse forests (*chapparal* and *bosque abierto*), sparse scrubland (*matorral*) and woodland typical of interior plateau and semi-arid climates. This includes varieties of cactus (*magueye, agave, biznaga, huevos de toro, nopal duraznillo*), prairie grasses, low scrub (including ocotillo) and stunted trees (*pino prieto, encino, huizache chino, mezquite*). The area has been developed for agriculture, pasture, and mining, and so there is little wildlife in the Project area, although ground squirrels have been observed. Deer and wild pigs are known to be present in northern Durango (González Elizondo, 2006).

The area lies in the Nazas-Aguanaval watershed where the Rio Sextín drains south to lake Lázaro Cardenas (or reservoir) and then drains east into the Rio Naza.

6 HISTORY

6.1 Mining History, pre-1917

Magistral del Oro is one of the oldest mining districts in the Mexican Republic, where first recorded discovery of gold was in 1620. Magistral del Oro was discovered by Cristóbal de Oñate. It was originally established as a mission in the 17th century it became a parish in 1735 and was named Nuestra Senora de las Mercedes. The town site (funda legal) was later established in 1758 (CRM, 1999).

Small scale mining grew in the 18th century with the production of gold, which was sent to New Spain. Mining continued until 1810 when the mines were largely abandoned due to the War of Independence (1809-1820). The region was largely forgotten until the mid-1800s when small scale exploitation of the gold veins and placers slowly developed at El Oro. (CRM, 1987; CRM, 1999).

In the late 19th century, mining activities in the region grew with the influx of foreign, mixed foreign/Mexican, and Mexican companies. Notably, at El Oro, mining companies included the Lustre Mining Company (Lustre), La Recompensa and California, and the Sestian Land Mining Company (Pacheco Rojas, 2016).

Up to 1910, mining activities in the area reached a moderate intensity. Lustre, one of the more important companies in the area, had problems with gold recovery (approximately 40%). Lustre later used cyanidation without being able to recover the cyanide due to the presence of copper. A smelter was installed and operated until 1917 when the Revolution put an end to the operation. Lustre leased their rights to the National Mines and Smelter Company in 1911. Operations finally came to an end in 1917 due to the Revolution (CRM, 1987; CRM, 1999, Pacheco Rojas, 2016).

The following is a list of some of the named historical mines found (see Figure 4-2) in near the project site:

Huachi	Magistral	Santa Ana
Crucero	Gavilana	Fragua
Crucero Recompensa	Las Viboras	Gran Lucero
Socavon La Mesa	Cocineras	El Rey
Rolvorin	Socavon Los Angeles	
El Progreso	Crucero Las Marías	

6.2 Mining and Exploration History, 1940–1996

The following is a brief description of the mid-20th century mining history for the mines around Ejido Magistral del Oro and may have contributed to the deposition of the Magistral tailings. There is little information available on past mining companies, their activities, and historical production. What information is available is taken mainly from CRM (1987) and CRM (1999).

Table 6-1 summarizes some of the ownership and approximate dates of ownership of operations.

Table 6-1: Recent Ownership History

Year (From)	Year (To)	Company	Activity	Source
?	1940	Compañía Real del Monte y Pachuca	Installed processing plant.	CRM, 1987
?	~1950s	Compañía Mineral Santa María del Oro	"Cía. Santa María del Oro has extensive holdings in the municipality of Santa María del Oro…"	Cathcart, 1951
1950	1960	Compañía Magistral del Oro	Mined veins: Colorados, Recompensa, Los Angeles, Santa Ana. Last known industrial scale mining. Possible provenance for the majority of tailings for the Project.	CAM, 2012 CRM, 1987
1979		Tormex Resources	Conducted a drill program on the tailings. Only gold was analysed. No additional information or results were available.	CRM, 1987
~1981	~1987	Bactete	Held mineral rights to processing plant. No additional information available.	CRM,1987
1992	1995	Consolidated Nevada Goldfields	Removal of approximately 1,000,000 t of tailings to Rancho Cazuelas, approximately 6 km west of the Project for heap leaching. No additional information available	CAM, 2012 Ash et.al., 2018
	ca. 1999		Small scale mining and processing by *gambusinos* mainly at the Santa Ana and Recompensa mines.	CRM, 1999

Note: ca. = circa
CAM = Corporación Ambiental de México
CRM = Consejo de Recurso Minerales
Source: CRM, 1987; CRM, 1999; CAM, 2012; Ash et.al., 2018.

6.2.1 Real del Monte y Pachuca, 1920s–1940

The company Real del Monte y Pachuca S.A. de C.V. (Real del Monte y Pachuca) installed the processing plant in the 1920s or 30s, but it burnt down in 1940 (Ash et.al., 2018). Mining activities ceased in 1940 (CRM, 1987; CAM, 2012).

Real del Monte y Pachuca has a long history in Mexico. First established by colonial Spain in the state of Hidalgo from 1727 to 1824, it was taken over by a British company in 1824 until 1849. In 1850, it was taken over by the Mexican company entity Sociedad Aviadora de Minas de Real del Monte y Pachuca. In 1906, it was sold to the United States Mining and Refining Company, which modernized its mining operations (Saavedra y Sanchez, 2008) until around 1951. The company was administered through a government company (entitad Paraestatal) from 1949 to 1990. The company was later acquired by Altos Hornos de Mexico S.A. (AHMSA) as a subsidiary.

6.2.2 Compañía Magistral del Oro, 1950–1960

Compañía Magistral del Oro S.A. de C.V. (Cía. Magistral del Oro) took over operations, mining, and milling/flotation of the Cocineras and Colorados veins, part of Recompensa, Los Angeles, and Santa Ana, concluding its activities in 1960 due to labour problems. Cía. Magistral del Oro held the property until at least 1985 (Ash et.al., 2018).

The majority of the tailings at Magistral were generated during these mining operations. Production records were not available at the Report effective date.

6.2.3 Tormex, 1979

In 1979, Tormex Resources Ltd. (Tormex) carried out a drilling and sampling program to determine tonnes and grades of the tailings (CAM, 2012). However, there was no detailed technical information available on this program.

6.2.4 Bactete, 1981–1987

The mining concession and plant were held by Bactete S.A. de C.V. (Bactete)from 1981 to about 1987. There is no information available other than its mention by CRM (1987). The activities of this company were unavailable.

The tailings were owned by the Ejido when it converted to an ejido minero in 1981 (CRM, 1987).

6.2.5 Real del Monte y Pachuca, 1985

In 1985, Real del Monte y Pachuca carried out a program to determine different processing that could be applied to the tailings. Real del Monte estimated a volume for the tailings (Ash et.al., 2018), however, there was no technical information available on this work.

6.2.6 Minera Magistral del Oro, Consolidated Nevada Goldfields, 1992–1996

In 1992, Consolidated Nevada Goldfields Corporation (CNGC) acquired some rights to the Magistral tailings. Between 1993 and 1998, Compañía Minera Magistral del Oro S.A. de C.V., obtained an operations and processing licence for approximately 1,000,000 tonnes of tailings material at Rancho Cazuelas (Cazuelas Ranch). The heap leach site was situated adjacent to the ejido, approximately 2 km west of the Project (Vugalit, 2004).

Between 1992 and 1996, an estimated 750,000 t were extracted from the tailings and shipped to the heap leach pads outside the ejido. These are known as the Minera del Norte tailings (internal AHMSA PowerPoint, 2018).

The project initially ceased operation in August 1994, due to high operating costs related to the high copper content of the tailings. Production was restarted in June 1995 after extensive experimental work was conducted to develop a method of extracting the dissolved copper and thereby minimizing cyanide consumption. There was no information available on production or recovery of this operation (Ash et.al. 2018).

6.2.7 Altos Hornos de Mexico S.A. (Real del Monte y Pachuco), 1990–2018

Prior to 1990, both Altos Hornos de Mexico S.A. (AHMSA) and Real del Monte y Pachuca were parastatal companies with a participation of greater than 50% (DOF, 1979). From 1990–1992, Mexico went through a series of privatizations of many of these parastatal companies. In 1990, Altos Hornos de Mexico S.A. (AHMSA) merged, or acquired, Real del Monte y Pachuco, and became the sole owner of the company.

6.2.8 Real del Monte y Pachuca, 2004

In 2004, an Environmental Impact Study was completed by Durango-based Consultoria Ambiental Vugarlit S.C. (Vugarlit) for Monte del Real on the heap leach site, 2 km west of the Project.

At the time, the Project was held by Procesadora Magistral S. de R.L. de C.V., and the primary material considered for the heap leach operation was the Magistral tailings (Vugarlit, 2004).

6.2.9 MINOSA, 2014–2018

From 2014 to 2018, Real del Monte y Pachuca, with Minera Magistral del Oro, conducted regional and detailed exploration programs over the mine concessions of Cía. Mineral Magistral del Oro around the Ejido Magistral (AHMSA, 2020a, 2020c). This included, but was not limited to:

- Topographic survey;
- Regional geology mapping and detailed geology mapping over selected areas;
- Cleaning (unspecified) of 25 of 33 mine workings within the ejido Magistral; and
- Drilling program over the heap leach pad (2 km west of the Project) consisting of 305 drillholes totalling 2,542.47 m. Thickness of the tailings ranged between 0.7 m and 12.8 m with an average thickness of 8.3 m.

Within the historic mine workings, and outside the Project limits, the following drilling was conducted:

- 12 core holes over the Gavilanas and Marías mine areas. A total of 2,113.5 m was completed (labelled BN01 to BN12).
- 24 core holes were proposed, targeting geophysical anomalies around the Gavilanas, Bella Vista Santa Martha, Cocineras, Abejas (Los Tiros) veins/mines (labelled MN17MAG-001 to MN17MAG-020 on maps). It is not known if these were completed.
- Geophysical surveys consisted of 47 line km of magnetics. 14 sections of induced polarization (IP) and resistivity (23 line km) and 1 electromagnetic survey, controlled source audio frequency magnetotellurics (CSAMT).
- Surface and trench sampling, including within historic underground workings (taken from AHMSA, 2020c) which included:
    - 501 samples from the La Mesa mine; chip sampling;
    - 540 samples from the Gavilanas mine; chip sampling;
    - 786 samples from surface sampling, mainly channel sampling of vein outcrop; and
    - 62 samples (grab) from rehabilitated workings, for example, Cocineras, Los Tiros, Los Angeles, and Las Marías.

6.3 Project History, 2011–Present

6.3.1 Proyecto Magistral SRLCV, Promociones Metrópolis, 2011–2016

In 2011, on behalf of Promociones Metrópolis S.A. de C.V. (Promociones Metrópolis), Corporación Ambiental de México S.A. de C.V. (CAM) carried out a drilling program over the tailings consisting of 24 hollow core auger drillholes, totalling 197.4 m. Samples were collected in 3-m intervals for a total of 58 samples. The 58 samples were sent to Inspectorate de Mexico S.A. de C.V. (a Bureau Veritas Company), based in Durango, Durango State, for analysis. Analysis consisted of fire assay with an atomic absorption finish.

In March 2012, a bottle roll leaching test was completed by Kappes, Cassiday & Associates (KCA), based in Reno, Nevada. This testwork was completed on a single bulk sample from the Project and the bottle roll tests were completed on five portions of the sample (KCA, 2012).

6.3.2 CIL Plant

The 500 t/d carbon-in-leach (CIL) plant at the Magistral Project was constructed in 2013-2014 by Proyecto Magistral SRLCV, financed by four Mexican investment firms.

The CIL plant processed 35,000 tonnes of tailings material, however, gold production and recovery figures were not available (Ash et.al., 2018). The rejects from this operation were put in a tailings dam in a valley 450 m to the west of the Magistral tailings deposit.

In August 2014, heavy rains caused an overflow from these tailings to wash down into the valley. This resulted in the suspension of the MIA Permit by SEMARNAT. In 2015, Proyecto Magistral SRLCV built diversion trenches on either side of the pond to mitigate any future overflow.

6.3.3 MX Gold, 2016–2019

In October 2016, MX Gold entered into a joint venture with Nevada-based Gracepoint Mining Corp. (Gracepoint), a subsidiary of Firma Holdings Corp. (OTC:FRMA) to acquire a 50% interest in the Magistral del Oro tailings project. During Firma's pre-purchase due diligence, a volume and grade value report was commissioned and provided, which was stated to have validated expected grade and tonnage. Additionally, to confirm previous metallurgical results, a report was commissioned and completed by two different Mexican-based metallurgical engineering companies, with both company's reports confirming previous grade, process, and recovery results (MX Gold press release 26 October 2016). This information was unavailable at the time of writing.

In December 2016, MX Gold Corp. (MX Gold) entered into a binding agreement with Gracepoint, and in January 2017, MX Gold completed the acquisition of the 50% interest in the Magistral Project. At the time, the mineral rights to the tailings were held in agreement between the Ejido Magistral del Oro and American Mining Mexico, S.A. de C.V. (AMM).

The project included the 500 t/d dynamic cyanide countercurrent system plant, constructed in 2013–2014, at a cost of approximately US$4.5 million, and the exclusive rights to process the mill tailings.

In November 2016, five shallow backhoe test pits were excavated on the tailings. Locations of these test pits were not available. The material from these pits were use in a bulk sample that was transported and analyzed by Metsolve in

Langley, BC. Assay and metallurgical test work on these samples included cyanide bottle roll to focus on the cyanide gold extraction.

In September 2017, MX Gold, retained Ash et.al. to complete a PEA (MX Gold, p 2017), which was completed on 28 January 2018. The PEA was based on the drilling program and results by CAM (2012).

In January 2018, MX Gold was faced with a Cease Trade Order (CTO) for not filing technical reports under National Instrument 43-101 to support first time disclosure of mineral reserves on its Magistral property, as well as on another property. During this period, MX Gold was also in the process of changing its business from mining to crypto mining.

On September 11, 2018, MX Gold received a Complaint dated September 9, 2018, that was filed in the United States District Court for the District of Nevada, naming Gracepoint as the plaintiff, and MX Gold as one of the defendants. The Complaint alleged breach of contract and breach of the implied covenant of good faith and fair dealing, and sought, among other things, general damages of US$12 M. The Complaint related to an Initial Purchase Agreement dated October 21, 2016, as amended, among MX Gold, Gracepoint, American Metal Mining, S.A. de C.V., and Proyecto Magistral, S. de R.L. de C.V., (Proyecto Magistral SRLCV), whereby the MX Gold agreed to pay US$2.5 M to purchase a 50% participating ownership interest and a 45% net profit participating interest under a joint venture with respect to the Magistral Project. Both AMM and Proyecto Magistral were affiliates of Gracepoint with Proyecto Magistral being the registered owner of the Project (MX Gold, MD&A, Dec 2018).

In November 2018, MX Gold relinquished its 50% participating ownership in the Magistral Project and, as a result, Gracepoint retained 100% of the Magistral Project (MX Gold press release, 5 April 2018 and 29 November 2018; MX Gold, MD&A, December 2018) (Firma Holdings Corp., press release, 29 November 2018).

6.3.4 AMM, Manto, 2019–2020

Proceeding from the MX Gold issues, the Project incurred several unpaid debts which were left to Gracepoint and its affiliate, AMM. In 2019, Gracepoint relinquished its interest in the Magistral project, leaving AMM with 100% interest and the outstanding debts to creditors.

In 2020, Manto Resources S.A. de C.V. (Manto), acquired 100% interest in the Magistral Project from AMM as a result of a court settlement agreement. As part of the acquisition, Manto settled the project debts.

No exploration or development work was completed by AMM or Manto during this period.

6.3.5 Tarachi Gold, 2020–present

On 8 February 2021, Tarachi signed a final purchase agreement with Manto to acquire of the Magistral Project.

6.4 Historical Resource Estimates

The following resource estimates are not considered relevant or reliable and are summarized here for historical reference and completeness. A qualified person has not done sufficient work to classify the historical mineral estimate except for Ash et.al. (2018). AGP and Tarachi are treating these resource estimates as historic and do not consider them valid and should not be relied upon as current estimates.

Table 6-2 presents a summary of historical resource estimates for the Magistral Project.

Table 6-2: Historical Resource Estimates for the Magistral Project

Company	Year	Classification	Tonnes (t)	Au (g/t)	Contained Au (oz Au)
CAM	2012	-	1.292,918	2.06	86,000
MX Gold	2018	Indicated	1,295,000	2.11	88,000

Note: CRM (1987), CAM (2012), Ash et.al. (2018).

In 2012, CAM estimated the volume/tonnes and grade by polygonal method based on their 2011 hollow core auger drill program of 24 drill holes. The density for the material was assigned 1.7. The reduction of estimated tonnes may be due to the removal of material to Mina Norte in the 1990's, the heap leach site adjacent to the Ejido to the west.

In 2018, Ash et.al. estimated the mineral resources by polygonal method based on the CAM 2011 drill hole data. Arbitrary block volume reduction factors were assigned to the polygons situated along the perimeter of the tailings area to account for the unknown slope angle of the base of the tailings along the perimeter. A bulk density of 1.7875 was assigned based on the dry density less an assumed conversion factor of -35%. All estimated polygons were classified as Indicated Mineral Resources and the mineral resource estimate reported above a 1.0 g/t cut-off grade.

All historic resource estimates presented above are superseded by this report.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The geology in the State of Durango, Mexico is dominated by extensive volcanic fields that form one of the world's largest deposits of rhyolitic ignimbrite and tuff. The volcanic field has been divided into an early, Lower Volcanic Group (LVG) consisting mainly of intermediate composition volcanic and volcaniclastic rocks and a later (Oligocene), Upper Volcanic Group (UVG) consisting of acidic volcanic rocks.

Early Tertiary to Mesozoic age, sedimentary rocks occur in the eastern part of the State of Durango and as windows in the extensive Tertiary volcanic fields. Locally younger intrusive bodies, quartz feldspar porphyry, dioritic, or granodioritic units, intrude limy sedimentary rocks (Hodson, 2014).

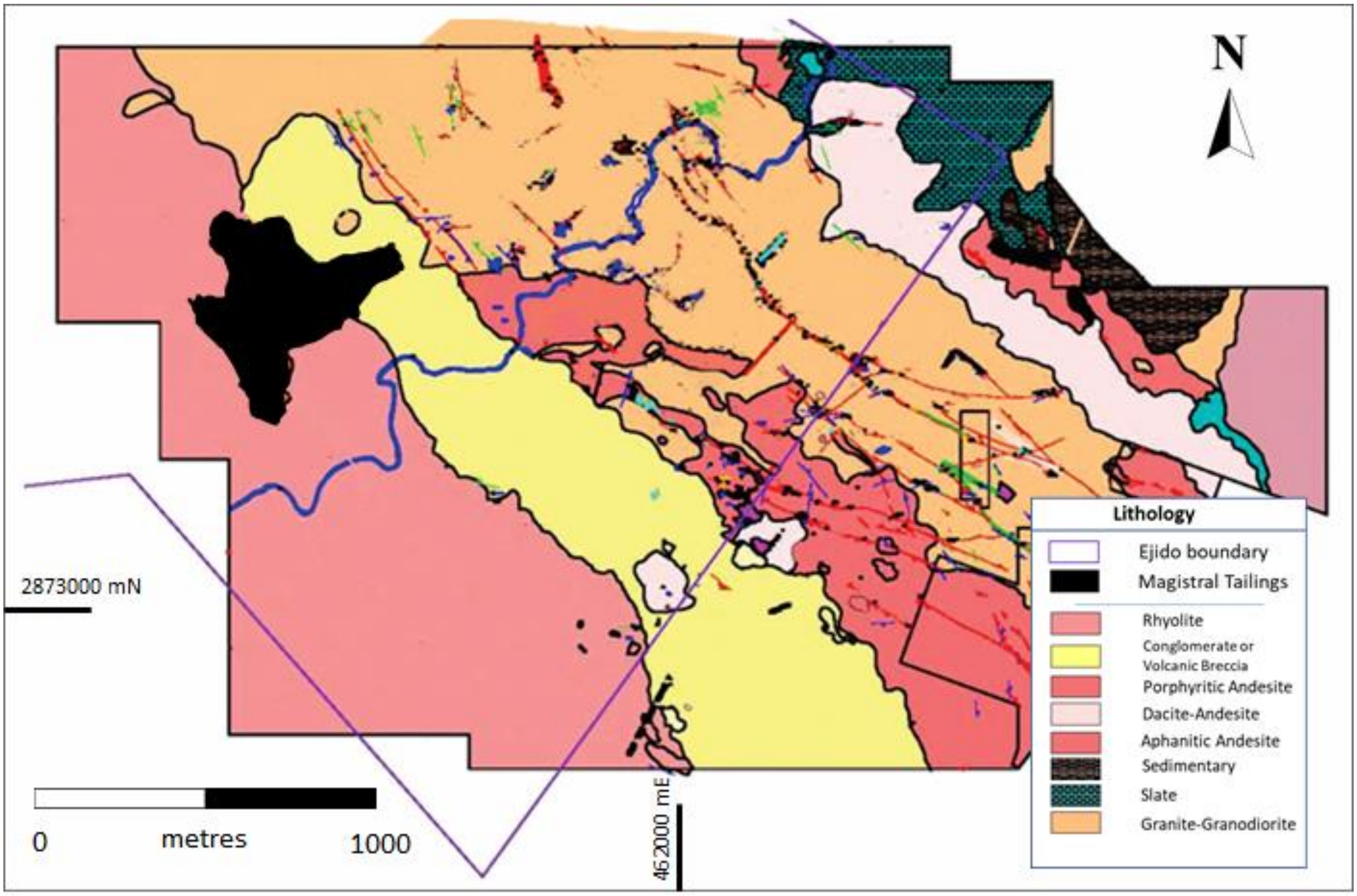
This region of northern Durango (southern Chihuahua) is comprised of two physiographic provinces; to the east is the Basin and Range (*Sierras y Cuencas*), and to the west is the Upland with Basins (*Tierras Altas con Cuencas*) (Raiz, 1964). The Project is hosted in the Upland with Basins province.

The region consists of elongated and narrow orographic lineaments formed by Mesozoic sedimentary rocks, which have a NW-SE orientation. The topographic relief is low in the eastern part and more pronounced towards the western part, where the Sierra Madre Occidental begins. The plains are bounded by normal faults and filled with Quaternary alluvium, sands, and clays. These plains predominate in the eastern portion and disappear towards the western part due to more rugged volcanic igneous rocks of the Tertiary and Quaternary of the Sierra Madre Occidental (Araujo y Arenas, 2020).

7.2 Property Geology

The Magistral district in the foothills of the Sierra Madre Occidental is a Tertiary volcanic province composed of dacites, diorites, rhyolitic breccia, and rhyolitic ignimbrites and tuffs that can be covered by Quaternary sediments (Figure 7-1).

Figure 7-1: Property Geology Map



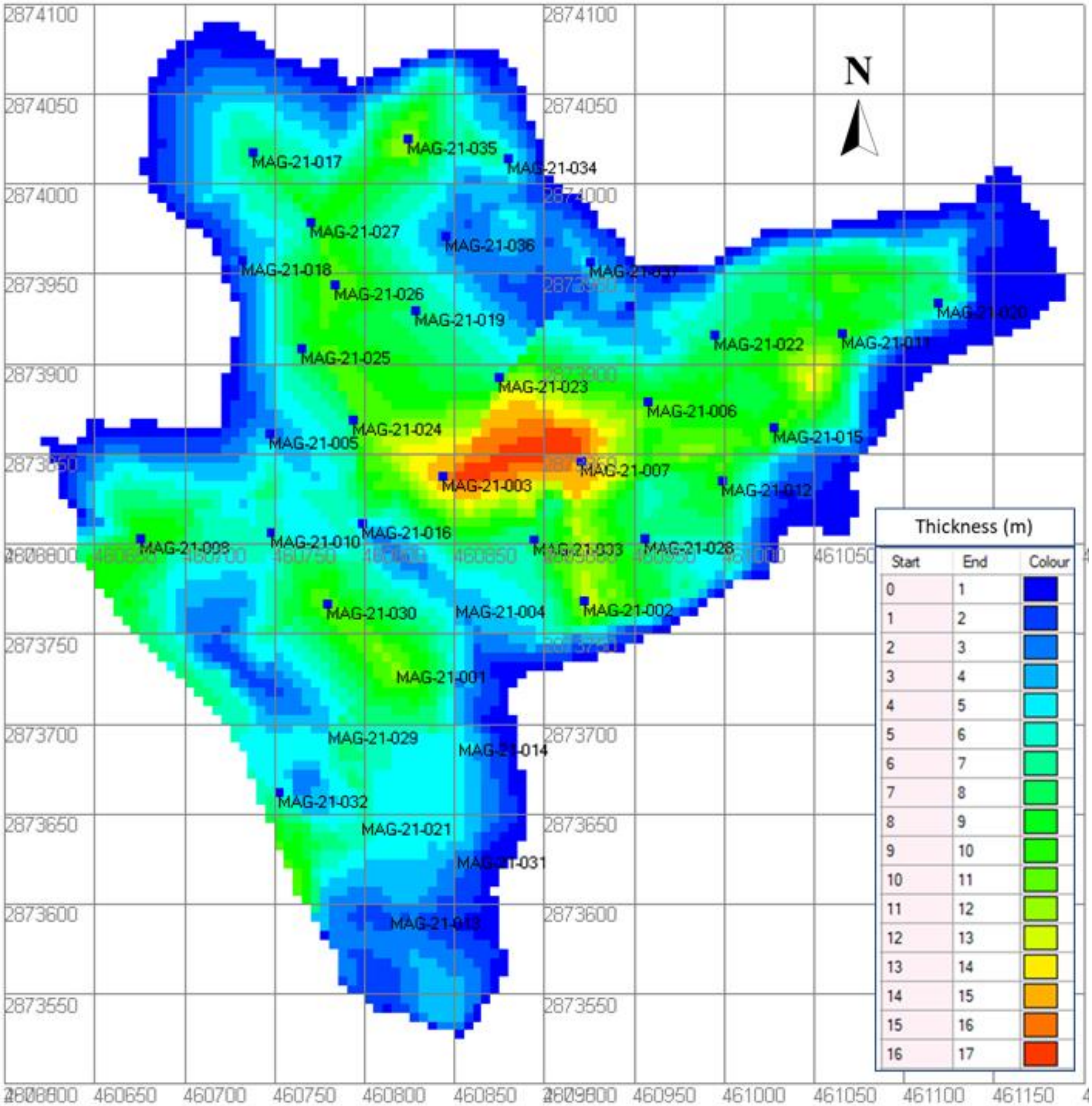
Note: Figure prepared by AGP, 2021; modified from AHAMSA, 2020b.

To the east of Santa María del Oro is an intrusive body of granite–diorite composition, with a granular to porphyritic phaneritic texture, and potassium alteration zones. This intrusive body is interpreted as polyphasic since clasts of it are found in the (younger) Ahuichila Conglomerate and to the east of Magistral, it is observed intruding the andesites of the Lower Volcanic Sequence. To the north of Ejido Magistral del Oro, it is reportedly of Jurassic age and the other is of Oligocene age. (CRM,1999; geology map).

7.3 Deposit Geology

The Magistral tailings deposit consists of the deposition of rejects from historical mill workings from the mid-1900s. These tailings were deposited within a natural low relief valley to the west of the historical mill and made up of relatively unconsolidated clay/silt particles. The provenance of the reject material was from treating gold bearing granodiorites and quartz veins. The primary sources were from the nearby mines: Colorados, Recompensa, Los Angeles, and Santa Ana (Figure 4-2). Thickness varies within the tailings up to 16 m as shown in Figure 7-2.

Figure 7-2: Magistral Tailings Thickness Map

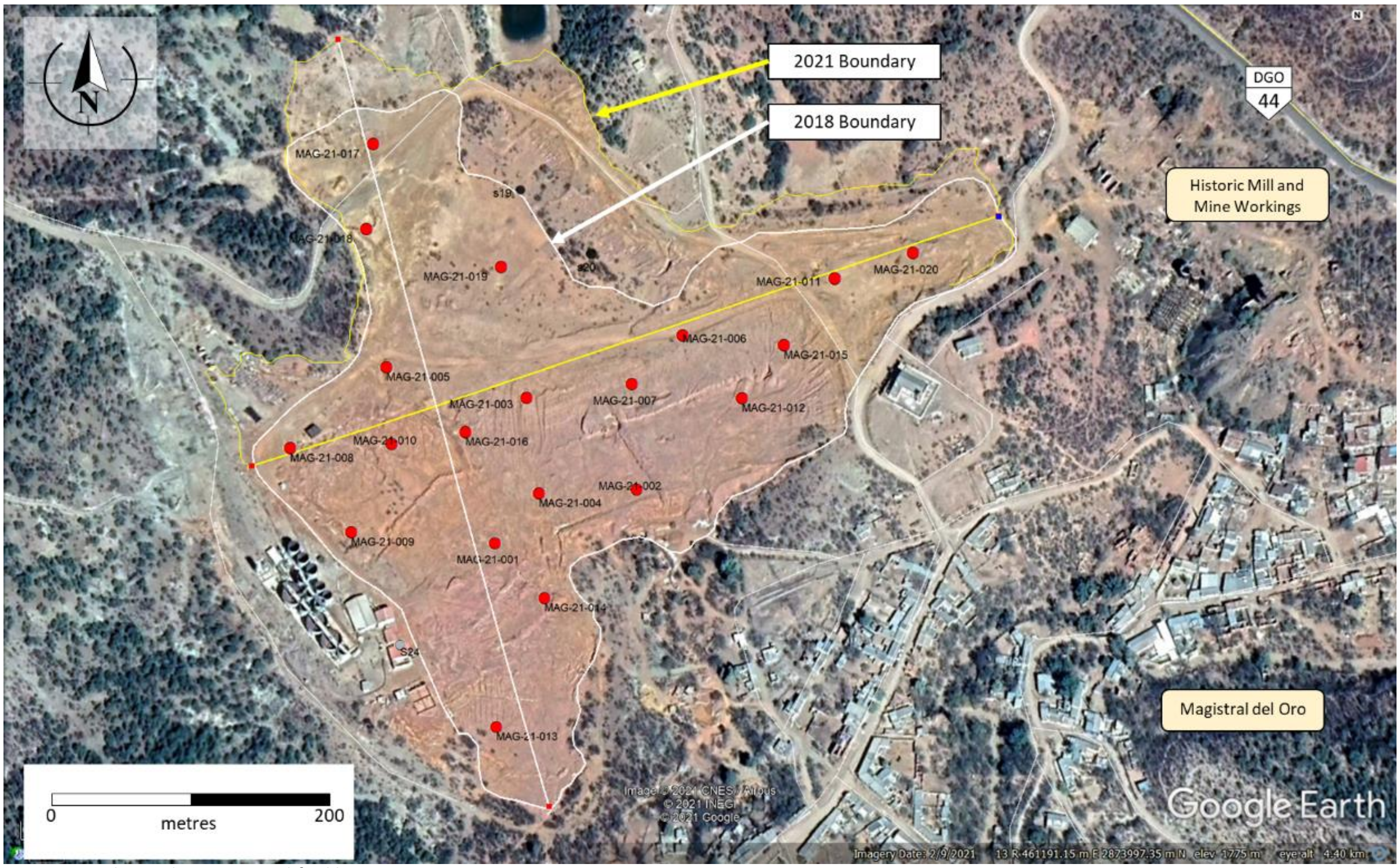


Note: Grid is 50 m x 50 m. Figure prepared by AGP, 2021.

7.4 Mineralization

The Magistral tailings is host to gold, copper and silver mineralization. The longest axes of the tailings deposit are approximately 550m north–south and approximately 575 m east–west (Figure 7-3).

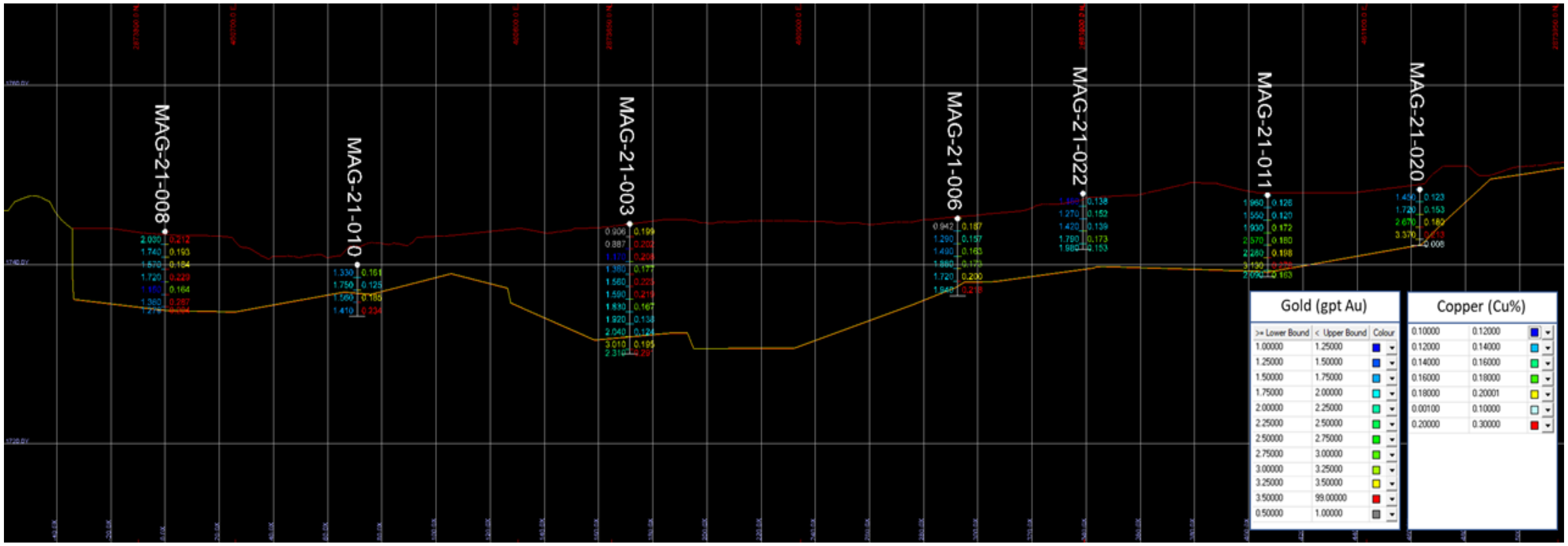
Figure 7-3: Satellite Photo of the Magistral Project; Showing Lateral Extent of Tailings



Note: Google Earth, 2021; modified by AGP, 2021.

Figure 7-4 presents a cross-section (yellow line in Figure 7-3) of the Magistral tailings with 2x vertical exaggeration, showing gold and copper grades from the 2021 auger holes.

Figure 7-4: Cross-Section of the Magistral Tailings at 2x Vertical Exaggeration; Showing Gold (left) and Copper (right) Grades; Looking 345°Az



Note: Grid shown at 2x vertical exaggeration; Grid is 20 m x 20 m; viewing corridor is 20 m toward and away
Figure prepared by AGP, 2021.

8 DEPOSIT TYPES

Portions of the following text are taken from Ash et.al. (2018).

The Magistral deposit is a gold and copper-bearing mill tailings deposit that was generated during the historical mining and processing of the local Magistral del Oro mines in the mid-1900s (Figure 8-1).

Figure 8-1: Magistral Tailings, looking North

Note: Figure prepared by AGP, 2021.

A portion of the tailings, reportedly 750,000 tonnes, was removed from the deposit for secondary processing between 1992 and 1996. There are a few minor workings observed on the surface of the tailings deposit from artisanal miners (*gambusinos*), but these are not considered to have a significant impact on the estimated mineral resources.

8.1 Deposit Type

The primary mineral deposits of the Magistral del Oro district are classified as epithermal gold–silver-bearing quartz–sulphide vein deposits of Oligocene age. These primary deposits are hosted by Jurassic age volcanic and sedimentary rocks including phyllites, limestones, and andesitic to rhyolitic tuffs and flows, intruded by Jurassic age granites and felsite dikes, and locally overlain by post-mineral volcanic rocks of Oligocene age. Epithermal gold–silver-bearing deposits can exhibit variable metal zonation between one another within a district, and even within different portions of individual deposits and veins. Therefore, the tailings resulting from mining and processing of such deposits should also be expected to contain varying contents of the metals and/or minerals (Ash et.al. 2018).

9 EXPLORATION

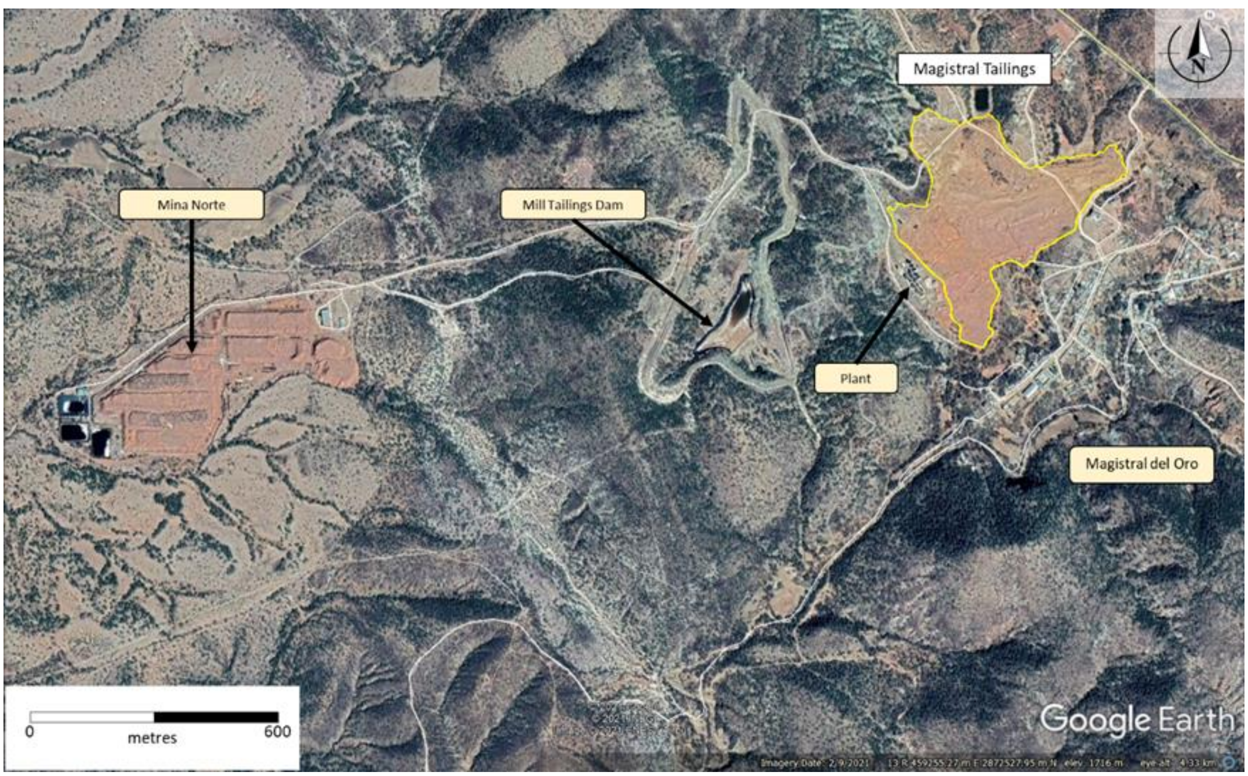
Tarachi completed property and topographic surveys and a drilling program that ran from April and May 2021.

9.1 Property Survey, 2021

In March 2021, Tarachi retained Sistemas de Tecnología Integrados S.C. (TOPMIR), based in Hermosillo, Sonora, to carry out topographic surveys of the tailings and mill, the mill tailings dam, and Mina Norte (Magistral tailings off the ejido to the west.

The surveys consisted of a ground global positioning system (GPS) survey and a photogrammetry survey for each of the three areas (Figure 9-1).

Figure 9-1: Property Survey



Note: Google Earth, modified by AGP, 2021.

The ground GPS survey was completed using dual-frequency DGPS and the photogrammetry survey was carried out using a Phantom 4 drone.

Table 9-1 lists the coverage of each of the surveys.

Table 9-1: Survey Coverage

Area	Survey	Coverage
Magistral Tailings and Mill	DGPS	2.023-line km perimeter
	Drone Photogrammetry	49.613 ha
Plant Tailings Dam	DGPS	0.713-line km perimeter
	Drone Photogrammetry	59.863 ha
Mina Norte	DGPS	2.268-line km perimeter
	Drone Photogrammetry	49.613 ha

Note: Table prepared by TOPMIR, 2021.

9.2 Topographic Drone Survey, 2021

In April 2021, L. B. Ecologico Consultoria Ambiental (Ecologico), based in Durango, State of Durango, completed a drone LiDAR survey of the Magistral tailings and area. The information gathered from this survey was used to create a new topographic surface for the Project.

10 DRILLING

10.1 Summary

In May 2021, Tarachi completed a hollow auger drilling campaign on the tailings deposit. The drilling campaign was initially designed to follow up on CAM's drilling program in 2011; however, laboratory certificates were not available from the CAM program. Tarachi re-drilled and infill drilled the entire tailings deposit area.

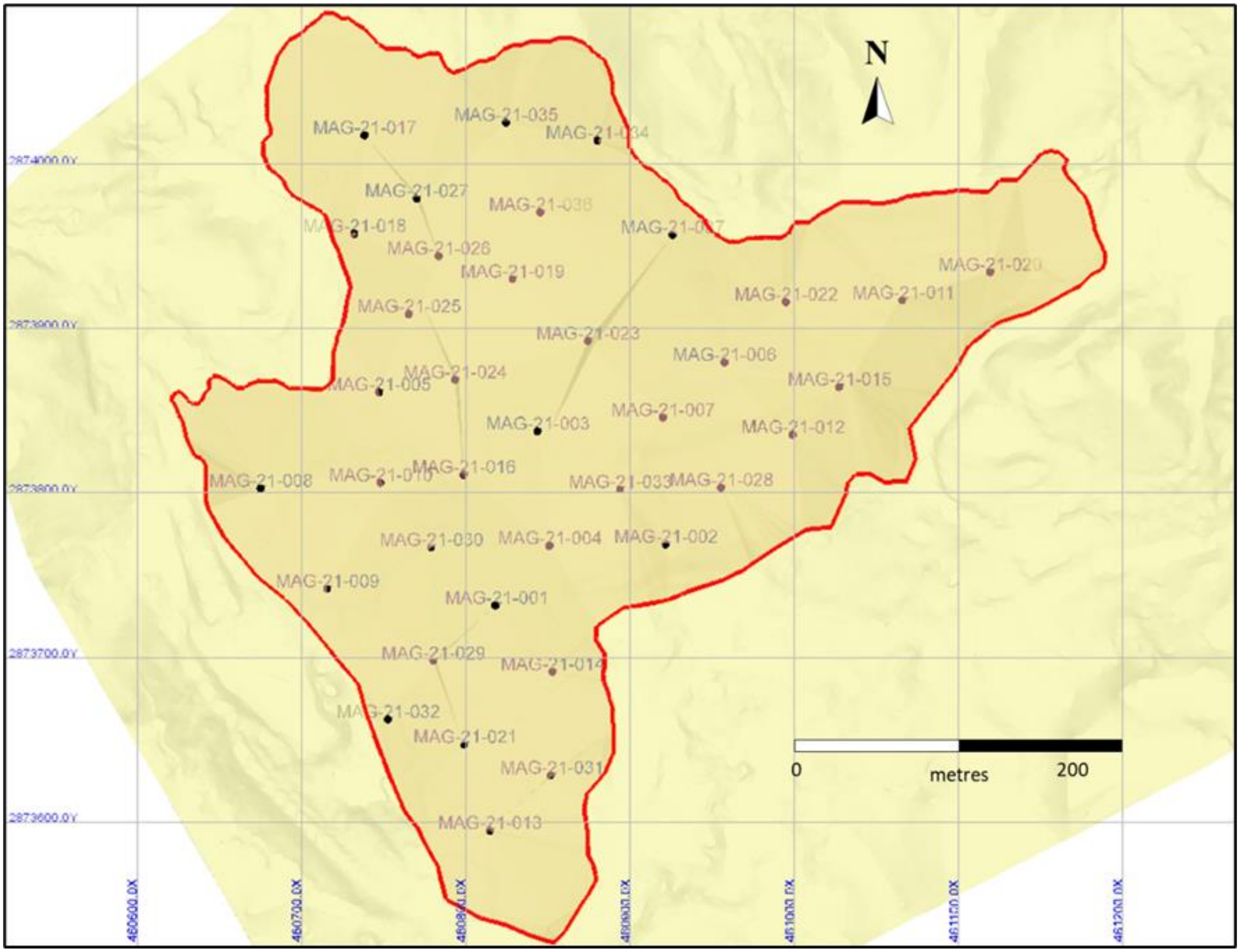
Table 10-1 summarizes the 2021 drilling program. Figure 10-1 shows the drillhole locations for the Project.

Table 10-1: Summary of the 2021 Drilling Program

Year	Holes	Dates Drilled	Drillhole Numbers	Metres (m)	No. of Samples
2021	37	27 April to 20 May, 2021	MAG-21-001 to MAG-21-037	242.62	178

Note: Table prepared by AGP, 2021.

Figure 10-1: Magistral Drillhole Location Map



Note: Figure prepared by AGP, 2021.

Table 10-2 lists the drillholes completed at Magistral.

Table 10-2: Magistral Drillhole Collar Information

Hole ID	Collar UTM East	Collar UTM North	Hole Azimuth º	Hole Dip º	Final Depth (m)
MAG-21-001	460818	2873732	0	-90	10.92
MAG-21-002	460922	2873770	0	-90	8.97
MAG-21-003	460844	2873837	0	-90	14.50
MAG-21-004	460851	2873768	0	-90	3.26
MAG-21-005	460744	2873860	0	-90	2.80
MAG-21-006	460957	2873880	0	-90	8.61
MAG-21-007	460920	2873846	0	-90	14.00
MAG-21-008	460675	2873803	0	-90	8.83
MAG-21-009	460716	2873742	0	-90	1.29
MAG-21-010	460746	2873805	0	-90	5.73
MAG-21-011	461065	2873918	0	-90	9.10
MAG-21-012	460999	2873835	0	-90	8.40
MAG-21-013	460815	2873595	0	-90	1.90
MAG-21-014	460853	2873691	0	-90	4.63
MAG-21-015	461029	2873872	0	-90	8.95
MAG-21-016	460799	2873813	0	-90	3.73
MAG-21-017	460738	2874018	0	-90	7.70
MAG-21-018	460732	2873958	0	-90	1.90
MAG-21-019	460828	2873930	0	-90	6.30
MAG-21-020	461120	2873935	0	-90	6.30
MAG-21-021	460799	2873647	0	-90	5.60
MAG-21-022	460994	2873916	0	-90	6.21
MAG-21-023	460878	2873890	0	-90	6.54
MAG-21-024	460796	2873868	0	-90	6.20
MAG-21-025	460765	2873910	0	-90	7.34
MAG-21-026	460783	2873948	0	-90	9.80
MAG-21-027	460772	2873980	0	-90	6.18
MAG-21-028	460958	2873805	0	-90	6.30
MAG-21-029	460782	2873698	0	-90	3.50
MAG-21-030	460781	2873766	0	-90	9.80
MAG-21-031	460852	2873628	0	-90	3.50
MAG-21-032	460753	2873663	0	-90	4.78
MAG-21-033	460887	2873807	0	-90	6.30
MAG-21-034	460876	2874017	0	-90	5.60
MAG-21-035	460824	2874026	0	-90	11.20
MAG-21-036	460844	2873970	0	-90	1.93
MAG-21-037	460922	2873965	0	-90	10.92

Note: Table prepared by AGP, 2021.

10.2 2021 Drilling

10.2.1 Drilling, 2021

In May 2021, Tarachi completed a hollow stem auger drilling program on the Magistral tailings. The drilling program was intended to cover the entire tailings deposit with a nominal drilling spacing of 50 m x 50 m. All drillholes intersected the tailings deposit.

Drilling was completed by Bylsa. A truck-mounted Central Mine Equipment Company 75 (CME-75) drill rig was used. A 3-inch-diameter hollow auger with a 1.4 m barrel length was used (Figure 10-2).

Figure 10-2: Drill Rig at MAG-21-033

Note: Figure prepared by AGP, 2021.

Samples from within the barrel were collected using a 0.7-m-long Shelby solid tube (Figure 10-3).

Figure 10-3: Shelby Tube Sample at MAG-21-033

Note: Figure prepared by AGP, 2021.

The Shelby tube was pushed into the compacted tailings ahead of the hollow auger bit, and the auger was drilled down to the base of the sampling tube. The Shelby tube was then extracted, and a new sampling tube was placed at the end of the drill rod and the process was repeated. One sample is made up of two Shelby tubes; that is, a sample interval of 1.4 m.

Once extracted, the Shelby tube was capped at both ends with a plastic cap and the drillhole number, sample number, and meterage "to" were all marked on the side at the base of the tube in permanent marker (Figure 10-4).

Figure 10-4: Shelby Tube Sample at MAG-21-033

Note: Figure prepared by AGP, 2021.

10.2.2 Logging and Sampling Procedures

The Shelby tubes were then transported back to the logging and sampling facility by Tarachi personnel. The material was extracted from the tubes into split tubes using a pneumatic piston (Figure 10-5) for logging.

Figure 10-5: 1.4-m Sample Interval – MAG-21-032

Note: Figure prepared by AGP, 2021.

It was noted that wet material was easier to extract from the tube than dry samples. Dry samples tended to get compacted in the tube when forced out of the slightly tapered bottom. Knocking on the tube wall with a hammer facilitated loosening the sample.

The core logging methodology and procedures were overseen by Mr. Braulio Rivera Enriquez and Mr. Lalo Gracia, Project Geologists for Tarachi. The logging procedures applied during the Magistral drill program were as follows:

- Once the material from the two Shelby tubes was extracted, the tailings material was logged for colour, texture, recovery and oxidization intensity. Logs were recorded on paper and then transferred to an Excel spreadsheet.
- The split tubes of material were then photographed using a whiteboard to record: the drillhole number, sample number, from and to distance, and the Shelby tube number (ordered sequentially down the hole) (Figure 10-6).

Figure 10-6: Tailings Sample Photography, 0.7m Interval – MAG-21-032

Note: Figure prepared by AGP, 2021.

- Material from the two tubes was then placed in a sample bag and marked with the sample number. A sample tag was placed in the bag and zip tied.
- The sample bag was weighed and the weight was recorded in the log.

- Once all samples for the drilling program were collected, they were placed into rice bags, marked with the number of samples, and sealed.

Upon completion of the drilling program, all samples were transported to Hermosillo by Tarachi personnel and shipped via FedEx to Base Metallurgical Laboratories (BaseMet) in Kamloops, British Columbia (BC).

Upon arrival at BaseMet, control samples (standards, blanks, and duplicates), which were delivered marked with their own sample numbers, were inserted at the rate of 1 control sample for every 20 samples. Duplicates were given their own sample number in which the laboratory created a duplicate from the split sample.

Upon request from Ausenco, BaseMet delivered the samples to Activation Laboratories Ltd. (Actlabs) in Kamloops for analyses.

10.2.3 Surveys

Drillholes were originally situated using handheld GPS units. All drillholes were drilled vertically and were not surveyed downhole. The maximum depth of the drillholes was 14.5 m; therefore, any deviation from the vertical hole would not be considered significant.

All drillhole collars in the 2021 drilling program were surveyed by Ecologico. The survey also included 8 drillholes from the 2012 CAM drilling campaign where collar locations were still evident.

10.3 Results of the 2021 Drilling Program

The 2021 Magistral drilling program consisted of 37 drillholes; all drillholes intersected the tailings.

Table 10-3 lists selected drillhole intercepts in the Magistral tailings with significant gold values. The results demonstrate the presence of a core of gold mineralization throughout the tailings. Grades do not appear to vary greatly within drillholes or from drillhole to drillhole. Figure 10-7 shows a selected cross-section of the Magistral tailings deposit.

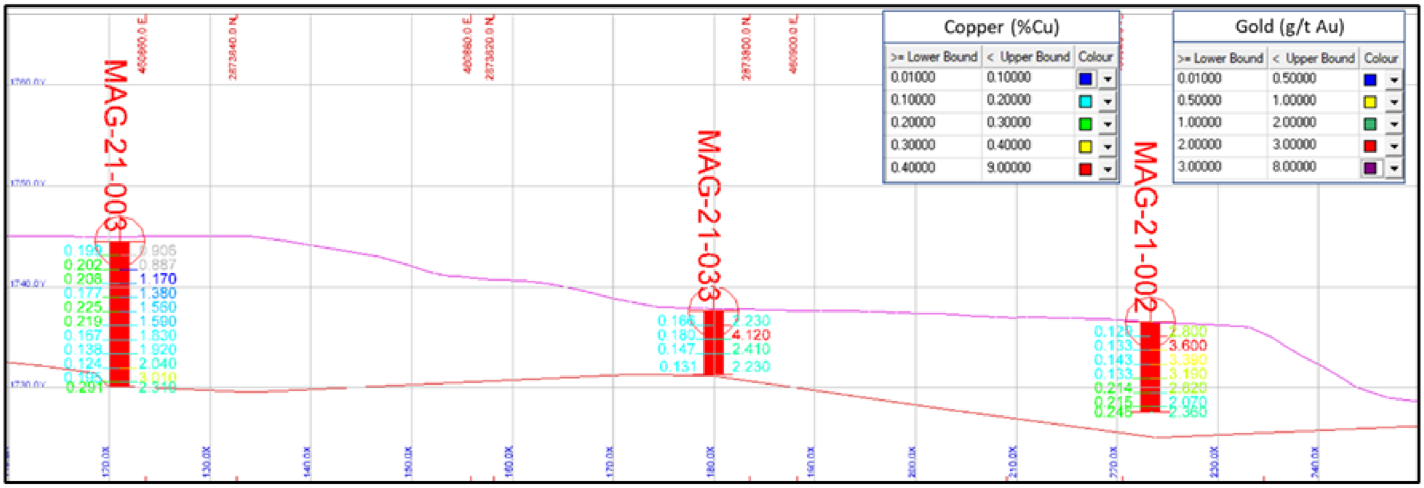
Table 10-3: Summary of Significant Drillhole Intercepts – Magistral Deposit

Hole ID		From (m)	To (m)	Width (m)	Au (g/t)	Cu (%)
MAG-21-001		0	10.92	10.92	2.66	0.19
	including	0	5.60	5.60	2.85	0.20
MAG-21-002		0	8.97	8.97	2.94	0.17
	including	1.40	5.60	4.20	3.39	0.14
MAG-21-003		2.80	14.50	11.70	1.83	0.16
	including	12.60	14.50	1.90	2.83	0.22
MAG-21-026		0	9.80	9.80	2.43	0.16
	including	5.60	9.80	4.20	3.07	0.15
MAG-21-033		0	6.30	6.30	2.69	0.15
	including	1.40	2.80	1.40	4.12	0.18

Hole ID		From (m)	To (m)	Width (m)	Au (g/t)	Cu (%)
MAG-21-035		0	11.20	11.20	2.58	0.17
	including	7.00	11.20	4.20	3.37	0.16

Note: Prepared by Tarachi, AGP, 2021

Figure 10-7: Magistral Tailings Cross-Section, Looking Northeast 050°Az; Showing Gold Assays (right), Copper Assays (left)



Note: Grid is 10m x 10m
Figure prepared by Tarachi, AGP, 2021.

These selected drillholes appear to coincide with thicker sections of the tailings deposit (> 6.0 m).

10.4 QP Opinion

The QP responsible for this section of the Report reviewed the Magistral samples and witnessed the drilling and logging procedures to verify that the logging and sampling procedures were in accordance with industry standards. The QP accepts that the drilling program follows industry guidelines, and that the data is sufficiently accurate to be reliable and is suitable for use in the estimation of mineral resources.

11 SAMPLE PREPARATION AND ANALYSIS

11.1 Chain of Custody

The chain of custody and sample security are recorded and documented for Tarachi's 2021 drilling program.

For the drilling and sampling program, the sample bags were sealed using zip ties and kept secure by Tarachi personnel at Magistral's logging and sampling facility. The sample bags were then collected in white rice bags, sealed with zip ties, and recorded prior to transport.

Tarachi personnel transported the samples to Hermosillo where they were delivered to FedEx for shipment to BaseMet. The quality assurance/quality control (QA/QC) control samples were delivered to BaseMet by Tarachi to be added to the sample consignment. At the request of Ausenco, and independently of Tarachi, the samples were sent to Actlabs by BaseMet for analyses.

From these descriptions, the QP responsible for this section of the Report believes that Tarachi personnel have taken reasonable measures to ensure that the samples were kept secure prior to shipping the samples to the respective assay laboratories for analysis.

11.2 Sample Preparation and Analysis

Assay analyses of the drillhole samples for the Magistral Project was carried out in September 2021 by Actlabs.

11.2.1 Sample Preparation

The samples from the Tarachi 2021 drilling program were prepared at Actlabs for fire assay analysis and multi-element analysis. The analyses also included standard, duplicate, and blank samples. Samples did not require crushing.

The samples were analyzed by Actlabs for gold by means of fire assay with an atomic absorption finish using a 30 g aliquot (Actlabs Code: 1A2). A multi-element analysis was also performed using the aqua regia digestion method with an inductively coupled plasma mass spectrometry (ICP-MS) finish (Actlabs Code: 1E3).

11.2.2 QA/QC – 2021

Tarachi carried out a QA/QC program that consisted of insertion and analysis of blanks, certified standard reference materials (SRMs or standards), and duplicate samples to monitor the precision, accuracy and reliability of the assay results from the drilling and sampling program. This was in addition to the quality control samples that were inserted by the assay laboratory, which consisted of blanks, standards, and duplicates. The blanks and standards were inserted into the sample stream at specified intervals. Actlabs analyzed the duplicate split samples.

Table 11-1 summarizes the control samples employed by Tarachi.

Table 11-1: Summary of Control Samples – Magistral Tailings

Description	2021
Total Number of Samples	209
Number of Control Samples	31 (15%)
Distribution	
Blanks	12 (6%)
Standards	
PGMS-30	11 (5%)
Duplicates	
Laboratory Sample Splits	8 (4%)

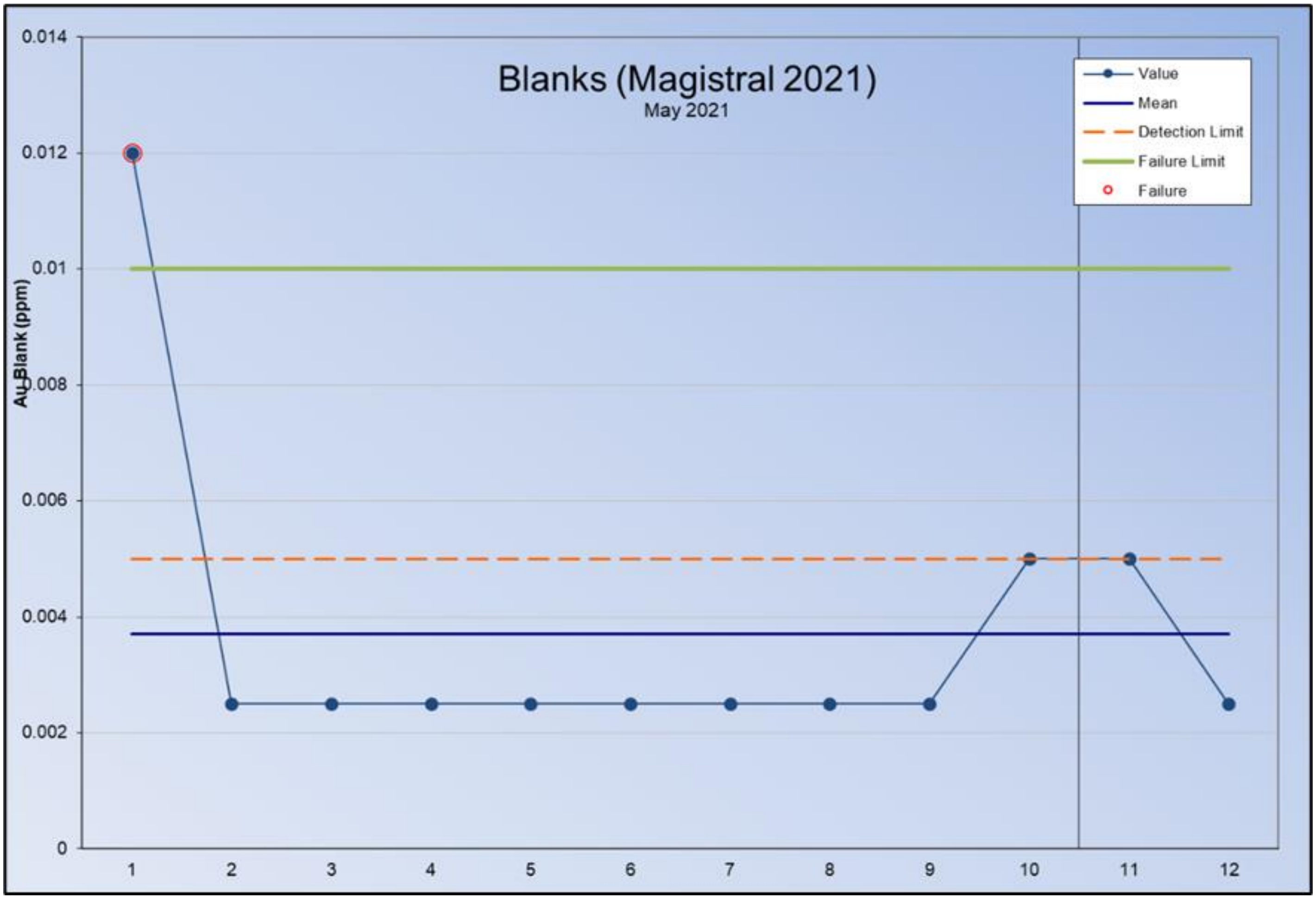
Note: Table prepared by AGP, 2021.

11.2.2.1 Blanks

Blanks were provided by Actlabs, were made from silica sand, and used by Actlabs to clean the pulveriser when high-grade gold samples were anticipated.

Figure 11-1 displays a control chart of the results of the 12 gold assays for the blanks inserted into the sample stream, with an upper control limit of 0.010 g/t Au, which is determined as 4 times the average grade of the blanks. Only one value occurred over the failure limit, at 0.012 g/t Au, but is not considered significant to warrant investigation.

Figure 11-1: Control Chart of Blanks Sample Results



Note: Figure prepared by AGP, 2021.

11.2.2.2 Lab Duplicates

Duplicate analyses were made on 8 sample splits of the prior sample. There were no failures between samples. Based on the good results of blanks and standards, it appears Actlabs has produced sufficiently accurate and precise results such that these results can be considered as reliable.

The laboratory duplicate results are summarized in Table 11-2 for gold and copper.

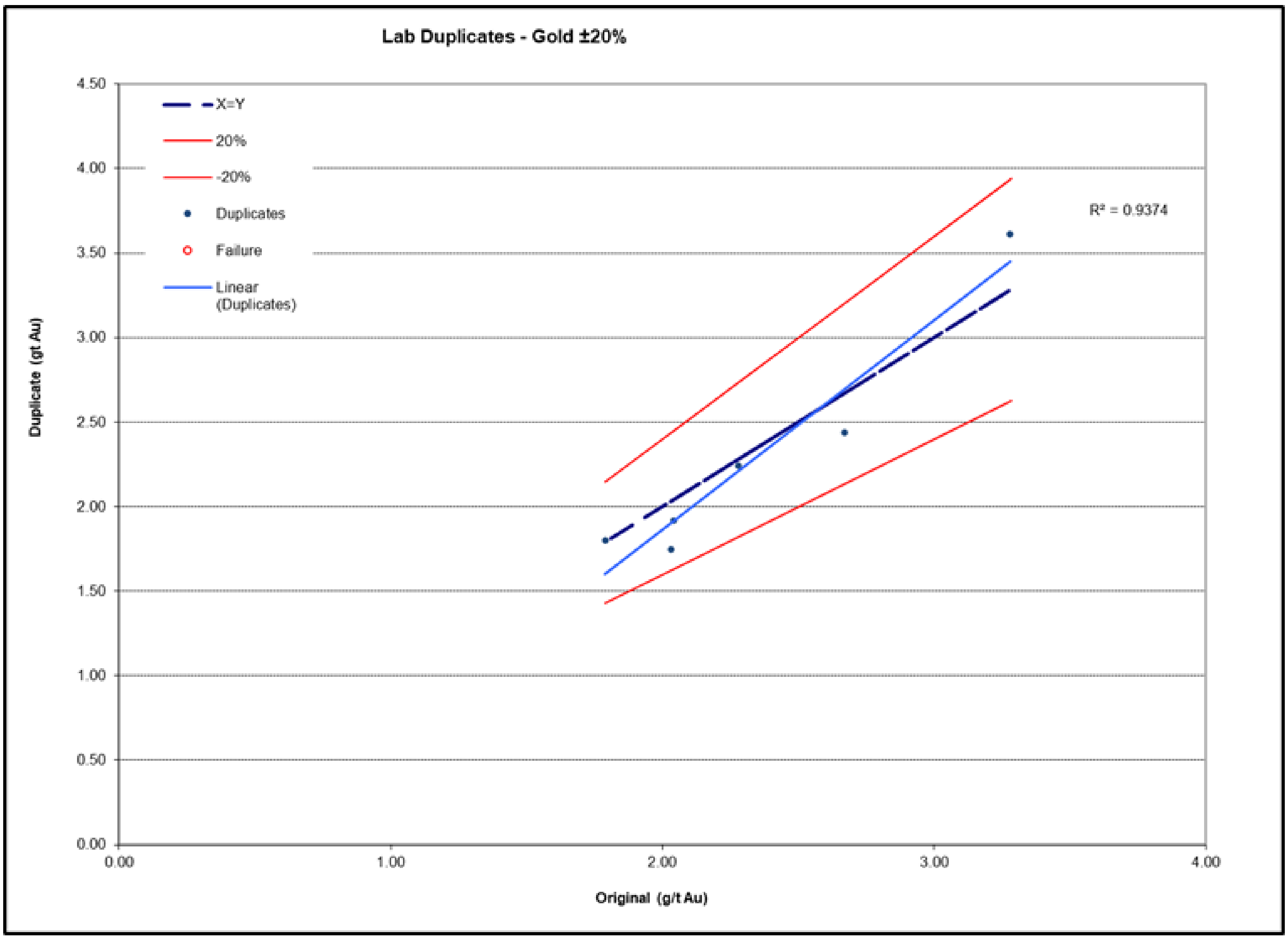
Table 11-2: Summary of Duplicate Results for the 2021 Drilling Program

Assay Laboratory	Method	Type	No. of Assays	Ave. 1	Ave. 2	Correlation	Pass/Fail	No. of Failures	% of Failures
Actlabs	FAAU	Lab Dup (Au)	8	2.21	2.16	0.94	20%	0	0%
Actlabs	ICP	Lab Dup (Cu)	8	0.194	0.192	0.43	20%	0	0%

Note: Table prepared by AGP, 2021.

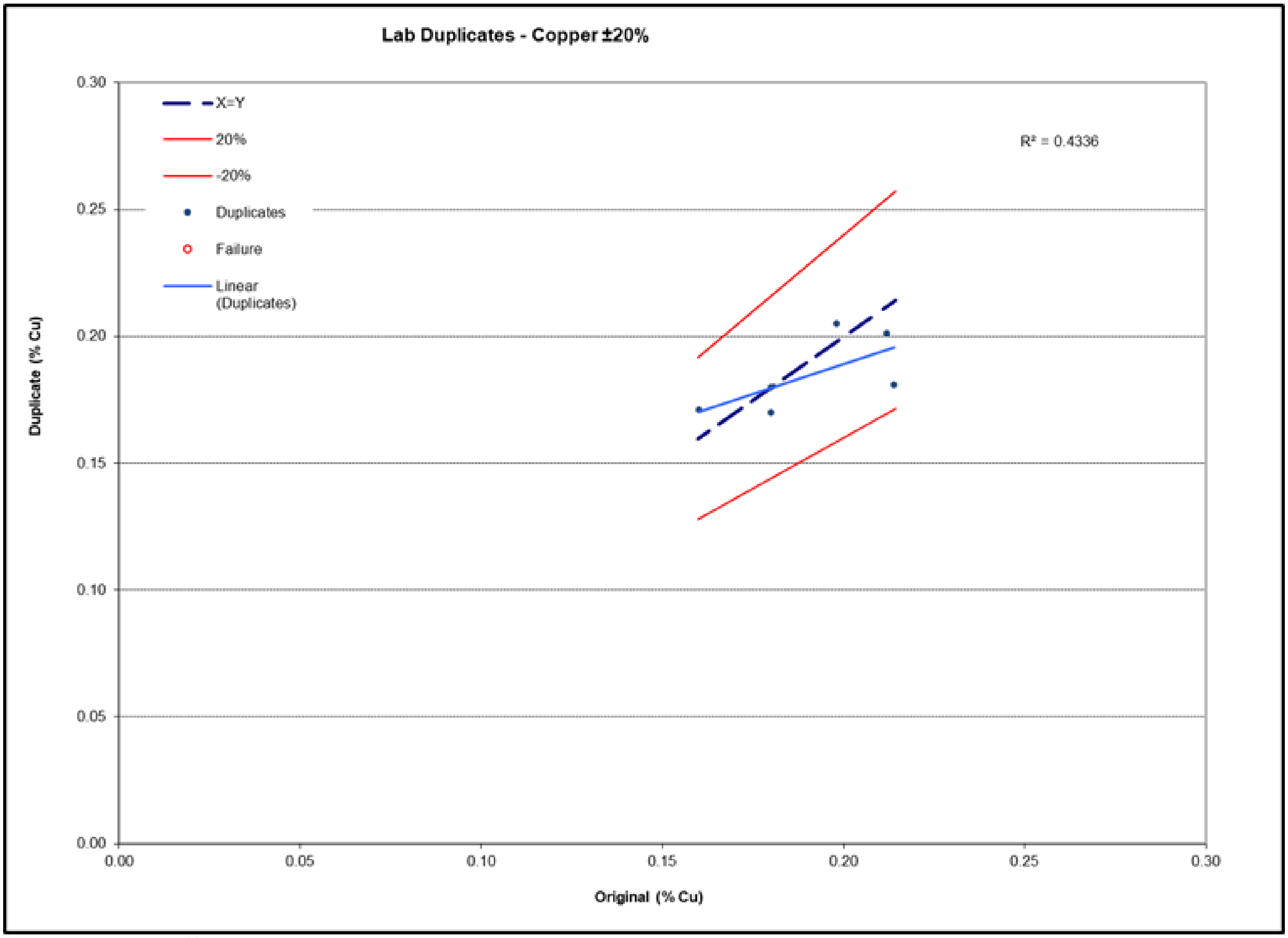
Figure 11-2 and Figure 11-3 present the scatter plots with the pass/fail line for the laboratory duplicates for gold and copper, respectively.

Figure 11-2: Scatter Plot with Pass/Fail Line for Lab Duplicates; Gold



Note: Figure prepared by AGP, 2021.

Figure 11-3: Scatter Plot with Pass/Fail Line for Lab Duplicates; Copper



Note: Figure prepared by AGP, 2021.

11.2.2.3 Standards

Due to the limited sampling, only one standard was used for the Magistral 2021 drilling program. The PGMS-30 standard was purchased from CDN Resource Laboratories Ltd. (CDN Resource) in Langley, British Colombia. The anticipated ranges for gold and copper are 1.897 g/t Au and 0.864% Cu, respectively. No failures were encountered.

Table 11-3 presents the expected values and standard deviation from the standard, along with the number of assay results and the average grade of the assays. Any assays outside the limit of ± 3 standard deviations were considered failures.

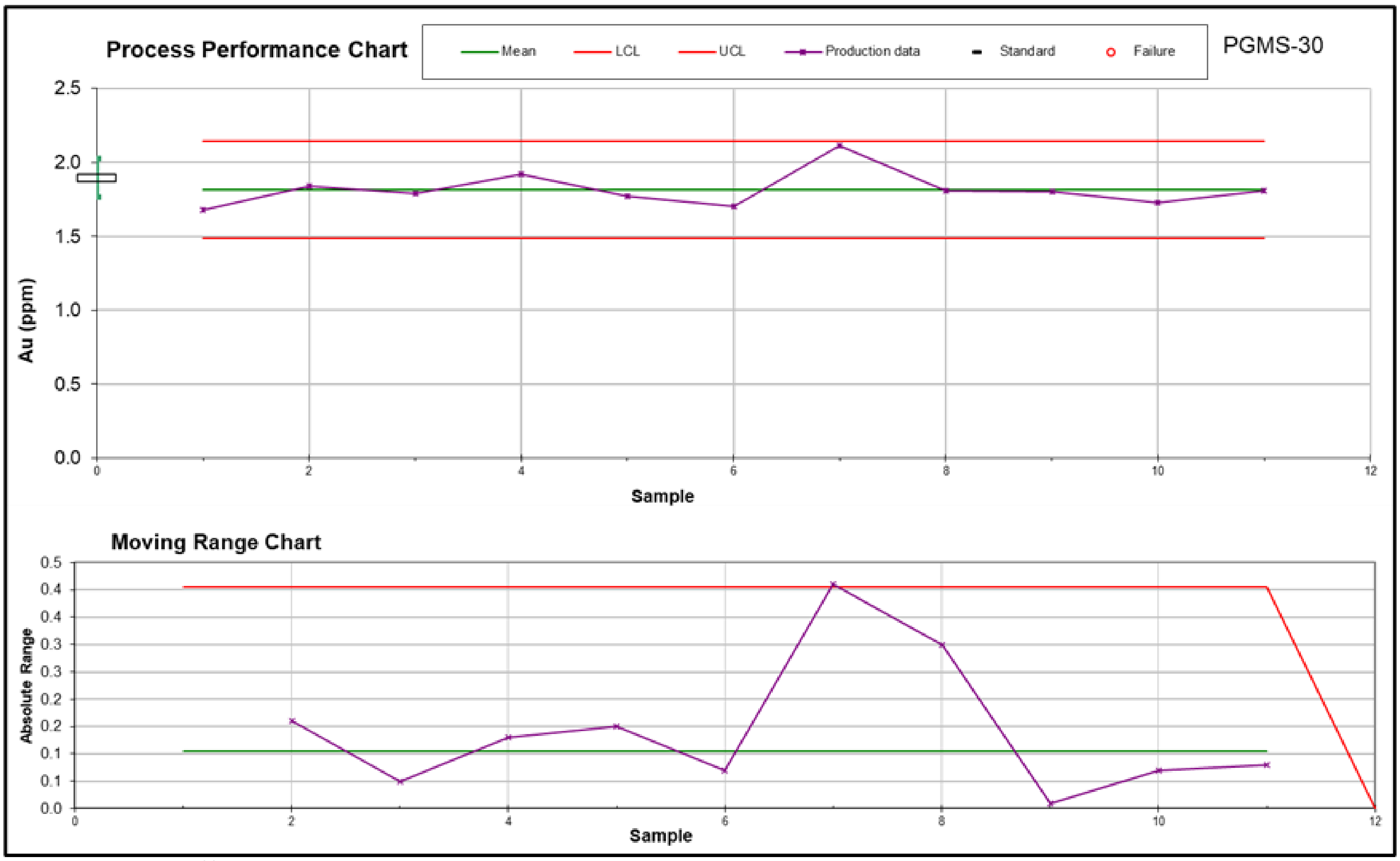
Table 11-3: Summary of Standards for 2021 Drilling Program

Assay Lab.	Method	SRM Source	SRM	Expected Value	Error	No. of Assays	Average Assay	No. of Failures	% Failures
Actlabs	FA-AA	CDN Resource	CDN-PGMS-30 (Au)	1.897	± 0.130	11	1.815	0	0%
Actlabs	ICP	CDN Resource	CDN-PGMS-30 (Cu)	0.864	± 0.048	11	0.806	0	0%

Note: Table prepared by AGP, 2021.

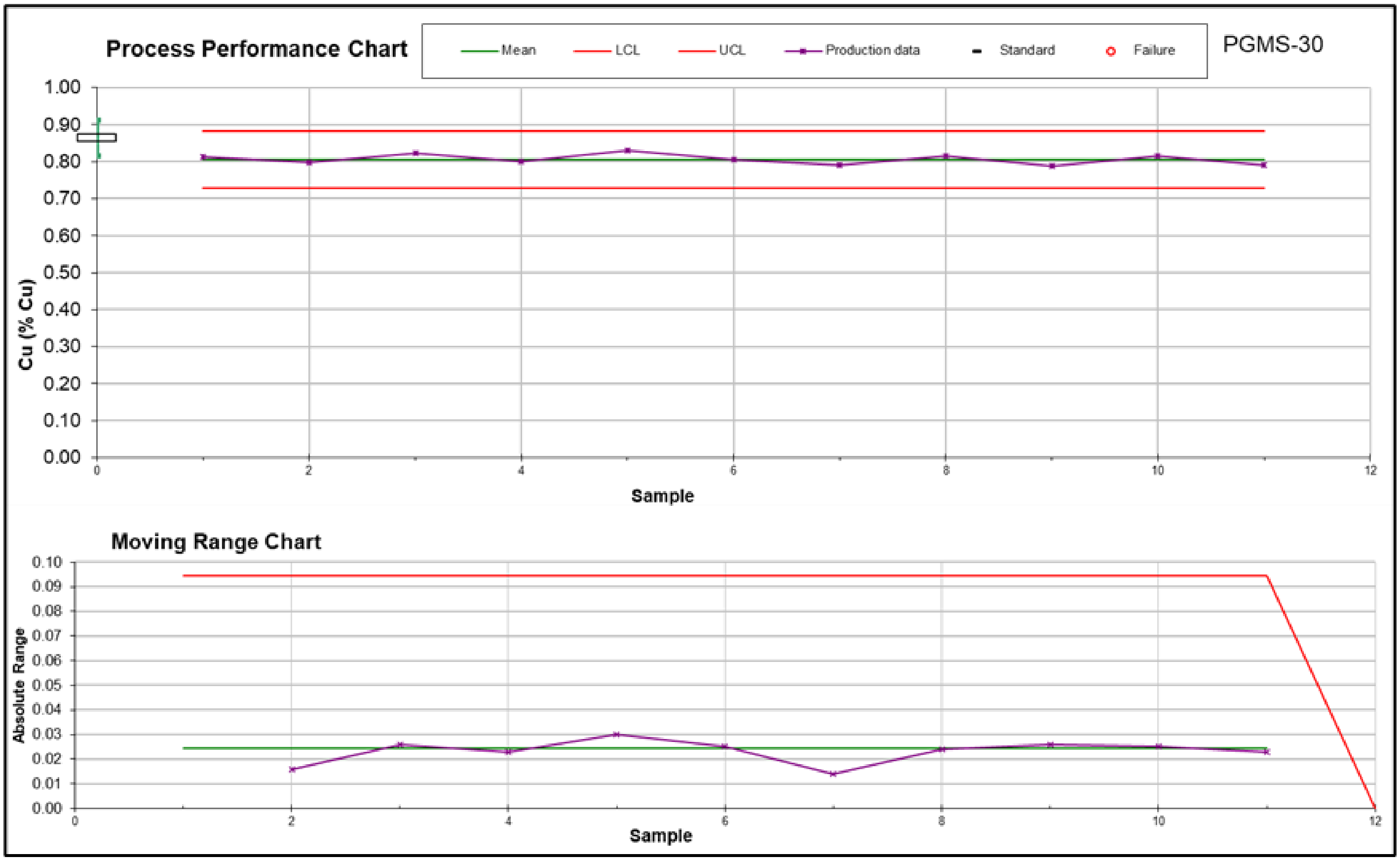
Figure 11-4 and Figure 11-5 present the control charts for the PGMS-30 standard for gold and copper, respectively.

Figure 11-4: Control Chart for PGMS-30 Standard; Gold Results



Note: Figure prepared by AGP, 2021.

Figure 11-5: Control Chart for PGMS-30 Standard; Copper Results



Note: Figure prepared by AGP, 2021.

11.3 QP Opinion

The QP believes that the preparation and analyses of the samples are satisfactory for this type of deposit and style of gold mineralization and that the sample handling and chain of custody, as documented, meet standard industry practice.

The QP has reviewed the QA/QC program and is of the opinion it is in accordance with standard industry practice and CIM Exploration Best Practice Guidelines. That is, Tarachi personnel have taken reasonable measures to ensure the sample analysis completed is sufficiently accurate and precise such that the assays can be considered as reliable.

The QP considers, based on the statistical analysis of the QA/QC results, that the assay results and database are suitable for use in the estimation of mineral resources.

12 DATA VERIFICATION

12.1 Magistral Database

Tarachi received the laboratory certificates and drillhole sample intervals. A total of 178 samples were collected from the 2021 auger drillhole program. AGP reviewed 100% of the assay analyses and no errors were encountered.

The data were formatted and imported into GEMS software and verified using the GEMS validation tool to determine whether there were missing and/or overlapping intervals. The drillholes were also checked visually for any misplaced drillhole collars. No errors were found.

12.2 QP Site Inspection

The site visit to the Magistral Project and inspection of the Magistral tailings deposit was conducted by Mr. Paul Daigle, P.Geo., from May 13 to 18, 2021, with two days on site. The 2021 drilling program was underway and near completion at the time of the visit. The QP was accompanied on the site visit by:

- Lorne Warner, Vice President and Director, Tarachi;
- Braulio Rivera Enriquez, Project Geologist, Tarachi;
- Lalo Gracia, Project Geologist, Tarachi; and
- Juan Fernando Gurrola Peral, Tarachi.

The site visit included an inspection of the Project site to review drillhole collars and collar coordinates; an inspection of the core logging, sampling and storage facilities situated adjacent to the tailings deposit; and observation of the drilling program in progress.

12.2.1 Drillhole Collar Locations

AGP located 22 of the 37 drillhole collars on the Magistral tailings from Tarachi's 2021 drilling campaign. The locations of the auger drillhole collars were measured in the field using a handheld GPS device (Garmin GPS map 62s) and using the WGS84 datum, the same datum used by Tarachi. Drillhole collars were uncapped. The drillhole was marked with a 1-inch PVC pipe, painted orange, and the drillhole number and depth were written on it in black permanent marker (Figure 12-1).

Figure 12-1: Drillhole Collars for MAG-21-029

Note: Figure prepared by AGP, 2021.

The collar coordinates measured by AGP fell within a 5 m tolerance of those reported in the drillhole database. It is the QP's opinion the coordinates are acceptable, given the accuracy of the handheld GPS devices used to review the drillhole collar locations. Table 12-1 presents the comparison of the AGP coordinates and Tarachi's surveyed drillhole coordinates for verified drillholes.

Table 12-1: Comparison of Drillhole Collar Coordinates at the Magistral Tailings

Drillholes	Tarachi Easting (m UTM)	Tarachi Northing (m UTM)	AGP Easting (m UTM)	AGP Northing (m UTM)	Δ Easting (m)	Δ Northing (m)
MAG-21-001	460818	2873732	460820	2873734	2	2
MAG-21-002	460922	2873769	460924	2873766	2	-3
MAG-21-003	460844	2873838	460847	2873838	3	0
MAG-21-004	460851	2873768	460851	2873768	0	0
MAG-21-005	460747	2873861	460745	2873860	-2	-1
MAG-21-006	460957	2873879	460960	2873881	3	2
MAG-21-008	460675	2873803	460674	2873801	-1	-2
MAG-21-009	460716	2873742	460716	2873743	0	1
MAG-21-011	461066	2873917	461067	2873915	1	-2
MAG-21-012	460999	2873835	461000	2873834	1	-1
MAG-21-014	460853	2873691	460854	2873688	1	-3
MAG-21-015	461027	2873865	461026	2873864	-1	-1
MAG-21-018	460732	2873958	460732	2873958	0	0
MAG-21-019	460828	2873930	460828	2873929	0	-1
MAG-21-020	461119	2873934	461120	2873932	1	-2
MAG-21-022	460995	2873916	460994	2873916	-1	0
MAG-21-023	460874	2873892	460873	2873892	-1	0
MAG-21-026	460783	2873944	460782	2873945	-1	1
MAG-21-027	460770	2873979	460768	2873983	-2	4
MAG-21-028	460955	2873803	460957	2873801	2	-2
MAG-21-029	460780	2873698	460781	2873699	1	1
MAG-21-032	460753	2873662	460750	2873663	-3	1

Note: WGS84 Datum, Zone 13R. Table prepared by AGP, 2021.

12.2.2 Drill Core Logging and Sampling and Core Storage Facilities

The Magistral drill samples were collected and stored at the Magistral Project in three buildings which serve as exploration offices, logging and sampling facilities and storage areas. The buildings are situated on the west side of the tailings and below the CIL processing plant (Figure 12-2 and Figure 12-3).

Figure 12-2: Drill Logging and Sampling Facility (foreground), CIL Plant (background); looking West

Note: Figure prepared by AGP, 2021.

Figure 12-3: Drill Logging and Sampling Facility and CIL Plant; looking East

Note: Figure prepared by AGP, 2021.

Notably, the three buildings are situated on tailings material as witnessed by drillhole MAG-21-034 drilled in the parking area of the offices. The 2011 drillhole S-24 was situated on the site of one of the buildings.

The interior of the core logging and sampling facility is kept clean and well-maintained (Figure 12-4 and Figure 12-5). The pneumatic piston to extract samples (Figure 12-4), sample logging, sample photos and scale (Figure 12-5) to weigh samples are all located in one building. All field and sampling supplies are kept orderly and organized on shelves and tables in the facility.

Figure 12-4: Logging and Sampling Facility – pneumatic piston and capped sample tube

Note: Figure prepared by AGP, 2021.

Figure 12-5: Drill Logging Facility – scale

Note: Figure prepared by AGP, 2021.

The sealed sample bags were stored in an open area outside the logging and sampling facility (Figure 12-6) prior to the bagging and shipping of the samples. Tarachi maintains security after hours and at night for the facility.

Figure 12-6: Sample Storage – Magistral Project

Note: Figure prepared by AGP, 2021.

12.2.3 Independent (Witness) Sample Analysis

During the site visit, AGP collected two samples that were close to two of the 2021 drillholes by means of hollow stem auger drill. The samples were taken from a 'twinned' drillhole at approximately 2 m from the original drillhole. The sample interval where the samples were collected is from 0 m to 1.4 m, nominally matching the same sample interval as those in the sample database for comparison.

AGP supervised the collection of the selected sample intervals and observed the capping of the Shelby tubes. Two tubes were used to complete one sample. The tubes were taken to the sampling facility and extracted from the tubes onto a split tube and were then placed into a sample bag. A sample tag was added to the sample bag and sealed with a zip tie. The two samples were kept by the QP during transport to Hermosillo and to FedEx in Hermosillo. The samples were couriered to Actlabs in Guadalupe, Zacatecas for analysis. Once received at Actlabs, the samples were prepared by crushing the sample to 80% passing 10 mesh, and then a split of 250 g was pulverised to 85% passing 200 mesh (Actlabs code: RX1).

Gold was analyzed by gravimetric with a fire assay finish (Actlabs Code 1A4-FA-Metallic Screen). The samples were also analysed for 36 elements by 4-acid digestion and by the ICP-MS method (Actlabs Code: 1F2). The two independent samples are shown in Table 12-2 and the comparison of gold, copper and silver results is presented in Table 12-3.

Table 12-2: Summary of Independent Samples – Magistral Tailings

AGP Sample No.	Tarachi Sample No.	Drillhole	Sample Interval (m)
A0265753	486768	MAG-21-029	0–1.4
A0265754	483686	MAG-21-006	0–1.4

Note: Table prepared by AGP, 2021.

Table 12-3: Independent Sample Results – Magistral Tailings

	Sample No.	Drillhole	Au (gpt)	Ag (g/t)	Cu (%)
AGP	A0265753	MAG-21-029	1.91	2.8	0.139
	A0265754	MAG-21-006	1.11	3.7	0.182
Tarachi	486768	MAG-21-029	1.98	2.2	0.151
	483686	MAG-21-006	1.75	3.2	0.187
Difference		MAG-21-029	0.07	-0.6	+0.012
		MAG-21-006	0.64	-0.5	+0.005

Note: Table prepared by AGP, 2021.

The results of the independent samples demonstrated the presence of mineralization at similar grades in similar locations and demonstrated the variability between samples. AGP interprets the difference of the gold grades in the independent samples to be due to the degree of variability of the gold mineralization.

12.3 QP Opinion

The QP is of the opinion the sample descriptions, sampling procedures, and data entries were conducted in accordance with industry standards. The database shows no inconsistencies in the laboratory certificate numbers and the corresponding assay values.

The QP is also of the opinion the database is representative and adequate to support the resource estimate for the Magistral Project.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Introduction

Three metallurgical testwork programs were undertaken in 2012, 2016 and 2021 in support of the evaluation of tailings retreatment for the Magistral Project. A brief overview of the testwork programs and the testing facilities where they were carried out is provided below in Table 13-1.

Table 13-1: Summary of Previous Testwork Completed

Year	Laboratory	Testwork Performed
March 2012	Kappes, Cassiday & Associates (KCA); Reno, NV	Cyanidation bottle roll tests.
2016	Metsolve Labs, BC	2016 Testwork program referred to in the 2017 PEA. Cyanidation bottle roll tests.
November 2021	Base Metallurgical Laboratories, BC	Testing included grinding, water washing to assess soluble copper content, followed by cyanidation bottle roll leach tests. Gravity and flotation were also assessed using a master composite.

Note: Table prepared by Ausenco, 2021.

13.2 Metallurgical Testwork

13.2.1 KCA Testwork Program 2012

Samples for the KCA metallurgical testwork were sourced from 24 drillholes of the CAM 2011 drill campaign. Leach tests conducted by KCA are presented in Table 13-2.

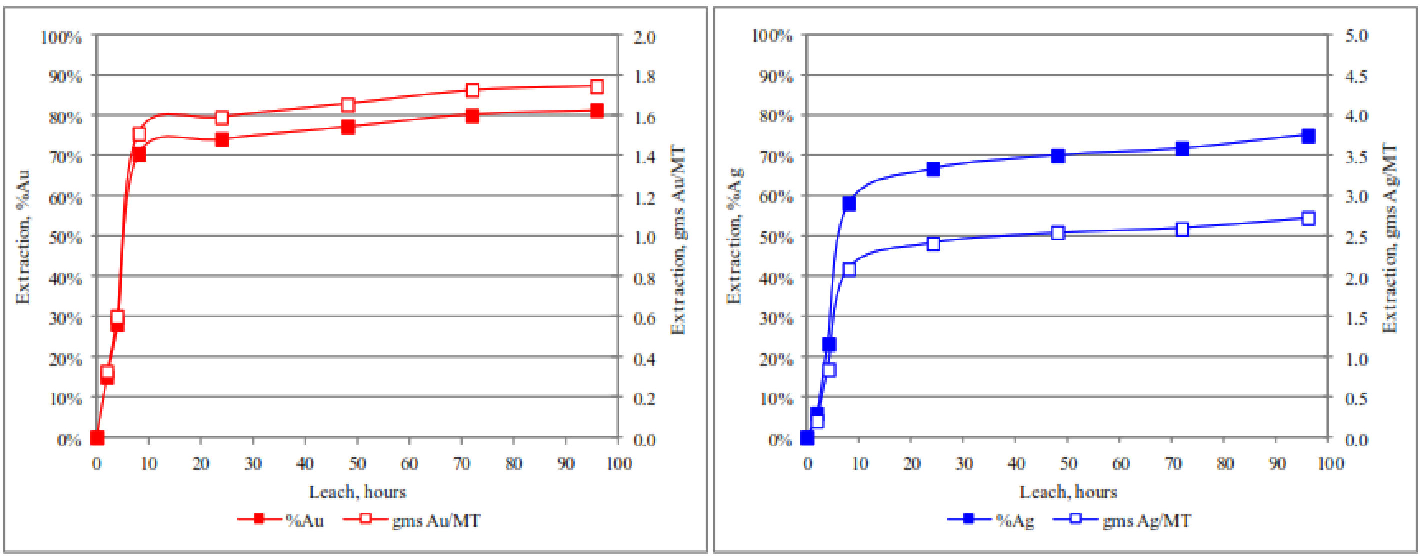
Table 13-2: Tailings Sample Leach Tests, from KCA Testwork, 2012

Test	Size P_{80} µm	Calc Head Au g/t	Calc Head Ag g/t	Au Extract %	Ag Extract %	Leach Time h	NaCN Conc g/L	NaCN Consum kg/t	$Ca(OH)_2$ Addition kg/t	Au Residue g/t	Ag Residue g/t
1 CN	P_{100} 1.7mm	2.15	3.62	82	78	96	1	3.3	2.5	0.38	0.79
2 CN	180	2.06	3.57	82	75	96	1	3.4	2.5	0.38	0.89
3 CIL	180	2.31	3.48	84	74	96	1	6.2	3	0.37	0.89
4 CN	56	1.87	3.72	85	77	96	1	4	4.5	0.33	0.87
5 CN	67	1.95	4.06	85	74	96	5	10.3	2.5	0.3	1.04
6 CIL	180	2.14	4.88	71-78	52	24	1	2.9-3.8	4	0.48	2.35

Note: Table prepared by KCA, 2012.

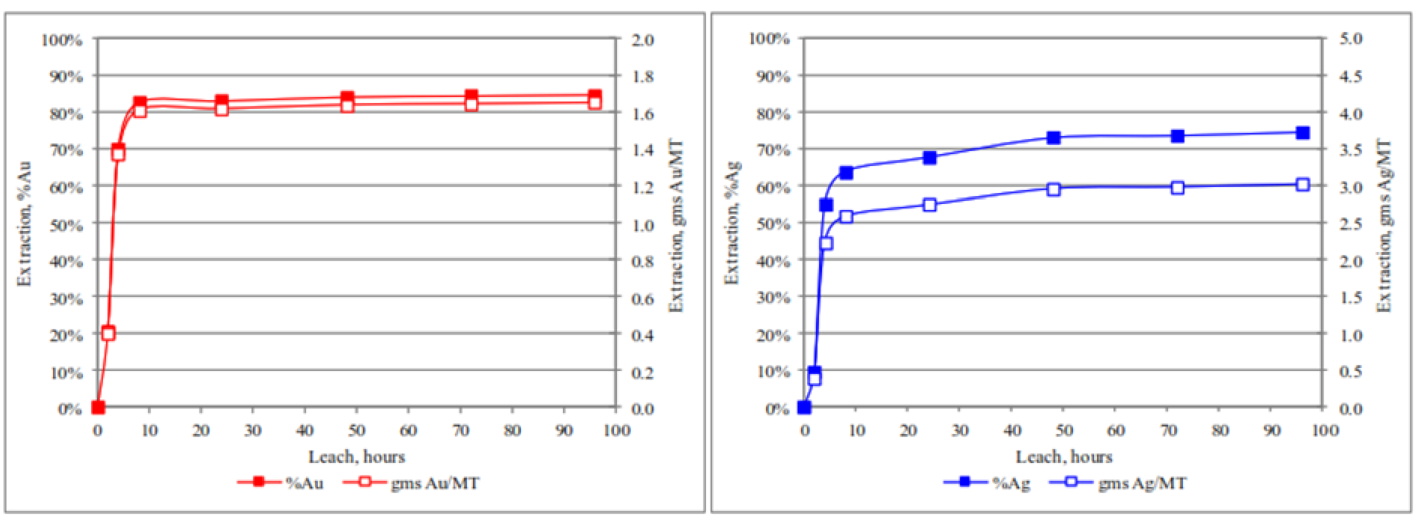
This testing considered the effect of particle size. The as-received sample at P_{100} of 1.7 mm achieved 82% extraction after 96 hours. A reground sample at P_{80} of 67 µm achieved 85% extraction after 96 hours. The leach kinetics were shown to be relatively fast for both the coarse and fine sample as shown in Figure 13-1and Figure 13-2. The leach was complete for the fine sample within 10 hours, albeit at a higher cyanide concentration (5 g/L); for the coarser sample the leach extended beyond 70 hours, with lower cyanide concentration (1 g/L).

Figure 13-1: Test 1 CN – P_{100} 1.7 mm



Note: Figure prepared by KCA, 2012.

Figure 13-2: Test 5 CN – P_{80} 67 mm



Note: Figure prepared by KCA, 2012.

13.2.2 Metsolve Testwork Program 2016

The Metsolve testwork report from 2016 was not available. The testwork program was referred to in the 2017 PEA study. Samples were sourced from five 1.5- to 2.0m-deep backhoe pits from several areas of the tailings deposit. Samples were also obtained from the walls of each pit to: (1) to compare mineralogical make-up and compare it with CAM and KCA reports; and (2) to conduct confirmatory tests (performed at Metsolve Labs in Langley; reported Nov 10, 2016).

Metsolve used more rigorous leach conditions than KCA and achieved faster kinetics with higher leach extractions overall.

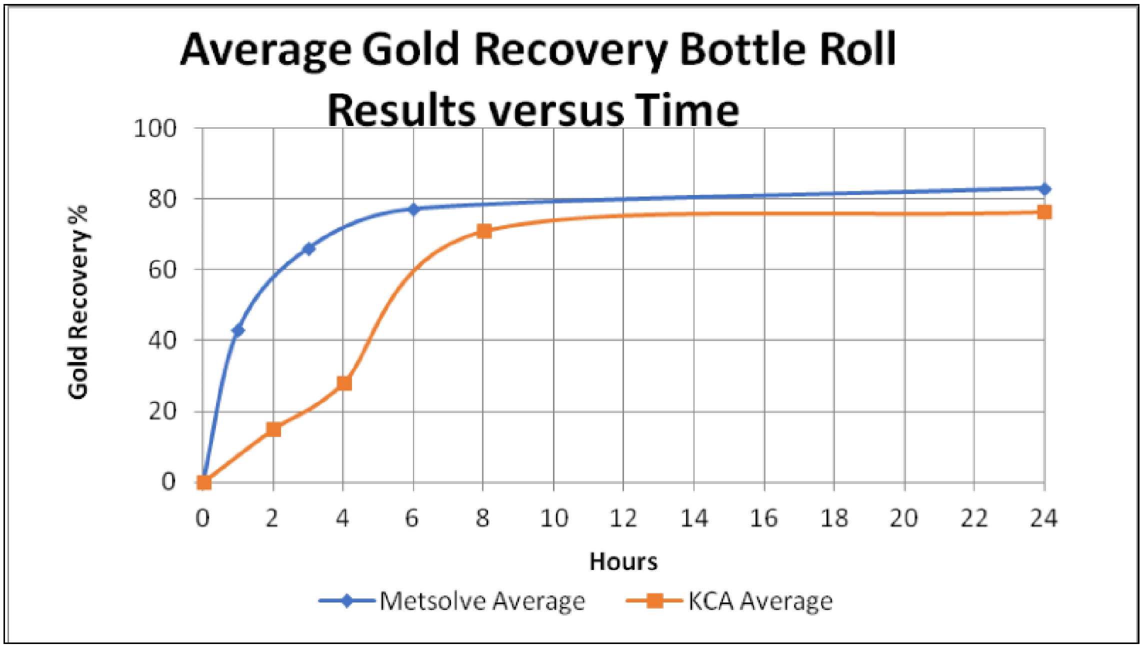
Leach conditions included higher cyanide addition of 5 kg/t and pH 11 and 25 wt% solids. After 24 hours Metsolve generally reached 80%+ extractions. Bottle roll leach test results are presented in Table 13-3 and the average results for both KCA and Metsolve are presented in Figure 13-3.

Table 13-3: Metsolve Bottle Roll Leach Tests

Sample	pH Modifier	Au Recovery (%)				Preg Soln	Residue	Head Grade (g/t Au)		Consumption (kg/t)		
		1 hr	3hr	6 hr	24 hr	ppm Au	(g/t Au)	Calculated	Assayed	NaCN	NaOH	CaO
1	NaOH	49.6	70.1	78.0	82.6	0.72	0.47	2.64	2.83	2.07	2.69	
1A	NaOH	31.8	57.8	80.3	83.4	0.77	0.47	2.77	3.04	5.05	1.70	
2	NaOH	29.2	47.5	58.1	74.5	0.49	0.55	1.99	1.98	2.67	6.24	
3	NaOH	45.7	74.1	87.6	90.5	0.67	0.25	2.44	2.94	2.16	29.40	
4	NaOH	51.8	68.4	75.9	84.9	0.46	0.26	1.65	1.86	0.84	4.99	
5	NaOH	46.6	71.3	81.0	83.5	0.51	0.32	1.85	2.09	2.66	6.45	
5	CaO	47.6	73.5	79.9	82.4	0.51	0.34	1.87	2.09	2.66		6.45
Average		43.2	66.1	77.3	83.1	0.59	0.38	2.17	2.40	2.59	8.58	6.45

Note: Table prepared by Metsolve, 2016.

Figure 13-3: Leach Extractions – Metsolve vs KCA



Note: Figure from PEA, 2017

The average Metsolve extractions were reported to achieve 80% gold extraction after 12-14 hours. The sample particle size was not mentioned and was assumed not to represent as-received, repulped ore.

13.2.3 Base Metallurgical Laboratories Testwork Program 2021

Basemet received material in the form of drilled intervals from historic tailings representing target retreatment areas.

Once each interval had been sampled, the study included preparation of six location composites selected by Ausenco. The composites ranged from 1. 76–2. 77 g/t Au (average 2.13 g/t Au) and averaged 0.18% Cu.

Testing included benchmarking each composite by applying a standard flowsheet that included grinding, water washing to assess soluble copper content, followed by cyanide leaching. Gravity and flotation were also assessed using a master composite prepared from equal portions of each of the six location composites. Results from gravity and flotation testing showed no gravity gold was present and flotation gold recovery was low. The presence of water-soluble copper was negligible.

Cyanide leaching was performed for three different scenarios: without grinding, polish grinding, and on material ground to 75 to 85 µm K80. Finer grinding marginally improved gold leach extraction and kinetics. At the benchmark grind size of approximately 75 µm K80, average gold extraction within 24 to 48 hours measured 85% extraction. Cyanide consumption averaged 3.78 kg/t and lime consumption averaged 4.25 kg/t

13.2.3.1 Sample Feed Size

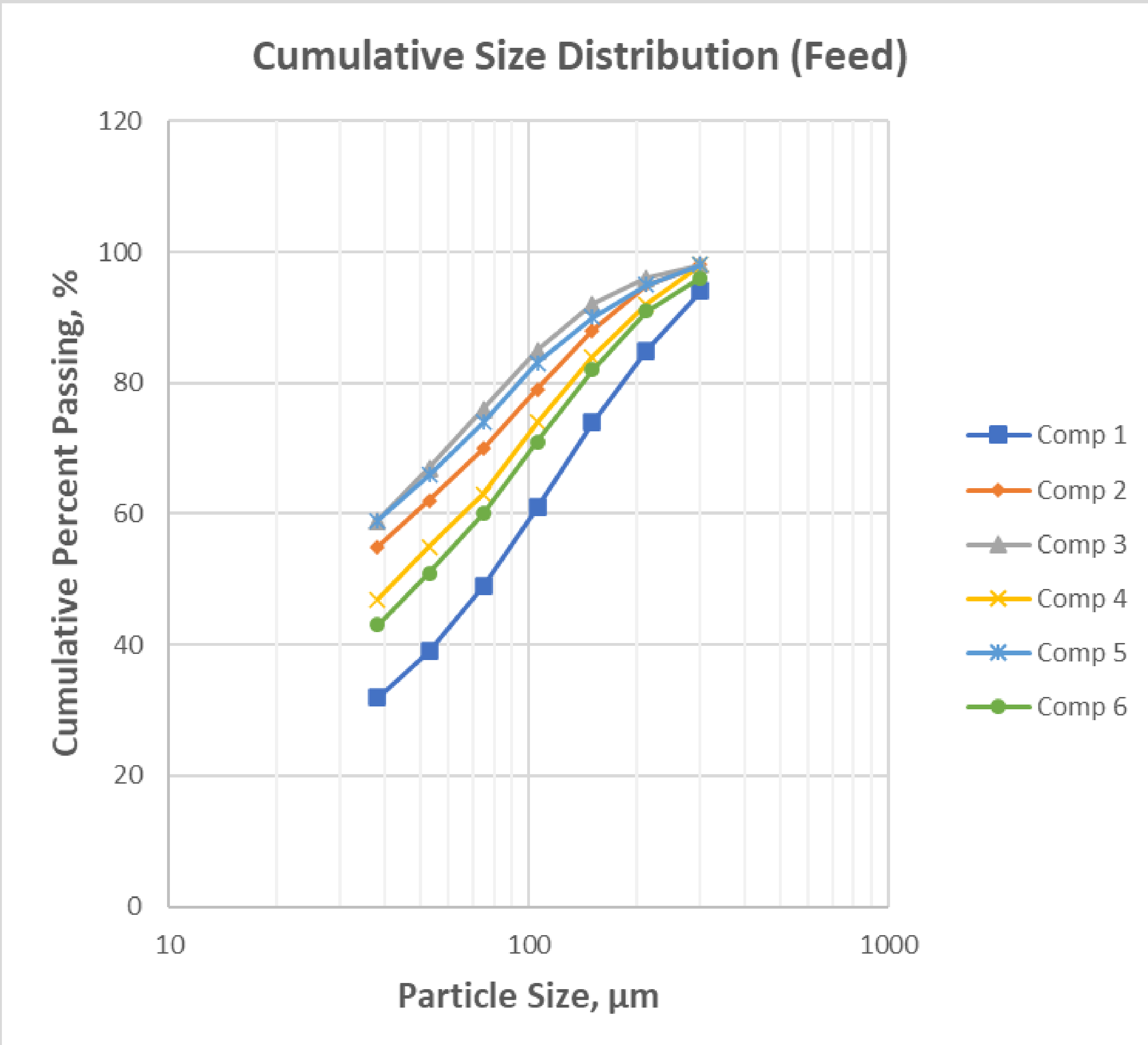
The feed size distribution for the six composites as received is provided in Table 13-4 and Figure 13-4. The as-received material size ranged between 87 and 181 µm on a K80 basis.

Table 13-4: As-received Feed Sizing

Sieve Size (µm)	Cumulative Percent Passing					
	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 6
300	94	98	98	98	98	96
212	85	95	96	92	95	91
150	74	88	92	84	90	82
106	61	79	85	74	83	71
75	49	70	76	63	74	60
53	39	62	67	55	66	51
38	32	55	59	47	59	43
K80, (µm)	181	109	87	132	94	143

Note: Table prepared by Basemet, 2021.

Figure 13-4: Cumulative Size Distribution (feed)



Note: Figure prepared by Ausenco, 2021

13.2.3.2 Feed Analysis

Gold fire assay and multi-element ICP analyses were completed on the feed composites. A summary of the feed chemical analysis for each composite is presented in Table 13-5.

Gold measured between 1.76 and 2.77 g/t. Sequential copper assaying was completed with a modification to include an initial 30-minute water wash stage to remove any water-soluble copper, Cu(w); very little soluble copper was present with a slight spike in Comp 1. Low levels of acid soluble (CuOx) or cyanide soluble copper (CuCN) were also identified, which accounted for most of the copper.

Table 13-5: Chemical Analysis Summary

Comp ID	Au g/t	Ag g/t	Cu %	Cu(w) ppm	CuOx %	CuCN %
Comp 1 Hd 1	2.05	7.60	0.14	32.00	0.07	0.03
Comp 1 Hd 2	3.48	7.20	0.15	0.50	0.07	0.04
Average	2.77	7.40	0.15	16.25	0.07	0.04
Comp 2 Hd 1	1.71	7.20	0.21	<0.5	0.12	0.05
Comp 2 Hd 2	1.80	4.00	0.20	0.50	0.12	0.05
Average	1.76	5.60	0.21	0.50	0.12	0.05
Comp 3 Hd 1	2.07	5.20	0.20	1.00	0.10	0.06
Comp 3 Hd 2	2.05	5.60	0.20	4.50	0.10	0.05
Average	2.06	5.40	0.20	2.75	0.10	0.06
Comp 4 Hd 1	2.29	5.60	0.17	2.00	0.08	0.05
Comp 4 Hd 2	2.51	5.20	0.18	2.50	0.09	0.05
Average	2.40	5.40	0.18	2.25	0.09	0.05
Comp 5 Hd 1	1.91	5.20	0.18	2.00	0.09	0.03
Comp 5 Hd 2	1.94	5.20	0.18	0.50	0.09	0.03
Average	1.93	5.20	0.18	1.25	0.09	0.03
Comp 6 Hd 1	1.87	5.20	0.17	0.50	0.09	0.04
Comp 6 Hd 2	1.83	5.20	0.17	0.50	0.09	0.04
Average	1.85	5.20	0.17	0.50	0.09	0.04
Master Hd 1	2.18	2.80	0.19	-	0.10	0.04
Master Hd 2	2.15	3.40	0.19	-	0.09	0.05
Average	2.17	3.10	0.19	-	0.09	0.04

Note: Table prepared by Basemet, 2021.

13.2.3.3 Mineralogy

Feed mineralogy for each composite was completed by QEMSCAN using the particle mineral analysis (PMA) mode of operation.

Mineral abundance data is provided in Table 13-6 followed by copper deportment in Table 13-7.

Table 13-6: Mineral Abundance Summary (key minerals)

Mineral	Mineral Abundance, wt. %					
	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 6
Pyrite	10.60	10.30	9.10	11.50	8.50	10.80
Pyrrhotite	0.74	0.81	0.71	0.80	0.94	0.99
Arsenopyrite	0.23	0.29	0.15	0.34	0.15	0.45
Cobaltite	0.18	0.08	0.08	0.11	0.06	0.21
Chalcopyrite	0.24	0.17	0.17	0.22	0.12	0.24
Bornite	0.02	0.06	0.02	0.03	0.02	0.04
Other Cu Sulphides	0.03	0.02	0.02	0.05	0.01	0.05
Other Sulphides	0.06	0.01	0.01	0.01	0.01	0.02
Quartz	37.00	30.80	35.50	33.40	33.90	31.00
Plagioclase	1.08	1.15	1.06	0.96	1.77	1.15
K-Feldspar	7.36	6.67	5.21	6.55	5.01	6.83
Biotite	0.85	1.09	0.81	0.93	1.22	1.01
Sericite/Muscovite	3.23	4.10	3.82	3.61	3.91	3.35
Chlorite	5.56	6.54	6.08	5.70	7.21	5.60
Clays	4.02	5.06	5.08	5.15	6.54	4.58
Other Silicates	0.43	0.77	0.63	0.56	0.90	0.68
Calcite	7.98	11.60	7.70	5.97	6.54	11.50
Dolomite	5.36	6.44	6.68	7.47	6.58	6.59
Ankerite	1.17	1.18	1.79	2.09	1.61	1.43
Siderite	6.53	6.44	7.84	7.22	7.00	7.16
Fe-Oxides	5.79	5.25	6.54	6.31	6.69	5.30
Other Oxides	0.49	0.40	0.44	0.42	0.55	0.39
Gypsum	0.32	0.26	0.28	0.07	0.37	0.11
Apatite	0.19	0.29	0.17	0.28	0.20	0.25
Jarosite	0.13	0.02	0.01	0.01	0.02	0.04
Other	0.37	0.15	0.11	0.19	0.15	0.25
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Note: Table prepared by Basemet, 2021.

Table 13-7: Copper Deportment

Mineral	Copper Deportment					
	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 6
Chalcopyrite	66.00	48.90	57.30	60.10	45.90	57.70
Bornite	8.10	29.40	10.80	12.40	11.00	17.80
Chalcocite	5.50	4.60	4.30	4.80	4.20	5.90
Covellite	2.00	2.20	4.70	3.00	0.90	1.50
Enargite	1.10	0.30	1.50	2.10	0.80	2.20
Tetrahedrite	3.80	1.00	1.70	6.30	1.70	5.70
Fe Ox_Low Cu	12.80	13.30	19.20	10.80	34.60	9.10
Silicates_low Cu	0.70	0.30	0.50	0.40	0.80	0.20
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Note: Table prepared by Basemet, 2021.

Sulphides were mainly present as pyrite, and did not vary greatly between composites, measuring between 8.5 and 11.5% by mass. Copper deportment indicated about half the copper was present as chalcopyrite, while a significant portion was identified in iron oxides. Varying levels of bornite and secondary copper sulphides were also observed.

13.2.3.4 Metallurgical Testing

Metallurgical testing compared the effect of gravity, flotation and leaching on gold recovery using six composites and the master composite. Testing focused on the effect of grind size and leach performance.

13.2.3.4.1 Gravity Gold

Gravity gold concentration testing was conducted using the master composite. A single test was completed following industry accepted Knelson-Mozley gravity separation, targeting a low weight gravity concentrate. Gravity feed was prepared by grinding in a laboratory rod mill to a target size K80 of 75 µm. Minimal gold was recovered from both the Knelson and Mozley concentrates with only 0.9% gold recovered from the Mozley and 12.4% gold from the Knelson concentrate. The concentrate grade was low, measuring only 33.6 g/t Au in the Mozley concentrate. Gravity testing was not explored further, as the sample was not amenable to gravity concentration.

13.2.3.4.2 Rougher Flotation

A single rougher kinetic flotation test was completed using the master composite. A 2-kg test charge was ground to a K80 of 75 µm. Subsequent flotation with 80 g/t of potassium amyl xanthate (PAX) and 30 g/t 3418A was carried out in a Denver D12 style flotation cell. Rougher flotation recovered a combined 15% of the mass, and 38 and 41% of the copper and gold, respectively. The flotation concentrate grade was 5.8 g/t Au. Flotation was not an effective option for copper or gold recovery.

13.2.3.4.3 Leach Performance

Leaching evaluated sensitivity to grind size using the six location composites. Standard conditions were applied to each test, with grind size the only variable adjusted. Two to three tests were completed for each composite that included:

- Leaching as-is (no grind);
- Polish grind (1 minute); and
- Grind to target 75 µm.

Composites 3 and 5 were comparatively finer in size compared to the other composites; as such, the polish grind applied achieved a K80 of 75 µm.

Prior to each cyanide leach, the material was contacted with water and agitated for a period of 30 minutes before filtering and washing. The solution was collected and assayed for copper. Very little to no water-soluble copper was noted, all measuring less than 0.03 percent extraction; results are summarized in Table 13-8. The washed filter cakes were repulped and leached with cyanide.

Table 13-8: Water Wash / Leach Results

Test ID	Sample ID	Cu Assay, %		Solution	
		Feed, %	Sol, ppm	vol, ml	Cu Rec. %
CN1	Comp 1	0.15	0.03	1500	0.003
CN7	Comp 1	0.15	0.04	2103	0.006
CN13	Comp 1	0.15	0.05	1928	0.006
CN2	Comp 2	0.21	0.21	1500	0.015
CN8	Comp 2	0.21	0.08	2399	0.009
CN14	Comp 2	0.21	0.08	2006	0.008
CN3	Comp 3	0.20	0.30	1500	0.023
CN9	Comp 3	0.20	0.11	3223	0.018
CN4	Comp 4	0.18	0.16	1500	0.013
CN10	Comp 4	0.18	0.22	2613	0.032
CN15	Comp 4	0.18	0.06	2097	0.007
CN5	Comp 5	0.18	0.07	1500	0.006
CN11	Comp 5	0.18	0.06	2479	0.008
CN6	Comp 6	0.17	0.05	1500	0.004
CN12	Comp 6	0.17	0.05	2228	0.007
CN16	Comp 6	0.17	0.08	2176	0.010

Note: Table prepared by Basemet, 2021.

Cyanide leach conditions were held constant throughout the program as follows:

- Pulp Density: 40% Solids (wt. % basis);
- Pulp pH: 11.5 (maintained);

- DO: O_2 >20 ppm;
- NaCN (free): 2.0 g/L (maintained); and
- Kinetics: 2, 6, 12, 24, 48 hours.

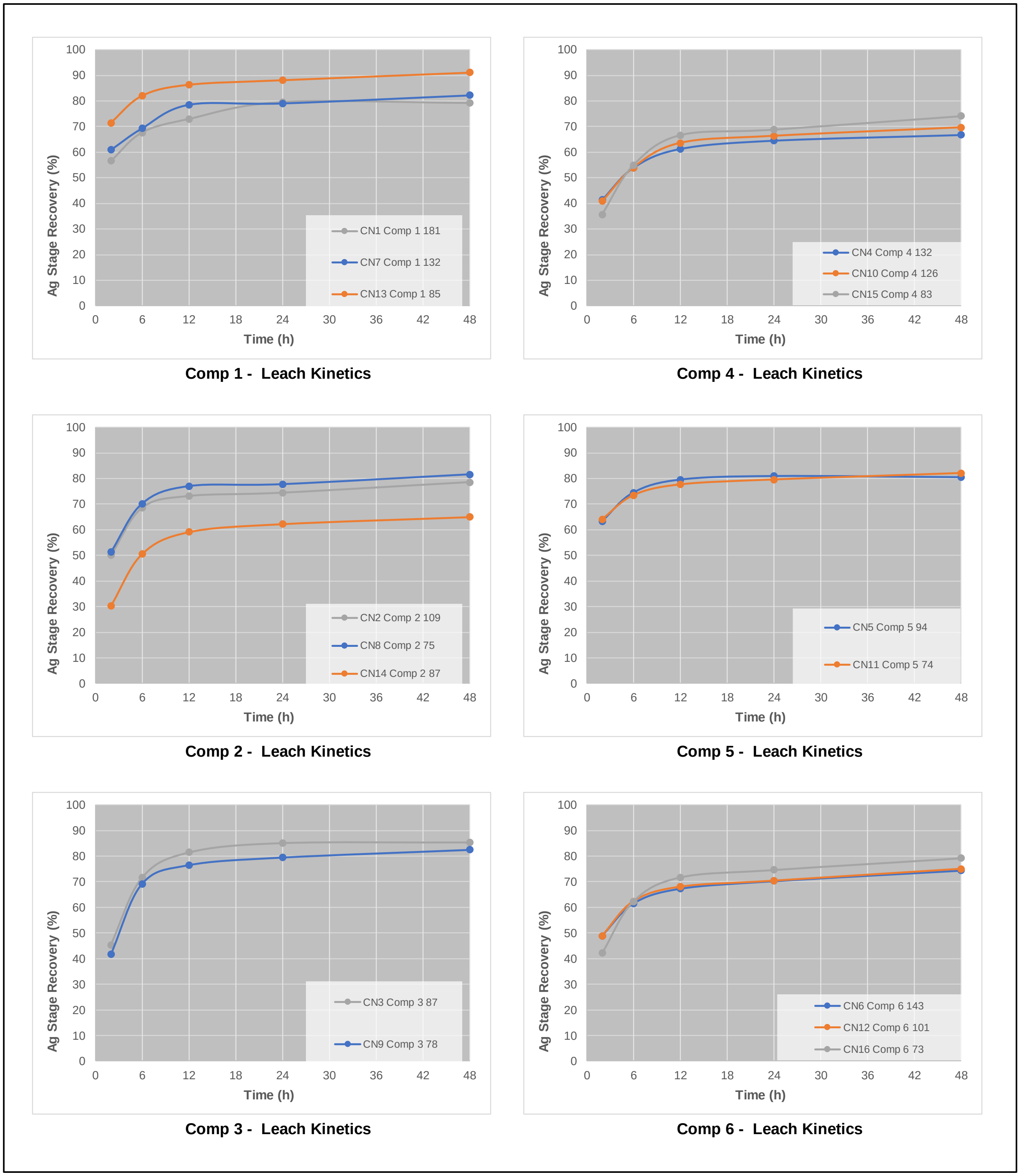
A summary of leach results is provided by Table 13-9, which includes a comparison of the average results for the six composites for the as-is particle size distribution, and 75 µm K80 size distribution. Kinetic leach results are compared in Figure 13-5 for each composite tested.

Table 13-9: Leach Results

Test ID	Sample ID	Grind (µm)	Consumption (kg/t)		Au Grade, g/t			Leach Kinetics (h), Recovery (%)				
			NaCN	CaO	Hd (direct)	Hd (calc)	CNTL	2	6	12	24	48
CN1	Comp 1	181	3.72	5.17	2.77	2.36	0.35	56.2	70.0	72.4	78.3	85.2
CN7	Comp 1	132	4.20	2.52	2.77	1.96	0.32	70.3	76.7	82.3	79.9	83.9
CN13	Comp 1	85	3.03	6.58	2.77	1.93	0.26	83.9	86.4	93.9	86.5	86.6
CN2	Comp 2	109	4.20	3.45	1.76	1.64	0.28	54.9	84.3	81.3	80.2	82.9
CN14	Comp 2	87	3.81	4.52	1.76	1.62	0.28	40.0	75.5	87.9	82.9	82.8
CN8	Comp 2	75	3.33	5.08	1.76	1.53	0.28	58.4	81.7	85.8	84.4	82.0
CN3	Comp 3	87	4.56	4.09	2.06	1.88	0.29	60.4	85.4	87.0	87.1	84.6
CN9	Comp 3	78	4.62	4.02	2.06	1.73	0.30	51.4	77.6	75.6	79.1	82.6
CN4	Comp 4	132	3.84	3.44	2.40	2.39	0.40	64.5	76.3	84.3	79.2	83.3
CN10	Comp 4	126	3.87	3.47	2.40	2.15	0.44	57.8	78.9	81.1	75.3	79.7
CN15	Comp 4	83	3.81	4.12	2.40	2.26	0.34	57.8	81.3	80.7	89.2	85.2
CN5	Comp 5	94	3.24	5.14	1.93	1.98	0.26	74.0	81.9	90.8	86.1	86.9
CN11	Comp 5	74	3.36	4.73	1.93	1.78	0.24	79.6	86.7	85.8	84.8	86.5
CN6	Comp 6	143	3.66	3.42	1.85	1.70	0.31	53.8	79.4	82.9	80.0	81.7
CN12	Comp 6	101	3.78	3.88	1.85	1.73	0.31	62.8	80.7	85.2	87.8	82.3
CN16	Comp 6	73	3.39	4.41	1.85	1.71	0.27	54.4	79.9	91.7	84.3	84.2
As-is Average		124	3.87	4.12	2.13	1.99	0.32	60.6	79.6	83.1	81.8	84.1
75 µm Average		78	3.54	4.82	2.13	1.82	0.28	64.3	82.3	85.6	84.7	84.5

Note: Table prepared by Basemet, 2021.

Figure 13-5: Effect of Grind Results



Note: Figure prepared by Basemet, 2021.

General trends showed finer grinding slightly improved gold extraction kinetics. Recovery reached a plateau between 12 and 24 hours. Average final extraction after 48 hours measured 84.1% for the as-is particle size, and 84.5 % for the 75µm K80 grind. The overall effect of additional grinding was minimal.

Copper in the final leach solution was measured; results are provided in Table 13-10. The level of copper in solution will require a management plan. Sulphidisation, acidification, recycle and thickening (SART) processing is considered providing an additional revenue stream. The SART process has demonstrated to be the best option to treat gold-copper ores using cyanide, due to its capability to recover cyanide and produce a saleable copper product.

Table 13-10: Copper in Final Leach Solution

Test ID	Sample ID	Grind (µm)	Cu Final Solution ppm
CN1	Comp 1	181	408
CN7	Comp 1	132	477
CN13	Comp 1	85	506
CN2	Comp 2	109	785
CN14	Comp 2	87	777
CN8	Comp 2	75	732
CN3	Comp 3	87	803
CN9	Comp 3	78	780
CN4	Comp 4	132	681
CN10	Comp 4	126	655
CN15	Comp 4	83	691
CN5	Comp 5	94	518
CN11	Comp 5	74	521
CN6	Comp 6	143	640
CN12	Comp 6	101	655
CN16	Comp 6	73	679

Note: Table prepared by Basemet, 2021.

13.3 Recovery Estimates

Testwork and benchmarking indicated that the flowsheet for the Magistral tailings retreatment with regrinding/repulping, cyanide leaching, countercurrent decantation (CCD) washing, copper recovery from a SART plant, and gold recovery by the existing Merrill-Crowe process was functional.

Table 13-11 presents the average recovery forecasts for both the SART and Merrill-Crowe plants.

Table 13-11: Forecasts for Plant Recovery

Element	Head Grade (g/t)	Cyanide Extractions %	CCD Recovery %	SART Plant Recovery %	Merrill-Crowe Recovery %	Merrill-Crowe Overall Recovery %	SART Plant Overall Recovery %
Au	1.93	84.4	95.7	11.0	99.5	71.8	8.9
Cu	1,712	53.6	95.7	90.0	8.0	0.4	46.2
Ag	4.30	75.2	95.7	95.0	99.5	3.6	68.4
Hg	16.76	50.0	95.7	95.0	99.5	2.4	45.5

Note: Table prepared by Ausenco, 2021.

13.4 Deleterious Elements

Copper, mercury, and arsenic present in the tailings in moderate to high levels are deleterious elements and impact the gold recovery process. These are managed accordingly:

- Copper is a high cyanide consumer and is recovered by SART. The copper sulphide precipitate is sold for copper credits.
- Most of the cyanide associated with the soluble copper is recovered in SART and recycled to the leaching stage.
- Most of the silver in the PLS is co-precipitated in SART with copper. This is sold for silver credits.
- Most of the mercury in the PLS is co-precipitated in SART with copper. The mercury normally attracts a smelting or refining penalty or charge.
- The balance of mercury after SART is recovered by zinc precipitation then retorted to capture the mercury. The mercury is stored in secure flasks for export from the property.
- Arsenic is not cyanide soluble so has no impact on the hydrometallurgical processing for gold and silver recovery. Its host mineral, arsenopyrite, may contain various amounts of mildly or strongly refractory gold.

SART is included in the flowsheet to remove and recover copper and mercury. The SART circuit requires acidification then addition of sodium hydrosulphide (NaHS) to precipitate copper and mercury (and silver) from a PLS stream, then removal of Cu_2S, HgS and Ag_2S precipitates in the filter cake from filtration.

13.5 Comments on Mineral Processing and Metallurgical Testing

The SART process is used to remove and recover copper.

There is no solid/liquid separation testwork on the Magistral tailings. Solid/liquid separation testwork is recommended in the next stage of study. Thickener settling performance (yield stress) is required due to increasing underflow density, which will result in a material with a higher yield stress being raked and will increase the rake torque and limit the achievable underflow density.

14 MINERAL RESOURCE ESTIMATES

14.1 Summary

AGP completed a Mineral Resource estimate for the Magistral tailings deposit. The software used for the resource estimate is Geovia GEMS Version 6.8™ software.

14.2 Data

On 20 September 2021, Tarachi provided AGP with a sample database consisting of collar coordinates and sample intervals and laboratory certificates. There was no downhole survey data as all holes were vertical and shallow (<15 m). The data set was supplemented with topography data consisting of a LiDAR survey at 1 m contour lines. All data received were in the WGS84 UTM grid coordinate system.

Data were fully validated before being used in the resource estimate as described in Section 12 of this Report. Drill data were checked for overlapping, missing, and negative length intervals. No erroneous data were found affecting the database used in the resource estimation. No further additions were made to the database after 20 September 2021, which constitutes the official data cut-off date for the resource estimate.

The Magistral database consists of 37 hollow auger drillholes, for a total of 243.45 m and 178 samples, which are summarized in Table 14-1. All drillholes were used in grade estimation.

Table 14-1: Summary of Drillhole Database for the Magistral Deposit

Year	Total Drillholes	Total Metres (m)	Drillholes in Resource	Total Metres (m)
2021	37	243.45	37	243.45

Note: Table prepared by AGP, 2021.

The QP is of the opinion that the database is adequate for the purpose of mineral resource estimation.

14.3 Geological Model

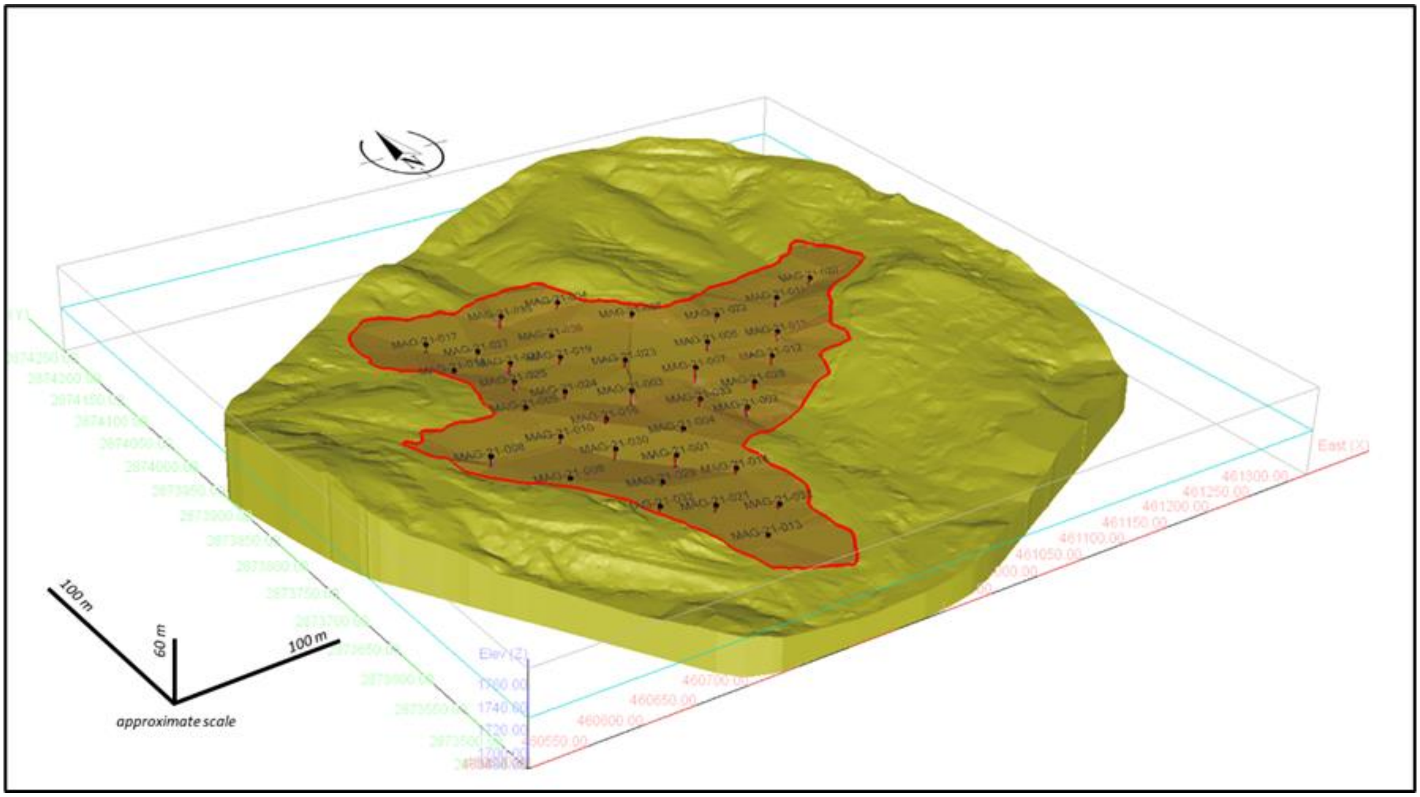
The tailings deposit model was created using a top surface (topographic surface) and bottom surface, based on the depth from drill collar. The tailings wireframe was modelled to pinch out at the boundary line, demarcated by Tarachi, to show the finishing contact of the deposit. In the southwest section of the tailings deposit, the exploration offices are built on tailings as noted in drillholes MAG-21-0009 and MAG-21-032. Here, the wireframe maintains its thickness based on drillhole intercepts. This three-dimensional wireframe domain incorporates the gold, copper and silver mineralization.

The topographic surface provided by Tarachi (see Section 14.4) was used as the top surface of the wireframe. For the bottom surface, the drillhole depths were used to define the underlying surface. The tailings were emplaced in the mid-1900s and there is no detailed information of the original topography.

A waste rock wireframe was created by the intersection of the tailings and all material below topography. The tailings and waste rock wireframes were validated, and no errors were found.

Figure 14-1 shows the tailings and country rock wireframes for the Magistral deposit with intersecting drillholes.

Figure 14-1: Geological Models; perspective view looking northeast



Note: Figure prepared by AGP, 2021.

Table 14-2 lists the mineralized domain wireframes and subdomains for the Magistral deposit.

Table 14-2: Domains – Magistral Deposit

Domain	Rock Code	Rock Type	Comment
Tailings	TAILS	400	Mineralized Tailings
Waste Rock	CR	99	Material below topography and tailings
Air	AIR	0	

Note: Table prepared by AGP, 2021.

14.4 Topography

The topography was based on Tarachi's April 2021 LiDAR drone survey. The drone survey was completed at 50 cm resolution and covers the extent of the tailings deposit to roughly 40 to 130 m beyond the tailings limit. The XYZ point coordinate file was provided by Tarachi.

14.5 Exploratory Data Analysis

14.5.1 Assays

The raw assay statistics for gold, copper, arsenic and mercury were evaluated within the tailings wireframe.

The drillhole database consists of 37 drillholes and 178 assay values for each metal. Any assay values reported below detection limit were assigned half the detection limit for statistical analysis and grade estimation. Any missing values were assigned a zero. All 178 assays values were used in the resource estimation.

Table 14-3 presents descriptive statistics for raw, uncapped values for gold, copper, arsenic and mercury.

Table 14-3: Descriptive Statistics – Uncapped Values

	Au (g/t)	Cu% (g/t)	Ag (g/t)	As (g/t)	Hg (g/t)	Length (m)
Count	178	178	178	178	178	178
Minimum	0.04	0.01	0.10	83	0.50	0.43
Maximum	4.12	0.29	66.20	2960	40.00	2.10
Mean	1.98	0.17	3.33	1470	16.77	1.35
Median	1.93	0.17	2.40	1430	16.00	1.40
Std. Deviation	0.69	0.04	5.44	390	5.39	0.25
CV	0.35	0.25	1.63	0.27	0.32	0.18

Note: CV = coefficient of variation. Table prepared by AGP, 2021.

14.5.2 Composites

The hollow auger core was sampled at 1.4 m intervals, the length of two Shelby sample tubes, within the mineralized tailings. From the sampling length statistics, a composite length of 2.8 m was selected.

The 2.8 m composite intervals were from the collar of the drillholes and automatically adjusted across the thickness of the tailings, leaving no remnants. The adjustment resulted in composite lengths ranging between 1.90 and 4.00 m, with a mean composite length of 2.86 m.

Table 14-4 shows the descriptive statistics for gold, copper, silver, arsenic and mercury composites within the tailings.

Table 14-4: Descriptive Statistics – Composites

	Au (g/t)	Cu% (g/t)	Ag (g/t)	As (g/t)	Hg (g/t)	Length (m)
Count	84	84	84	84	84	84
Minimum	0.10	0.02	1.69	224	9.33	1.90
Maximum	3.42	0.23	38.57	2440	29.85	4.00
Mean	1.95	0.17	3.32	1456	16.54	2.86
Median	1.91	0.17	2.45	1484	16.80	2.84
Std. Deviation	0.63	0.04	4.30	316	4.18	0.35
CV	0.32	0.23	1.29	0.22	0.25	0.12

Note: CV = coefficient of variation. Table prepared by AGP, 2021.

14.5.3 Capping Analysis

A combination of probability plots and disintegration analysis was used to determine the potential risk of grade distortion from higher-grade assays. Due to the low coefficient of variation (CV) and relatively stable population in the raw assays and composite values, capping of assay grades for gold, copper, silver, arsenic, and mercury was not required.

14.5.4 Bulk Density

Bulk density measurements were collected during the drilling campaign. Bulk density was calculated based on the weight of the sample (two Shelby tubes) and the volume of the Shelby tube. Only samples with 100% recovery were used in this calculation. A total of 137 values were calculated and a median of 1.70 was used to assigned to the tailings deposit.

Country rock material was assigned a value of 2.80.

Table 14-5 presents the descriptive statistics for the bulk density.

Table 14-5: Bulk Density by Domain

Domain	Tailings	Country Rock
Count	137	
Min	1.23	
Max	2.02	
Mean	1.71	
Median	1.70	2.80 (assigned)
Std Dev	0.14	
CV	0.08	

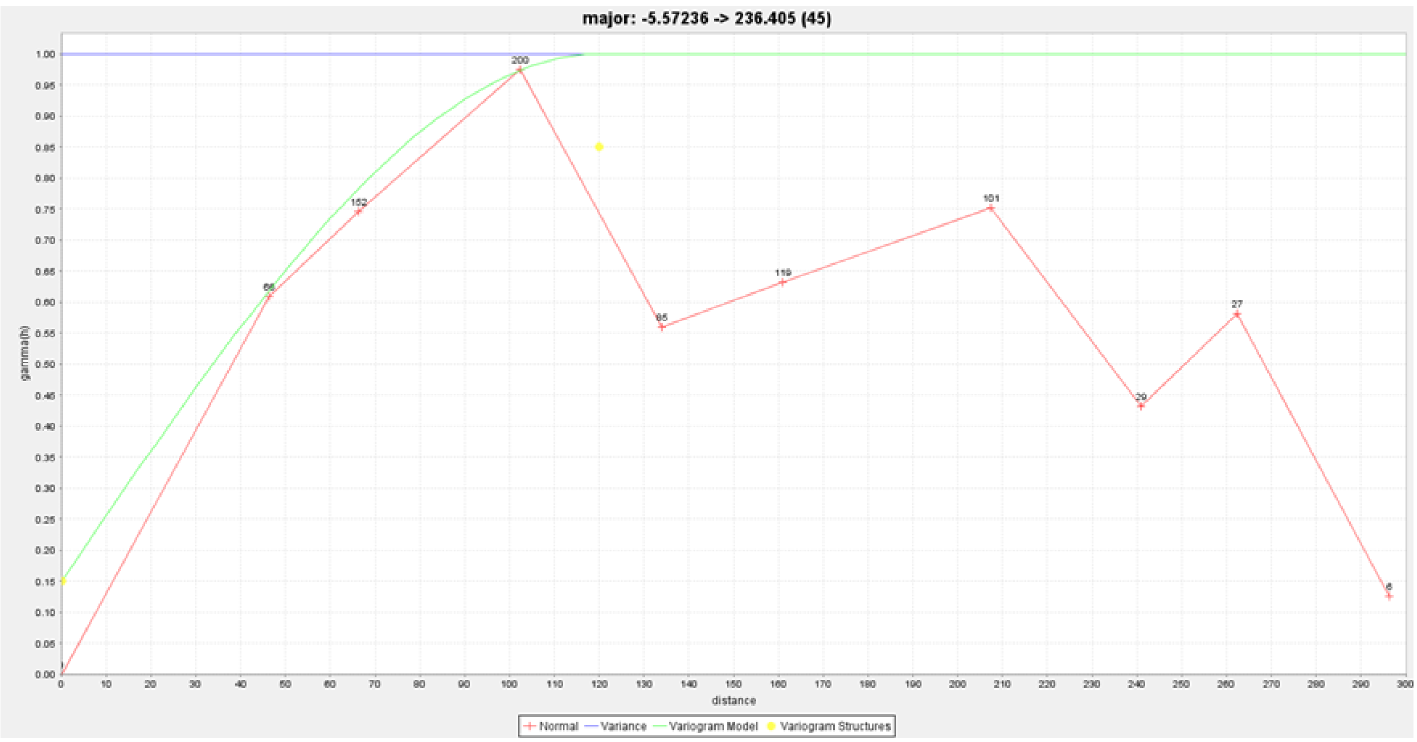
Note: Table prepared by AGP, 2021.

14.6 Spatial Analysis - Variography

Spatial analysis was performed on the 2.8 m composites. Experimental variograms were established for gold, copper, arsenic, and mercury, and oriented sub-parallel to the tailings deposit.

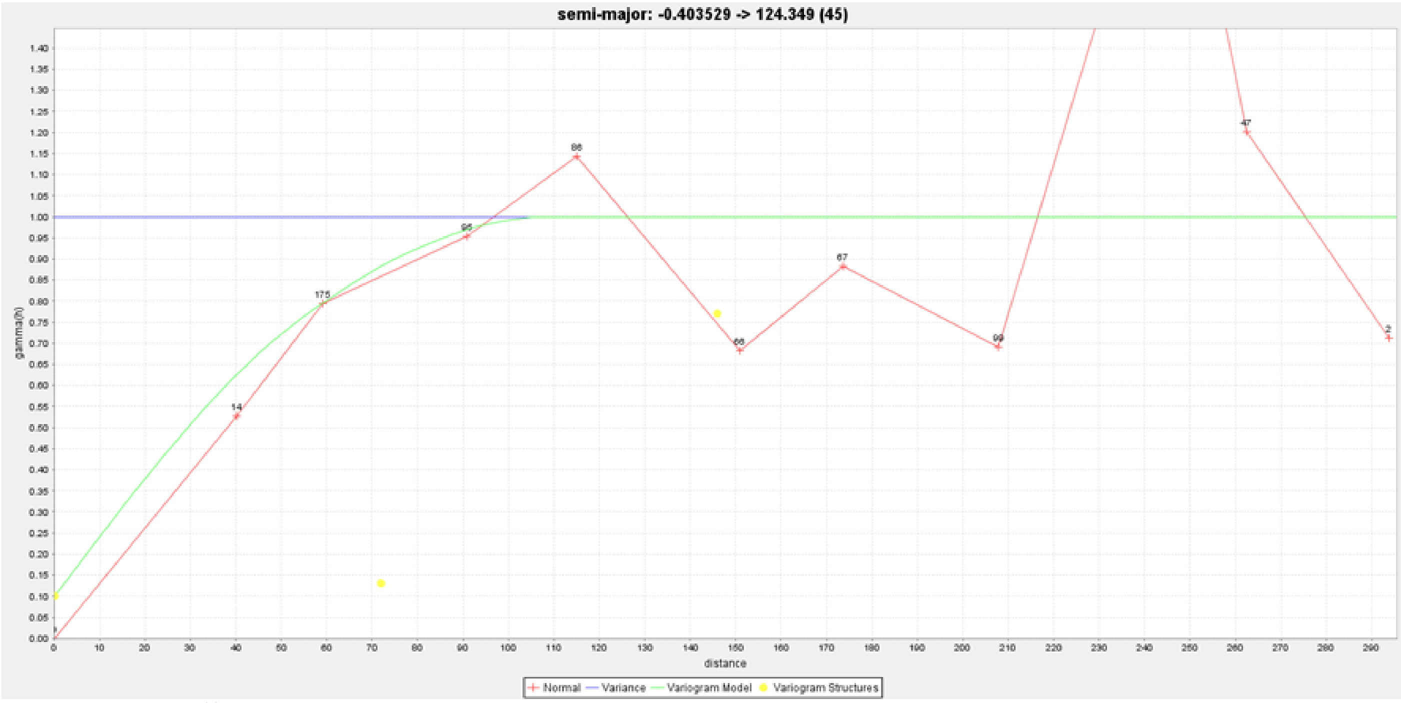
For gold, the maximum of the sill along the apparent plunge of the mineralization is approximately 120 m. The nugget is relatively low at 0.15. Figure 14-2 and Figure 14-3 illustrate the major and semi-major direction for gold. Figure 14-4 illustrates the orientation of the gold variogram.

Figure 14-2: Variogram for Gold – Major direction



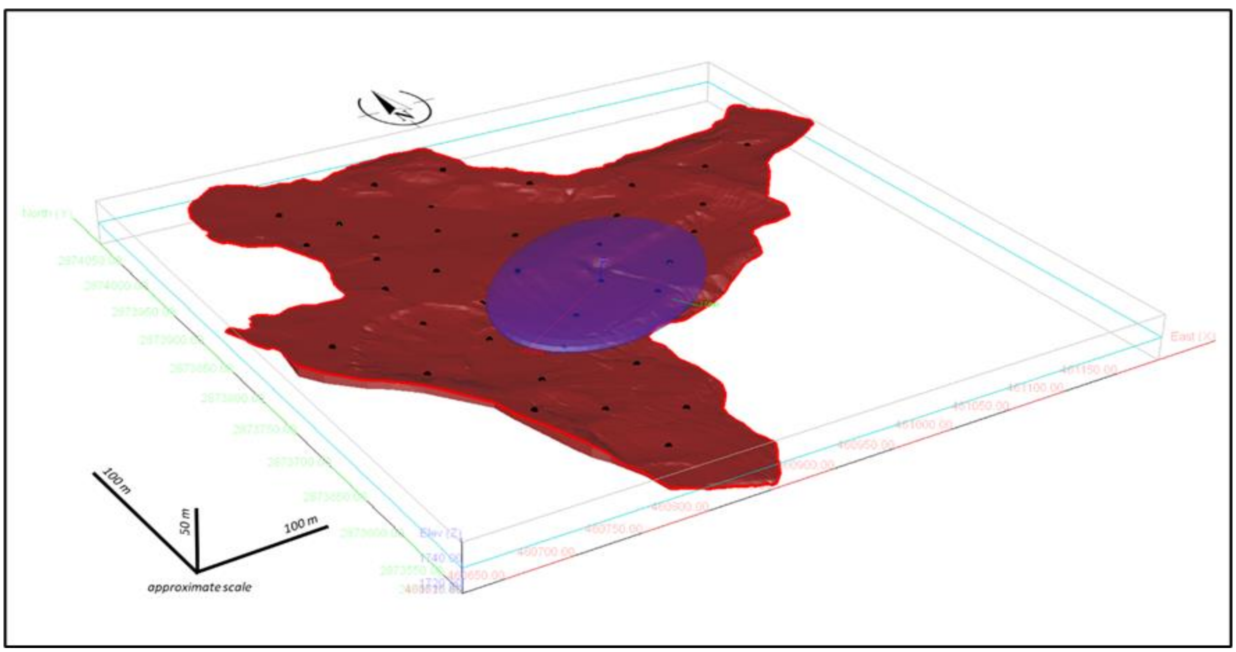
Note: Figure prepared by AGP, 2021.

Figure 14-3: Variogram for Gold – Semi-major direction



Note: Figure prepared by AGP, 2021.

Figure 14-4: Variogram Orientation for Gold – Variogram ellipse



Note: Figure prepared by AGP, 2021.

Table 14-6 lists the variogram parameters used in the model for gold, copper, arsenic and mercury. The variograms were fitted using the GEMS "Azimuth-Dip-Azimuth" rotation method which is independent of the block model orientation.

Table 14-6: Variogram Parameters

Metal	Model	Nugget C_0	Rotation Az., Dip, Az. (degree)	C_1	C_1 Range (m)	C_2	C_2 Range (m)
Gold	Spherical	0.15	236.4, -5.6, 146.5	0.85	120.0, 72.8, 11.0	-	-
Copper	Spherical	0.10	45.0, 3.0, 135.0	0.90	100.0, 92.5, 10.9	-	-
Silver	Spherical	0.15	249.3, -3.6,159.3	0.22	60.0, 30.0, 11.4	0.63	101.0, 50.5, 19.2
Arsenic	Spherical	0.10	214.4, -8.3,124.3	0.13	72.0, 53.6, 2.7	0.77	146.0, 109.0, 5.5
Mercury	Spherical	0.10	226.4, -6.9,136.3	0. 40	57.0, 47.4, 3.6	0.50	150.0, 124.6, 9.5

Note: Table prepared by AGP, 2021

14.7 Block Model

The block model was created with a block matrix of 10 m-long by 10 m-wide by 5 m-high and is not rotated. The block matrix was selected as appropriate based on the drill spacing and the block height and in consideration of an open pit mining scenario. The datum for UTM coordinates used are in WGS84.

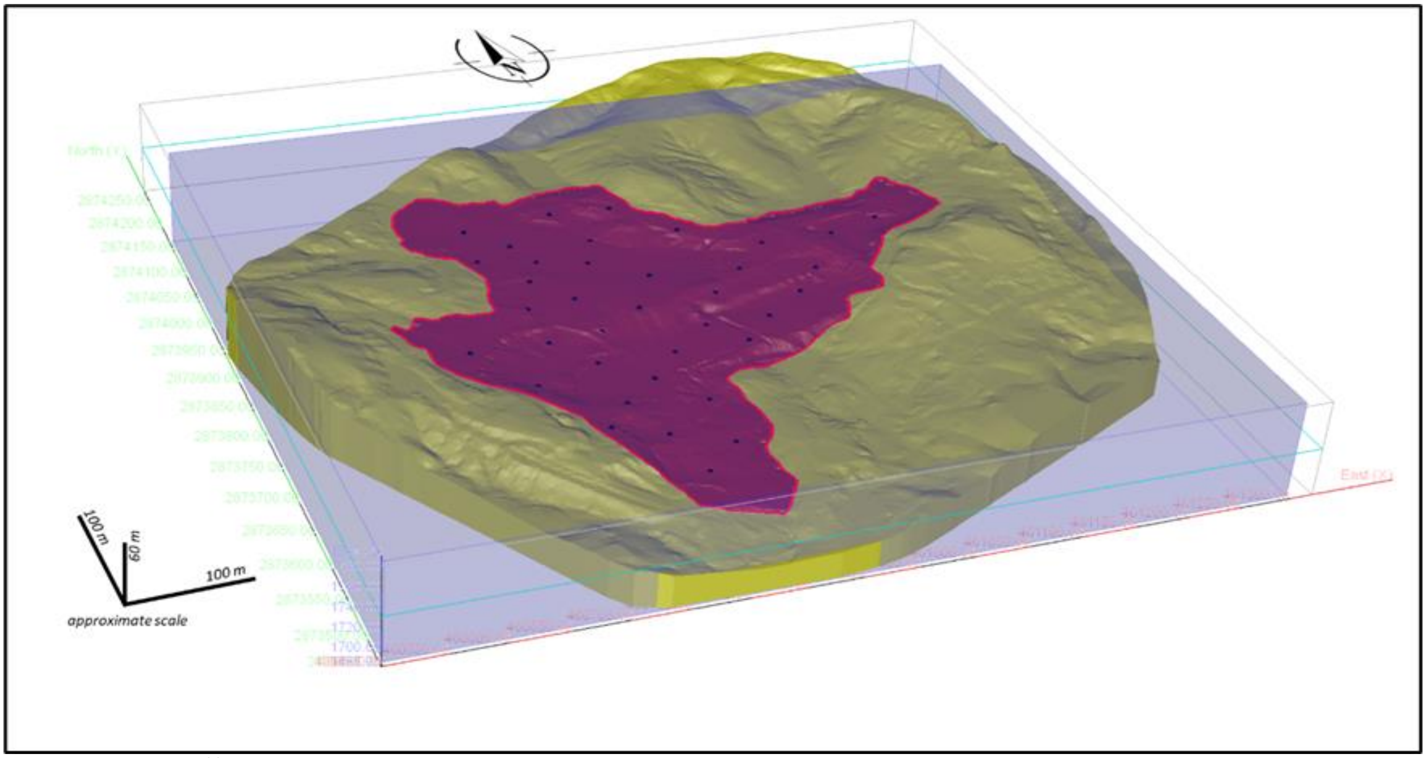
Table 14-7 summarizes the block model parameters and Figure 14-5 illustrates the block model over the interpreted domains for the Magistral Deposit.

Table 14-7: Block Model Parameters

	Minimum	Maximum	No. of Blocks
Easting	460500	460500	80
Northing	2873470	2874170	70
Elevation	1685	1785	20
Rotation Angle	No rotation°	-	-
Block Size (X, Y, Z in metres)	10m x 10m x 5m	-	-

Note: Table prepared by AGP, 2021.

Figure 14-5: Block Model; Perspective View Looking North



Note: Figure prepared by AGP, 2021.

The block model is an ore percent block model where estimated blocks are assigned a rock type code and percentage of the block in the estimate. The volume of the coded blocks was compared to the analytical volume and was found to be within 0.1%.

Block model attributes in the block model include:

- Rock type;
- Density;
- Gold, copper, arsenic and mercury grades;
- Classification;
- Distance to the nearest composite;
- Number of composites used in estimation of block;
- Number of drillholes used for estimation of block; and
- Pass number.

Arsenic and mercury grade models were estimated in the model for metallurgical purposes only. They are not reported as part of the mineral resources.

14.8 Estimation Parameters and Interpolation

The estimation of grades was carried out using ordinary kriging (OK) interpolation for all metals. An inverse distance squared (ID2) and nearest neighbour (NN) model were also interpolated to be used for validation. The interpolation was carried out in two passes, with an increased search dimension in the second pass:

- Pass 1 used an ellipsoid search with 8 minimum/15 maximum samples. A maximum of 3 samples per hole was imposed on the data selection, forcing a minimum of 3 holes to be used in the search.
- Pass 2 used an ellipsoid search with 6 minimum/15 maximum samples. A maximum of 3 samples per hole was imposed on the data selection, forcing a minimum of 2 holes to be used in the search.

The search neighbourhood for the first pass used the variogram ranges of each of the metals. The second pass was increased nominally by 30%. Table 14-8 presents the orientations and ranges of the search passes.

Table 14-8: Search Ellipsoid Dimensions and Orientation for Gold and Copper

Pass	Anisotropy	Azimuth (°)	Dip (°)	Azimuth (°)	Range X (m)	Range Y (m)	Range Z (m)	Search
Gold								
Pass 1	Az, Dip, Az	236.4	1	146.5	120	72.8	15	Ellipsoidal
Pass 2	Az, Dip, Az	236.4	1	146.5	150	100	30	Ellipsoidal
Copper								
Pass 1	Az, Dip, Az	45	3	135	100	92.5	10.9	Ellipsoidal
Pass 2	Az, Dip, Az	45	3	135	150	125	25	Ellipsoidal
Silver								
Pass 1	Az, Dip, Az	249.3	-3.6	159.3	101	50.5	19.2	Ellipsoidal
Pass 2	Az, Dip, Az	249.3	-3.6	159.3	101	100..0	25.0	Ellipsoidal

Note: Az, Dip, Az = Azimuth, Dip, Azimuth. Table prepared by AGP, 2021.

14.9 Block Model Validation

The Magistral block grade models were validated by:

- Visual comparison of colour coded block model grades with composite grades on sections and plans;
- Comparison of the global mean block grades for OK/ID2, ID3, NN models, composite, and raw assay grades; and
- Comparison using swath plots to investigate local bias in the estimate.

14.9.1 Visual Comparison

The visual comparison of block model grades on sections and plans indicated a good correlation between drillhole grade and resource model grade.

14.9.2 Global Comparison

Table 14-9 shows the grade statistics for the raw assays, composites, NN, ID2, and OK models for all zones in the Measured, Indicated, and Inferred category.

Table 14-9: Global Comparisons by Mean Grades (Measured, Indicated, and Inferred)

Methodology	Au (g/t)	Cu (%Cu)
Raw assays uncapped	1.98	0.172
Composite uncapped	1.95	0.169
OK	1.90	0.170
ID2	1.90	0.170
NN	1.87	0.167

Note: Table prepared by AGP, 2021.

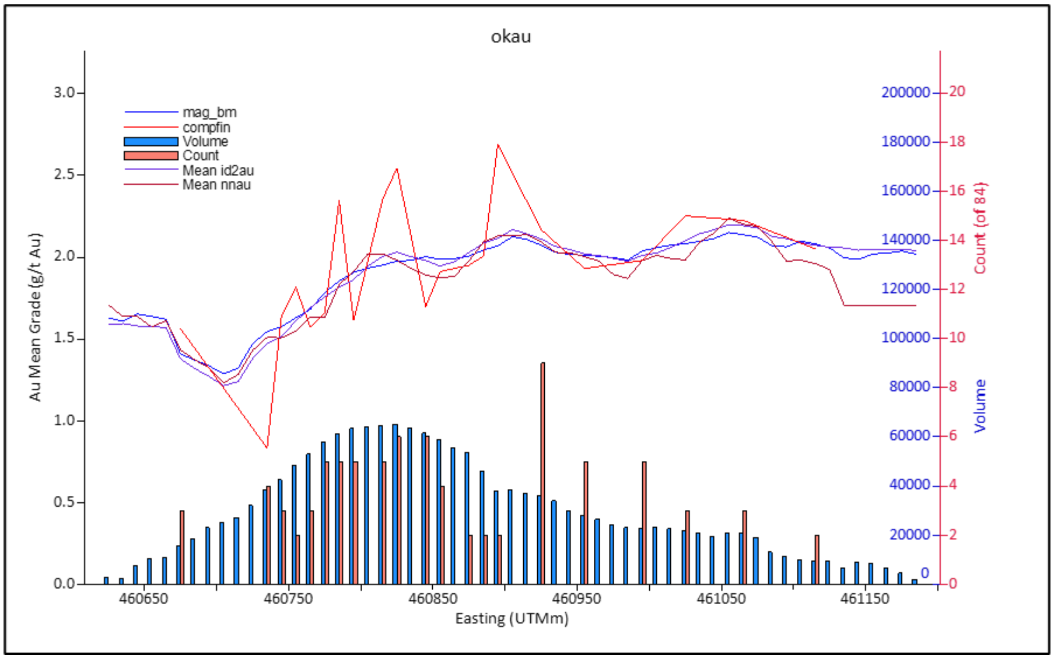
Statistics for the gold and silver composite mean grades compared well to the raw assay grades, with a normal reduction in values due to smoothing, related to volume variance. The block model mean grade, when compared against the composites, showed a normal reduction in values. More importantly, the grade of the NN, ID2, and OK models were within < 2% for gold and <5% of r for silver, indicating the methodology used did not introduce a bias into the estimate.

14.9.3 Swath Plots

Swath plots by northing, easting and by elevation were reviewed. In general, the swath plots for all four metals showed good agreement with the three methodologies. The distribution of gold, copper, arsenic and mercury composites and interpolated block grades showed no major local bias.

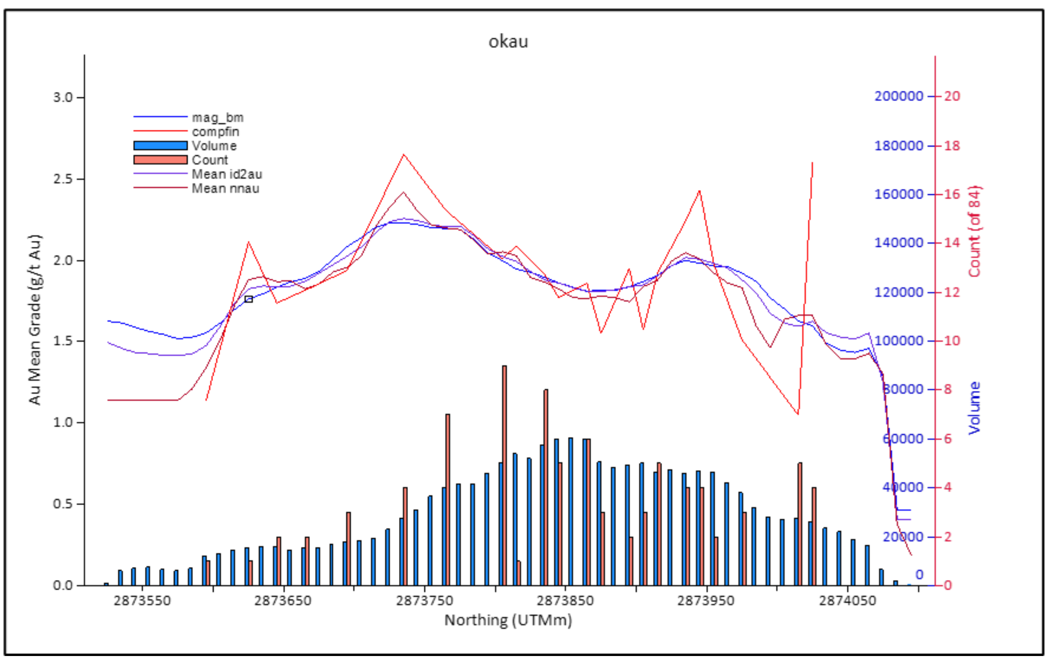
Figure 14-6, Figure 14-7 and Figure 14-8 present the swath plots by easting, northing, and elevation for gold, respectively.

Figure 14-6: Swath Plot for Gold Grades by Easting



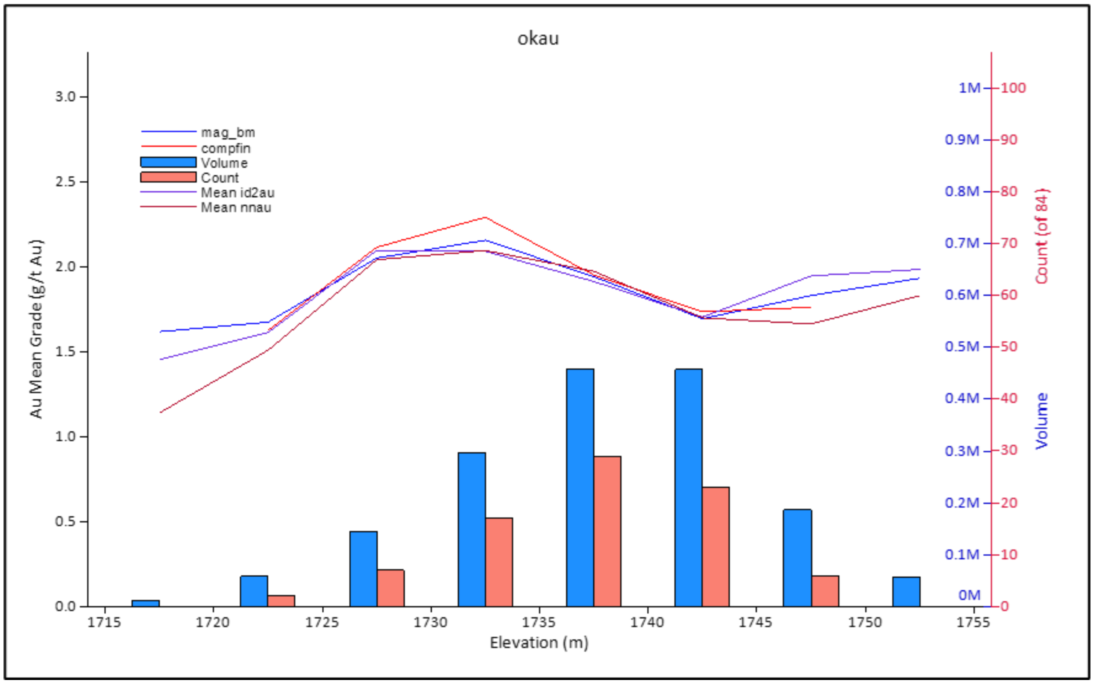
Note: Figure prepared by AGP, 2021.

Figure 14-7: Swath Plot for Gold Grades by Northing



Note: Figure prepared by AGP, 2021.

Figure 14-8: Swath Plot for Gold Grades by Elevation



Note: Figure prepared by AGP, 2021.

14.10 Mineral Resources

14.10.1 Classification of Mineral Resources

Several factors were considered in the definition of a resource classification:

- Canadian Institute of Mining (CIM) requirements and guidelines;
- Experience with similar deposits; and
- Spatial continuity.

Table 14-10 lists the parameters used to classify the Mineral Resources.

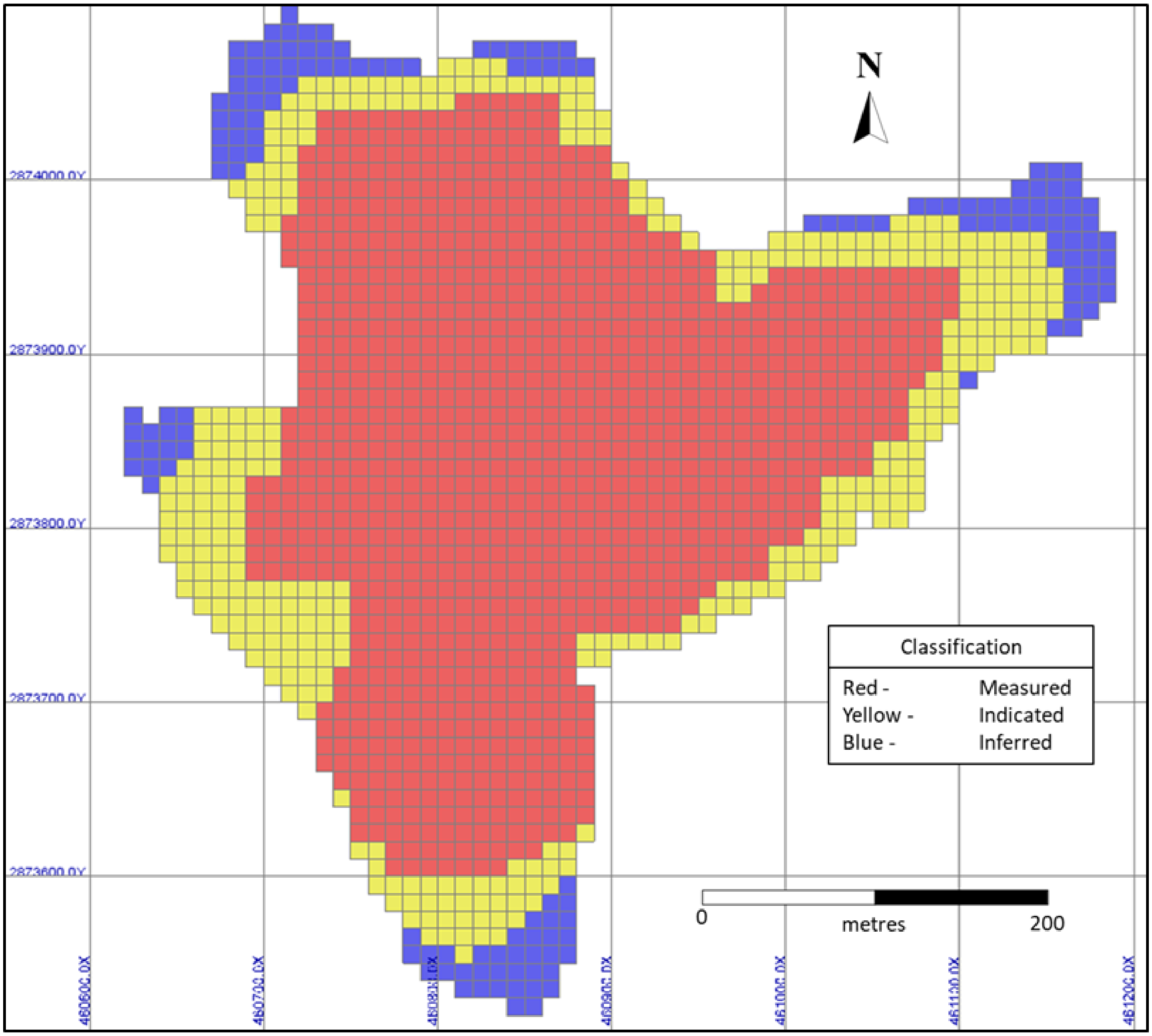
Table 14-10: Primary Classification Parameters

Classification	Parameters
Measured	Minimum of 4 drillholes within 40 m of the nearest sample
Indicated	Minimum of 2 drillholes within 80 m of the nearest sample
Inferred	Minimum of 1 drillhole within 120 m of the nearest sample

Note: Table prepared by AGP, 2021.

Figure 14-9 illustrates the block model classification for the Magistral deposit.

Figure 14-9: Model Classification; Plan View



Note Figure prepared by AGP, 2021.

14.10.2 Marginal Cut-off Grade for Mineral Resources

AGP determined a resource cut-off grade of 0.50 g/t Au to be used for the reporting of mineral resources within a constraining shell for material amenable to open pit extraction. Table 14-11shows the assumptions and parameters used to constrain the mineral resource estimate.

Table 14-11: Assumed Parameters for the Constraining Shell

Parameter	Units	Value
Au Price	US$/oz Au	1,688.00
Au Recovery	%	72.4
MXN$: US$		20.00
Mining Rate – Open Pit	t/d	1,000
Mining Cost – Open Pit	$US/t	4.00
Processing Cost	$US/t	25.14
G&A Cost	$US/t	1.13
Pit Slope	degrees	45

Note: G&A = General and Administration. Table prepared by AGP, 2021.

14.10.3 Mineral Resources Tabulation

The Mineral Resources for the Magistral tailings are reported at a 0.50 g/t Au cut-off grade within a constraining shell. The Mineral Resources are: Measured Resources of 1.1 Mt at 1.95 g/t Au, 0.17% Cu and 3.22 g/t Ag; Indicated Resources of 0.2 Mt at 1.80 g/t Au, 0.17 %Cu and 3.11 g/t Ag; and, and Inferred Resources of 0.02 Mt at 1.78 g/t Au ,0.16 %Cu and 2.43 g/t Ag. The effective date of the Mineral Resources is 15 November 2021.

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Table 14-12 presents the Mineral Resources for the Magistral tailings deposit.

Table 14-12: Mineral Resources for the Magistral Tailings at a 0.50 g/t Au cut-off Grade

Classification	Tonnes (,000 t)	Au Grade (g/t Au)	Cu Grade (%Cu)	Ag Grade (g/t Ag)	Contained Au (oz. Au)	Contained Cu (lb Cu)	Contained Ag (oz. Ag)
Measured	1,099	1.95	0.17	3.22	69,000	4,188,000	113,700
Indicated	158	1.80	0.17	3.11	9,100	608,000	15,800
Measure and Indicated	1,257	1.93	0.17	3.21	78,100	4,796,000	129,500
Inferred	17	1.78	0.16	2.43	1,000	66,000	1,400

Note: Table prepared by AGP, 2021.
Mineral Resources were estimated by Paul Daigle, P.Geo., Senior Resource Geologist for AGP.
Summation errors may occur due to rounding.
Mineral resources are reported within an optimized constraining shell using a gold price of $US 1,668/oz and a recovery of 72.6%.
Block matrix is 10m x 10m x 5m (no rotation).
Blocks were estimated using OK interpolation; no grade capping was applied.
The density for the deposit was assigned at 1.7 g/cm^3.

AGP is not aware of any information not already discussed in this Report, which would affect their interpretation or conclusions regarding the Project.

14.10.4 Grade Sensitivity

Table 14-13 shows the sensitivity of the model to changes in cut-off within the resource constraining shell. The base case cut-off of 0.5 g/t Au is highlighted in the tables.

Table 14-13: Model Sensitivity to Cut-off Grades

Classification	Cut-off Grade (g/t Au)	Tonnes (,000 t)	Au Grade (g/t Au)	Cu Grade (%Cu)	Ag Grade (g/t Ag)	Contained Au (oz. Au)	Contained Cu (lb Cu)	Contained Ag (oz. Ag)
Measured	2.00	466	2.30	0.17	3.01	34,400	1,764,000	45,200
	1.50	984	2.02	0.17	3.07	64,000	3,751,000	97,000
	1.00	1,093	1.96	0.17	3.18	68,800	4,176,000	111,700
	0.50	1,099	1.95	0.17	3.22	69,000	4,188,000	113,700
Indicated	2.00	39	2.20	0.17	2.62	2,700	143,000	3,300
	1.50	136	1.87	0.18	2.76	8,200	535,000	12,000
	1.00	158	1.80	0.17	3.11	9,100	608,000	15,800
	0.50	158	1.80	0.17	3.11	9,100	608,000	15,800
Inferred	2.00	5	2.18	0.16	2.53	400	19,000	400
	1.50	16	1.80	0.17	2.29	1,00	64,000	1,300
	1.00	17	1.78	0.16	2.43	1,000	66,000	1,400
	0.50	17	1.78	0.1	2.43	1,000	66,000	1,400

Note: Table prepared by AGP, 2021. Summation errors may occur due to rounding

14.11 Comparison with 2018 Mineral Resource Estimate

Comparing this new resource estimate against the last resource model, authored by Ash et al. (2018) with an effective date of 15 March 2018, resulted in a slight decrease tonnes and grade in the combined Measured and Indicated Mineral Resources. The new estimate yields a decrease of 11% in gold ounces in the combined Measured and Indicated category.

There were no Inferred Mineral Resources in the previous model. The Inferred material in the current model is reflective of low sample support at the fringes of the deposit.

Table 14-14 shows the comparison of the current estimate at a 1 g/t Au cut-off grade with the previous resource estimate since the 2018 mineral resource estimate was reported at a 1 g/t Au cut-off grade.

Table 14-14: Resources Statement compared with Previous Estimate

Cut-off Classification	AGP, 30 September 2021 > 1.0 g/t within constraining shell			Ash et al., 15 March 2018 > 1.0 g/t unconstrained					
	Tonnage (,000 t)	Au (g/t)	Gold (Ounces)	Tonnage (T)	Au (g/t)	Gold (Ounces)	Δ Tonnes (T)	Δ Au (g/t)	Δ Gold (Ounces)
Measured	1,093	1.96	68,800						
Indicated	158	1.80	9,100	1,295	2.11	88,100			
Mea. + Ind.	1,238	1.94	77,200	1,295	2.11	88,100	-45	-0.17	-10,200
Inferred	11	1.78	1,000				+17		+1,000

Note: Table prepared by AGP, 2021.

Several key differences in the estimates are in the interpretation and estimation methods, density, and classification. Additionally, the current mineral resources are constrained within a pit shell that conforms to reasonable prospects of eventual economic extraction, whereas the previous mineral resources were reported above a 1.0 g/t Au cut-off grade.

AGP notes that the volume of the tailings material by Ash et al., (2018) resource is estimated based on polygonal columns, creating polygons around drillholes with adjustments to the edges of the outlined tailings. The polygonal method does not precisely account for the variation of thicknesses within the polygons, at surface or base of the tailings. The current interpretation is based on a new outline of the deposit and modelled tailings between the topography and the drillhole intercepts of the tailings.

The density of the material varies slightly from 1.785 in the previous model to 1.7 in the current model, which has a minor impact on the estimated tonnes.

The current resources downgrade some of the fringe blocks to the inferred category due to low sample support and distance from the final drillhole and some thicknesses may be less 1.5 m.

14.12 Factors That May Affect the Mineral Resource Estimate

The Magistral deposit is a gold- and copper-bearing tailings deposit from historic gold mining. Topographic maps of the original surface prior due deposition were not available, and it is unknown if the ground was leveled prior to deposition. There is a risk or opportunity that the volume of material may change due to the unevenness of the original surface between drillholes. It is anticipated that the slight variations would not have a material impact on the deposit volume.

The tailings material at the edges of the interpreted northern boundary are assumed to be thin at the edges. There may be both risk or opportunity of a change in tailings volume along this boundary once the edges have been tested either by drilling or by trenching.

15 MINERAL RESERVE ESTIMATES

This section is not relevant to this Report.

16 MINING METHODS

16.1 Introduction

Mining of the tailings by small scale open pit mining methods made the most sense based on the size of the resource, grade tenor, grade distribution and location on top of topography of the deposit. AGP's opinion is that with current metal pricing levels and knowledge of the mineralization, open pit mining offers the most reasonable approach for development.

The mine plan includes sending mineralized material to mill located adjacent to the tailings. The mine plan is based on Measured, Indicated and Inferred Mineral Resources. Any waste material encountered will be placed back within the footprint of the existing tailings facility being mined.

Based on a production rate of 360,000 t/year, the 1.1 Mt in the mining schedule mining would be complete in 3.25 years.

16.2 Geotechnical Considerations

Limited geotechnical information regarding the slopes of the tailings mining has been completed. For the purposes of the PEA and based on the shallow nature of the expected mining, wall slope angles of 45 degrees overall have been used.

Further review of the potential slopes should be undertaken as well as a proposed monitoring program established for use during mining to avoid any potential sloughs that may impact nearby infrastructure.

16.3 Geological Model Importation

The 2021 resource estimate was created using Gemcom software for mineralization domains and block modelling. The model was then transferred in comma separated variable (CSV) format. The final resource model provided for mine design was a single ore percentage model.

Framework details of the two open pit block models are provided in Table 16-1. Resource model item descriptions are shown in Table 16-2 while the final open pit mine planning model items are displayed in Table 16-3. The mining model created by AGP in Hexagon MinePlan software includes additional items for mine planning purposes. MinePlan was used for the mining portion of the PEA, utilizing their Lerchs Grossman (LG) shell generation, pit and dump design and mine scheduling tools. Measured, indicated and inferred resources were used for the PEA.

A global resource check was completed to ensure contained metal matched between the two model formats. The tonnes and contained metal for each resource category with no cut-off applied was within 0.3% in all cases.

Table 16-1: Open Pit Model Framework

Framework Description	Resources Model	Open Pit Model (Value)
MinePlan file 10 (control file)	Magistral-bm-all.csv	Tr1010.dat
MinePlan file 15 (model file)	-	T21.15
X origin (m)	460500	460500
Y origin (m)	2873470	2873470
Z origin (m) (max)	1785	1785
Rotation (degrees clockwise)	0	0
Number of blocks in X direction	80	80
Number of blocks in Y direction	70	70
Number of blocks in Z direction	20	20
X block size (m)	10	10
Y block size (m)	10	10
Z block size (m)	5	5

Note: Table prepared by AGP, 2021.

Table 16-2: Resource Model Descriptions

Field Name	Min	Max	Precision	Units	Description
Rock Type	400	400	1	-	Rock Type (201-212) Ore, 9 Overburden
Density	1.7	1.7	1	t/m3	Density
%Ore	0	100	1	%	Ore percent
okau	0.34	3.02	0.01	g/t	Undiluted g/t Au grade
okcu	0.04	0.22	0.01	%	Undiluted g/t Cu grade
CLASS	1	3	1	-	Resource class, 1=measured, 2=indicated, 3=inferred
Waste%	0.002	100	0.01	%	Waste percent
WasteRT	99	99	1	%	Waste Rock type, 99 Country Rock
WasteSG	2.8	2.8	0.01	t/m^3	Waste density
okas	420.42	2063.66	0.01	ppm	Undiluted ppm As grade
okhg	10.19	25.77	0.01	ppm	Undiluted ppm Hg grade
okag	0	24.01	0.01	g/t	Undiluted Ag grade

Note: Table prepared by AGP, 2021.

Table 16-3: Open Pit Model Item Descriptions

Field Name	Min	Max	Precision	Units	Description
TOPO%	0	100	1	-	Topography percent
RTYPE	0	400	1	-	Rock Type (201-212) Ore, 9 Overburden, 99 Country Rock
SG	0	4	1	t/m3	Density
%Ore	0	100	1	%	Ore percent
AU	0	100	0.01	g/t	Undiluted g/t Au grade
CU	0	100	0.001	%	Undiluted g/t Cu grade
CLASS	0	5	1	-	Resource class, 1=measured, 2=indicated, 3=inferred
WST%	0	100	0.01	%	Waste percent
WTYPE	0	99	1	%	Waste Rock type, 99 Country Rock
SGW	0	4	0.01	t/m3	Waste density
AS	0	4000	0.01	ppm	Undiluted ppm As grade
HG	0	100	0.01	ppm	Undiluted ppm Hg grade
AG	0	100	0.01	g/t	Undiluted g/t Ag grade
VLT1	0	999999	0.1	$/tonnes	Value per tonnes calculated
VLB1	-1000000	999999	0.1	$/tonnes	Value per Block calculated
MINE	0	3	1	-	Flag 1 is below topo and 0 air

Note: Table prepared by AGP, 2021.

16.4 Economic Pit Shell Development

The open pit ultimate size was determined with various input parameters including estimates of the expected mining, processing and general and administrative (G&A) costs, as well as metallurgical recoveries, pit slopes and reasonable long-term metal price assumptions. AGP worked together with the study team to select appropriate operating cost parameters for the proposed open pit. The mining costs are estimates based on cost estimates for equipment from vendors and previous studies completed by AGP. Process costs and a portion of the G&A costs were provided by Ausenco and other team members based on preliminary costing results.

The parameters used are shown in Table 16-4. The net value calculations are in United States dollars (US$) unless otherwise noted. The mining cost estimates are based on the use of 20 t class trucks using size appropriate loading equipment.

Table 16-4: Pit Shell Parameter Assumptions

Description	Units	Value
Resource classifications used		M+I+I
Mining Bench height	m	10
Metal Prices		Gold

Description	Units	Value
Price	US$/oz	1500
Royalty	%	0.0%
Smelting, Refining, Transportation Terms		
Doré	Payable %	99.0
Selling Cost	US$/oz	12.00
Process Recoveries		
Mill Feed	%	72.4%
Mining Costs		
Base Rate	$/t moved	4.00
Process Costs		
Mill Feed	$/t ore milled	25.14
G&A Cost	$/t milled	1.13

Note: Table prepared by AGP, 2021.

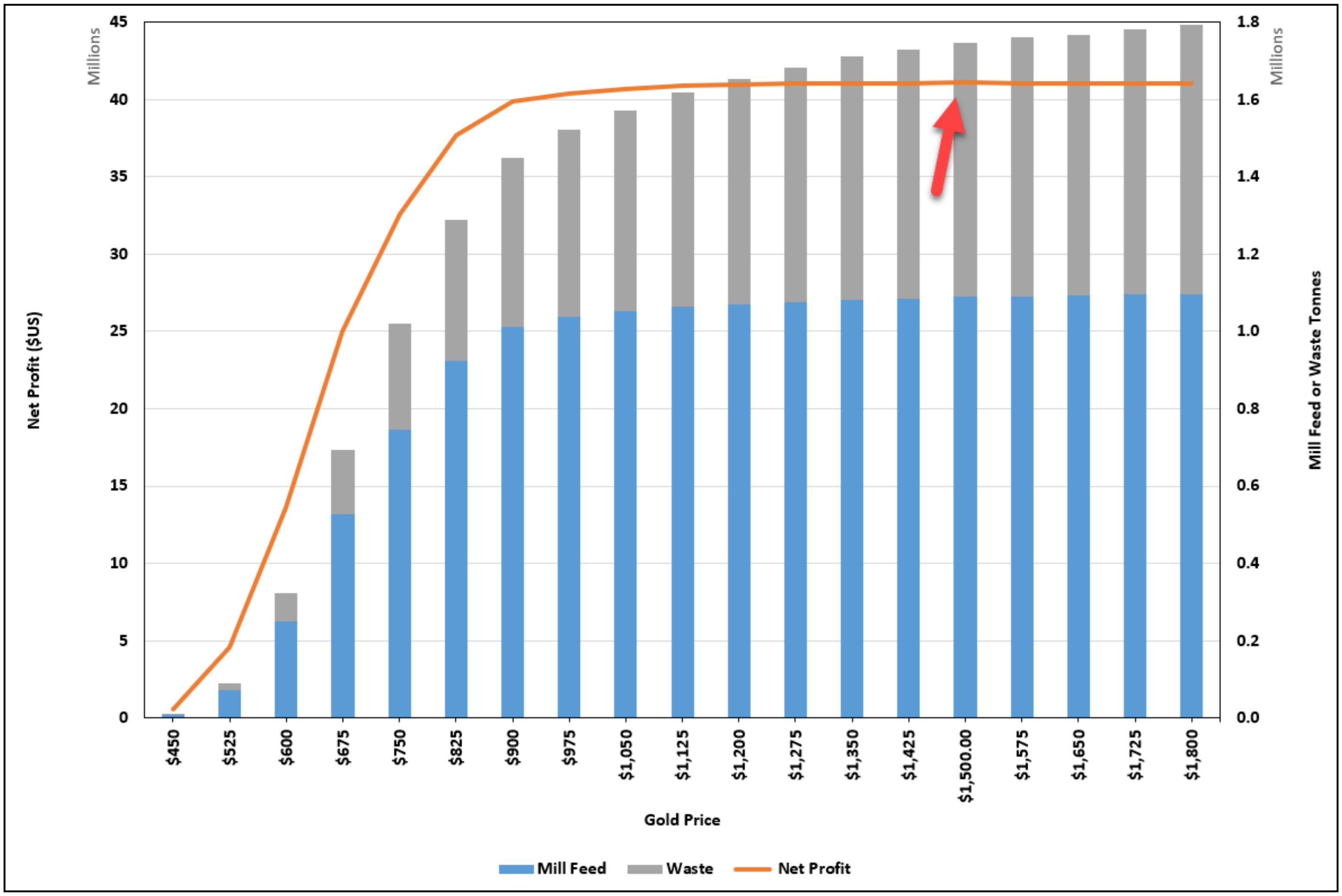
Wall slopes for pit optimization were based on a 45-degree overall slope in absence of other information. This was considered reasonable for the PEA.

Nested Lerch–Grossman (LG) pit shells were generated to examine sensitivity to the various metal prices. Undiluted Measured, Indicated and Inferred material was used in the analysis. The gold price was varied by applying revenue factors (RF) of 0.30 to 1.20 at 0.05 increments, to generate a set of nested LG shells. The chosen set of revenue factors result in a gold price varying from US$450/oz up to US$1800/oz. All other parameters were fixed. The resulting nested pit shells assist in visualizing if any natural breakpoints in the deposit existed. The net profit before capital for each pit was calculated on an undiscounted basis for each pit shell using US$1500/oz Au. No mining limits were used to restrict the pit shells from any infrastructure areas. Mill feed tonnages, waste tonnages and potential net profit were plotted against gold price and are displayed in Figure 16-1.

Figure 16-1 shows a flattening of the curve from a gold price of US$900/oz up to the US$1500/oz base price. From a practical mining perspective, distinguishing the difference in the material along the base of the old tailings would define the final pit so the maximum pit was selected. It should be noted that the waste tonnage shown represents the lower portion of the material within the block mined that is along the contact. It was not anticipated that this would be mined except a small portion as dilution for the mill feed.

The final pit shell selected represented the ultimate pit at RF1.0 (US$1500/oz Au). This mined almost the entire deposit.

Figure 16-1: Net Profit versus Price by Pit Shell (Selected pit with Red Arrow)



Note: Figured prepared by AGP, 2021.

16.5 Dilution

The open pit resource model was provided as an undiluted percentage type model, such that the grades from the wireframes were reported into separate percentage parcels of ore and waste in each block. As this was an old tailings facility, the material was considered to be fairly homogenous with the potential for dilution occurring along the original topography contact rather than internally.

The surface area of the tailings area was determined, and a dilution thickness of 0.15 m assumed for mixing at the contact. The rock density expected for this material was assumed to be 2.0 t/m^3. This results in a dilution tonnage of 46,300 t of dilution over the entire area to be mined. This tonnage applied to the contained tailings tonnage results in an overall increase in mill feed tonnage of 4%. The resulting drop in grade was also 4% as the material was assumed to have no grade.

16.6 Pit Design

The pit design was based on the revenue factor (RF) =1 pit shell. This design mined the blocks contained within the shell. Waste associated with the basal blocks, while included in the design, would be left in the pit at the time of mining. The dilution was manually added to the production schedule to reflect the corresponding change in tonnage and grades.

Ramps within the pit are only needed within the sinking cuts and are sized at 15 metres wide. The pit has access to topography along the edges and the existing roads present work for the haulroads. It is anticipated that due to the shallow nature of the mining small ramps connecting the levels will be pulled in by the excavators or dozed in with the available loose material. Access along the levels will be maintained for haulage to the main road leading to the mill.

The final diluted tonnage and grades are shown in Table 16-5.

Table 16-5: Final Design – Tonnage and Grades (Diluted)

Classification	Mill Feed (t)	Au (g/t)	Ag (g/t)	Cu (%)	As (ppm)	Hg (ppm)
Measured	976,300	1.88	3.07	0.16	1,414	15.6
Indicated	127,000	1.72	2.89	0.17	1,409	17.3
Total Measured & Indicated	1,103,300	1.87	3.05	0.16	1,414	15.8
Inferred	9,500	1.87	3.04	0.16	1,414	15.8

Note: Table prepared by AGP, 2021.

The final pit design is shown in Figure 16-2.

16.7 Production Schedules

The mine schedule delivers 1.1 Mt of material grading 1.87 gpt gold, 3.04 g/t silver, 0.16% copper, 1,400 ppm As and 15.8 ppm mercury to the mill over a 3.25-year mine life. No prestripping is required as the material is present on the surface at grades sufficient for processing. No waste is mined other than dilution which is accounted for. Separation of waste material at the contact of the pit is not expected to be hauled but rather placed to the side when encountered. Therefore, there is no stripping ratio to report.

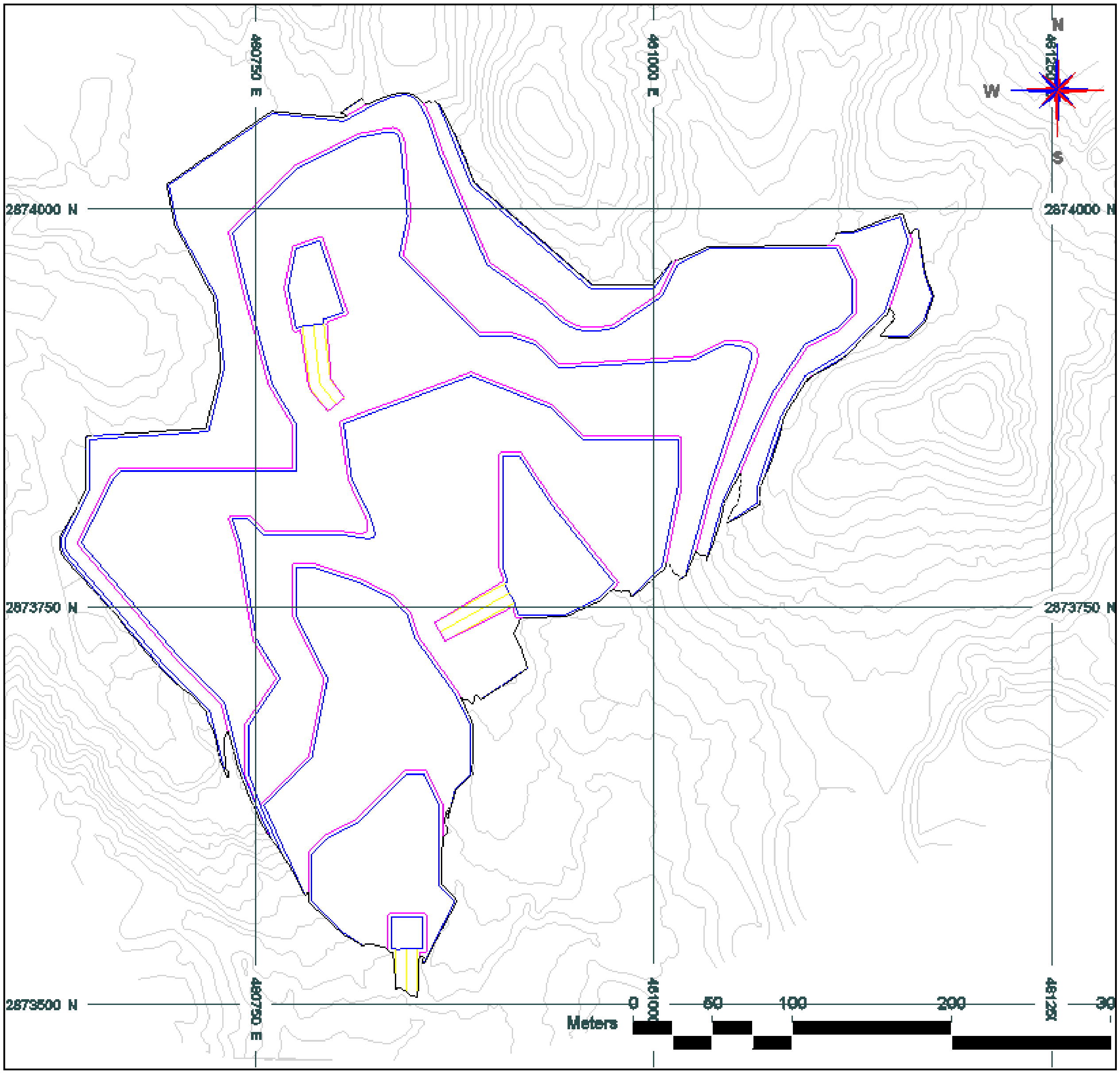
The schedule by year is shown in Table 16-6.

Table 16-6: Annual Production Schedule

Period	Mill Feed (t)	Au (g/t)	Ag (g/t)	Cu (%)	As (ppm)	Hg (ppm)
Year 1	300,000	1.93	3.33	0.16	1,514	14.3
Year 2	360,000	1.86	2.47	0.17	1,400	16.0
Year 3	360,000	1.84	3.25	0.17	1,356	16.7
Year 4	92,800	1.82	3.50	0.17	1,362	16.8
Total	1,112,800	1.87	3.04	0.17	1,414	15.8

Note: Table prepared by AGP, 2021.

Figure 16-2: Final Pit Design

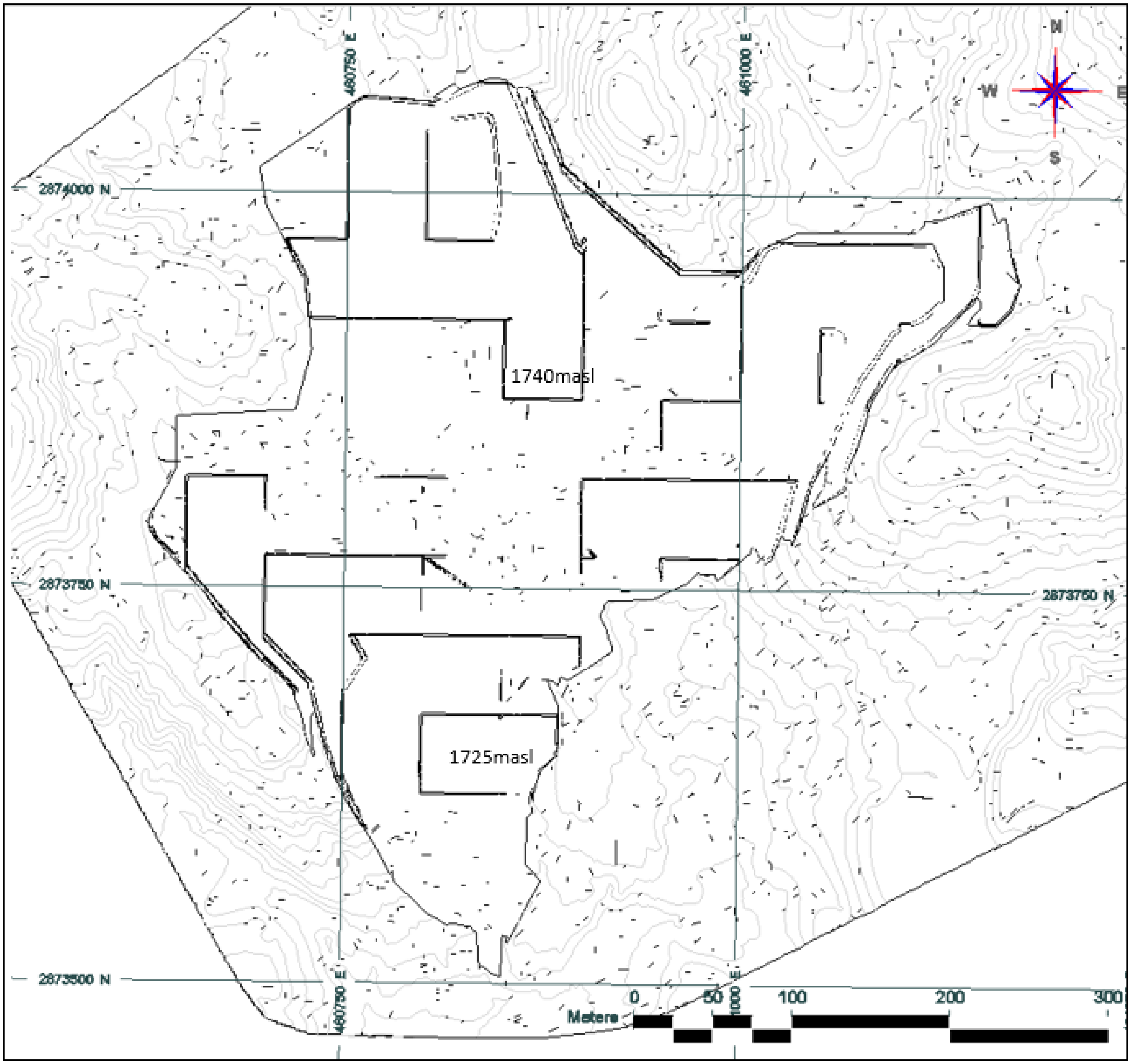


Note: Figured prepared by AGP, 2021.

16.8 Mine Plan Sequence

Mine may commence when the processing facilities are ready. No prestripping of material is required. The initial year of mining is intended to target the higher-grade zones near surface. This is shown in Figure 16-3. This material is located around the edges of the deposit but are predominately in the south, close to the processing facility.

Figure 16-3: End of Year 1

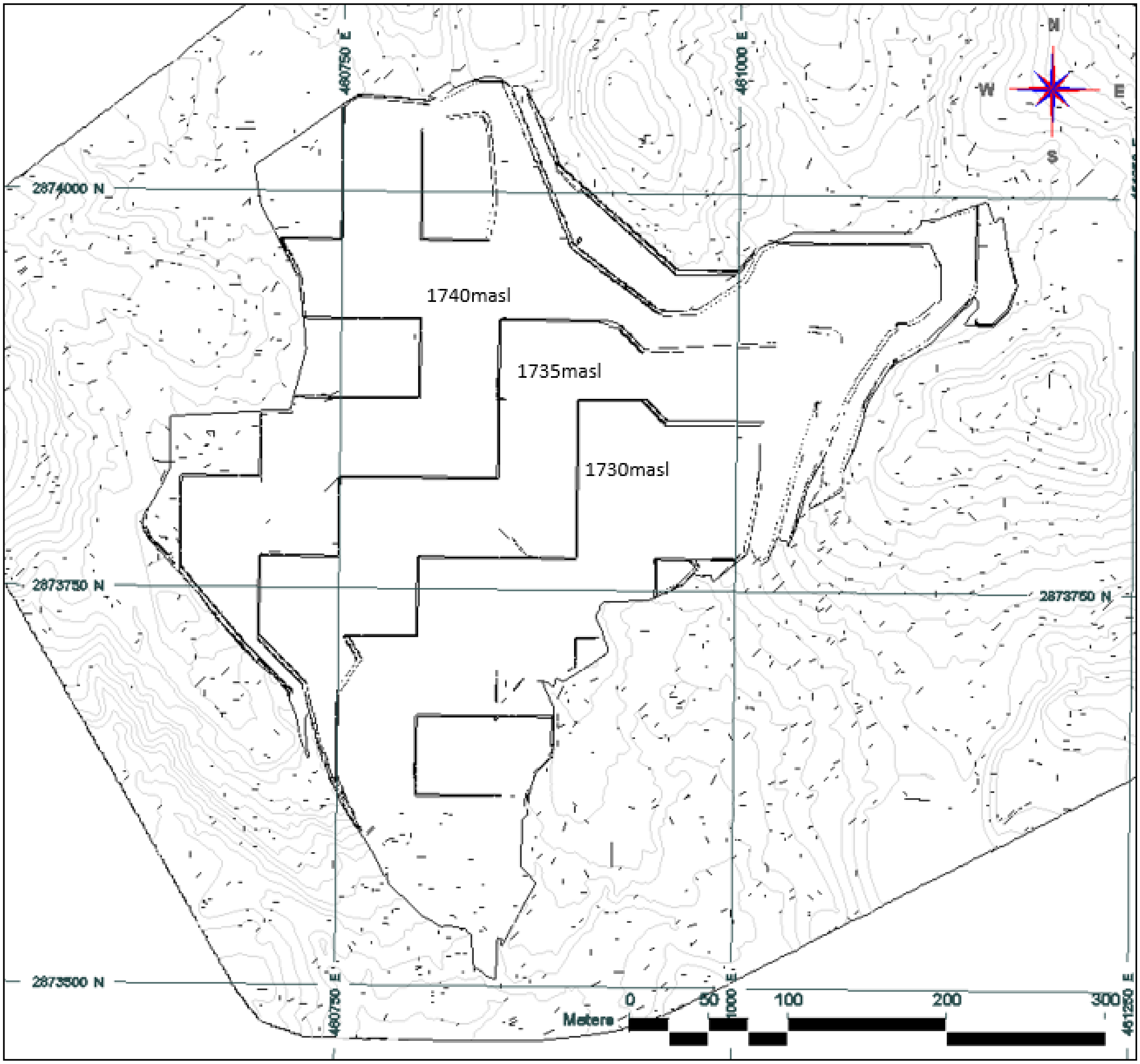


Note: Figured prepared by AGP, 2021.

The second year of production expands to cover almost the entire surface area of the facility as shown in Figure 16-4.

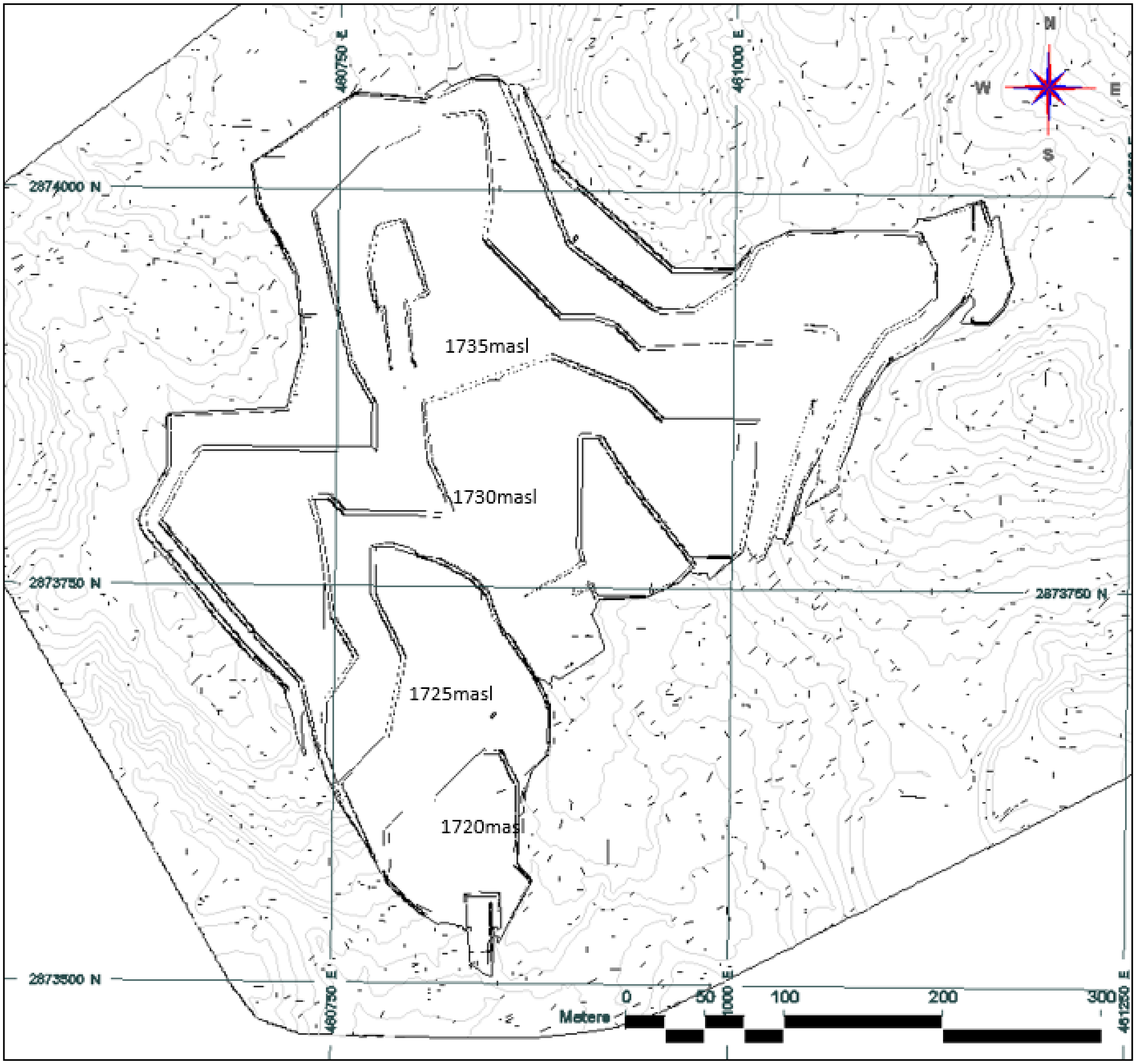
The third year takes the pit to final limits as shown in Figure 16-5. The remainder in Year 4 is the final cleaning of the bench levels and the final sink cuts.

Figure 16-4: End of Year 2



Note: Figured prepared by AGP, 2021.

Figure 16-5: End of Mine Position



Note: Figured prepared by AGP, 2021.

16.9 Mine Operation and Equipment

Mining is planned to be completed with an owner operated fleet for the study with rental equipment. The small-scale nature of the project requires a single excavator with a capacity of 1.75 m^3, plus a backup front-end loader with a 2.5 m^3 bucket. Trucking would be with two 14m^3 capacity trucks with a carrying capacity of 20 tonnes.

Support equipment is comprised of a 264 kW dozer, 128 kW grader and a water truck for dust suppression.

Grade control would be samples collected at the face and in trenches prior to mining to guide the weekly planning for the plant. The mine workforce is expected to be a total of 7 staff and 30 hourly covering production 24 hours per day, 7 days per week.

17 RECOVERY METHODS

17.1 Overview

The project has an existing processing plant consisting of a ball mill, trash screen, four agitated leach tanks, three CCD thickeners, Merrill-Crowe circuit, cyanide destruction agitated tank, various reagent tanks, and material handling equipment. The condition of the equipment was inspected by a local Mexican contractor from SEM-PENTA which is the basis of the equipment identified in this flowsheet. Equipment refurbishment costs have been considered in the estimate based on the assessment report.

Metallurgical testwork was conducted to validate the performance of the existing flowsheet and identify addition of any new equipment to maximize the plant recovery. The modification to the plant considers the throughout of the existing plant and metallurgical test results.

Based on the metallurgical testing results of laboratory testing as discussed in Section 13 and the Magistral existing process plant, a SART plant will be added to treat the Magistral tailings deposit.

The key process plant design criteria are:

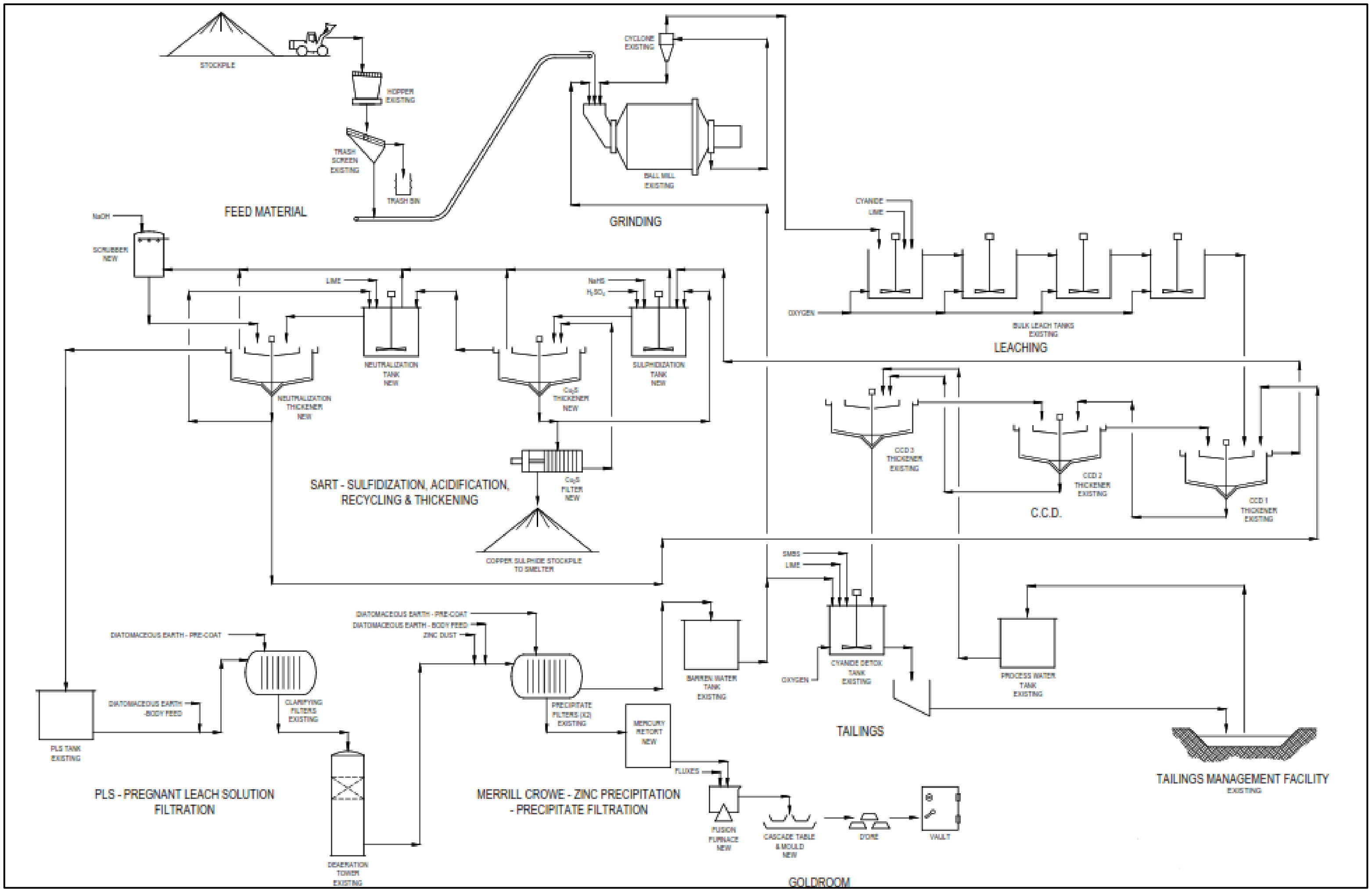
- Major equipment designed for nominal throughput of 1,000 t/d;
- Process flowsheet including grinding, cyanide leaching circuit, CCD, SART, a Merrill-Crowe (MC) circuit, and cyanide destruction, with an overall availability of 95%, given:
    - Design head grades of 1.93 g/t Au and 0.17% Cu;

17.2 Process Flow Sheet

Figure 17-1 presents an overall process flow diagram depicting the proposed major unit operations and Figure 17-2 shows the plant layout. The process plant consists of the following major areas:

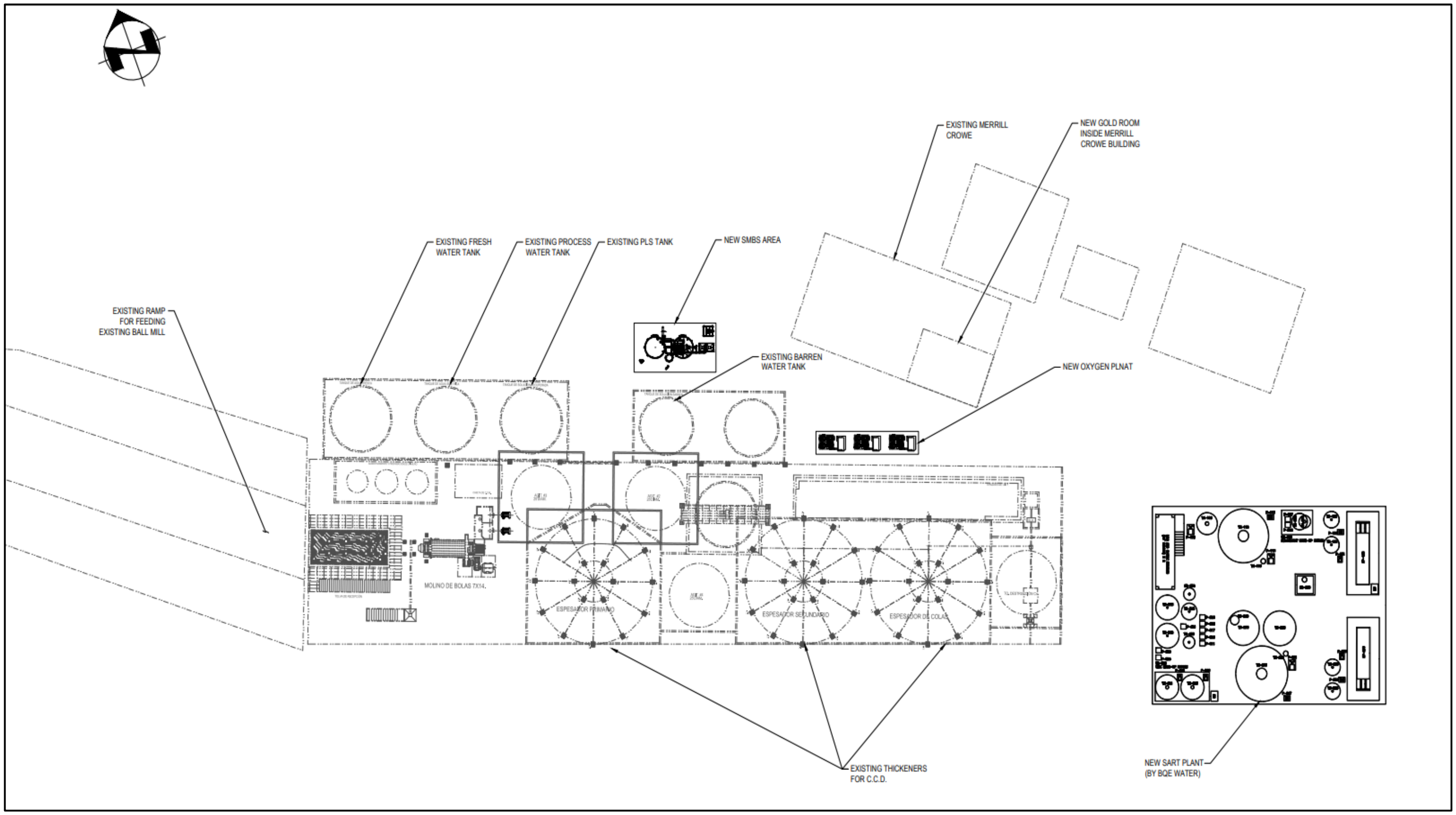
- Grinding;
- Cyanide Leaching Circuit;
- CCD Circuit;
- Sulfidation, Acidification, Recycling and Refinery (SART);
- Merrill-Crowe;
- Cyanide Destruction; and
- Reagent Handling and Storage.

Figure 17-1: Process Flowsheet



Note: Figure prepared by Ausenco, November 2021.

Figure 17-2: Plant Layout



Note: Figure prepared by Ausenco, November 2021.

17.3 Process Plant Design

The key process plant design criteria listed in Table 17-1 form the basis of the process flowsheet design and selection of mechanical equipment.

Table 17-1: Process Design Criteria

Parameter	Units	Value
Plant throughput	t/d	1000
Plant availability	%	95
Hourly rate	t/h	44
Gold grade (average)	g/t	1.87
Silver grade (average)	g/t	3.10
Copper grade (average)	%	0.17
Leach slurry density	%w/w solids	40
Leach residence time	h	16
Leach extraction, Au	%	84.4
Leach extraction, Ag	%	75.2
Leach extraction, Cu	%	53.6
Thickener underflow density	%w/w solids	60
Merrill-Crowe feed volume	m^3/h	112
CCD wash ratio		2.56
CCD wash water	m^3/h	75
Wash efficiency	%	95.7
MC Overall Recovery (Au)	%	71.8
SART Overall Recovery (Cu)	%	46.2
Cyanide consumption	kg/t	1.13
Lime consumption	kg/t	4.59
Zinc consumption	kg/t	0.08
Lead nitrate consumption	kg/t	0.45
Flocculant consumption	kg/t	0.11
SMBS consumption	kg/t	0.747

Note: Table prepared by Ausenco, 2021.

17.4 Process Description

17.4.1 Grinding

An existing ball mill, arranged in closed circuit with a cyclone cluster, was selected to reduce the mineralized material from a nominal F80 of 130 µm to P80 of 90 µm. The ball mill will serve as lump material breaking, repulping and polish grinding.

The grinding circuit will include:

- One ball mill, 2.1 m diameter by 4.5 m length, powered by a 300 kW motor;
- Two slurry pumps to pump ball mill discharge to cyclones, with one pump in operation and one in standby;
- One cyclone cluster; and
- Associated material handling and storage systems (sump pumps, pump box).

The process plant feed material will be reclaimed from a hopper onto a trash screen. The trash screen undersize will report to a ball mill feed conveyor and discharge into the feed chute of the ball mill. The trash screen oversize will report to a trash bin. Process water will be added to the ball mill feed chute and cyclone feed pump box to maintain a target mill discharge slurry solids density. Ball mill discharge will be discharged into the cyclone feed pump box and will be pumped to the cyclone clusters. The cyclone underflow will return to the ball mill feed. The cyclone overflow will report to a leach circuit.

17.4.2 Cyanide Leaching Circuit

The cyclone overflow slurry at a solids density of about 40% w/w will be leached in a cyanide leaching circuit, which will consist of four mechanically-agitated leach tanks operating in series.

The cyanide leaching circuit will include:

- Four 25-ft-diameter x 30-ft-high leaching tanks; and
- Associated material handling (agitators).

Sodium cyanide will be added to the leach circuit for gold, silver, and copper dissolution. Milk of lime will be used to maintain the operating pH of the leach circuit between 10.5 and 11.0.

Oxygen will be introduced into the circuit to maintain the oxygen-to-leach level to a set point dissolved oxygen concentration. The leach circuit will have a 16-hr retention time, equally distributed across the four tanks. Slurry exiting the leach circuit will flow by gravity to the CCD circuit to recover pregnant solution from leached slurry.

The leach circuit will be serviced by a vertical cantilevered centrifugal sump pump, which will return spillage to a nearby leach tank.

17.4.3 CCD Circuit

A three-stage CCD washing circuit will be used to recover pregnant solution from the cyanide leached slurry.

The washing circuit will include:

- Three 50-ft diameter thickeners;
- Associated material handling and storage systems (feed boxes, pumps, sump pumps, pump boxes).

The leached slurry will feed to the first CCD thickener and underflow from the first thickener will be fed to the subsequent CCD thickener. The process will repeat until the solids flow reports to the last CCD thickener (CCD No. 3). The underflow of CCD No. 3 will be pumped to a cyanide destruction circuit as washed tailings. The barren solution from the Merrill-Crowe circuit will be added to CCD No. 3 as process wash water. Overflow solution from the final CCD thickener will flow in a countercurrent mode to the preceding thickener. The overflow from the first CCD thickener will flow to a CCD overflow tank which will feed the SART circuit.

The washing ratio, which is the flow rate of washing barren solution from the Merrill-Crowe plant to the flow rate of liquid in the thickener underflow, will be 2.56:1, in order to achieve an overall CCD washing performance efficiency of 95.7%.

Settling of solids will be aided by the addition of diluted flocculant at each CCD stage.

17.4.4 Sulfidation, Acidification, Recycling and Thickening

The benefit of having a SART process in the cyanidation process is that it breaks the weak Cu and Ag, partially Hg cyanide complexes, precipitates the metals as high-grade sulfide concentrates, and frees the cyanide for recirculation to the leaching process.

The PLS solution from the CCD circuit will be mixed with sodium hydrosulfide (NaHS) and sulfuric acid (H_2SO_4) to decrease the pH between 4–5 to form the final product, Cu_2S concentrate. The Cu_2S precipitation will have a 10-minute retention time reactor. The copper precipitation efficiency under standard process conditions will be between 80% and 95%, and the precipitate will be recovered with a thickener and filter.

The solution will then be neutralized with lime which will convert the HCN cyanide back into the non-volatile sodium cyanide (NaCN) form, while the calcium introduced from lime will combine with sulphate introduced from sulfuric acid to form gypsum solids. The recovered NaCN will then be available for recycle to the gold and silver leaching process.

During the acidification stage, a small amount of cyanide (~ 5% of free CN) will evolve as HCN gas from solution. The headspaces of all vessels comprising the acidification circuit will be connected, maintained under a slightly negative pressure and off-gas vented through a caustic scrubber which will capture HCN and convert it into NaCN, which will then be returned to the leach circuit.

The gypsum precipitation will have a 1-hr retention time, equally distributed between the two reactors. The gypsum sludge will be sent to the CCD thickener, where it will be dewatered along with the tailings, which in return removes the need for a gypsum filter press in the SART plant, consequently reducing capital and operating costs.

The overflow solution from the gypsum thickener will represent the final solution. This solution will have a free cyanide content that will be recycled in the cyanidation leach process.

17.4.5 Merrill-Crowe Precipitation and Refinery

The gold, residual silver and mercury (following SART) will be recovered by zinc cementation. The Merrill-Crowe plant will have a capacity to treat 112 m^3/hr of PLS.

The PLS from the SART plant after copper precipitation will be pumped to a PLS tank. The solution will then be pumped to a clarifying filter in the Merrill-Crowe circuit which will remove suspended solids. The filtered PLS will flow through the deaeration column where oxygen will be removed. Zinc will then be added to the filtered, deaerated solution which will be pumped to the precipitate filters. The precipitate, including precious metals, will be recovered in the filter. Barren solution will flow to a barren solution tank for reuse in the plant.

Precious metal recovery from solution to zinc precipitate will be about 99.5%.

The wet filter cakes from the Merrill-Crowe circuits will be transferred to retort pans, which will then be put into a retort furnace to remove water and mercury. Water and then mercury will be sequentially volatilized from the precipitate by heating the precipitate under a partial vacuum. The exhaust gases will pass through multiple stages of condensers that drain mercury and water to a collection vessel. The last traces of mercury will be removed from the retort gas by a packed bed of sulfur-impregnated carbon before being released to the atmosphere. The retort will be operated in batches. The dried filter cake will be mixed with flux and then transferred to an electric arc furnace where it will be smelted to produce doré.

17.4.6 Cyanide Destruction

The washed leach residue slurry from the CCD circuit will be treated using a sulphur dioxide (SO_2)-O_2 process to reduce the weak acid dissociable (CN_{WAD}) cyanide concentration to <5 mg/L.

The cyanide destruction circuit will include:

- One 8-m-diameter x 8-m-high cyanide destruction reaction tank;
- Associated material handling systems (pumps, pump boxes, sump pumps).

Thickened, washed tailings slurry from the final CCD thickener, with a solids concentration of approximately 60%, will be pumped to the cyanide destruction tanks- and diluted with barren solution from Merrill-Crowe process. In the SO_2–O_2 process, sodium metabisulphite, oxygen, and milk of lime will be added to oxidize residual free and CN_{WAD} to cyanate, thereby reducing the CN_{WAD} concentration to the target level prior to final tailings disposal. No copper addition will be required as the reprocessed material provides sufficient copper to catalyze the reaction. The cyanide destruction circuit will consist of one mechanically-agitated tank, providing a residence time of 2.5 hr by using existing equipment.

Oxygen will be provided from the oxygen plant as required and will be added to the cyanide destruction tank. CN_{WAD} levels of the cyanide destruction discharge will be measured by analysis of regularly collected samples.

The cyanide destruction circuit will be serviced by a dedicated sump pump. Any spillage within this area will be returned to the cyanide destruction feed box

17.4.7 Final Tailings Slurry Transport

The detoxified tailings will be pumped to the TSF.

17.4.8 Reagent Handling and Storage

The mixing and storage area for each reagent will be located proximate to various addition points throughout the plant. Reagents delivered in bulk bags will be moved from storage to the mixing area by forklift. Electric hoists servicing in the reagent area will lift the reagents to the respective reagent bag braker that will be located above the reagent mixing area.

The reagent handling system will include unloading and storage facilities, mixing tanks, stock tanks, transfer pumps, and feeding equipment.

Table 17-2 shows the reagents proposed for the process plant.

Table 17-2: Summary of Reagents Used in the Process Plant

Reagent	Preparation Method	Use
Lime	Slaked and mixed to 20% strength; pumped to a storage tank. Dosed to leaching, neutralization, and cyanide destruction circuits as required	pH control added as required
Sodium Cyanide	Mixed to 23% strength. Dosed using the cyanide metering pump to the cyanide leaching circuit, as well as Merrill-Crowe circuit if required.	Leaching agent
Flocculant	Mixed to 0.25% storing strength; transferred to a storage tank. Dosed directly to CCD washing thickeners with dilution as required	Flocculation of CCD washing thickeners
Sulfuric acid	Dosed neat without dilution to the Cu2S Precipitation reactor	Acidification agent
Sodium hydrosulfide	Mixed to about 43% solution strength. Dosed to the Cu_2S Precipitation reactor	Sulphidation agent
Diatomaceous Earth	Mixed to about 5% solution strength. Dosed to the clarifier and precipitate filters in Merrill-Crowe circuit	Precoat and body feed in Merrill-Crowe circuit
Zinc Powder	Dosed to Zn mixing cone through a feeder at specific rate in Merrill-Crowe circuit	Precipitation regent
Sodium Metabisulfite	Mixed to 15% strength; transferred to a storage tank. Dosed to the cyanide destruction circuit.	Reactant in the cyanide destruction process
Antiscalant	Dosed neat without dilution to barren solution tank and process water tank	To minimize scale buildup
Flux	Mixed with calcined charges for smelting	Fusion agent

Note: Table prepared by Ausenco, 2021.

17.5 Plant Services

17.5.1 Fresh Water, Process Water

Fresh water from the old pit or the well, will be used for the following:

- Reagent mixing and preparation;
- Gland water.

Wherever possible in the process plant, process water or barren solution will be used to minimize fresh water consumption. The total fresh water requirement for the plant will be 16.9 m^3/hr.

17.5.2 Process Water

Process water will consist of reclaimed water from TSF return water and will be recycled to the process plant.

Barren solution from the Merrill-Crowe circuit will be stored in a barren solution tank and recycled to the CCD circuit as wash water. The excess barren solution will report to the cyanide destruction tank.

17.5.3 Oxygen Plant

The oxygen plant will generate oxygen using vacuum swing adsorption (VSA) technology. Oxygen will be produced at 93% purity at 100 psig (6.8 barg).

Oxygen will be used for the following:

- Cyanide leaching circuit; and
- Cyanide destruction circuit.

The total oxygen required for the plant will be about 1.23 t/d.

17.5.4 Electrical Power

The total peak operating load for the project will be 1.7 MW. Power will be supplied to site from the regional grid, as described in Section 18.

17.5.5 Sampling and Quality Control

A metallurgical and assay laboratory will be provided to conduct daily assays for quality control and optimize process performance. The assay laboratory will be equipped with the necessary analytical instruments to provide all the routine assays. The metallurgical laboratory will undertake all basic test work to monitor metallurgical performance and to improve the process flowsheet and efficiencies.

18 PROJECT INFRASTRUCTURE

18.1 Introduction

Project access is via a paved road approximately 5 km north of the village of Santa María del Oro (see also discussion in Section 5).

The village of Magistral del Oro, with a population of less than 100, is located immediately adjacent and to the south of Magistral tailings deposit and the process plant. The city of Santa María del Oro is located about 5 km to the south of the deposit and plant and has a population of approximately 5,200. In the 2011–2014 period up to 120 persons were employed at the processing plant, almost all of whom lived within a few kilometres of the project, including many native inhabitants of the local ejido. Figure 18-1 shows the site map of Magistral project. It shows the existing facilities and infrastructure on site.

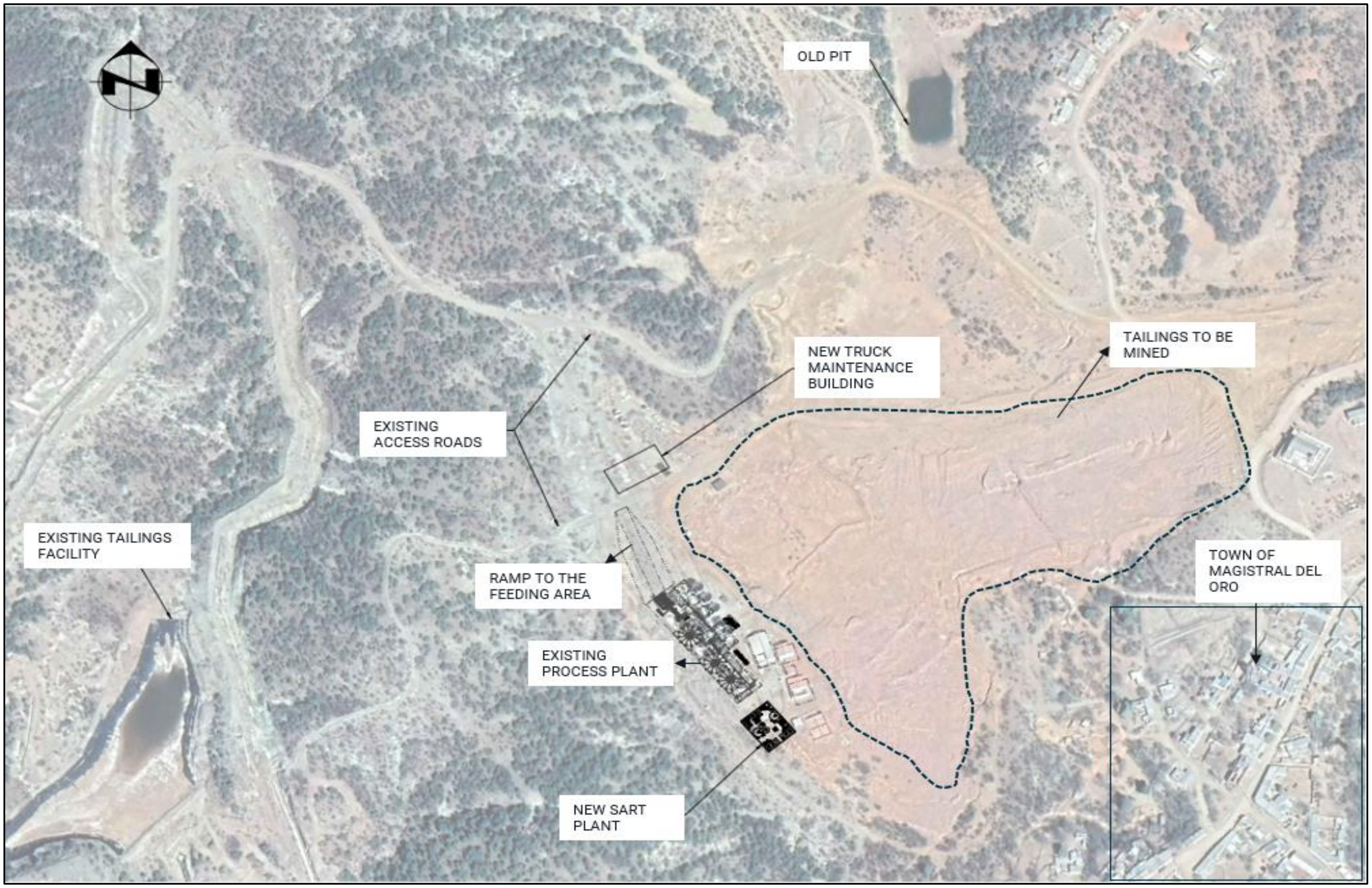
Figure 18-1: Site Map of Magistral Project

Note: Ausenco, 2021.

The mine site infrastructure uses existing infrastructure on site and new infrastructure to support the operations. The new areas would be the SART and oxygen plant, sodium metabisulfite (SMBS) area, refinery and gold room, static screen, and conveyor. The existing areas would be leaching and CCD area, Merrill-Crowe, tailings and water management facilities, truck shop, maintenance facilities, offices, service roads, and utilities. The majority the equipment and supplies will be trucked in from the city of Durango, Parral, or Chihuahua.

Figure 18-2 provides an overview of the Magistral Project site. The new areas are highlighted in dark in the figure.

Figure 18-2: Project Site Plan



Note: Figure prepared by Ausenco, 2021.

18.2 Power

Santa Marta del Oro and Magistral del Oro are connected to the national electrical grid. The Project is set up for 1200 kVA service for the processing plant on site and has a backup transformer to provide additional supply of 500 kVA. The site power requirement during peak production is estimated to be 1.7MW for operation of the project, for which Tarachi will be submitting an application to CFE. A unit power cost of US$0.10 per kWh is considered in this study.

18.3 Site Earthworks

The site does not require major earthworks as it is a fully functional site with existing access roads and onsite roads. Earthworks includes expansion of the existing ramp to safely backup trucks or the front-end loader to the feed hopper. Other site earthwork includes preparation of land for construction of the new SART plant, mine truck shop and SMBS area.

18.4 Buildings

The project site experiences dry weather for the majority of the year and does not require buildings to protect the process plant. The site has existing buildings for Merrill-Crowe equipment which will also house the gold room. There are existing buildings for admin office, plant workshop and laboratory. A pre-engineered new gate house, a modular building for the SART plant concentrate, and a prefabricated truck workshop will be built.

18.5 Water

Fresh water is available from the shaft of the original Magistral del Oro mine or existing well, as well as recirculated water from the existing tailings pond. The freshwater requirement is 16.87 m^3/hr.

18.6 Camps

There will be no accommodation camps on site as the project site is located very close to the town of Magistral del Oro. All employees, contractors, vendor representatives and labour during construction and operation will be residing in the town hotels.

18.7 Fuel

Fuel to the site is provided by the mining contractor which will be stored in tanks. The fuel consumption and costs are accounted in the mining operating cost.

18.8 Potable Water

Potable water is sourced from an existing pipeline connected to the local town supply system and stored in a tank for distribution at the project site.

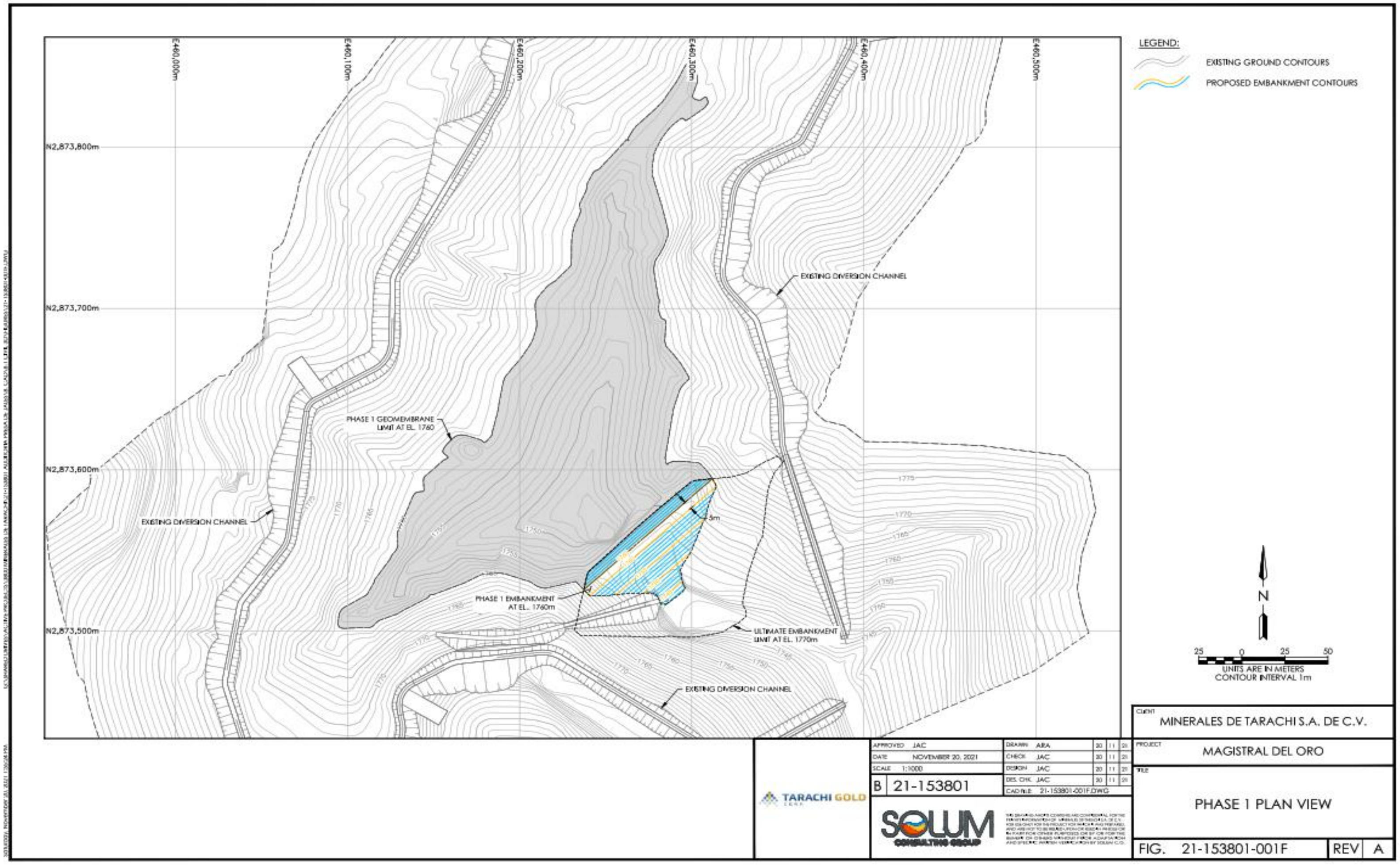
18.9 Tailing Storage Facilities

Solum Consulting Group developed a conceptual design for the tailings storage facility (TSF) based on the available information to date. The project site has an existing TSF located west of the process plant and the tailings to be mined as shown in Figure 18-2. Solum Consulting Group developed a conceptual design for expansion of the existing tailings storage facility (TSF) based on the available information to date.

The major components of this design are shown in Figure 18-3.

The TSF design is based on previous project experience, Project information and in general is in accordance with the Official Mexican Standard NOM-141-SEMARNAT-2003 (SEMARNAT, 2003), which outlines the design requirements for TSFs in Mexico.

Figure 18-3: TSF Plan View



Note: Figure prepared by Solum Consulting Group, 2021.

18.9.1 Design Criteria

A summary of the assumed design criteria for the Magistral del Oro TSF is provided below in Table 18-1.

Table 18-1: Conceptual Design Criteria for the TSF

Design Parameter	
Total Tailings Tonnage Storage*	0.91 million tonnes
Days of Active Operation per Year	335 days
Proposed Tons per Day	1,000
Design Life of TSF	2.75 years
Engineering Properties of Tailings	
Tailings Density	1.4 tonnes/m^3
Solid-to-Water Ratio (by wt.)	~50 %
Phase 1 Tailings Tonnage Storage	0.19 million tonnes
Design Life of Mine	3.85 years

Note: Table prepared by Solum Consulting Group, 2021.
*Total estimated available tailings available for reprocessing is more than current ultimate TSF design capacity

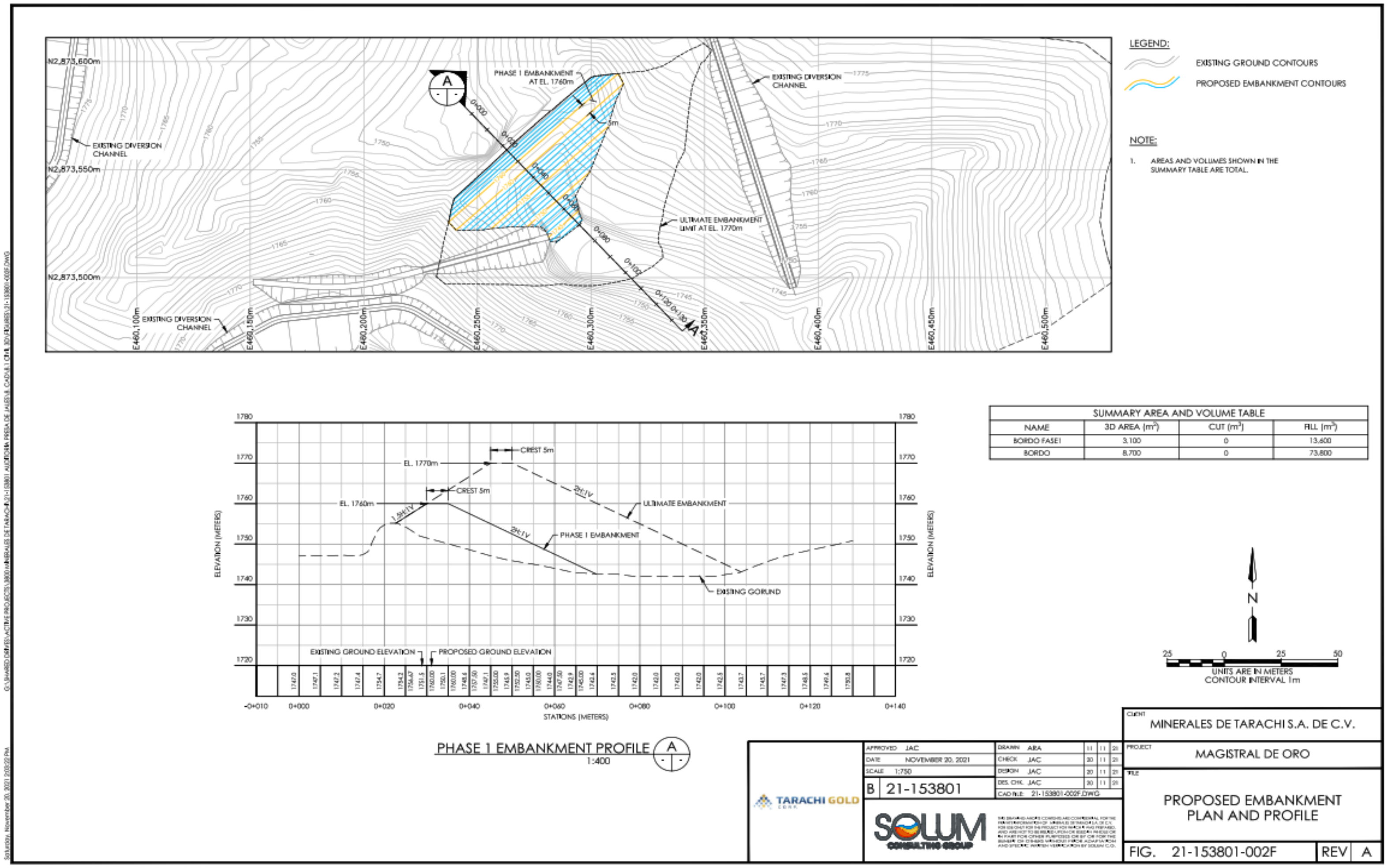
18.9.2 Staged Development Construction Option

Solum assembled a set of costs for development of a full-capacity TSF under a staged scenario that includes embankment construction of an initial raise to elevation 1760 m (Phase 1), which greatly reduces initial capital cost while accommodating storage of full production tailings for approximately the first 6–8 months of plant operations.

The structural fill material used to construct the Phase 1 dam is assumed to come from a borrow material within the tailings impoundment. Potential borrow source areas have not been identified for this level of study but it was assumed that adequate material exists in the vicinity and can easily be procured. The borrow source locations and availability can be further developed during the feasibility level design phase. The primary borrow source within the TSF limits is assumed to provide enough material that is rippable for the Phase 1 dam. It is assumed for costing purposes that all required fill for the construction of the embankment can be obtained without explosives.

The footprint of the Phase 1 dam is to be cleared of vegetation and stripped of topsoil and debris, scarified, moisture conditioned, and compacted. The footprint of the embankment goes beyond the existing water collection pond located just downstream of the existing TSF. No costs are included for the removal of non-organic material (i.e., geosynthetics) or any environmental requirements. Topsoil may be salvaged for use in concurrent TSF reclamation. A typical cross-section of the proposed TSF embankment is shown on Figure 18-4.

Figure 18-4: TSF Embankment Plan and Profile



Source: Figure prepared by Solum Consulting Group, 2021.

18.9.3 Full-Capacity TSF Construction Option

Solum assumed a single embankment raise from the initial Phase 1 to the ultimate elevation of 1770 m based on the most current topography. The ultimate elevation of 1772 m as proposed in the original design could not be done as the constructed diversion channel outlet is at 1770 m.

The structural fill material used to construct the dam is assumed to come from a local source of not more than 1 km in distance. The primary borrow material for fill is to be obtained from within the tailings impoundment. Additional required material is to be from existing site materials such as waste from the development of nearby borrow sources. The primary borrow source within the TSF limits likely does not provide enough material that is rippable for the ultimate dam and a secondary borrow source will need to be developed during the construction of the dam. It is assumed for costing purposes all required fill for the construction of the embankment can be obtained without explosives.

18.9.4 Diversion Channels

Surface water controls will include diversion channels upgradient of the tailings diverting water away from the facility. Non-contact water will be diverted from the facility into an existing drainage downstream of the facility so as not to negatively impact the embankment and tailings surface. Diversion channels shall meet both operational and closure regulatory requirements set forth by the National Water Commission (CONAGUA). The current facility has two main diversion channels constructed at the final elevation of the TSF (1770 m). Solum assumes the existing channels meet regulatory requirements and only the channel outlets will require construction. The final phase (ultimate) includes any modification of the diversion channels to its final configuration to meet closure design criteria at the top of the facility.

18.9.5 Closure Conditions

Closure and reclamation costs will include the final exterior grading of the tailings facility to its final overall slope and placement of a 1-m-compacted rockfill cover for erosion control. A capping will be incorporated over the rock fill with organic soil amended for revegetation. The capping shall be designed so that there is minimal infiltration into the tailings and water is to runoff the facility.

18.10 Hydrology

The following sections briefly describe available climate data, hydrometric data, water management structures, and catchment delineations for the project site.

18.10.1 Climate and Meteorology

The climate at the project site is discussed in Section 5.2.

The climate stations close to the Project site (within a 100 km distance) and with sufficient minimum data history (30 years) are San Bernardo, Santa María del Oro, and El Mirador. Table 18-2 provides a brief description of the geographical location of the climate stations close to the Project site and their data history period.

Table 18-2: Climate Stations Close to the Magistral Site

Station Name	Station ID	Distance to site (Km)	Elevation (m)	Lat	Lon	First Year	Last Year
San Bernardo	10138	13.7	1,640	26°00'16" N	105°31'36" W	1977	2018
Santa María del Oro	10075	4.1	1,700	25°57'12" N	105°22'00" W	1967	2009
El Mirador	10144	41.2	1,880	26°07'36" N	105°01'06" W	1979	2006

Note: Table prepared by Hemmera, 2021

18.11 Water Management

18.11.1 Water Management Systems

The primary water management systems and components will include:

- Diversion ditches;
- Collection ditches; and
- Collection ponds.

18.11.1.1 Diversion Ditches

Diversion ditches will be required to divert clean runoff away from the facilities and to minimize the amount of contact runoff to be collected and managed. The design criteria for the diversion ditches was the conveyance of 1:25-year peak flow without overflow.

18.11.1.2 Collection Ditches

Collection ditches will collect contact runoff from the mining area, process plant, and temporary stockpile that will not be diverted by the diversion ditches. The design criteria for the collection ditches was the conveyance of 1:100-year peak flow without overflow.

18.11.1.3 Collection Ponds

Collection ponds were proposed to store contact runoff from the collection ditches. The stored contact water should be either treated and released to the environment or reused for process purposes. The collection ponds' design criteria were to store 1:100-year 24 hr flood with a minimum freeboard of 0.5 m.

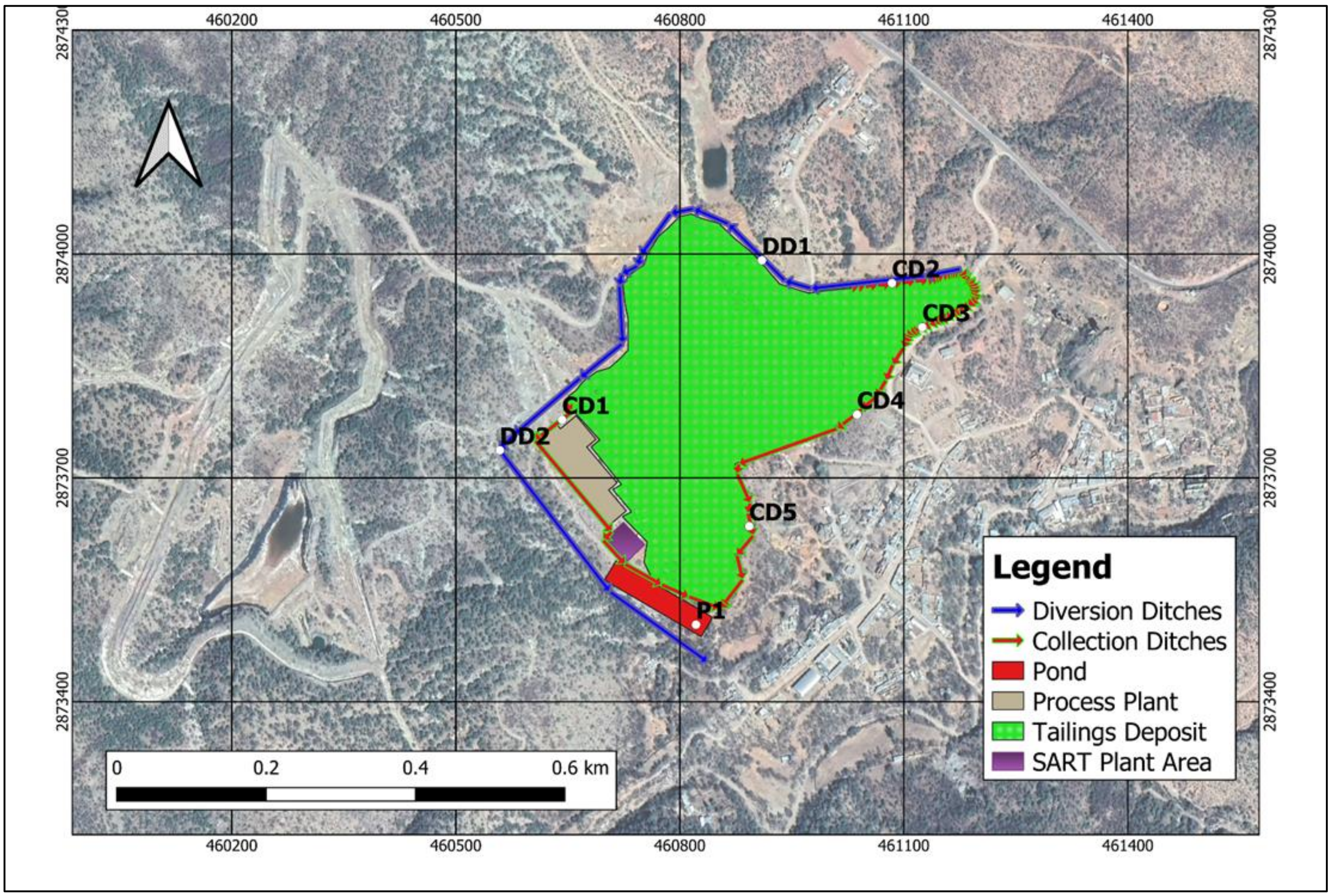
A high-level estimate of excavation volumes was also completed using the proposed geometries of the structures and elevation profile along the alignment of channels and ditches.

18.11.2 Conceptual Design and Quantity Estimates

The water management structures consider the tailings deposit, process plant and SART plant area.

Figure 18-5 shows the proposed alignments for the diversion ditches, collection ditches, and collection pond. Two diversion ditches with a total length of ~1,249 m were designed (blue lines in) to divert the clean runoff approaching the tailings deposit and process plant areas. In addition to diversion ditches, a collection system, including two collection ditches was designed to manage contact water from the tailings deposit area. The collected contact water will be retained in a collection pond.

Figure 18-5: Water Management Structures



Note: Figure prepared by Hemmera, 2021.

A summary of the estimated excavation volumes (class D), liner, and riprap materials for the water management structures is provided in Table 18-3. It also summarizes the total volumes for constructing the water management structures, with the total excavation works being 15,384, 9,787, and 6,414 m^3 in Year 1, 2, and 3, respectively.

Table 18-3: Summary of Excavation Estimates for Water Management Structures

Item	Year1				Year2				Year3			
	Excavation Volume (m^3)	Fill Volume (m^3)	Liner Area (m^2)	Riprap Volume (m^3)	Excavation Volume (m^3)	Fill Volume (m^3)	Liner Area (m^2)	Riprap Volume (m^3)	Excavation Volume (m^3)	Fill Volume (m^3)	Liner Area (m^2)	Riprap Volume (m^3)
Diversion Ditches	6,399	8,015	N/A	2,146	2,742	415	N/A	N/A	-	-	-	-
Collection Ditches	1,108	999	1,894	N/A	287	391	546	54	331	436	852	-
Collection Ponds	4,800	N/A	1,884	N/A	4,800	N/A	1,884	N/A	4,800	N/A	1,884	-
TOTAL	**12,307**	**9,014**	**3,778**	**2,146**	**7,830**	**806**	**2,430**	**54**	**5,131**	**436**	**2,736**	**-**

Note: Table prepared by Hemmera, 2021

19 MARKET STUDIES AND CONTRACTS

It was assumed in the 2021 PEA that the Magistral Project will produce gold in the form of doré bars from the Merrill Crowe and copper in the form of sulphide precipitate along with silver from the SART plant. The market for doré is well established and accessible to new producers. The doré bars will be processed in precious metal refineries and concentrates will be smelted in certified North American refineries and smelters. The copper concentrate along with silver will be sold in the spot market.

19.1 Market Studies

No market study has been conducted by Tarachi or its consultants on the sale of copper concentrate, and gold doré. The market terms for this study are based on the terms proposed by Tarachi as per their discussion with Ocean Partners as well as recently published terms from other similar studies. The QP is of the opinion that the marketing and commodity price information is suitable to be used in cashflow analyses to support this report.

19.2 Commodity Price Projections

For this Report, a gold price of US$1,600/oz, a silver price of US$22/oz, and a copper price of US$3.4/lb was assumed and a US$:C$ exchange rate of 1.00:1.28 was used. The smelter and refinery terms assumed for the 2021 PEA are shown in Table 19-1.

Table 19-1: Smelter and Refinery Terms

Item		Units	Value
Metal Payable	Copper (SART) (Deduction from the concentrate grade)	%	3.0
	Gold (SART) (For concentrate gold grade over 1kg Au/mt)	%	96.0
	Gold (SART) (For concentrate gold grade under 1kg Au/mt)	%	95.0
	Gold (Merrill-Crowe)	%	99.5
Treatment Smelting and Refining Terms	Gold Treatment Charges	$/dmt	1,500
	Gold Doré Refining Charges	$/oz	15
	Copper Concentrate Refining Charges	$/kg	0.9
	Silver Concentrate Refining Charges	$/oz	1.5
	Doré Refining Charges	$/oz	4.4
Penalty	per 0.01% of Mercury in a dmt	$	35.0
Transportation		$/wmt	150.0

Note: dmt = dry metric tonne; wmt = wet metric tonne. Table prepared by Tarachi, 2021.

19.3 Contracts

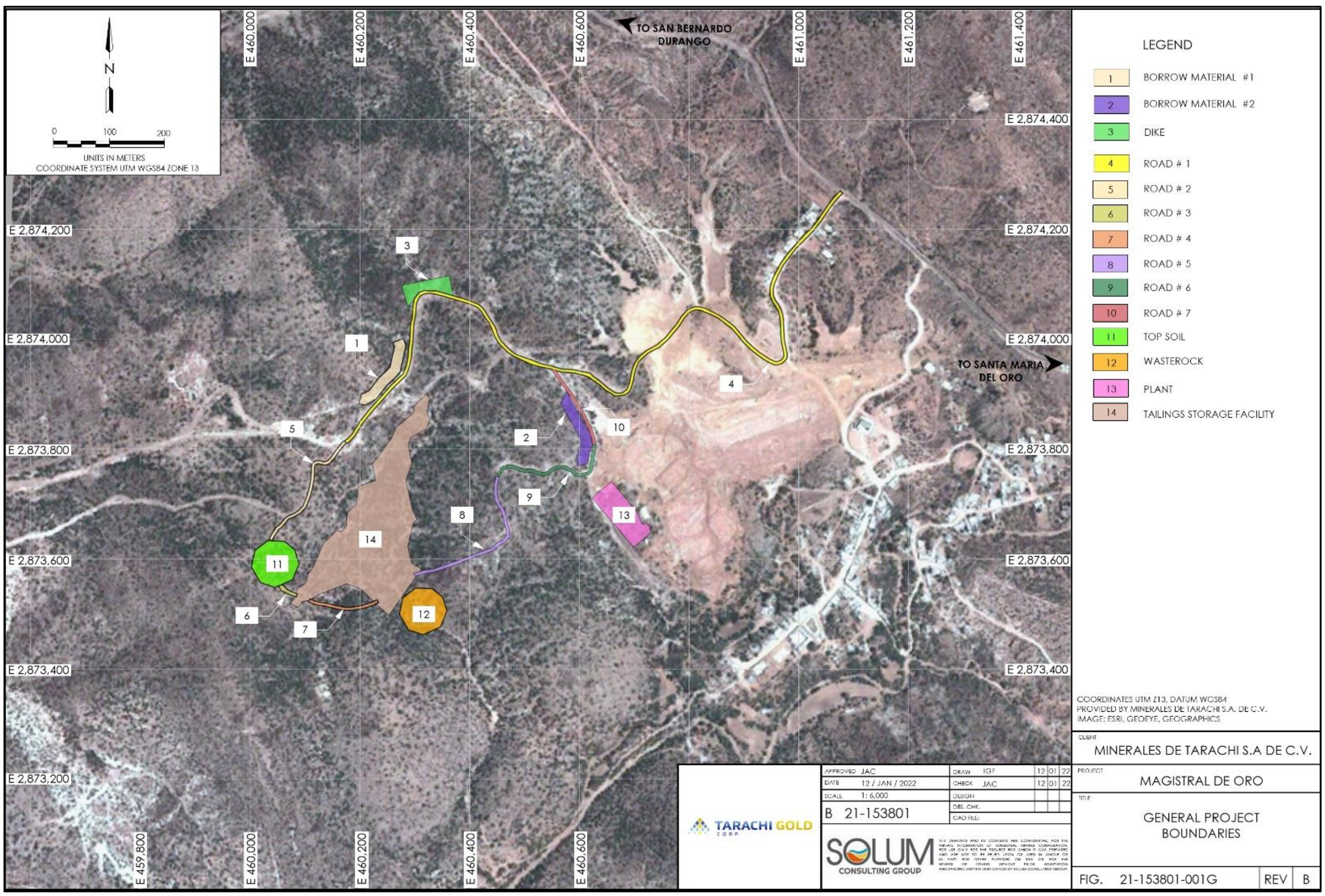
There are no existing refining agreements or sales contracts in place for the Project that are relevant to this Report.

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 History and Background

The historical plant operations that produced the existing tailings deposit were last active in 1960. Plant operations included cyanide leaching and production of doré by means of a Merrill-Crowe process. The Project area that comprises the historical facilities and tailings deposits (Figure 20-1) is located within approximately 8.43 ha of land owned by the Ejido, as authorized under an approved MIA. Approximately 7.8 ha of this total area required additional authorization under the terms of a Change in Land Use for Forestal Land (CUSTF) permit, supported by a Technical Justification Study.

Figure 20-1: General Project Boundaries



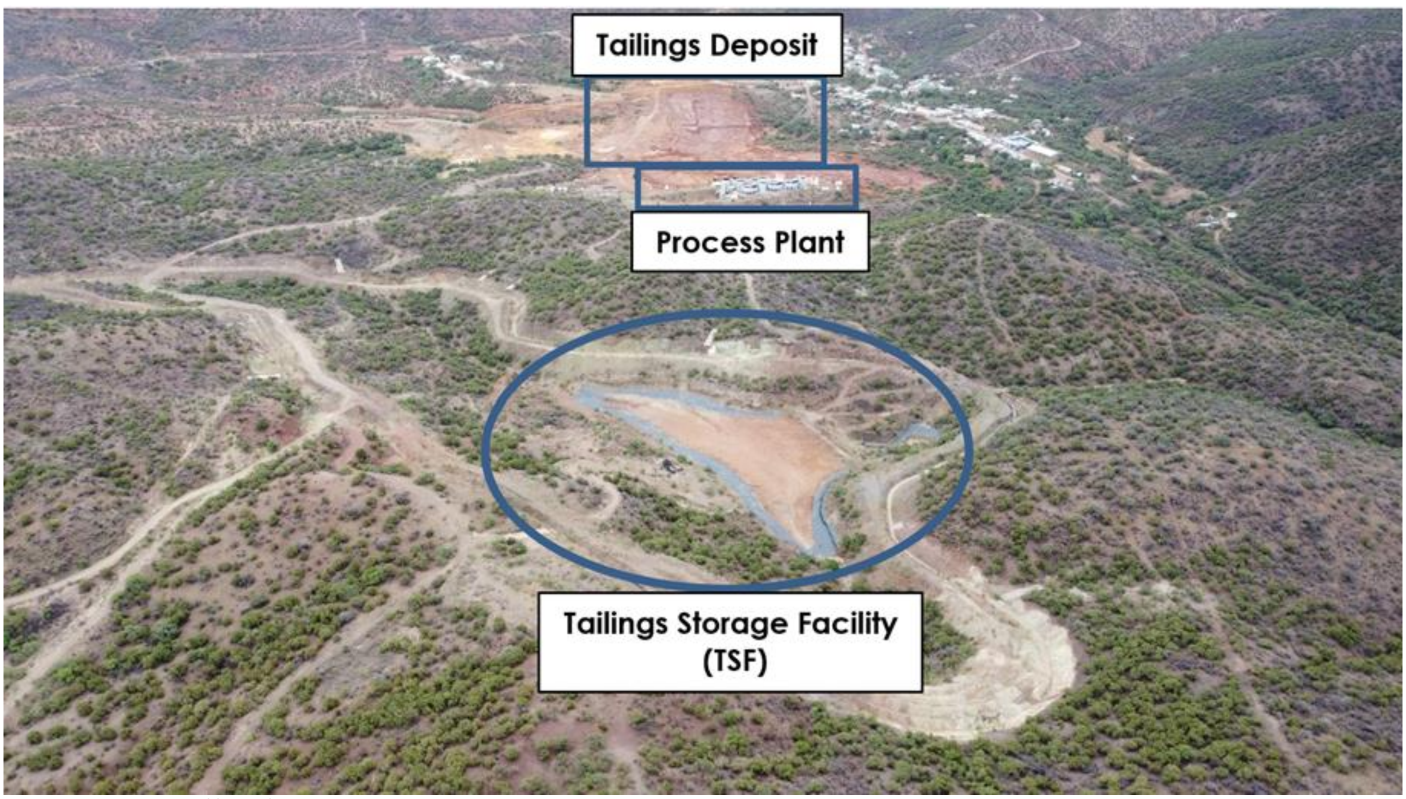
Note: Solum Consulting, 2021.

Mexico's General Law of Ecologic Balance and Environment Protection (LGEEPA) provides the legal framework for activities on forest land and/or exploration and exploitation of mineral deposits and related activities. Under the terms of an Environmental Impact Assessment, this requires prior authorization from Mexico's SEMARNAT.

The major Project objective is to refurbish and upgrade the existing facilities as necessary to bring them into fully operational, safe, and environmentally compliant conditions to facilitate re-mining and processing of the existing tailings. Based on the composition of the historic tailings, the original mineralization source was most likely from the Colorados veins that comprise parts of the Recompensa, Los Angeles and Santa Ana deposits. The main residual metals in the tailings deposit include gold, silver, and copper. As an integral part of the Project advancement, supporting environmental and social/community impact studies will be undertaken to ensure compliance with all federal, state, and local environmental standards.

The Project area consists of three main areas as shown in Figure 20-2.

Figure 20-2: Aerial View of the Project Site



Note: Figure prepared by Solum, 2021

Reprocessing the Magistral tailings was initiated under prior ownership in February 2014. Those operations were halted in August 2014 due to a storm event that caused the stormwater pond to overflow into the downstream creek. Due to this breach, the operation was sanctioned by the Federal Attorney for Environmental Protection (PROFEPA) on 07 August 2014. Based on the findings of an investigation of the breach event, CONAGUA requested the construction of diversion channels with a closure spillway before operations could resume. Construction of the diversion channels has since been completed, and the closure spillways have been partially completed.

20.2 Environmental and Socioeconomic Setting

The following subsections present the environmental and socioeconomic setting for the Project.

20.2.1 Physical Environment

The physical environment at Magistral is discussed in this section which includes climate, air, surface hydrology, groundwater and soil (García, 1988).

20.2.1.1 Climate

The climate setting is discussed in Section 5 and Section 18.

20.2.1.2 Air

The overall atmospheric quality in the region is good as there are no sources of significant fixed or mobile pollution (combustion gases, dust emissions and noise). Tarachi will implement a road watering program for dirt roads to minimize dust emissions.

20.2.1.3 Surface Hydrology

The Project is located in Hydrological Region No.36 (Sinaloa) RH36, Basin C (Nazas-Aguanaval), Sub-basin C (Rio del Oro (River or Sextín River) (RH36Cc). There are no permanent water bodies in the Project area or vicinity. The Arroyo Magistral, which is an ephemeral stream, is approximately 300 m away from the Project site, where the most significant runoff occurs in the rainy season.

The municipality covers 3,458.8 km^2, which represents 2.9% of the state's surface. The topography consists of various forest lands, low mountain ranges and hills, as well as flood plains in the valleys of the Sextín and Ramos Rivers.

Two rivers pass through the municipality of Rio del Oro; the Sextín River, which enters the town of Cazuelas and ends at the Lázaro Cárdenas dam, and the Ramos River, whose tributaries are born in the mountains, specifically in the municipality of Potrero de Campa, passing through various points in the municipality, and ending at the Lázaro Cárdenas dam.

The Nazas-Aguanaval hydrological region covers part of the states of Durango, Zacatecas, and Coahuila. Surface waters originate from the Nazas and Aguanaval Rivers, with the latter river supplying the largest proportion of water to the basin. The Nazas River is formed from the confluence of the Sixtín River and the Ramos River, while the Aguanaval River is the result of the union of the Saín Alto and Trujillo Rivers.

20.2.1.4 Groundwater

The groundwater flows in a N–SE direction. The water is fresh and there are free-type aquifers that have their origin in the valley fill materials. The water is used mostly for agriculture and domestic consumption.

In the southwest portion of the Project area, consolidated material hydrogeological units have high potential to be aquifers. In the northeast and southeast areas, there is consolidated material that has with low aquifer potential. In the northwest portion there are unconsolidated material hydrogeological units with low aquifer potential.

20.2.1.5 Soil

Soil compositions include fluvisol, luvisol and feozem types. Land uses include livestock grazing, agriculture, forestry and urban areas.

20.2.2 Biological Environment

The Project is not located within a priority attention area, such as an historical site, archaeological zone, community or area of indigenous importance, wetland, biological corridor, area of interest for the conservation of biodiversity, or restricted forest use zone.

The land on which the Magistral Project is located is not within an area decreed by the National Forestry Commission (CONAFOR), Priority Terrestrial Region (RTP), nor is it located within an Area of Importance for the Conservation of Birds (AICA), Priority Marine Region (RMP) or Protected Natural Area (ANP) or at the federal, state or municipal level (Leopold, 1987).

20.2.2.1 Flora

Vegetation at the Project site, as determined by the National Institution of Statistics, Geography and Informatics (INEGI), is typical of juniperus forest, oak forest and natural grassland. There are also areas with seasonal agriculture, where corn, oats, wheat, sorghum and beans are grown.

No flora species included in the Official Mexican Standards NOM-059-SEMARNAT-2010 were observed in the Project area. However, slow-growing species were detected within the Project site, such as chilito biznaga (*Mammilaria heyderii*), rainbow biznaga (*Echinocereus pectinatus*) and egg bull (*Echinocactus texensis*).

20.2.2.2 Fauna

The Project site is currently impacted due to anthropogenic activities (livestock, agriculture, mining, and human settlement) with a low variety of fauna and wildlife due in part to the closeness of the settlement as well as other livestock activities. These factors have forced wildlife to travel to other areas with less impact; however, there have been reports of representative species at the Project site. The following species have been identified: coyote, rabbit, jackrabbit, white tail deer, squirrel, badger, racoon, bobcat, wild boar, gopher, and maguey bat. Bird species that have been identified include vulture, aura, owl, roadrunner, pigeon, chestnut woodpecker, and tildium. Reptiles noted include tortoise, lizard, rattlesnake, and garter snake.

20.2.2.3 Landscape

Based on the type, characteristics, distribution, uniformity, and continuity of the environmental units (ecosystems) it can be observed that these are stable and, although they have been somehow disturbed by anthropogenic activity; they retain their specific distribution and uniformity regarding the structure of the system.

20.3 Social or Community Setting

The area has a long mining history, and the local population is familiar with mining operations. The local unemployment rate is high. The proposed operation is adjacent to the small village of Magistral. Skilled and experienced labour is available in the local communities, who welcome the creation of well-paying jobs. This outcome is also encouraged and welcomed by local and state government. Santa María del Oro is only 5 km from the Project, and will not only benefit from employment, but from added activity for local businesses and service providers when the Project is in operation.

Multiple land use designations exist within the Project influence area and include: inactive mining sites, agricultural and livestock grazing, human settlement and road infrastructure. Land use within the Magistral Project boundaries includes: forest, livestock, wildlife, human settlement, communications infrastructure, and inactive mining sites. Designated use for the three operational components of the Project (see Figure 20-2) is for mining and mineral development.

A social baseline study is currently underway for the Project area as well as surrounding villages. The study consists of surveying the communities and is being conducted on an in-person basis. The goal of this study is to determine population socioeconomic characteristics of the, assess resident perceptions and views regarding mining and Tarachi, and to evaluate/quantify a potential workforce. Community leaders were identified and conversations are ongoing about the Project. The community and leaders are well informed of Project aspects from previous mining activities in recent years.

The towns that will directly benefit from the Project are Santa María del Oro and Magistral del Oro. Both belong to the municipality of El Oro, State of Durango, and the towns are located in the vicinity of the Project and within the area of influence. These towns have some public services such as drinking water, electricity, drainage, sanitation, and public lighting, while the city of Santa María del Oro has health services, an education centre, and a water treatment system.

These demographic concentrations will continue their development with or without the Project, increasing their population. However, if the Project is not executed, it is likely that community development will take place at a slower pace, with a lower quality of life, since this type of Project directly supports economic development of the area.

The Project will have a positive impact as measured by job creation, the introduction of goods and services that will benefit the local population, as well as reductions in the high degree of marginalization experienced in the area and dust emissions generated by the abandoned tailings. In addition, the landscape quality of the town of Magistral del Oro will be improved by relocating the tailings and the area will be consolidated as a mining area, thus creating an added and long-lasting environmental and visual benefit to the community. No relocation of houses or communities will be required for the operation of the process plant or expansion of the TSF.

20.4 Tailings and Water Management

In order to better define mine waste strategies, additional environmental testing and characterization studies will be completed. These may include but may not be limited to:

- Geochemical characterization of the anticipated final process residues (if warranted by process flowsheet changes);
- Testing of residual soils and development of any blending strategies with minor residual tailings, post-excavation, with emphasis on specific requirements for amendment and growth media to provide the basis for successful site restoration;
- Development and implementation of strategies for excavation, handling, and transportation of the in situ historic tailings to the processing facility that minimize fugitive dust generation and off-site sediment excursion; and
- Evaluation of possible waste management optimizations to improve project economics and overall environmental performance that may include alternative tailings management strategies involving complete dewatering of the final process residues and their placement in dry form vs. conventional slurry impoundment as the primary option.

20.4.1 Tailings and Mine Waste Management

The Project will produce no conventional mine waste and therefore no WRSFs will be required.

The current primary option for managing the final process tailings includes conventional slurry impoundment and recovery and recycling of supernatant solutions to the process plant via pumping.

The active environmental permit for the existing TSF includes a synthetic PVC liner system that allows for the storage of tailings that are classified as dirty, meaning that they may continue residual cyanide. The planned upgrade and expansion of the existing TSF to accommodate the anticipated process tailings follows the essential elements of the current permit and does not include any provision for reclassification of the tailings via cyanide destruction to produce a clean product. The required repairs and upgrades to the existing TSF identified as part of the staged construction plan for process plant restart operations includes all the essential elements and additional earthwork construction to bring the facility into full compliance with the permit.

20.5 Project Permitting Requirements

20.5.1 Permits

Three SEMARNAT permits are required before the construction of a new mine: a MIA, a Land Use Change (CUS) and a Risk Study (ER). These permits were obtained in 2013

Tarachi is currently working on updating baseline studies to supplement the current MIA to comply with the conditions established in the originally approved MIA which are discussed in section 20.5.3 of this report.

Tarachi also holds a current water usage permit

20.5.2 Water Rights

Water is planned to be supplied through a concession permit obtained from CONAGUA.

TSF surface water will be recirculated to the process plant.

20.5.3 Permits

Tarachi has existing permits and has applied for additional permits which will require 6-8 months. The current permits and permits under application as required are as follows:

- SEMARNAT - MIA – The initial report was submitted on 30 January 2013 and is valid for 17 years from the authorization notice date. Three modifications to the MIA were submitted and authorized on 5 November 2013, 31 March 2015, and 23 April 2018, respectively. The latter modification, valid for a total of 6 years including closure, was for the incorporation of an absorption method using activated carbon-by-zinc precipitate (Merrill-Crowe);

- SEMARNAT - CUS - 2013 (compliant), 2017 requires extension to complete construction of water management structures and diversion outlets as no activities were carried out since 2017;

- Ejido Magistral de Oro - Authorization of the owner of the surface land for access expires on 28 October 2022. Further details are discussed in section 4.2;

- Ejido Magistral de Oro - Authorization of the owner of the surface land to authorize the change of land use and to carry out all the procedures before the environmental dependencies whether federal, state and/or municipal, expires on 26 July 2025;
- Municipality - In accordance with local legislation, an operating licence may be required (currently missing documentation), which will be granted based on the authorization of the MIA by SEMARNAT;
- Registration - Public Registration of Tarachi Gold required once in production;
- Water Permit - submitted notice and request for grant of use of water to CONAGUA on October 30, 2012; currently authorized to use of 360,000 m^3 annually. There is no expiry date on the permit;
- Social Security - register as an employer with the Mexican Institute of Social Security (IMSS) and INFONAVIT which provides incentives to employees for home purchase. Tarachi is currently so registered, but registered as current, needs to pay off the INFONAVIT portion. There is no expiry date for permit;
- Electric Permit - Tarachi has a provisional electric permit/contract until the process plant is operational to establish a baseline for nominal usage. A contract will need to be signed by Tarachi which includes an advance payment before starting services. There is no expiry date.

As part of the conditions to restart operations, a Modification of the Project (General Plan of Restitution) must be submitted before operations can begin. Procuraduría Federal de Protección al Ambiente (PROFEPA) requires the Technical Proposal to be presented that should include a water management plan for the TSF. CONAGUA has provided minor site remediation requirements that will need to be addressed as part of the general plan of restitution.

20.6 Mine Closure Requirements

According to Mexican and international requirements and regulations for closure of mining complexes, the Project must have a waste management and closure plan. The purpose of the closure plan is to prevent or minimize any adverse environmental impacts in the long term and create an auto-sustainable natural ecosystem or allow for alternative land use in compliance with the accepted closure objectives.

Any minor volumes of tailings that remain in place after re-mining of the tailings deposit will be blended with native soils and amended and reseeded as necessary to return the landscape as close to near original conditions as possible. The envisaged closure plan assumes that the process plant will be maintained in operational status to allow Tarachi to evaluate potential regional processing options. No final closure plan has been developed. Conceptually, the ultimate closure plan will include stabilization of the final TSF surface, construction or addition of new or improved surface water management and stormwater diversions systems, and the placement of a final soil cap and cover system. This cover system will be revegetated with native plants to eliminate visual disturbance and return the impacted lands to productive long-term use under an approved plan. Currently no information is available on post closure requirements or reclamation bonds. A closure cost allowance of US$960,000 has been considered in this PEA.

21 CAPITAL AND OPERATING COSTS

21.1 Introduction

The following basic information pertains to the estimate of both capital and operating costs:

- Base date for these estimates is Q4 – 2021.
- All costs are expressed in United States dollars (US$).
- United States to Canadian (C$) currency exchange rate used is US$1.00 = C$1.28.
- Estimate accuracy is reflective of the stage of project development and classified as an Association for the Advancement of Cost Engineering (AACE) and AACE Class 5 Order of Magnitude/Conceptual Study estimate with a -30% to +50% accuracy.
- Unit of measurement is metric (where applicable).
- All estimates are based on a mill throughput rate of 1,000 t/d.
- Operating and sustaining capital costs are based on an estimated mine life of 3.4 years.
- Cost estimate is based on an engineering, procurement, and construction management (EPCM) implementation approach, with selected scope areas being developed under discrete engineer, procure and construct (EPC) packages.

21.1.1 Exclusion

The following items were not considered in this cost estimate:

- Taxes;
- Duties;
- Senior finance charges;
- Residual value of temporary equipment and facilities;
- Cost to client of any downtime;
- Environmental approvals;
- Future studies;
- Force majeure issues;

- Future scope changes;
- Special incentives (schedule, safety or others);
- No allowance has been made for loss of productivity and/or disruption due to religious, union, social and/or cultural activities;
- Management reserve;
- Owner's escalation costs; and
- Owner's foreign exchange exposure.

21.2 Capital Cost

21.2.1 Overview

The overall capital cost estimate was developed by Ausenco with contributions from a team of engineers from the following companies:

- AGP — development of the mining costs;
- Solum — TSF (Phase 1 Dam) costs.

The source data for the cost estimate included a priced equipment list, the scope of work, the process flow diagram, and historical data. The total estimated capital cost for the design, construction, installation, and commissioning of the Project is US$11.11 M, which includes all direct, indirect, project delivery, Owner's, and contingency costs.

Sustaining capital investment is limited to incremental mining, TSF, and water management areas over the LOM. The cumulative total sustaining capital cost is US$2.1M.

Closure costs are not included in the capital or operating costs but are factored into the financial model to account for tailings management area requirements.

A breakdown of initial capital cost figures by major work area is presented in Table 21-1.

Table 21-1: Capital Cost

WBS L1	Description	Total Cost (M US$)
1000	MINING	$0.20
2000	ONSITE INFRASTRUCTURE	$0.38
3000	PROCESS PLANT	$5.85
4000	TAILINGS MANAGEMENT	$0.95
	TOTAL DIRECT COST	**$7.38**
6000	Total Indirect Costs	$0.65
7000	Project Delivery Costs	$0.84
8000	Owner's Costs	$0.25
9000	Contingency and Growth	$1.98
	TOTAL CAPITAL COST	**$11.11**

Note: Table prepared by Ausenco, 2021.

21.2.2 Direct Costs

21.2.2.1 Overview

Direct capital costs are those costs that pertain to the permanent equipment, freight, materials and labour associated with the physical construction of the facilities including refurbishment costs. Contractor's indirect costs, which include contractor's distributable costs, are contained within the direct costs. Each of the contributing parties noted in Section 21.2 provided the direct costs associated with the works in their respective discipline areas.

21.2.2.2 Mining Cost

There is no pre-production stripping involved as the mill feed is historically processed tailings which is readily available. Since the mining of the historical tailings will be done by a contractor fleet, there is no capital cost associated with purchase of mining fleet.

The initial capital in mining will include cost of building the truck shop and truck shop maintenance supplies. The estimated cost is US$200,000. The mining direct costs are shown in Table 21-2.

Table 21-2: Mining Direct Costs

MINING	TOTAL COST (USD)
Mine Development	$0
Mine Services - truck shop, maintenance equipment	$201,000
Site Establishment and Preparation	$0
Mining Equipment - MINING FLEET - (included with Opex)	$0

MINING	TOTAL COST (USD)
Exploration Development	$0
Pre-production management, supervision and technical services	$0
TOTAL MINING	**$201,000**

Note: Table prepared by Ausenco, 2021.

21.2.2.3 Process and Infrastructure Cost

21.2.2.3.1 General

Process and infrastructure costs are summarized in Table 21-3 and described in the following sections. Direct costs include all contractors' direct and indirect labour, permanent equipment, materials, freight, and mobile equipment associated with the physical construction of the areas.

Table 21-3: Process Plant and Infrastructure Direct Costs

ONSITE INFRASTRUCTURE	TOTAL COST (USD)
Site Preparation Works	$0
Power Supply - Existing	$20,000
Fuel Supply and Distribution – Existing	$20,000
Mine Workshop and Warehouse – Included with Mining	$0
Mill Workshop and Warehouse – Existing	$0
Administration Buildings – Existing	$0
Gate house - Refurbish	$20,000
Waste Management - Existing	$0
Access Roads - Included in Mining costs	$0
Laboratory - Existing building, added new lab equipment	$200,000
Mobile Equipment - For process plant	$100,000
Fresh Water and Recovered Water tanks - Existing	$20,000
Air compressor system	$0
TOTAL ONSITE INFRASTRUCTURE - DIRECT COSTS	**$380,000**
PROCESS PLANT	**TOTAL COST (USD)**
Grinding - Existing - Refurbish hopper, ball mill & cyclones & trash screen	$154,000
Re-Pulp/Leaching - Existing - Refurbish tanks and agitators	$28,000
CCD - New (2) thickener O/F pumps & refurbish thickeners and pumps	$82,273
New SART Plant - (2) reactors, (2) filter Presses, (2) thickeners, (1) Scrubber located in new area	$3,672,598
Merrill Crowe Plant - refurbish PLS equipment & deaeration tower & precipitate tower	$107,000
Goldroom - Mercury Retort system (to be located in existing Merrill Crowe building)	$820,237

PROCESS PLANT	TOTAL COST (USD)
Cyanide Destruction - Refurbish tanks and pumps	$20,000
Reagents Offloading and Storage - New SMBS tanks and pumps & refurbishments	$310,187
Plant Services - Leased Oxygen Generating Unit first year leasing_	$303,705
General Piping, valves refurbishment	$200,000
General E & I refurbishment	$150,000
TOTAL PROCESS PLANT - DIRECT COSTS	**$5,848,000**
TAILINGS STORAGE FACILITY	**TOTAL COST (USD)**
Tailings Management Area	$642,000
Water Management	$290,000
Tailings Overland Pipeline - Existing	$22,000
TOTAL TSF - DIRECT COSTS	**$954,000**
OFFSITE INFRASTRUCTURE	**TOTAL COST (USD)**
Main Access Roads - Existing	$0
Water Supply & Distribution to site - Existing	$0
TOTAL OFF-SITE INFRASTRUCTURE- DIRECT COSTS	**$0**
TOTAL DIRECT COSTS (USD)	**7,383,000**

Note: Table prepared by Ausenco, 2021.

21.2.2.3.2 Onsite Infrastructure

On-site infrastructure costs were developed based on Ausenco's in-house database of costs and labour rates and include the following:

- Site Development
  - Bulk earthworks for installation of new equipment; and
  - Access road.
- Power Supply & Distribution
  - Refurbishment of existing power line and site distribution.
- Utilities
  - Refurbishment of fuel supply and distribution .
- General Buildings
  - Refurbishment of existing security gatehouse.
- Plant Buildings

    - SART plant building.
- Mobile Equipment for process plant; and
- Water Management;
    - Refurbishment of existing freshwater and recovered water tanks.

21.2.2.3.3 Process Plant

The definition of process equipment requirements was based on conceptual process flowsheets and process design criteria (refer to Section 17). Mechanical equipment and building supply costs were based on recent and historical budget quotes from similar projects, adjusted to reflect the Magistral Project sizing.

21.2.2.3.4 TSF

The estimated capital expenditures have been developed based on the PEA-level design for TSF expansion developed by Solum Consulting with current understanding of site conditions and permitting obligations. The MTOs and costs developed by Solum were reviewed by Ausenco and updated.

The estimated capital cost estimate includes the following main items:

- Earthworks costs associated with foundation preparation, material processing and embankment construction for the TSF;
- Earthworks costs for the seepage collection pond, and miscellaneous infrastructure required for the TSF operations;
- Installation of a seepage collection pond and key trenches to collect potential embankment seepage and contact runoff from the embankment;
- Supply and installation of geomembrane on TSF embankment and seepage collection pond; and
- Indirect cost associated with QA-QC and site investigation to support detailed design.

21.2.2.3.5 Offsite Infrastructure

The project site was previously in operation and will not require any offsite infrastructure development. The site is connected by grid power, roads and water.

21.2.3 Indirect Costs

Indirect costs are those costs that are associated with plant implementation and incurred by the owner, engineer or consultants in project design, procurement, construction, and commissioning. Ausenco estimated a total of US$654,000, which represented an average of 9% of the total direct costs, as shown in Table 21-4.

Table 21-4: Distribution of Indirect Costs

Indirect Cost Category	Total Cost (US$)
Temporary Construction Facilities and Services	$140,000
Commissioning Reps and Assistance	$140,000
Spares (Commissioning, Initial and Insurance)	$150,000
First Fills & Initial Charges	$140,000
Indirect costs - Mining (AGP)	$20,000
Indirect costs - TSF (Solum)	$64,000
TOTAL PROJECT INDIRECT COSTS	**$654,000**

Note: Table prepared by Ausenco, 2021.

21.2.4 Project Delivery Cost

EPCM services costs cover such items as engineering and procurement services (home office based), construction management services (site based), project office facilities, information technology (IT), staff transfer expenses, secondary consultants, field inspection and expediting, commissioning, corporate overhead and fees. Ausenco estimated a total of US$844,000, which represented an average of 11.8% of the total direct costs as shown in Table 21-5.

Table 21-5: Distribution of Project Delivery Costs

Description of Work Breakdown Structure (WBS)	Total Cost (US$)	% of Direct Costs	% of Total
Engineering & Construction Management Services	$760,000	10.6%	6.8%
Commissioning Services	$84,000	1.1%	0.8%
TOTAL PROJECT DELIVERY COSTS	**$844,000**	**11.8%**	**7.6%**

Note: Table prepared by Ausenco, 2021.

21.2.5 Owners Cost

Owner's costs are costs borne by the Owner in Project support and execution. Ausenco assumed an allowance of US$250,000 for Owner's costs, which equated to approximately 3.4% of direct costs. Key items included staffing and expenses, pre-production labour, home office project management, home office financial, legal, insurance, bonds, licenses, and fees.

21.2.6 Contingency Cost

The total contingency amount of US$1,981,000 was equal to an average of 21.7% of total direct costs and was applied to the individual work areas based on the level of detail and construction cost risk associated with each area. The estimated contingencies excluded the following:

- Abnormal weather conditions;
- Changes to market conditions affecting the cost of labour or materials;
- Changes of scope within the general production and operating parameters;
- Effects of industrial disputations;
- Financial modelling;
- Technical engineering refinement; and
- Estimate inaccuracy.

21.3 Operating Costs

21.3.1 Basis of Estimate

Common to all operating cost estimates are the following assumptions:

- Cost estimates are based on Q4 2021 pricing without allowances for inflation;
- Costs are expressed in United States dollars (US$);
- For material sourced in Canadian dollars, an exchange rate of 1.27 Canadian dollar per US dollar was assumed;
- For material sourced in Australian dollars, an exchange rate of 1.36 Australian dollar per US dollar was assumed;
- Majority of the labour requirement is assumed to come from neighbouring municipalities;
- Processing unit operations were benchmarked against similar or comparable processing plants;
- Equipment and materials will be purchased as new;
- Grinding media consumption rates have been estimated based on the material characteristics;
- Reagent consumption rates have been estimated on the metallurgical characteristics; and
- The mobile equipment cost provides for fuel and maintenance.

The average annual operating cost for the Project was estimated to be US$21.05/t over the proposed 3.4-year mine life, based on the 1,000 t/d plant capacity. A summary of the individual components that make up this estimate is presented in Table 21-6.

Table 21-6: Summary of Operating Cost Estimate

Cost Centre	US$/tonne Milled	Percentage (%)
G&A	1.09	5.2%
Mining	5.79	27.5%
Labour	2.28	10.8%
Power	1.69	8.0%
Maintenance Consumables	0.89	4.2%
Reagents and Consumables	6.50	30.9%
SART plant	2.83	13.4%
TOTAL	**21.05**	**100.0%**

Note: Table prepared by Ausenco, 2021.

21.3.2 Mine Operating Costs

The mine operating cost has been based on the use of rental equipment from a local vendor. The rates were provided on a dry basis with fuel and owner labour added to these rates. The equipment rates included consumables such as tires on the loader and haulage trucks.

The fuel price used was $19.71 MXN/litre or $0.99 USD/litre delivered to site and provided by a local vendor.

No drilling and blasting is required as the material is old tailings which is already in a loose nature.

The equipment list for mining at Magistral is shown in Table 21-7. The equipment shown as leased is not part of the rental but a separate lease with Tarachi and financing charges are applied over the mine life.

Table 21-7: Mine Equipment List

Equipment	Units	Capacity	Number of Units
Hydraulic Excavator	m^3	1.75	1
Front-end Loader	m^3	2.50	1
Haul Truck	m^3	14.0	2
Track Dozer	kW	264	1
Grader	kW	128	1
Water Truck - Leased	L	19,000	1
Lube/Fuel Truck – Leased			1
Lighting Plants - Leased			2
Pickup Truck - Leased			1

Note: Table prepared by AGP, 2021.

The equipment would be operated on a 7 day per week schedule.

The mine staff and operating teams are shown in Table 21-8.

Table 21-8: Mine Operational Labour

Job Position	Personnel
Staff	
Maintenance Shift Foremen	1
Mine Shift Foremen	3
Mine Operations Clerk	1
Survey Technician	1
Sampling Technician	1
Total Staff	7
Hourly	
Lube Truck Driver	2
Excavator Operator	4
Loader Operator	3
Truck Drivers	8
Dozer Operator	2
Grader Operator	1
Water Truck Driver	1
Mechanics/Welders	9
Total Hourly	**30**
Total Mine Personnel	**37**

Note: Table prepared by AGP, 2021.

The mine operating cost totals US$6.4 million for the life of the mine or US$5.79/ t mined. The total mine operating cost is shown in Table 21-9.

Table 21-9: Mine Operating Cost

Mine Activity	Cost (US$)	Cost (US$/t Mined)
General Mine Administration	1,683,200	1.51
Loading	895,800	0.80
Hauling	797,900	0.72
Support Equipment	2,557,900	2.30
Lease Cost	503,600	0.45
Total Mine Cost	**6,438,300**	**5.79**

Note: Table prepared by AGP, 2021.

21.3.3 Process Plant Operating Costs

The process operating cost estimate was based on a 1,000 t/d mill comprising grinding, cyanide leaching circuit, CCD, SART, Merrill-Crowe precious metals recovery, and cyanide destruction.

21.3.3.1 Processing Operating Cost Summary

The unit process operating cost was estimated at US$14.18/t processed, based on a 1,000 t/d throughput with plant availability of 95.0%, and 365 operating days per year. Table 21-10 summarizes the operating costs expected for the process area.

Table 21-10: Process Operating Cost Summary

Cost Centre	US M$/year	US$/tonne Processed	Percentage, (%)
Labour	0.83	2.28	16%
Power	0.62	1.69	12%
Maintenance Consumables	0.33	0.89	6%
Reagents and Consumables	2.37	6.50	46%
SART plant	1.03	2.83	20%
Total	**5.18**	**14.18**	**100.0%**

Note: Table prepared by Ausenco, 2021.

21.3.3.2 Labour

The estimated labour cost was $2.28/t processed and comprise 16% of the overall operating cost. It was based on the labour rates from similar Mexican project Ausenco conducted in 2020. A total of 54 persons were required for the process plant and the process maintenance shop.

The labour costs used in this estimated is tabulated in Table 21-11.

Table 21-11: Project Workforce in the Process Plant and Labour Rates

Job Title	Number of Employees	Yearly Salary (US$)
Process Plant		
Production Superintendent	1	$75,509
Metallurgist A -Trainer	1	$42,417
Technician	1	$18,921
Supervisors Prod/refinery	3	$33,753
Grinding Operator	3	$8,301
Control Room Operator	3	$8,301
Leach Operator	3	$8,301
Merrill Crowe Operator	3	$8,301

Refinery/ Gold Room Operator	3	$8,301
Refinery/ Gold Room Helper	3	$5,702
Tails Management	3	$6,978
General Labours/ Helper	6	$5,702
Total Process Plant	**33**	
Operations -Maintenance		
Maintenance Superintendent	1	$75,509
Maintenance Supervisor	2	$33,753
Specialized Mechanic	3	$15,713
Welders	3	$7,954
Helper of Mechanic	6	$7,598
Tool Crip Helper	2	$5,702
Chief of Electricians & Instrumentation	1	$49,163
General Electricians	3	$25,204
Total Plant Maintenance	**21**	
TOTAL	**54**	**$830,660**

Note: Table prepared by Ausenco, 2021.

21.3.3.3 Power

The electrical energy consumption is estimated to be 6,158 MWh per year or approximately 16.9 kWh/t processed material.

Electricity will be provided to site at a unit cost of US$0.10/kWh based on the similar operation.

The unit power cost is estimated at US$1.68/t processed, which accounts for 12% of the overall process operating cost.

21.3.3.4 Maintenance Supplies

The cost for maintenance supplies was estimated at US$0.89/t processed and comprises 6% of the overall process operating cost. A factor of 8.5% of the equipment direct capital cost was used which was based on benchmarked projects.

21.3.3.5 Reagents and Consumables

Individual reagent and consumable consumption rates were estimated from metallurgical testwork results, Ausenco's in-house database and Ausenco's experience. The cost of reagents and consumables was estimated at $6.50/t processed, which accounts for 46% of the overall process operating cost and is the largest Project operating cost factor.

21.3.3.6 SART Plant

The SART plant operating cost was estimated at US$2.83/t processed by benchmarking it against projects of similar nature. The cost accounts for 20% of the overall process operating cost.

21.3.4 General and Administrative Operating Costs

G&A operating costs covered the expenses of the operating departments (mine, geology, plant operation/maintenance).

Overall, the G&A costs included:

- Human resources: Included training and recruiting;
- Health and safety: Included personal protective equipment, clothing allowance; and
- Contract expenses: Included assay laboratory, relining, specialist maintenance hazardous waste.

The total annual G&A cost was estimated at $0.4 M during production which equated to a G&A cost of $1.09/t processed.

21.4 Sustaining Costs

The project includes sustaining capital for expansion of TSF and water management structures. The total sustaining cost is estimated at US$2.1M. A breakdown of the costs in shown in Table 21-12.

Table 21-12: Breakdown of Sustaining Capital Cost

Description	Year 1 (US M$)	Year 2 (US M$)	Year 3 (US M$)	Year 4 (US M$)
Mining	$0.1	-	-	-
TSF	-	$0.5	$0.4	$0.2
Water Management	-	$0.2	$0.1	-
Indirect Costs	-	$0.1	$0.1	$0.0
Contingency	-	$0.2	$0.1	$0.1
Total	$0.1	$0.9	$0.7	$0.3

Note: Table prepared by Ausenco, 2021.

22 ECONOMIC ANALYSIS

22.1 Forward-Looking Information Cautionary Statements

The results of the economic analyses discussed in this section represent forward-looking information as defined under Canadian securities law. The results depend on inputs that are subject to known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here. Information that is forward-looking includes the following:

- Mineral resource estimates;
- Assumed commodity prices and exchange rates;
- Proposed production plan;
- Projected recovery rates;
- Proposed capital and operating costs;
- Environmental, permitting, and social risks.

Additional risks to the forward-looking information include:

- Changes to costs of production from what is assumed;
- Unrecognized environmental risks;
- Unanticipated reclamation expenses;
- Unexpected variations in quantity of mineralized material, grade, or recovery rates;
- Accidents, labour disputes and other risks of the mining industry;
- Geotechnical or hydrogeological considerations during mining being different from what was assumed;
- Failure of production methods to operate as anticipated;
- Failure of plant, equipment, or processes to operate as anticipated;
- Changes to assumptions as to the availability of electrical power, and the power rates used in the operating cost estimates and financial analysis;
- Ability to maintain the social licence to operate; and
- Changes to tax rates.

22.2 Methodologies Used

The Project was evaluated using a discounted cash flow (DCF) analysis based on a 5% discount rate. Cash inflows consist of annual revenue projections. Cash outflows consist of capital expenditures, including pre-production costs; operating costs; taxes; and royalties. These are subtracted from the inflows to arrive at the annual cash flow projections. Cash flows are taken to occur at the mid-point of each period. It must be noted that tax calculations involve complex variables that can only be accurately determined during operations and, as such, the actual post-tax results may differ from those estimated. A sensitivity analysis was performed to assess the impact of variations in metals price, discount rate, head grade, total operating cost, and total capital costs.

The capital and operating cost estimates were presented in Section 21 of this Report in Q4 2021 US$. The economic analysis assumed a constant dollar basis with no inflation.

22.3 Financial Model Parameters

22.3.1 Assumptions

The economic analysis was performed assuming a gold price of US$1,600/oz, silver price of US$22.00/oz and copper price of US$3.40/lb; these metal prices were based on consensus analyst estimates and recently published economic studies. The forecasts used are meant to reflect the average metals price expectation over the life of the project. No price inflation or escalation factors were taken into account. Commodity prices can be volatile, and there is the potential for deviation from the forecast.

- The economic analysis also used the following assumptions:
- Construction period of 1 year;
- Mine life of 3.4 years;
- Results based on 100% ownership with an 15% net profit interest (NPI) royalty;
- Capital cost funded with 100% equity (no financing cost assumed);
- All cash flows discounted to start of construction period using mid-period discounting convention;
- All metal products are sold in the same year they are produced;
- Project revenue is derived from the sale of doré and copper concentrate; and
- No contractual arrangements for refining currently exist.

22.3.2 Taxes

The Project was evaluated on a post-tax basis to provide an approximate value of the potential economics. The tax model was compiled by Tarachi and calculations are based on the tax regime as of the date of the 2021 PEA technical report. At the effective date of this report, the Project is assumed to be subject to the Mexican corporate income tax system consists of 30% income tax resulting in estimated total payments of US$12 Mover the LOM.

22.4 Economic Analysis

The economic analysis assumed a 5% discount rate.

The pre-tax NPV discounted at 5% is estimated at US$31.2 M; the internal rate of return IRR is 120%, and the payback period is 0.8 years. On a post-tax basis, the NPV discounted at 5% is US$21.0 M; the IRR is 85%, and the payback period is 1.0 years. A summary of project economics is shown in Table 22-1. An annualized cashflow output is shown in Table 22-2

Readers are cautioned that the PEA is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Table 22-1: Economic Analysis Summary

General	LOM Total / Avg
Gold Price (US$/oz)	$1,600
Silver Price (US$/oz)	$22.00
Copper Price (US$/lb)	$3.40
Mine Life (years)	3.4
Total Mill Feed Tonnes (kt)	1,112.8
Production	**LOM Total / Avg**
Mill Head Grade - Au (g/t)	1.87
Mill Head Grade - Ag (g/t)	3.10
Mill Head Grade - Cu (%)	0.17%
Mill Recovery Rate (Merrill-Crowe) - Au (%)	71.8%
Mill Recovery Rate (SART) - Au (%)	8.9%
Mill Recovery Rate (SART) - Ag (%)	68.4%
Mill Recovery Rate - Cu (%)	46.2%
Total Mill Recovered - Au (koz)	53.9
Total Mill Recovered - Ag (koz)	75.8
Total Mill Recovered - Cu (mlbs)	1.9
Average Annual Production - Au (koz)	16.0
Average Annual Production - Ag (koz)	22.5
Average Annual Production - Cu (mlbs)	0.6
Operating Costs	**LOM Total / Avg**
Mining Cost (US$/t Mined)	$5.79
Processing Cost (US$/t Milled)	$14.18
G&A Cost (US$/t Milled)	$1.09
Total Operating Costs (US$/t Milled)	$26.2
Cash Costs (US$/oz)	$647.5
AISC (US$/oz)	$704.8
Capital Costs	**LOM Total / Avg**

Initial Capital (US$M)	$11.1	
Sustaining Capital (US$M)	$2.1	
Closure Costs (US$M)	$1.0	
Financials	**Pre-Tax**	**Post-Tax**
NPV (5%) (US$M)	$31.2	$21.0
IRR (%)	120%	85%
Payback (years)	0.8	1.0

Note: Table prepared by Ausenco, 2021.
* Cash costs consist of mining costs, processing costs, mine-level G&A and refining charges and royalties
** AISC includes cash costs plus sustaining capital and closure costs

Table 22-2: Project Cash Flow

Dollar figures in Real 2021 $mm unless otherwise noted							
Macro Assumptions	**Units**	**Total / Avg.**	**2023**	**2024**	**2025**	**2026**	**2027**
Gold Price	US$/oz	$1,600	$1,600	$1,600	$1,600	$1,600	$1,600
Silver Price	US$/oz	$22.00	$22.00	$22.00	$22.00	$22.00	$22.00
Copper Price	US$/lb	$3.40	$3.40	$3.40	$3.40	$3.40	$3.40
Revenue	**$mm**	**$93.1**	**--**	**$25.7**	**$30.0**	**$29.8**	**$7.6**
Operating Cost	$mm	($23.6)	–	($6.5)	($7.6)	($7.6)	($1.9)
Property Leasing Fees	$mm	($5.5)	–	($1.4)	($1.7)	($1.8)	($0.6)
Off-Site Costs	$mm	($6.4)	–	($1.6)	($2.1)	($2.1)	($0.6)
Royalties	$mm	($6.8)	–	($2.0)	($2.3)	($2.3)	($0.2)
EBITDA	**$mm**	**$50.9**	**--**	**$14.2**	**$16.2**	**$16.0**	**$4.4**
Initial Capex	$mm	($11.1)	($11.1)	–	–	–	–
Sustaining Capex	$mm	($2.1)	–	($0.1)	($0.9)	($0.7)	($0.3)
Closure Capex	$mm	($1.0)	–	–	–	–	($1.0)
Pre-Tax Unlevered Free Cash Flow	**$mm**	**$36.7**	**($11.1)**	**$14.1**	**$15.3**	**$15.3**	**$3.1**
Corporate Income Tax	$mm	($11.5)	–	($3.4)	($4.0)	($3.8)	($0.3)
Post-Tax Unlevered Free Cash Flow	**$mm**	**$25.1**	**($11.1)**	**$10.7**	**$11.3**	**$11.4**	**$2.8**
Production Summary							
Total Material Mined	kt	1,113	–	300	360	360	93
Project Life	yrs	3.4	–	1.0	1.0	1.0	0.4
Mill Feed	kt	1,113	–	300	360	360	93
Mill Head Grade (Au)	g/t	1.87	–	1.93	1.86	1.84	1.82
Mill Head Grade (Ag)	g/t	3.10	–	3.10	3.10	3.10	3.10
Mill Head Grade (Cu)	%	0.17%	0.00%	0.16%	0.17%	0.17%	0.17%
Mill Head Grade (Hg)	g/t	15.8	–	14.33	15.98	16.67	16.76
Mill Recovery (Au) – Merrill-Crowe	%	71.8%	–	71.8%	71.8%	71.8%	71.8%
Mill Recovery (Au) - SART	%	8.9%	–	8.9%	8.9%	8.9%	8.9%
Mill Recovery (Ag) - SART	%	68.4%	–	68.4%	68.4%	68.4%	68.4%
Mill Recovery (Cu)	%	46.2%	–	46.2%	46.2%	46.2%	46.2%
Mill Recovery (Hg)	%	45.5%	–	45.5%	45.5%	45.5%	45.5%
Recovered Gold – Merrill-Crowe	koz	48	–	13	15	15	4
Recovered Gold - SART	koz	6	–	2	2	2	0
Recovered Silver - SART	koz	76	–	20	25	25	6
Recovered Copper	mlbs	2	–	0	1	1	0
Recovered Mercury	t	8	–	2	3	3	1
Recovered Gold Equivalent	koz	59	–	16	19	19	5
Dry Concentrate Produced	kt	1.43	–	0.36	0.47	0.47	0.12
Moisture Content	%	9.0%	–	9.0%	9.0%	9.0%	9.0%
Wet Concentrate Produced	kt	1.57	–	0.40	0.52	0.52	0.13
Total TC, RC & Penalties	$mm	($6.1)	–	($1.5)	($2.0)	($2.1)	($0.5)
Transportation	$mm	($0.2)	–	($0.1)	($0.1)	($0.1)	($0.0)
Payable Gold	**koz**	**53**	**--**	**15**	**17**	**17**	**4**
Payable Silver	**koz**	**72**	**--**	**19**	**23**	**23**	**6**
Payable Copper	**mlbs**	**2**	**--**	**0**	**1**	**1**	**0**
Payable Gold Equivalent	**koz**	**57**	**--**	**16**	**18**	**18**	**5**
Gold Revenue	**$mm**	**$85**	**--**	**$24**	**$28**	**$27**	**$7**
Silver Revenue	**$mm**	**$2**	**--**	**$0**	**$1**	**$1**	**$0**
Copper Revenue	**$mm**	**$6**	**--**	**$2**	**$2**	**$2**	**$1**
Total Revenue	**$mm**	**$93**	**--**	**$26**	**$30**	**$30**	**$8**
Royalties	$mm	($7)	–	($2)	($2)	($2)	($0)
Total Operating Costs	$mm	($24)	–	($7)	($8)	($8)	($2)
Mine Operating Costs	$mm	($6.4)	–	($1.9)	($2.1)	($2.0)	($0.4)
Mill Processing	$mm	($15.8)	–	($4.3)	($5.1)	($5.1)	($1.3)
Equipment Leasing Fees	$mm	($0.2)	–	($0.0)	($0.0)	($0.0)	($0.0)
G&A Costs	$mm	($1.2)	–	($0.3)	($0.4)	($0.4)	($0.1)
Tailings Leasing Fees	$mm	($5.4)	–	($1.4)	($1.7)	($1.8)	($0.5)
Land Leasing Fees	$mm	($0.1)	–	($0.0)	($0.0)	($0.0)	($0.0)
Operating Costs per Tonne Processed	*$/t Processed*	*$26.16*	–	*$26.39*	*$26.05*	*$26.09*	*$26.14*
Cash Costs (By-Product Basis)		* Cash costs consist of mining costs, processing costs, mine-level G&A and refining charges and royalties ** AISC includes cash costs plus sustaining capital and closure costs					
Cash Cost *	US$/oz Au	$647.5	–	$643.0	$655.3	$660.5	$581.3

All in Sustaining Cost (AISC) **	US$/oz Au	$704.8	--	$651.0	$709.5	$703.2	$876.5
Total Initial Capital	**$mm**	**($11)**	**($11)**	**--**	**--**	**--**	**--**
Mining	$mm	($0.2)	($0.2)	--	--	--	--
On Site Infrastructure	$mm	($0.4)	($0.4)	--	--	--	--
Process Plant	$mm	($5.8)	($5.8)	--	--	--	--
Tailings Management	$mm	($1.0)	($1.0)	--	--	--	--
Project Indirect	$mm	($0.7)	($0.7)	--	--	--	--
Project Delivery	$mm	($0.8)	($0.8)	--	--	--	--
Owners Cost	$mm	($0.3)	($0.3)	--	--	--	--
Contingency	$mm	($2.0)	($2.0)	--	--	--	--
Total Sustaining Capital	**$mm**	**($2.1)**	**--**	**($0.1)**	**($0.9)**	**($0.7)**	**($0.3)**
Mining	$mm	($0.1)	--	($0.1)	--	--	--
Tailings Storage Facility	$mm	($1.2)	--	--	($0.5)	($0.4)	($0.2)
Water Management	$mm	($0.3)	--	--	($0.2)	($0.1)	--
Indirect	$mm	($0.1)	--	--	($0.1)	($0.1)	($0.0)
Contingency	$mm	($0.3)	--	--	($0.2)	($0.1)	($0.1)
Closure Cost	$mm	($1.0)	--	--	--	--	($1.0)
Total Capital Expenditures Including Salvage Value	**$mm**	**($14.2)**	**($11.1)**	**($0.1)**	**($0.9)**	**($0.7)**	**($1.3)**

Note: Table prepared by Ausenco, 2021.

22.5 Sensitivity Analysis

A sensitivity analysis was conducted on the base case pre-tax and post-tax NPV and IRR of the project, using the following variables: metal prices, discount rate, head grade, total operating cost, and initial capital cost.

Table 22-3 shows the post-tax sensitivity analysis results; pre-tax sensitivity results are shown in Table 22-4.

As shown in Figure 22-1 and Figure 22-2, the sensitivity analysis revealed that the project is most sensitive to changes in commodity price and head grade, and less sensitive to discount rate, total operating cost, and initial capital cost.

Table 22-3: Post-Tax Sensitivity Summary

Post-Tax NPV Sensitivity To Discount Rate (Commodity Price (%))

Discount Rate	(20%)	(10%)	--	10%	20%
1.0%	$13	$19	$24	$30	$35
3.0%	$12	$17	$23	$28	$33
5.0%	$11	$16	$21	$26	$31
8.0%	$10	$14	$19	$23	$28
10.0%	$9	$13	$18	$22	$26

Post-Tax IRR Sensitivity To Discount Rate (Commodity Price (%))

Discount Rate	(20%)	(10%)	--	10%	20%
1.0%	50.7%	68.2%	84.9%	101.1%	116.8%
3.0%	50.7%	68.2%	84.9%	101.1%	116.8%
5.0%	50.7%	68.2%	84.9%	101.1%	116.8%
8.0%	50.7%	68.2%	84.9%	101.1%	116.8%
10.0%	50.7%	68.2%	84.9%	101.1%	116.8%

Post-Tax NPV Sensitivity To Opex (Commodity Price (%))

Opex	(20%)	(10%)	--	10%	20%
(20.0%)	$14	$19	$23	$28	$33
(10.0%)	$13	$17	$22	$27	$32
--	$11	$16	$21	$26	$31
10.0%	$10	$15	$20	$25	$29
20.0%	$9	$14	$19	$23	$28

Post-Tax IRR Sensitivity To Opex (Commodity Price (%))

Opex	(20%)	(10%)	--	10%	20%
(20.0%)	59.8%	76.8%	93.2%	109.1%	124.7%
(10.0%)	55.3%	72.5%	89.0%	105.1%	120.8%
--	50.7%	68.2%	84.9%	101.1%	116.8%
10.0%	46.0%	63.9%	80.7%	97.0%	112.9%
20.0%	41.2%	59.5%	76.5%	92.9%	108.9%

Post-Tax NPV Sensitivity To Initial Capex (Commodity Price (%))

Initial Capex	(20%)	(10%)	--	10%	20%
(20.0%)	$13	$18	$22	$27	$32
(10.0%)	$12	$17	$22	$27	$31
--	$11	$16	$21	$26	$31
10.0%	$10	$15	$20	$25	$30
20.0%	$10	$15	$20	$24	$29

Post-Tax IRR Sensitivity To Initial Capex (Commodity Price (%))

Initial Capex	(20%)	(10%)	--	10%	20%
(20.0%)	67.9%	88.8%	108.9%	128.4%	147.6%
(10.0%)	58.5%	77.4%	95.6%	113.3%	130.6%
--	50.7%	68.2%	84.9%	101.1%	116.8%
10.0%	44.2%	60.6%	76.0%	90.9%	105.4%
20.0%	38.6%	54.1%	68.4%	82.3%	95.8%

Post-Tax NPV Sensitivity To Mill Head Grade (Commodity Price (%))

Mill Head Grade	(20%)	(10%)	--	10%	20%
(20.0%)	$4	$8	$12	$16	$20
(10.0%)	$7	$12	$16	$21	$25
--	$11	$16	$21	$26	$31
10.0%	$15	$20	$26	$31	$36
20.0%	$18	$24	$30	$36	$42

Post-Tax IRR Sensitivity To Mill Head Grade (Commodity Price (%))

Mill Head Grade	(20%)	(10%)	--	10%	20%
(20.0%)	21.9%	38.1%	53.1%	67.1%	80.5%
(10.0%)	36.8%	53.7%	69.3%	84.3%	98.9%
--	50.7%	68.2%	84.9%	101.1%	116.8%
10.0%	63.7%	82.2%	100.0%	117.4%	134.3%
20.0%	76.1%	95.7%	114.8%	133.3%	151.6%

Post-Tax NPV Sensitivity To Mill Recovery (Commodity Price (%))

Mill Recovery	(20%)	(10%)	--	10%	20%
(20.0%)	$4	$8	$12	$16	$20
(10.0%)	$7	$12	$16	$21	$25
--	$11	$16	$21	$26	$31
10.0%	$15	$20	$26	$31	$36
20.0%	$18	$24	$30	$36	$42

Post-Tax IRR Sensitivity To Mill Recovery (Commodity Price (%))

Mill Recovery	(20%)	(10%)	--	10%	20%
(20.0%)	21.9%	38.1%	53.1%	67.1%	80.5%
(10.0%)	36.8%	53.7%	69.3%	84.3%	98.9%
--	50.7%	68.2%	84.9%	101.1%	116.8%
10.0%	63.7%	82.2%	100.0%	117.4%	134.3%
20.0%	76.1%	95.7%	114.8%	133.3%	151.6%

Note: Prepared by Ausenco, 2021.

Table 22-4: Pre-Tax Sensitivity Analysis

Pre-Tax NPV Sensitivity To Discount Rate

Discount Rate	Commodity Price (%)				
	(20%)	(10%)	--	10%	20%
1.0%	$20	$28	$35	$43	$51
3.0%	$19	$26	$33	$41	$48
5.0%	$17	$24	$31	$38	$45
8.0%	$15	$22	$28	$35	$41
10.0%	$14	$21	$27	$33	$39

Pre-Tax IRR Sensitivity To Discount Rate

Discount Rate	Commodity Price (%)				
	(20%)	(10%)	--	10%	20%
1.0%	73.6%	97.2%	119.9%	141.9%	163.5%
3.0%	73.6%	97.2%	119.9%	141.9%	163.5%
5.0%	73.6%	97.2%	119.9%	141.9%	163.5%
8.0%	73.6%	97.2%	119.9%	141.9%	163.5%
10.0%	73.6%	97.2%	119.9%	141.9%	163.5%

Pre-Tax NPV Sensitivity To Opex

Opex	Commodity Price (%)				
	(20%)	(10%)	--	10%	20%
(20.0%)	$21	$28	$35	$42	$49
(10.0%)	$19	$26	$33	$40	$47
--	$17	$24	$31	$38	$45
10.0%	$15	$22	$29	$36	$43
20.0%	$14	$21	$28	$35	$42

Pre-Tax IRR Sensitivity To Opex

Opex	Commodity Price (%)				
	(20%)	(10%)	--	10%	20%
(20.0%)	85.7%	108.8%	131.1%	152.9%	174.3%
(10.0%)	79.7%	103.0%	125.5%	147.4%	168.9%
--	73.6%	97.2%	119.9%	141.9%	163.5%
10.0%	67.3%	91.3%	114.2%	136.4%	158.1%
20.0%	61.0%	85.4%	108.5%	130.8%	152.6%

Pre-Tax NPV Sensitivity To Initial Capex

Initial Capex	Commodity Price (%)				
	(20%)	(10%)	--	10%	20%
(20.0%)	$19	$26	$33	$40	$47
(10.0%)	$18	$25	$32	$39	$46
--	$17	$24	$31	$38	$45
10.0%	$16	$23	$30	$37	$44
20.0%	$15	$22	$29	$36	$43

Pre-Tax IRR Sensitivity To Initial Capex

Initial Capex	Commodity Price (%)				
	(20%)	(10%)	--	10%	20%
(20.0%)	97.3%	125.7%	153.1%	179.9%	206.2%
(10.0%)	84.2%	110.0%	134.8%	158.9%	182.6%
--	73.6%	97.2%	119.9%	141.9%	163.5%
10.0%	64.6%	86.6%	107.5%	127.8%	147.7%
20.0%	57.1%	77.6%	97.1%	116.0%	134.4%

Pre-Tax NPV Sensitivity To Mill Head Grade

Mill Head Grade	Commodity Price (%)				
	(20%)	(10%)	--	10%	20%
(20.0%)	$7	$13	$18	$24	$29
(10.0%)	$12	$18	$25	$31	$37
--	$17	$24	$31	$38	$45
10.0%	$22	$30	$38	$45	$53
20.0%	$27	$36	$44	$52	$61

Pre-Tax IRR Sensitivity To Mill Head Grade

Mill Head Grade	Commodity Price (%)				
	(20%)	(10%)	--	10%	20%
(20.0%)	35.6%	56.9%	76.8%	95.6%	113.9%
(10.0%)	55.2%	77.6%	98.7%	119.1%	139.0%
--	73.6%	97.2%	119.9%	141.9%	163.5%
10.0%	91.0%	116.2%	140.5%	164.2%	187.6%
20.0%	107.9%	134.7%	160.7%	186.2%	211.3%

Pre-Tax NPV Sensitivity To Mill Recovery

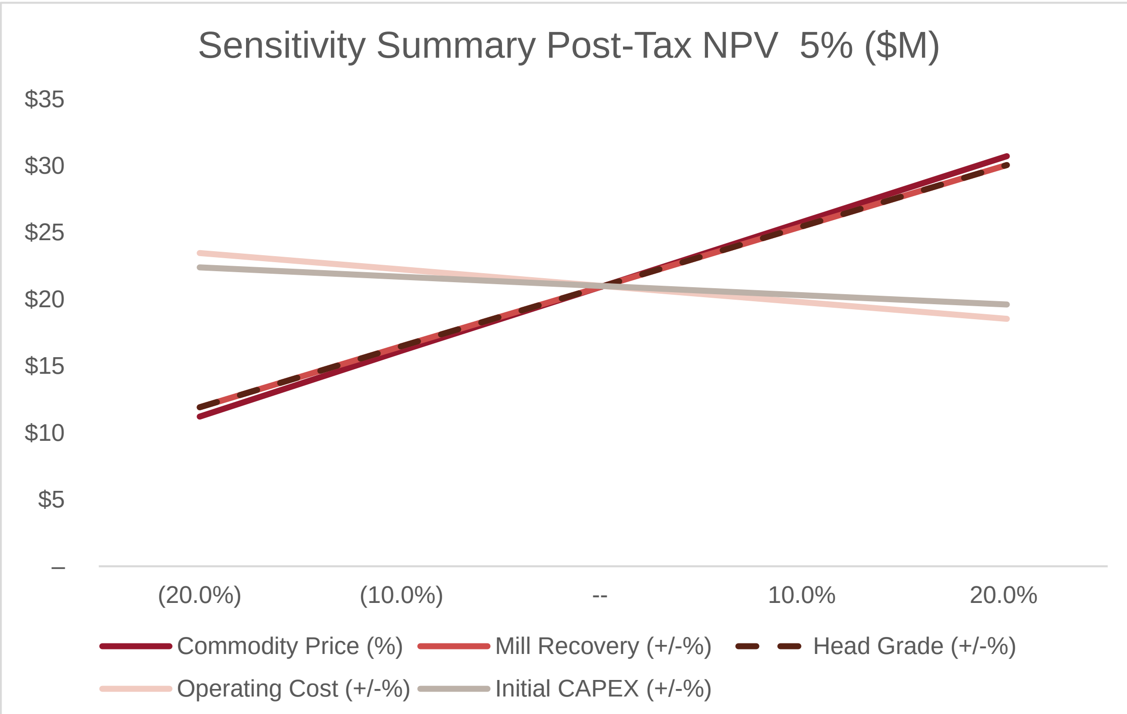
Mill Recovery	Commodity Price (%)				
	(20%)	(10%)	--	10%	20%
(20.0%)	$7	$13	$18	$24	$29
(10.0%)	$12	$18	$25	$31	$37
--	$17	$24	$31	$38	$45
10.0%	$22	$30	$38	$45	$53
20.0%	$27	$36	$44	$52	$61

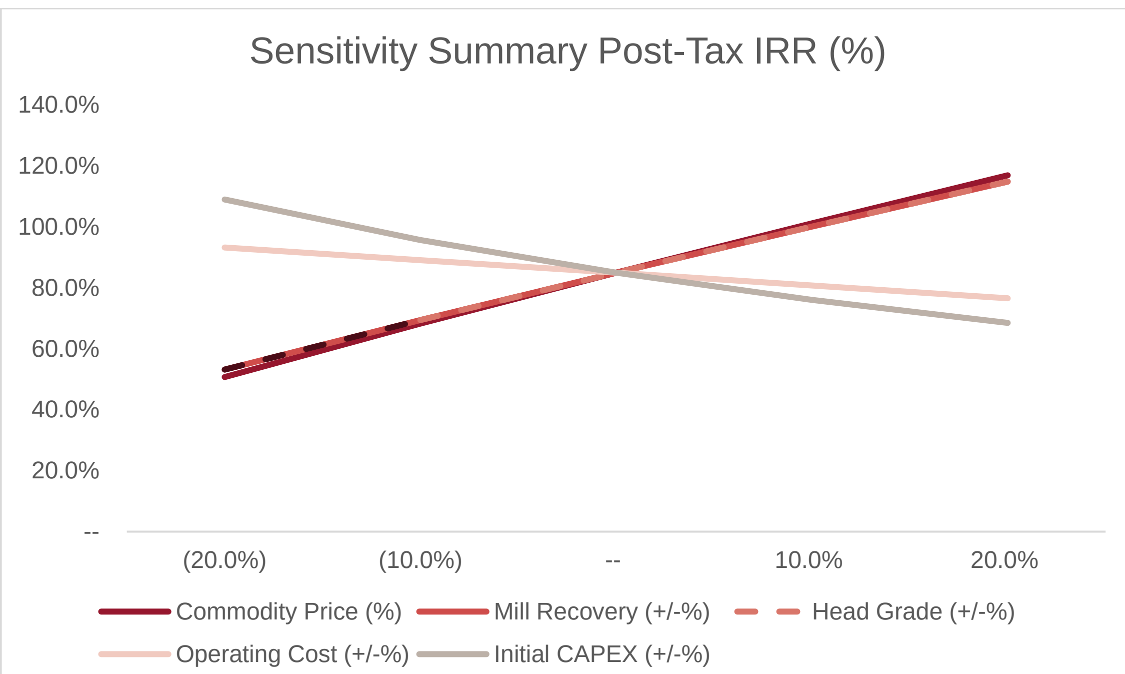
Pre-Tax IRR Sensitivity To Mill Recovery

Mill Recovery	Commodity Price (%)				
	(20%)	(10%)	--	10%	20%
(20.0%)	35.6%	56.9%	76.8%	95.6%	113.9%
(10.0%)	55.2%	77.6%	98.7%	119.1%	139.0%
--	73.6%	97.2%	119.9%	141.9%	163.5%
10.0%	91.0%	116.2%	140.5%	164.2%	187.6%
20.0%	107.9%	134.7%	160.7%	186.2%	211.3%

Note: Prepared by Ausenco, 2021.

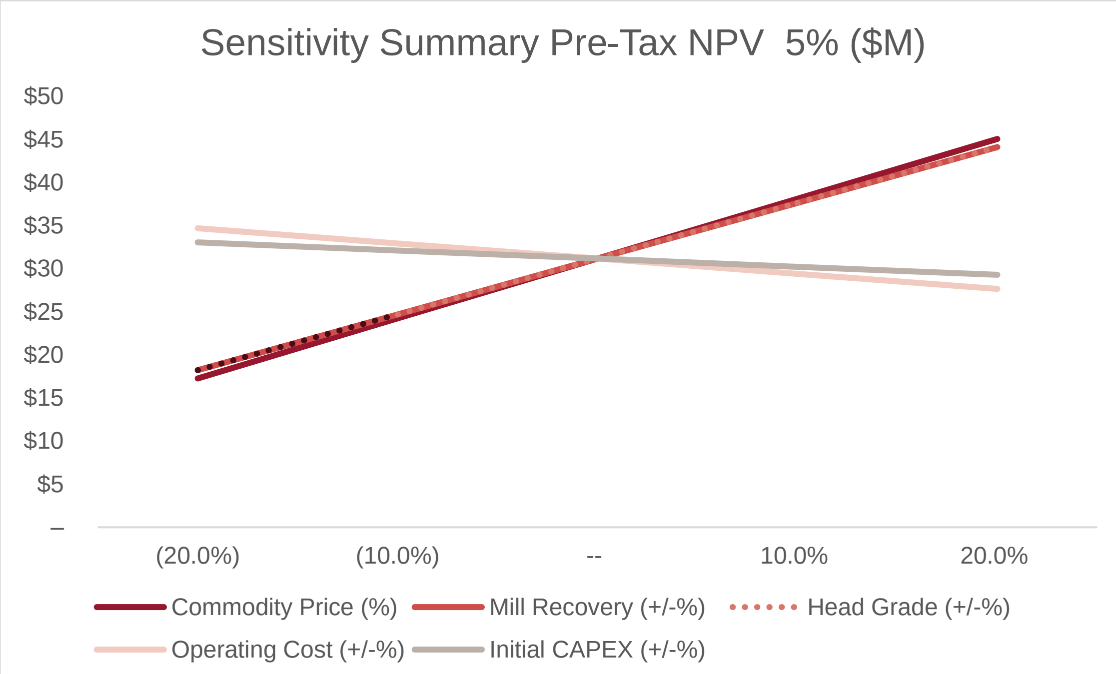
Figure 22-1: Post-Tax NPV and IRR Sensitivity Results

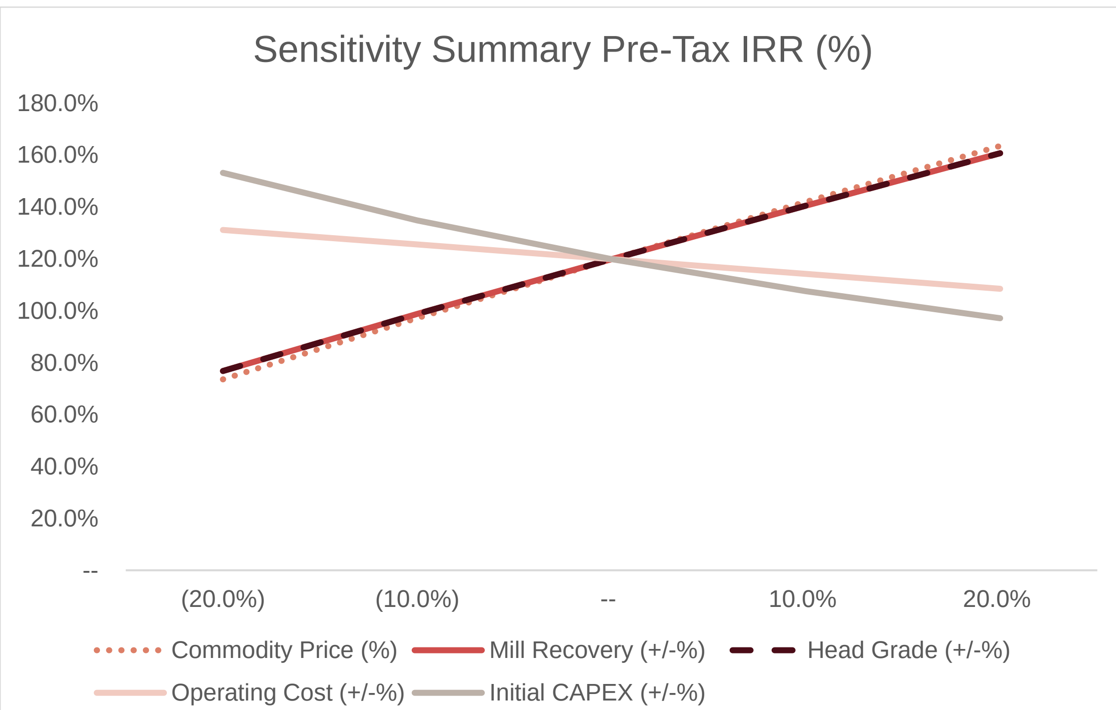




Note: Figure prepared by Ausenco, 2021.

Figure 22-2: Pre-Tax NPV and IRR Sensitivity Results





Note: Figure prepared by Ausenco, 2021.

23 ADJACENT PROPERTIES

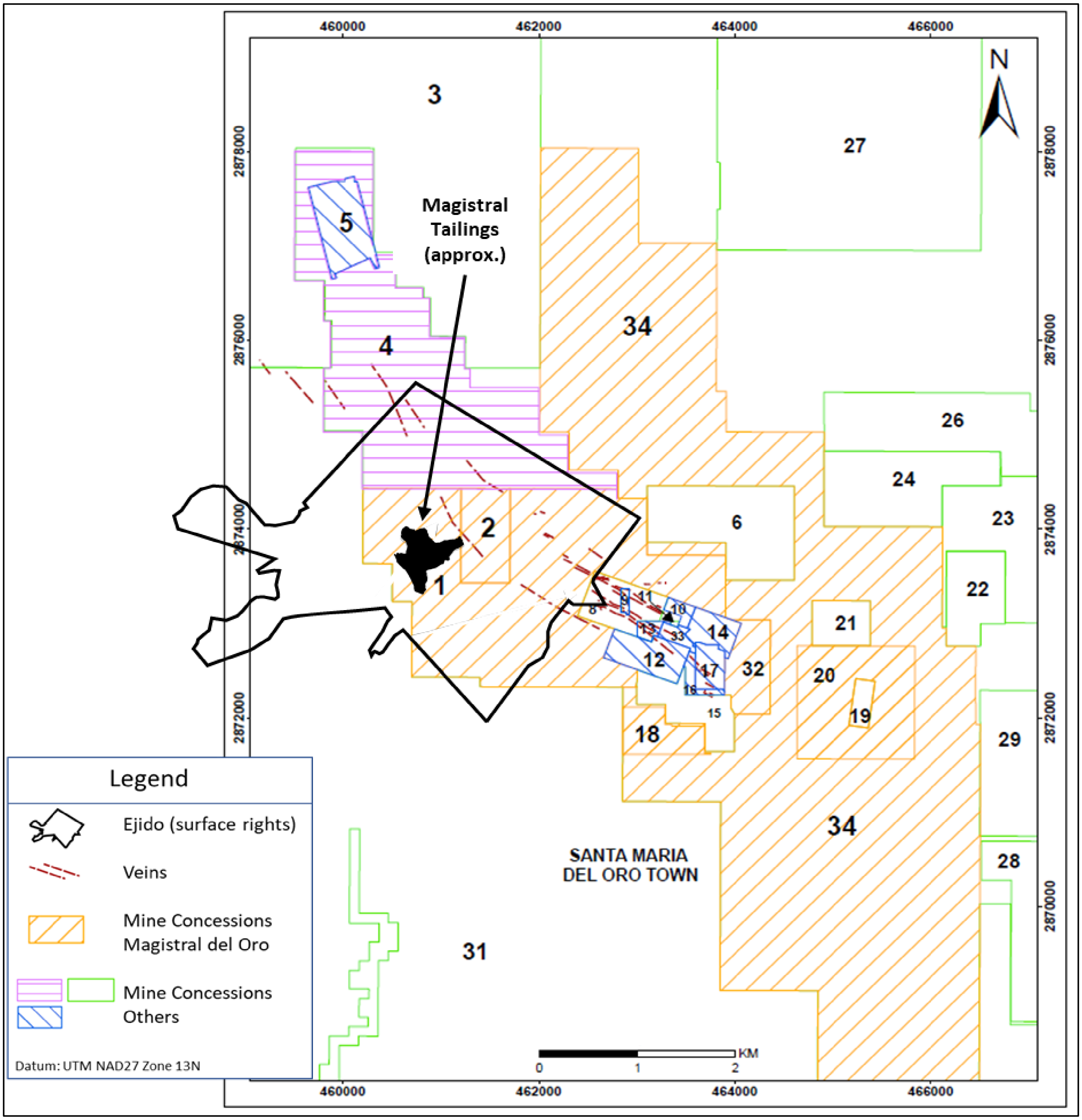
The Project is located on the Ejido Magistral del Oro where the tailings are covered by the surface rights held by the Ejido.

Several mine concessions are found below and adjacent to the Project, however, these mineral rights are for subsurface materials only and do not impact the Project.

The mineral rights below the tailings are held by Magistral del Oro S.A. de C.V. for two mine concessions: MM-23 and JM-29. Additionally, there are several mine concessions to the north and east of the Project. There are currently no active exploration activities or mine operations adjacent to the Project.

Figure 23-1 illustrates the mineral rights adjacent to the Project. Table 23-1 lists the key index of the adjacent mine concessions and ownership.

Figure 23-1: Adjacent Properties



Source: Prepared by Tarachi, 2021; modified by AGP, 2021.

Table 23-1: List of Adjacent Properties; Mine Concessions

ID	Title	Name	Owner	Surface (ha)
1	217523	MM-23	Cía. Minera Magistral del Oro S.A. de C.V.	525.52
2	216692	JM-29	Cía. Minera Magistral del Oro S.A. de C.V.	50.00
3	202631	El Sauce	Minera Cerro de Plata S.A. de C.V.	7,456.01
4	220508	El Oro	Cía. Minera La Parreña S.A. de C.V.	443.90
5	214712	La Cobriz	Ernesto Sileyra Arias	46.24
6	212424	El Colorado	Cía. Minera Magistral del Oro S.A. de C.V.	118.00
8	4015	Cía. La Sonrisa, S.A. de C.V.	Cía. La Sonrisa, S.A. de C.V.	40.00
9	217468	Ataque 2	Francisco Silveyra Ibarra	2.06
10	217257	Francisco III	Francisco Silveyra Ibarra	5.18
11	216026	Zorro	Real Minera de Hidalgo S.A. de C.V.	1.03
12	161847	Anaconda de México	Miguel Caballero Chávez	29.20
13	216004	Ataque 1	Ernesto Sileyra Arias	4.54
14	217774	Susana	Leticia Arias Castro de Silveyra	16.98
15	216594	Guadiana	Cía. Minera La Parreña S.A. de C.V.	41.83
16	216913	Los Tres Amigos	Aníbal Caballero Juárez y Socios	6.19
17	229792	San Jose	Minera Scorpio S.A.	14.02
18	212323	La Compuerta	Cía. Minera Magistral del Oro S.A. de C.V.	33.84
19	217226	Silvia	Juan Manuel Ramos Garcia	10.00
20	216703	Gama	Cía. Minera Magistral del Oro S.A. de C.V.	134.00
21	221092	La Argentina	Minera San Francisco del Oro S.A. de C.V.	28.43
22	218442	El Oro 4	Cía. Minera La Parreña S.A. de C.V.	54.06
23	225245	Picacho	Juan Martiniano Villa Moreno	163.73
24	245716	Chilicotes 2	Desarrollos Mineros El Águila S.A. de C.V.	119.06
26	220016	Chilicotes 2	Cía. Minera La Parreña S.A. de C.V.	317.93
27	220498	Cerro Prieto	Cía. Minera La Parreña S.A. de C.V.	725.84
28	242532	Pescaditos	J. Eduwiges Meléndez Bueno y Socios	190.87
29	245715	Chilicotes	Desarrollos Mineros El Águila S.A. de C.V.	337.78
31	245129	Santa María	Minera Fumarola S.A. de C.V.	6,030.26
32	216693	Cristy	Cía. Minera Magistral del Oro S.A. de C.V.	40.80
33	214734	San Cristóbal	Ernesto Sileyra Arias	5.76
34	221389	Reducción San Carlos	Cía. Minera Magistral del Oro S.A. de C.V.	1,831.70

Note: Cia = Compañía
Prepared by Tarachi, 2021; modified by AGP, 2021.

24 OTHER RELEVANT DATA AND INFORMATION

24.1 Project Execution Plan

All work within the defined scope will be managed in accordance with the project execution plan and all other project plans, to achieve the project schedule and budget. A project controls system will be implemented to adequately monitor and report on project progress, including adherence to or deviation from the schedule and the budget. Monthly Project Progress reports will be provided to thoroughly explain project progress.

24.2 Project Execution Schedule

The project execution schedule addresses the overall project (objectives, scope, strategies, and roles and responsibilities) and provides a high-level plan for the development and implementation of the Magistral Project. The schedule covers the site works, engineering, procurement, construction, start-up and commissioning of the project.

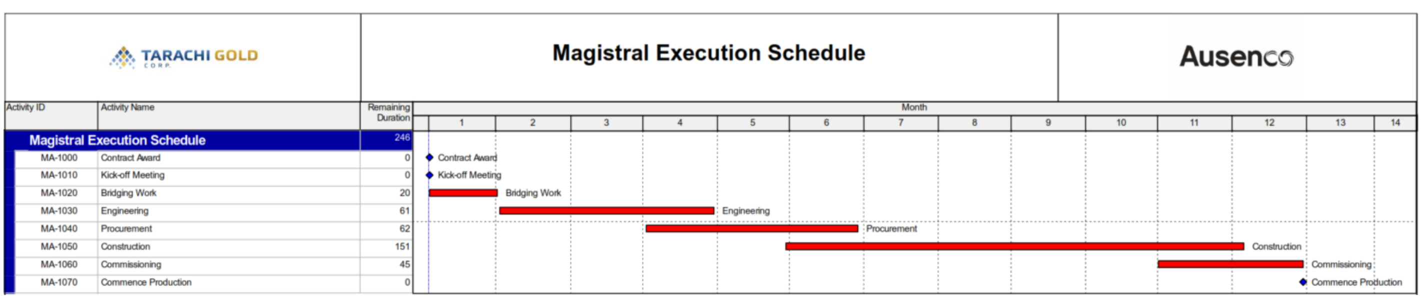
24.2.1 Execution Strategy

The execution schedule activities include the following:

- Bridging work;
- Engineering procurement construction management (EPCM);
- Construction; and
- Commissioning.

The overall execution schedule is assumed to take 12 months as indicated in Figure 24-1.

Figure 24-1: Execution Schedule



Note: Figure prepared by Ausenco, 2021.

24.2.1.1.1 Bridging work

During the bridging work prior to the commencement of engineering, the focus will be on obtaining the necessary information to successfully execute the EPCM work.

24.2.1.1.2 Engineering Procurement Construction Management (EPCM)

The EPCM contractor will provide a complete and fully functional process plant and other on-site infrastructure as defined in Section 18 by performing the services below.

- Engineering
  - The engineering and design required for the construction of the facilities will be completed. Design for construction will include all engineering disciplines such as civil, structural, mechanical, piping, electrical, instrumentation and control.
  - Engineering and supervisory support will be provided for the process plant from start-up through to final completion.
  - Engineering will be supported construction to help resolve any technical issues.
- Procurement
  - All materials, goods, and services will be procured to construct and commission the process plant. This includes the procurement of commissioning spare parts at the time of equipment procurement.
  - Logistics management, warehousing and preservation of all procured materials and goods will be provided prior to issue to construction contractors.
- Construction
  - The construction management will coordinate, monitor and direct contractors to ensure compliance with safety, health and environment standards, plus the administration of contract requirements for quality, schedule, documentation, industrial relations requirements etc.

24.2.1.1.3 Commissioning

Commissioning will cover the handover and acceptance of process equipment and commissioning modules between the various commissioning stages, from the completion of installation by contractors and suppliers through verification of process plant and equipment. There will be early engagement of the operations team to participate in the commissioning planning and sequencing.

25 INTERPRETATION AND CONCLUSIONS

25.1 Introduction

The QPs note the following interpretations and conclusions in their respective areas of expertise, based on the review of data available for this Report.

25.2 Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

The Magistral Property is defined by three agreements with the Ejido Magistral del Oro in the northern part of the State of Durango, Mexico. These include: a 'Tailings Lease Agreement', a 'Land Lease Agreement' for the Project which comprises of two Temporary Occupancy agreements. The Property, as defined by the agreements, covers a total area of approximately 51.6 ha.

25.3 Geology

The Magistral Project is located on the Ejido Magistral del Oro in the northern part of the State of Durango, Mexico. The Magistral tailings have been in place since 1960 when mining operations from the surrounding mineralized veins were abandoned. The tailings have undergone several studies and exploration drilling but have largely been left as is since 2006 when approximately 750,000 tonnes were transferred 2 km west, and away from the Ejido to undergo a heap leach metallurgical test.

The gold and copper mineralization is hosted in the historic tailings deposit at Magistral del Oro. The material is made up largely of processed diorite metavolocanics from historic mine operations in the 1950's. The deposit is roughly triangular in shape with the longest axes approximately 550 m and 570 m. Thicknesses range between 1.7 m and 14 m. There are no berms to protect from runoff.

25.4 Exploration, Drilling and Analytical Data Collection in Support of Mineral Resource Estimation

In March 2021, Tarachi completed a property survey using DGPS, and photogrammetry survey was completed of the mill and tailings to the west of the ejido. In April 2021, a drone LiDAR survey was completed to obtain an accurate topographic surface of the tailings. Drilling on the Magistral tailings was completed by Tarachi in April and May 2021. A total of 37 hollow core auger drillholes, totalling 263 m, were completed over the tailings. Samples were collected using 0.7-m-long Shelby sample tubes, and sample intervals consisted of two (2) Shelby tubes, or 1.4 m. A total of 178 samples were collected during this drill program.

The samples were sent to BaseMet, in Kamloops, BC, for metallurgical testwork and assay analyses were completed at Actlabs, in Kamloops, BC. The samples were analyzed for gold by means of fire assay with an atomic absorption finish using a 30g aliquot. A multi-element analysis, including copper, was also performed using the aqua regia digestion method with an ICP-MS finish. Tarachi conducted a QA/QC program that consisted of inserting blanks, standards and duplicate samples to monitor the precision, accuracy and reliability of the assay results.

The QP believes that the preparation and analyses of the samples was satisfactory for this type of deposit and style of gold mineralization and that the sample handling and chain of custody, as documented, meets standard industry practice. The QP has reviewed the QA/QC program and is of the opinion it is in accordance with standard industry practice and CIM Exploration Best Practice Guidelines. That is, Tarachi personnel have taken reasonable measures to ensure the sample analysis completed is sufficiently accurate and precise such that the assays can be considered as reliable. The QP considers, based on the statistical analysis of the QA/QC results, that the assay results and database are suitable for use in the estimation of mineral resources.

25.5 Mineral Processing and Metallurgical Testing

Metallurgical testwork completed in November 2021 by Base Metallurgical Laboratories is suitable to support process design of this NI 43-101 Technical Report study.

Results from gravity and flotation testing at Base Metallurgical Laboratories showed little gravity gold was present and flotation gold recovery was low. The presence of water-soluble copper was also low and negligible.

Testwork indicated that the preferred flowsheet for the Magistral retreatment material should include cyanide leaching, CCD washing, copper recovery by means of a SART process and precious metal recovery by the existing Merrill-Crowe process.

Based on the selected flowsheet for process plant operation, the recoveries for gold in the Merrill-Crowe plant and SART plant are 71.8% and 8.9%, respectively. Total gold recovery of 80.70% (combined SART and Merrill-Crowe), silver recovery of 68.4% in the SART plant and copper recovery of 46.2% in the SART plant will be achieved.

25.6 Mineral Resource Estimates

The Mineral Resources for the Magistral tailings are reported at a 0.50 g/t Au cut-off grade within a constraining shell. The Mineral Resources are: Measured Resources of 1.1 Mt at 1.95 g/t Au, 0.17% Cu and 3.22 g/t Ag; Indicated Resources of 0.2 Mt at 1.80 g/t Au, 0.17 %Cu and 3.11 g/t Ag; and, and Inferred Resources of 0.02 Mt at 1.78 g/t Au ,0.16 %Cu and 2.43 g/t Ag. The effective date of the Mineral Resources is 15 November 2021.

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

AGP concluded that further exploration will delineate and more accurately assess the volume of the material. AGP finds that additional drilling is warranted and recommended.

25.7 Mining Methods

The tailings will be excavated by an excavator or loader and hauled to the process plant. Mining will encounter a small amount of dilution along the original topography contact. Two 20 t dump trucks are required to maintain production to the process plant. Support equipment includes a track dozer, grader and water truck.

25.8 Recovery Methods

The modifications proposed to the existing flowsheet at Magistral maximize the recovery of Au, Ag and Cu with minimal capital addition. The proposed flowsheet and the existing plant at Magistral have a proven flowsheet which utilizes conventional processing equipment, used within operational mining.

The flowsheet includes grinding, cyanide leaching, CCD, SART, Merrill-Crowe, and cyanide destruction, with an overall availability of 95%. The major equipment was designed for a nominal throughput of 1,000 t/d.

25.9 Project Infrastructure

Infrastructure to support the Magistral project will consist of site civil work, buildings, onsite roads, a water management system, and site electrical power.

The process plant is located immediately adjacent to the Magistral tailings deposit. The lined tailings deposition facility is located 0.75 km due west of the plant.

The village of Magistral del Oro (population less than 100) is located immediately adjacent to and south of the tailings deposit. The town of Santa María del Oro (population about 5,800) is located 5 km south of the deposit. The majority of the workforce is expected to be available from these two population centres. No camps will be built on the site.

The majority of equipment and supplies will be trucked in from Durango City, Parral, or Chihuahua City.

The maximum power load requirement at Magistral is estimated at 1.7MW. The project currently has access to 1.2MW and has an additional backup transformer that can supply 0.5MW. Tarachi will submit an application to CFE for supply of 2MW load which meets the peak power demand during operation. .

The freshwater requirement is 16.87 m^3/hr which will be supplied from either the existing well or the old pit adjacent to the site.

Being in Mexico, the site has dry weather for the majority of the year and does not require buildings to protect the process plant. The site has existing buildings for Merrill-Crowe equipment which will also house the gold room. There are existing buildings for admin office, plant workshop and laboratory. A new gate house, a building for the SART plant and a truck workshop will be built.

The currently permitted TSF facility design will be raised to its fully permitted elevation of 1,770m to accommodate an additional storage of approximately 900,000 mt. The initial raise of embankment to 1760m (Phase 1) will accommodate storage of full production tailings for approximately the first 6-8 months of plant operation. The structural fill material used to construct the Phase 1 dam is assumed to come from a borrow source within the tailings impoundment. The structural fill material used to construct the ultimate dam is assumed to come from a local source not more than 1 km in distance.

25.10 Market Studies and Contracts

No market studies were completed by Tarachi or its consultants for this NI 43-101 technical report. The marketing terms are based on Tarachi’s discussions with Ocean Partners. No specific contracts have been signed by Tarachi.

The final product from the process plant will be gold in the form of doré bars and copper in the form of sulphide precipitate along with silver.

No specific contracts have been signed or market studies conducted. For this technical report, a gold price of US$1,600/oz, a silver price of US$22/oz, and a copper price of US$3.4/lb were assumed and a US$:C$ exchange rate of 1.00:1.28 was used.

The smelter and refinery terms are discussed in Table 19-.

25.11 Environmental Studies, Permitting, and Social or Community Impact

The Magistral Tailings Project has undertaken and completed an Environmental Impact Study and has completed most of the permitting process. The Environmental Impact Study was submitted to the government authority SEMARNAT on 30 January 2013, and is valid for 17 years from the authorization notice date. Based on the area's long mining history the local population is aware of the impact of the Magistral Tailings project becoming operational.

As currently configured, the TSF consists of two types of cells for segregation of both "clean" and "dirty" process residues. The "clean" residues consist of solids and liquid fractions where the free cyanide and copper cyanide are removed (cyanide destruction) with the retained copper precipitating out as a solid. To minimize the copper dissolved in the process, the pH will be maintained at 11.0 to 11.2. Copper buildup is likely to plateau as some copper will leave with the MC precipitate and some with a bleed that may have to be introduced, and this will help maintain a manageable level of copper in the concentrate.

One method that is commonly used for cyanide destruction involves the application of the INCO SO2/Air Process. For the 15 to 20% of the barren solution that requires cyanide destruction, the unit cost is estimated to be between US$ 1.00/t and US$ 2.00/t of tailings

The active environmental permit for the existing TSF includes a synthetic liner system (PVC) that enables the storage of tailings that are classified as "dirty", meaning that they may contain residual cyanide. The planned upgrade and expansion of the existing TSF to accommodate the anticipated process tailings follows the essential elements of the current permit and does not include any provision for reclassification of the tailings via cyanide destruction to produce a "clean" product. The required repairs and upgrades to the existing TSF identified as part of the staged construction plan for plant restart operations includes all the essential elements and additional earthwork construction to bring the facility into full compliance with the permit.

Theoretically, incorporation of cyanide destruction and the reclassification of the tailings as "clean" could be considered as part of future facility expansion that may be considered once the current tailings resource on site has been exhausted and other regional resources are considered for processing in the plant.

25.12 Capital and Operating Costs

The Capital Cost estimate is broken out into direct and indirect costs. Direct costs include all contractors direct and indirect labour, permanent equipment, materials, freight and mobile equipment associated with the physical construction and/or refurbishment of the facilities within the scope of work. Indirect costs include all costs that are necessary for project completion but not related to the direct construction cost. The total Capital Cost is estimated at US$11.11M including 21.7% contingency factor. The estimated operating unit cost is projected at US$ 21.05 per tonne

25.13 Economic Analysis

Based on the assumptions and parameters in this report, the PEA shows positive economics with post-tax $NPV_{5\%}$ of $21.0 million post-tax IRR of 85%.

25.14 Risks and Opportunities

25.14.1 Introduction

The following discussion of risks and opportunities involves forward-looking statements that are based on reasonable expectations and informed by the recent past. Readers are cautioned that such forward-looking statements involve uncertainties and unknowns that may cause actual outcomes to differ from those implied by these forward-looking statements.

25.14.2 Risks

25.14.2.1 Commodity Prices

The ability of mining companies to fund the advancement of their projects through exploration and development is always influenced by commodity prices. The World Bank Commodities Price Forecast for October 2021 (World Bank, 2021) projects stable prices for each of Cordero's anticipated revenue-producing metals; the metal with the most volatile price forecast is gold, which accounts for less than 10% of Cordero's in-situ value. Since the World Bank's forecasts of silver, gold, lead and zinc prices from 2021 to 2035 are above the prices that Discovery Silver assumes for the Cordero Project, the company anticipates that commodity price fluctuations are not likely to create difficulties for funding the advancement of Cordero.

25.14.2.2 COVID-19 and Evolving Variants

The major risk to project development or further drilling is disruption due to COVID-19 or to evolving variants on site or in the local communities. To reduce the likelihood of this risk occurring, Tarachi will take measures to keep any infected personnel isolated from the local communities. Testing is required prior to authorization to access the site and quarantine periods are enforced if applicable.

25.14.2.3 Mineral Resource

One risk to the mineral resources is the lack of original, or bottom, topography of the Magistral tailings. This is considered a low risk and is anticipated to have a low impact on the resource volume. It is understood that the original topography may undulate, or the ground may have been altered/prepared prior to the deposition of tailings from historic operations. Current bottom topography was modelled based on current drilling information but does not include the edges of the deposit, where the edges of the deposit were pinched off from the last known drillhole to the current boundary of the tailings.

25.14.2.4 Recovery

The recovery of Cu and Ag from the SART plant is based on the speciation data of the samples produced by Base Metallurgical Lab and BQE Water's experience in operating SART plants. No additional tests were conducted to confirm the recoveries or performance which should be completed in the future work.

There is a risk that no solid/liquid separation testwork has been conducted on the Magistral tailings. Solid/liquid separation testwork is recommended in the next stage of study. Thickener settling performance (yield stress) is required due to increasing underflow density, which will result in a material with a higher yield stress being raked and will increase the rake torque and limit the achievable underflow density.

When treating very high-grade gold–copper grades that require high cyanide and zinc reagent additions, there is potential for impurities to build up in the recirculating process water. To mitigate this, the cyanide detoxification circuit was designed to treat an additional barren bleed stream to purge impurities from the process water.

25.14.2.5 Process Plant

The project has an existing process plant consisting of both used and non used equipment which was inspected in 2020. Since the plant is currently not running, thorough inspection of equipment condition is required prior to restarting the plant.

25.14.2.6 Infrastructure

The condition of the existing infrastructure may present a risk as the condition was inspected in 2020. Further assessment is recommended prior to restarting the project.

25.14.2.7 Environmental Studies, Permitting and Social or Community Impact

Potential environmental risks could be:

- Use of cyanide may require additional design compliance both in the process area and TSF;
- A more robust environmental baseline may be requested; and
- Closure requirements on the historic tailings area may change when the project ends.

Potential permitting risks could be:

- The new agreement has not passed the vote of Ejido which is schedule on 23 January 2022;
- Possible delays in permit approvals may impact the project schedule;
- Additional requirements established by PROFEPA or SEMANART not indicated in the original MIA;
- Implementation of the new circuit (SART) in the process may require the submittal of new permits at the federal level such as a Risk Analysis Study; and
- Conventional tailings deposition may need additional studies to ensure safety due to the unauthorized discharge of solution into the creek breach in 2014.

25.14.2.8 Tailings Storage Facility

- Storage capacity of the existing facility may not be enough to process any additional tailings within the project vicinity;

- Construction delays due to supply chain demands; and
- Water supply demands for conventional tails may require additional water wells and water right permits.

25.14.3 Opportunities

25.14.3.1 Mining

By implementing smaller mining fleet with ability for high selectivity mining, the dilution rate could be lowered and increase the recovery of the resource.

25.14.3.2 Metallurgy

There may be opportunity to improve the process plant recovery by testing variability samples from different locations in the tailings deposit.

25.14.3.3 Tailings Storage Facility

The footprint of the new expanded TSF may be reduced by dry stacking of tailings which should be considered in the next stage of the study.

26 RECOMMENDATIONS

26.1 Summary and Estimated Budget

The Magistral Project PEA Study has indicated a positive project. It is recommended that Tarachi proceed forward with additional studies including a Prefeasibility Study (PFS). The recommendations and associated budgets by area are described further in the sections below.

A summary of the expected study costs is shown in Table 26-1.

Table 26-1: Proposed Budget Summary

Area of Study	Approximate Cost (US$)
Geology – Work Program	$ 22,000
Geotechnical	$ 150,000
Mining	$ 30,000
Metallurgy	$ 150,000
Infrastructure	$ 180,000
Environmental	$ 100,000
Total Recommended Study Budget	$ 632,000

Note: Table prepared by Ausenco, 2021.

26.2 Geology

AGP recommends a minimum of 15 drillholes to determine the true thickness at the edges of the deposit and upgrade the inferred resources, for example, in the northeast of the tailings deposit where the outflow from the historic plant was situated.

To determine the bottom, or original, topography below the tailings may employ the same drill at a more densely spaced pattern, or a series of trenches.

The cost for these recommended programs is estimated at US$ 22,000.

Table 26-2 presents the breakdown of the recommended work.

Table 26-2: Geology Program Estimate

Proposed Work	Unit Cost (US$)	Approximate Cost (US$)
Delineation/condemnation drilling (~80m)	$100/m	$ 8,000
Trenching or GPR survey		$ 12,000
Subtotal:		$ 20,000
Contingency (10%)		$ 2,000
Subtotal:		$ 22,000

Note: Table prepared by AGP, 2021.

26.3 Geotechnical

The following additional work is recommended as the project advances further in the study phases prior to a production decision:

- Deposit Base Topography – additional study should be completed to properly determine the original topography. This may be completed with additional drilling as well as the use of seismic or ground penetrating radar in the shallower areas.
- End Wall analysis – the stability of the edges of the pit design needs to be examined to ensure that slumping would not occur and if it does whether it would impact nearby infrastructure. Using the above determined topography and a review of the geotechnical parameters obtained from a site visit and laboratory testwork, the stability analysis could be completed.
- Expected budget for this work is US$150,000.

26.4 Mining

The following additional work is recommended as the project advances further in the study phases prior to a production decision:

- Contract Mining – additional discussions with local contractors should be completed to determine if a full contract mining scenario is cost effective.
- Update the mining plan and quantities with new deposit base topography.
- Expected budget for the work is US$30,000.

26.5 Metallurgy

Ausenco recommends that a solids/liquid separation test be required in the next stage of the study to demonstrate that a higher pulp density for the thickener underflow is practical. Since the Magistral plant will be located in an arid region, evaporation will exceed the amount of precipitation. It is recommended to evaluate tailings filtration if the water rights become a major issue or freshwater is limited.

The SART process metallurgical test program is also required to demonstrate the maintaining precious metal recovery without a major increase in cyanide consumption related to copper and confirming additional value generation through the production of high-grade copper sulphide concentrate.

Table 26-3: Metallurgical Program Estimate

Proposed Work	Approximate Cost (US$)
Mill Inspection	$20,000
Solid/liquid separation test	$40,000
Locked Cycle and SART Testwork	$90,000
Total	$150,000

Note: Table prepared by Ausenco, 2021.

26.6 Infrastructure

26.6.1 Tailings Storage Facility

Solum recommends the following works in the next stage of the Project:

Table 26-4: Proposed Next Stage Work

Proposed Work	Unit Cost (US$)	Approximate Cost (US$)
Geotechnical field program		$25,000
Topographic survey		$10,000
Geotechnical testing		$10,000
Geochemical testing		$15,000
Final TSF design		$45,000
Rheology and dewatering testing		$25,000
Filtered tailings alternative study		$25,000
Total		$155,000

Note: Table prepared by Solum, 2021.

The estimated cost does not include drilling, shipping, evaluations studies, and contingencies.

26.6.2 Water Management

The water management plan for Magistral Mine was developed such that contact runoff/seepage from any facilities to be collected, and any clean catchment runoff to be diverted away from the facilities.

Collection ditches were designed to convey contact runoff, and the collection pond was considered to collect the runoff. The diversion systems surrounding the tailings deposit site was delineated, and the corresponding excavation volumes were estimated.

For the next phase of the work:

- a detailed water balance of the collection pond would be needed. The ponds should also be designed such that particles less than 10 microns settle within each pond and a 1:100 year storm to be passed through a overflow structure;
- Geochemistry analysis would also be needed to determine whether any treatment of the collected runoff is required; and
- The geometry of the ditches and pond can be further optimized to reduce the earth work.
- Expected budget for future work is US$25,000 excluding the TSF Water Balance and Geochemistry analysis.

26.7 Environmental

Environmental recommendations include:

- Geochemical characterization of the anticipated final process residues (if warranted by process flowsheet changes);
- Testing of residual soils and development of any blending strategies with minor residual tailings, post-excavation, with emphasis on specific requirements for amendment and growth media to provide the basis for successful site restoration;
- Development and implementation of strategies for excavation, handling, and transportation of the in situ historic tailings to the processing facility that minimize fugitive dust generation and off-site sediment excursion; and
- Evaluation of possible waste management optimizations to improve project economics and overall environmental performance that may include alternative tailings management strategies involving complete dewatering of the final process residues and their placement in dry form vs. conventional slurry impoundment as the primary option.

27 REFERENCES

27.1 Document References

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