mineral industry consultants

NI 43-101 F1 Technical Report on the Updated Mineral Resource Estimate and Feasibility Study for the Oxide Portion of the Candelones Project, Neita Sur Concession, Dominican Republic

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1.0 SUMMARY

1.1 GENERAL

Unigold Inc. (TSX-V:UGD) (Unigold) has retained Micon International Limited (Micon) to compile a Feasibility Study (FS) for the Main Zone oxide mineral resources at the Candelones Project and disclose the results of the study in a Canadian National Instrument (NI) 43-101 Technical Report.

The FS includes work from specialist consultants retained by Unigold who contributed to the study. All contributors to the FS are independent of Unigold, have conducted site visits and meet the requirements of a "Qualified Person" as defined by NI-43-101.

The FS describes a 5,000 tonne per day open pit mine delivering oxide ore to a valley fill, lined, heap leach pad. Gold recovery will include industry standard Carbon-in-Column (CIC) recovery circuit and a modern Adsorption, Desorption and Regeneration (ADR) plant, to produce approximately 31,000 ounces of gold annually at an All-In Sustaining Cost (AISC) of US $829 per ounce. At a gold price of US$ 1,650 per ounce, the Project generates a discounted (5%) Net Present Value of US$ 30.0 million representing a 44% after tax Internal Rate of Return.

The FS is based on an updated August, 2022, oxide mineral resource estimate by Micon which is based on updated economic parameters for costs and metal prices. This Technical Report includes the 2021 mineral resource for the sulphide portion of the Project which, for the purposes of this report, has not been updated.

The Candelones Project is comprised of the Candelones Main (CM), Candelones Connector (CC) and the Candelones Extension (CE) deposits. Drilling has now demonstrated that the CM and CC deposits are joined together, and the combined CM and CC deposits are referred to herein as the CMC deposit. The Project is located entirely within the Neita Sur Concession. Unigold submitted an application for the Neita Sur Concession as an exploitation concession with a seventy-five-year term. Unigold currently holds exclusive rights to Neita Sur until the application process is completed. The application is currently in final review by the Ministry of Energy and Mines of the Dominican Republic. Unigold has held title to the Neita Concession(s) continuously since 2002.

The mineral resource and reserve estimates for the Candelones Project, as reported in the FS described herein, combined with the mineral resource estimate for the sulphide resource at the CM, CC and CE deposits as outlined in this Technical Report, supersede the Technical Report dated May 31, 2021 (effective date May 10, 2021) titled "NI 43-101 Technical Report, Updated Mineral Resource Estimate and Preliminary Economic Estimate for the Candelones Project, Neita Concession, Dominican Republic". That report was posted on the Canadian System for Electronic Document Analysis and Retrieval (SEDAR) and on Unigold's website.

The material in this report was derived from published material researched by Micon and its Qualified Persons (QPs), as well as data, professional opinions and unpublished material submitted by the professional staff of Unigold and/or its consultants. Much of these data came from reports prepared and provided by Unigold.

Neither Micon nor the QPs for this report have or have had any material interest in Unigold or related entities. The relationship with Unigold is solely a professional association between the client and the independent consultant. This report is prepared in return for fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report.

This report includes technical information which requires subsequent calculations or estimates to derive sub-totals, totals and weighted averages. Such calculations or estimations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, Micon and the QPs do not consider them to be material.

The conclusions and recommendations in this report reflect Micon's and the authors' best independent judgment considering the information available to them at the time of writing. Micon and the authors reserve the right, but will not be obliged, to revise this report and conclusions if additional information becomes known to them after the date of this report. Use of this report acknowledges acceptance of the foregoing conditions.

This report is intended to be used by Unigold subject to the terms and conditions of its agreement with Micon. That agreement permits Unigold to file this report as a Technical Report with the Canadian Securities Administrators pursuant to provincial securities legislation. Except for the purposes legislated under provincial securities laws, any other use of this report, by any third party, is at that party's sole risk.

1.2 Property Description and Location

The Neita Sur and Neita Norte concession are located in the province of Dajabón, in the northwest region of the Dominican Republic. Both concessions border the Republic of Haiti to the west, defined by the Rio Libón. Unigold owns 100% of both mineral concessions. Unigold has applied for Neita Norte as an exploration and Neita Sur as an exploitation concession. Once these applications were submitted, Unigold's original Neita Fase II Concession exploration licence was suspended.

The exploration concession Neita Norte is centred at approximately 19°20'20" N, 71°40'00" W. The Universal Transverse Mercator (UTM) coordinates are 2,140,500 N, 219,800 E and the datum used was WGS-84, UTM-Zone 19N.

The exploitation concession Neita Sur is centred at approximately 19°16'53" N, 71°39'16" W. The Universal Transverse Mercator (UTM) coordinates are 2,134,100 N, 221,000 E and the datum used was WGS-84, UTM-Zone 19N.

The Candelones Project, currently hosts all known mineral resources of the expired Neita Fase II Concession as well as the Neita Sur concession.

On February 25, 2022, Unigold submitted applications to the DGM for the Neita Sur exploitation concession (9,990.50 ha) and Neita Norte exploration concession (11,100.11 ha). The application guarantees Unigold's exclusive claim to both concessions throughout the government review process.

The Neita Sur and Neita Norte concessions lie entire within the now suspended Neita Fase II concession. Mining Resolution R-MEM-CM-016-2018 was approved by the Ministry of Energy and Mines (Ministerio de Energiá y Minas) on May 10, 2018, through the DGM. The DGM administers mining in the Dominican Republic, as established under Mining Law 146 (1971). Once DGM has signed off on the technical and economic aspects of an application, the files are passed on to the Ministry of Energy and Mines for granting.

The term of Resolution R-MEM-CM-016-2018 was three years which expired May 10, 2021. Unigold applied for and was granted a one-year extension for the Neita Fase II concession on March 24, 2021, as per official notification letter DGM-0833. This initial one-year extension period was to expire on May 11, 2022. Submission of the application for the Neita Sur and Neita Norte Concessions on February 25, 2022, superseded the Neita Fase II extension.

Mining Resolution R-MEM-CM-016-2018 was the third consecutive mining resolution granted to Unigold for the Neita concession.

On April 25, 2022, the DGM published the extract letter for the Neita Sur Concession in the El Caribe newspaper, a national publication, advising the public of the applications and soliciting public comment on the applications.

On September 1, 2022, the DGM published the extract letter for the Neita Norte Concession. Publication of the extract letters for public comment is an important step in the government review process.

As of Oct. 14, 2022, the DGM had completed its technical review of the Neita Sur Concession and forwarded the application to the Ministry of Energy and Mines for final approval. The application for the Neita Norte concession is still under review by the MEM.

Unigold's exploration properties are subject to ongoing renewal and application processes. Should renewals and applications not be granted, then the carrying value of the exploration and evaluation assets may be impaired.

1.3 Accessibility, Climate, Physiography, Local Resources and Infrastructure

The Dominican Republic has many international airports, including those at Santiago and Puerto Plata, which are the closest airports to the Project.

The property is accessible by road, being bisected by highway #45, a paved road from Monte Christi, on the Atlantic coast, south to Dajabón, Restauración and Matayaya. Monte Christi is also the terminus for highway #1, a major highway originating in the capital of Santo Domingo and heading northwest through Santiago, before continuing to Monte Christi.

The Project and both mineral concessions are accessible by means of a network of trails and unpaved roads, leading off highway #45. These trails and roads are passable year-round.

The climate is semitropical. There is a distinct rainy season that commences in May and extends through October, with the Atlantic hurricane season extending from June through November. There have been no recorded incidences of hurricanes affecting activities in the town of Restauración. Unigold can operate year-round with little difficulty.

The property is located within the Cordillera Central, where it displays craggy highlands and mountains, interspersed with rich workable valleys. The steep slopes, deep valleys and sharp crests are common characteristics of volcanic mountain ranges. Elevation varies from 460 metres above sea level (masl) in the valley of Rio Libón to 1,009 masl at the peak of Cerro del Guano.

The vegetation on the property is comprised of a mix of montane pine forest and mixed pine-broad-leaved forest, with the undergrowth and floor layers comprising younger saplings, ferns, grasses, orchids, moss and fungi. These pine forests are generally the result of reforestation. Low lying areas and areas with gentle slopes/relief are dominated by agricultural land.

The border region with Haiti is one of the least densely populated and least developed areas of the Dominican Republic. Farming and forestry are the primary means of income.

The nearest population centre is Restauración (pop. 7,000). Several smaller communities (pop. <500) lie within the larger Concession area. The remainder of the population is rural, living in scattered farms.

Restauración is serviced by the national electrical grid and has a number of small local businesses that support the community and the local farming and forestry industries. Dajabón, which is located 45 kilometres (km) north, is the closest urban area of any size. Santiago is the second largest city in the Dominican Republic and the closest major centre, approximately 150 km to the northeast. Santiago is accessible by paved road from the property.

Unigold has established a semi-permanent camp approximately 2 km from Restauración. The camp can accommodate more than twenty-five people and includes bunkhouse facilities, washroom facilities, a full dining room/kitchen, office facilities, fuel and consumable storage, warehousing facilities and a core processing and storage facility. Most of the buildings are converted shipping containers. The camp is fenced and there is security onsite 24 hours per day. There is no additional infrastructure in the area and Unigold generates its own power at the camp using diesel generators.

Unigold owns four diamond drills and an associated inventory of parts and down-hole tools, sufficient to support future exploration diamond drill programs.

The local workforce is largely unskilled, with no mining history. Unigold's existing workforce consists almost entirely of local labour, many of whom were trained as diamond drillers, heavy equipment operators, general labourers, technical support staff and supervisors.

1.4 HISTORY

The Concession was first explored by Mitsubishi International Corp. (Mitsubishi) between 1965 and 1969. Mitsubishi was granted the exploration rights to over 7,700 square kilometres (km^2) of the Cordillera Central and its exploration program was focused on porphyry copper deposits.

After four years on the Concession, Mitsubishi did not complete any further work.

In 1985, Rosario Dominicana (Rosario) drilled one hole at Cerro Candelones (CM Zone). Historical documents note that the hole was extensively mineralized, but that recovery was very poor. Surface geological mapping by Rosario identified three areas (Cerro Candelones, Cerro Berro and El Corozo) and recommendations were made to continue work on these prospects.

In 1990, Rosario completed a detailed geological mapping program, as well as collecting 1,308 soil samples, and excavating 78 trenches for a total of 2,968 m of trenching at the Cerro Candelones, Guano-Naranjo and El Montazo prospects. Rosario made the decision to start drilling on the Cerro Candelones prospect and eight holes were completed for a total of 642 m.

In September, 1997, Bureau de Recherches Géologiques et Minières (BRGM) of France combined efforts with Rosario and Geofitec, S.A. in a thirteen-month exploration program sponsored by the European Community. The exploration program produced a geological evaluation of the area and a pre-feasibility study and environmental impact study of the Candelones deposit that was based on a potential open pit concept.

BRGM also authored a six-volume prefeasibility study, completed to international standards of the day, but noted that the resulting project did not meet its internal economic hurdle rate and, as a result, BRGM shelved the project.

Unigold acquired the rights to the Neita Concession in 2002, by means of a contract with the Dominican State. Unigold commenced exploration in October, 2002 and has operated more or less continuously since that date.

1.5 Geological Setting and Mineralization

1.5.1 Regional Geology

The island of Hispaniola is largely a result of island arc volcanism that took place from the early Cretaceous through the mid Tertiary (Eocene) period. The geology of the island is still being studied and remains a source of considerable debate.

Geologically, the most well understood area is the southeastern Cordillera Central district near Maimon. The mines at Falcondo (Ni laterite), Cerro de Maimon (Cu-Au, VMS) and Pueblo Veijo (epithermal Au) are all located in this region, with all having been extensively studied and are currently in production.

In general, the consensus is that the island of Hispaniola developed as a classic island arc sequence, resulting from the subduction of the North American plate beneath the Caribbean plate.

The Tireo Formation, which dominates the local geology of the Neita Concession, can be traced for 300 km along a northwest-southeast strike and averages 35 km in width. It is comprised of volcano-sedimentary rocks and lavas of Upper Cretaceous age that outcrop in the Massif du Nord of Haiti and the Cordillera Central of the Dominican Republic.

1.5.2 Local and Property Geology

Outcrop within the Neita Concession is generally lacking and, where there is outcrop, it has been intensely altered by weathering. The most studied area within the Concession is the Candelones Project area, where the bulk of the exploration effort has been focused to date.

The Concession geology is dominated by the Tireo Formation. A small section of the Trois Rivieres – Peralta Formation is found near the southwestern boundary of the Concession. The contact between the Tireo and Trois Rivieres – Peralta Formation is believed to be the trace of the San Jose – Restauración Fault Zone. It is believed that the older rocks of the Tireo Formation were thrust over the younger marine sediments of the Trois Rivieres – Peralta Formation.

The Tireo Formation is subdivided into Upper and Lower members. The older Lower Tireo is dominated by volcanic, volcaniclastics and pyroclastics of predominantly andesitic composition and lies to the northeast of the main branch of the San Jose – Restauración Thrust which bisects the Concession almost in half along a northwest trending corridor.

Both members of the Tireo Formation are intruded by granitoid stocks and batholiths, as evidenced by the Loma de Cabrera batholiths located immediately north of the Concession boundary. K-Ar age dating of the Loma de Cabrera batholiths suggests a multi-phase origin, with an initial largely gabbroic phase around the mid-Cretaceous, a second, extensive hornblende – tonalite phase during the late Cretaceous and a final, less mafic tonalite phase during the early Eocene.

The CMC and CE deposits (zones) define an east-northeast trend that has been traced through field mapping and diamond drilling for over a 3.0 km distance. This trend is believed to be related to a series of east-northeast trending fault zones that extend from the Candelones Project, through the Montazo target, and continue to the Guano, Naranjo, Juan de Bosques and Rancho Pedro targets which are located approximately 8 km to the east-northeast of the Candelones Project.

Observations from drill core at the CE deposit indicate that polymetallic mineralization is localized within brecciated and reworked dacite volcaniclastics that stratigraphically underlie a series of andesite volcanics and volcanoclastic rocks. The contact strikes east-west and the dip of the contact varies from horizontal at the current western boundary to approximately 70° to the south at the currently defined eastern limit. The variability in dip is interpreted to be the product of faulting. Consistent stratigraphic marker horizons have yet to be identified, although the closer spaced drilling from 2016 to present is providing some clarity to the litho-structural interpretation which is evolving as Unigold completes additional drill holes.

1.5.3 Mineralization

The Candelones deposits feature anomalous gold, silver, copper, lead and zinc mineralization. To date, all mineralization is confined to brecciated dacite volcaniclastics where they are in contact with andesite volcanics/volcaniclastics (CC and CE) or dacite volcanics (CM).

Mineralization is currently interpreted to be a product of a hybrid type system. Volcanogenic massive sulphide (VMS) in a shallow water, back arc basin setting, is interpreted to have introduced low tenor copper, lead and zinc mineralization, coeval with deposition of the host dacite volcaniclastics, over a widespread area. Post mineral uplift developed extensive folding and faulting, interpreted to have produced extensive brecciation within the dacite volcanoclastic unit. The brecciated dacites offered ideal pathways for later, epithermal mineralization events associated with the late calc-akaline intrusives mapped elsewhere in the Tireo Formation that are possibly largely buried within the Concession limits. Hydrothermal fluid flow related to these buried intrusives is interpreted to have introduced most of the gold and silver into the Candelones deposits. The final stage of mineralization was reactivation of the fault systems followed by a late, mafic volcanic event which emplaced the observed mafic dikes and/or sills. These late intrusives are proximal to the high-grade systems that have been the focal point of drilling since 2015. It is currently interpreted that these late mafic intrusives may have remobilized gold to the dike margins.

At the CE and CC deposits, mineralization is stratigraphically restricted to dacite volcaniclastics that underlie a sequence of andesite volcanics and volcanoclastic rocks. The contact strikes east-west and the dip varies from horizontal at the CC and western limit of the CE, to 70° south at the eastern limit of the CE. The variability in dip is currently interpreted to be the result of the extensive faulting produced during the formation of the island of Hispaniola.

1.6 Unigold Exploration Programs

Unigold commenced exploration in 2002 and the current exploration database for the Concessions as of June 30, 2022, includes:

- 694 diamond drill holes (158,450 m).
- 31,559 m of surface trenching.
- 31 test pits.
- 32,704 geochemical soil sampling.
- 11,089 rock samples.
- 884 stream sediment samples.
- 196-line km of surface geophysics.
- 687 km^2 of airborne geophysics.

1.7 Metallurgical Testwork

The FS is based on average gold recoveries of 88% for oxide mineralization and 59% for transition mineralization. These recovery estimates are based of a series of metallurgical tests performed on representative samples of oxide, transition and sulphide mineralization collected from the CM and CC mineral resource.

Bottle roll testing on coarse crushed samples (<2.0mm) indicated robust gold recovery in excess of 90%, with moderate cyanide consumption.

Bench scale column tests indicated gold recoveries in excess of 90% were achieved after 45 days of leaching.

Large diameter column testing of representative oxide and transition mineralization indicated gold recoveries in excess of 90% after 90 - 105 days of leaching. The large diameter column tests, completed on run of mine material, excavated to a maximum depth of 5.0 metres, showed evidence of reduced percolation. As a result, the FS production schedule requires that all oxide material mined in the initial 12 months of operation will be classified and agglomerated to limit potential percolation issues.

1.8 MINERAL RESOURCE ESTIMATE

The Candelones Project is currently composed of two distinct mineralization zones: CMC and CE. The present Candelones resource update is focused on the oxidized portion of the CMC zone, with no change to the model used for the previous May, 2021 sulphide estimate. Unigold conducted infill drilling and a new topographic survey on the oxide portion of the deposit in 2022, and the results have been incorporated into the oxide mineral resource update.

The sulphide portions of the CMC and the CE models were reinterpreted in 2021, using the results obtained from the 2019, 2020 and early 2021 drilling, along with updated economic parameters. The work in 2021 resulted in upgrading the previous sulphide resources from inferred into measured and indicated categories for portions of the mineral resources.

1.8.1 Supporting Data

The CMC and CE database provided to Micon is comprised of 564 drill holes and 31 test pits, with a total of 107,839 m of drill core and containing 67,814 samples. This database was the starting point from which the two mineralized envelopes, CMC and CE, were modelled.

The mineral resource update for the oxidized CMC zone, used only the data contained within the wireframes, so that the effective number of drill holes and samples used to produce the updated 2022 resource estimate is 229 drill holes, including 61 new drill holes from 2020 and 2022, and 21 test pits, totalling 6,017 samples of mineralized intercepts.

In addition to the drill holes, Micon's QPs included trench sample data for the CMC zone, as it assisted in defining the shape of the outcropping mineralization. A total of 70 trenches containing 2,778 samples were used in the resource estimate.

For the 2021 CE resource, Micon's QPs used 153 drill holes with a total of 13,700 samples inside the wireframes.

The CMC and CC area topography was updated for the mineral resources using LiDAR technology a high resolution and accurate digital terrain model (DTM) to better assess the oxide cover. The use of this new topographic surface only moved drill holes up or down in elevation when compared to the topographic surface used for the previous estimate and resulted in no appreciable difference between the two estimates.

The remaining sulphide mineral resource estimate at the Candelones Project continues to use the topography which was derived from a previous DTM based on grid data, purchased by Unigold. Some collar and trench elevations were corrected using this topographic surface when the mineral resources were estimated in 2021. The DTM is based on satellite imagery and can exhibit errors, due to heavy vegetation covering the land surface or rugged terrain. The corrected collar and trench elevations, therefore, may also be subject to some minor errors. However, in the opinion of Micon's QPs, this would have minimal effect on the sulphide resource estimate as this was demonstrated by the minimal effect that the new LiDAR topographic surface had on the overall oxide mineral resources when compared to the resources generated by using the old DTM based on grid data.

A total of 841 revised density measurements were delivered to Micon's QPs, from which average densities were calculated for the CMC deposit, as well as for waste rock. The overall average density value of the Candelones Project is 2.64 g/cm^3. A total of 688 density values were used for the updated 2022 resource estimate for the CMC deposit, following a more specific sequential selection starting from the shallowest overburden, followed by oxidized rock, transition rock, sulphides and waste rock. The CE density was updated in 2021, because the data increased to 2,986 density measurements, from the 298 density measurements used for the previous 2013 resource estimate.

Unigold provided Micon with initial three-dimensional (3-D) wireframes representing the mineralized envelopes for the CMC and CE zones. Micon's QPs reviewed and modified the wireframes to correct some irregular shapes that caused volume losses, and to ensure that the drill hole intercepts were snapped to the wireframe. Once these changes were completed, the resulting envelopes were discussed with Unigold prior to finalizing the wireframes. The wireframes for the oxide mineralization of the CMC have been updated to reflect both the new topographic surface plus the new oxide drilling. The sulphide mineralization wireframes remain the same as those used in the 2021 as there has been no update to the sulphide resources.

The capping grade selection was based on log-normal probability plots for the oxidized and sulphide zones. After the grade capping was completed, the selected intercepts for the Candelones Project were composited into 1.0 m equal length intervals, with the composite length selected based on the average original sampling length.

Two block models were constructed for the Project:

- The first contains the CMC oxide and sulphides zones. The proximity of these zones allowed for the interpolation of the zones to be completed using the same model with the oxide zone separated from the sulphide zone for the purposes of resource estimation.
- The second block model contains the CE sulphide zone.

1.8.2 Prospects for Economic Extraction

The mineral resource estimates have been constrained using economic assumptions that consider both open pit (shallow mineralization) and underground (mineralization below the conceptual pit) mining scenarios. The optimized pit shells are conceptual in nature and are based on the economic assumptions stated herein, applied using the Lerchs-Grossman algorithm contained in the Datamine NPV Scheduler software. The potential underground blocks are also conceptual in nature and are based on identifying a reasonable spatially continuous tonnage sufficient to justify an eventual underground development. No specific underground mining method nor economic model was evaluated, but scattered and isolated blocks were excluded from the resource.

The mineral resource estimate and open pit optimization have been prepared without reference to surface rights or the presence of any overlying private property or public infrastructure or geographical constraints.

The Candelones Project has been evaluated using gold assays only for the updated oxide resources, while the sulphide resources were evaluated using silver and copper assays as well.

Operating costs for the resource estimate are based on processing costs at similar operations and utilized current Dominican labour cost ranges with open-pit mining contract rates provided to Unigold from Dominican domestic suppliers. As a result, the costs are only partially derived from first principles and are therefore considered conceptual in nature. Nevertheless, it is Micon's QP's opinion that the cost estimates are reasonable.

Table 1.1 summarizes the open pit and underground economic estimates upon which the resource estimate for the Candelones Project is based. All monetary values are expressed as US dollars.

Table 1.1
Summary of the Candelones Project Economic Assumptions for the Conceptual Open Pit and Underground Mining Methods

Candelones Parameters	Oxides (Updated 2022)		Sulphides (2021)
	Oxides	Transition	
Au price $/oz	$1,800	$1,800	$1,700
Ag price $/oz	N/A	N/A	$20.00
Cu price $/lb	N/A	N/A	$4.00
Au recovery	88%	59%	84%
Ag recovery			55%
Cu recovery			87%
Open Pit Mining Cost $/t	$1.85	$2.75	$2.85
Processing Cost (Heap Leach) $/t	$7.90	$7.90	
Processing Cost (Flotation) $/t			$25.00
G&A Cost $/t	$2.39	$2.39	$2.39
Open Pit Overall Cost $/t	$12.14	$13.04	$30.24
Underground Mining Cost $/t			$60.00
Underground Overall Cost $/t			$87.39
Open Pit Au Cut-off g/t	0.20	0.34	0.66
Au Eq. Cut-off g/t			0.65
Open Pit NSR Cut-off ($/t)			$20.24
Underground Au Cut-off (g/t)			1.9
Underground Au-Eq Cut-off (g/t)			1.89
Underground NSR Cut-off ($/t)			$77.39
Open pit slope	45	45	45

The open pit parameters noted above were input into the pit optimization software and a series of nested pit shells representing varying revenue factors (gold prices) were generated.

The pit shell maximizing NPV (optimum pit) indicated that the mining cut-off grade for open pit mining is:

- Oxide mineralization (starter pit) 0.20 g/t.
- Transition mineralization (starter pit) 0.34 g/t.
- Sulphide mineralization (ultimate pit) $20/t NSR.
- Sulphide mineralization (underground) $77/t NSR.

The stripping ratios for the optimized resulting pit shells are 0.23 for the CMC starter pit (Oxide + Transition only), 0.91 for the CMC ultimate pit and 7.46 for the CE deposit.

For the underground mining scenario, the model indicated that the mining cut-off value is $77/t NSR for the sulphide mineralization. There is no oxide mineralization in the underground scenario.

1.8.3 Classification of Resources

Micon' QPs have classified the mineral resource estimate of the Candelones Project as being in the Measured, Indicated and Inferred categories. The criteria for each category are as follows:

- Measured Resources:
  - All oxide blocks in the CMC deposit within 20 m of an informing sample, with a significant density of informing samples from drill holes, test pits and trenches.
  - All sulphide blocks in the CE deposit within 25 m of an informing sample.
- Indicated Resources:
  - All oxide blocks in the CMC deposit within 20 m of an informing sample, but with a lesser density of informing samples from drill holes, test pits and trenches.
  - All sulphide blocks in the CE deposit within 40 m of an informing sample.
- Inferred Resources:
  - All remaining blocks in the CMC oxide zone.
  - All transition and sulphide blocks in the CMC zone.
  - All remaining sulphide blocks in the CE zone.

All Measured and Indicated resources were subjected to a final, manual grooming check for reasonableness.

1.8.4 Mineral Resource Estimate

The mineral resources for the Candelones Project are summarized Table 1.2 (updated oxide resources). and Table 1.3 (2021 sulphide resources). The oxide resources are inclusive of the oxide mineral reserves but are exclusive of the sulphide resources.

Table 1.2
Updated Oxide Mineral Resource Estimate for Candelones Project, Effective Date August 08, 2022

Deposit	Mining Method	Mineralization Type	Category	COG	Tonnes (x1,000)	Au g/t	Au oz (x1,000)	Strip Ratio
CMC	Open Pit	OB (Heap Leach)	Measured	0.20	15	0.68	0	0.23
		Oxide (Heap Leach)	Measured	0.20	2,527	0.83	67	
		Oxide (Heap Leach)	Indicated	0.20	2,444	0.60	47	
		OB (Heap Leach)	Indicated	0.20	39	0.67	1	
		Transition (Heap Leach)	Indicated	0.34	710	0.66	15	
		Total Measured + Indicated			**5,735**	**0.71**	**130**	
		OB (Heap Leach)	Inferred	0.20	6	0.60	0	
		Oxide (Heap Leach)	Inferred	0.20	1,088	0.43	15	
		Transition (Heap Leach)	Inferred	0.34	160	0.59	3	
		Total Inferred			**1,255**	**0.45**	**18**	

Notes:

1. The updated Oxide Mineral Resource Estimate is reported using two different cut-off grades: 0.21 g/t Au for the Oxide rock and 0.34 g/t Au for the Transition rock, both cut-offs for an open pit mining scenario. The oxide resources are inclusive of the oxide mineral reserves but are exclusive of the sulphide resources.
2. The cut-off grade was calculated using a gold price of US$1,800 per ounce with Heap Leach metallurgical recoveries of 88% for Oxide rock and 59% for Transition rock, using cost assumptions of US$2.25/t for mining Oxide rock, US$2.75/t for mining Transition rock, US$5.97/t for mineral processing and US$1.93/t for G&A.
3. The resource estimate applies different grade capping thresholds to each of the deposits ranging from 1.0 g/t Au to 10.0 g/t Au applied on 1.0 metre composites.
4. The current Oxide Mineral Resource has been updated using a high-precision LiDAR and Total Station topographic survey, all resource supporting data including drillholes, trenches and test pits were projected accordingly to new elevations using this DTM surface.
5. The weathering zones of Oxidized cover and Transition (Oxide-Sulphide) were remodelled from scratch using the drill logs provided by Unigold.
6. The mineral resources above were modelled using a subblock model with a parent block size of 10 m x 10 m x 5 m and child blocks size of 2 m x 2 m x 1 m and constrained within mineralization wireframes. Gold was estimated by Ordinary Kriging using dynamic anisotropy search. The max range of the variogram models generally are between 50 m x 50 m x 5 m and 80 m x 45 m x 5 m. The interpolation was constrained to selected composites flagged within each domain; Candelones Main (CM) and Candelones Connector (CC) also known as CMC.
7. The oxide mineral resources presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards of Disclosure for Mineral Projects (NI 43-101).
8. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant modifying factors.
9. The quantity and grade of reported Inferred Resources are uncertain in nature and there has not been sufficient work to define these Inferred Resources as Indicated or Measured Resources. It is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
10. Tonnage estimates are based on bulk densities individually measured and were interpolated for each of the weathered zones of Overburden (OB), Oxide (OX) and Transition (TR). Resources are presented as undiluted and in-situ.
11. This mineral resource estimate is dated August 08, 2022. The effective date for the drill-hole database used to produce this updated mineral resource estimate is April 13, 2022.
12. Tonnages and ounces in the tables are rounded to the nearest thousand. Numbers may not total due to rounding.
13. Mr. William J. Lewis, P.Geo. and Mr. Alan J. San Martin, MAusIMM(CP) of Micon, who are qualified persons as defined by NI 43-101 are responsible for the completion of the updated mineral resource estimate.

Table 1.3
Sulphide Mineral Resource Estimate for the Candelones Project, Effective Date May 10, 2021

Deposit	Mining Method	Category	NSR$ Cut-off	Tonnes (x1,000)	AuEq g/t	Au g/t	Ag g/t	Cu %	AuEq oz (x1,000)	Au oz (x1,000)	Ag oz (x1,000)	Cu lb (x1,000)	Strip Ratio
CE	Open Pit (Ultimate)	Measured	20	6,280	2.22	1.90	3.28	0.18	449	383	662	25,042	7.46
		Indicated	20	13,098	1.63	1.40	4.18	0.12	688	591	1,762	34,201	
		M+I	**20**	**19,378**	**1.82**	**1.56**	**3.89**	**0.14**	**1,137**	**974**	**2,425**	**59,243**	
		Inferred	20	18,594	1.55	1.38	2.93	0.09	928	826	1,749	36,022	
CMC			20	4,448	1.38	1.25	1.17	0.07	197	178	167	7,207	0.91
CMC + CE		**Inferred Subtotal**	**20**	**23,042**	**1.52**	**1.36**	**2.59**	**0.09**	**1,125**	**1,005**	**1,916**	**43,229**	N/A
CE	Underground	Measured	77	759	3.15	2.65	1.88	0.29	77	65	46	4,836	N/A
		Indicated	77	348	2.73	2.35	2.32	0.22	31	26	26	1,652	
		M+I	**77**	**1,107**	**3.02**	**2.56**	**2.02**	**0.27**	**107**	**91**	**72**	**6,488**	
		Inferred	77	417	2.63	2.32	3.53	0.17	35	31	47	1,535	
CMC			77	338	2.72	2.46	0.81	0.15	30	27	9	1,114	
CMC + CE		**Inferred Subtotal**	**77**	**755**	**2.67**	**2.38**	**2.31**	**0.16**	**65**	**58**	**56**	**2,649**	
Sulphides Total Measured + Indicated				**20,484**	**1.89**	**1.62**	**3.79**	**0.15**	**1,244**	**1,065**	**2,497**	**65,731**	
Sulphides Total Inferred				**23,797**	**1.55**	**1.39**	**2.58**	**0.09**	**1,190**	**1,063**	**1,972**	**45,878**	

Notes:

1. The sulphide Mineral Resource Estimate is reported using two different NSR$ cut-offs; 20 NSR$ for the sulphide open pit mining scenario and 77 NSR$ the Sulphide underground mining scenario. The sulphide resources are reported exclusive of the oxide resources.
2. The cut-off grade was calculated using a gold price of US$1,700 per ounce with Heap Leach metallurgical recoveries of 84% for gold, 55% for silver and 87% for copper, using cost assumptions of US$2.85/t for open pit mining, US$60.00/t for mining, US$25.00/t for mineral processing and US$2.39/t for G&A.
3. The resource estimate applies different grade capping thresholds to each of the deposits ranging from 1.0 g/t Au to 10.0 g/t Au applied on 1.0 metre composites.
4. The sulphide Mineral Resource continues to use the topography which was derived from a previous DTM based on grid data, purchased by Unigold. All sulphide resource supporting data including drillholes, trenches and test pits were projected accordingly to new elevations using this DTM surface.
5. The Sulphide zones were remodelled from scratch using the drill logs provided by Unigold.
6. The mineral resources above were modelled using a subblock model with a parent block size of 10 m x 10 m x 5 m and child blocks size of 2 m x 2 m x 1 m and constrained within mineralization wireframes. Gold was estimated by Ordinary Kriging using dynamic anisotropy search. The max range of the variogram models generally are between 50 m x 50 m x 5 m and 80 m x 45 m x 5 m. The interpolation was constrained to selected composites flagged within each domain; Candelones Main (CM) and Candelones Connector (CC) also known as CMC.
7. The sulphide mineral resources presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards of Disclosure for Mineral Projects (NI 43-101).
8. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant modifying factors.
9. The quantity and grade of reported Inferred Resources are uncertain in nature and there has not been sufficient work to define these Inferred Resources as Indicated or Measured Resources. It is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
10. Tonnage estimates are based on bulk densities individually measured and were interpolated for sulphide zone. Resources are presented as undiluted and in-situ.
11. The sulphide mineral resource estimate is dated May 10, 2021.
12. Tonnages and ounces in the tables are rounded to the nearest thousand. Numbers may not total due to rounding.
13. Mr. William J. Lewis, P.Geo. and Mr. Alan J. San Martin, MAusIMM(CP) of Micon International Limited., who are qualified persons as defined by NI 43-101 are responsible for the completion of the updated mineral resource estimate.

1.9 Mineral Reserve Estimate

1.9.1 Block Model and Reserve Estimate

The block model used as the basis for the mineral reserve estimate is the same as the oxide resource model which has been completed Micon using Leapfrog Geo software. The block model has not been regularized, and the blocks size remained at 10 m x 10 m x 5 m (X-Easting, Y-Northing, Z-elevation), with no rotation applied.

The block model extent was constrained by the topography and cells above have been removed. No percent block attribute has been retained to estimate the intact rock mass and overburden volumes.

All inferred resources in the deposit have been considered as waste and excluded from the optimized pit shell, regardless of their grade.

The Candelones oxide deposit has been designed for extraction by conventional truck/shovel open pit mining methods. Table 1.4 summarizes the Candelones mineral reserve tonnage and grades, which have been estimated according to CIM standards.

Table 1.4
Summary of the Oxide Mineral Reserve Tonnages and Grades for the Candelones Project

Mineralization Type	Category	COG	Tonnes (x1,000)	Au g/t	Au oz (x1,000)	Strip Ratio
OB (Heap Leach)	Proven	0.208	-	-	-	0.40
Oxide (Heap Leach)			2,564	0.79	65	
Transition (Heap Leach)			-	-	-	
Total Proven			**2,564**	**0.79**	**65**	
OB (Heap Leach)	Probable	0.337	-	-	-	
Oxide (Heap Leach)			2,384	0.57	43	
Transition (Heap Leach)			649	0.62	13	
Total Probable			**3,033**	**0.58**	**56**	
Total Proven + Probable			**5,597**	**0.67**	**121**	

Notes:

1. The oxide Mineral Reserves Estimates are reported at two different cut-off grades: 0.208 g/t Au for the Oxide and 0.337 g/t Au for the Transition, both for surface mining scenario.
2. The cut-off grade was calculated using a gold price of US$1,650 per ounce, US$2.74/g for selling costs and royalties, with Heap Leach metallurgical recoveries of 88% for Oxide rock and 59% for Transition rock, using cost assumptions of US$2.25/t for mining the oxide, US$2.75/t for mining the transition, US$5.56/t for mineral processing and US$1.31/t for G&A.
3. The oxide Mineral Reserve above were based on the resource model which used a subblock model with a parent block size of 10 m x 10 m x 5 m and child blocks size of 2 m x 2 m x 1 m and constrained within mineralization wireframes. Gold was estimated by Ordinary Kriging using dynamic anisotropy search. The max range of the variogram models generally are between 50 m x 50 m x 5 m and 80 m x 45 m x5 m. The interpolation was constrained to selected composites flagged within each domain; Candelones Main (CM) and Candelones Connector (CC) also known as CMC.
4. The oxide Mineral Reserve presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards of Disclosure for Mineral Projects (NI 43-101).
5. Mineral Reserves have demonstrated economic viability. The estimate of Mineral Reserves differs from the Mineral Resources the use of modifying factors such as economical, technical, environmental, permitting, legal, title, market or other relevant modifying factors which demonstrate the economic viability of the mineral deposit. The mineral resources are inclusive of the mineral reserves.
6. Inferred resources have been excluded from the current oxide Mineral Reserves estimate.

7. Tonnage estimates are based on bulk densities individually measured and were interpolated for each of the weathered zones of Overburden (OB), Oxide (OX) and Transition (TR).
8. This oxide Mineral Reserve estimate is dated October 07th, 2022 and is based upon the updated Mineral Resource estimate dated August 8th, 2022.
9. Tonnages and ounces in the tables are rounded to the nearest thousand. Numbers may not total due to rounding.
10. Mr. Abdoul Aziz Dramé, P.Eng, of Micon International Limited., is a qualified person as defined by NI 43-101 and is responsible for the updated mineral reserves estimate.

1.10 Mining Methods

The Candelones Project will employ conventional truck-and-shovel open pit mining techniques. The operations will be fully undertaken by a contractor, with no drilling and blasting activities involved.

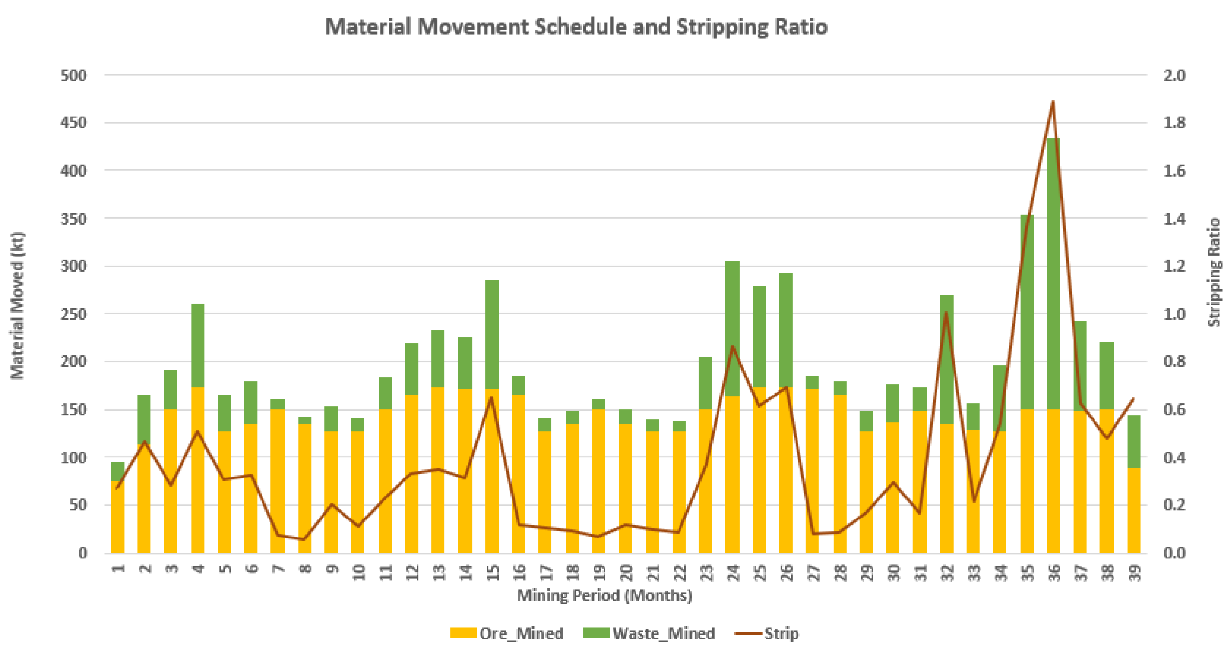
The pit will be mined over a period of 39 months (3.3 years) at an average rate of 5,000 t/d.

Ore material will be sent to either the heap leach facility or an ore stockpile; the stockpile will serve as complement to feed the leach pad during the period of low production due to the rainy season. Waste material will be sent to the waste dump storage (WDS) located southeast of the pit.

The mine will operate 360 days per year, with five days scheduled for non-operation. Mining will be carried out during a single twelve-hour shift per day.

The mining of the pit will be divided into six pushbacks during the 3.3 years of operation and be executed in 5 m benches. Figure 1.1 shows the material movement schedule and striping ratio for the operational period.

Figure 1.1
Material Movement Schedule and Striping Ratio for the 3.3 Year Operational Period



1.11 Recovery Methods

The metallurgical response of the oxide ores to conventional column testing using alkaline cyanide solutions indicated that the mined material will be eminently suitable to processing using heap leaching and conventional carbon in column recovery methods.

A staged heap leach will be stacked and irrigated with barren solution from the process facility with added lime and cyanide solution to facilitate the dissolution of gold from the mined material. For the first year of mining, Run-of-mine (ROM) material will be delivered to a screening and agglomeration area where the material will be screened, coarse material stockpiled, and the fine material passed through an agglomerator where binder (cement and barren solution) will be added. The agglomerated and coarse material will be recombined and trucked to a conveying/stacking system for placement on the heap leach pad. A sprinkler or drip-line system will be used to irrigate the individual heap leach pad areas that are in operation at any point in time to effect the desired dissolution of gold.

The pregnant solution from the heap leach pad will flow by gravity to the pregnant solution pond and then be pumped to the pregnant solution tank at the process facility. The Carbon-in-Column circuit will be fed from this pregnant solution tank at a controlled flow rate to ensure good adsorption in the circuit, with the final solution reporting as barren solution to the barren tank and barren solution pond. This barren solution will be dosed as required with cyanide and lime solution and returned to the heap leach pads.

Carbon in the CIC circuit will be transferred counter currently to the pregnant solution flow and eventually to the dewatering screens of the Adsorption, Desorption, Recovery facility (ADR). In this circuit, the carbon will be acid washed as required in fibreglass acid wash vessels and then transferred to the elution vessel for subsequent elution of gold. A high pH and cyanide content solution is to be made up using caustic soda and cyanide, heated using a diesel fired boiler and heat exchangers and then passed through the carbon in the elution vessel to desorb the gold from the carbon. The eluted solution will then be passed through stainless steel mesh electrowinning cells to precipitate out the gold from solution. The gold sludge will be recovered via filtration with subsequent drying and smelting to generate the doré bars. The doré will be sent for external refining of gold and silver into bars for sale into global markets.

The overall process circuit is normally expected to be water balance negative and to require makeup water, due to evaporation losses. However, to accommodate seasonal circuit imbalances a separate detoxification circuit will form part of the process flowsheet and excess barren solution can be neutralized to below the required cyanide limits and discharged subject to future environmental licence constraints.

1.12 Infrastructure

The heap leach facility (HLF) has been designed for a nominal production rate of 1.8 million tonnes of ore per year (t/y) for a total heap capacity of approximately 5.6 million tonnes (Mt) for a 3.3-year operating period. The ore will be mined by standard open pit mining methods, screened and for the first-year fines processed through agglomeration, recombined with coarse material and stacked on the HLF, using a conveyor/stacker system. Agglomeration is only expected to be required for the first year of operation. The leach solution will be applied to the heap leach pad surface, percolate through the ore, and flow through a gravity solution collection system to the Pregnant Leach Solution (PLS) Pond. The solution will be delivered to the plant for processing.

Tierra Group developed a water balance to determine the water volumes that drain from the HLF to the PLS and Events Pond under various annual precipitation scenarios (average, wet and dry), evaporation (average annual), and the inflow design flood (IDF) associated with the 100-year, 24-hour IDF. As a result, the HLF, PLS, and Events Pond water balance is positive (the Project must begin with an initial operating volume of 70,000 m^3) for the average hydrological scenarios of rain and evaporation, the input and output primary sources being the precipitation on the HLF and the water retained by ore moisture loss, respectively.

Waste rock will be disposed of in a dedicated waste rock storage (WRS) southeast of the HLF. The WRS has been designed to store up to 1 Mt of non-acid generating (NAG) waste rock material. Acid-Base Accounting testwork indicates waste rock to be non-acid generating. Waste rock will be placed in lifts via haul trucks, to a maximum elevation of 562 m providing an overall slope between 2.5H:1V (horizontal:vertical) to 2.75H:1V. Stacking will start from the lowest WRS elevation and extend upwards to the north. As waste rock is placed, a haul road will be constructed on the WRS slope, and temporary diversion ditches will manage stormwater and prevent erosion on the downstream slope.

Slope stability analyses were performed for the HLF and WRS, including static, pseudo-static, and post-earthquake loading conditions. Material properties were established using field and laboratory data collected from a geotechnical investigation, including test pits, boreholes, and geophysical survey. The HLF and WRS stability analyses resulted in acceptable minimum FOS values for static and post-earthquake conditions.

Material take-offs (MTOs) were calculated for the HLF and WRS and entered into the infrastructure's engineering capital cost calculations.

1.13 Environmental Studies, Permitting and Social or Community Impact

According to the established permitting process for mining projects in the Dominican Republic, an Environmental and Social Impact Assessment (ESIA) does not formally commence until 1) the Ministry of Energy and Mines (MEM) has granted the exploitation concession and 2) the Ministry of Environment and Natural Resources (MENR) has issued the Terms of Reference (ToR) for the environmental study. Given that the exploitation license application for Neita Sur is still under review with the authorities, the formal ESIA process has not yet commenced.

Unigold has initiated environmental and social baseline studies in advance of the formal ESIA process commencing, in order to collect as much information as possible and ensure a full understanding of the environmental and social context, along with any potential risks and impacts. This approach is aligned with Good International Industry Practice (GIIP) and will also help optimise the overall timescale before mining and processing operations can commence.

The scope of work for the baseline studies and the ESIA, effectively the ToR, was developed by Knight Piésold Consulting in 2021. The scope was designed in accordance with the relevant national mining and environmental regulations and also considers GIIP, specifically International Finance Corporation (IFC) Performance Standards, Equator Principles and World Bank Environmental, Health and Safety (EHS) Guidelines.

The latest schedule indicates that the ESIA report will be completed in early 2023.

Unigold has committed to responsible mining practices and released its first Environmental, Social and Governance (ESG) report in 2021. Unigold states that it aligns with a number of internationally recognised guidelines and standards, including the IFC Performance Standards, Equator Principles, Carbon Disclosure Project, Global Reporting Initiative, and ICMM guidelines.

As part of the comprehensive legal framework for environmental management in the Dominican Republic, Law No. 64-00 requires a consultation process that involves communities in the evaluation of environmental impacts and in consideration of alternatives. Formal public consultation with local communities and stakeholders has not yet been undertaken for the Candelones Project, as the ESIA process has not formally commenced.

Unigold representatives held several meetings during 2021-2022 to discuss the Project components with the regulatory authorities and meetings have also been held with affected landowners to discuss temporary access and use of the land for the exploration drilling operations.

Unigold has a community relations team in place, and they are the first point of contact for any questions or complaints regarding the Project. A Stakeholder Engagement Plan and formal grievance mechanism will be developed for the Project, to capture any concerns from the local community and enable any necessary corrective or preventative actions to be implemented.

Unigold has supported a number of community development projects as part of its ongoing commitment to corporate social responsibility, including health, education and infrastructure projects. Unigold also contributes to on-going programs for re-forestation and land reclamation and supports local government tree and plant nurseries.

Closure is expected to be undertaken on a progressive basis, with remedial earthworks and revegetation taking place as soon as each area is no longer in use. The main closure process at the end of the Project will comprise three key stages: removal of Project infrastructure and remediation of Project areas, construction of closure infrastructure required for long term management of the site, and post-closure monitoring and inspection. A documented closure plan will be produced for the Project in conjunction with the ESIA and will likely be modified throughout the mine life.

1.14 CAPITAL AND OPERATING COSTS

Capital cost estimates are expressed in third quarter 2022 United States dollars, without provision for escalation. Where appropriate, an exchange rate of DOP 54/US$ has been applied. The expected accuracy of the estimates is ±15%.

1.14.1 Capital Costs

Table 1.5 summarizes the estimated capital expenditures for the Candelones Oxide Project.

Table 1.5
Capital Expenditure Summary

Item	Initial Capital US$'000	Sustaining Capital US$'000	LOM Total US$'000
Mining	1,708	935	2,643
Processing Plant	9,972	-	9,972
Infrastructure	16,420	-	16,420
EPCM, Indirect	1,825	-	1,825
Owners Costs	1,896	-	1,896
Sub-total before contingencies	**31,822**	**935**	**32,757**
Contingencies	4,099	-	4,099
Grand total Capital	**35,922**	**935**	**36,857**
Closure and Rehabilitation	466	4,663	5,129

1.14.2 Operating Costs

Table 1.6 summarizes the LOM cash operating costs for Candelones Oxide Project.

Table 1.6
Life-of-Mine Cash Operating Costs

Parameters	LOM Total $'000	$/t Treated	US$/oz Au
Mining costs	23,107	4.13	224
Processing costs	31,056	5.55	302
General & Administrative costs	7,316	1.31	71
Subtotal Cash Operating Costs	**61,479**	**10.98**	**597**
Selling expenses incl. Royalty	17,826	3.18	173
Total Cash Cost	**79,305**	**14.17**	**770**

The detailed breakdown of the capital and operating costs is provided for in Section 21 of the Technical Report.

1.15 ECONOMIC ANALYSIS

1.15.1 Cautionary Statement

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 a number of 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:

- Mineral Resource and Mineral Reserve estimates.
- Assumed commodity prices and exchange rates.
- The proposed mine production plan.

- Projected mining and process recovery rates.
- Assumptions as to mining dilution.
- Capital and operating cost estimates and working capital requirements.
- Assumptions as to closure costs and closure requirements.
- Assumptions as to environmental, permitting and social considerations and 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.
- Geotechnical or hydrogeological considerations differing from what was assumed.
- Failure of mining methods to operate as anticipated.
- Failure of plant, equipment or processes to operate as anticipated.
- Changes to assumptions as to the availability and cost of electrical power and process reagents.
- Ability to maintain the social licence to operate.
- Accidents, labour disputes and other risks of the mining industry.
- Changes to interest rates.
- Changes to tax rates and availability of allowances for depreciation and amortization.

1.15.2 Basis of Evaluation

Micon has prepared its assessment of the Project on the basis of a discounted cash flow model, from which the Internal Rate of Return (IRR) and Net Present Value (NPV) can be determined. Assessments of NPV are generally accepted within the mining industry as representing the economic value of a project after allowing for the cost of capital invested.

The objective of the study was to determine the potential viability of an open pit mine, heap-leach pad and gold recovery plant on site. In order to do this, the cash flow arising from the base case has been forecast. The sensitivity of Project IRR and NPV to changes in base case assumptions is then examined.

1.15.3 Macro-Economic Assumptions

1.15.3.1 Exchange Rate and Inflation

All results are expressed in United States dollars, except where otherwise stated. Cost estimates and other inputs to the cash flow model for the Project have been prepared using constant, third quarter 2022 money terms, i.e., without provision for escalation or inflation.

1.15.3.2 Weighted Average Cost of Capital

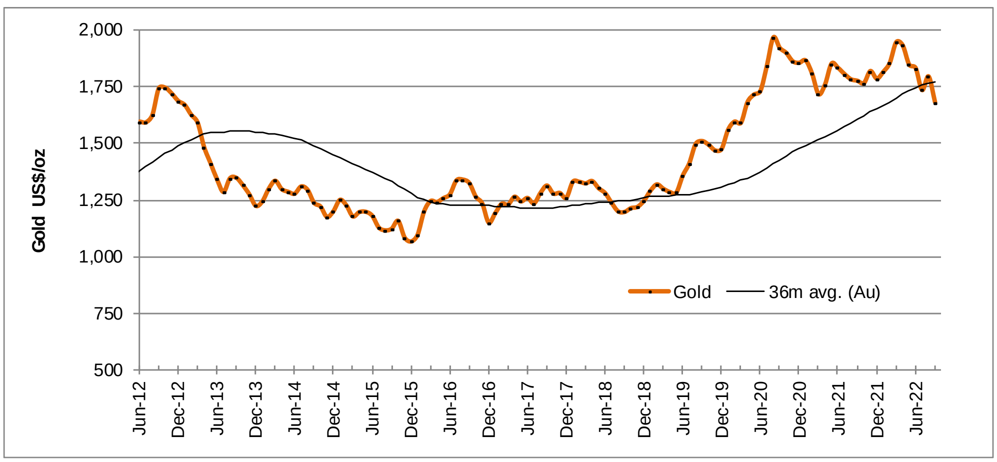
In order to estimate the NPV of the cash flows forecast for the Project, an appropriate discount factor must be applied which represents the weighted average cost of capital (WACC) imposed on the Project by the capital markets. The cash flow projections used for the evaluation have been prepared on an all-equity basis. This being the case, WACC is equal to the market cost of equity.

In line with the cost of capital estimated for other gold producers, Micon has selected an annual discount rate of 5% for its base case and has tested the sensitivity of the Project to changes in this rate.

1.15.3.3 Expected Metal Prices

Project revenues will be generated from the sale of gold doré bars. Figure 1.2 presents monthly average prices for gold over the past ten years, along with the 36-month trailing average price over that period.

Figure 1.2
Spot Gold Price, Monthly Average 2012-2022



The Project has been evaluated using a constant metal price of US$1,650/oz Au. This is close to current market levels and below the average achieved over the 36 months ending 30 September, 2022.

1.15.3.4 Taxation and Royalty Regime

Dominican Republic provincial income and mining taxes have been provided for in the economic evaluation. There is a 5% royalty on gold sales payable to the Government of the Dominican Republic. The amount paid to the Government under this royalty forms a minimum tax and is credited against Income tax payable. Should income tax payable be lower than the royalty paid, no refund of the royalty amount is allowed. Depreciation of capital costs is allowed on a unit of production basis, and income tax is levied at the rate of 27% on net earnings. Unigold is also subject to a levy of 5% of after-tax income payable to support local community projects. According to Unigold's public disclosure there is also an outstanding option held by a third party to acquire a 2% revenue royalty over the project.

Micon has applied a 10% royalty on revenue in order to account for the various tax and community burdens, and also applied a 27% tax on remaining income in the economic analysis presented for this study.

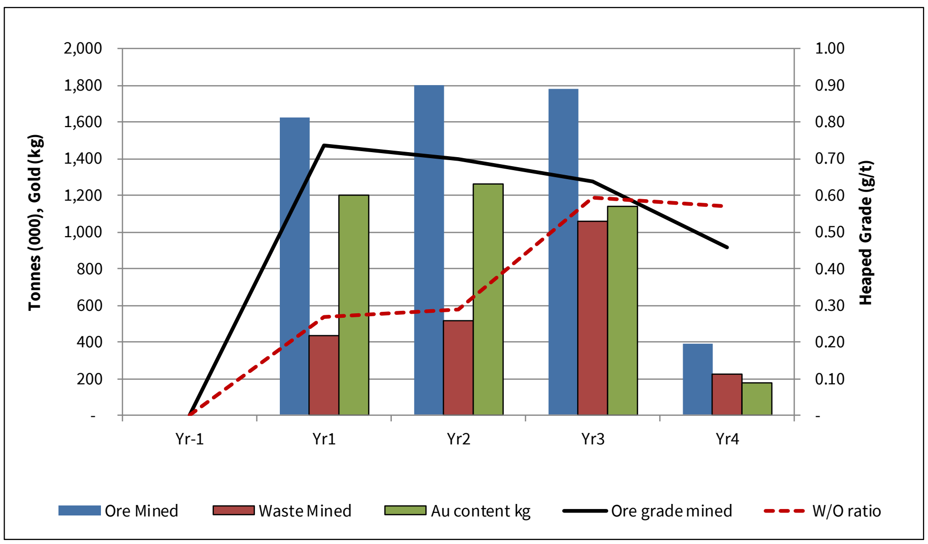
1.15.4 Technical Assumptions

The technical parameters, production forecasts and estimates summarized below and described in detail within the body of in this report are reflected in the base case cash flow model. These inputs to the model are summarised below.

Mine Production Schedule

Figure 1.3 shows the annual tonnages of waste rock and material heaped on the leach pad, the average ore grade, stripping ratio and the gold content of the material to be leached.

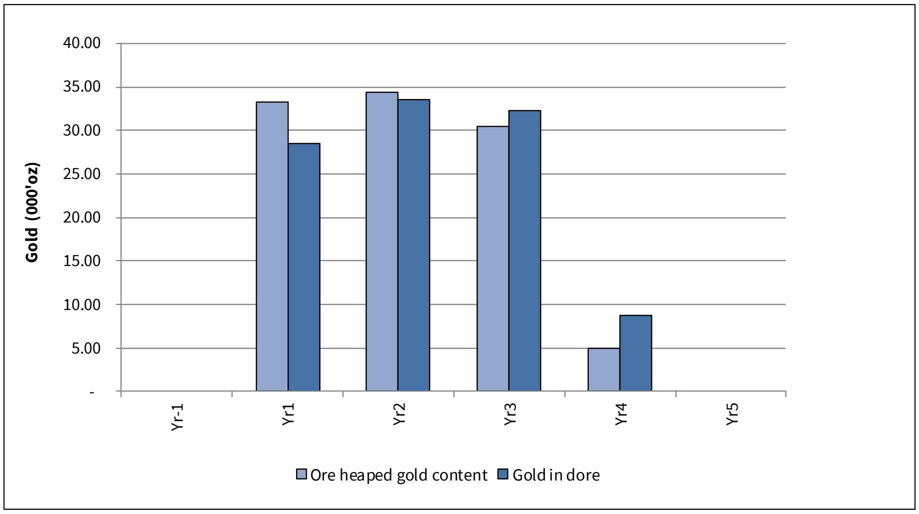
Figure 1.3
Annual Mine Production Schedule



1.15.4.1 Heap Leach Production

Heap leach extraction of gold has been modelled assuming 88.0% recovery from oxide material and 58.9% from the transition zone, for a weighted average recovery of 84.9% (Figure 1.4). Notwithstanding column testwork showing more rapid leaching, the cash flow model assumes full recovery of the leachable gold will require 3 months from placement of material on the heap. Testwork has indicated that some silver will be recovered as a by-product however, silver does not appear in the resource estimate and, as such, silver has not been included in the economic analysis.

Figure 1.4
Gold Production and Sales

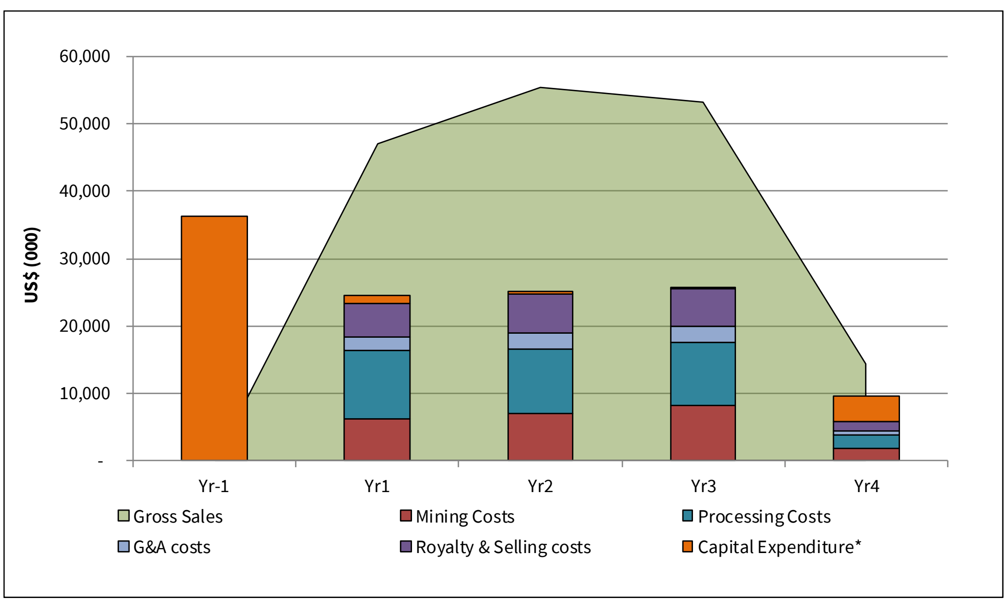


A further 7 days of sales is provided in working capital for accounts receivable. Stores and accounts payable are provided for with 45 and 30 days, respectively.

1.15.4.2 Operating Margin

Figure 1.5 shows the annual sales revenues compared to capital expenditure and cash operating costs. The Project is forecast to generate an average operating margin of 53% over the LOM period. Total cash costs are $770/oz. All-in Sustaining Costs (AISC) are estimated at $829/oz and All-in Costs are $1,178/oz.

Figure 1.5
Annual Revenues, Capital and Cash Operating Costs



1.15.4.3 Project Cash Flow

The Project LOM base case cash flow is presented in Table 1.7 and summarized in Figure 1.6. Annual cash flows are set out in Table 1.8.

Pre-tax cash flows provide an internal rate of return (IRR) of 52.4%; when discounted at the rate of 5% per year, the pre-tax net present value (NPV_5) is $38.2 million. Undiscounted, and when discounted at 5% per year, the pre-tax payback period is approximately 1.5 years.

After-tax cash flows provide an IRR of 43.6%; after-tax NPV_5 is $30.6 million. Profitability index (i.e., the ratio of NPV5/Initial Capital) is 0.9. Undiscounted, the after-tax payback period is 1.6 years. When discounted at 5% per year, it extends to 1.7 years.

Table 1.7
Life-of-Mine Cash Flow Summary

	LOM Total $'000	$/t Processed	US$/oz Au
Gross Revenue	**169,894**	**30.35**	**1,650**
Mining costs	23,107	4.13	224
Processing costs	31,056	5.55	302
General & Administrative costs	7,316	1.31	71
Subtotal Cash Operating Costs	61,479	10.98	597
Selling expenses incl. Royalty	17,826	3.18	173
Total Cash Cost	**79,305**	**14.17**	**770**
Net cash operating margin	**90,589**	**16.18**	**880**
Initial capital	35,922	6.42	349
Sustaining capital	935	0.17	9
Closure provision	5,129	0.92	50
Net Cash flow before tax	**48,603**	**8.68**	**472**
Taxation	8,788	1.57	85
Net Cash flow after tax	**39,815**	**7.11**	**387**
All-in Sustaining Cost per ounce (AISC)			829
All-in Cost per ounce (AIC)			1,178

Figure 1.6
Life of Mine Annual Cash Flows

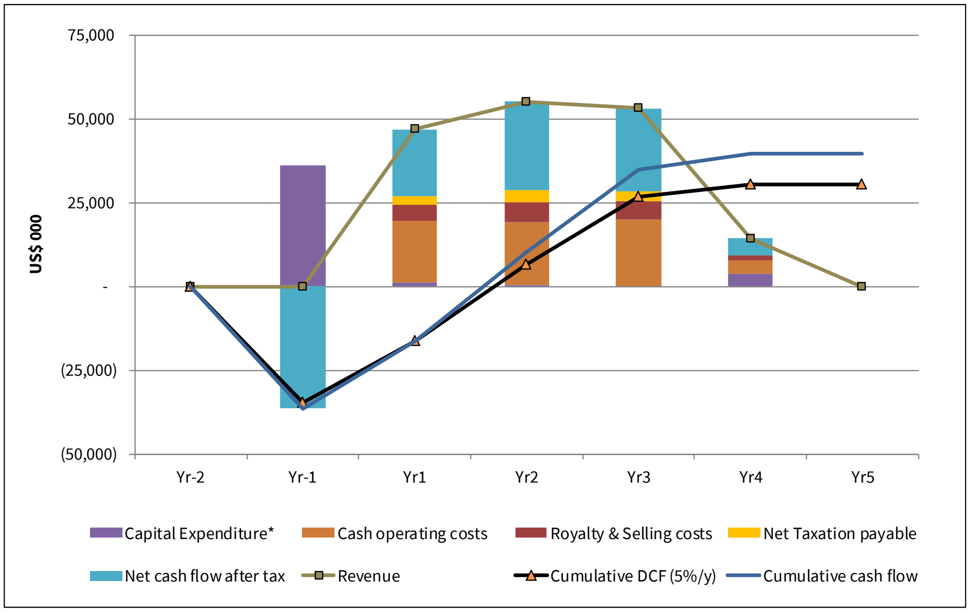


Table 1.8
Life of Mine Production and Annual Cash Flows

Period	Units	LOM Total	Yr-1	Yr1	Yr2	Yr3	Yr4
Tonnes treated (t'000)	t'000	5,597	-	1,612	1,800	1,799	387
Heaped Grade	g/t Au	0.67	-	0.74	0.70	0.64	0.46
Gold Content	koz Au	121.35	-	38.23	40.44	36.98	5.70
Gold Sales (payable oz)	koz Au	102.97	-	28.47	33.54	32.27	8.69
Gross revenue	**$'000**	**169,894**	**-**	**46,970**	**55,342**	**53,252**	**14,331**
Mining	$'000	23,107	-	6,190	7,052	8,109	1,757
Processing	$'000	31,056	-	10,064	9,538	9,426	2,028
G&A	$'000	7,316	-	2,107	2,353	2,351	506
Cash operating costs	$'000	61,479	-	18,360	18,943	19,886	4,290
Selling costs	$'000	17,826	-	4,930	5,807	5,584	1,504
Total Cash Costs	$'000	79,305	-	23,290	24,750	25,471	5,794
Net cash operating margin	**$'000**	**90,589**	**-**	**23,680**	**30,592**	**27,781**	**8,537**
Initial capital	$'000	35,922	35,922	-	-	-	-
Sustaining capital	$'000	935	-	154	320	260	201
Closure provision	$'000	5,129	466	-	-	-	4,663
Change in working capital	$'000	-	-	1,033	151	(24)	(1,159)
Net Cash flow before tax	**$'000**	**48,603**	**(36,388)**	**22,493**	**30,121**	**27,545**	**4,832**
Taxation	$'000	8,788	-	2,398	3,513	2,878	-
Net Cash flow after tax	**$'000**	**39,815**	**(36,388)**	**20,096**	**26,608**	**24,667**	**4,832**

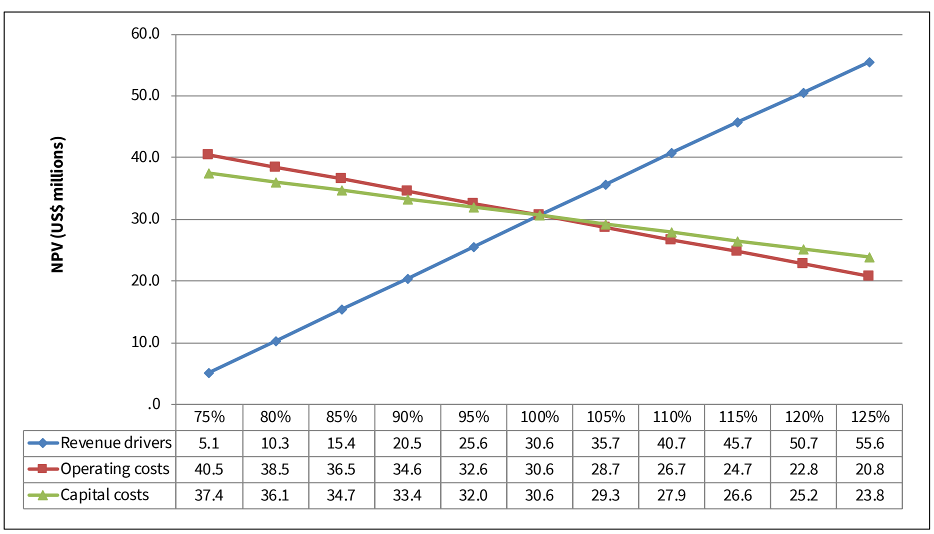
Period	Units	LOM Total	Yr-1	Yr1	Yr2	Yr3	Yr4
Disc. cash flow (5%)	$'000	30,637	(34,656)	18,227	22,985	20,294	3,786
Cumulative disc. cash flow	$'000		(34,656)	(16,428)	6,557	26,851	30,637
		Before Tax	**After Tax**				
Internal Rate of Return	%	52.4%	43.6%				
Undiscounted cash flow	$'000	48,603	39,815				
Net Present Value (5%)	$'000	38,214	30,637				
Net Present Value (7.5%)	$'000	33,853	26,795				
Net Present Value (10%)	$'000	29,954	23,367				
Total Cash Cost	**US$/oz**	**770**					
All-in Sustaining Cost	**US$/oz**	**829**					
All-in Cost	**US$/oz**	**1,178**					

1.15.5 Sensitivity Study and Risk Analysis

Micon tested the sensitivity of the base case after-tax NPV_5 to changes in metal price, operating costs and capital investment for a range of 25% above and below base case values. The impact on NPV_5 to changes in other revenue drivers such as gold grade of material treated and the percentage recovery of gold from processing is equivalent to gold price changes of the same magnitude, so these factors can be considered as equivalent to the price sensitivity.

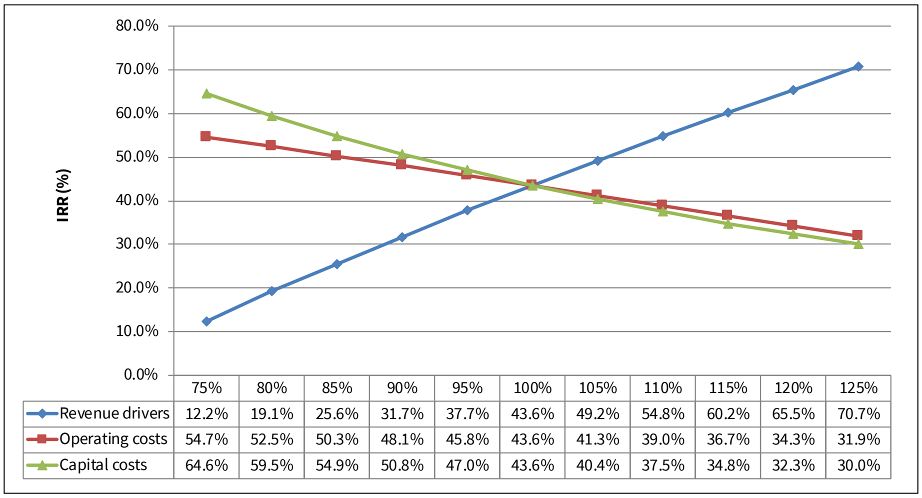
Figure 1.7 shows the results of changes in each factor separately. With NPV_5 remaining positive across the range tested for each variable, the chart demonstrates robust viability of the Project. NPV is most sensitive to revenue factors: with a 25% reduction in price (i.e., a reduction to $1,237.50/oz) NPV_5 falls to $5.1 million. The Project is less sensitive to changes in operating or capital costs, with an increase of 25% in each factor separately reducing NPV_5 to $20.8 million and $23.8 million, respectively.

Figure 1.7
Sensitivity of Base Case NPV to Capital, Operating Costs and Gold Price



Error! Not a valid bookmark self-reference. shows the sensitivity if IRR to the same factors. As with NPV_5, IRR remains positive across the range tested. Adverse changes of 25% in revenue drivers reduce IRR to 12.2%, whereas the same factors applied to capital and operating costs reduces IRR to 31.9% and 30.0, respectively.

Figure 1.8
Sensitivity of Base Case IRR to Capital, Operating Costs and Gold Price



The sensitivity of NPV_5 and IRR to specific gold prices between \$1,400/oz and \$1,900/oz are shown in **Error! Not a valid bookmark self-reference.**.

Table 1.9
Gold Price Sensitivity

Gold Price (US\$/oz)	NPV_5 (US\$M)	IRR (%)
1,400	15.3	25.4%
1,450	18.3	29.1%
1,500	21.4	32.8%
1,550	24.5	36.5%
1,600	27.6	40.0%
1,650	**30.6**	**43.6%**
1,700	33.7	47.0%
1,750	36.8	50.4%
1,800	39.8	53.8%
1,850	42.8	57.1%
1,900	45.8	60.3%

1.15.6 Conclusion

The QP concludes that, based on the forecast production, capital and operating cost estimates presented in this study, the Project base case demonstrates an all-in sustaining cost (AISC) of US\$829/oz, and that the base case presents a potentially viable Project at gold prices above US\$1,400/oz. Sensitivity to changes in gold price (or grade), capital and operating costs are all low, with

NPV_5 and IRR remaining positive for adverse changes of 25% in each factor, indicating robust viability of the Project.

1.16 BUDGET AND RECOMMENDATIONS

1.16.1 Planned Expenditures and Budget Preparation

An overview of the proposed annual project budget is presented in Table 1.10. The budget forms part of the capital expenditures noted in this report.

Unigold's primary objective is start the necessary work to bring the Candelones Oxide Project into production once it receives the approvals necessary from the Dominican government. This will consist of the necessary environmental studies and the detailed geotechnical and engineering studies necessary prior to beginning construction.

Unigold plans to continue a public relations campaign to educate the local communities on the benefits of mining and the proposed oxide Project development.

Micon's QPs have reviewed the proposed annual project budget for the Candelones Project and agrees with the nature of the expenditures. The budget is subject to Unigold's ability to secure funding as well as management's ability to secure the necessary approvals and agreements necessary to advance the Project and the approval of Unigold's board.

Table 1.10
Unigold's Proposed Annual Project Budget for the Candelones Project

Item	Detail	US% 000
Mining	Optimization open pit Detail design	70
Tierra Group	Recommendations Detail Engineering, Heap Leach Facility, Waste Rock Site	884
Promet 101	Recommendations Detail design, Metallurgical and engineering	983
Contingency		194
Total		**2,131**

1.16.2 Further Recommendations

1.16.2.1 Recommendations Micon

Micon's QPs agree with the general direction of Unigold's previous exploration programs and economic studies for the Candelones Project. The QPs for this Feasibility Study make the following additional recommendations:

1. The QPs recommend that Unigold should continue exploring the extent of the sulphide mineralization at the Candelones Project, so that it may be able to translate from mining the Oxide directly into the sulphide material once the oxide material has been exhausted.

2. The QPs recommend that slope monitoring and ground water control programs be conducted for all stages of pit development. These should include geotechnical and tension crack mapping, and surface displacement monitoring program using surface prisms. The surface water that develops behind the pit walls should be monitored and depressurized as needed.
3. The QPs recommend that further optimization is conducted during the operational phase, in order to improve the cash margins of production.

lt is recommended that the Project be advanced to production through the normal process of permitting, financing, detailed engineering, and construction. Estimated costs for engineering and construction are included in the capital cost of this Feasibility Study. Ongoing risk mitigation efforts should be undertaken on a continuous basis throughout the Project development, construction and into the production phase.

1.16.2.2 Recommendations Tierra Group

Facility designs were developed based on the limited data and information available before, or collected during, the feasibility study. Where incomplete data was available, designers relied on conservative assumptions based on a broad base of previous experience with similar designs and geophysical (climate, hydrology, geology, and geotechnical) conditions. Additional confirmatory engineering analyses is required prior to completing detailed engineering and preparing Issued for Construction (IFC) design drawings. This includes but is not limited to:

1. Complete supplementary borehole drilling for the HLF and WRS sites using HQ3 drilling wireline triple tube core barrel. Drilling should include in-situ testing in boreholes, such as standard penetration tests (SPT) and permeability tests for the geological units identified during the recently completed geotechnical investigation;
2. Perform geotechnical laboratory testing on core samples for the Saprock and Bedrock units;
3. Additional laboratory testing of agglomerated ore as initial results indicate that agglomeration may be required for the life-of-mine;
4. Geotechnical investigation to identify locations for local borrow materials that will be required for construction, particularly for overliner gravels;
5. Further evaluation should be performed to assess the HLF and WRS hydrogeologic conditions. Tierra Group recommends installing piezometers to establish a groundwater characterization and to monitor groundwater levels and chemistry at the HLF and WRS;
6. Monitoring of existing stream flows should be considered to measure sediment transportation in existing streams. This will provide valuable input for refining the design of sediment control structures;
7. Additional site-specific precipitation and evaporation measurements should be collected to better calibrate the water balance;
8. The HLF water balance should be expanded to include, or included within, a site-wide water management plan and balance. A specific uncertainty is both construction and process start-up water demand/supply;

9. Dam breach analyses should be developed to support dam consequence classification for the Events Pond and Underdrain Pond dams. Results from the dam breach study may require a more robust design and additional geotechnical investigation;
10. Advance geochemical characterization of site materials to refine predictions of contact water chemistry for water treatment and to support water management for operations and closure. The geochemical characterization should include kinetic testing of waste rock, additional characterization of spent ore, and further identification and characterization of cover and borrow source materials;
11. Hydraulic evaluations of potential cover materials, cover performance, and the HLF draindown are recommended to support closure water quality evaluations and water treatment design;
12. A supplementary drilling program should be completed using a geotechnical rig, including in-situ testing (i.e., standard penetration test and permeability) and sampling.
13. Piezometer installation should be considered as part of the supplementary drilling program. Groundwater conditions for the geotechnical analysis reported herein were adopted based on water levels measured in boreholes during the drilling program; no piezometers were installed.
14. Additional confirmatory engineering analyses is required prior to completing detailed engineering and preparing Issued for Construction (IFC) design drawings that includes geotechnical laboratory testing on the Saprock and bedrock units, dam breach analysis, borrow materials geotechnical investigation, among others

- Tierra Group's estimated cost for the additional work is included within the Total Project Capital (Table 21.1 Capital Expenditures summary).

1.16.2.3 Recommendations Promet 101

Metallurgical Testing and the design of the recovery facilities for this project have been done using industry standards. Promet 101 makes the following recommendations:

1. While the column testing has been consistent in generating similar extraction results for each test it is recommended that further column tests be carried out to expand on the database of information, increase knowledge of gold and silver dissolutions, reagent consumptions and the physical performance of the columns themselves. Further evaluation of the consumption of reagents including cement is recommended to increase the accuracy of cost estimations.
2. Further testing to generate parameters for detailed design of the proposed facility such as carbon activity and equilibrium, copper solubility, cyanide consumption variability among others is recommended.
3. A Project Execution Plan that focuses on how to minimise capital expenditures, identify key service providers, develop a logistics plan and a detailed project schedule is recommended to be advanced prior to the detailed engineering stage of the project.
4. Some assumptions have been made with regards to the recovery plant site location. Geotechnical evaluations should be advanced prior to detailed design of these facilities.

5. Evaluation of potential second-hand equipment in the market is recommended to be advanced prior to the start of detailed design as this equipment becomes available in a sporadic nature.

The estimated costs for advancing the above concepts are included within the capital costs shown in Table 21.1 Capital Cost Summary.

2.0 INTRODUCTION

2.1 GENERAL INFORMATION

At the request of Mr. Gordon Babcock, P.Eng., Chief Operating Officer of Unigold Inc. (TSX-V:UGD) (Unigold), Micon International Limited (Micon) has been retained to compile a Feasibility Study (FS) for the Main Zone oxide mineral resources at the Candelones Project and disclose the results of the study in a Canadian National Instrument (NI) 43-101 Technical Report.

The FS is based on the updated August, 2022, oxide mineral resource model. The model was updated using a new topographical surface and new economic parameters for costs and metal prices. This Technical Report also contains the previous 2021 mineral resource for the sulphide portion of the deposits which has not been updated. The Candelones Project falls entirely within the Neita Sur Exploitation Concession, currently under review by the Ministry of Energy and Mines of the Dominican Republic. Unigold holds exclusive rights to the Concession during the review process and, if approved, will hold exclusive rights to the Concession for a seventy-five-year term.

The updated 2022 oxide mineral resource estimate disclosed herein supersedes all previous oxide mineral resource estimate for the Candelones Project and forms the basis for the FS.

2.2 QUALIFIED PERSONS AND SITE VISITS

Micon's most recent site visit was conducted to the Candelones Project between August 30, 2022, and September 2, 2022. Table 2.1 summarizes the independent Qualified Persons (QPs)for this Technical Report, the sections of the report for which they are responsible for and dates of their respective site visit(s).

Table 2.1
Qualified Persons Responsible for this Technical Report and Site Visits

Qualified Person	Title and Company	Area of Responsibility	Site Visit
William J. Lewis, P.Geo.	Senior Geologist, Micon	Sections 1.1 to 1.8, 2 through 11, 12.1.1, 14.1 to 14.3, 14.7, 19, 23, 24, 25.1, 25.2, 26, 28	May, 2013, June, 2017, October 22 to 26, 2019
Ing. Alan San Martin, MAusIMM(CP)	Mineral Resource Specialist, Micon	Sections 14.4 to 14.6. 14.8 and 14.9	May 21 to 24, 2013
Chris Jacobs, MBA, CEng., MIMMM	President and Senior Consultant Mineral Economics, Micon	Section 1.13, 1.15, 20, 22 and 25.7	August 30 to September 2, 2022.
Abdoul Aziz Dramé, P.Eng.	Mining Engineer, Micon	Sections 1.9, 1.10, 12.1.2, 15, 16, 25.3 and 25.4	August 30 to September 2, 2022
Mathew Fuller, C.P.G., P.Geo	Principal, Tierra Group International	Parts of Sections 1.12, 12.1.3 and 18,	February 16 to 18, 2022
Stuart J Saich, B.Sc Chem Eng.	Director and Process Engineering Consultant – Promet101 Consulting	Sections 1.11, 1.14, 13, 17, 21, 25.5 and 25.6	June, 2022

2.3 OTHER INFORMATION

All currency amounts and commodity prices are stated in United States dollars (US$). Quantities are generally stated in metric units, the standard Canadian and international practice, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometres (km) or metres (m) for distance, hectares (ha) for area and grams per metric tonne (g/t) for gold and silver grades (g/t Au, g/t Ag). Wherever applicable, Imperial units have been converted to Système International d'Unités (SI) units for reporting consistency. Precious metal grades may be expressed in parts per million (ppm) or parts per billion (ppb) and their quantities may also be reported in troy ounces (ounces, oz). A list of abbreviations is provided in Table 2.2. Appendix 1 contains a glossary of mining and other related terms.

Table 2.2
Units and Abbreviations

Name	Abbreviation
Acid rock drainage and metal leaching	ARDML
Acme Analytical Laboratories S.A.	AcmeLabs™
Adsorption Desorption Recovery	ADR
Advanced Terra Testing	ATT
ALS-Chemex Laboratories	ALS
ALS Global	ALS
ALS Minerals	ALS
ALS Metallurgical	ALS
Below ground surface	bgs
British Columbia Mine Waste Rock Pile Research Committee	BCMWRPRC
Bureau de Recherches Géologiques et Minières	BRGM
Canadian Institute of Mining, Metallurgy and Petroleum	CIM
Canadian National Instrument 43-101	NI 43-101
Canadian Securities Administrators	CSA
Canadian Standards Association	CSA
Candelones Connector	CC
Candelones Extension	CE
Candelones Main	CM
Candelones Main/Connector	CMC
Carbon in leach	CIL
Centimetre(s)	cm
Certified Reference Materials	CRMs
Chartered Professional	CP
Complex resistivity	CRIP
Controlled-Source Audio-Frequency Magnetotellurics	CSAMT
Compania Fresnillo S.A. de C.V.	Fresnillo
Cubic feet per minute	cfm
Day	d
Degree(s)	°
Degrees Celsius	°C
Digital elevation model	DEM
Director General of Mining	DGM

Name	Abbreviation
Discounted cash flow	DCF
Dollar(s), Canadian and US	$, Cdn $ and US$
East Diversion Channel	HLF-EDC
Endemic Bird Area	EBA
Environmental Adaptation and Management Plan	PMAA
Environmental and Social Management System	ESMS
Environmental, Social and Governance	ESG
GoldQuest Mining Corporation	GoldQuest
Gram(s)	g
Grams per metric tonne	g/t
Greater than	>
Health and Safety	EHS
Heap Leach Facility	HLF
Hectare(s)	ha
Important Bird Area	IBA
Induced polarization	IP
Inductively Coupled Plasma – Emission Spectrometry	ICP-ES
Internal diameter	ID
Internal rate of return	IRR
International Finance Corporation	IFC
International Union for Conservation of Nature	IUCN
Kilogram(s)	kg
Kilometre(s)	km
Laboratory Information Management System	LIMS
Less than	<
Litre(s)	l
Maximum credible earthquake	MCE
Metre(s)	m
Metres above sea level	masl
Micon International Limited	Micon
Million tonnes	Mt
Million ounces	Moz
Million years	Ma
Million metric tonnes per year	Mt/y
Milligram(s)	mg
Millimetre(s)	mm
Ministerio de Medio Ambiente y Recursos Naturales	MARENA
Ministry of Energy and Mines	MEM
Ministry of Environment and Natural Resources	MENR
Multi-channel analyses of surface waves	MASW
Natural source audio magnetotellurics	NSAMT
North Diversion Channel	HLF-NDC
Net present value	NPV
Net smelter return	NSR
Non-acid generating	NAG
North American Datum	NAD

Name	Abbreviation
North American Free Trade Agreement	NAFTA
Not available/applicable	n.a.
Ounces	oz
Ounces per year	oz/y
Parts per billion	ppb
Parts per million	ppm
Peak ground acceleration	PGA
Percent(age)	%
Perforated polyethylene	PE
PLS Pond Spillway	HLF-PPS
Potentially Acid Generating	PAG
Quality Assurance/Quality Control	QA/QC
Reverse takeover	RTO
Second(s)	s
Securities and Exchange Commission	SEC
seismic hazard analysis	SHA
seismic refraction	SR
Solution Collection Channel	HLF-SCC
Specific gravity	SG
South Diversion Channel	HLF-SDC
Square metres	m^2
System for Electronic Document Analysis and Retrieval	SEDAR
Système International d'Unités	SI
Tailings Storage Facility	TSF
Terms of Reference	ToR
Three-dimension	3D
Tierra Group International, Ltd.	Tierra Group
Tonne (metric)	t
Tonnes (metric) per day	t/d
Underdrain Collection Sump	HLF-UCS
Universal Transverse Mercator	UTM
Vane Shear Test (VST)	VST
Volcanogenic massive sulphide	VMS
Waste Rock Dump	WRD
Waste Rock Stockpile	WRS
Weighted average cost of capital	WACC
West Diversion Channel	HLF-WDC
Year	y

Information for the Candelones Project is based on published material researched by Micon and its QPs, as well as data, professional opinions and unpublished material submitted by the professional staff of Unigold, or its consultants involved in undertaking the FS. Much of these data came from reports prepared for and provided by Unigold.

Neither Micon nor the QPs have, nor have they previously had any material interest in Unigold or related entities. The relationship with Unigold and its related entities is solely a professional association between the client and the independent consultant. This report is prepared in return for fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report.

This report includes technical information which requires subsequent calculations or estimates to derive sub-totals, totals and weighted averages. Such calculations or estimations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, neither Micon nor the QPs consider them to be material.

The conclusions and recommendations in this report reflect the authors' best independent judgment in light of the information available to them at the time of writing. Micon and the authors reserve the right, but will not be obliged, to revise this report and conclusions if additional information becomes known to them subsequent to the date of this report. Use of this report acknowledges acceptance of the foregoing conditions.

This report is intended to be used by Unigold subject to the terms and conditions of its agreement with Micon. That agreement permits Unigold to file this report as a Technical Report with the Canadian Securities Administrators pursuant to provincial securities legislation. Except for the purposes legislated under provincial securities laws, any other use of this report, by any third party, is at that party's sole risk.

The descriptions of geology, mineralization and exploration used in this report are taken from reports prepared by various organizations and companies or their contracted consultants, as well as from various government and academic publications. The conclusions of this report are based in part on data available in published and unpublished reports supplied by the companies which have conducted exploration on the property, and information supplied by Unigold. The information provided to Unigold was supplied by reputable companies. Neither Micon nor the QPs have any reason to doubt its validity and have used the information where it has been verified through their own review and discussions.

Micon and the QPs are pleased to acknowledge the helpful cooperation of Unigold management and consulting field staff, all of whom made any and all data requested available and responded openly and helpfully to all questions, queries and requests for material.

Some of the figures and tables for this report were reproduced or derived from historical reports written on the property by various individuals and/or supplied to Micon by Unigold for its previous Technical Reports or for this current report. In the cases where photographs, figures or tables were supplied by other individuals or Unigold, they are referenced below the inserted item.

2.4 PREVIOUS TECHNICAL REPORTS

The following is a list of some of the Technical Reports which been published on the Candelones Project:

- NI 43-101 Technical Report Mineral Resource Estimate for the Candelones Project, Neita Concession, Dominican Republic, Report Date: December 20, 2013, Effective Date: November 4, 2013.

- NI 43-101 Technical Report Mineral Resource Estimate for the Candelones Extension Deposit, Candelones Project, Neita Concession, Dominican Republic, Report Date: March 30, 2015, Effective Date: February 24, 2015.
- NI 43-101 F1 Technical Report Updated Mineral Resource Estimate for the Candelones Project, Neita Concession, Dominican Republic, Report Date: October 6, 2020, Effective Date: August 17, 2020.
- NI 43-101 F1 Technical Report Updated Mineral Resource Estimate and Preliminary Economic Assessment for the Oxide Portion of the Candelones Project, Neita Concession, Dominican Republic, Report Date: May 31, 2021, Effective Date: May 10, 2021

3.0 RELIANCE ON OTHER EXPERTS

In this Technical Report, discussions regarding royalties, permitting, taxation, and environmental matters are based on material provided by Unigold or its contractors. The QPs and Micon are not qualified to comment on such matters and have relied on the representations and documentation provided by Unigold or its contractors for such discussions.

All data used in this report were originally provided by Unigold. The QPs have reviewed and analyzed these data and have drawn their own conclusions therefrom.

The QPs and Micon offer no legal opinion as to the validity of the title to the mineral concessions claimed by Unigold and, in that regard, have relied on information provided by Unigold, which has provided a legal opinion to Micon and the QPs regarding the property.

The legal opinion was prepared by Lic. Manuel Ramon Tapia López of Marat Legal, based in the City of Santo Domingo, Dominican Republic. The legal opinion dated November 21, 2022, provided information in the following areas:

A. Exclusive rights of the concessionaire to exploit the exploration area.

B. Application Procedure for Exploitation Concession.

C. Current state of the Neita Norte and Neita Sur concession applications.

The legal opinion expressed that Unigold's exploration properties, as previously expressed, are subject to ongoing renewal and application processes. Should renewals and applications not be granted, then the carrying value of the exploration and evaluation assets may be impaired.

Information related to royalties, permitting, taxation, environmental matters and the validity of the title to the mineral concessions claimed by Unigold were extracted from previous NI 43-101 Technical Reports and updated by Unigold through personal communication with the QPs. Previous NI 43-101 Technical Reports, as well as other references, which were used in the compilation of this report are listed in Section 28.0.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 General Information

The Neita Sur and Neita Norte concession for which Unigold has applied are located in the province of Dajabón, in the northwest region of the Dominican Republic. Both concession applications border the Republic of Haiti to the west, defined by the Rio Libón. Figure 4.1 is a general location map showing the locations of the Neita Sur and Neita Norte concessions.

Figure 4.1
Location Map for the Neita Concession

Figure was supplied by Unigold Inc. and is dated August, 2022., North is towards the top of the page.

The exploration concession application Neita Norte is centred at approximately 19°20'20" N, 71°40'00" W. The Universal Transverse Mercator (UTM) coordinates are 2,140,500 N, 219,800 E and the datum used was WGS-84, UTM-Zone 19N.

The exploitation concession application Neita Sur is centred at approximately 19°16'53" N, 71°39'16" W. The UTM coordinates are 2,134,100 N, 221,000 E and the datum used was WGS-84, UTM-Zone 19N.

The Candelones Project, comprised of the Candelones Main, Candelones Connector and Candelones Extensions deposits, is located entirely within the Neita Sur concession application.

4.2 Property Description and Ownership

Under Dominican Mining Law, "the mineral substances of every nature in the soil and subsoil of the National Territory belong to the Dominican State, which will grant the right to explore, exploit or benefit through a mining concession." Furthermore, as per Article 38 of the Mining Law, private landowners cannot refuse access to private lands for the purposes of exploration. Under Article 181 of the mining law, Unigold will be required to execute indemnification agreements with the legitimate landowners or occupants, if any, prior to commencing exploitation. Said agreements shall be filed at the Dirección General de Minería (DGM).

On February 25, 2022, Unigold submitted applications to the DGM for the Neita Norte exploration concession (11,100.11 ha) and the Neita Sur exploitation concession (9,990.50 ha). The applications guarantee Unigold's exclusive claim to both concessions throughout the government review process.

The Neita Sur and Neita Norte concessions, which are the subject of Unigold's applications, lie entire within the now suspended Neita Fase II concession. Mining Resolution R-MEM-CM-016-2018, granting the Neita Fase II concession, was approved by the Ministry of Energy and Mines (Ministerio de Energiá y Minas) on May 10, 2018, through the DGM. The DGM administers mining in the Dominican Republic, as established under Mining Law 146 (1971). Once the DGM has signed off on the technical and economic aspects of an application the files are passed on to the Ministry of Energy and Mines for granting.

The initial term of Resolution R-MEM-CM-016-2018 was three years which expired May 10, 2021. Unigold applied for and was granted a one-year extension for the Neita Fase II concession on March 24, 2021, as per official notification letter DGM-0833. This initial one-year extension period was to expire on May 11, 2022. Submission of the applications for the Neita Sur and Neita Norte concessions on February 25, 2022, superseded the Neita Fase II extension.

Exploration concessions are granted for a three-year period allowing the concessionaire the exclusive rights to explore the concession. Exploration concessions allow for two, one-year extensions which provides the concessionaire exclusivity to the concession for five years in total. Exploration concessions, also provide an exclusive right to obtain exploitation rights over the exploration area that would be subject to the re-application for a new concession once the 5-year term is reached and if the concessionaire has not been able to complete enough technical definition on a resource that would allow for an exploitation license application.

Mining Resolution R-MEM-CM-016-2018 was the third consecutive mining resolution granted to Unigold for the Neita concession.

The first, Resolution No. XC-06, was granted on April 11, 2006, and extended by means of Official Letter No. 797 (April 23, 2009) and No. 841 (May 12, 2010).

The second Resolution, No. I 12, was granted March 7, 2012, and extended by means of Official Letter No. 753 (March 24, 2015) and No. DGM-508 (Feb. 18, 2016).

Unigold has held title to the exploration rights of both concessions since April 11, 2006.

Exploitation concessions may be requested at any time during the exploration stage. Exploitation concessions grant exclusive rights the applicant to exploit, smelt and use the extracted materials for commercial business purposes. Under Article 49 of the Mining Law, exploitation concessions are granted for a 75-year term.

On April 25, 2022, the DGM published the first notice for the Neita Sur exploitation concession in the El Caribe newspaper, a national publication, advising the public of the applications and soliciting public comment on the applications.

On September 1, 2022, the DGM published the first notice for the Neita Norte exploration concession. Publication of the notices for public comment is an important step in the government review process.

As of Oct. 14, 2022, the DGM had completed its technical review of the Neita Sur concession application and forwarded the application to the Ministry of Energy and Mines for final approval. The application for the Neita Norte concession is still under review by the MEM.

Figure 4.2 shows the official boundary of the Neita Sur exploitation concession applied for and Figure 4.3 shows the official boundary of the Neita Norte exploration concession applied for.

The Neita Sur and Neita Norte concessions were formerly within the Neita Fase II, Neita Fase I and Neita exploration concessions. Unigold has held title to the exploration rights of both concessions since April 11, 2006.

Unigold's exploration properties are subject to ongoing renewal and application processes. Should renewals and applications not be granted, then the carrying value of the exploration and evaluation assets may be impaired.

4.3 Obligations and Encumbrances, Environmental Liabilities and Permitting

4.3.1 Obligations and Encumbrances

Articles 6 and 7 of Mining Resolution R-MEM-CM-016-2018 state that Unigold has an obligation to reforest areas affected during exploration activities and to maintain an adequate program to compensate landowners for damages resulting from exploration activity. Unigold has satisfied both obligations.

Currently, there are no other encumbrances associated with the Neita Norte exploration concession grant. Should Unigold successfully identify, permit and develop a mining operation, it would be liable to pay an annual license fee to the State. The amount of the annual license fee is a nominal cash value, typically less than 50,000 Dominican pesos (DOP) annually.

Figure 4.2
Boundaries of the Neita Sur Exploitation Concession

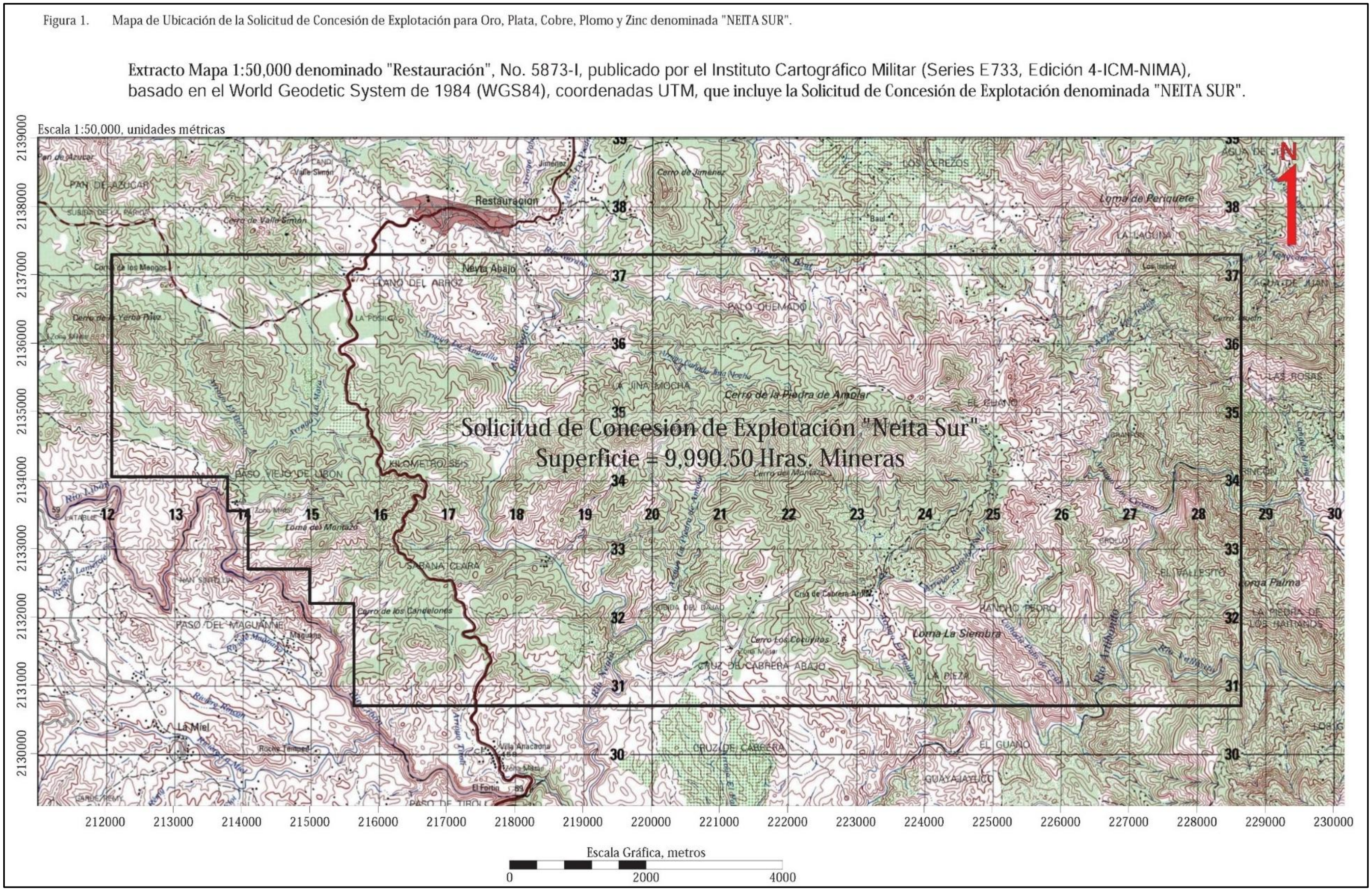


Figure was supplied by Unigold Inc. and is dated August, 2022.

Figure 4.3
Boundary of the Neita Norte Exploration Concession

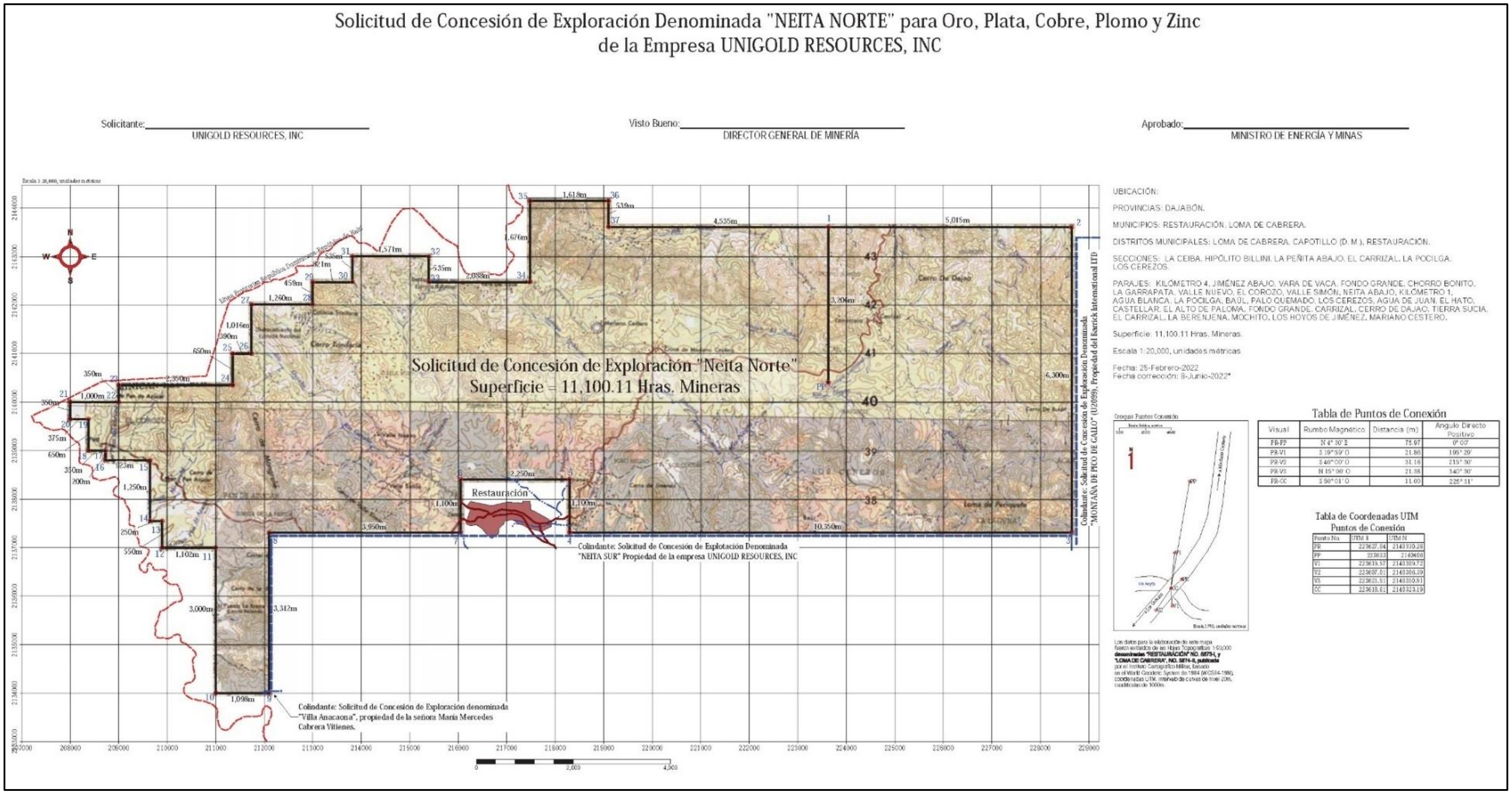


Figure was supplied by Unigold Inc. and is dated August, 2022.

As to the Neita Sur exploitation concession, Unigold will be liable to pay a revenue royalty to the State. The amount of the royalty is set within of the Dominican Mining Law and it is currently 5% of the FOB price of exported minerals which price will be determined by the Ministry of Industry and commerce in conjunction with the Dominican Central Bank either by taking into consideration transfer price between parties of an economic group or by considering international market pricing in accordance with the purity and other characteristics of the exported material.

In addition, once commercial production is achieved, Unigold would be required to pay income taxes (rate of 27%) and export duties.

These fees are partially offset by the fact that the Neita concession lies within a tax and customs exemption area, as defined by Law 28-01 (2001). Under this law, companies operating in border regions qualify for a 100% exemption from taxes, duties and import fees for a twenty-year period. In 2003, Unigold was issued a 10-year Certificate certifying that it qualifies as a border company. This certificate has expired, and current legislation does not allow re-application until an Environmental Permit is approved.

4.3.2 Environmental Liabilities and Permitting

The Ministry of the Environment and Natural Resources (previously the Secretaría de Estado de Medioambiente y Recursos Naturales) granted Environmental Permit No. 0225-03-RENOVADO for the concession on December 3, 2003, and subsequently renewed the permit on March 21, 2012 and again on October 16th, 2018. Currently the Environmental Permit is pending approval of the Neita Sur exploitation and Neita Norte exploration concession applications. Once the Ministry of Mines makes a final decision on the concession applications, the environmental permit will be submitted for renewal.

Obligations related to the permit include regular inspections and a requirement to file annual and semi-annual reports on exploration disturbance and impact with the Ministry. Unigold has submitted the reports and the terms of the permit are in good standing.

Under Dominican Law 64-00, Unigold, as concessionaire, has the unlimited right to utilize surface water in support of exploration activity.

4.4 MICON QP COMMENTS

Micon's QPs are not aware of any significant factors or risks besides those discussed in this report that may affect access, title or right or ability to perform work on the property by Unigold or any other party which may be engaged to undertake work on the property by Unigold. It is Micon's QPs understanding that further permitting and environmental studies will be required when the Project advances to the construction stage.

Both the Neita Sur and Neita Norte concessions are large enough to be able to locate and accommodate the infrastructure necessary to host a mining operation.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

The Dominican Republic is accessible through international airports located in the cities of Santo Domingo, Santiago, Punta Cana and Puerto Plata. Santiago and Puerto Plata are the closest airports to the Project.

The property is accessible by road, being bisected by highway #45, a paved road from Monte Christi, on the Atlantic coast, south to Dajabón, Restauración and Matayaya. Monte Christi is also the terminus for highway #1, a major highway originating in the capital of Santo Domingo and heading northwest through Santiago (second largest city), before continuing on to Monte Christi.

The Candelones deposits and other parts of the two Neita concession applications are accessible by means of a network of trails and unpaved roads, leading off highway #45. These trails and roads are passable year-round. Figure 5.1 shows the access, community and Unigold camp locations within the concessions.

5.2 CLIMATE

The climate is semitropical. Daytime temperatures average 25°C, with humidity ranging between 60% and 80%. Nighttime temperatures average 18°C. Average monthly precipitation ranges from 40 to 220 mm. There is a distinct rainy season that commences in May and extends through October. Table 5.1 summarizes the data collected from NOAA (National Oceanic and Atmospheric Administration) station 78000000000433, located in the town of Restauración.

Table 5.1
Summary of the Climate Data from the Restauración NOAA Station

Month	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Max. Avg. Temp. (°C)	29.6	30.0	31.2	31.4	31.7	31.8	32.4	32.3	31.9	31.7	30.4	29.1	**31.1**
Min. Avg. Temp. (°C)	16.0	16.0	16.5	17.4	18.3	18.9	18.7	18.8	18.8	18.8	18.2	16.8	**17.7**
Avg. Precip. (mm)	45.8	45.3	64.5	102.6	177.3	179.9	129.3	160.3	220.2	213.6	94.9	56.1	**124.2**

Table provided by Unigold Inc.

The climate is sufficiently moderate that Unigold can operate year-round with little difficulty.

The Atlantic hurricane season extends annually from June through November, with the largest number of tropical cyclones occurring in August and September. There have been no recorded data of hurricanes affecting activities in the town of Restauración.

Figure 5.1
Map of the Access, Communities and Unigold Camp on the Neita Concession

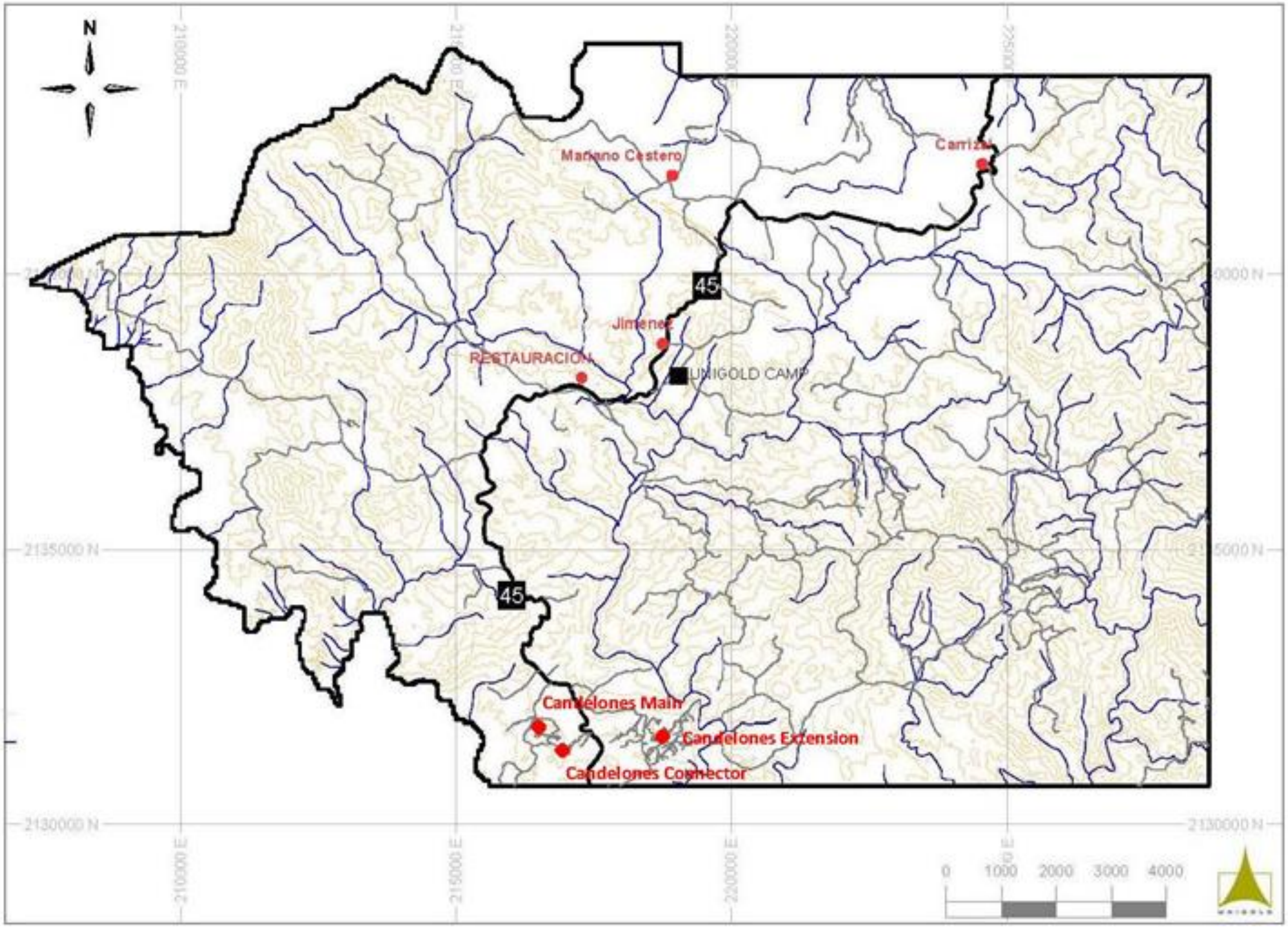


Figure Taken from the Unigold Inc. May 31, 2021 Technical Report and dated December, 2013.

5.3 PHYSIOGRAPHY

The property is located within the Cordillera Central, where it displays craggy highlands and mountains, interspersed with rich workable valleys. The steep slopes, deep valleys and sharp crests are common characteristics of volcanic mountain ranges. Elevation varies from 460 masl in the valley of Rio Libón to 1,009 masl at the peak of Cerro del Guano.

The vegetation on the property is comprised of a mix of montane pine forest and mixed pine-broad-leaved forest, with the undergrowth and floor layers comprising younger saplings, ferns, grasses, orchids, moss and fungi. These pine forests are generally the result of reforestation. Low lying areas and areas with gentle slopes/relief are dominated by agricultural land.

Figure 5.2 is a view of the physiography located on the Concession.

Figure 5.2
View of the Physiography from a Hilltop on the Candelones Main Deposit

5.4 INFRASTRUCTURE

The border region with Haiti is one of the least densely populated and least developed areas of the Dominican Republic. Farming and forestry are the primary means of income.

The nearest population centre is Restauración (pop. 7,000), which is the third largest city in the province of Dajabón. Several smaller communities (pop. <500) lie within the larger Concession area. The remainder of the population is rural, living in scattered farms. Figure 5.3 is a view of the main street in Restauración, the local community near Unigold's camp.

Figure 5.3
View of the Main Street in Restauración

Restauración lies along Route 45, is serviced by the national electrical grid and offers a number of small local businesses that support the community and the local farming and forestry industries. Dajabón, which is located 45 km north, is the closest urban area of any size. Most services are available in Dajabón, although it is generally easier and less expensive to go to Santiago for services. Santiago is the second largest city in the Dominican Republic and the closest major centre, approximately 150 km to the northeast, and is accessible by paved road from the property.

Unigold has established a semi-permanent camp approximately 2 km from Restauración. The camp can accommodate more than twenty-five people and includes bunkhouse facilities, washroom facilities, a full dining room/kitchen, office facilities, fuel and consumable storage, warehousing facilities and a core processing and storage facility. Most of the buildings are converted shipping containers. The camp is fenced and there is 24-hour security onsite. Figure 5.4 is a view of some of the buildings in the Unigold camp.

There is no additional infrastructure in the area and Unigold generates its own power at the camp using diesel generators. Diesel fuel is obtained from a local supplier.

Unigold owns four diamond drills and an associated inventory of parts and down-hole tools, sufficient to support a future exploration diamond drilling program.

Figure 5.4
Buildings in the Unigold Camp

5.5 Local Resources

Water for drilling is readily available from rivers and streams on the property and Unigold's Resolution No. I-12 allows use of surface water for exploration purposes.

The local workforce is largely unskilled, with no mining history. Unigold's existing workforce consists almost entirely of local labour, many of whom were trained as diamond drillers, heavy equipment operators, technical support staff and supervisors. Unigold advancing the Project to an operational stage would need to bring in outside personnel for management and staff positions until a suitable workforce could be trained locally.

6.0 HISTORY

6.1 EXPLORATION HISTORY

6.1.1 Exploration 1965 through 1969

The earliest documented exploration of the Concession area was completed by Mitsubishi International Corp. (Mitsubishi) between 1965 and 1969. Mitsubishi was granted the exploration rights to over 7,700 km^2 of the Cordillera Central and its exploration program was focused on porphyry copper deposits.

Mitsubishi collected stream sediment samples throughout the Cordillera Central and utilized the data from these samples as a targeting tool, to identify areas prospective for copper. This initial work highlighted the Neita Concession as an area requiring follow-up.

During the second year, Mitsubishi focused its exploration program on a 145 km^2 area that was called the Neita Concession prospect. In this area, Mitsubishi took an additional 805 stream sediment samples, but only assayed for copper and molybdenum. Three smaller areas were then selected, Neita Concession A (2.8 km^2), Neita Concession B (2.3 km^2) and Neita Concession C (2.7 km^2), and a surface soil sampling program was completed on grid spacing of 100 m x 100 m and 50 m x 50 m.

During the third and fourth years, Mitsubishi completed induced polarization (IP) surveys to identify prospective targets for drilling. A total of 27 drill holes were completed by Mitsubishi, testing the Neita Concession A and B targets. The drilling discovered narrow veins carrying chalcopyrite, bornite and chalcocite, with copper values ranging from 0.5% to 5.0% Cu in the Neita Concession A area. In the Neita Concession B area, copper sulphides and pyrite were found disseminated in andesites, diorites and porphyries, and sulphide bearing quartz veins were located along the contact of the diorites with the porphyries.

After the exploration programs in the third and fourth years, Mitsubishi did not complete any further work.

6.1.2 Exploration 1985 through 1999

In 1985, Rosario Dominicana (Rosario) drilled one hole at Cerro Candelones (Candelones Main deposit). Historical documents note that the hole was extensively mineralized, but recovery was very poor. Surface geological mapping by Rosario identified three areas (Cerro Candelones, Cerro Berro and El Corozo) and recommendations were made to continue the work on these prospects.

In 1990, Rosario completed a detailed geological mapping program, as well as collecting 1,308 soil samples, and excavating 78 trenches for a total of 2,968 m of trenching at the Cerro Candelones, Guano-Naranjo and El Montazo prospects.

Rosario made the decision to start drilling on the Cerro Candelones prospect and eight holes were completed for a total of 642 m. Assaying was performed at Rosario, using fire assay with a detection limit of 50 ppb for gold. The highlight from this drill program was hole SC3, which returned an intersection of 16 m averaging 2.4 g/t Au.

In September, 1997, Bureau de Recherches Géologiques et Minières (BRGM) of France combined efforts with Rosario and Geofitec, S.A. in a thirteen-month exploration program sponsored by the European Community. The exploration program produced a geological evaluation of the area and a pre-feasibility study and environmental impact study of the Candelones deposit that was based on a potential open pit mine concept.

BRGM authored the six-volume pre-feasibility study, completed to international standards of the day. The study included results from 14 trenches (969 m) and 17 drill holes (3,000 m). The final database included approximately 1,800 samples. Sample preparation was completed at Rosario's Pueblo Viejo mine (currently owned by Barrick and Goldcorp), with final analysis completed at BRGM's laboratory in France.

BRGM estimated a mineral resource inventory from 11 vertical sections, spaced 30 m apart. BRGM estimated a "Proven and Probable Reserve" that could be recovered through open pit mining with a strip ratio of 9:1. BRGM noted that the resulting project did not meet its internal hurdle rate and, as a result, BRGM shelved the project.

The BRGM estimate is historical and Micon QPs have not verified, audited or conducted sufficient work on the historical estimate to classify it as current. Therefore, neither Unigold nor Micon's QPs are relying upon the historical BRGM resource and it is included in this Technical Report as historical information only. The key assumptions, parameters and methods used to prepare the historical BRGM estimate are not known.

6.1.3 Exploration 2002 through 2010

Unigold acquired the rights to the Neita Concession in 2002, by means of a tender process and subsequent contract with the Dominican State. Unigold commenced exploration in October, 2002 and has conducted programs more or less continuously since that date.

6.2 Historical and Recent Mineral Resource Estimates

A number of previous mineral resource estimates have been conducted on the Neita Concession. Table 6.1 summarizes the operator who initiated the estimate, the reports which disclosed the estimates and the companies which conducted the estimates.

Table 6.1
Summary of the Previous Technical Reports with Mineral Resource Estimates

Operator	Report Disclosing the Estimate	Company Conducting the Estimate
BRGM	Pre-Feasibility Study of the Candelones Project; 1998	BRGM
Unigold	NI 43 101 Technical Report Mineral Resource Estimate for the Candelones Project, Neita Concession, Dominican Republic, Effective Date Nov. 4, 2013	Micon
	NI 43 101 Technical Report Mineral Resource Estimate for the Candelones Extension Deposit, Candelones Project, Neita Concession, Dominican Republic, Effective Date Feb. 24, 2015	
	NI 43-101 F1 Technical Report Updated Mineral Resource Estimate for the Candelones Project Neita Concession, Dominican Republic, Effective Date August 17, 2020.	
	NI 43-101 F1 Technical Report Updated Mineral Resource Estimate and Preliminary Economic Assessment for the Oxide Portion of the Candelones Project Neita Concession, Dominican Republic, Effective Date May 10, 2021.	

These prior mineral resource estimates are superseded by the estimate disclosed in detail in Section 14.0 of this report.

6.3 Mining Activities and Production

There have been no recorded mining activities or production on either the Candelones Project or the larger Neita Sur and Neita Norte concession applications.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The island of Hispaniola is largely a result of island arc volcanism that took place from the early Cretaceous through the mid Tertiary (Eocene) period. The geology of the island is still being studied and, not surprisingly, remains a source of considerable debate.

Geologically, the most well understood area is the southeastern Cordillera Central district near Maimon. The mines at Falcondo (Ni), Cerro de Maimon (Cu-Au) and Pueblo Veijo (Au) are all located in this region, with all having been extensively studied.

In general, the consensus is that the island of Hispaniola developed as a classic island arc sequence, resulting from the subduction of the North American plate beneath the Caribbean plate.

Mueller et al., (2008) state that the Cretaceous-Eocene basement of Hispaniola may be divided into terranes north of the Septentrional-Hispaniola fault system, terranes of the Cordillera Central, and terranes south of the Enriquillo-Plantain Garden Fault.

The northern margin of the Cordillera Central is defined by the Hispaniola sinistral fault. The terrane of the Cordillera Central has been described as being composed of autochthonous volcanic rocks of the Early Cretaceous oceanic arc, allochthonous mafic and ultramafic rocks of an early Cretaceous ophiolite complex, and tonalite batholiths and volcanic-volcaniclastic rocks of the Late Cretaceous-Early Tertiary.

Draper and Louis (1991) have described the basement rocks, excluding the batholiths, as having been regionally metamorphosed to prehnite-pumpellyite and greenschist facies assemblages.

Mann et al. (1991) divide the island into 12 island arc terranes (Figure 7.1) and suggest that the Septentrional Fault Zone and Enriquilo-Plantain-Garden Fault Zone define the island arc assemblage. The island arc assemblage includes five stratigraphic terranes (Tireo, Seibo, Oro, Presqu'ile du Nord-Ouest-Neiba and Altimira), believed to be the result of the volcano-plutonic island arc. One stratigraphic terrane is believed to have formed in a back-arc basin (Trois Rivieres – Peralta) and one terrane is believed to be a fragment of the oceanic plateau (Sell-Hotte-Bahoruco).

The Tireo Formation, which dominates the local geology of the Neita Concession, can be traced for 300 km along strike and averages 35 km in width. It is comprised of volcano-sedimentary rocks and lavas of Upper Cretaceous age that outcrop in the Massif du Nord of Haiti and the Cordillera Central of the Dominican Republic (Valls, 2008).

Lewis, et. al. (1991), no relationship to current author, suggest that the Tireo Formation is comprised of two members. The Lower member, best observed at the Massif du Nord in Haiti, is a 4,000 m thick sequence of massive, green, vitric-lithic tuffs of basic composition and metabasalt flows with intercalated mudstones, siltstones, chert and limestone. Near Restauración (within Unigold's boundary), the Lower Tireo consists of interbedded red-green tuffs, well stratified lithic tuffs, silicified tuffs, andesite flows and pyroclastic basaltic rocks.

Figure 7.1
Regional Geology of the Island of Hispaniola

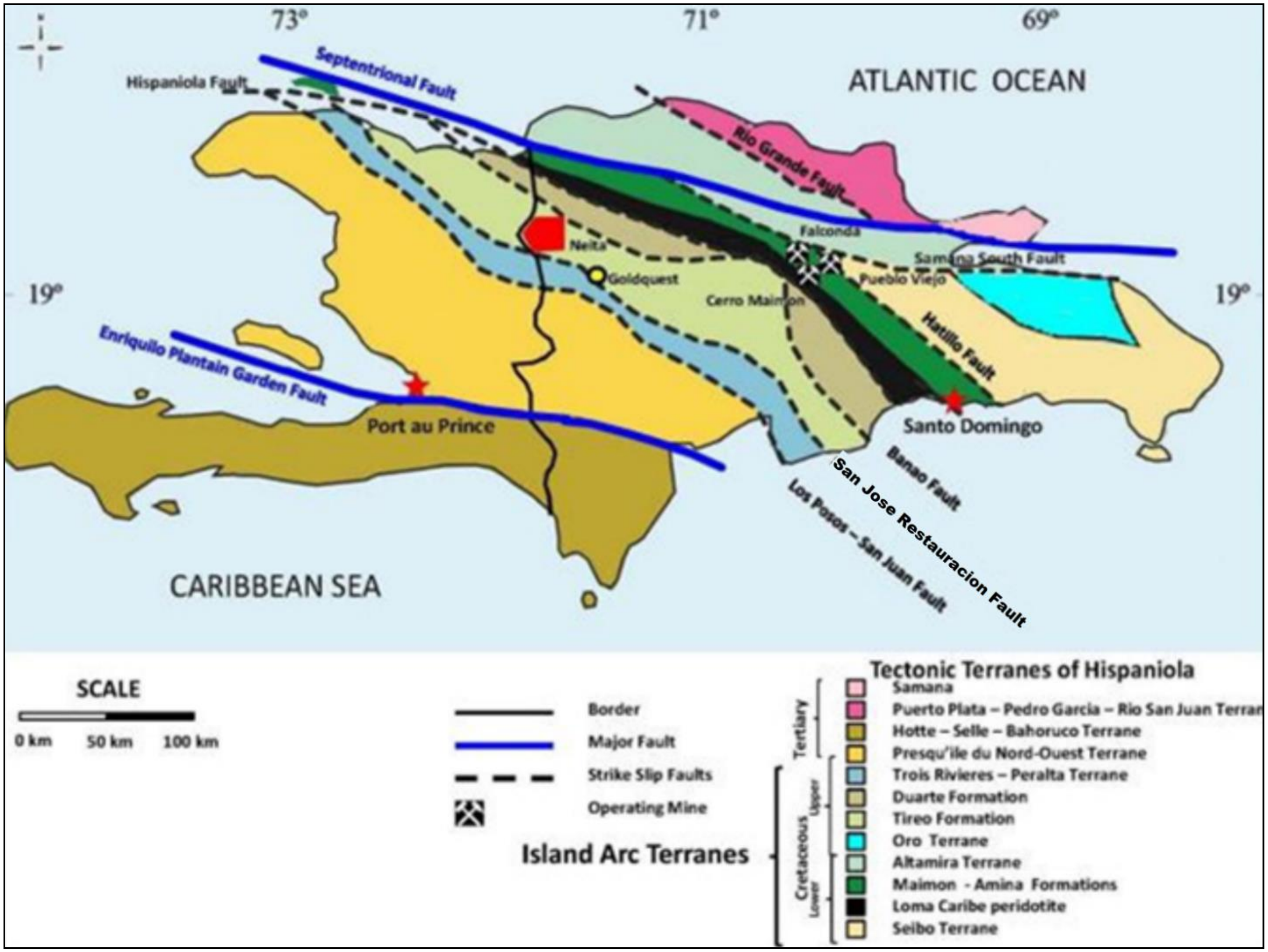


Figure provided by Unigold Inc., May, 2021, and derived from Mann et al., 1991.

The Lower Tireo Group passes conformably into rocks of the Upper Tireo Group, which consist of an unknown thickness of lava, pyroclastic rocks and reworked tuffs of dacitic to rhyolitic composition.

The Upper Tireo Group passes unconformably into the marine sedimentary rocks of the Trois Rivieres Peralta Formation along the San Jose – Restauración fault zone.

Both members of the Tireo Formation have been extensively intruded by numerous calc alkaline stocks and batholiths.

7.2 Local Geology

Outcrop within the Neita Concession is generally lacking and, where there is outcrop, it has been intensely altered by weathering and/or supergene alteration. The most studied area within the Concession is the Candelones Project area, where the bulk of the exploration effort has been focused to date.

The Concession geology is dominated by the Tireo Formation (Figure 7.2). A small section of the Trois Rivieres – Peralta Formation is found near the southern boundary of the Concession. The contact between the Tireo and Trois Rivieres – Peralta Formation is believed to be splay of the San Jose – Restauración Fault Zone (Figure 7.1 and Figure 7.2). It is believed that the older rocks of the Tireo Formation were thrust over the younger marine sediments of the Trois Rivieres – Peralta Formation.

The Tireo Formation is subdivided into Upper and Lower members (Figure 7.2). The older Lower Tireo is dominated by volcanic, volcanoclastics and pyroclastics of predominantly andesitic composition and lies to the northeast of the main branch of the San Jose – Restauración Thrust which bisects the Concession almost in half along a northwest trending corridor.

The younger Upper Tireo member is comprised largely of volcanic and volcanoclastics rocks of andesitic to rhyodacitic composition.

Both members of the Tireo Formation are intruded by granitoid stocks and batholiths, as evidenced by the Loma de Cabrera batholiths located immediately north of the Concession boundary. Kesler et al. (1991), note that K-Ar age dating of the Loma de Cabrera batholiths suggests a multi-phase origin, with an initial largely gabbroic phase around the mid-Cretaceous (102-87 Ma), a second, extensive hornblende-tonalite phase during the late Cretaceous (87-83 Ma) and a final, less mafic tonalite phase during the early Eocene (~50 Ma).

Kesler concludes that the volcanism during the late Cretaceous period undoubtedly corresponds to the formation of the Tireo Formation and represents “the period of greatest magma generation in Hispaniola arc evolution”.

Figure 7.2
Local Geology of the Neita Concession

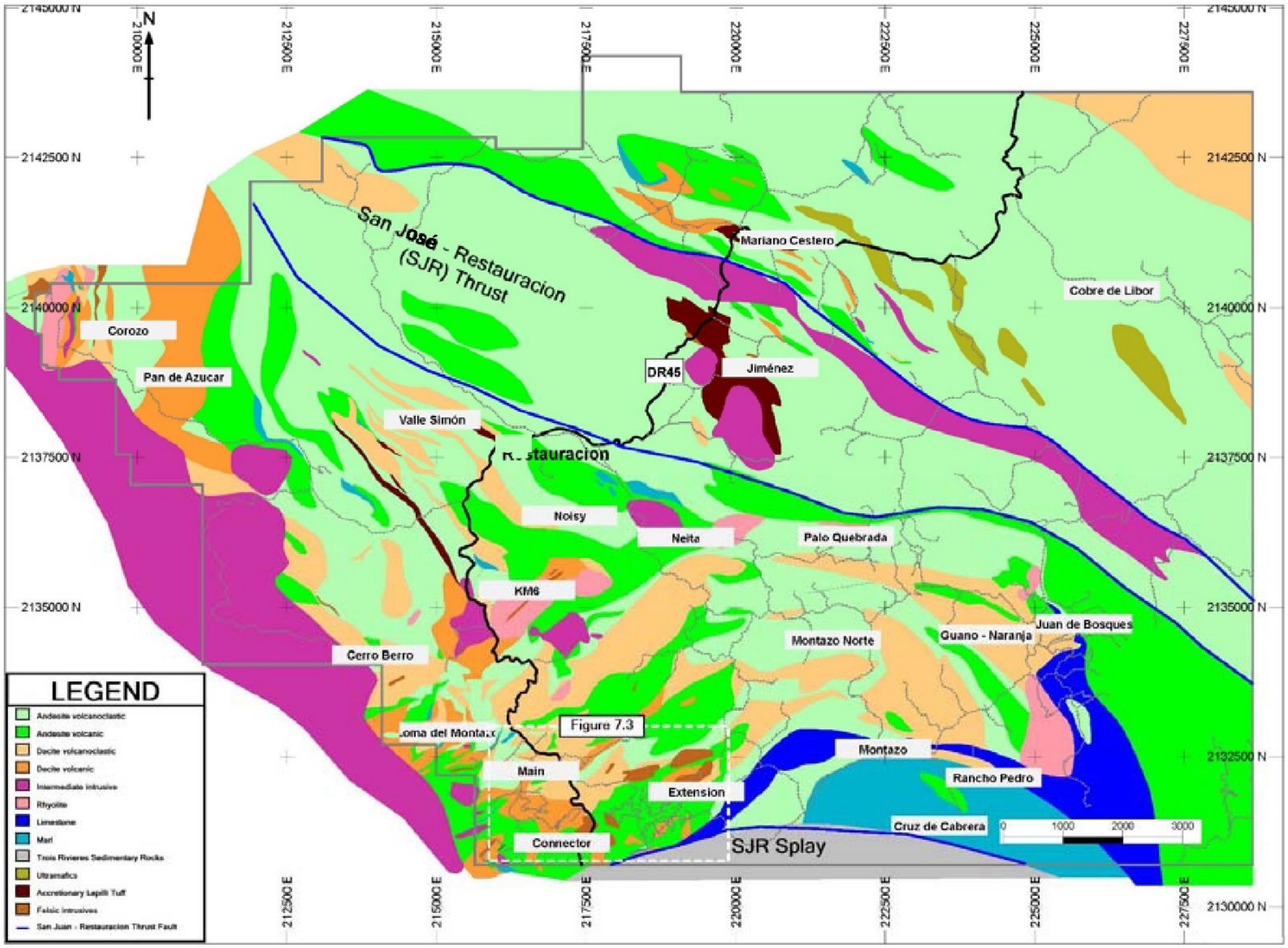


Figure provided by Unigold Inc., May, 2021.

7.3 CANDELONES PROJECT GEOLOGY

The CM, CMC and CE deposits (zones) define an east-northeast trend that has been traced through field mapping and diamond drilling for over a 3.0 km distance (Figure 7.3). This trend is believed to be related to a series of east-northeast trending fault zones that extend from the Candelones Project, through the Montazo target, and continue to the Guano, Naranjo, Juan de Bosques and Rancho Pedro targets which are located approximately 8 km to the east-northeast of the Candelones Project.

Observations from drill core at the CE deposit indicate that polymetallic mineralization is localized within a brecciated and reworked dacite volcanoclastic unit that stratigraphically underlies a series of andesite volcanics and volcanoclastic rocks. The contact strikes east-west and the dip of the contact varies from horizontal at the current western boundary to approximately 70º to the south at the currently defined eastern limit. The variability in dip is currently interpreted to be the product of faulting but could be manifesting the limb of a fold. Consistent stratigraphic marker horizons have yet to be identified, although the closer spaced drilling from 2016 to present is providing some clarity to the litho-structural interpretation which is evolving as Unigold completes additional drill holes.

The mineralization at the CMC deposit, approximately 800 to 1,000 m west of the current western limit of the CE deposit, occurs within a flat lying brecciated dacite volcaniclastic that overlies a thick sequence of andesite volcanics and volcaniclastics. Information along the 800 to 1,000 m gap between the two known deposits is sparse, limited to approximately 20 widely spaced drill holes, all of which targeted the interpreted andesite-dacite contact. Recent drilling at Target C – CE, returned anomalous intervals at a second andesite-dacite interface that is south of the initial contact, targeted by the historical drilling. This contact mineralization remains open to the west and Unigold indicates that it plans to drill this target as part of its current exploration program.

The CM deposit is hosted in dacite breccias developed where the hanging wall dacite volcaniclastics are in contact with a dacite intrusive (Figure 10.9). The CM deposit strikes southeast and dips between 50-70º to the northeast. The northwest terminus is abrupt and interpreted to be fault offset, but there is no indication as to the direction of movement at this time.

The CM deposit generally dips steeply to the north, while that of the CMC zone is generally sub-horizontal.

The host dacite volcanoclastic sequences in contact with the andesite are largely tuffaceous and exhibit textures indicative of submarine deposition, as well as brecciation resulting from extensive and long-lived tectonic activity as the island arc matured. The contact zone is often described as brecciated, containing sub-angular to sub-rounded fragments of dacite tuff ranging in size from 2 mm to >20 mm within a fine to medium grained clay matrix that has been locally silicified. Some have identified the contact rocks as hyaloclastites, suggesting volcanic deposition in a shallow water environment. Unigold's current geological model proposes a hybrid type system with elements of both volcanogenic massive sulphide origins, as well as later, epithermal overprinting.

Figure 7.3
Property Geology for the Candelones Project

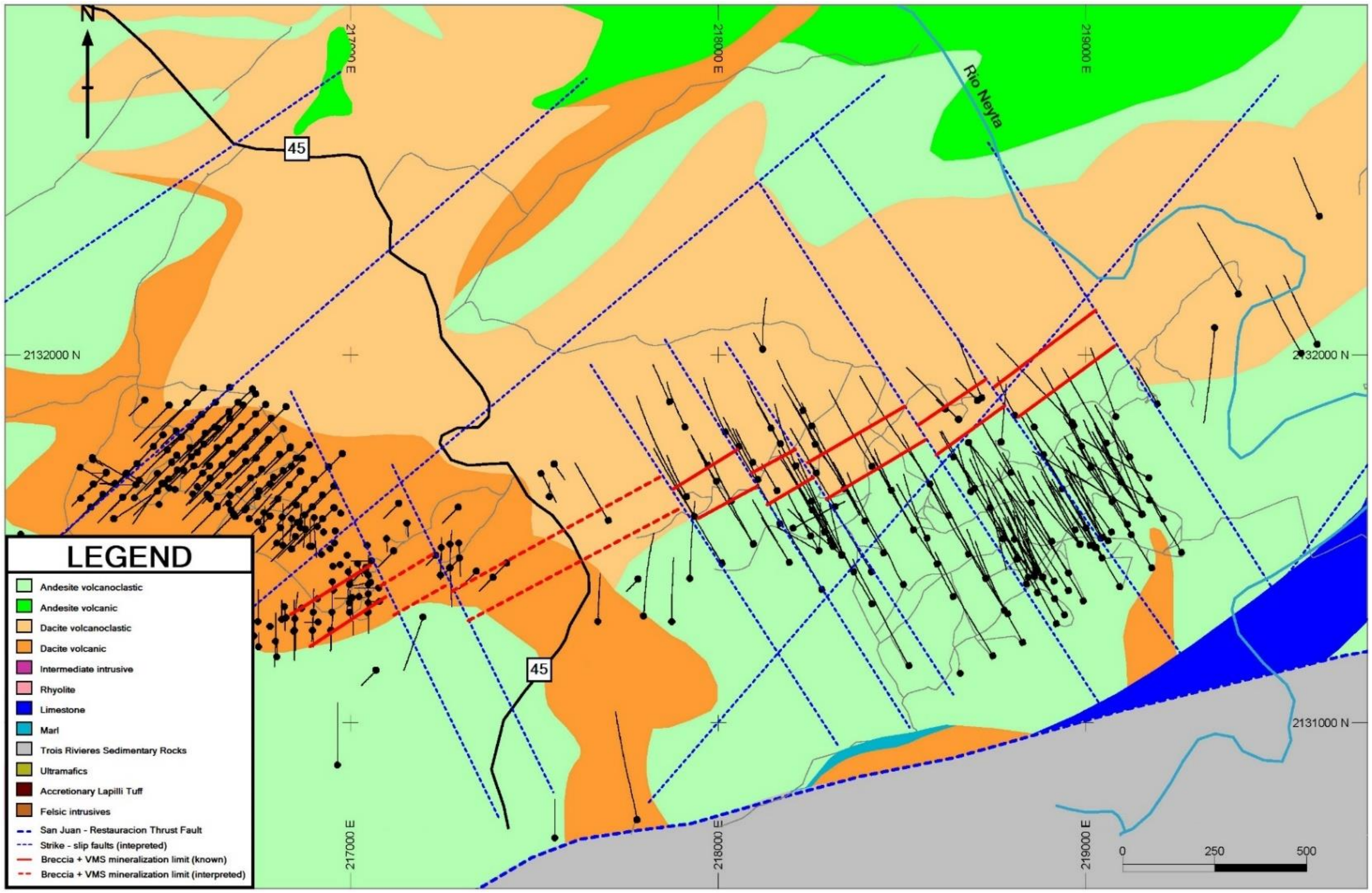


Figure provided by Unigold Inc., September, 2020.

As noted in the Section 7.2, the Upper Tireo is interpreted to have been thrust over the younger Trois Rivieres – Peralta sediments. The contact is readily observable on surface, where bedding angles suggest that this unit dips at 25° to 30°. Drilling has intersected a sedimentary flysch sequence (FY) at depth below the CE deposit. Interpretation suggests that the contact dips at 55° to 65° to the north.

Figure 7.4 presents a typical cross-section of the CE Zone.

7.4 Major Lithologies

The current lithological legend for the Project has been simplified from past versions which include over 60 distinct lithological units. The historical coding system resulted in a challenging hole to hole, section to section interpretive effort.

Starting in 2014, efforts to simplify the lithological legend were initiated. In 2019-20, re-logging of the historical core in the core storage facility from holes proximal to the areas actively being drilled, provided clarity with respect to both the legend and the interpretation.

The current lithological coding system for the Candelones Project consists of two main lithological units that are compositionally distinct. Hanging wall andesites, coded as AN and foot wall dacites, coded as DA. The andesites are slightly more mafic than the felsic dominated dacites. Within each main lithology are the following sub-lithologies. These include:

- a anhydrite stockwork – ANa or DAa – highly distinctive unit due to the presence of upwards of 30% anhydrite (+/- gypsum, +/- pyrite) as fine, chaotically oriented fracture fill up to 1.0 cm thick. This unit was first identified vertically above the thick, massive sulphide mineralization intersected at Target A at the CE deposit. Similar anhydrite stockwork has been intersected in dacite volcaniclastics in the footwall of the mineralized dacite breccias. In some drill holes, the anhydrite stockwork includes fine grained, pyrite rich sulphide stringers up to 2 cm thick which carry low tenor gold and silver mineralization. This lower DAa unit is thick and at the maximum depth capability of the current drills owned by Unigold.
- d dike, typically fine grained to aphanitic, massive, coded as ANd and DAd. Slight compositional variations produce a wide range of colour and texture, but the dikes are distinguished from intrusive units based on observed hornfelsing along the contacts.
- i intrusive, generally fine to medium grained with a porphyritic texture, coded as ANi and DAi. DAi has very distinctive quartz eyes.
- l lapilli tuff, very distinctive unit with 2-64 mm phenocrysts, fiamme structures are common, coded as ANl and DAl.
- t tuffs coded as ANt and DAt, - both are variable ranging from fine, bedded ash tuffs to coarse grained crystal tuffs.
- x brecciation, unmineralized to strongly mineralized, dominantly monomictic composition – coded as ANx / DAx. Fragments range in size from millimetres to centimetres and vary from rounded to sub-angular. In rare cases, the fragments are rimmed, occasionally by fine grained pyrite but more often by silica.

Figure 7.4
Typical Cross-Section for the Candelones Extension Deposit

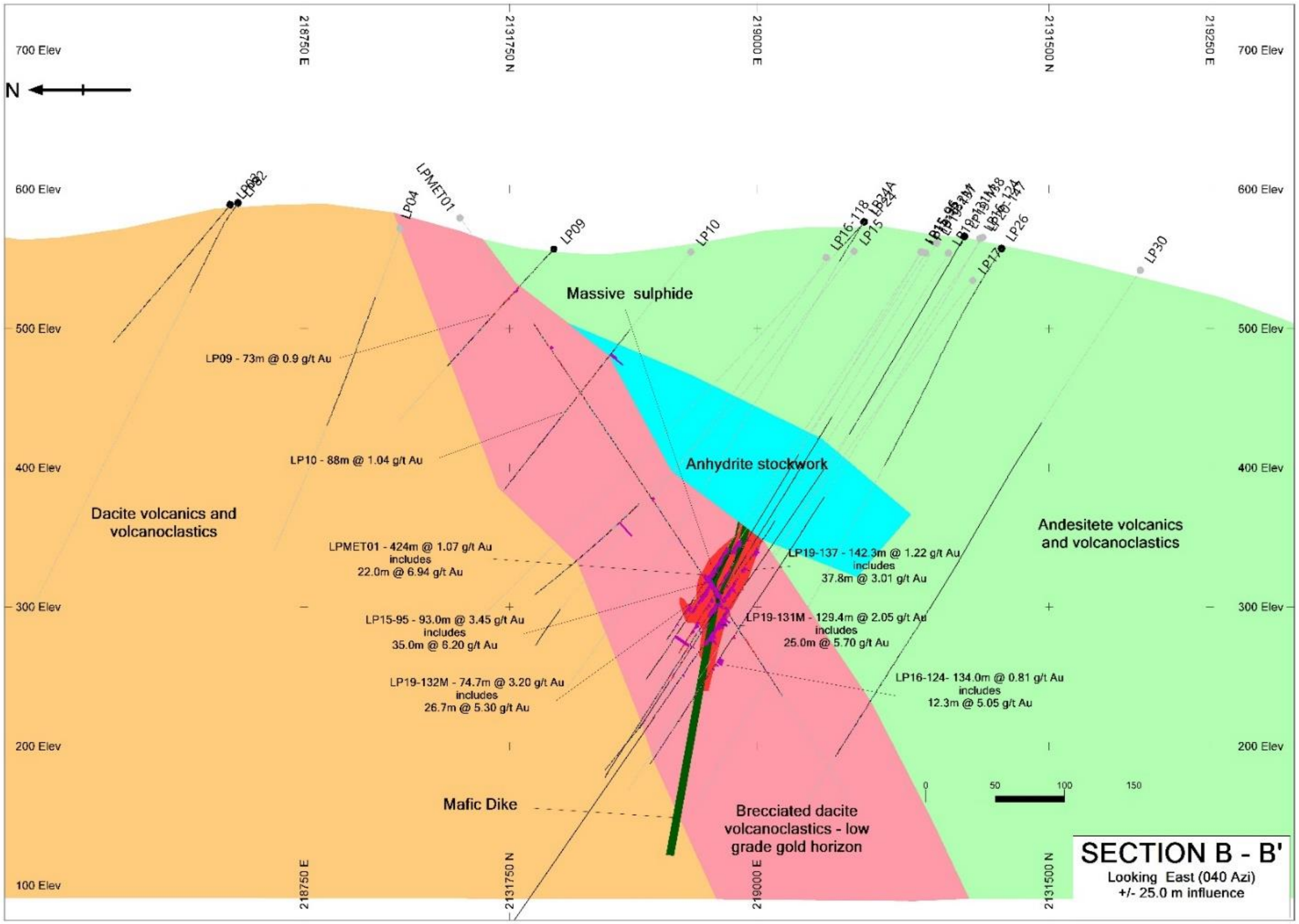


Figure was provided by Unigold Inc. for the previous Technical Reports and is dated September, 2020.

The main mineralized zone is always coded as DAx. The only exception is when the main mineralized zone is expressed as massive or semi-massive sulphides (MS or SMS).

Faults are broken out and highlighted, typically coded as Fz but also as Fs (if extensive shearing is observed), Fg (clay gouge observed) or Fx (brecciated) are also utilized.

Zones of massive to semi-massive sulphide mineralization are also highlighted within the host DAx, coded as MS or SMS.

The final two primary lithological units may be potential marker lithologies.

Late mafic dikes (sills), coded as Md, occur proximal to all three high-grade targets at the CE deposit and may remobilize gold to the contact surrounding the dike. These dikes are very distinctive, typically fine grained to aphanitic, and jet black in colour, highly magnetic and chaotically oriented. The late mafic dikes are not always associated with mineralization, however, all high-grade mineralization intersected to date, including that at Targets A, B and C at the CE, features mafic dike intervals proximal to the mineralization (Ref. Figure 10.9).

7.5 Mineralization

The Candelones deposits feature anomalous gold, silver, copper, lead and zinc mineralization. To date, all mineralization is confined to brecciated dacite volcaniclastics where they are in contact with andesite volcanics/volcaniclastics (CMC, CE) or dacite volcanics (CM).

Mineralization is currently interpreted to be a product of a hybrid type system. Volcanogenic massive sulphide (VMS), in a shallow water, back arc basin setting, is interpreted to have introduced low tenor copper, lead and zinc mineralization, coeval with deposition of the host dacite volcaniclastics, over a widespread area. Post mineral uplift developed extensive folding and faulting, interpreted to have produced extensive brecciation within the dacite volcanoclastic unit. The brecciated dacites offered ideal pathways for later, epithermal mineralization events associated with the late calc-akaline intrusives mapped elsewhere in the Tireo Formation that are possibly buried within the Concession limit. Hydrothermal fluid flow related to these buried intrusives is interpreted to have introduced the majority of the gold and silver into the Candelones deposits. The final stage of mineralization was reactivation of the fault systems followed by a late, mafic volcanic event which emplaced the observed mafic dikes and/or sills. These late intrusives are proximal to the high-grade systems that have been the focal point of drilling since 2015. It is currently interpreted that these late mafic intrusives may have remobilized gold to the dike margins.

At the CE and CMC deposits, mineralization is stratigraphically restricted to dacite volcaniclastics that underlie a sequence of andesite volcanics and volcanoclastic rocks. The contact strikes east-west and the dip varies from horizontal, at the CMC and western limit of the CE, to 70º south at the eastern limit of the CE. The variability in dip is currently interpreted to be the result of the extensive faulting produced during the formation of the island of Hispaniola.

The San Jose-Restauración (SJR) thrust fault transects the Concession, separating the Lower Tireo rocks in the north from the Upper Tireo rocks in the south. Most of the anomalous gold mineralization within the Neita Concession has been identified in the Upper Tireo.

Near the Candelones deposits, a splay of the SJR thrust fault curves east-west, defining the southern limit of the Upper Tireo rocks. This splay has overthrust a wedge of younger, Trois Riviere sediments over the older Upper Tireo sequence.

Extensive northwest to northeast trending strike slip faults are interpreted to be common, based on surface mapping and diamond drill hole interpretation. Movement and orientation of the faults is difficult to isolate, as there are few recognizable marker horizons and compositional variation within the dominant andesites and dacites is minimal.

7.5.1 Dacite Breccia Mineralization – VMS Type

Dacite breccia typically starts at the andesite-dacite contact and extends for up to 125 m. Brecciation decreases as the distance from the contact increases, as does the tenor of mineralization. The contact can be identified visually. It is the most distinctive marker horizon identified to date. The footwall of the dacite breccia can be identified visually in the core as the intensity of brecciation decreases but the actual terminus of the mineralization is defined by assay cut-off. There is a sharp, order of magnitude decrease in gold grade from 100 ppb to 10 ppb that defines the footwall terminus of the host dacite.

7.5.2 Massive Sulphide Mineralization – Target A

Drilling in late 2015 intersected a zone of massive sulphide mineralization that is interpreted to be discordant to the andesite-dacite contact, striking northeast and plunging to the east at approximately 30°. The massive sulphide is pyrite dominant and has returned gold and copper values that are elevated by an order of magnitude relative to the VMS mineralization discussed in Section 7.5.1. The massive sulphide mineralization has been traced by drilling for a strike length of 350 m along an east-northeast trend. Gold and copper grades within the massive sulphide mineralization are markedly consistent, with no significant outliers.

The massive sulphides appear localized along the margin of a late, barren, mafic intrusive, interpreted to be a sub-vertical dike (Ref. Figure 7.4).

7.5.3 Quartz Vein Polymetallic Mineralization – Target B Candelones Extension

Drilling in 2016 confirmed the presence of high-grade gold, silver, copper and zinc associated with quartz +/- barite veining and matrix replacement at Target B of the Candelones Extension. Pyrite and sphalerite are also common, with rare chalcopyrite and galena. This high-grade target is 150 m west of the massive sulphide mineralization at Target A and is interpreted to be a product of one or more hydrothermal fluid floods into the host dacite breccia, along interpreted sub-vertical, NE and NW fault zones. Drilling has intersected higher grade gold values over 150 m strike length. The mineralization is interpreted to occur as anastomosing veins within a fault bounded, sub-vertical fault block (Ref. Figure 10.6).

7.5.4 Dacite Breccia – Target C Mineralization

Target C mineralization is very similar to Target B. Elevated gold values are associated with a zone of intense brecciation. Sub-angular to sub-rounded fragments of dacite tuff are set in a silica-sulphide matrix dominated by sphalerite and pyrite, with rare chalcopyrite and galena. Gold occurs preferentially in areas that are flooded by barite and quartz or proximal to what are interpreted to be sub-vertical mafic dikes that bisect the breccia unit.

7.5.5 Candelones Connector

Mineralization at the CMC deposit occurs within a brecciated dacite tuff stratigraphically above an andesite volcanoclastic unit. Elevated gold values are associated with a zone of intense brecciation. Sub-angular to sub-rounded fragments of dacite tuff are set in a silica-sulphide matrix dominated by pyrite. Gold occurs preferentially in areas that are flooded by barite and quartz. As at the CE deposit, the gold mineralization is interpreted to be spatially related to NE and NW trending faults that are interpreted from the current data set.

Unlike the CE deposit, mineralization at the CMC outcrops to surface and is intensely weathered and oxidized to a depth approaching 30.0 m from surface. Metallurgical testing to date suggests that gold recoveries are particularly robust, with +95% recovery estimated from direct cyanidation.

Below the oxide horizon, the mineralization appears to be largely VMS type mineralization, limited to the brecciated dacites, to the andesite contact where anomalous grades are immediately truncated.

7.5.6 Candelones Main

Mineralization at the CM deposit occurs within a broad interval of brecciated dacite tuff in contact with what is interpreted to be a dacite intrusive. The CM deposit strikes northwest, almost perpendicular to the strike of the CE deposit, and dips at 50-70^{o} to the northeast. The mineralization is interpreted to be largely VMS type mineralization, with the tenor of mineralization directly related to the intensity of brecciation. The hanging wall rocks are comprised of dacite tuffs.

As at the CMC deposit, the CM mineralization outcrops to surface and is oxidized to depths of over 30 m. Metallurgical testing indicates robust gold recovery from direct cyanidation, with recoveries estimated to be over 95%.

Strong clay alteration is also common, with extensive illite and montmorillonite associated with the mineralized envelope near surface. Extensive silica alteration is also observed within the sulphide component below the oxidation cap.

Unigold notes that review of the CM deposit is in progress with the objective of identifying priority, high-grade targets for follow up drilling, extrapolating observations from the CE deposit to the CM.

7.6 MICON QP COMMENTS

Having established the extent of the oxide mineralization, Unigold continues to explore the Candelones deposit, reviewing and revising the geological model for the sulphide mineralization. The geological model for the sulphide mineralization will continue to be discussed in future Technical Reports, as further work is conducted to outline the extent of the mineralization.

8.0 DEPOSIT TYPES

8.1 POTENTIAL DEPOSIT TYPES

The island of Hispaniola occupies the north-central segment of the Greater Antilles island arc, extending from Cuba to the north coast of South America. The island arc formed during the Cretaceous – Eocene period, above a southwesterly dipping subduction zone where the Caribbean plate collided with the North American plate. Volcanism, a product of the subduction process, makes the island prospective for a number of potential valuable mineral deposits (Figure 8.1) including:

- Volcanogenic massive sulphide deposits (Zn, Cu, Pb, Ag, Au).
- High sulphidation epithermal (Au, Ag).
- Intermediate sulphidation epithermal (Au, Ag).
- Low sulphidation epithermal (Au, Ag).
- Mesothermal vein deposits (Au, Ag).
- Porphyry deposits (Cu, Au, Mo).

Figure 8.1
Hydrothermal Mineral Deposits

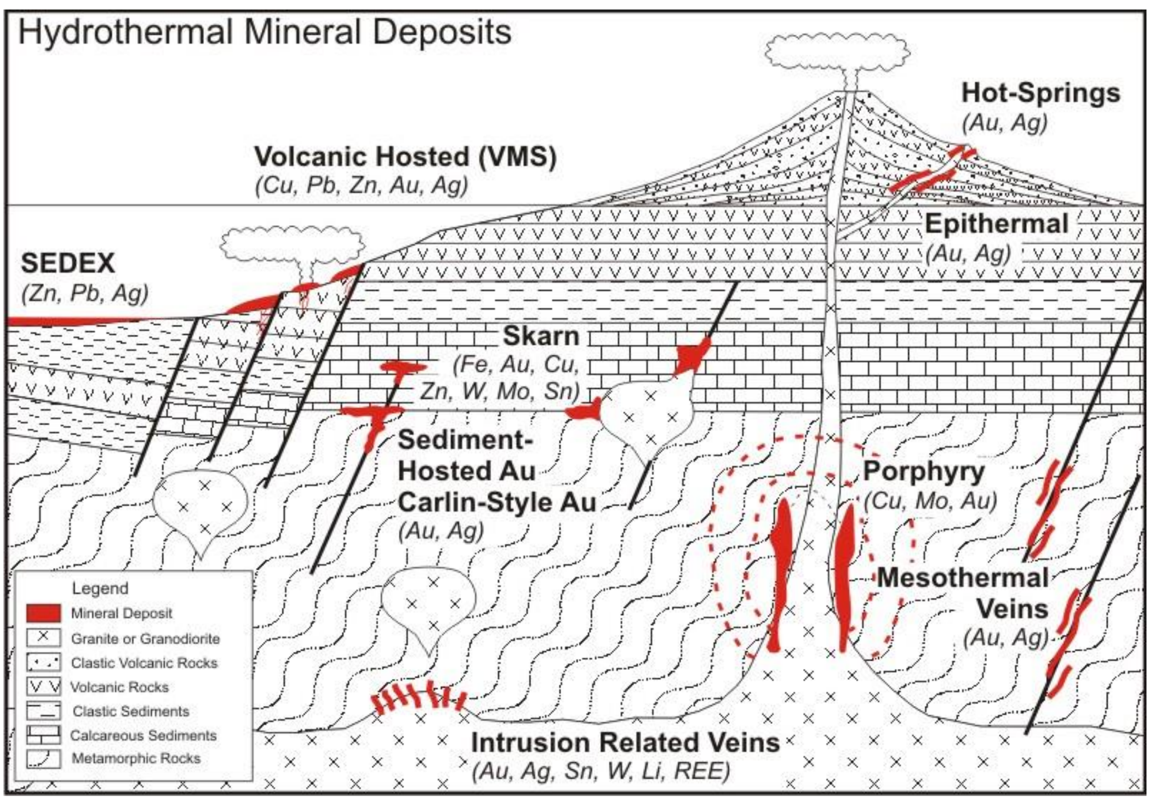


Figure provided by Unigold Inc. – Sourced from Earth Science Australia.

8.2 GEOLOGICAL MODEL AND CONCEPTS

The Neita Concession lies entirely within the Cretaceous aged Tireo Formation, a 35 km wide x 300 km long belt of intermediate volcanics and volcanoclastic rocks the transects the island of Hispaniola. It is bounded to the north by the Banao-Guacara fault and to the south by the SJR fault (Figure 7.1).

Early exploration by Mitsubishi International Corp. focused on the porphyry copper potential of the Concession. Unigold's initial exploration of the Concession was largely focused in and around the CM deposit, where extensive argillic alteration and pervasive silicification suggested potential for an intermediate sulphidation deposit.

In 2011, the CE discovery exhibited features consistent with volcanic massive sulphide deposit models. Cooper (2012) cites the presence of a preserved barite carapace, chert bands, overlapping sulphide mounds, collapsed chimneys, turbidite sequences and metal zoning as evidence supporting a VMS origin. Cooper suggested that the CE deposit is a gold enriched, VMS deposit, stratigraphically controlled by an east-west trending, south dipping contact between hanging wall andesite volcanic/volcaniclastics and footwall dacite volcanics/volcaniclastics. The contact dips between 40 to 75^{o} to the south. All drilling was perpendicular to the contact, with drill sections every 100 m and holes spaced 100 m apart. The drilling returned remarkably consistent, gold, silver, copper, lead and zinc mineralization, typically starting at the contact and extending up to 1,200 m into the footwall dacites, averaging between 0.5 to 1.5 g/t Au with lesser Ag, Cu, Zn and Pb grades. The tenor of the mineralization, particularly gold, decreases as the distance from the contact increases. Broad intervals of massive sulphide, with elevated Zn and Cu, typical of most VMS deposits elsewhere in the world.

Unigold's current exploration model assumes that the Candelones deposits were formed as a hybrid system, with as many as three separate mineralization events. The first is low tenor VMS deposition, coeval with the deposition of the dacite volcaniclastics, which introduced Au, Ag, Cu, Zn and Pb mineralization within the dacite volcaniclastics. This mineralization event is interpreted to have occurred in shallow water, possibly in a back-arc environment. A lack of confining pressure from the water column allowed widespread mineralization to accumulate within the dacite volcaniclastics rather than precipitate out into cohesive, massive sulphide lenses adjacent to the volcanic vents that are typically associated with VMS deposits elsewhere.

The dacites were then capped by later andesite volcaniclastics that were also likely deposited in a shallow water environment.

A period of uplift associated with the subduction of the North American Plate is interpreted to have produced extensive faulting throughout the Tireo Formation. It is interpreted that some of these faults transect the original VMS chimneys. The faulting produced extensive brecciation, establishing conduits for subsequent hydrothermal mineralization events.

A second period of volcanism, associated with the calc-akaline intrusives intruded throughout the Tireo Formation, is believed to have generated mineral rich hydrothermal fluid flow, interpreted to include elevated Au and Ag mineralization. This event may have introduced additional Au and Ag mineralization into the system, concentrated within the breccias formed by the fault zone development. It is not yet known if there is a single mineralizing event associated with the calc-akaline intrusives or if multiple events of faulting and hydrothermal fluid flow occurred over time.

The third and final event introduced late stage mafic to intermediate dikes (sills) throughout the mineralized system. At least some of these dikes are interpreted to have been emplaced along the reactivated fault zones and it is apparent that the dikes have remobilized gold and other metals and concentrated them along the intrusive contact. The highest-grade mineralization is located in contact with the mafic-intermediate dikes at all three targets tested at the CE deposit.

Unigold continues to evaluate and update its geological interpretation as new information is obtained.

8.3 MICON QP COMMENTS

Micon's QP held a number of discussions with Unigold personnel during site visits to the Candelones Project and in Toronto and notes that the exploration programs are planned and executed on the basis of the new deposit models discussed above. Micon's QP also observed the various stages of the drilling program during site visits to the Candelones Project and notes that they have been conducted according to industry best practices, as described by the CIM best practices guidelines, and taking into account the deposit model which has been proposed for the Project.

9.0 EXPLORATION

9.1 GENERAL EXPLORATION 2002 TO 2022

Unigold has advised Micon that its exploration at the Concessions has been performed following the Exploration Best Practices Guidelines established by the CIM. All work has been carried out under the supervision of a QP.

Exploration targets are generated through established field procedures, relying on the following data sources:

- Regional geology.
- Soil geochemistry.
- Geophysical surveys (airborne MAG and ground-based IP).
- Local geology (including surface rock sampling).
- Surface trenching.
- Diamond drilling.

All Project and Concession data are collected utilizing hand-held GPS survey units. Critical data (drill hole collars, etc.) are verified utilizing a differential GPS survey unit. The Zone 19, WGS-84 survey datum is the standard for the Concession. All sample locations (soil, rock chip, trench and drill hole collar locations) are surveyed. All drill holes are surveyed for down-hole deflection using a Reflex ™ EZ shot instrument.

There is soil geochemical coverage over the entire Concession. Sampling was generally conducted on 200 m line spacing with 50 m between samples. Tighter spacing (100 m line spacing, 50 m between samples) was conducted at the Candelones Main, Connector and Extension, Noisy, Corozo, Valle Simon, Cerro Berro, Montazo, Rancho Pedro, Juan de Bosques, Guano, Naranja, Pan de Azucar and Jimenez showings. The majority (75%) of the geochemical lines are oriented to the northeast-southwest, perpendicular to the dominant lithological-structural trend. The remainder (25%), largely confined to the southwest sector of the concession, are oriented in a north-south direction.

All samples were analyzed at accredited assay facilities for 36 elements. Figure 9.1 illustrates the soil sample coverage on the Neita concession.

Approximately 11,000 surface rock samples have been collected to date (Figure 9.2). Surface rock sampling is largely concentrated in the southern half of the Concession, where outcrop is more prevalent.

Airborne MAG/EM (Fugro DIGHEM) coverage is available for the entire Concession area (Figure 9.3).

Ground based induced polarity (IP) (chargeability and resistivity) coverage is limited to the southwestern sector of the Concession and essentially covers the Candelones-Montazo-Guano trend. The IP survey has identified multiple prospective targets requiring further field work to follow up and was instrumental in the discovery of significant mineralization at the Candelones Extension (Figure 9.4).

Figure 9.1
Neita Concession, Geochemical Soil Sampling Map

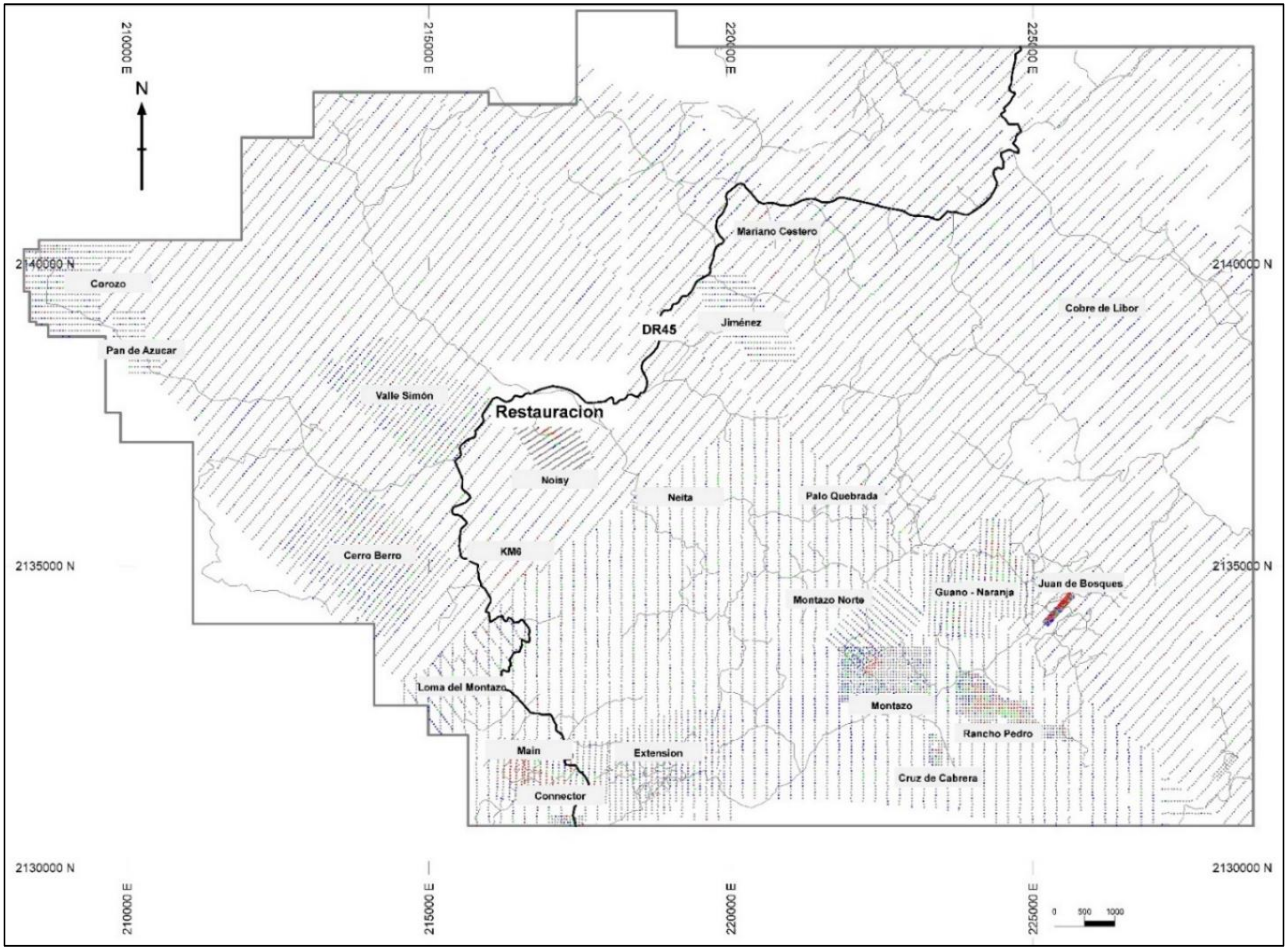


Figure provided by Unigold Inc. and dated November, 2013.

Figure 9.2
Neita Concession Map Showing Surface Rock Geochemistry Sampling

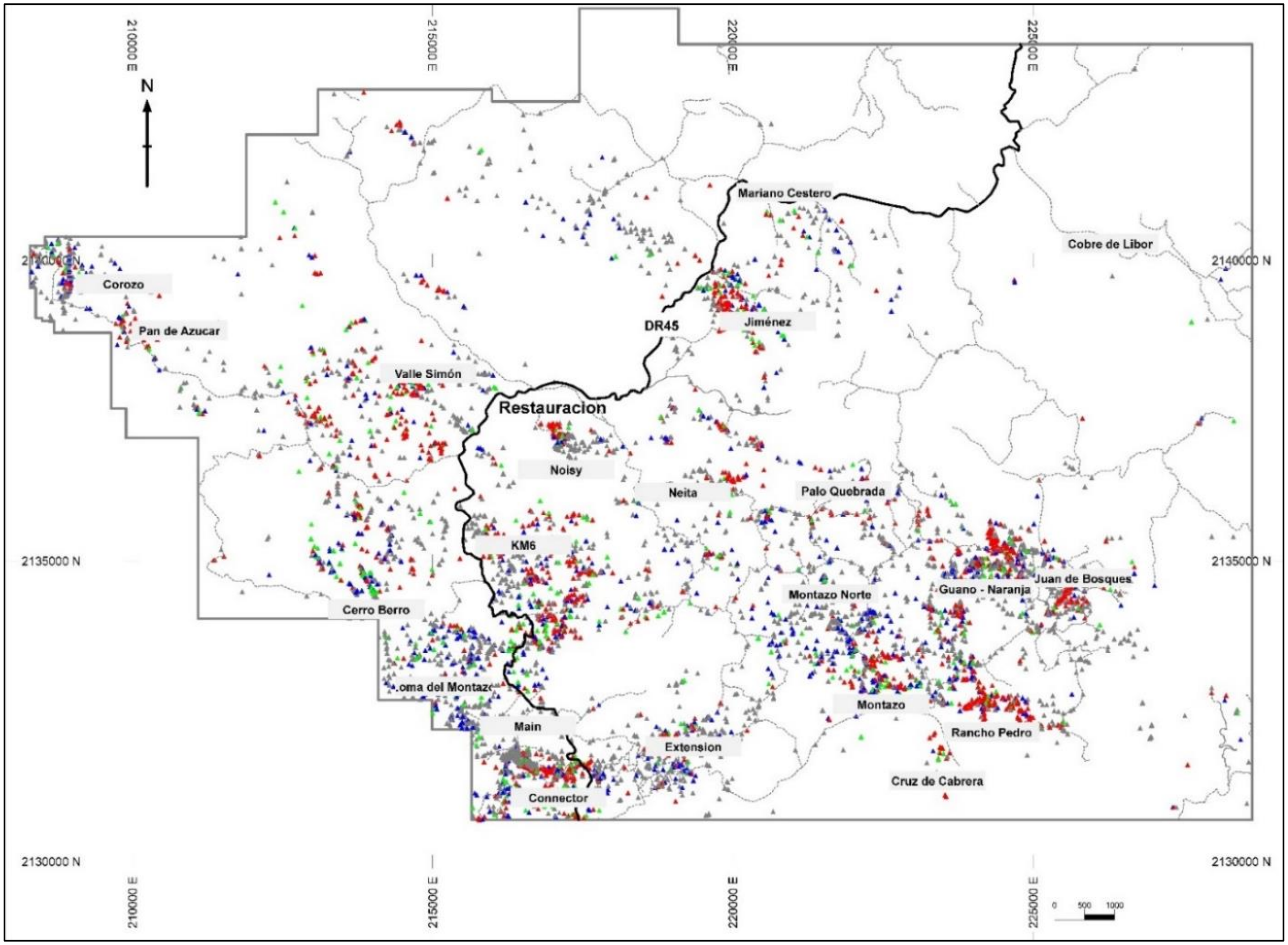


Figure provided by Unigold Inc. and dated November, 2013.

Figure 9.3
Neita Concession Map Showing the Airborne MAG Coverage

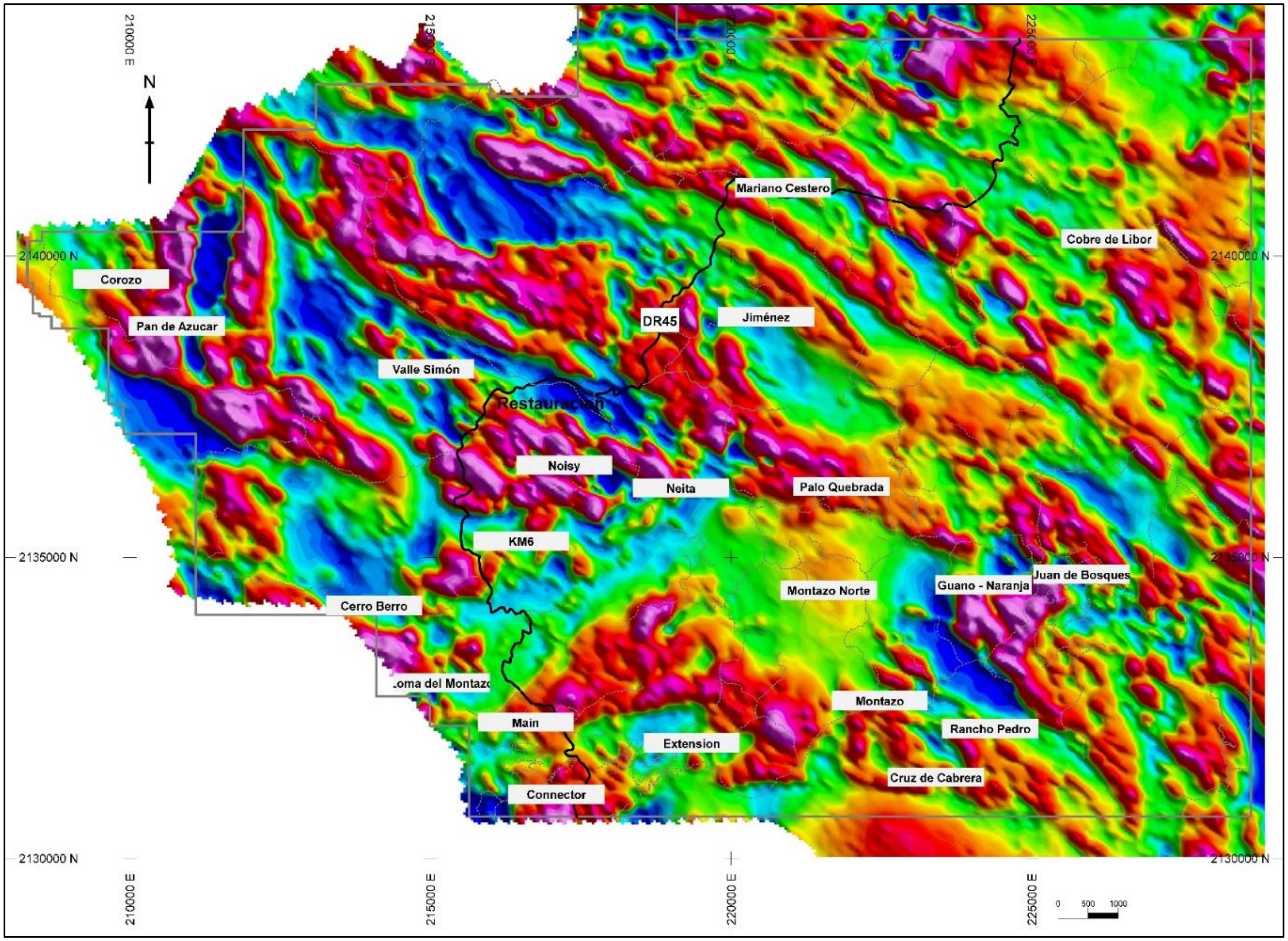


Figure provided by Unigold Inc. and dated November, 2013.

Figure 9.4
Neita Concession Map Showing the IP Chargeability Survey Coverage

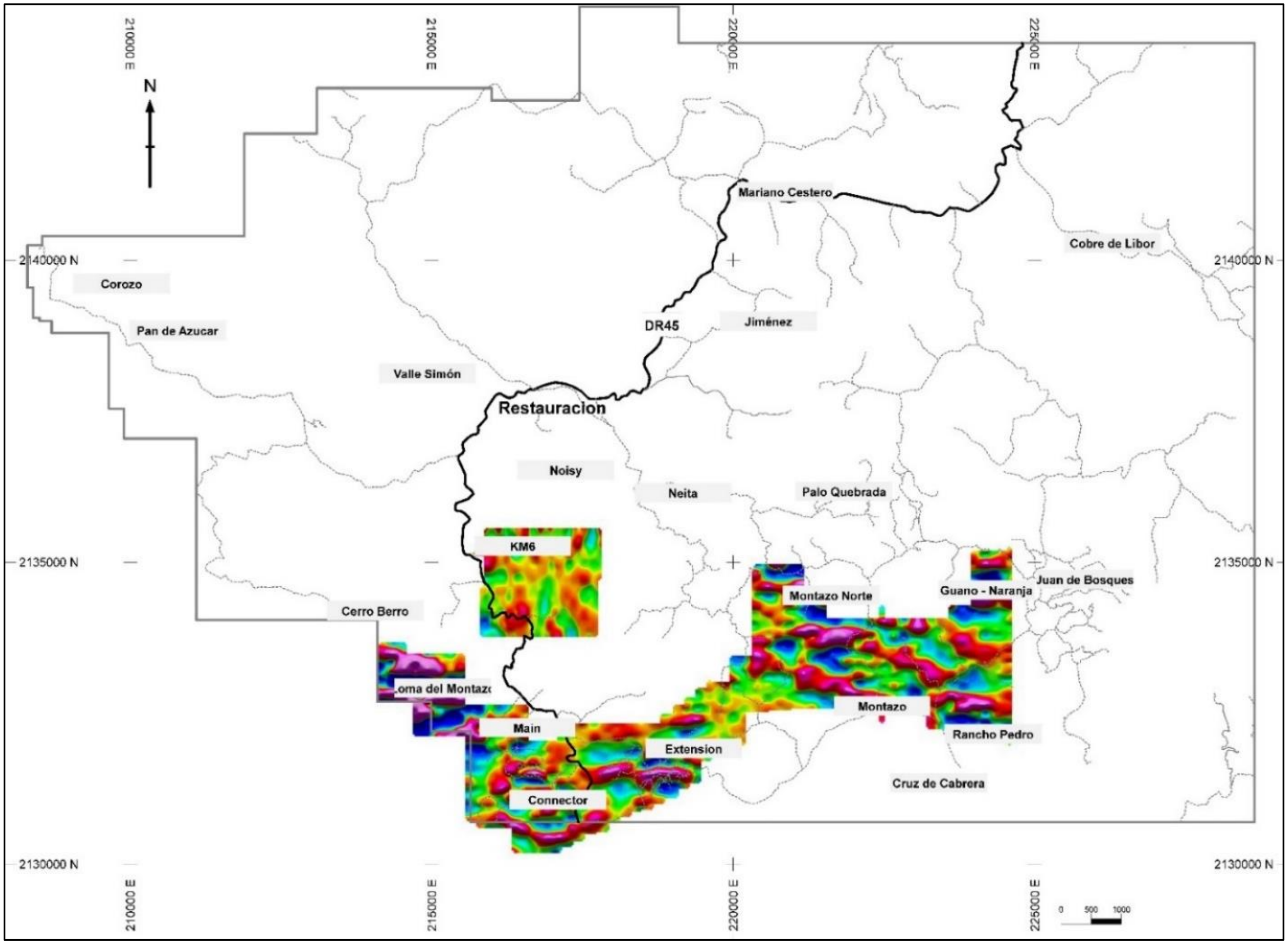


Figure provided by Unigold Inc. and dated November, 2013.

Surface geological mapping, with associated rock sampling, is used as the primary means of following up targets generated by soil geochemistry and/or geophysics. Once a target is isolated, field mapping and surface sampling are used as the primary means of locating surface trenches, to ensure the correct orientation of each trench. Trench sample results are used to position future drill holes if results are positive.

Trenches are dug using a mechanized excavator to a maximum depth of one metre. The trenches are then cleaned by hand using shovels, before being mapped and sampled. This is done to avoid contamination. Samples are collected along one the wall of the trench at 6 cm from the bottom of the trench, using hand picks. Samples are bagged and tagged on site under the supervision of a qualified geologist. Figure 9.5 is a view of one of the trenches on the Candelones Main deposit.

Unigold has completed 31,559 m of surface trenching at the concessions and collected 31,559 samples. Trenching is largely concentrated in and near the Candelones deposits but additional trenches have been completed at Corozo, KM6, Noisy, Rancho Pedro, Montazo, Guano, Naranja and Juan de Bosques showings. As with the soil samples, the majority of the trench samples have been analyzed for 36 elements.

The final step in the exploration process is diamond drilling if the results of the field processes are considered to be positive.

Figure 9.5
A View of One of the Trenches on the Candelones Main Deposit

9.1.1 Exploration 2016 to June 30, 2022

Drilling in 2016 focused on expanding the three high grade target areas identified within the Candelones Extension footprint. Target A, a pyrite dominated, Au-Cu rich massive sulphide lens was traced for over 300 m along an easterly plunge axis. Target B, an interpreted, sub-vertical feeder system was traced over 200 m down dip. Target C, a second interpreted sub-vertical target, was traced down dip and along strike. High grade mineralization was identified at Target C to the south of the andesite-dacite contact area drilled prior to 2013. Systematic, step out drilling successfully expanded all three targets, primarily at depth. Approximately 85% of the holes completed intersected what Unigold considers to be significant mineralization, returning grades greater than 1.5 g/t over several tens of metres, including metre scale intervals grading in excess of 5.0 g/t on average.

In Q4, 2016, Unigold submitted an application seeking to renew both the exploration and the environmental permits for the Neita Concession. All exploration activity was halted during the permit renewal process.

Exploration resumed in Q4, 2018 with all necessary permits in hand. A test pit program evaluating the at surface oxide resource at the Candelones Main and Connector deposits was initiated to twin select drill holes and probe the physical limits of the oxide mineralization.

Diamond drilling resumed in Q4, 2019 with a 20,000 m drill program focused on infill drilling at Targets A, B and C to provide sample material for metallurgical testing and to increase the geological confidence of future mineral resource estimates. Unigold also completed shallow diamond drill holes at the Candelones Main and Connector deposits, testing the at surface oxide mineralization. As at the Candelones Extension, the primary purpose of the drilling was to provide material for metallurgical testing and to increase the geological confidence of the at surface oxide resource potential. The data collected for the oxide resource was to be used to evaluate potential of the oxide mineralization as a small-scale surface mining opportunity. Exploration was suspended in March, 2020, as countries around the world-initiated efforts to reduce the spread of COVID 19.

Active exploration resumed in October, 2020. Drilling from October through December was monitored remotely. Drilling in 2020 largely focused on infill drilling at the three primary high-grade targets. Exploration drilling testing the three targets at depth and initial step out drilling along strike commenced in mid-November targeting the gap between the Candelones Main and Extension deposits.

From January 1, 2021 through June 30, 2022, geological supervision of the exploration drilling at site was contracted to Longford Exploration Services Ltd. (Longford) a Canadian based exploration services provider. Longford’s field personnel were supervised by Unigold’s Chief Operating Officer, W. Hanson P.Geo., remotely.

Exploration drilling targeted the high-grade sulphide mineralization identified at Candelones Extension.

On completion of the May, 2021, Preliminary Economic Assessment of the Candelones Oxide Project, diamond drill holes targeting the inferred mineral resource were commissioned with the objective of converting as much inferred mineralization as possible to the measured and indicated classification in advance of future engineering studies and economic analyses. An additional 51 holes (1,475 m) were completed targeting the inferred mineralization at the Candelones Main and Connector deposits from January 2021 through June 2022.

9.2 SAMPLING METHODOLOGY

There are five main types of samples within the current database:

- Soil samples.
- Rock samples.
- Trench samples.
- Diamond drill samples.
- Test pit samples.

No soil samples or rock samples were used in completing the resource estimate. The primary purpose of these samples is as a guide to exploration and target identification.

Trenches are completed under the supervision of a QP. Trenches are continuously sampled by means of chip sampling, along sample intervals that vary in length according to the lithological boundaries between geological rock units, for the most part.

Test pits to a maximum depth of 5.0 m from surface were completed to evaluate gold grade and physical characteristics of the oxide mineralization at the Candelones Main and Connector deposits. Pits measured approximately 2.4 m x 2.8 m. Pits were excavated utilizing a CAT325 excavator to a maximum depth of 5.0 m. All four pit walls were continuously chip-channel sampled along one-metre vertical intervals from the pit floor to the pit collar. Parallel cuts were made, approximately 10.0-15.0 cm apart and 2-4 cm deep. The material between the cut lines was chipped off and collected on a tarpaulin spread at the bottom of the pit. Once the sample was completed, the material in the tarpaulin was placed in a five-gallon pail and lifted to surface. Samples were riffle split in the field using a ¼ inch splitter. Oversize fragments were hand sorted, equally divided between the sample and reject fractions. One half of each split was bagged and tagged and sent for analysis as a primary sample. The reject portion was passed through the riffle splitter a second time to separate the + ¼ inch and – ¼ size fractions. The coarse fraction was bagged and tagged as a course reject sample and both fine fractions were combined, bagged and tagged as a fine reject sample. All three samples were sent for analyses.

The test pits were located at the Candelones Main and Connector deposits. Six pits twinned historical drill holes to verify the grades out of concerns of the accuracy of select intervals due to excessive core loss. The results of the test pits confirmed the results from the drill holes, most of which reported core recoveries of less than 25%. In addition, there is no appreciable difference in grade between the coarse and fine size fractions from the ¼ inch riffle split.

Drill holes are oriented to intersect the interpreted targets at right angles to the dominant trend of the surficial geology in the target area. Drill hole dips are selected to intersect the target horizon at an angle as close as possible to the true width of the deposit as possible. The dominant direction of drilling at Candelones Main is southwest (225° azimuth.). The dominant direction of drilling at Candelones

Extension is northwest (330° azimuth.). Drilling at the Candelones Connector was oriented due north-south, utilizing a series of scissor holes to test what is, essentially, a flat lying tabular mineralized zone.

The initial drill holes at Candelones were sampled from collar to the end of hole on one metre sample intervals. More recent drilling limits sampling to the areas considered to be mineralized. Samples are collected continuously on one metre intervals, across the core length identified for sampling. Since 2016, sample intervals have been adjusted to reflect litho-structural contacts observed during core logging. The core is sampled in one-metre intervals within geological breaks identified by the core logging geologist. Despite this adjustment, the vast majority of samples are one-metre in length.

Sample selection is supervised by the QP. All samples are sawn utilizing a diamond saw, with one half of the core sent for analysis and the remaining core kept as part of the historic core library.

The core storage facility offers rack storage for approximately 50,000 m of core.

The core is cycled out of the storage racks and cross-stacked to provide rack space for the current drill campaign.

All the samples are analyzed for gold and the majority (80%), are analyzed for Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Mi, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr.

The above analyses are completed utilizing Emission Spectroscopy analysis. A separate analysis is performed for gold, using industry standard fire assay with an AA finish.

The majority of the samples collected have been analyzed at an accredited assaying facility independent of Unigold.

9.3 SAMPLING QUALITY

The use of Certified Reference Materials (CRMs) was not integrated into Unigold's exploration programs from 2002 through to late 2011. Largely, this affected the trenching and drilling at the Candelones Main deposit and the first 16 holes at the Candelones Extension.

Recognizing this as an area of concern, Unigold commissioned P&E Mining Consultants (P&E), Brampton, Ontario to assess the quality of the historical data collected without the benefit of industry standard Quality Assurance/Quality Control (QA/QC) protocols.

Ms. T. Armstrong, P.Geo., of P&E, reviewed the historical data and collected pulp reject and coarse reject samples for independent analysis. In a Memorandum titled; "Unigold Candelones and Lomita Pina Deposits, Dominican Republic, Quality Control Evaluation Report", Ms. Armstrong concluded that the historical results are accurate, based on P&E's verification assaying of a representative subset of the population from Candelones and Lomita Pina (Lomita Pina is now referred to as Candelones Extension). P&E's report also provided a higher level of confidence in the trench sampling, as well as the diamond drill core results. Subsequent to Ms. Armstrong's review, Unigold initiated industry standard QA/QC procedures. CRMs (blanks and standards), supplied by a certified laboratory, are regularly inserted into the sample stream at a maximum rate of one in ten (10%) or at a minimum rate of one in twenty (5%) of the core samples sent for analysis. Unigold utilizes multiple standards with varying gold, silver, copper and zinc limits. The CRM performance is monitored for all results received and standards or blanks returning results that are outside the expected performance metrics are investigated to determine the cause of the observed variance. In rare cases, sample batches corresponding to the standard or blank that reported results outside the acceptable precision limit, are re-assayed to verify the results. Micon's QP has previously reviewed the work conducted by both P&E's QP and the subsequent work by Unigold and agrees with the findings of P&E's QP and agrees that Unigold's subsequent QA/QC procedures follow industry best practice standards for exploration.

9.4 DATA SUMMARY

Unigold's database as of June 30, 2022, for the mineral concessions includes:

- 694 diamond drill holes (158,450 m).
- 31,559 m of surface trenching.
- 31 test pits.
- 32,704 geochemical soil sampling.
- 11,089 rock samples.
- 884 stream sediment samples.
- 196-line km of surface geophysics.
- 687 km^2 of airborne geophysics.
- Approximately 80% of the drilling (553 holes, 125,267 m) are located at the Candelones Project.

Physical exploration was at the Neita Concession was suspended on February 25, 2022, as Unigold submitted applications for the Neita Sur (exploitation) and Neita Norte (exploration). Concessions. Dominican Mining Regulations prohibit physical exploration activity during the application approval process.

On approval of the Neita Sur and Neita Norte Concessions, Unigold is may continue the engineering, design and construction of the Candelones Oxide Project subject to financing, market conditions and ultimately Board approval. Unigold may also complete additional exploration drill holes targeting the most recently identified high-grade sulphide system at Candelones Extension. Target E was identified in drill holes LP21-204 and LP21-206, the final exploration holes completed at Lomita Pina in 2021. LP21-204 intersected 16.0 m averaging 10.78 g/t Au, 68.9 g/t Ag, 0.24% Cu and 2.35% Zn. LP21-206, 50 m below LP21-204, intersected 5.0 m averaging 5.89 g/t Au, 2.2 g/t Ag, 0.29% Cu and 2.75% Zn.

Target E lies 300 m west and 400 m north of Target C. Historical drilling targeting the continuation of the Candelones Extension deposit was focused well to the south. Holes LP21-204 and 206 suggest that the Candelones Extension mineralization may have been fault offset to the north.

9.5 MICON QP COMMENTS

Micon's QP has discussed the exploration sampling programs with Unigold personnel during the various site visits. The surface soil sampling, stream sampling and general rock sampling are useful indicators of the location of mineral deposits but are not used for estimating resources, since there are a number of factors, such as sampling conditions, soil conditions, depth taken and others, that may affect the quality of the sample.

The trench sampling is used in resource estimation, if it is able to expose fresh rock for the purpose of mapping and sampling the lithological units along the exposure. In this case, some sampling bias can stem from how the sample is collected or the natural weathering conditions (oxidized/unoxidized) in the collection location. The sampling biases can be mitigated or lessened with proper sampling protocols, as is the case with Unigold. Micon's QP considers that the trench sampling is of sufficient quality to be used in the mineral resource estimate for the Candelones Project.

Micon's QP has reviewed Unigold's exploration programs and has visited several of the exploration sites, as well as discussing the exploration programs, procedures and practices with responsible personnel during the various visits to the Candelones Project. Micon's QP believes that the exploration programs are managed according to the Exploration Best Practice Guidelines established by the CIM in November, 2018.

Unigold also informed Micon's QP that all work has been carried out under the supervision of a Qualified Person and this was observed to be the case when conducting the site visits visit.

10.0 DRILLING

10.1 DRILLING PROCEDURES

As of June 30, 2022, 694 holes totalling 158,450 metres have been drilled within the limits of the Concessions. These data exclude 27 holes completed by Mitsubishi prior to 1990. Drilling at the Candelones Project as of June 30, 2022, totalled 553 holes (125,267 m).

All diamond drill holes have been completed utilizing modern, hydraulic, wireline drills. Both HQ diameter and NQ diameter core is produced during a single drill hole. The hole is usually collared as an HQ hole and, depending on ground conditions, the core is then reduced to an NQ diameter at some point. Unigold owns and operates four diamond drills, using locally trained Dominican workers and management for its drilling programs. Figure 10.1 shows one of Unigold's drills in the process of completing a hole during the Micon site visit.

Figure 10.1
Unigold's Drill Completing a Hole during the 2013 Micon Site Visit

Drill locations are selected by the QP managing the Project. Platform locations are located in the field, utilizing hand-held GPS receivers. After the platforms are constructed, the collar location for the drill hole is established and the drill is moved onto the platform and aligned by a QP.

Down-hole deviation is measured utilizing a Reflex ™ EZ shot instrument. The initial survey is completed at a depth of 15 m and the results are reviewed by the QP to determine if the drill hole will continue or if a realignment is needed to intersect the planned target.

Preliminary drill hole location and alignment data are supplied to the database manager, who updates the drill database. Working sections of the current hole are produced and the hole progress is charted by sketching the pertinent geological data from the core onto the section, to monitor hole progress.

The QP determines the hole shut down depth, based on observations of the core and the working sections. Once the hole is terminated, the drill is moved off the platform, a concrete monument is constructed for the hole and the hole number, azimuth, dip and total depth are inscribed on the monument. Figure 10.2 is a view of one of the concrete monuments for the drill holes.

Figure 10.2
Concrete Monument for a Drill Hole

Photograph taken during the 2013 Micon site visit.

The monuments are surveyed using differential GPS survey instruments at a later date and the more accurate survey data are supplied to the database manager, who updates the final collar location in the database.

The drill pads are reclaimed and reseeded at the beginning of the rainy season (April through June).

Drilling was executed to industry standards in a safe, secure and environmentally responsible manner, and the sites were as well cleaned and reclaimed as possible.

10.2 Drilling Locations

Figure 10.3 is a location map showing the collar locations of the holes completed as at June 30, 2022 at the Candelones Project.

Figure 10.3
Drill Hole Location Plan for the Candelones Project

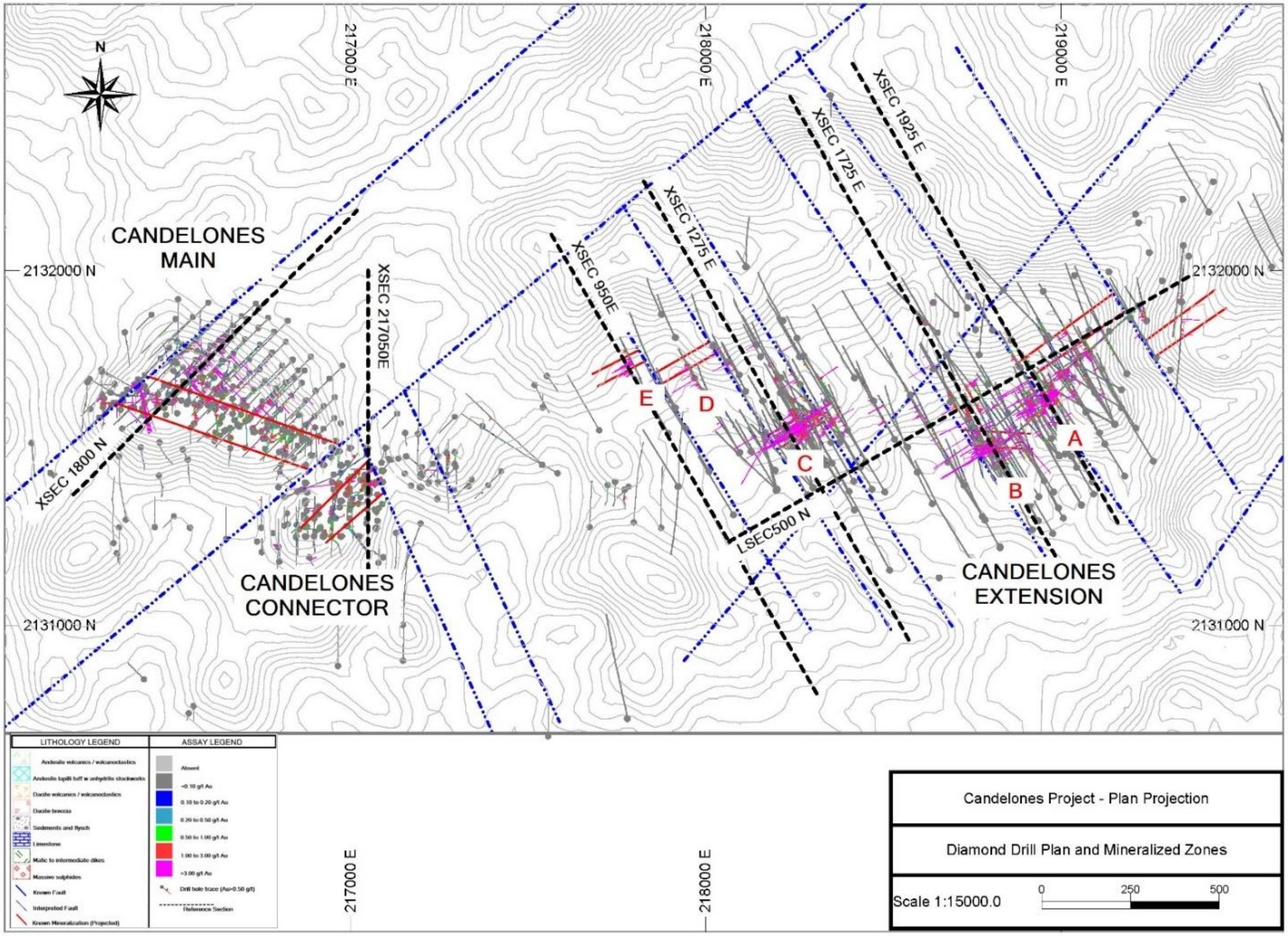


Figure supplied by Unigold, September, 2022.

Table 10.1 summarizes the drilling for the Candelones Project. Micon's QP advises that the 27 drill holes completed by Mitsubishi were not included in the database used to estimate the mineral resources. However, the drill data do include 22 holes (2,718 m) drilled by Rosario Dominicana at the Candelones Main deposit in the late 1990's.

Table 10.1
Summary of Neita Concession and Candelones Project Diamond Drilling by Year

Year	Company	Target	Number Holes	Metres
1990	Rosario Dominicana	Candelones Main	8	645.3
1998	Rosario Dominicana	Candelones Main	14	2,072.8
		Other	8	934.6
		Subtotal	22	3,007
2003	Unigold	Candelones Main	2	122.5
2004	Unigold	Candelones Main	18	2,253.4
		Other	7	1,108.7
		Subtotal	25	3,362
2007	Unigold	Candelones Main	50	8,453.2
		Other	6	820.5
		Subtotal	56	9,274
2008	Unigold	Candelones Main	37	8,599.0
		Other	12	1,448.0
		Subtotal	49	10,047
2009	Unigold	Candelones Main	5	636.0
		Candelones Extension	3	465.0
		Other	4	443.0
		Subtotal	12	1,544
2010	Unigold	Candelones Main	3	923.7
		Candelones Extension	12	3,196.7
		Other	26	6,384.5
		Subtotal	41	10,505
2011	Unigold	Candelones Main	6	843.6
		Candelones Extension	5	1,738.5
		Other	8	1,583.5
		Subtotal	19	4,166
2012	Unigold	Candelones Main	-	-
		Candelones Extension	47	20,887.9
		Candelones Connector	7	618.6
		Other	1	200.0
		Subtotal	55	21,707
2013	Unigold	Candelones Main	27	4,580.2

Year	Company	Target	Number Holes	Metres
		Candelones Extension	35	11,896.8
		Candelones Connector	39	6,928.3
		Other	33	9,449.1
		Subtotal	134	32,854
2014	Unigold	Candelones Main	-	-
		Candelones Extension	-	-
		Candelones Connector	-	-
		Other	23	5,996.4
		Subtotal	23	5,996
2015	Unigold	Candelones Main	-	-
		Candelones Extension	4	1,415.3
		Candelones Connector	-	-
		Other	-	-
		Subtotal	4	1,415
2016	Unigold	Candelones Main	-	-
		Candelones Extension	34	12,304.3
		Candelones Connector	8	626.0
		Other	-	-
		Subtotal	42	12,930
2019	Unigold	Candelones Main	13	389.0
		Candelones Extension	13	6,631.0
		Candelones Connector	10	276.5
		Other	-	-
		Subtotal	36	7,297
2020	Unigold	Candelones Main	7	255.0
		Candelones Extension	36	14,053.0
		Candelones Connector	9	1,543.0
		Other	-	-
		Subtotal	52	15,851
2021	Unigold	Candelones Main	24	746.0
		Candelones Extension	36	9,609.0
		Candelones Connector	17	1,549.0
		Other	5	1,205.0
		Subtotal	82	13,109
2022	Unigold	Candelones Main	8	169.0
		Candelones Extension	-	-
		Candelones Connector	16	839.0
		Other	8	3,610.0
		Subtotal	32	4,618
		Candelones Main	**222**	**30,689**

Year	Company	Target	Number Holes	Metres
Project to Date		Candelones Extension	225	82,198
		Candelones Connector	106	12,380
		Total	553	125,267
		Other	141	33,183
		Total	694	158,450

Table supplied by Unigold, September, 2022.

10.3 Summary of Significant Drilling Results

Table 10.2 is a partial summary of the drill hole location and alignment data for the holes with significant intersections of mineralization for the Candelones Project, by deposit/target.

Table 10.3 through Table 10.7 present the significant results by target and deposit for the Candelones Extension, Connector and Main deposits. The Tables correspond to the accompanying Figures (Figure 10.5 through Figure 10.9).

True Width is estimated based on the hole orientation relative to the currently interpreted strike and dip of the mineralization. Drill hole alignment is largely perpendicular to the andesite-dacite contact interpreted to control the stratabound, VMS type mineralization and the true width approximates the interval length of the reported mineralized interval.

High grade mineralization is currently interpreted to occur as quartz-sulphide, semi-massive sulphides and massive sulphides that occur along the margins of late, mafic to intermediate intrusive dikes or sills. The late intrusives are interpreted to be deposited within major, strike-slip faults, particularly along intersections and the resultant brecciation allowed hydrothermal fluid flow producing a series of anastomosing veins within the dacite volcanoclastic sequence. These high-grade vein systems are erratic but appear to be preferentially oriented in a sub-vertical plane. True width is estimated based on the currently interpreted strike, dip and plunge of the vein systems relative to the drill hole orientation.

Figure 10.4 is a Simplified Longitudinal Section (A-A') of the Candelones Extension deposit.

Figure 10.5 through Figure 10.9 are simplified cross-sections of Targets A, B and C (Candelones Extension), Candelones Connector and Candelones Main.

The Figures present a simplified interpretation of the current geological model which continues to evolve as more data are obtained at Targets A, B and C. Unigold advises that the current geological model benefitted from re-logging historical drill core proximal to the identified high-grade targets. The Company notes that to date, the same level of analyses has not been extended to either the Candelones Main or Candelones Connector deposits where historical drilling also identified isolated, higher-grade intervals within the broader, low tenor, mineralized envelope.

Table 10.2
Listing of the Drill Holes with Significant Results for the Candelones Project by Deposit and Target

Deposit Target	Reference Figure	Hole Number	Coordinates (UTM)			Drill Hole Parameters		
			Easting	Northing	Elevation	Depth (m)	Azimuth (°)	Dip (°)
Candelones Extension Target A	Figure 10.5	LP92	218861	2131802	579	80	330	-50
		LPMET01	218861	2131802	579	518	150	-52
		LP15-95	219042	2131501	555	339	330	-55
		LP19-132M	219047	2131502	554	374	328	-56
		LP20-163	219089	2131409	525	509	328	-50
		LP20-161	219089	2131409	525	449	328	-55
		LP27	219093	2131369	531	461	330	-60
Candelones Extension Target B	Figure 10.6	LP01	218620	2131852	563	51	315	-45
		LP22A	218815	2131445	535	451	330	-50
		LP20-144	218682	2131761	568	599	162	-55
		LP16-121	218865	2131408	538	437	330	-50
		LP16-99	218884	2131395	536	323	335	-55
		LP16-97	218844	2131395	540	384	340	-60
		LP16-120	218861	2131398	538.71	455	323	-65
		LP16-128	218807	2131498	530	464	0	-90
		LP16-100	218884	2131395	536	383	333	-70
		LP19-134M	218916	2131336	528	445	328	-56
		LP29	218921	2131269	515	483	330	-50
		LP19-135	218943	2131292	527	596	328	-56
		LP19-136	218943	2131292	527	453	328	-56
Candelones Extension Target C	Figure 10.7	LP20-162	218209	2131661	564	335	148	-50
		LP52	218307	2131495	532	426	330	-50
		LP20-148	218314	2131478	530	266	328	-50
		LP20-150A	218314	2131478	530	395	328	-58
		LP20-150	218314	2131478	530	278	328	-60
		LP20-164	218355	2131452	525	256	308	-50
		LP16-112	218338	2131454	526	377	310	-60
		LP21-194	218304	2131387	508	365	344	-50
Candelones Extension Target E	Figure 10.8	LP21-204	217897	2131539	524	521	330	-50
		LP21-206	217897	2131539	524	486	330	-60
Candelones Main	Figure 10.9	SC28	216549	2131684	595	120	225	-60
		CFI08A	216489	2131650	605	281	225	-70
		SC20	216507	2131662	603	159	222	-60
		CFI03	216531	2131686	596	155	225	-60
		CFI04	216568	2131721	583	150	225	-60
		SC39	216585	2131733	578	150	225	-60
		CFI05	216603	2131756	569	269	225	-60
		DC105	216633	2131803	557	258	225	-60
		CFI07	216674	2131826	546	276	225	-60
		CFI06	216643	2131798	557	241	225	-60
		DC110	216673	2131845	542	287	225	-60
		CFI02	216710	2131862	535	302	225	-60
		CFI01	216745	2131893	527	356	225	-60
Candelones Connector	Figure 10.10	DCZ16-53	217047	2131481	533	77	0	-90
		SC32	217059	2131440	532	112	270	-60

Deposit Target	Reference Figure	Hole Number	Coordinates (UTM)			Drill Hole Parameters		
			Easting	Northing	Elevation	Depth (m)	Azimuth (°)	Dip (°)
		DCZ25	217050	2131375	534	155	0	-60
		SC35	217045	2131422	536	100	225	-60
		DCZ09	217050	2131400	535	219	180	-60
		SC22	217056	2131381	532	102	260	-60
		SC33	217078	2131366	525	131	270	-60
		DCZ06	217050	2131325	534	104	0	-60
		SC34	217081	2131329	522	71	270	-60
		DCZ07	217050	2131350	534	134	180	-60
		DCZ19-57	217049	2131299	534	29	0	-90
		DCZ05	217050	2131300	533	113	180	-60
		DCZ16-47	216993	2131455	541	77	0	-90

Table supplied by Unigold, September, 2022.

Table 10.3
Listing of Significant Results for Section 1925 E, Target A Candelones Extension Deposit

Deposit / Target	Reference Figure	Hole Number	From (m)	To (m)	Interval (m)	True Width (m)	Gold (g/t)	Silver (g/t)	Copper (%)	Zinc (%)
Candelones Extension Target A	Figure 10.5 Section 1925 E	**LP92**	29.5	60.0	30.5	28.2	0.48	NA	NA	NA
		incl.	30.5	33.5	3.0	2.7	1.57	NA	NA	NA
		LPMET01	60.5	484.0	423.6	116.5	1.07	1.2	0.1	0.2
		incl. MS	314.0	336.0	22.0	20.4	6.94	6.6	0.6	0.0
		LP15-95	236.1	326.9	90.8	84.0	3.52	2.3	0.3	0.0
		incl.MS	252.6	287.5	34.9	32.3	6.19	4.1	0.6	0.0
		LP19-132M	236.0	342.1	106.1	98.1	3.20	2.6	0.3	0.1
		incl. MS	250.0	262.0	12.0	11.1	6.95	8.4	0.9	0.0
		and MS	287.3	314.0	26.7	24.7	5.29	4.6	0.5	0.0
		LP20-163	268.0	427.0	159.0	147.1	1.02	1.3	0.1	0.1
		incl. MS	386.0	396.0	10.0	9.3	4.31	2.7	0.3	0.0
		LP20-161	324.0	359.0	35.0	32.4	0.80	1.3	0.1	0.2
		incl. MS	356.0	359.0	3.0	2.8	2.26	9.3	0.1	0.2
		LP27	316.0	380.0	64.0	59.2	0.70	0.4	0.1	0.3
		incl. MS	330.6	342.0	11.4	10.5	2.41	1.2	0.1	1.1

Table supplied by Unigold, September, 2022.
Notes: incl. = includes.
MS = massive sulphides.

Table 10.4
Listing of Significant Results for Section 1725 E, Target B Candelones Extension Deposit

Deposit / Target	Reference Figure	Hole Number	From (m)	To (m)	Interval (m)	True Width (m)	Gold (g/t)	Silver (g/t)	Copper (%)	Zinc (%)
Candelones Extension Target B	Figure 10.6 Section 1725 E	**LP01**	10.6	17.0	6.4	5.8	3.0	6.8	0.0	0.0
		LP22A	227.0	317.0	90.0	81.0	1.5	1.4	0.0	0.4
		incl.	227.0	233.0	6.0	5.4	7.4	NA	NA	NA
		LP20-144	238.5	334.0	95.5	31.5	1.2	2.1	0.1	0.3
		incl.	268.5	292.0	23.5	7.8	1.5	1.2	0.1	2.5
		LP16-121	269.5	302.0	32.5	21.5	0.9	2.3	0.1	0.7
		LP16-99	231.5	321.0	89.5	59.1	1.1	4.0	0.1	0.4

		incl.	276.6	283.0	6.4	4.2	12.1	0.2	1.7	2.5
		LP16-97	247.0	340.8	93.8	61.9	0.7	1.0	0.0	0.1
		incl.	249.0	264.0	15.0	9.9	1.0	0.0	0.4	2.5
		LP16-120	245.4	369.7	124.3	82.0	0.9	1.4	0.2	0.3
		incl.	256.0	259.7	3.7	2.4	3.3	1.5	0.0	0.3
		and	363.0	369.7	6.7	4.4	3.3	6.5	1.9	0.2
		LP16-128	183.8	395.1	211.3	139.5	1.0	2.4	0.1	0.5
		incl.	262.8	274.0	11.2	7.4	5.1	7.4	0.3	2.5
		and	333.8	335.5	1.6	1.1	7.0	5.0	0.9	0.5
		LP16-100	240.9	366.0	125.1	82.6	1.7	2.7	0.2	0.6
		incl.	291.1	300.6	9.5	6.3	2.4	18.8	0.2	4.3
		and	307.5	319.5	12.0	7.9	7.5	5.1	1.4	1.3
		LP19-134M	286.0	392.0	106.0	70.0	2.0	2.8	0.2	0.3
		incl.	296.0	303.0	7.0	4.6	1.6	1.4	0.1	0.4
		and	367.0	378.0	11.0	7.3	6.3	6.5	0.9	0.5
		LP29	316.0	422.0	106.0	70.0	1.5	1.7	0.2	0.2
		incl.	328.0	334.0	6.0	4.0	2.6	0.7	0.1	0.6
		and	396.0	412.0	16.0	10.6	5.2	6.3	0.9	0.4
		LP19-135	288.5	512.0	223.5	147.5	1.2	1.4	0.1	0.2
		incl.	374.9	423.0	48.1	31.7	4.2	4.7	0.3	0.2
		and	433.4	435.0	1.6	1.1	3.3	2.6	1.0	0.0
		LP19-136	326.5	452.6	126.1	83.2	0.1	0.4	0.0	0.2
		incl.	346.5	351.5	5.0	3.3	0.2	1.3	0.1	1.7

Table supplied by Unigold, September, 2022.
Notes: incl. = includes.

Table 10.5
Listing of Significant Results for Section D-D'1275 E, Target C Candelones Extension Deposit

Deposit / Target	Reference Figure	Hole Number	From (m)	To (m)	Interval (m)	True Width (m)	Gold (g/t)	Silver (g/t)	Copper (%)	Zinc (%)
Candelones Extension Target C	Figure 10.7 Section 1275E	**LP20-162**	144.0	228.0	84.0	81.9	3.9	9.9	0.1	0.9
		incl.	146.0	160.0	14.0	13.7	14.9	51.6	0.3	3.6
		and	183.0	189.0	6.0	5.9	10.3	5.0	0.3	1.7
		LP52	115.2	199.0	83.8	79.6	3.1	8.7	0.1	1.4
		incl.	115.2	131.0	15.8	15.0	11.4	38.3	0.4	5.1
		and	175.0	183.0	8.0	7.6	3.7	1.5	0.0	1.2
		LP20-148	103.0	177.7	74.7	71.0	3.4	3.7	0.1	0.6
		incl.	126.0	150.0	24.0	22.8	8.6	5.8	0.2	1.4
		and	169.1	173.8	4.7	4.5	4.0	1.3	0.0	0.2
		LP20-150A	No significant values - Drilled entirely within a mafic dike							
		LP20-150	134.9	278.0	143.1	135.9	2.0	6.3	0.1	0.6
		incl.	141.5	144.0	2.5	2.4	5.2	147.9	0.1	1.4
		and	210.0	227.0	17.0	16.2	9.4	11.8	0.2	2.4
		LP20-164	166.0	252.0	86.0	81.7	1.2	3.6	0.1	0.7
		incl.	168.0	185.0	17.0	16.2	2.8	12.0	0.2	1.8
		LP16-112	291.1	328.0	36.9	36.0	0.1	0.6	0.0	0.1
		LP21-194	268.0	329.0	61.0	58.0	1.5	2.0	0.1	0.2
		incl.	271.6	286.0	14.4	13.7	4.8	5.7	0.2	0.6

Table supplied by Unigold, September, 2022.
Notes: incl. = includes.

Table 10.6
Listing of Significant Results for Section 950 E, Candelones Connector Extension Deposit

Deposit / Target	Reference Figure	Hole Number	From (m)	To (m)	Interval (m)	True Width (m)	Gold (g/t)	Silver (g/t)	Copper (%)	Zinc (%)
Candelones Extension Target E	**Figure 10.8 Section 950E**	**LP21-204**	330.0	427.0	97.0	67.9	2.5	12.1	0.1	0.6
		incl.	336.0	352.0	16.0	11.2	10.8	68.9	0.2	2.4
		LP21-206	395.0	425.0	30.0	21.0	2.3	2.3	0.4	0.8
		incl.	418.0	423.0	5.0	3.5	5.9	2.2	0.3	2.8

Table supplied by Unigold, September, 2022.
Notes: incl. = includes.

Table 10.7
Listing of Significant Results for Section 1800 N, Candelones Main Deposit

Deposit / Target	Reference Figure	Hole Number	From (m)	To (m)	Interval (m)	True Width (m)	Gold (g/t)	Silver (g/t)	Copper (%)	Zinc (%)
Candelones Main	**Figure 10.9 XS 1800 N**	**SC28**	19.0	44.0	25.0	22.5	0.5	3.6	1.1	0.1
		CFI08A	3.0	32.0	29.0	26.1	0.6	2.8	0.0	0.0
		SC20	0.0	56.0	56.0	50.4	0.3	0.2	0.0	0.0
		CFI03	2.0	76.0	74.0	66.6	1.0	7.6	0.1	0.1
		incl.	12.5	38.0	25.5	23.0	2.5	20.3	0.3	0.2
		CFI04	2.0	111.0	109.0	98.1	0.4	0.9	0.1	0.1
		incl.	61.0	64.0	3.0	2.7	4.9	5.2	1.8	0.5
		SC39	13.0	133.0	120.0	108.0	0.5	0.3	0.0	0.1
		incl.	40.0	44.0	4.0	3.6	4.3	0.7	0.1	0.8
		CFI05	53.0	141.2	88.2	79.3	1.0	0.6	0.1	0.2
		incl.	88.9	94.0	5.1	4.6	3.8	1.3	0.2	1.1
		DC105	101.0	184.0	83.0	74.7	0.4	0.1	0.0	0.2
		incl.	120.0	123.0	3.0	2.7	1.5	0.6	0.1	0.5
		CFI07	80.0	208.0	128.0	115.2	0.4	0.4	0.0	0.1
		incl.	195.2	202.4	7.2	6.5	2.2	1.7	0.3	0.1
		CFI06	103.1	238.5	135.4	121.8	0.4	0.1	0.0	0.1
		incl.	103.1	112.0	8.9	8.0	1.1	0.4	0.1	0.6
		DC110	141.0	247.0	106.0	95.4	0.6	0.4	0.0	0.2
		incl.	208.0	211.0	3.0	2.7	2.8	0.9	0.3	0.8
		CFI02	164.0	266.0	102.0	91.8	0.4	0.3	0.0	0.1
		incl.	201.0	212.0	11.0	9.9	0.7	0.5	0.2	0.2
		CFI01	193.6	279.5	85.9	77.3	0.1	0.6	0.0	0.0

Table supplied by Unigold, September, 2022.
Notes: incl. = includes.

Table 10.8
Listing of Significant Results for Section 217050 E, Candelones Connector Deposit

Deposit / Target	Reference Figure	Hole Number	From (m)	To (m)	Interval (m)	True Width (m)	Gold (g/t)	Silver (g/t)	Copper (%)	Zinc (%)
Candelones Connector	**Figure 10.10 Section 217050 E**	**DCZ16-53**	No Significant Values							
		SC32	0.0	35.0	35.0	35.0	0.5	3.3	0.1	0.1
		incl. OX	0.0	20.0	20.0	20.0	0.4	5.0	0.1	0.0
		DCZ25	0.0	36.5	36.5	36.5	1.1	5.9	0.1	0.1
		incl. OX	0.0	26.0	26.0	26.0	1.3	7.7	0.1	0.0

Deposit / Target	Reference Figure	Hole Number	From (m)	To (m)	Interval (m)	True Width (m)	Gold (g/t)	Silver (g/t)	Copper (%)	Zinc (%)
		SC35	0.0	49.0	49.0	49.0	1.5	9.6	0.1	0.6
		incl. OX	0.0	25.5	25.5	25.5	1.5	16.6	0.0	0.0
		DCZ09	0.0	33.9	33.9	33.9	1.8	8.7	0.1	0.2
		incl. OX	0.0	25.0	25.0	25.0	2.1	10.9	0.0	0.1
		SC22	0.0	38.0	38.0	38.0	1.6	3.3	0.1	0.1
		incl. OX	0.0	24.0	24.0	24.0	2.3	4.9	0.1	0.1
		SC33	0.0	7.0	7.0	7.0	1.3	5.5	0.0	0.0
		incl. OX	0.0	7.0	7.0	7.0	1.3	5.5	0.0	0.0
		DCZ06	0.0	45.4	45.4	45.4	1.1	3.9	0.1	0.2
		incl. OX	0.0	26.0	26.0	26.0	1.3	4.0	0.0	0.1
		SC34	0.0	9.0	9.0	9.0	0.6	3.3	0.0	0.0
		incl. OX	0.0	9.0	9.0	9.0	0.6	3.3	0.0	0.0
		DCZ07	0.0	32.0	32.0	32.0	0.8	7.9	0.1	0.1
		incl. OX	0.0	26.0	26.0	26.0	0.9	9.6	0.2	0.1
		DCZ19-57	0.0	28.0	28.0	28.0	1.1	NA	NA	NA
		incl. OX	0.0	28.0	28.0	28.0	1.1	NA	NA	NA
		DCZ05	0.0	19.8	19.8	19.8	0.2	1.3	0.0	0.0
		incl. OX	0.0	19.8	19.8	19.8	0.0	1.1	0.1	0.0

Table supplied by Unigold, September, 2022.
Notes: incl. = includes.
OX = Oxide mineralization

Figure 10.4
Simplified Longitudinal Section 500 N- Candelones Extension Deposit

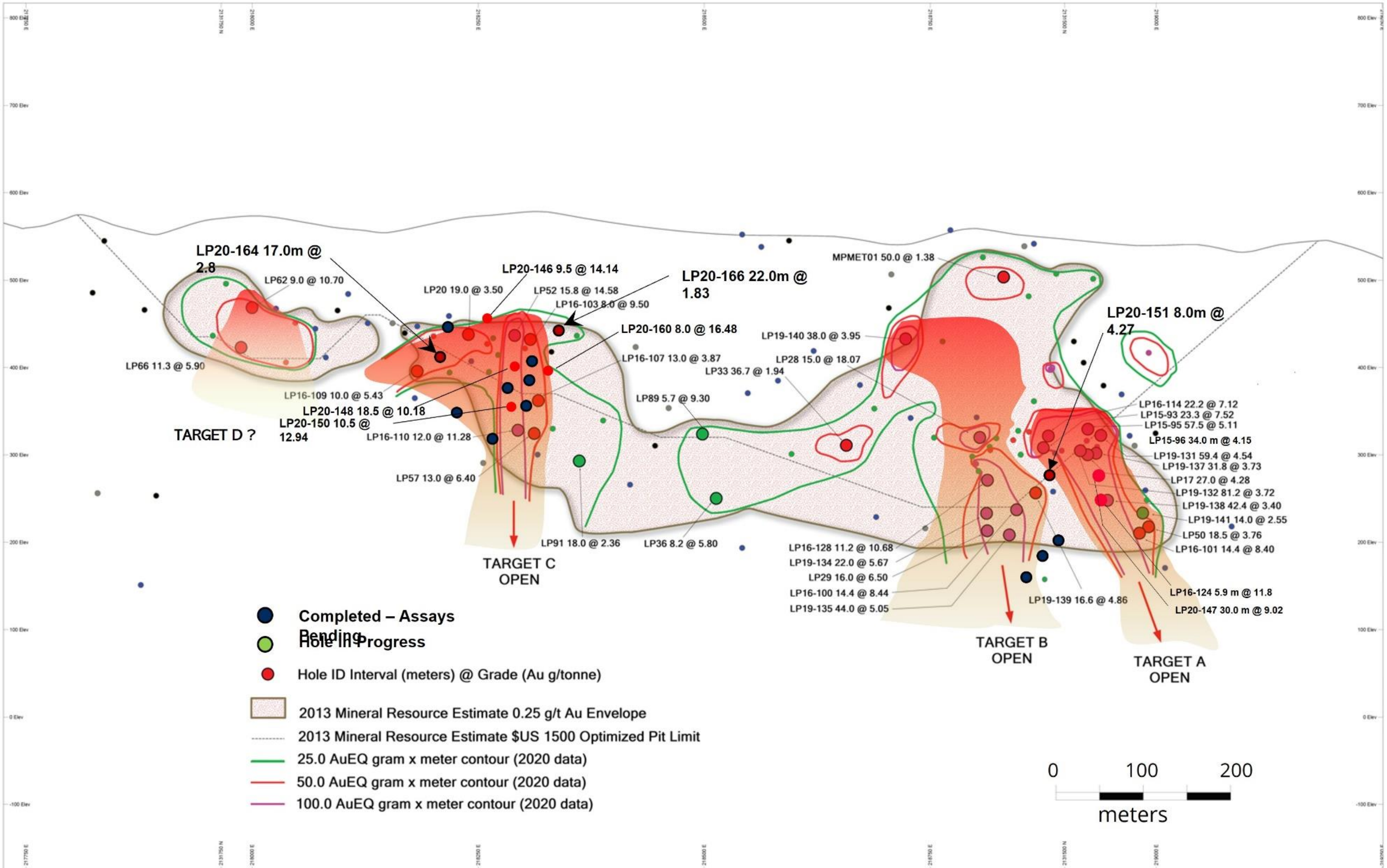


Figure 10.5
Simplified Cross-Section 1925 E Candelones Extension Deposit Target A

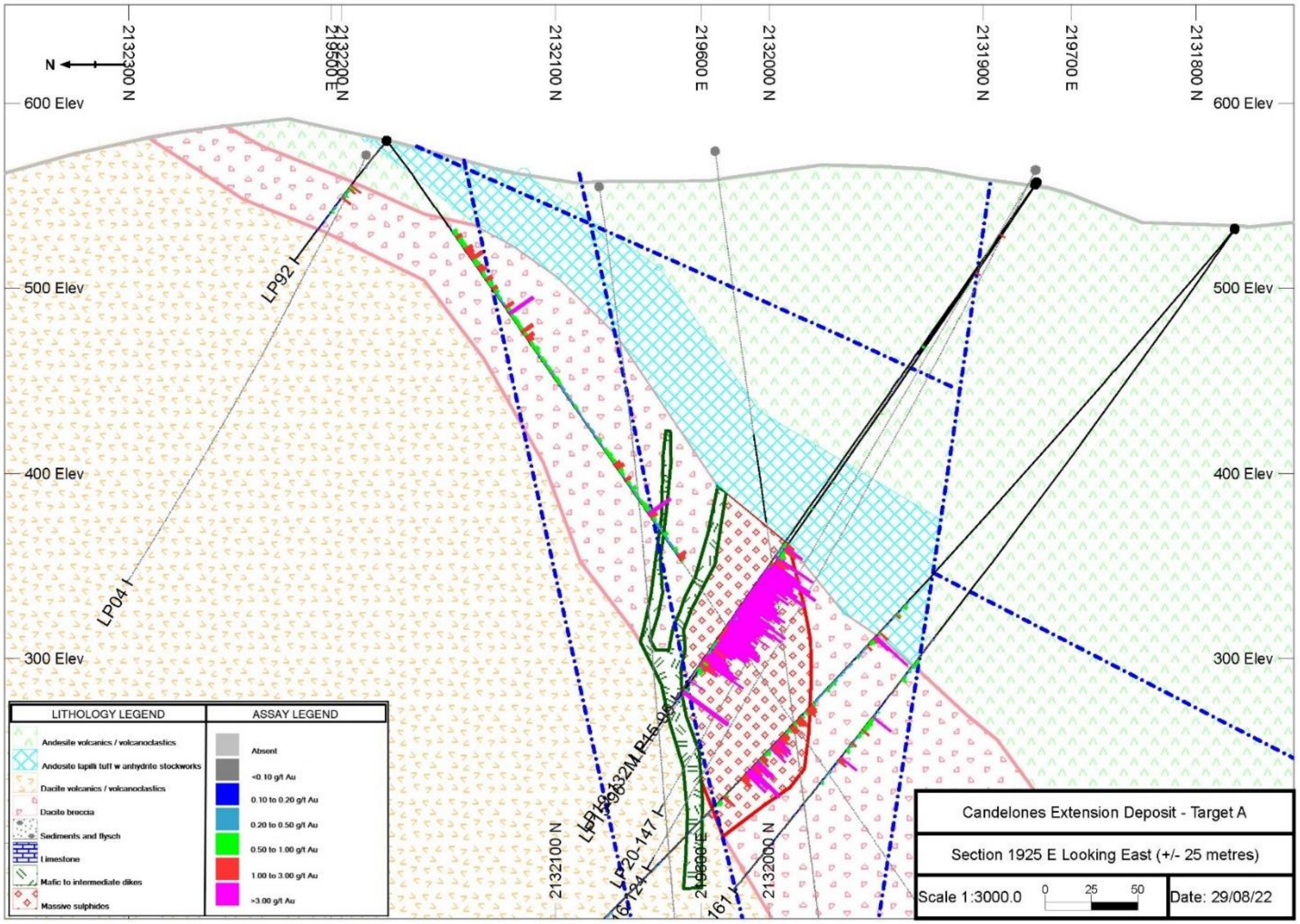


Figure supplied by Unigold, September, 2022.

Figure 10.6
Simplified Cross-Section 1725 E- Candelones Extension Deposit Target B

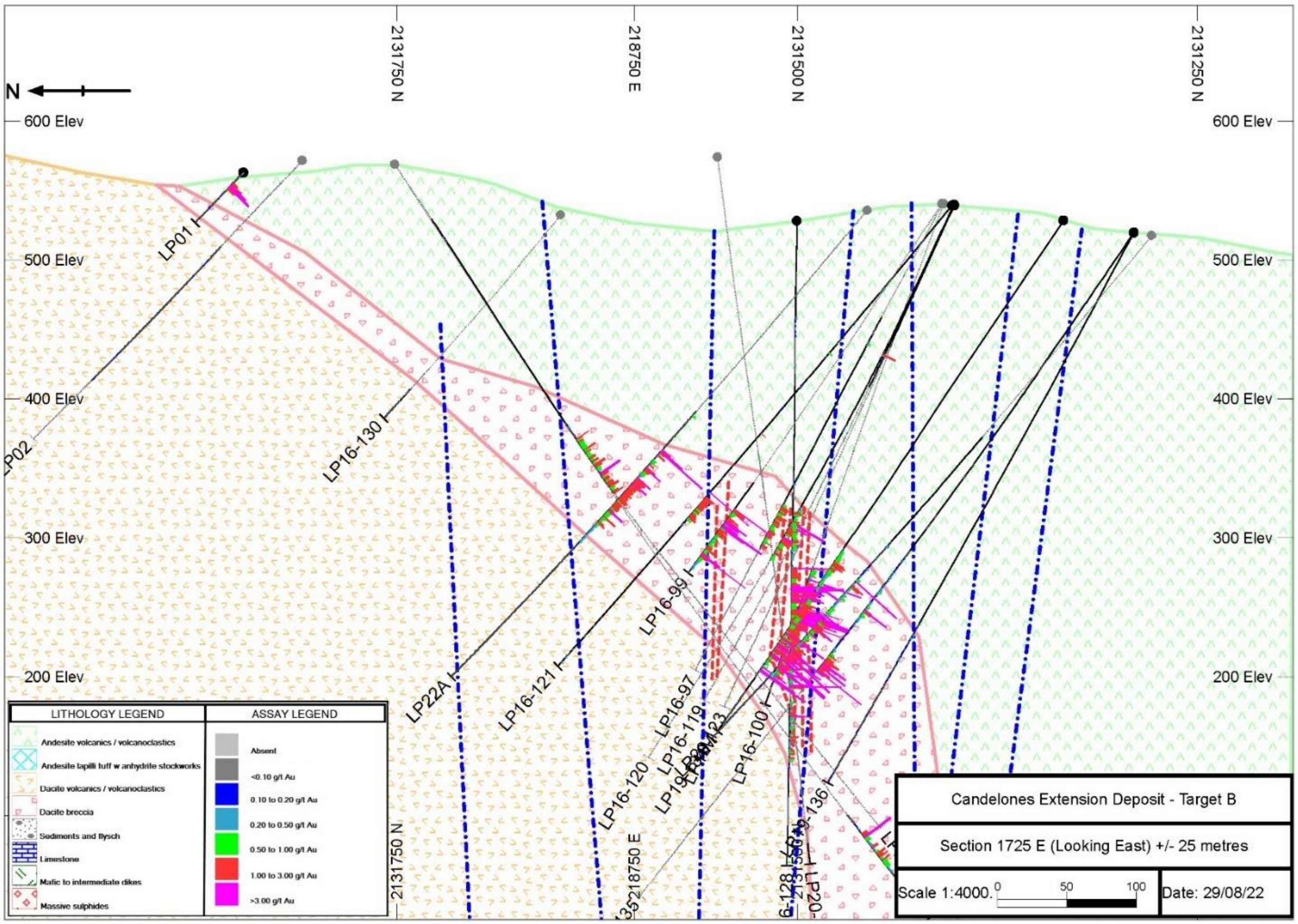


Figure supplied by Unigold, September, 2022.

Figure 10.7
Simplified Cross-Section 1275 E- Candelones Extension Deposit - Target C

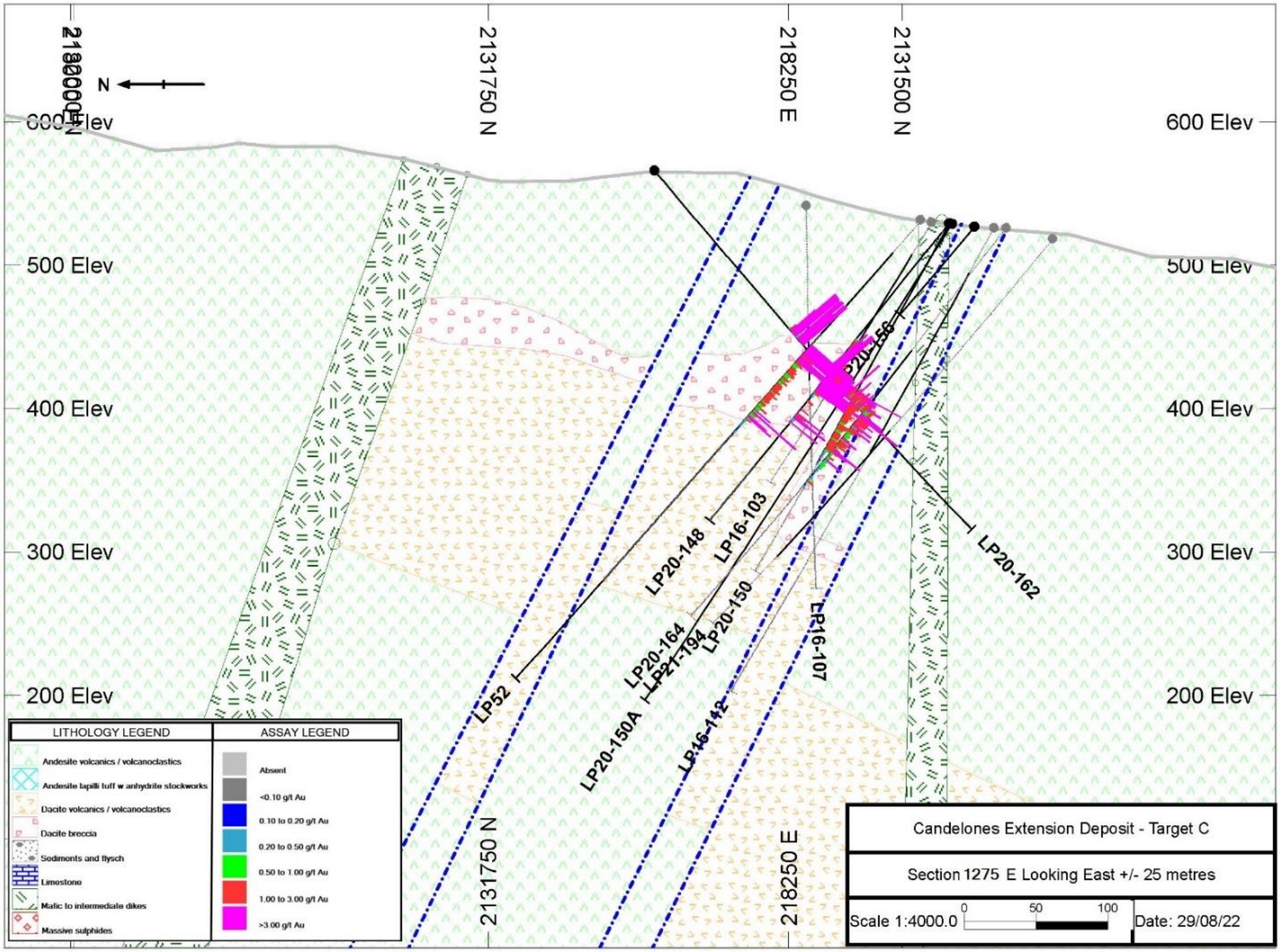


Figure supplied by Unigold, September, 2022.

Figure 10.8
Simplified Cross-Section 950 E - Candelones Extension Deposit

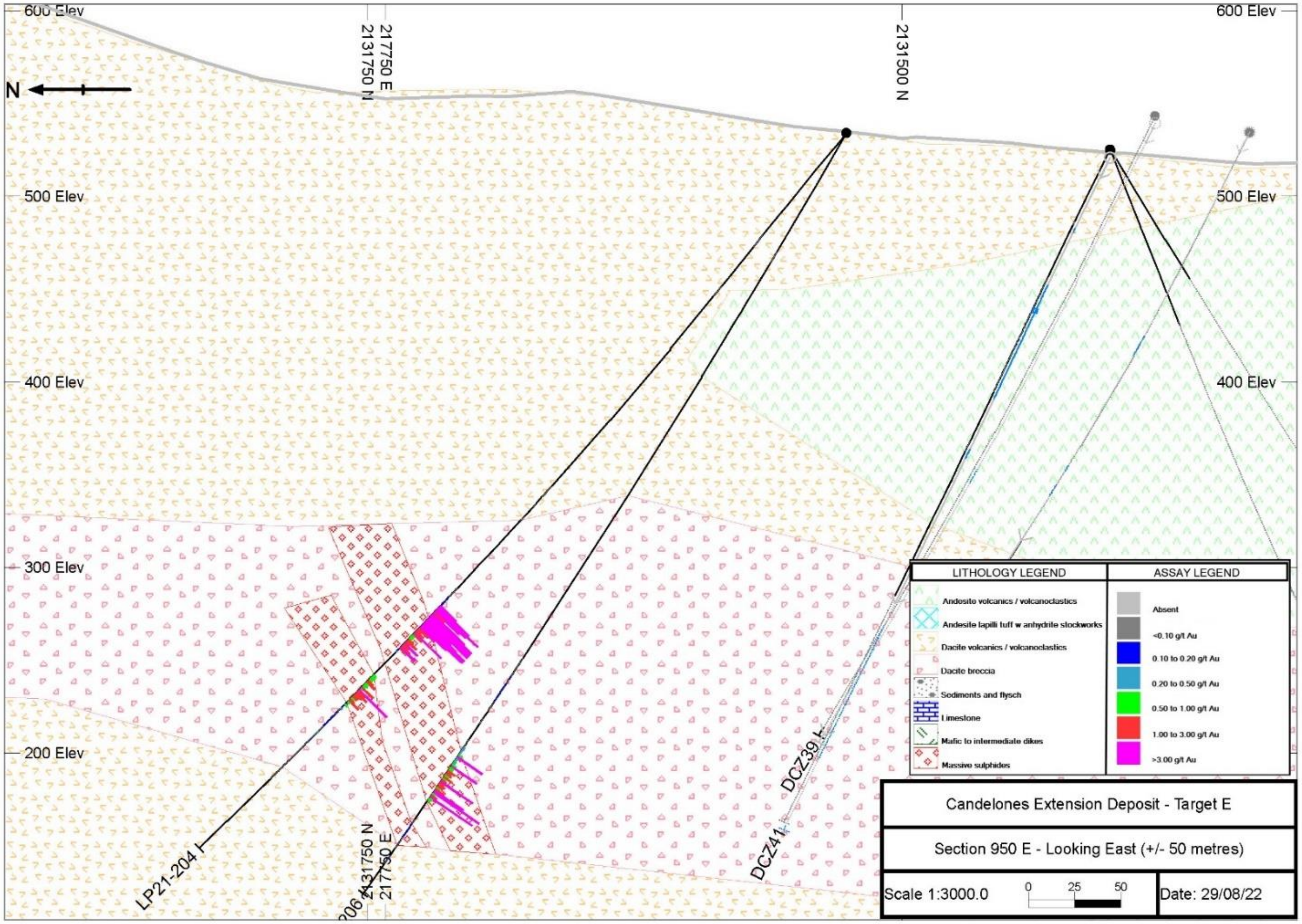


Figure supplied by Unigold, September, 2022.

Figure 10.9
Simplified Cross-Section 1800 N - Candelones Main Deposit

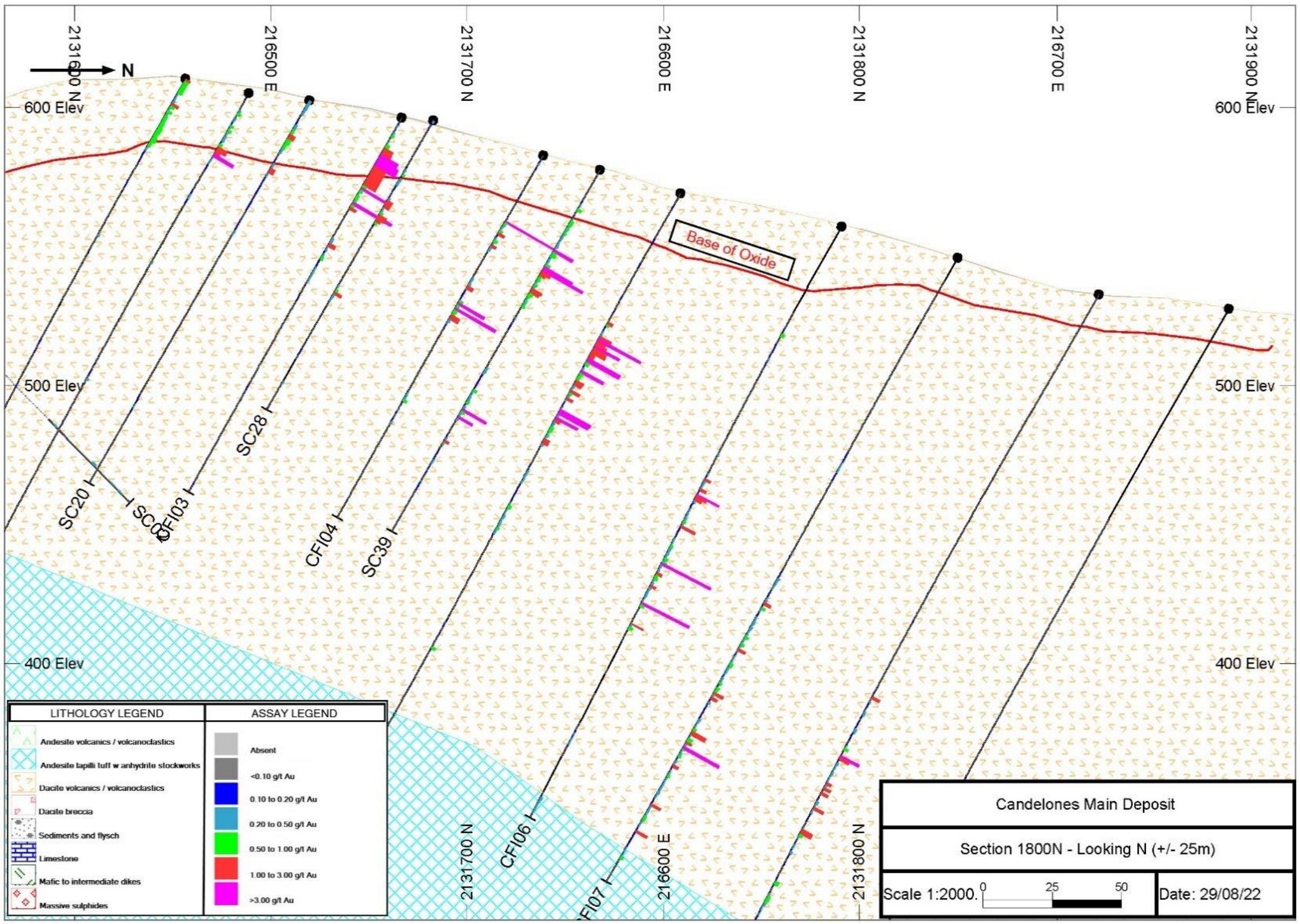


Figure supplied by Unigold, September, 2022.

Figure 10.10
Simplified Cross-Section 217050 E - Candelones Connector Deposit

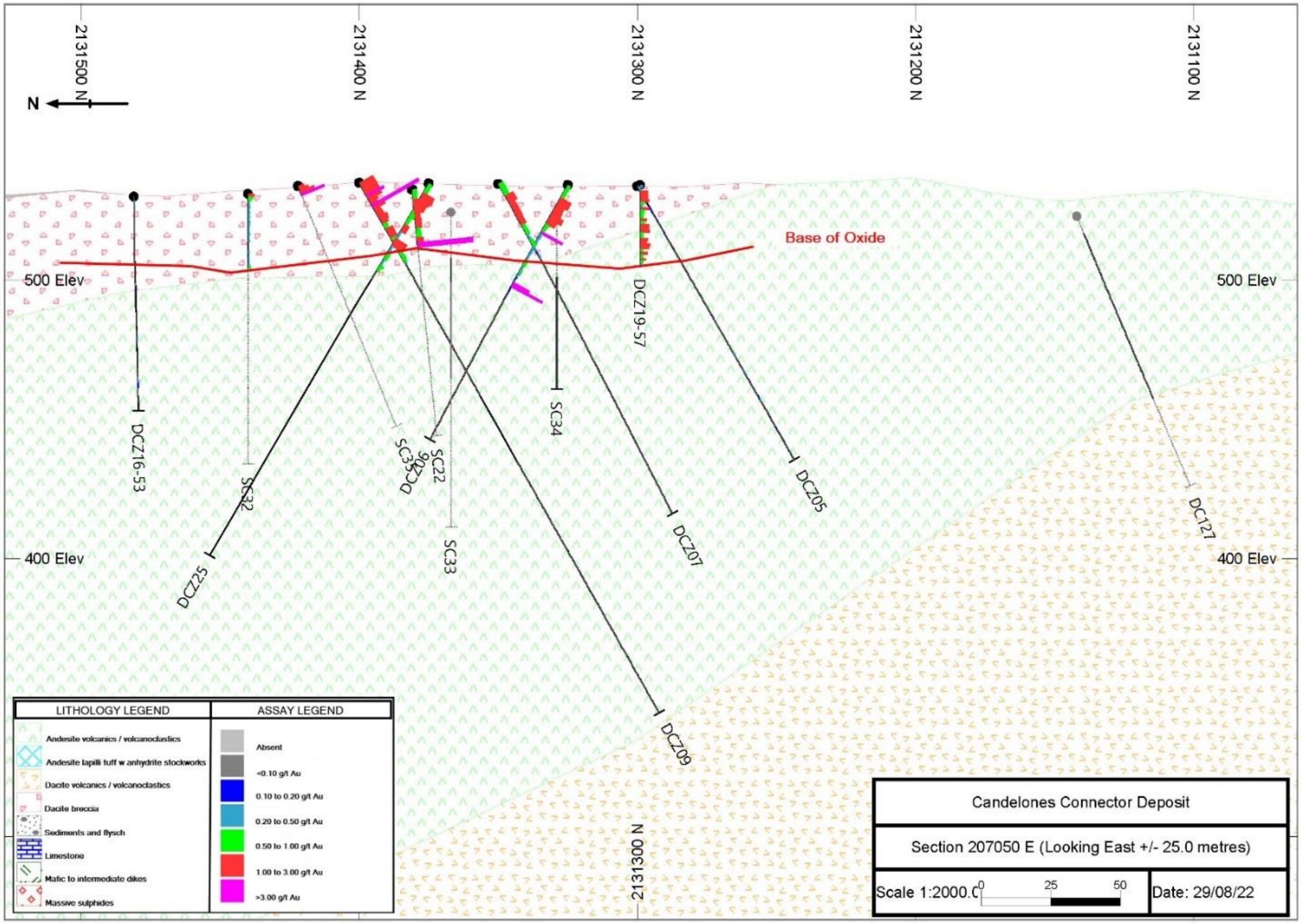


Figure supplied by Unigold, September, 2022.

10.4 MICON QP COMMENTS

During the various site visits, Micon's QP observed several components of the drilling program from the drills moving to a new hole, drilling and recovery of the core, logging and sampling, and data input and verification. In general, the Unigold drilling program is conducted according to the CIM guidelines for best practices. Micon' QP believes that the data collected by Unigold are of sufficient quality and quantity to form the basis of a mineral resource estimate.

10.4.1 Factors Affecting the Historical Drilling on the Candelones Project

The review of the historical drilling data by Micon's QP has previously identified the following risks, primarily in the Candelones Main and Connector deposits, that may affect the estimate:

1. Core recovery data were not available in most of the historical drill holes located in Candelones Main zone and instances of poor core recovery (less than 70%) were noted in drill core collected from the Candelones Main and Connector deposits. Micon's QP believes that any drill holes where the core recovery was less than 70% should be subject to further verification of the data. Micon's QP notes that the poorest core recovery was returned from the oxide mineralization that subcrops at surface. The test pit program completed in 2018, confirmed the original tenor of the gold grades reported in the diamond drill hole database suggesting that the poor recovery has not introduced any bias as it pertains to the diamond drill data. Later infill and exploration drilling by Unigold in the area of the oxide resources had good core recoveries in the 90 to 100% range which also confirmed the tenor of the gold grades from the historical drilling with poor recovery.
2. The CMC area topography was updated for the mineral resources using LiDAR technology, which is a high resolution and accurate digital terrain model (DTM) to better assess the oxide cover. The use of this new topographic surface only moved drill holes up or down in elevation when compared to the DTM surface used previously. Both the LiDAR technology and DTM shifted the collars vertically up or down and were used to correct a number of collar elevations. However, in terms of impact when updating the resource estimates either in 2021 (sulphides) or 2022 (oxides) the changes were minimal.

Micon's QPs believe that the recovery data, potentially had the largest impact on the classification of the mineral resource estimate, since it limits the confidence in the grade distribution and continuity of the mineralization, rather than the extent of the mineralization itself. However, Unigold's 2018 test pit program and the subsequent drilling programs tended to confirm the original tenor of the gold grades reported in the diamond drill hole database. As a result of Unigold's work, Micon's QPs currently believe that the historical drill holes can be used in the estimation of mineral resources and can be used to assist in confirming the use of higher classifications for the mineralization in the CM and CMC zones.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 SAMPLING METHODOLOGY

Sample preparation and analysis procedures prior to 2011 were documented by Valls (2008) and generally follow current procedures, with the notable exception of quality control and quality assurance procedures. Prior to 2011, Unigold relied on the primary analytical facility to provide quality control, utilizing the laboratory's own internal quality control procedures. There was no effort by Unigold to independently monitor the sample quality.

Subsequent to 2011, with the focus of the diamond drilling program on defining the Candelones Extension deposit, Unigold initiated industry standard quality control and quality assurance programs that included the regular insertion and monitoring of certified standards (Certified Reference Materials (CRMs)) and blanks, at a rate of 1 in every 20 samples (5%).

Core is removed from the core tube and placed in wooden or plastic core boxes that are labelled with the hole number and the depth of each core run. The core boxes are sealed at the drill site and transported to the core logging facility by truck at the end of each 12-hour shift.

The core boxes are opened every morning under the supervision of the geologists working in the core logging facility. The core is then moved from the receiving area and placed in sequential order on the logging racks, where the core is left justified, recovery and rock quality designation (RQD) measurements are collected and the core is washed in preparation for logging.

Access to the core receiving and logging facility is not formally restricted but, generally, only the geologists and the local labourers assigned to open, move and split the core have access. A security guard monitors the core facility during the night shift.

Logging is performed by a qualified geologist who completes the lithological-structural description and selects the samples for each drill hole. The logging geologist physically marks up the samples and supervises the preparation of the sample log. Samples are typically limited to 1.0 m in length but are adjusted to reflect the lithological-structural contacts identified during logging. Assay tickets are placed in the core tray at the start of the sample and stapled into place. The sample number is written on the core at the start of the sample in a red china marker. The core is then photographed (wet and dry) and prepared for cutting.

The core is cut using a diamond saw and one half of the core is placed in a plastic sample bag, along with its corresponding ticket number. The remaining half core portion is placed in the core box and stored at the core logging facility in racks for future access. Sample numbers are written on the exterior of the sample bags using indelible marker and the bags are then either stapled shut or tied using a cable tie.

Samples are placed the rice bags with the sample series written on the outside of the bag in permanent marker. The rice bags are tied shut using a cable tie and a line of paint is sprayed over the cable tie and rice bags. Photographs are taken at various points in the sampling process to verify the correct handling and chain of custody, until the samples are handed over to Bureau Veritas Minerals at the exploration camp. Bureau Veritas Minerals is independent of Unigold.

Samples are regularly picked up at site by representatives from the Bureau Veritas Minerals preparation laboratory, located in Maimon.

Unigold has a complete record of the core drilling on the property and maintains a core library at site that includes:

- 10 years (+ selected holes) of half cores after splitting.
- Three years of sample rejects.
- A complete inventory of pulp rejects.

The onsite library is well maintained and organized and provides an excellent historical record for future use.

11.2 Quality Assurance and Quality Control Procedures

The use of CRMs and blanks were not integrated into Unigold's exploration programs from 2002 through to late 2011. Largely, this affected all trenching and drilling at the Candelones Main deposit, early exploration holes at Corozo, Noisy, Rancho Pedro, Montazo, Guano, Naranja, Juan de Bosques and the first 16 holes at the Candelones Extension.

Recognizing this as an area of concern, Unigold commissioned P&E to assess the quality of the historical data collected without the benefit of industry standard QA/QC protocols, as described in Section 9.3.

From 2011 through 2020, Unigold has utilized the regular insertion of Certified Reference Materials (CRMs) as standard operating procedure. Blanks and CRMs are regularly and randomly inserted into the assay stream. CRMs are purchased from Rocklabs (New Zealand) and CDN Resource Laboratories (Canada). CRM's include Au only, Au-Ag-Cu-Pb-Zn multi-element and Au-Cu-Mo multi-element CRMs. Gold is the primary element evaluated to monitor the CRM performance.

Unigold maintains a number of CRMs of varying grade ranges in inventory. The target insertion rate of CRMs is 1 in every 20 samples. CRM insertion is supervised by the logging geologist who determines where in the sample stream the CRM is inserted and, generally, which CRM is inserted, attempting to match the CRM grade to that of the interval where the insertion is planned. The geologist logging the core identifies the CRM insertion in the sample tag book as the core is being marked up for sampling. In most cases, the logging geologist identifies the CRM to be inserted.

The physical insertion of the CRM is performed by the geologist logging the hole and the senior geotechnician as the core is being sampled. The geologist identifies where each blank and/or standard is to be inserted as the core is being logged and the technician inserts the identified CRM, bags and tags the CRM and includes it in the sample shipment.

The database manager is initially responsible for monitoring CRM results. Results are monitored and samples returning values outside the CRM performance limit are flagged for follow up by the logging geologist. The logging geologist and database manager evaluate all CRMs returning values outside the CRM performance specification. All failures are evaluated to determine if re-analysis is warranted. If re-analysis is recommended, the five samples preceding and five samples following the standard are re-assayed along with the failed CRM.

The database for the Candelones deposits supporting this study and mineral resource estimate includes 1,861 CRM results from a total population of 42,466 analyses representing an insertion rate of 4.38% or approximately 1 standard for every 20 samples which is the targeted insertion rate established by Unigold.

The regular insertion of blanks into the sample stream commenced after CRM insertion became standard operating practice. A total of 1041 blanks have been inserted within a population of 38086 analyses, an insertion rate of 2.73%, approximately one blank for every 40 samples.

11.2.1 Certified Reference Materials (Standards)

A total of 96 standard failures have been observed to date, representing a failure rate of 5.16%. A failure is considered any result outside the expected tolerance window of the CRM. CRMs supplied by Canadian Resource Laboratories identify the tolerance window for each CRM. The tolerance window of the CRMs supplied by Rocklabs is based on the standard deviation of the Rocklabs round robin analyses. The CRM tolerance for the Rocklabs CRMs is set at two times the standard deviation of the round robin analyses.

All observed failures occur within the dataset used to estimate the mineral resource disclosed in Section 14.0 of this report.

All failures are reviewed by a geologist and the QP supervising the drill programs. Of the 96 observed CRM failures, 4 were considered significant, returning a result that was materially different from the certified value for that standard. Of the four critical failures observed, only two are unexplained. The remaining two were classified as mislabelling during insertion.

Table 11.1 summarizes all standards and blanks utilized from 2011 through 2020.

The 2021-22 drill program utilized three new standards:

CDN-GS-3U	Certified value = 3,290 ppb Au	12 submitted	3 failures
CDN-GS-5X	Certified value = 5,040 ppb Au	39 submitted	7 failures
CDN-GS-7H	Certified value = 6,560 ppb Au	11 submitted	1 failure

Observed failures (17.7%) were noticeably higher than the historical failure frequency (4.7%). Nine of eleven failures (82%) assayed lower that two standard deviations below the mean and six of the nine (9), (66%) assayed lower than three standard deviations below the certified value. The results suggest a potential low-grade bias. Unigold noted that results indicate improvement over time with failure frequency declining as the drill program progressed. Unigold also noted that the established procedure of re-assaying the five samples preceding and following a failed standard analyses was not followed by site personnel during the time period the site was managed remotely from Canada. When the error was identified, site personnel were instructed to pull the sample pulps related to each failure and have the pulps sent for re-assay with another standard inserted in the original location. As of August 30, 2022, the results of the re-assays were pending. Micon's QP agrees with Unigold's comments and its correction related to the failed standard analysis.

Table 11.1
Certified Reference Materials 2011 through 2020

	Gold		Silver		Copper		Lead		Zinc		Molybdenum	
Standard	Grade (g/t)	Tolerance (g/t)	Grade (g/t)	Tolerance (g/t)	Grade (%)	Tolerance (%)	Grade (%)	Tolerance (%)	Grade (%)	Tolerance (%)	Grade (%)	Tolerance (%)
CDN-BL-10	0.010	0.000										
CDN-BL-2	0.010	0.000										
OXC72	0.205	0.003										
SE19	0.583	0.011										
SE29	0.597	0.007										
SE44	0.606	0.006										
OxE101	0.607	0.005										
OxE74	0.615	0.006										
CDN-ME-19	0.620	0.062	103	7	0.474	0.018	0.980	0.060	0.750	0.040		
CDN-CGS-19	0.740	0.070			0.132	0.010						
OxF65	0.805	0.014										
SF57	0.848	0.030										
SG40	0.848	0.010										
SF57	0.976	0.009										
OxG83	1.002	0.009										
SG56	1.027	0.011										
CDN-GS-1W	1.063	0.076										
CDN-CM-15	1.253	0.118			1.280	0.090					0.054	0.004
OxH97	1.278	0.009										
OXH55	1.282	0.015										
OXH66	1.285	0.012										
CDN-ME-1602	1.310	0.100	137	6	0.372	0.014	1.130	0.050	0.775	0.038		
OXI67	1.817	0.024										
CDN-CM-19	2.110	0.220			2.040	0.110					0.104	0.012
CDN-ME-1407	2.120	0.150	246	7	0.427	0.016	3.970	0.170	0.536	0.024		
CDN-ME-1206	2.610	0.200	274	14	0.790	38.000	0.801	44.000	2.380	0.150		
CDN-GS-3K	3.190	0.260										
CDN-GS-3U	3.290	0.260										
CDN-ME-1607	3.330	0.270	150	5	0.310	0.008	1.720	0.060	0.560	0.020		
CDN-GS-5X	5.040	0.330										
CDN-GS-7H	6.560	0.500										
CDN-ME-1812	7.860	0.660	97	5	0.989	0.042	1.470	0.060	3.230	0.200		
CDN-GS-10D	9.500	0.560										

Table supplied by Unigold, September, 2022.

Figure 11.1 graphically depicts the performance of standard OxE101 in use from 2012 through 2016. A total of 168 analyses of the standard were completed. This standard has a certified value of 607 ppb Au. A total of seven (7) failures are observed with four analyses returning grades greater than the upper limit of the standard and an additional three analyses returning values lower than the lower limit of the standard.

Figure 11.2 graphically depicts the performance of standard ME-1602 in use from 2016 through 2020. A total of 90 analyses of the standard were completed. This standard has a certified value of 1,310 ppb Au. A total of seven failures are observed with two analyses returning grades greater than the upper limit of the standard and five analyses returning values lower than the lower limit of the standard.

Figure 11.1
Graphical depiction of the Performance of Standard OxE101 in Use From 2012 Through 2016

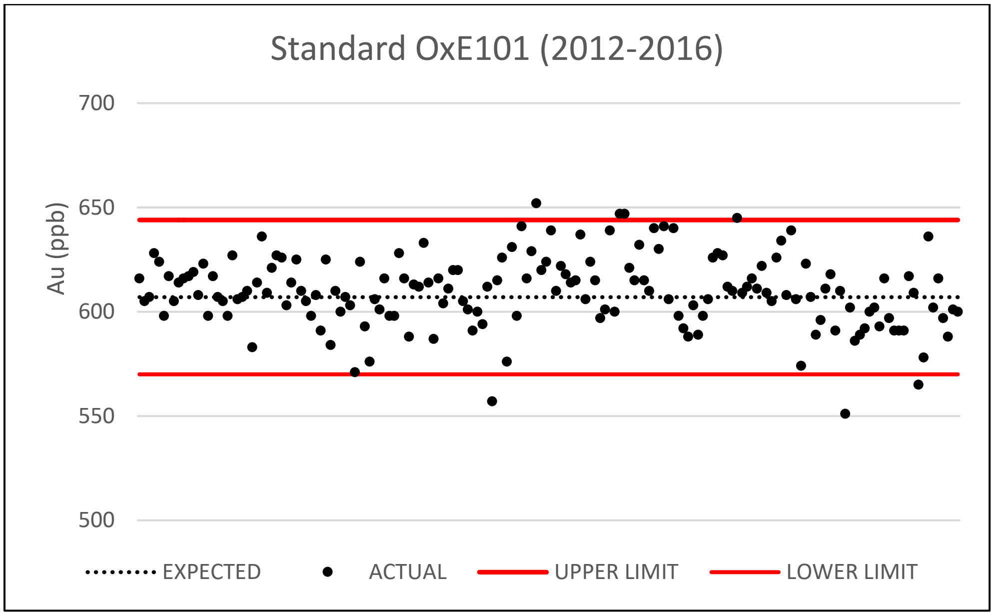


Figure 11.2
Graphical depiction of the Performance of Standard ME-1602 in Use From 2016 Through 2020

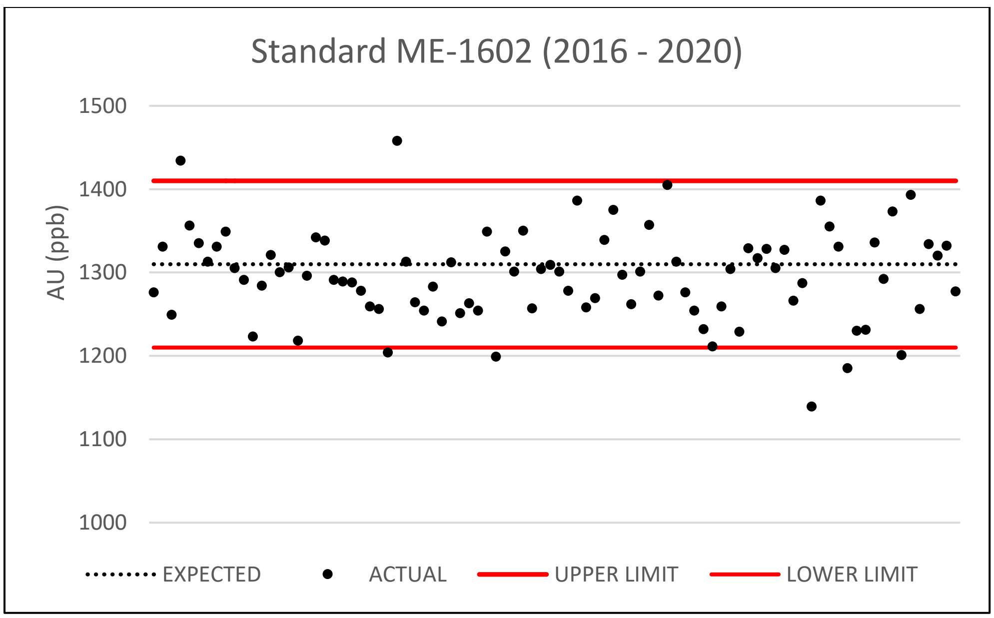


Figure 11.3 graphically depicts the performance of standard ME-1607 in use from 2019 through 2021. A total of 138 analyses of the standard were completed. This standard has a certified value of 3,330 ppb Au. A total of two failures are observed both returning grades greater than the upper limit of the standard.

Figure 11.3
Graphical Depiction the Performance of Standard ME-1607 in Use From 2019 through 2021

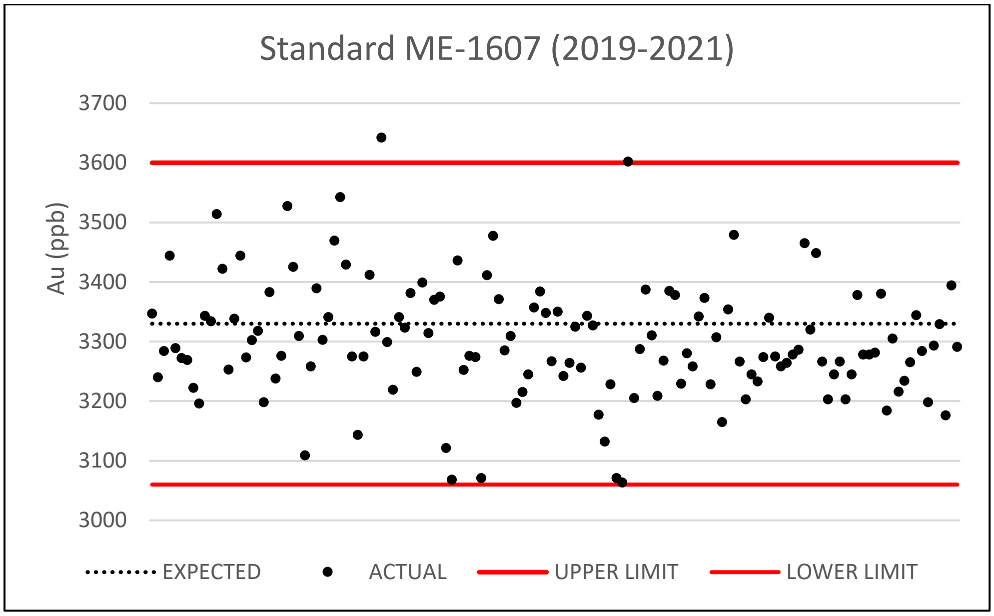


Figure 11.4 graphically depicts the performance of standard GS-10D in use from 2013 through 2019. A total of 44 analyses of the standard were completed. This standard has a certified value of 9,500 ppb Au. No failures are observed.

Figure 11.4
Graphical Depiction the Performance of Standard GS-10D in Use From 2013 through 2019

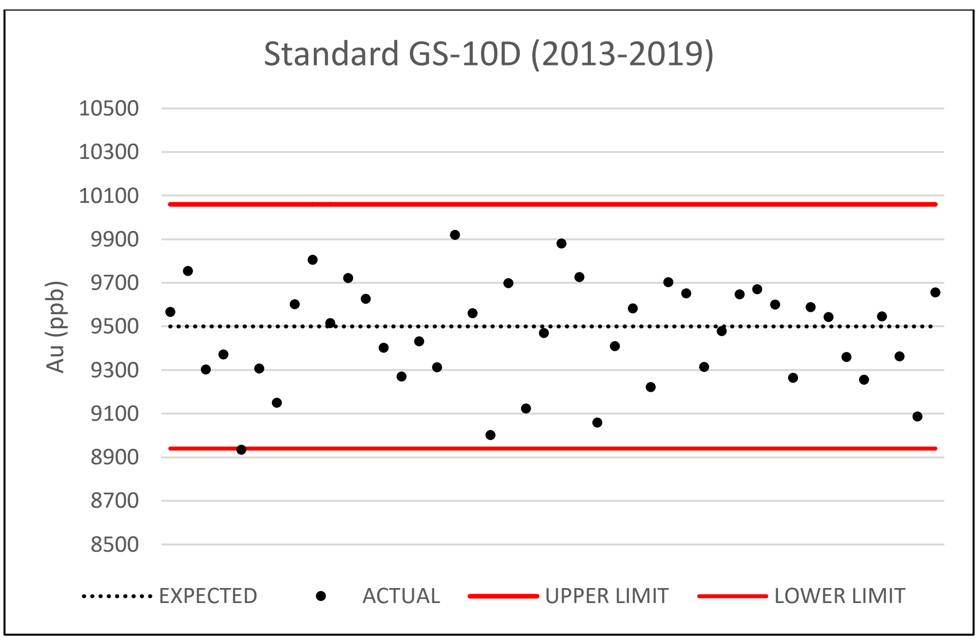
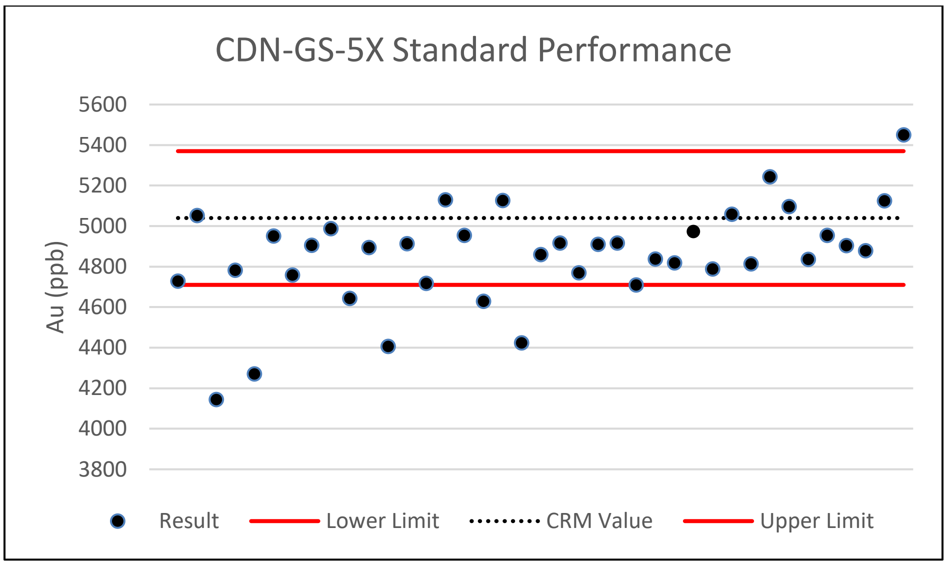


Figure 11.5 graphically depicts the performance of standard GS-5X. This was the most prevalent standard inserted during the 2021-22 drill programs. A total of 39 analyses of the standard were completed. This standard has a certified value of 5,040 ppb Au. Seven failures are observed. Six samples returned grades lower than two standard deviations below the certified value. Four samples returned grades lower than three standard deviations below the certified value.

By the mid-point of the drill program, the failure rate was virtually eliminated. It's possible that the failures may be related to staffing issues during COVID.

Micon's QP considers the CRM insertion rate and the performance of the CRMs to be within acceptable tolerances.

Figure 11.5
Graphical Depiction the Performance of Standard GS-5X



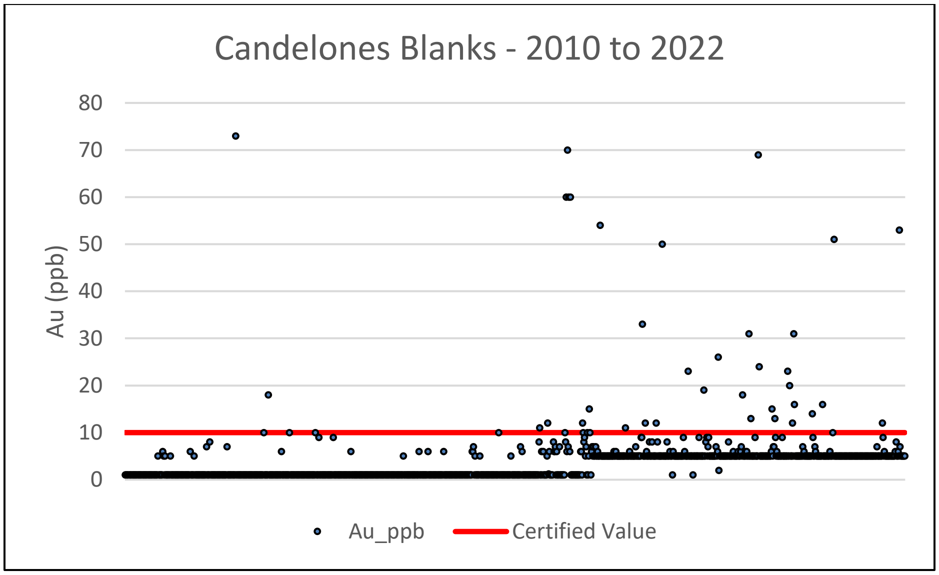
11.2.2 Blanks

A total of 1,145 blanks were submitted for analyses, within a sample population of 39,399 samples, an insertion rate of 2.91%. All blanks inserted have a certified value of < 10 ppb Au. Unigold advises that from 2015 through to Q4-2020, a data entry error erroneously set the failure level of blank analyses to < 100 ppb Au. As a result, 24 failures were not identified for follow up by the Database Manager.

In total, 37 blanks returned assay results exceeding the 10 ppb Au limit. This represents 3.23% of the population. One failure was identified as a labeling error during insertion with the standard and blank being swapped in the tag book. The remaining 36 failures returned results ranging from 11 to 73 ppb Au (Figure 11.6).

All 30 failures were reviewed by Unigold's QP. Of the 30 failures observed, 10 were flagged for re-assay. The determination as to whether or not re-assay was necessary was made by the supervising QP. Blanks returning a result greater than 10 ppb Au, and occurring within intervals averaging 1,000 ppb Au were selected for re-assay. Those blanks returning a result greater than 10 ppb Au where the samples above and below the failed blank assayed between 100 and 1,000 ppb Au were not selected for re-assay.

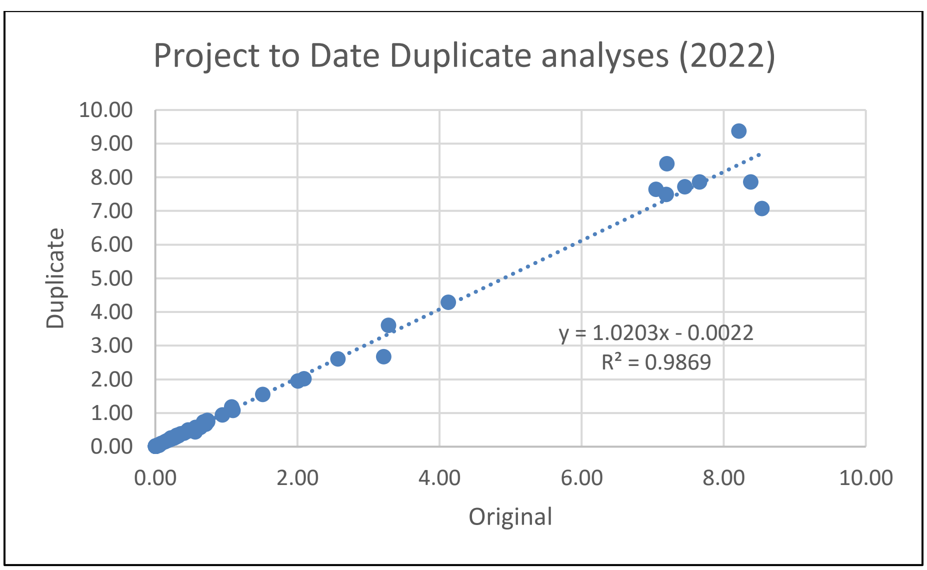
Figure 11.6
Graphical Depiction the Blank Sample Performance from 2010 to 2022



11.2.3 Re-Assay (Duplicate Sample) Results

A total of 88 duplicate analyses have been completed as part of the QA/QC program. The results suggest good to excellent correlation between the two populations. (Figure 11.7). The re-assay results represent the failed blank and standards selected by the QP for re-assay.

Figure 11.7
Graphical Depiction of the Duplicate Analysis (Re-Assay)



11.3 Sampling Procedures

All samples are collected under the supervision of a geologist.

Trench samples are typically collected over a 1.0 m interval within each trench, at an elevation of 0.15 m above the sill of the trench. The samples are collected using a continuous panel sampling method.

Drill core is typically sampled over a standard 1.0 m core length. The geologist who logs each hole identifies the sample intervals by physically marking the core. Typically, sample intervals are marked using a red china marker. A line, perpendicular to the core axis, marks the start of the interval and a continuous line is drawn on the core parallel to the core axis to the end of the sample interval. The end of the sample interval is marked by another line perpendicular to the core axis. The sample tag for each interval is filled out by the geologist logging the core and placed at the start of each interval. Primary geological contacts (lithological-structural) are honoured during sample mark up, resulting in some sample intervals that are greater or lesser than the 1.0 m standard sample length.

A geotechnician prepares a sample log which is submitted to the database manager who supervises the transcription of the sample log into the electronic database. The data are manually entered by local personnel and, upon completion, of the data entry is verified for accuracy by the supervising geologist.

11.4 Sample Preparation, Analysis and Certification

Samples are sent to the Bureau Veritas preparation laboratory, located in the town of Maimon.

Bureau Veritas uses the Laboratory Information Management System (LIMS) system for the control of samples, using bar codes. LIMS is computer software that is used in the laboratory for the management of samples, laboratory users, instruments, standards and other laboratory functions, such as invoicing, plate management and work-flow automation.

Samples are received at Bureau Veritas, unpacked, entered into the LIMS system and air dried at 60^0 C. Samples are then crushed to 70% passing #10 mesh. The crushers are air cleaned between samples and cleaned with a barren quartz rock every 10 samples, or more frequently when the sample stream is clay rich and/or oxidized.

The crushed sample is homogenized and then riffle split, with a 300 g sample selected for pulverization. The crushed sample reject is stored and returned to Unigold. The 300 g sample split is pulverized to 95% passing #150 mesh in a ring and puck pulverizer, bagged and tagged using a number generated by LIMS and packed for shipment to Bureau Veritas in Vancouver, Canada, for analysis.

The pulverized samples are air freighted to Bureau Veritas in Vancouver where the samples are unpacked and scanned into the LIMS.

The prepared samples are subjected to the following analyses:

- A 50-gram aliquot is fire assayed for gold with an atomic absorption finish (gravimetreic finish on overlimits).

- A 0.25 gram aliquot is digested in a mixture of HNO_3, $HClO_4$, HF, and HCL and analyzed for Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Mi, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr, using emission spectrometry.

Bureau Veritas is an ISO accredited facility.

11.5 MICON COMMENTS

Micon's QP has reviewed and discussed the Candelones Project QA/QC with Unigold personnel both during the various site visits and during web based and in person meetings in Toronto. Micon's QP concludes that the issues surrounding the deficiency of a QA/QC program for the drilling programs prior to 2011 have been sufficiently addressed by the P&E report and subsequent work by Unigold. At the present time, Unigold has a QA/QC program in place which follows the exploration best practice guidelines as set out by the CIM in November, 2018.

Micon's QP considers that the QA/QC programs presently conducted by Unigold are sufficiently reliable to allow the results obtained from the sampling and assaying to be used for a mineral resource estimate. In the opinion of Micon's QP, the work conducted by P&E allows for the previous sampling results to be incorporated into a mineral resource estimate.

12.0 DATA VERIFICATION

12.1 QUALIFIED PERSONS AND SITE VISITS

The details of the Qualified Persons for this Technical Report and any site visits conducted by them are summarized in Table 12.1.

Table 12.1
Technical Report Qualified Persons and Site Visits

Qualified Person	Title and Company	Area of Responsibility	Site Visit
William J. Lewis, P.Geo.	Senior Geologist, Micon	Sections 1.1 to 1.8, 2 through 11, 12.1.1, 14.1 to 14.3, 14.7, 19, 23, 24, 25.1, 25.2, 26, 28	May, 2013, June, 2017, October 22 to 26, 2019
Ing. Alan San Martin, MAusIMM(CP)	Mineral Resource Specialist, Micon	Sections 14.4 to 14.6. 14.8 and 14.9	May 21 to 24, 2013
Chris Jacobs, MBA, CEng., MIMMM	President and Senior Consultant Mineral Economics, Micon	Section 1.13, 1.15, 20, 22 and 25.7	August 30 to September 2, 2022.
Abdoul Aziz Dramé, P.Eng.	Mining Engineer, Micon	Sections 1.9, 1.10, 12.1.2, 15, 16, 25.3 and 25.4	August 30 to September 2, 2022
Mathew Fuller, C.P.G., P.Geo	Principal, Tierra Group International	Parts of Sections 1.12, 12.1.3 and 18,	February 16 to 18, 2022
Stuart J Saich, B.Sc Chem Eng.	Director and Process Engineering Consultant – Promet101 Consulting	Sections 1.11, 1.14, 13, 17, 21, 25.5 and 25.6	June, 2022

12.1.1 Micon QP Geological Site Visits and Data Verification

The most recent Candelones Project site visit conducted by a Micon geological QP occurred between October 22 and 26, 2019. Further discussions either through web-based platforms or in person were subsequently held with Unigold personnel from 2019 through 2022. These subsequent discussions were centred on exploration programs and results, QA/QC procedures, resource estimating procedures, metallurgical testwork and other topics. Prior site visits by Micon geological QPs were conducted in May, 2013 and June, 2017. Micon's geological QPs believe that the October, 2019 site visit remains current as the subsequent 2020, 2021 and 2022 drilling were either conducted as part of the same ongoing program that the QP discussed during the 2019 site visit or were infill programs to increase the confidence of the mineralization already identified. The drilling program was briefly halted for a few months in 2020 due to the Covid-19 pandemic.

During the October, 2019, site visit, a number of drill holes were visited, drilling procedures and logging and sampling procedures were observed. A number of test pit locations were also visited and, although these had been filled back in for safety reasons, their location in relationship to the surrounding drill holes was observed.

In addition to logging the new drill holes, Unigold was relogging the core from previous campaigns since it had been observed during the 2017 site visit that relogging of the drill holes from previous campaigns, could assist with reinterpreting the geological model.

Figure 12.1 through Figure 12.4 show various aspects of the drilling activities observed during the 2019 site visit to the Candelones Project.

Discussions were held with the geological personnel on-site related to possible geological models for the deposits and what distinguishing characteristics were being observed in the core and in the field that supported the various geological models.

During the 2019 site visit, Micon's QP did not take any independent samples of the mineralization, as 28 random pulp samples selected during the 2013 site visit had previously verified the tenor of the mineralization. The 2013 verification samples were sent to an independent commercial assay laboratory in Canada for assaying, with the results of that assaying discussed in the 2013 Technical Report.

Figure 12.1
Drilling on the CE Zone, 2019 Site Visit

Figure 12.2
Drilling the Oxide Mineralization at the CMC Zone, 2019 Site Visit

Figure 12.3
Marker for Drill Hole DCZ-27, 2019 Site Visit

Figure 12.4
Core Ready for Logging at the Core Shack in Camp, 2019 Site Visit

12.1.2 Micon QP Other Site Visits and Data Verification

Micon's QPs Abdoul Aziz Dramé, P.Eng. (Mining Engineer), and Chris Jacobs, MBA, CEng., MIMMM (President and Mining Economist), visited the Candelones Project between August 30 and September 02, 2022, to discuss:

- The appropriateness of the proposed mining method (i.e., conventional truck and shovel open pit) in regard to the geometry of the deposit and other Project requirements.
- The proposed mining parameters, equipment, manpower and infrastructures for the expected tonnage to be delivered to the heap leach pad.
- The potential challenges to the execution of the mining operations though the expected life of the mine.

Several meetings and discussions were conducted with the main stakeholders: local communities, Unigold's personnel and all other contractors.

The site visit also included a meeting with the preferred mining contractor's technical team during which Micon's QPs presented the current mine plan. The mining contractor also presented an execution plan along with all equipment and personnel available to deliver the expected tonnage to the heap leach facility (HLF).

Additionally, Micon's QPs completed a tour of the mine site, the camp and the core shack. The tour provided an appreciation of the general topography as well as the geological and geotechnical properties of representative rock core from several sections of the pit.

12.1.3 Tierra Group Site Visits and Data Verification

Tierra Group International, Ltd. (Tierra Group) representatives Matt Fuller, L.E.G., P.Geo., and Francisco Barrios, P.E, visited the Candelones Project between February 14 and 18, 2022. The primary objectives of the site visit were to attend an in-country kick-off meeting with all stakeholders and familiarize themselves with site conditions to determine site investigation requirements and logistics. The site visit also included a visit to in-country contractors to support the geotechnical investigation (laboratory testing and drilling).

Additionally, Tierra Group's QPs completed a geotechnical investigation for the HLF, Waste Rock Stockpile (WRS), and Topsoil Stockpile between May and August, 2022. The geotechnical investigation included 60 test pits, 13 boreholes, five seismic multi-channel analyses of surface waves (MASW), and 13 seismic refraction (SR) lines. In-situ testing was completed on selected test pits, including Vane Shear Test (VST) and Penetration and Percolation Tests.

Tierra Group's QP selected soil and rock samples from test pit excavations and borehole drilling for laboratory testing based on site subsurface conditions. The laboratory testing evaluated the physical and engineering properties of the various soil types. Samples collected during the field investigation were sent to Advanced Terra Testing (ATT), a geotechnical laboratory in Denver, Colorado.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 GENERAL DISCUSSION

The Candelones Project contains minerals and elements of economic interest with oxides, transition zone and sulphide mineralization identified from the geological exploration programs. Metallurgical testing on the Candelones Project started in 2007 with the first samples being subjected to cyanide testing to explore potential gold extraction and reagent consumptions. In total six discrete phases of testing have been completed that have evaluated the metallurgical response of all three zones of mineralization.

Key to the metallurgical test programs is the objective of generating metallurgical performance parameters for subsequent engineering design and reagent consumptions to support the estimation of operating costs. The proposed execution strategy for the Project has now advanced to consider the use of heap leach technology to recover gold and silver from the oxides and transition material. The objective of the scopes of work for the last three metallurgical test programs was thus focused on generating suitable data to advance the Project to a feasibility level.

The metallurgical results and associated analysis for the sulphide mineralization are not core to the use of heap leaching technology are presented in the Preliminary Economic Assessment (PEA) and are not duplicated in this document. The focus of the metallurgical test results presented in this chapter is on the recovery predictions, reagent consumptions and parameters to support the design of a suitable process facility to treat heap leach solutions, recover precious metals and return barren solution to the heap leach pad.

The metallurgical testwork programs completed to date are listed below for reference purposes:

- SGS Mineral Services of Lakefield, Ontario, Canada (SGS), September, 2007, Los Candelones Cyanidation Test Results (SGS, 2007).
- ALS Metallurgy, September, 2012, Metallurgical Testing of Candelones Zone (Lomita Pina), Neita Gold Project (ALS, 2012).
- SGS Mineral Services S.A. of Chile, October, 2014, Scoping Level Testwork on a Composite Sample from La Neita Concession (SGS, 2014).
- Bureau Veritas Minerals (BVM Phase 1), Vancouver, October, 2020, Preliminary Metallurgical Testing of Samples from the Candelones Deposit, Dominican Republic (BVM, 2020). Preliminary testwork on three sulphide and one oxide composite sample.
- Bureau Veritas Minerals (BVM Phase 2), Vancouver, June, 2021 (report issued April, 2022), Column leach testwork on samples representing the oxide, transition and sulphide mineralization included in the oxide mineral resource pit shell.
- Bureau Veritas Minerals (BVM Phase 3) February, 2022, Large scale column heap leach testing on Run-of-Mine oxide ore samples.

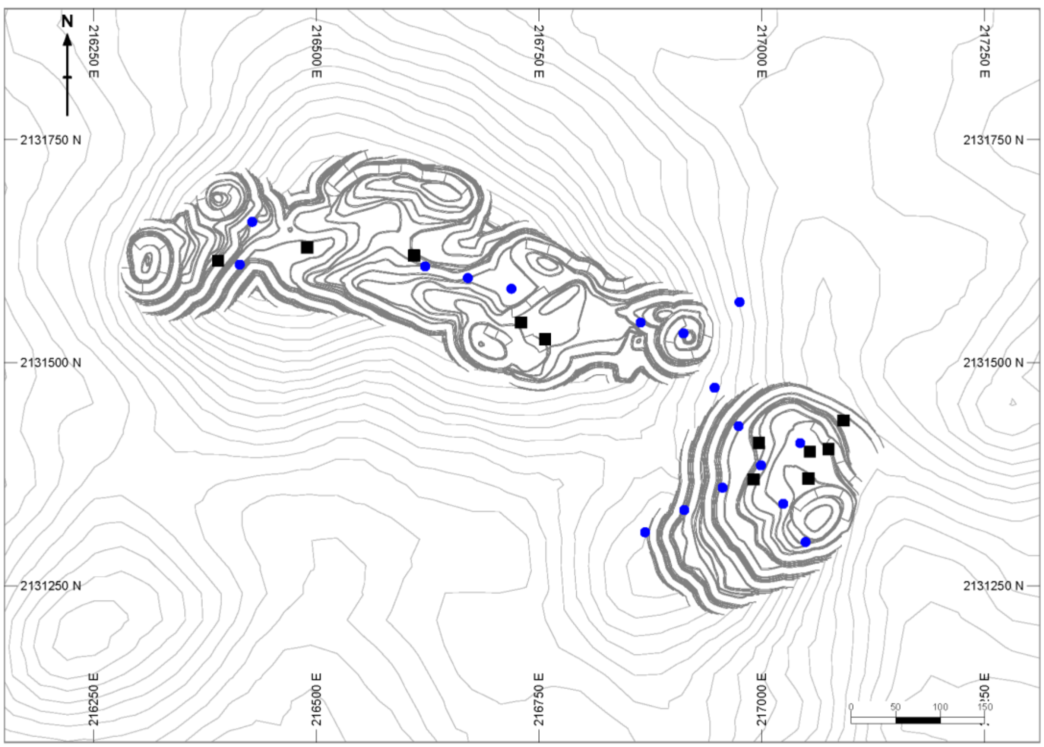
13.2 Sample Selection and Preparation for Testing

A summary of the location and subsequent sample preparation for each of the main testing programs as aligned with the column testing programs is presented in the following sections. Sample selection is a key issue for metallurgical programs in that good sample spatial and grade distribution is important to ensure that subsequent predictions of metallurgical performance are realistic and achievable in the full-scale plant once commissioned.

13.2.1 BVM Phase 1 Sample Selection

For the BVM Phase 1 program twenty-five drill holes that had been completed as part of the exploration drilling program were used to generate samples for metallurgical testing (Figure 13.1). A single composite was prepared from randomly selected intervals from 0 to 25 m depth from 17 holes (nine from Main and eight from Connector deposit). No grade criteria were used in the sample selection process and a total of 162 kg of samples with an average head grade of 0.59 g/t Au were prepared.

Figure 13.1
Bureau Veritas Phase 1 Drill Hole Locations from which Metallurgical Samples were Obtained



13.2.2 BVM Phase 2 Sample Selection

Near the end of 2020, drill core from twelve freshly drilled holes from the oxide mineral resource pit shell was shipped to BVM in Vancouver to be used for the Phase 2 heap leach metallurgical testing (Figure 13.2). These drill holes were specifically designed as metallurgical drill holes to target both oxide and sulphide mineralization. The 401 individual samples obtained were then grouped into three different types of mineralization based on the drill logs. These three styles were oxide, transition and sulphide, with the oxide mineralization near the surface, the sulphide mineralization at the bottom of the pit shell and transition in between the two (Table 13.1).

Figure 13.2
Bureau Veritas Phase 2 Drill Hole Locations from which Metallurgical Samples were Obtained

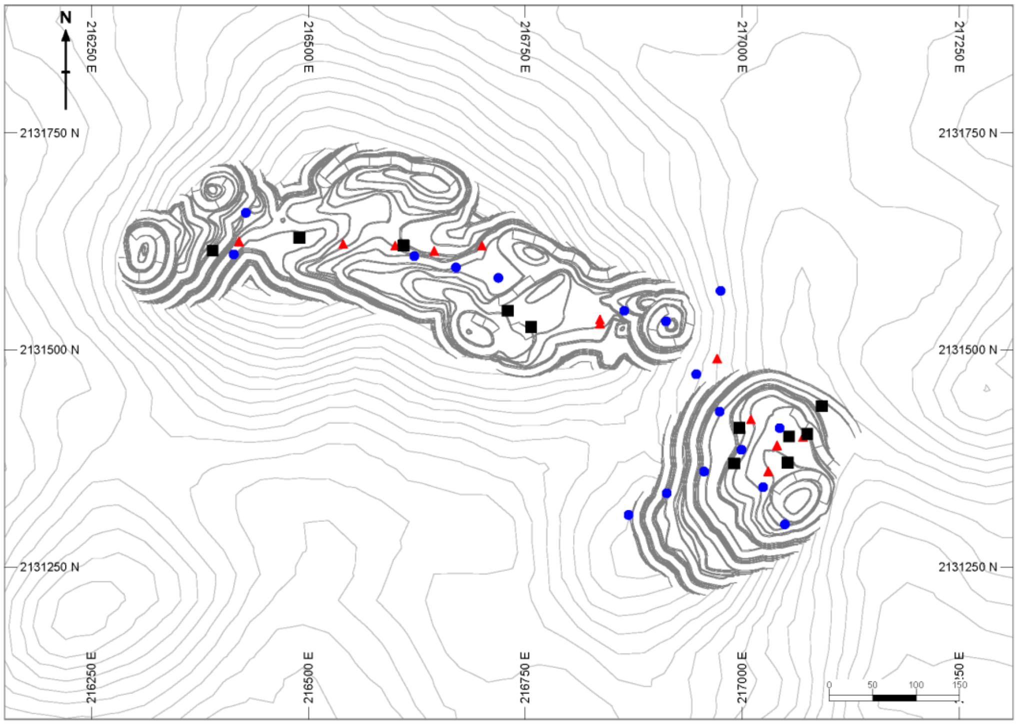


Table 13.1
Phase 2 Test Program Feed Composite Samples

Drill Hole #	Oxide 1		Oxide 2		Transition		Sulphide	
	No of samples	Weight (kg)	No of samples	Weight (kg)	No of samples	Weight (kg)	No of samples	Weight (kg)
DC20-158					8	18.3	4	10.34
DC20-159	10	26.0	6	12.2	1	1.3	10	20.99
DC20-160	15	43.0	19	54.7	3	11.6	3	11.1
DC20-161	10	15.0	11	20.4	3	7.1	7	23.69
DC20-161B	10	12.8	14	24.4	5	14.08	3	4.7
DC20-162	12	36.2	11	31.3	12	35.96	1	3.3
DC20-163					1	2.95	1	2.65
DCZ20-67					1	1.69		
DCZ20-68	14	37.0			5	16.26	4	13.64
DCZ20-69	10	27.1	11	23.5			6	18
DCZ20-70	10	25.1	9	12.2	1	1.57		
DCZ20-71	10	20.2	8	21.7	6	19.41		
Total	**101**	**242.4**	**89**	**200.4**	**46**	**130.22**	**39**	**108.41**

Prior to compositing the samples to be used for the column leach tests, sub-samples were removed from thirteen interval samples to form seven variability samples for bottle roll testing. These variability samples were selected from one hole (DC20-160, Table 13.2) so that a gold leachability trend could be derived for different depths within the mineral resources. Also, a sample of the Oxide Composite from BVM Phase 1 was included as a control sample. A summary of the variability samples selected is provided subsequently in Table 13.10.

Table 13.2
Variability Sample Selection from Drill Hole DC20-160

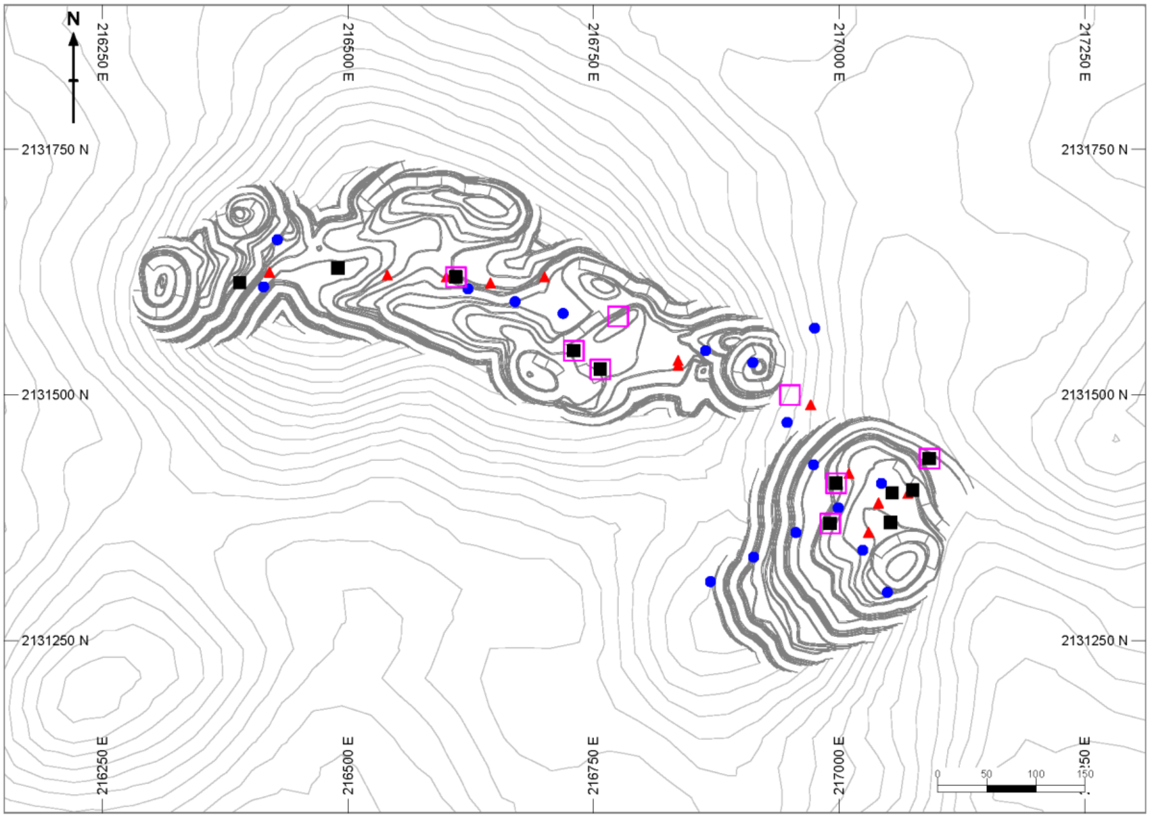
Sample ID	Litho	HID	SAMPLE ID	FROM	TO	BV Received Wt. (kg)	Composite weight, kg	Test charges, kg
O1	Oxide	DC20-160	2352534	1.0	2.0	3.13	6.46	2.0
		DC20-160	2352535	2.0	3.0	3.33		
O2	Oxide	DC20-160	2352543	10.0	11.0	3.70	7.20	2.0
		DC20-160	2352544	11.0	12.0	3.50		
O3	Oxide	DC20-160	2352552	19.0	20.0	2.60	5.00	2.0
		DC20-160	2352553	20.0	21.0	2.40		
O4	Oxide	DC20-160	2352562	29.0	30.0	2.50	5.50	2.0
		DC20-160	2352563	30.0	31.0	3.00		
T1	Transition	DC20-160	2352568	35.0	36.0	3.90	7.80	2.0
		DC20-160	2352569	36.0	37.5	3.90		
S1	Sulphide	DC20-160	2352571	38.0	39.0	3.90	7.70	2.0
		DC20-160	2352572	39.0	40.0	3.80		
S2	Sulphide	DC20-160	2352570	37.5	38	3.4	3.4	2.0

13.2.3 BVM Phase 3 Sample Selection

The metallurgical testing indicated that there was a high probability that poor percolation rates may occur as a result of the high level of fines in the top layer of oxidized material to be leached. A metallurgical program that would consider carrying out large scale column testing was planned and for this a set of six pits were identified to be excavated to enable sufficient material to be shipped to Bureau Veritas.

The location of these test pits was based on the overall knowledge of the deposit grades, and the results obtained from specific drill holes were not reviewed prior to excavating the test pits. The final grades obtained for the composite samples were 1.03 g/t Au for the Main zone and 1.17 g/t Au for the Connector zone. The sample locations for Phase 3 are presented in Figure 13.3.

Figure 13.3
Bureau Veritas Phase Three Large Column Testing Sample Locations



13.2.4 Phase IV Sample Selection

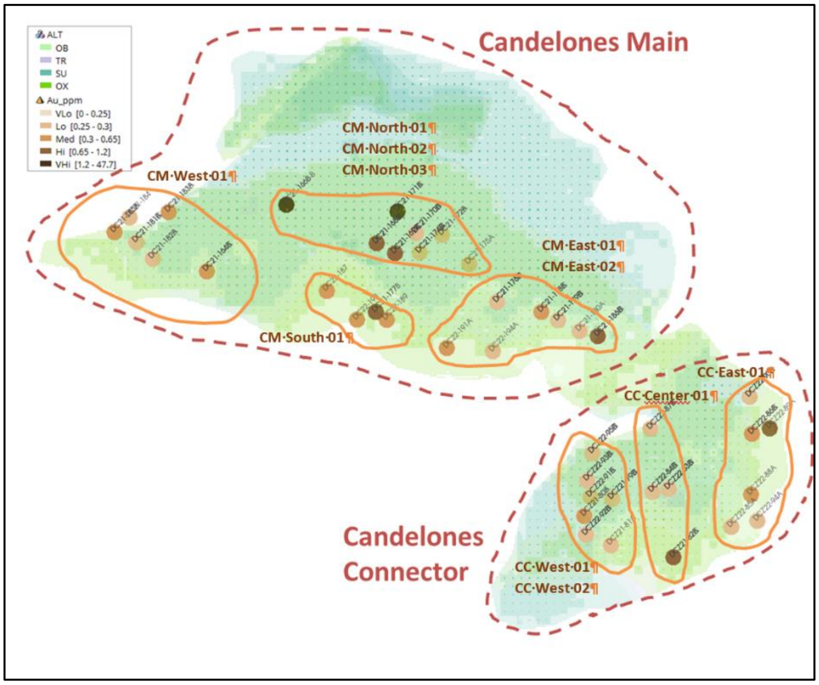
A new metallurgical test program is planned, in order to extend understanding of the metallurgical response of the deposit and also to provide additional data with respect to reagent consumptions, such as cyanide and cement for agglomeration purposes. Metallurgical samples for this new program were selected by the Project metallurgist and geologists in accordance with their resource models based on drill core assays. Samples were obtained from drill core and also by excavation methodologies for the larger bulk samples.

The drilling samples were selected from the 2021-2022 drilling campaign, using the following criteria:

- Composite selection was based on two mine areas: Candelones Main (CM) and Connector (CC).
- Within each mine area, a quadrant separation using cardinal points was used: N, S, E, W for CM and W, Centre, E for CC.
- Drill core samples were segregated into 10 m lengths, to represent different levels of weathering (for permeability testwork).
- Samples were also selected based on lithology, targeting for oxides (OX), transitional (TR) and Sulphide (SU) material, mainly based on the total sulphur content.

Figure 13.4 shows the distribution of samples within the Candelones Main and Connector areas, the colors on the solids represent the mineralization type and the colours in the samples represent the concentration of gold.

Figure 13.4
Location of Drill Samples Selected for Candelones FS



The samples selected and their main characteristics are described in Table 13.3.

Table 13.3
Description of Samples Selected for Candelones Phase IV Testing

Material Type	Pit	Number	Composite	Weight (kgs)	Avg. Grade (Au g/t)	Number samples (#)	Description
Oxide	Candelones Main	1	CM_West_01	99.0	0.41	36	Western quadrant
		2	CM_North_01	93.2	0.99	30	Northern quadrant 0-10m depth
		3	CM_North_02	115.1	1.01	39	Northern quadrant 11-20m depth
		4	CM_North_03	132.0	1.18	46	Northern quadrant 21m to TX interface
		5	CM_South_01	141.5	0.90	50	Southern quadrant
		6	CM_East_01	107.2	0.90	38	East quadrant 0 - 10m depth
		7	CM_East_02	97.2	1.20	34	East quadrant 11- TX interface
	Candelones Connector	1	CC_West_01	105.1	0.40	38	Western third 0-10m depth
		2	CC_West_02	87.1	0.39	31	Western third 11-TX interface
		3	CC_Center_01	116.7	0.60	40	Center third
		4	CC_East_01	128.0	0.72	44	Eastern third
Transition	Candelones Main	1	CM_TX	107.0	0.72	33	All quadrants - OX interface to SX interface; >0.30 g/t Au
	Candelones Connector	2	CC_TX	102.0	1.16	32	All quadrants - OX interface to SX interface; >0.45 g/t Au
Sulphide	Main and Connector	1	CMCC_SX	105.0	1.12	33	Below SX interface >0.50 g/t Au

Several run-of-mine (ROM) samples were collected from the Candelones Main and Connector areas, extracted from the top layer (5 m below ground level) using a Caterpillar 318 excavator. The procedure consisted of extracting material from different zones of the Candelones area. A total of 11 pits were excavated and the material was homogenized by manual shoveling, removing the coarser fragments larger than 10 cm. Each sample weighted approximately 72.7 kg (resulting in a total target mass of 800 kg).

The ROM samples were selected geographically and were not based on any specific drill hole assays. Rather, they were based on an interpretation of the expected grade from the resource model. Figure 13.5 illustrates the location of extraction from each of the 11 pits.

13.2.5 Gold Assay Distribution vs Composite Selection

One of the main criteria for the sample selection was to ensure that a full range of assays of samples were obtained, so such that variability during the leaching process could be evaluated to understand the metallurgical performance for those scenarios.

Figure 13.6 is a histogram presenting the gold distribution in the open pit block model resource, for the oxide mineralization.

The average gold grade for the oxide mineralization is 0.65 ppm and the median value 0.53 ppm. Overall composites selected averaged 0.79 ppm gold and covered a reasonable range of the gold distribution from the block model data.

Figure 13.5
Location of ROM Samples Selected for the Candelones FS

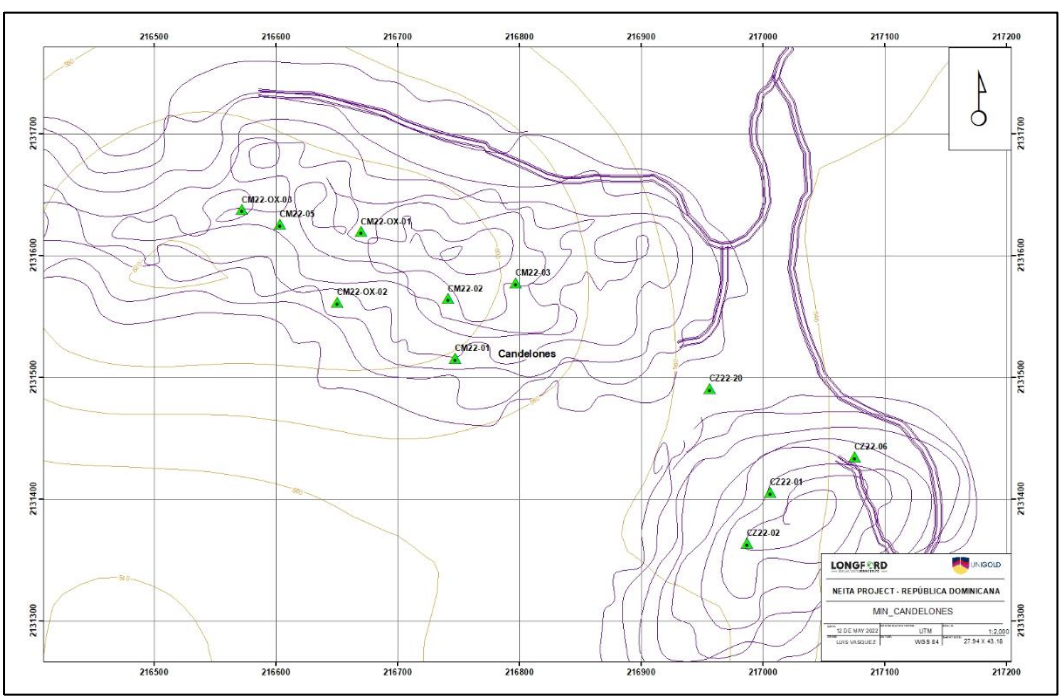
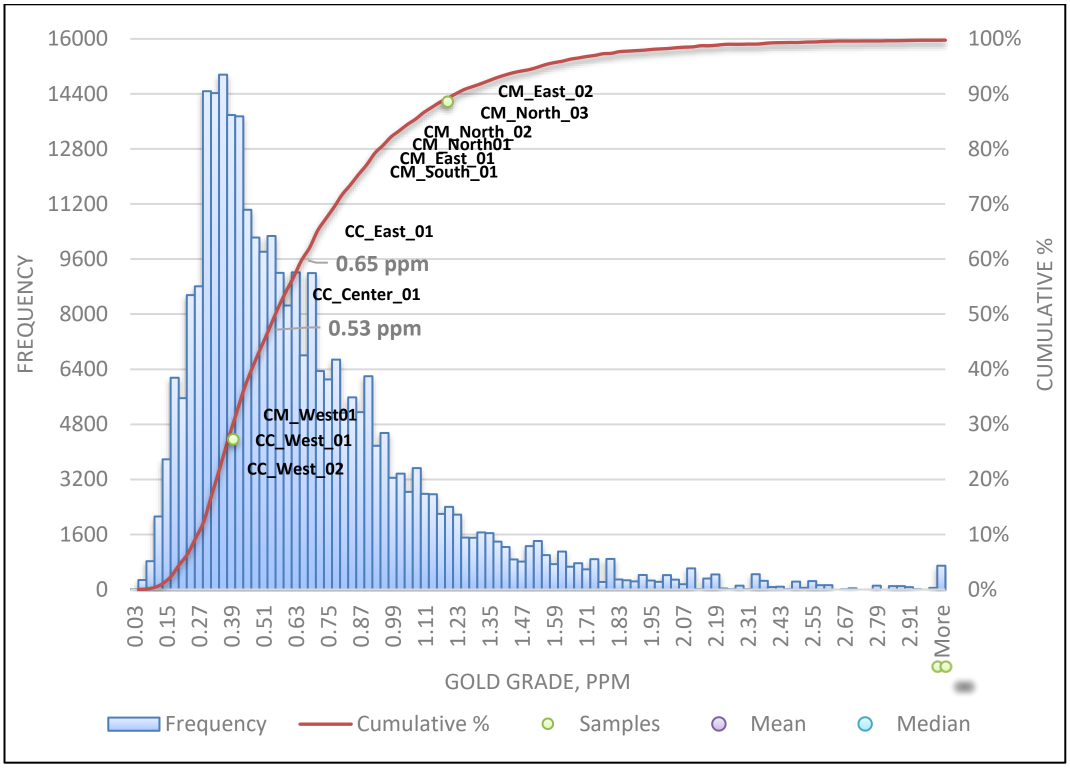


Figure 13.6
Gold Histogram from Block Model Information Sorted by Alt "OX In-Pit"



13.2.6 Comments on Sample Selection

The sample selection methodology of using drill core which had been assayed and also "grab" type excavation samples on a relatively wide spatial distribution is considered to be reasonable for the metallurgical programs. In general, the assays obtained for the metallurgical test programs were similar to those of the proposed mine plan and the resource block model.

13.3 Sample Analysis and Mineralogy

13.3.1 BVM Phase 1 Oxide Test Program Sample Analysis

The oxide composite selected and prepared by Unigold for the Phase 1 test program comprised 41 crushed samples with a total weight of 162 kg, and measured gold and silver grades of 0.60 g/t and 4.5 g/t, respectively. The gold and silver analyses per screened size fraction are summarized in Table 13.4.

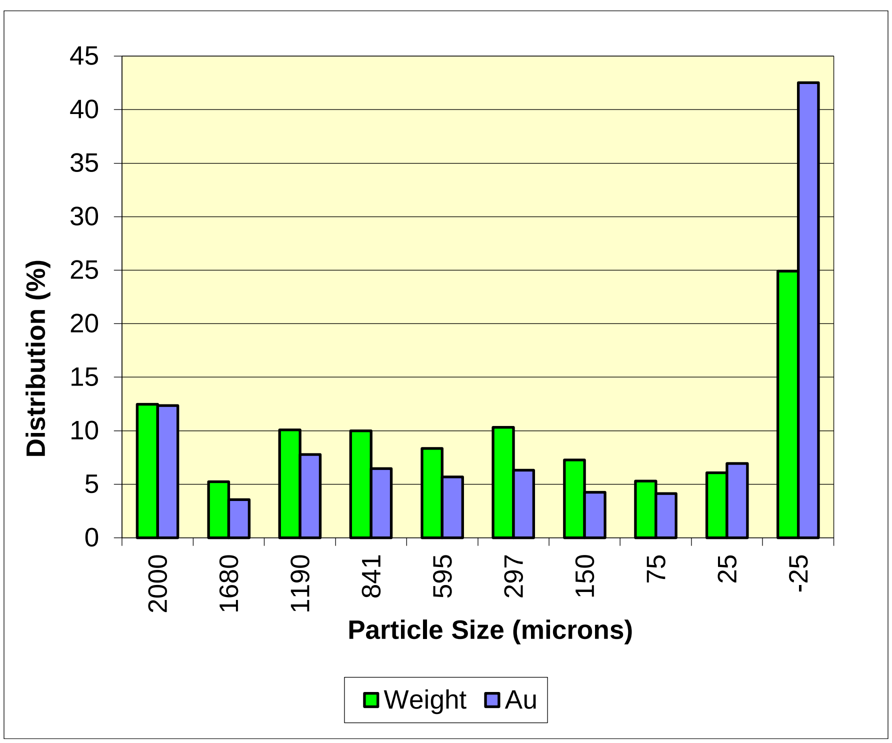
Approximately 50% of the gold and 30% of the silver was contained in the -75 µm fraction of the sample, which comprised about 30% of the total sample by weight

Table 13.4
Oxide Composite - Head Analyses per Size Fraction

Size Fraction		Weight			Assay		Distribution	
Tyler Mesh	Micrometres	(g)	Individual % Retained	Cumulative % Passing	Au (g/t)	Ag (g/t)	Au (%)	Ag (%)
9 mesh	2000	31.4	12.5	87.5	0.599	8.6	12.4	22.0
10 mesh	1680	13.2	5.2	82.3	0.410	5.7	3.6	6.2
14 mesh	1190	25.4	10.1	72.2	0.467	5.0	7.8	10.4
20 mesh	841	25.2	10.0	62.2	0.390	3.6	6.5	7.4
28 mesh	595	21.1	8.4	53.9	0.411	3.8	5.7	6.5
48 mesh	297	26.0	10.3	43.5	0.369	3.8	6.3	8.1
100 mesh	150	18.3	7.3	36.3	0.355	4.1	4.3	6.1
200 mesh	75	13.4	5.3	31.0	0.471	3.5	4.1	3.8
500 mesh	25	15.3	6.1	24.9	0.693	5.2	6.9	6.5
-500 mesh	-25	62.8	24.9	-	1.033	4.5	42.5	23.0
Calculated Total		**252.2**	**100.0**		**0.605**	**4.9**	**100.0**	**100.0**
Measured Total					0.598	4.5		

Figure 13.7 presents the gold and particle mass distribution as a function of particle size. Of importance to note is the relatively high gold deportment to the fine size fraction. The fine size fraction would be expected to cause some challenges with regard to solution percolation rates, since relatively high grade material needs to be processed early on in the mine life to enhance early cash flow.

Figure 13.7
Gold Distribution versus Particle Size



13.3.2 BVM Phase 2 Test Program Sample Analysis

The samples selected by Unigold for the phase 2 heap leach testing program at BVM are identified in Table 13.5 and a summary of the multi-element chemical analyses of the composite samples used for the four column leach tests is presented in Table 13.6.

Table 13.5
Phase 2 Heap Leach Test Program Feed Composite Samples

Drill Hole #	Oxide		Transition		Sulphide	
	No of samples	Weight (kg)	No of samples	Weight (kg)	No of samples	Weight (kg)
DC20-158	13	30.87	8	18.30	9	24.06
DC20-159	16	38.18	1.00	1.30	18	36.82
DC20-160	34	97.73	3	11.60	4	14.9
DC20-161	21	35.33	3	7.10	8	26.24
DC20-161B	24	37.20	5	14.08	3	4.7
DC20-162	31	89.90	4	13.56	6	22.1
DC20-163	33	83.71	1	2.95	8	23.02
DCZ20-67	20	44.60	1	1.69	11	33.95
DCZ20-68	14	36.99	5	16.26	20	59.87
DCZ20-69	21	50.60			11	29.7
DCZ20-70	19	37.29	1	1.57	3	7.5
DCZ20-71	18	41.90	6	19.41	7	22.1
Total	**264**	**624.3**	**38**	**107.82**	**108**	**304.96**

Table 13.6
Summary Analyses of the Phase 2 Heap Leach Test Program Feed Composite Samples

Element	Units	Oxide-1	Oxide-2	Transition-1	Sulphide-1
Au	g/t	1.13	0.74	1.12	1.28
Ag	ppm	7.20	4.70	6.00	3.00
Hg	ppm	0.53	0.22	0.36	0.18
C/ORG	%	0.04	<0.02	<0.02	<0.02
S (tot)	%	0.89	0.42	1.90	4.60
S/S-	%	0.07	<0.05	1.40	3.71
Cu	ppm	143.2	126.7	1304.4	1814.7
Pb	ppm	708.6	409.4	245.6	536.7
Zn	ppm	48.0	49.0	176.0	3563.0
Fe	%	4.2	3.2	3.7	3.9
As	ppm	219.0	87.0	94.0	69.0
Sb	ppm	13.2	5.3	4.8	3.1
Cr	ppm	265.0	186.0	190.0	77.0
Mg	%	0.2	0.3	0.4	1.5
Ba	ppm	10,627	8,030	1,484	549
Al	%	3.1	4.4	4.5	5.8
K	%	0.8	0.8	0.8	0.8
Zr	ppm	28.9	26.6	33.6	34.0

For the Phase 2 program the transition from oxide to sulphide zones can be seen to be well aligned with an increase in copper from an average of 130 ppm in the oxide material to 1,800 ppm in the sulphides. Whilst the level of copper in the oxides is low it will be important to adjust operating conditions to ensure that excessive copper does not report to the Doré. The gold and silver assays are well aligned with the expected mine plan and resource models.

The samples for the column leaching tests were agglomerated prior to loading the columns themselves. Figure 13.8 shows the agglomerated samples for each of the four columns.

The photos clearly illustrate the difference between the oxidised samples versus transition and sulphide samples. This will be an important visual guide for mining operations to easily distinguish between the oxidised and sulphide material.

Figure 13.8
Phase 2 Column Feed Material after Agglomeration

13.3.3 BVM Phase 3 Oxide Test Program Sample Analysis

Two run-of-mine oxide samples representing the Oxide mineralization of the Candelones deposit were received at BV Minerals Metallurgical Division, Vancouver, on the 5th of May, 2021. The two bulk samples were excavated from a number of pits by Unigold, using an excavator, and were bagged by hand for transportation and shipping to Canada. The two samples were identified as CM-18 RoM Composite (Figure 13.9) which comprised 1,049 dry kg of material with 9.4% moisture content and CZ-18 RoM Composite which comprised 1,079 dry kg of material with 10.4% moisture content. The natural top size of the two composite samples was about 125 mm (5 inches).

Figure 13.9
ROM Composite CM-18 Sample for Column Testing

Composite CM-18 was extracted from the Candelones Main deposit and CZ-18 from the Candelones Connector deposit. The chemical analyses and whole rock analyses are included in Table 13.7 and Table 13.8.

Table 13.7
ROM Composite Sample Assays

Analyte	Unit	Composite		Analyte	Unit	Composite	
		CM-18	CZ-18			CM-18	CZ-18
Au	**g/t**	**1.03**	**1.17**	P	%	0.02	0.03
Ag	ppm	2	3	La	ppm	5	5
Hg	ppm	0.06	0.15	Cr	ppm	150	162
C/TOT	%	0.28	0.34	Mg	%	0.22	0.25
C/ORG	%	0.26	0.33	Ba	ppm	8332	9848
S (tot)	%	0.24	0.44	Ti	%	0.159	0.126
S/S-	%	<0.05	<0.05	Al	%	3.77	3.29
Mo	ppm	9.4	18.6	Na	%	0.02	0.02

Analyte	Unit	Composite		Analyte	Unit	Composite	
Cu	ppm	126.2	188.2	K	%	0.53	0.56
Pb	ppm	287.5	902.6	W	ppm	1.7	1.3
Zn	ppm	77	42	Zr	ppm	43.8	32.4
Ag	ppm	1.6	2.8	Ce	ppm	8	9
Ni	ppm	4.7	2.5	Sn	ppm	<0.5	<0.5
Co	ppm	<1	<1	Y	ppm	2.8	2
Mn	ppm	20	17	Nb	ppm	1.7	1.4
Fe	%	4.85	3.85	Ta	ppm	<0.5	<0.5
As	ppm	122	241	Be	ppm	<5	<5
U	ppm	0.6	1.1	Sc	ppm	11	12
Th	ppm	1	0.7	Li	ppm	2.5	4
Sr	ppm	174	378	S	%	0.25	0.33
Cd	ppm	<0.5	<0.5	Rb	ppm	10.7	10.9
Sb	ppm	11.7	25.3	Hf	ppm	1.1	0.8
Bi	ppm	0.8	0.6	Se	ppm	22	17
V	ppm	93	92	Ca	%	0.03	0.03

Table 13.8
ROM Composite Sample Whole Rock Analyses

Analyte	Unit	Sample ID	
		CM-18	CZ-18
SiO_2	%	78.94	80.04
Al_2O_3	%	6.81	6.01
Fe_2O_3	%	6.74	5.37
MgO	%	0.35	0.41
CaO	%	0.04	0.04
Na_2O	%	0.02	0.02
K_2O	%	0.6	0.65
TiO_2	%	0.26	0.21
P_2O_5	%	0.06	0.09
MnO	%	<0.01	<0.01
Cr_2O_3	%	0.026	0.027
BaO	%	1.09	1.76
LOI	%	4.9	5.1
Sum	%	99.83	99.8

The gold assays for these samples were slightly higher than the resource average values but they represent bulk grab samples that would be expected to form part of the feed to the heap leach.

13.4 METALLURGICAL TEST PROGRAMS

13.4.1 BVM Phase 1 Oxide Test Program (2020)

BVM was contracted in early 2020 to undertake a program of preliminary metallurgical testwork, using samples that represent the oxide and sulphide mineralization at the Candelones Project.

One composite sample was collected from shallow drill holes from the Candelones Main and Connector oxide mineralization. The scope of the oxide testwork program comprised chemical and physical characterization, bottle roll leach tests and multiple grind sizes and a column leach test to investigate potential amenability to heap leaching.

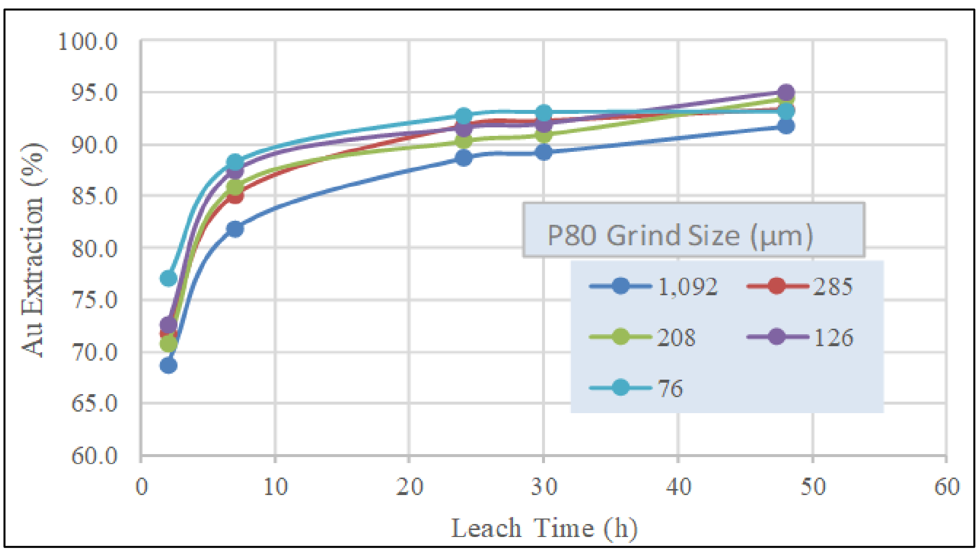
13.4.1.1 Phase 1 – Laboratory Bottle Roll Leach Tests

A series of standard bottle roll leaching tests was undertaken by BVM using the Oxide Composite and a variable grind size. A summary of the results is presented in Table 13.9 and Figure 13.10.

Table 13.9
Oxide Composite – Summary of the Results for the Bottle Roll Cyanide Leach Tests

Test No.	P_{80} (µm)	Gold Extraction (%) Leach Time (h)					Consumption (kg/t)	
		2	7	24	30	48	NaCN	Lime
C1	1092	68.7	81.9	88.6	89.2	91.7	1.40	3.82
C3	285	71.8	85.1	91.8	92.2	93.4	1.58	3.74
C4	208	70.7	85.9	90.3	90.9	94.4	1.68	3.74
C5	126	72.6	87.4	91.6	92.0	95.0	1.55	3.74
C2	76	77.0	88.2	92.8	93.1	93.1	1.37	3.93

Figure 13.10
Oxide Composite – Graphical Bottle Roll Cyanide Leach Test Results

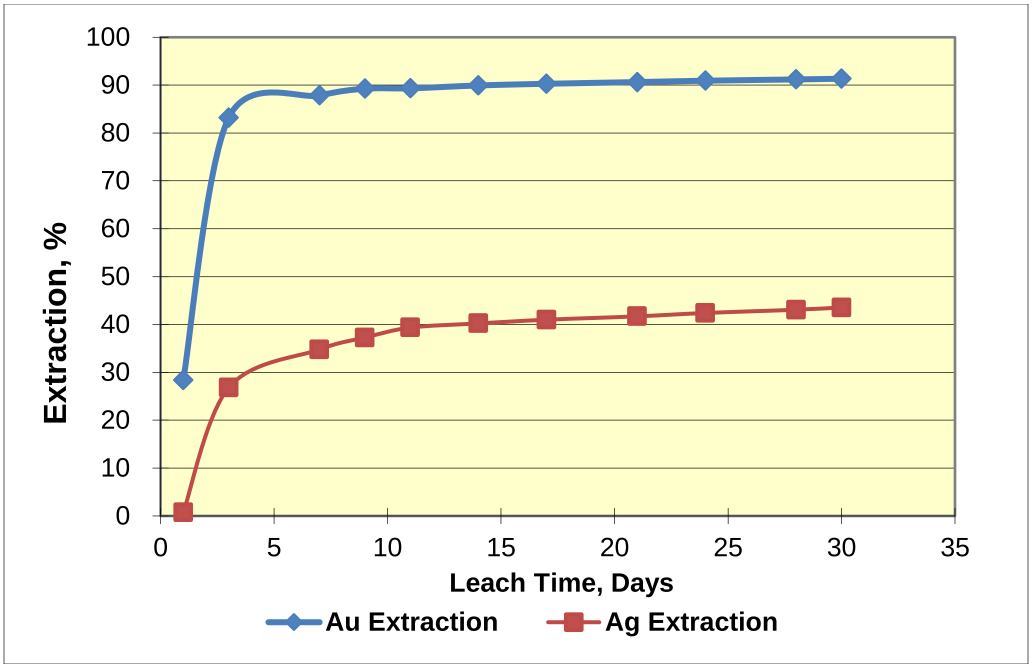


The bottle roll leach tests show that the oxide mineralization is amenable to standard agitation cyanide leach technology, even at relatively coarse grind sizes. These results suggest that there is limited benefit with regard to gold leach recovery with grinding finer than 285 microns.

13.4.1.2 Phase 1 – Laboratory Column Leach Test

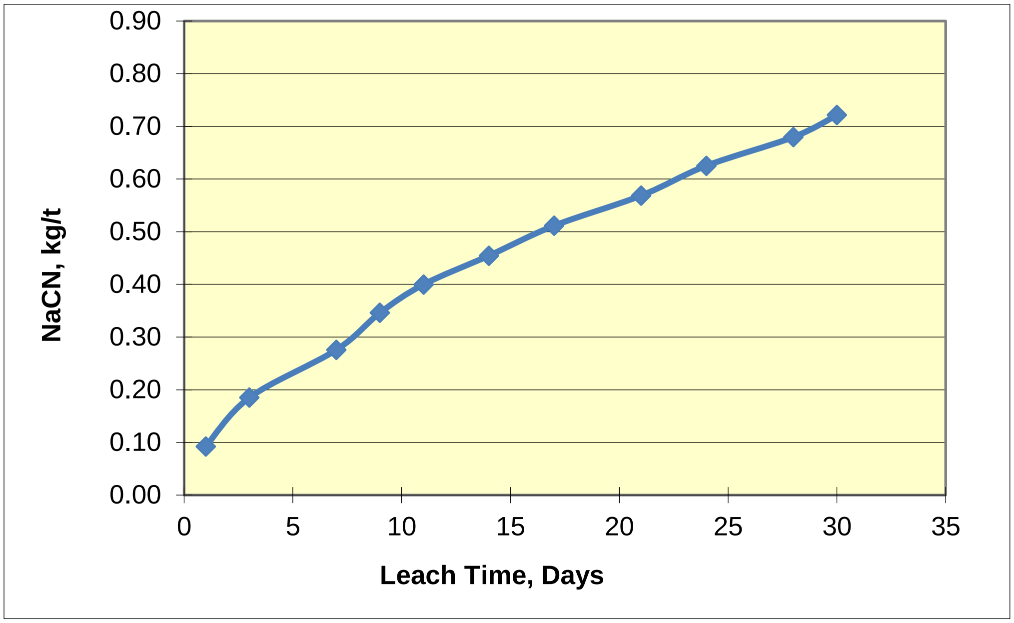
A 29 kg sample of the oxide composite was agglomerated with 4 kg/t of lime and 5 kg/t of cement and loaded into a 150 mm diameter by 1,520 mm high column. The agglomerated sample was leached for 30 days while the leach solution was maintained at a NaCN concentration of 0.5 g/L. No additional lime was required during the test. The gold and silver extraction kinetics are presented in Figure 13.11.

Figure 13.11
Oxide Composite – Column Cyanide Leach Kinetics



It can be seen from Figure 13.11 that effective leaching was completed within 20 days and that excellent gold dissolution of the order of 90% would be expected to be achieved. In addition reasonable silver dissolution of the order of 40% could be expected. The cyanide consumption kinetics are presented in Figure 13.12.

Figure 13.12
Oxide Composite – Column Cyanide Consumption Rate



Cyanide consumption for this sample would be considered reasonable for a weathered oxide ore, but no significant rate of change of consumption over the 30 days of leaching can be observed. This implies that extended leach cycles would actually be detrimental to the Project economics as the gold and silver leaching had already effectively finished by this time. Further analysis with regards heap leach pad design and the potential use of interstage liners should be evaluated during the next stage of the Project.

13.5 BVM Phase 2 Oxide Test Program (2021)

Near the end of 2020, drill core from 12 freshly drilled holes from the oxide mineral resource pit shell was shipped to BVM in Vancouver to be used for heap leach metallurgical testing. The 401 individual samples were grouped into three different types of mineralization based on the drill logs (Table 13.10). These three styles were oxide, transition and sulphide, with the oxide mineralization near the surface, the sulphide mineralization at the bottom of the pit shell and transition in-between the two. Four composites from the samples were prepared for preliminary comparative column leach tests from the samples shipped to BVM. These composites comprised two oxide composites, one transition composite and one sulphide composite.

Table 13.10
Variability Samples

Sample ID	Lithology	Depth (m)		Head Assay (g/t)	
		From	To	Au	Ag
OXIDE PHASE 1	Oxide	-	-	0.67	5
O1	Oxide	1.0	3.0	1.25	1
O2	Oxide	10.0	12.0	1.47	2

Sample ID	Lithology	Depth (m)		Head Assay (g/t)	
		From	To	Au	Ag
O3	Oxide	19.0	21.0	0.25	1
O4	Oxide	29.0	31.0	1.31	1
T1	Transition	35.0	37.5	0.71	3
S1	Sulphide	38.0	40.0	0.50	1
S2	Sulphide	37.5	38.0	0.96	3

13.5.1 Crusher Work Index and Abrasion Index

A Bond low impact crusher test was conducted on a total of 20 specimens from the Oxide Master Composite and Transition-1 composite. An average Bond crusher work index of 5.9 kWh/tonne for the Oxide Master Composite and a higher Bond crusher work index of 9.0 kWh/tonne for the Transition-1 sample were obtained, which would be characterized as relatively soft with respect to crushing energy requirements.

Abrasion indices on the Oxide Master composite and the Transition-1 composite were calculated at 0.1258 and 0.1334, respectively, indicating soft abrasion of the Oxide and Transition mineralization.

13.5.2 Baseline Bottle Roll Leach Test

Bottle roll testing was carried out on all four composites, with the samples being ground to 80% passing 75 µm and the tests being done at 40% solids by mass with 1,000 ppm NaCN and a pulp pH of 10.5-11.0, for a total of 48 hours.

The baseline bottle roll leach test results are summarized in Table 13.11.

Table 13.11
Baseline Bottle Roll Cyanide Leach Tests

Test No.	Sample	P_{80} (µm)	Calculated Head		48-h Leach Extraction (%)		Consumption (kg/t)	
			Au-g/t	Ag-g/t	Au	Ag	NaCN	Lime
C15	Oxide-1 Composite	80	1.421	6	96.4	92.1	1.32	3.77
C16	Oxide-2 Composite	86	0.839	5	97.4	61.6	1.34	5.45
C17	Transition-1 Composite	87	1.189	7	84.6	71.2	3.44	4.74
C18	Sulphide-1 Composite	72	1.241	2	59.0	77.2	3.84	4.44

The oxide sample gold dissolution results were as expected, considering the fine grind and previous test results. Silver dissolution for the one oxide sample was very high. As expected, the gold dissolution for the transition and sulphide samples dropped off as compared to the oxides.

Cyanide consumptions were higher for the transition and sulphide composites as expected. Lime consumptions were similar for all ore types.

13.5.3 Variability Bottle Roll Leach Tests

The variability samples and the Oxide-Master composite sample were subjected to bottle roll leach tests at two sizes, - 2 mm and P_{80} 75 microns. These tests were performed at 40 wt.% solids in 1.0 g/L NaCN at pH 10.0-10.5, for 48 hours. A summary of the variability leach test results is presented in Table 13.12. The gold dissolution for the variability samples followed a similar trend as that for the main composites. The finer ground samples did achieve faster kinetics and slightly higher overall dissolutions on average. Reagent consumptions were similar to the zone composites.

The impact of increased sulphur content on gold dissolution for the transition and sulphide samples, as a function of sulphur, can be seen in the Figure 13.13 and Figure 13.14.

Figure 13.13 presents the gold extraction versus the sulphide sulphur content of the sample and the data can also be viewed as a function of depth of samples with a clear drop in gold dissolution occurring at approximately 30 m depth, as the transition zone is reached.

Figure 13.14 indicates how the gold extraction and sulphide content trends with the average depth of the sample.

Table 13.12
Variability Sample Bottle Roll Leach Test Results

Sample.	Size P_{80}	Assayed Head			Calculated Head		48-h Leach Extraction (%)		Consumption (kg/t)	
		Au-g/t	Ag-g/t	S^{2-} %	Au-g/t	Ag-g/t	Au	Ag	NaCN	Lime
Oxide Phase 1	-2 mm	0.67	5	0.37	0.70	5	91.9	39.9	1.65	3.27
	75 µm	0.67	5	0.37	0.71	5	94.1	61.9	1.38	4.29
O1	-2 mm	1.25	1	<0.05	1.39	1	98.2	24.8	1.22	2.98
	75 µm	1.25	1	<0.05	1.36	1	98.8	25.2	1.81	3.78
O2	-2 mm	1.47	2	<0.05	1.55	2	96.8	58.2	1.08	2.01
	75 µm	1.47	2	<0.05	1.55	3	97.9	60.8	1.05	2.58
O3	-2 mm	0.25	1	<0.05	0.26	1	98.1	13.7	2.10	1.49
	75 µm	0.25	1	<0.05	0.27	1	98.2	23.9	1.64	2.01
O4	-2 mm	1.31	1	<0.05	1.44	1	97.7	24.0	1.90	2.30
	75 µm	1.31	1	<0.05	1.42	1	98.9	38.7	1.78	3.07
T1	-2 mm	0.71	3	1.70	0.70	3	67.7	40.8	1.62	1.86
	75 µm	0.71	3	1.70	0.72	3	74.7	62.9	1.66	2.29
S1	-2 mm	0.50	2	2.36	0.43	1	49.4	31.3	2.49	2.74
	75 µm	0.50	2	2.36	0.44	1	55.7	31.5	2.77	3.33
S2	-2 mm	0.98	3	2.01	0.94	2	61.7	44.7	3.99	2.69
	75 µm	0.98	3	2.01	0.95	2	73.3	72.2	3.88	3.13

Figure 13.13
Variability Bottle Roll Test Results – Gold Extraction vs Sulphide Sulphur

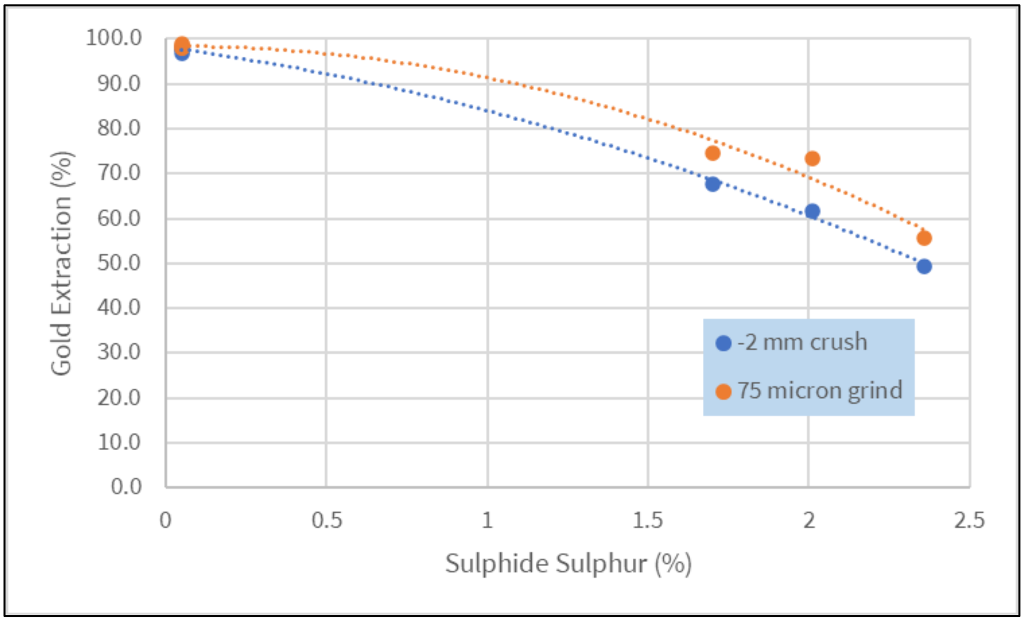
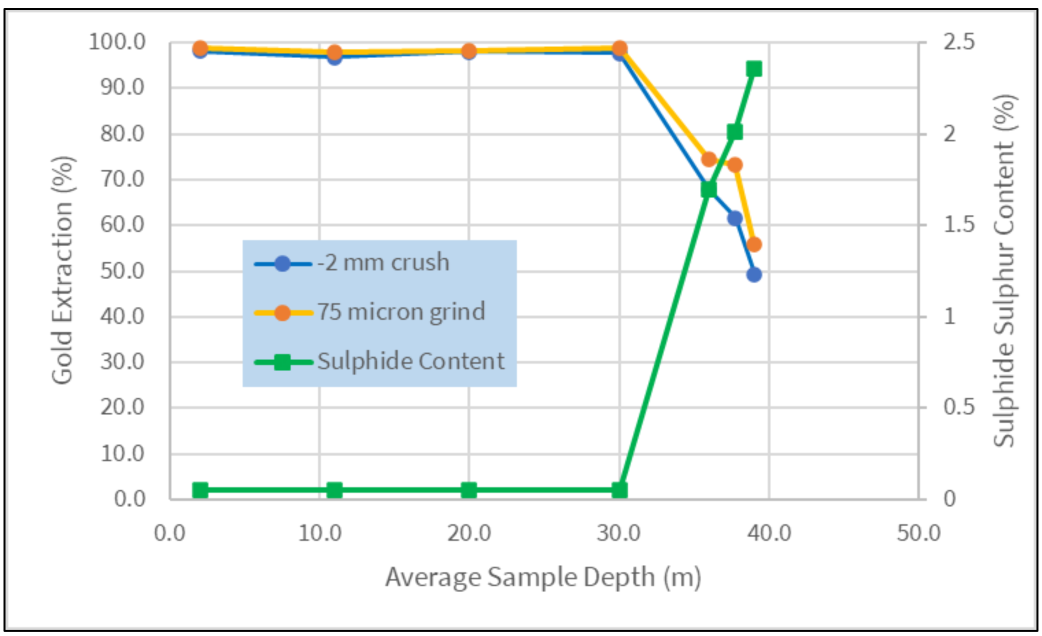


Figure 13.14
Variability Bottle Roll Test Results – Variability with Depth



The gold dissolution for the variability samples followed a similar trend as that for the main composites. The finer ground samples did achieve faster kinetics and slightly higher overall dissolutions, on average. Reagent consumptions were similar to the zone composites.

The variability test results show that the gold extraction of the oxide mineralization is typically over 97% when ground to 80% passing 75 µm but as the material becomes less oxidized at depth (below 30 m for drill hole DC20-160) and the sulphide sulphur content increases, the gold extraction drops significantly.

13.5.4 Column Leach Tests

Four column leach tests were prepared by BVM. Two tests comprised agglomerated oxide composite samples, one crushed to minus ¾ inch or 19 mm (Column 1) and one crushed to minus ½ inch or 12.5 mm (Column 2). The other two columns contained composite samples of minus 12.5 mm agglomerated transition (Column 3) and sulphide mineralization (Column 4).

The columns used were all 150 mm (6 inch) in diameter by 3.0 m high, and each contained approximately 70 kg of mineralization. Prior to loading the column, the crushed material was agglomerated using a cement mixer at ~5% moisture, with 5 kg/t of cement and 4 kg/t of hydrated lime, which acted as binders to avoid plugging of the column flow by fines, and pH modifiers.

The column test set up at BVM is presented in Figure 13.15

Once loaded with solids, a cyanide-free lime solution of pH 11.0 was circulated through the column until the pH stabilized above 10.5. Then a 0.5 g/L NaCN leach solution was added at 6 mL/min and maintained at this level during the leach test. The pregnant leach solution (PLS) recovered from the bottom of the column was fed through a small carbon column filled with approximately 30 g of activated carbon to absorb the leached precious metals. The stripped barren leach solution (BLS), after adjustment of pH and NaCN concentration, was recycled to the top of the column. The gold and silver loaded carbon and strip solution samples were collected at regular intervals during the test period and all test products were assayed for gold and silver for metallurgical balance.

Figure 13.15
BVM Phase 2 Column Leach Test Equipment

The two oxide columns were leached for 44 days, whilst the transition and sulphide columns were leached for a total of 79 days. The gold extraction results for all four column tests are presented in Figure 13.16 and Figure 13.17. The column test results are based on final residue sample analyses.

These tests show that, even at a crush size of 17 mm, the oxide mineralization leached rapidly with 90% gold extraction achieved in 30 days.

The final transition sample preliminary results showed about 66% gold extraction in 79 leaching days and the sulphide sample showed around 34% gold extraction for the same period.

Figure 13.16
Kinetic Gold Extraction Results for the Four Column Leach Tests

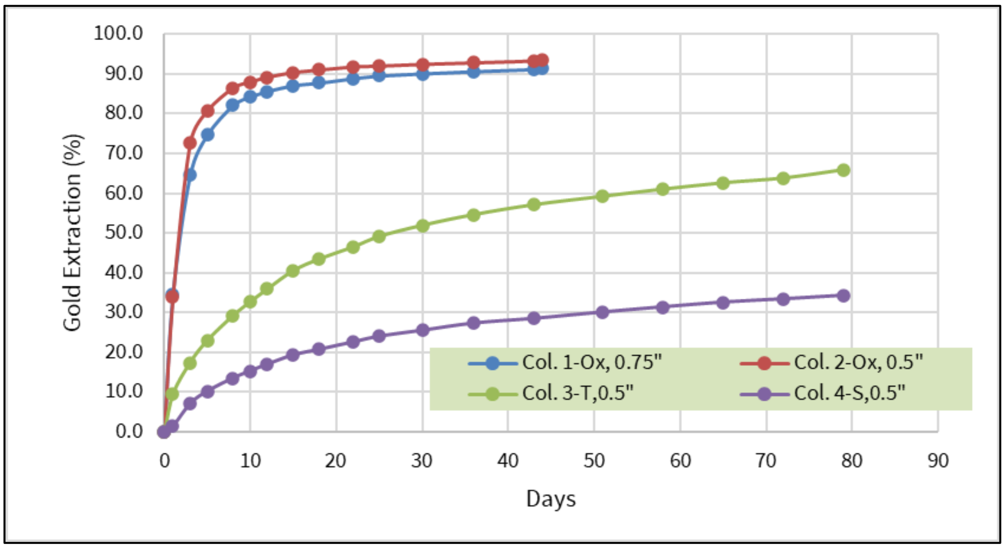
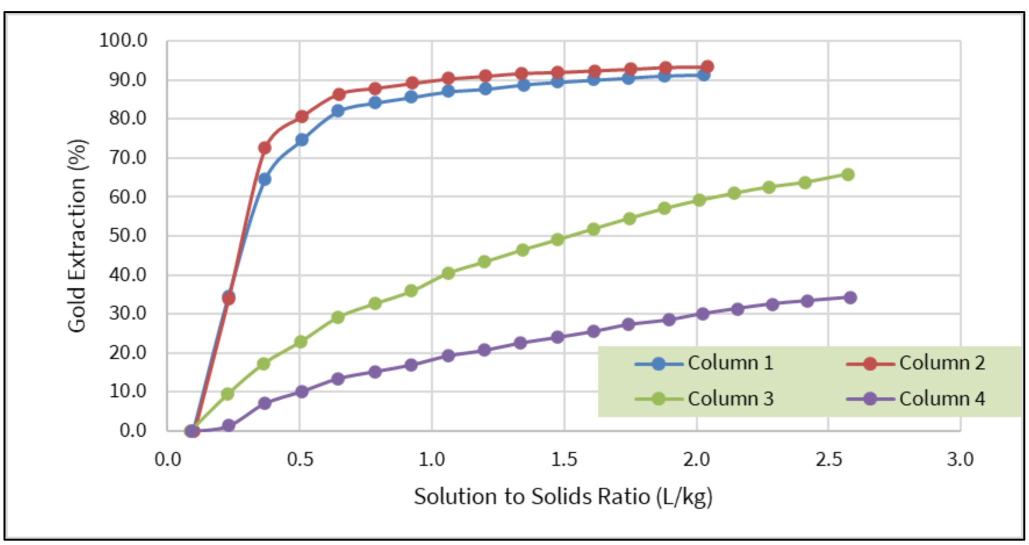


Figure 13.17
Gold Extraction vs Solution Flux for the Four Column Leach Tests



The corresponding silver extractions for the four columns were 31%, 44%, 28% and 6%, respectively.

The final back calculated head grade from the product streams versus the original head assays correlated well, indicating that good a metallurgical balance for all the four tests.

13.6 BVM Phase 3 Oxide Test Program (2021-22) Large Scale Columns

The results of the Phase 2 testing program at Bureau Veritas indicated that potential issues with regard to permeability of the heap leach could be a problem if agglomeration was not carried out. Thus, a further phase of testing using larger quantities of samples and large diameter columns was recommended and completed. This testing included agglomeration to evaluate the impact on percolation rates and potential for pooling.

Neutralization tests were conducted in rolling bottles for 8 hours using 2 kg samples of the two composites. During the tests, slurry pH was recorded at each lime addition point, and accumulated lime additions at three target pH's of 9.5, 9.8 and 10.0 were calculated. A target pH of 9.8 was selected for column leach tests which correlated with a lime addition of 4.13 kg/t for CM-18 and 4.32 kg/t for CZ-18.

13.6.1 ROM Column Test Procedures

The columns used in this test program had an inside diameter of 530 mm (21 inches) and a fill capacity to a height of 4.3 m (14 feet). Hydrated lime was added at the rate of 4.2-4.3 kg/t to each test sample as pH modifier, to achieve the desired target pH of 9.8 during column leach.

After mixing with lime, the ROM oxide material was loaded into the two columns. A cyanide-free lime solution of pH ~11 was circulated through the columns for several days until the pH stabilized above 9.8, and then cyanide solution containing 0.5 g/L NaCN for CM-18 and 0.3 g/L NaCN for CZ-18 was added at a flowrate of 10 L/h/m^2 and maintained at these respective levels during the leach tests.

The pregnant leach solution (PLS) discharging at the bottom of the column was fed through a small carbon column filled with about 350 g of activated carbon and stripped barren leach solution (BLS), after pH and NaCN strength adjustment was recycled as feed to the top of the columns. The gold and silver loaded carbon and strip solution samples were collected at regular intervals during the test period and assayed for gold and silver.

Test Column 5 (CM-18) was terminated after 90 days, while Test Column 6 (CZ-18) rested for a period of 3 weeks, and then continued for additional 16 days (total 106 leach days), prior to termination. At the end of tests, the leach residues were first washed with pH 10.5 solution, followed by two tap water washes. The wash solutions were collected separately and assayed for gold and silver.

Following the wash procedure, the columns were taken down and the residues were emptied onto a plastic sheet, air dried and then separated into three sections (Top, Mid and Bottom). A sub-sample from each section was assayed for gold and silver in duplicate.

13.6.2 ROM Column Test Results

The final gold extraction for Column 5 (CM-18), after 90 days of leaching, draindown and washing was 94.3%, which included 4 0% recovery following a washing stage.

The final gold extraction for Column 6 (CZ-18) after 106 days of leaching, drain-down and washing, was 90.8%, which included 3 0% recovery following a washing stage. This column test included a 21-day rest period following the first 90 days of continuous leaching. The washing ratios (m^3 wash solution per t of sample) used for the tests were 0.26 and 0.21 m^3/t for CM-18 and CZ-18, respectively.

A summary of the final results is presented in Table 13.13 and the gold extractions are shown in Figure 13.18 and

Figure 13.19. These two figures present the leach kinetics, in terms of time (leach days) and solution flux (ratio of leach solution to feed sample mass).

Table 13.13
Final ROM Column Leach Test Results

Test – Sample	Measured Head		Calculated Head		Final Extraction		Residue Grade		Consumption (kg/t)	
	Au-g/t	Ag-g/t	Au-g/t	Ag-g/t	Au %	Ag %	Au-g/t	Ag-g/t	NaCN	Lime
Column 5 CM-18	1.03	2	1.22	2	94.3	14.8	0.070	2	0.80	4.36
Column 6 CZ-18	1.17	3	1.18	2	90.8	14.7	0.109	2	0.56	4.5

Figure 13.18
Kinetic Gold Extraction Results for the Two ROM Column Leach Tests

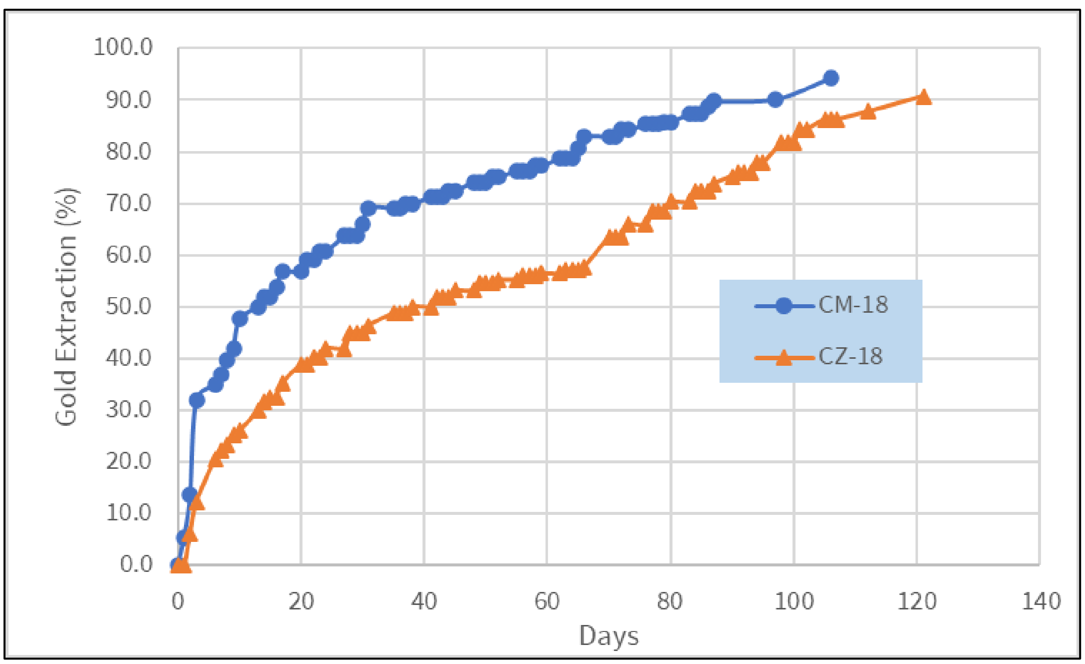


Figure 13.19
Gold Extraction vs Solution Flux for the Two ROM Column Leach Tests

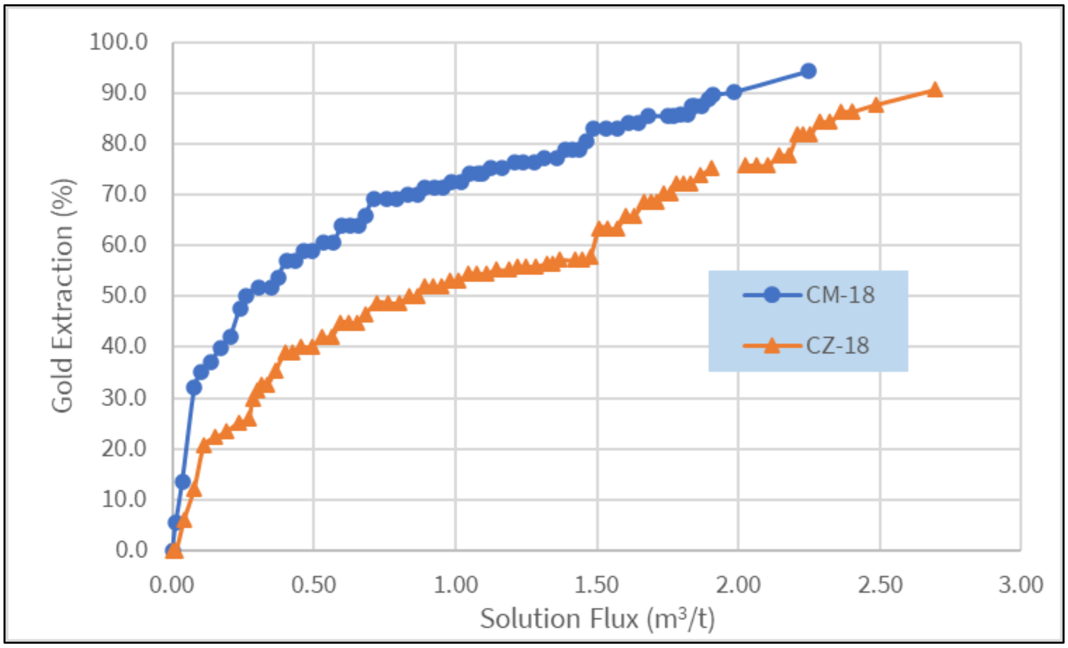


Table 13.14 and Figure 13.20 presents the residue size distribution and gold content per size range, for the two ROM columns. The bars in Figure 13.20 represent the gold distribution, while the lines are the weight distribution for the corresponding size fractions.

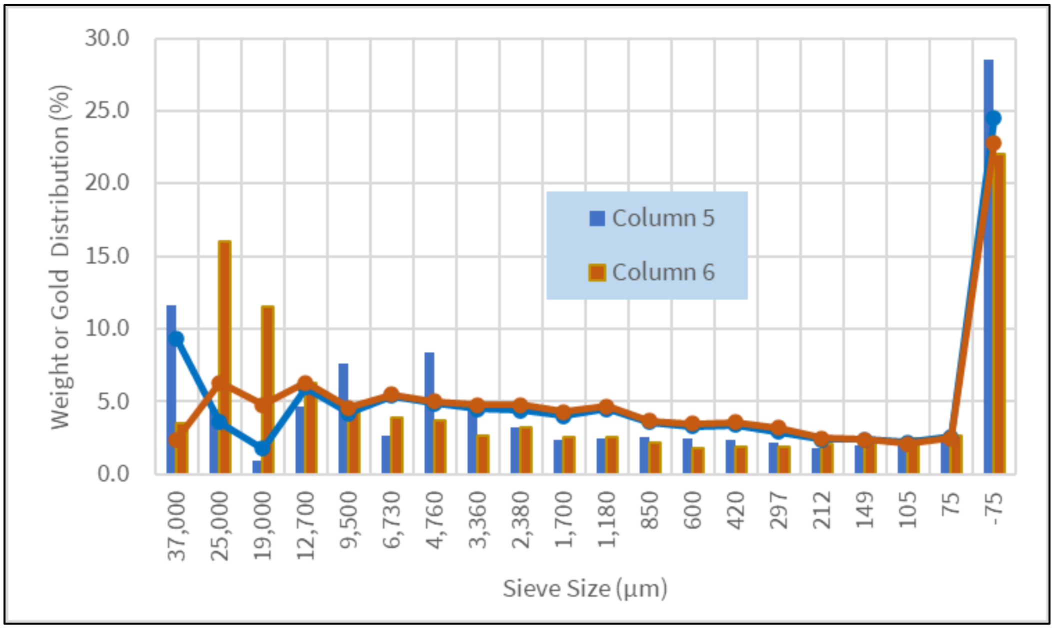
The majority of the gold losses for each column test are in the fines (-75 µm), while the highest gold residue grade tended to be in the coarser size fractions.

Table 13.14
Final ROM Column Leach Residue Size and Gold Distribution

Sieve Size		Column 5, CM-18			Column 6, CZ-18		
Inches	Microns	Fraction Wt %	Residue Au (g/t)	% Au Distribution	Fraction Wt %	Residue Au (g/t)	% Au Distribution
1 1/2"	37,000	9.30	0.09	11.60	2.40	0.16	3.50
1"	25,000	3.60	0.09	4.50	6.30	0.28	16.00
3/4"	19,000	1.80	0.04	0.90	4.80	0.26	11.50
1/2"	12,700	6.00	0.06	4.70	6.30	0.11	6.30
3/8"	9,500	4.20	0.13	7.60	4.60	0.10	4.30
3	6,730	5.40	0.04	2.70	5.50	0.08	3.90
4	4,760	4.90	0.12	8.40	5.00	0.08	3.70
6	3,360	4.50	0.07	4.40	4.80	0.06	2.70
8	2,380	4.40	0.05	3.20	4.80	0.07	3.20
10	1,700	4.00	0.04	2.40	4.30	0.07	2.60
14	1,180	4.50	0.04	2.50	4.70	0.06	2.60
20	850	3.60	0.05	2.60	3.70	0.07	2.20
28	600	3.30	0.05	2.50	3.50	0.06	1.80
35	420	3.40	0.05	2.40	3.60	0.06	1.90
48	297	2.90	0.05	2.20	3.20	0.06	1.90

65	212	2.40	0.05	1.80	2.50	0.09	2.10
100	149	2.40	0.06	2.00	2.40	0.11	2.50
150	105	2.20	0.07	2.30	2.10	0.13	2.50
200	75	2.60	0.07	2.80	2.50	0.12	2.70
-200	-75	24.50	0.08	28.50	22.80	0.11	22.00
Calculated total		100.00	0.07	100.00	100.00	0.11	100.00
Measured assay			0.06			0.09	

Figure 13.20
Weight and Gold Distribution per Size Fraction in Residue



The characteristics of the column test material before, during and after leaching, are summarized in Table 13.15. These measurements show a relatively high solution capture of the mineralization tested. The feed moisture content of the sample was about 10% by weight, which increased to around 27% during leaching and finally to approximately 20% after the drain-down of solution and wash water.

Table 13.15
Final ROM Column Leach Test Results

Test - Sample	Wt% Moisture			Bed Height (m)		Bulk Density (t/m^3)	
	Head	Saturated	Final	Initial	Final	Initial	Final
Column 5 CM-18	10%	27%	21%	3.72	3.00	1.29	1.60
Column 6 CZ-18	11%	26%	19%	3.84	3.02	1.30	1.63

Slumping of the leach bed during the test (volume reduction of about 20%), as shown in Table 13.15, is a concern, and will need to be reviewed by the relevant geo-technical design consultants responsible for heap leach pad placement and operations. Agglomeration is viewed as definitely being required for the highly weathered material and further investigation into this issue is recommended.

13.7 CONCLUSIONS AND RECOMMENDATIONS

13.7.1 Sample Selection and Suitability for use in Metallurgical Test Programs

The sample selection methodology to obtain samples for the three Bureau Veritas metallurgical programs was seen to be robust with suitable attention placed on ensuring that a bias towards high grade or localised samples did not occur. The grab samples were selected across a broad range of physical locations in addition to those obtained from the drill hole samples. Variability samples were subsequently tested across a range of assays and in all instances the gold dissolution was typically high for the oxide samples. The expected gold dissolution across the range of grade expected to be processed is considered to be relatively insensitive to the feed grade and as such sample selection considered to have been suitable for use in the study and determination of gold dissolutions.

13.7.2 Metallurgical Performance

A significant portion of the testing involved bottle roll tests to determine ranges of gold dissolutions and reagent consumptions. Samples were either ground to suit conventional agitated leaching or screened to relatively coarse size fractions. In all cases dissolutions would be considered to be excellent with rapid kinetics and reasonable cyanide consumptions. These tests would be suitable for processing using grinding and agitated leaching as the process route. However, the capital expenditure requirements for such processing would be relatively high for the resource size and life of mine.

Variability 48 h standard bottle roll cyanidation tests show that the gold extraction of the oxide mineralization is typically over 95% but as the material becomes less oxidized at depth (below 30 m for drill hole tested) and the sulphide sulphur content increases, the gold extraction drops significantly, to around 50% to 60% at a depth of 40 m where the sample contained about 2.4% sulphide sulphur.

In addition to bottle roll tests column leaching tests were completed on crushed and agglomerated samples to develop test data that could subsequently be used for evaluation considering the use of heap leaching as the main processing route for gold dissolution.

Table 13.16 summarizes the key finding that gold dissolutions were typically excellent and above 90% with relatively low cyanide consumptions. The key issue identified with the column testing is the relatively high fines content of the weathered material at approximately 20-30% less than 15 mm which will require agglomeration to avoid problems with percolation rates and heap leach pad stability.

There are no significant quantities of deleterious elements or compounds associated with the oxide mineralization.

Table 13.16
Summary Oxide Column Leach Test Results

Test	units	Phase 1	Phase 2	Phase 2	Phase 3	Phase 3
		Oxide	Oxide	Oxide	CM-18	CZ-18
Crush size		87%< 2.0 mm	< ¾”	< ½”	ROM	ROM
Gold head grade	g/t	0.59	1.25	0.80	1.22	1.18
Gold dissolution	%	90% @ 30 days	91.1% @ 45 days	93% @ 45 days	94.3% @ 90 days	90.8% @ 106 days
Cyanide consumption	kg/t	0.72	0.24	0.23	0.80	0.56
Lime consumption	kg/t	4.02	5.00	5.00	4.36	4.50

13.8 RECOMMENDATIONS

13.8.1 Metallurgical Testing

Whilst the column testing has been consistent in generating similar extraction results for each test it is recommended that further column tests be carried out to expand the database of information, increase knowledge of gold and silver dissolutions, reagent consumptions and also the physical performance of the columns themselves.

13.8.2 Recovery and Performance Data for Financial Evaluation

The column leach results obtained at a range of 91-94% gold dissolution should be discounted to account for imperfect solution irrigation in the full-scale heap leach and a 3.0-5% discount should be used to derive the recommended gold dissolution factor of 88.0% for process development and financial evaluation.

The cyanide consumption figures were all relatively low, but as seen on the kinetics cyanide consumption does not stop when effective gold dissolution is completed. For this reason, a value of 0.9 kg/t cyanide consumption is recommended to be used for development of the operating costs. For the lime consumption the typical tests do not include the recycle of lime solution in the heap leach and for this reason a slightly lower lime consumption figure of 3.0 kg/t is recommended to be used for operating cost development. Cement consumption, as part of the agglomeration testing of whole ore material, was 5.0 kg/t. It is recommended that this figure be used in estimating operating costs, but that only the equivalent of first year of operation use cement due to the weathering profile of the rock which becomes harder with depth.

14.0 MINERAL RESOURCE ESTIMATES

14.1 GENERAL DESCRIPTION

Since drilling has allowed joining the CM and CC zones together, the Candelones Project is currently composed of two distinct mineralization zones: CMC and CE. The Candelones resource update discussed in this report is focused on the oxidized portion of the CMC zone, with no change to the model used for the previous May, 2021 sulphide estimate. Unigold conducted 2022 infill drilling and a new topographic survey on the oxide portion of the deposit, and these have been incorporated into the resource update.

The sulphide portions of the CMC and the CE models were reinterpreted in 2021 using the results obtained from the 2019, 2020 and early 2021 drilling, along with updated economic parameters. The work in 2021 resulted in upgrading the previous resources from inferred into measured and indicated categories for portions of the sulphide mineral resources. Figure 14.1 show the location of the mineralized zones in relation to each other.

Figure 14.1
Location of the Candelones Mineralized Zones

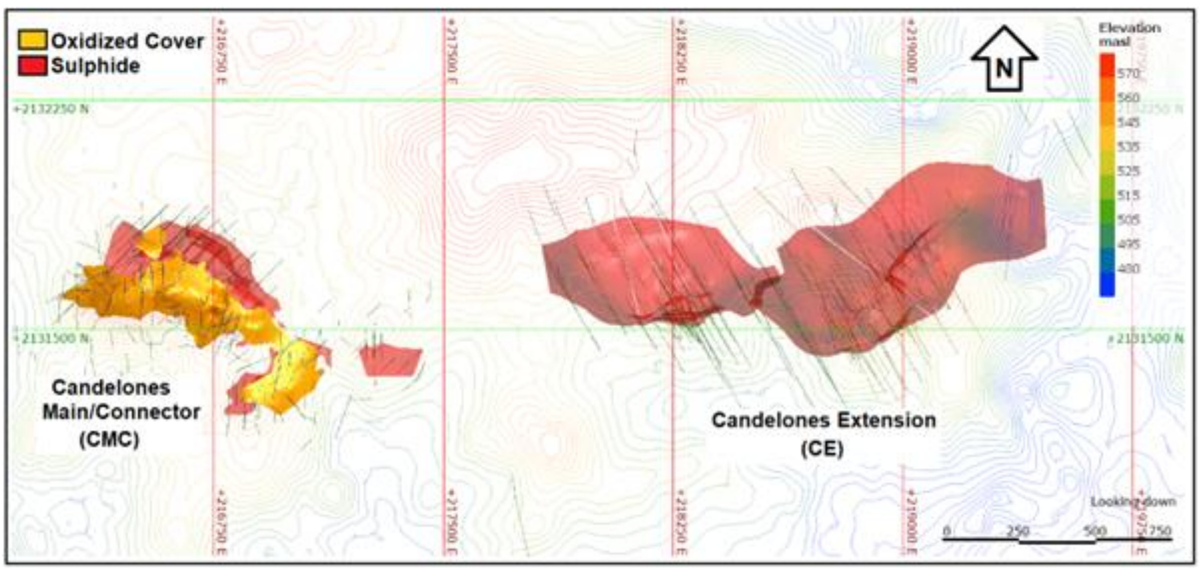


Figure supplied by Micon, May, 2021.

14.2 CIM MINERAL RESOURCE DEFINITIONS AND CLASSIFICATIONS

All resources presented in a Technical Report must follow the current CIM definitions and standards for mineral resources and reserves. The latest edition of the CIM definitions and standards was adopted by the CIM council on May 10, 2014, and includes the resource definitions reproduced below:

> *"Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher*

level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource."

"A Mineral Resource is 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."

"The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

"Material of economic interest refers to diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals."

"The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of Modifying Factors."

"Inferred Mineral Resource"

"An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity."

"An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration."

"An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life-of-mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101."

"Indicated Mineral Resource"

"An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit."

"Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation."

"An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve."

"Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Pre-Feasibility Study which can serve as the basis for major development decisions."

"Measured Mineral Resource"

"A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit."

"Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve."

"Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade or quality of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit."

14.3 CIM Estimation of Mineral Resources Best Practices Guidelines

Micon and its QPs have used the CIM Estimation of Mineral Resources and Mineral Reserves Best Practices Guidelines which were adopted by the CIM Council on November 29, 2019, in estimating the Mineral Resources contained within of the Candelones Project.

14.4 Mineral Resource Estimation Procedures

For the purposes of this Technical Report, only the oxidized portion of the mineral resources was updated as of August 8, 2022. The effective date for the sulphide portion of the mineral resources remains May 10, 2021.

14.4.1 Supporting Data

The Candelones Project database provided to Micon is comprised of 564 drill holes and 31 test pits, with a total of 107,839 m of drill core and containing 67,814 samples. This database was the starting point from which the two mineralized envelopes, CMC and CE, were modelled.

The mineral resource update for the oxidized CMC zone, used only the data contained within the wireframes, so that the data used to produce the updated estimate consist of 229 drill holes, including

61 new drill holes from 2020 and 2022, and 21 test pits, totalling 6,017 samples of mineralized intercepts.

In addition to the drill holes, Micon's QPs included trench sample data for the CMC zone, as it assisted in defining the shape of the outcropping mineralization. A total of 70 trenches containing 2,778 samples were used in the resource estimate.

For the 2021 CE resource, Micon's QPs used 153 drill holes with a total of 13,700 samples inside the wireframes. This represents a substantial increase of drilling information compared to the 4,579 samples used in 2013.

14.4.2 Topography

The CMC area topography was updated for the mineral resources using LiDAR technology, this is a high resolution and accurate digital terrain model (DTM) and was used to better assess the oxide cover. The new topographic surface only moved drill holes up or down in elevation when compared to the topographic surface used for the previous estimate, and all differences were minor.

The DTM is based on satellite imagery and can exhibit errors, due to heavy vegetation covering the land surface or rugged terrain. The corrected collar and trench elevations, therefore, may also be subject to some minor errors. In the opinion of Micon's QPs, however, this would have minimal effect on the sulphide resource estimate.

14.4.3 Geological and Mineralogical Data

The CMC and CE deposits define an east-northeast trend that has been traced through field mapping and diamond drilling over a 3.0 km distance. This trend is believed to be related to a series of east-northeast trending fault zones that extend from the Candelones Project, through the Montazo target, and continue to the Guano, Naranjo, Juan de Bosques and Rancho Pedro targets, which are located approximately 8 km to the east-northeast of the Candelones Project.

At the CMC and CE deposits, both an oxide and a sulphide phase are observed. Typically, the oxide zone extends from surface to a depth ranging from 15 to 50 m. The sulphide phase has been traced to depths of over 400 m.

14.4.4 Rock Density

Density measurements were taken by local technicians and geologists employed by Unigold. Density measurements were conducted on drill core samples, using the water displacement or buoyancy method. The drill core density measurements were separated by lithology and by zone. ALS Minerals (ALS) was contracted by Unigold to conduct independent specific gravity tests on 13 samples and these tests generally confirmed the density measurements conducted by Unigold. ALS is an independent ISO certified laboratory.

A total of 841 revised density measurements were delivered to Micon's QPs, from which average densities were calculated for the CMC deposit, as well as for waste rock. The overall average density value of the Candelones Project is 2.64 g/cm^3. Out of the total measurements, a total of 688 density values were used for the updated 2022 resource estimate for the CMC deposit, following a more specific sequential selection starting from the shallowest overburden, followed by oxidized rock, transition rock (1 and 2), sulphides and waste rock. This approach made more sense as density averages were increasing in the deeper rock mass. The CE density was updated in 2021 because the data increased to 2,986 density measurements from the 298 density measurements used for the previous 2013 resource estimate. Table 14.1 summarizes the density measurements.

Table 14.1
Candelones Project Average Density within the Mineralized Envelopes and Waste Rock

Deposit	Number of Measurements	Minimum	Maximum	Average Value
CMC – Overburden	2	1.76	2.67	2.14
CMC – Oxidized	108	2.00	2.81	2.24
CMC – Transition	34	2.15	2.60	2.36
CMC – Sulphides	89	1.50	4.29	2.70
CMC – Waste Rock	566	1.18	3.10	2.63
CE – Sulphides	2,986	1.50	4.62	2.68

14.4.5 General Statistics

Basic statistics were computed for the entire database and for selected intervals of the mineralized envelopes. The results are summarized in Table 14.2.

Table 14.2
Candelones Basic Statistics within the Envelopes

Description	CM + CMC		CE
Sample Source	DH	Trench	DH
	Au g/t	Au g/t	Au g/t
Number of samples	9,593	2,778	13,700
Minimum value	0.001	0.001	0.001
Maximum value	47.700	157.000	77.500
Mean	0.568	0.926	1.046
Median	0.259	0.414	0.339
Variance	1.775	23.287	7.582
Standard deviation	1.332	4.826	2.754
Coefficient of variation	2.345	5.211	3.061

14.4.6 Three-Dimensional Modelling

Unigold provided Micon with initial three-dimensional (3-D) wireframes representing the mineralized envelopes for the CMC and CE zones. Micon's QPs reviewed and modified the wireframes to correct some irregular shapes that caused volume losses, and to ensure that the drill hole intercepts were snapped to the wireframe. Once these changes were completed, the resulting envelopes were discussed with Unigold prior to finalizing the wireframes. The wireframes for the oxide mineralization of the CMC have been updated to reflect both the new topographic surface and the recent oxide drilling. The sulphide mineralization wireframes remain the same as those used in the 2021.

Figure 14.2 illustrates the final wireframes for the mineralized zones.

Figure 14.2
Finalized Wireframes for the Three Candelones Mineral Zones

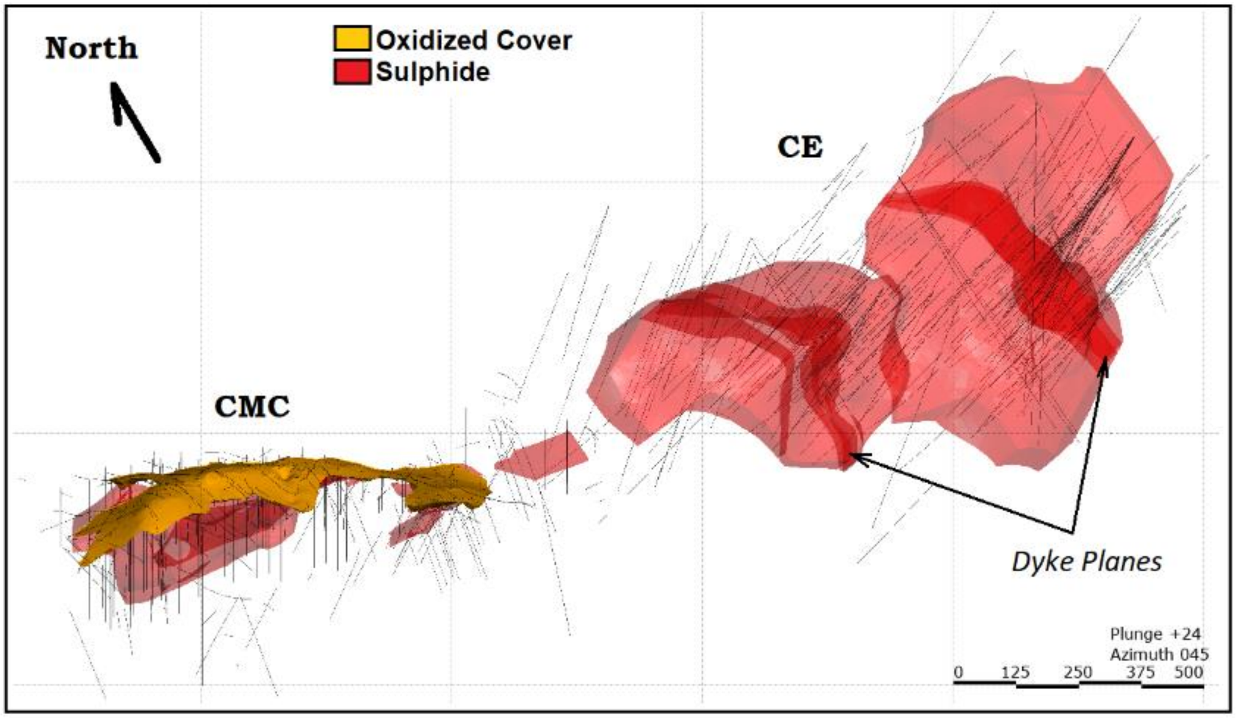


Figure supplied by Micon, May, 2021.
Note: The dykes are thin and cross-cut the mineralization in a northernly strike direction.

14.4.7 Data Processing

14.4.7.1 Grade Capping

Outlier gold values were reviewed carefully. The capping grade selection was based on log-normal probability plots for the oxidized and sulphide zones (Figure 14.3 and Figure 14.4). Table 14.3 summarizes the grade capping for the Candelones Project, by mineralized zone.

Figure 14.3
CMC Oxides (PEA) and Sulphides Gold Probability Plot

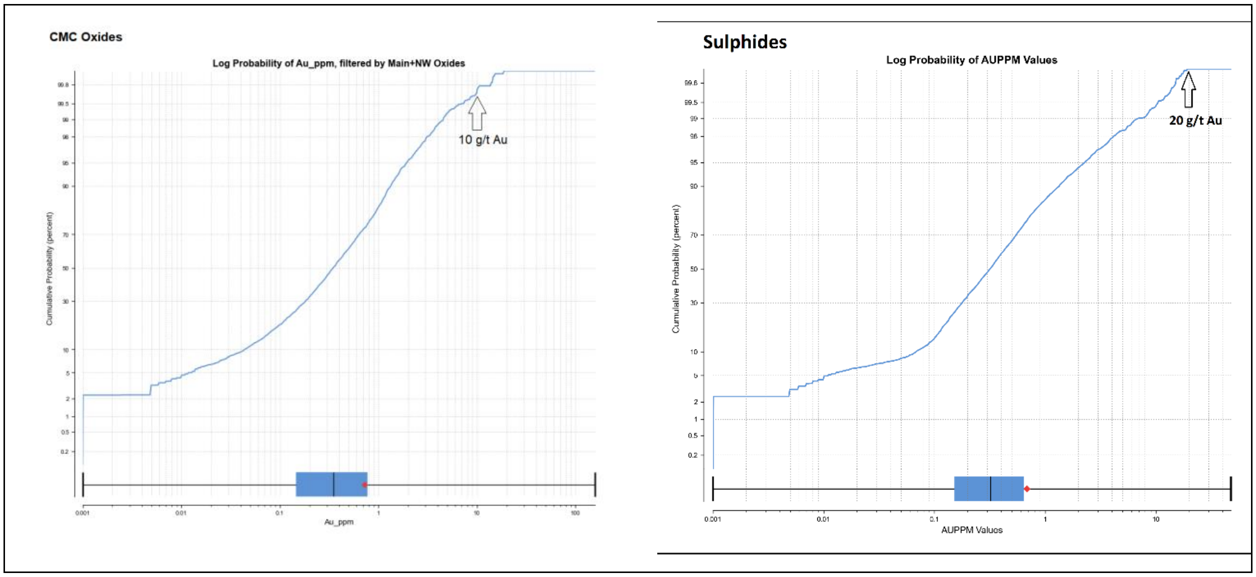


Figure 14.4
CE East and West Gold Probability Plot

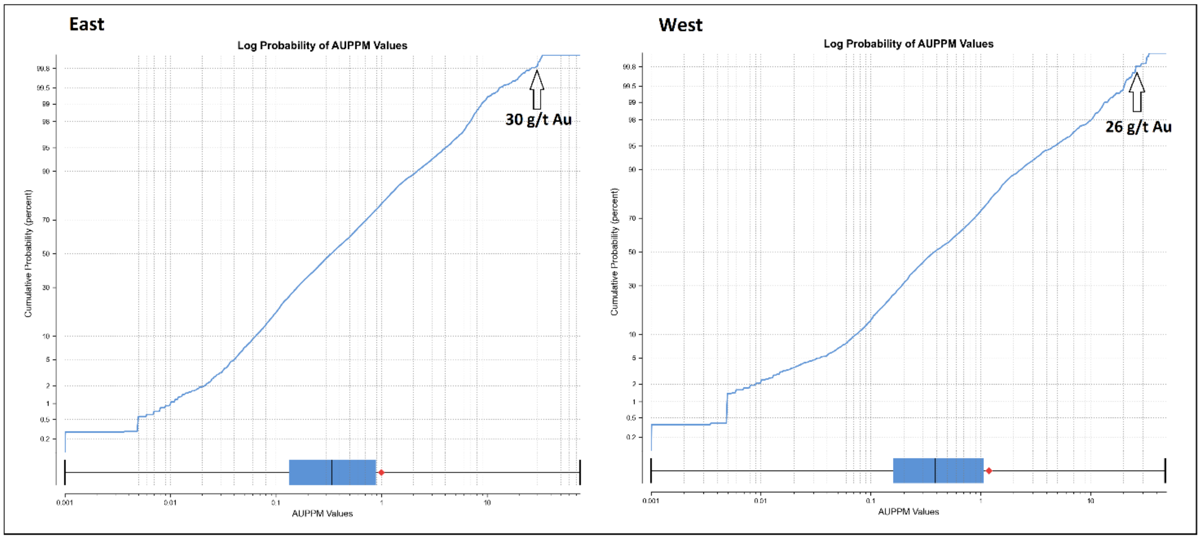


Table 14.3
Candelones Project Grade Capping by Mineral Zone

Mineral Zone	Gold Capping Value (g/t)	Number of Capped Samples
CMC Oxides	10.0	15
CMC Sulphides	20.0	5
CE – West	26.0	7
CE – East	30.0	18

14.4.7.2 Compositing

After the grade capping was completed, the selected intercepts for the Candelones Project were composited into 1.0 m equal length intervals, with the composite length selected based on the average original sampling length. Table 14.4 summarizes the basic statistics of the composited data.

Table 14.4
Summary of the Basic Statistics for the 1 m Composites

Description	CMC (Oxides Only 2022)		CMC (Oxides and Sulphides)		CE	
	Not Capped	Capped	Not Capped	Capped	Not Capped	Capped
Variable	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t
Number of samples	6,017	6,017	12,574	12,574	14,646	14,646
Minimum value	0.00	0.00	0.000	0.000	0.001	0.001
Maximum value	157.00	10.00	157.000	20.000	77.500	30.000
Mean	0.72	0.63	0.780	0.707	1.046	1.026
Median	0.35	0.35	0.375	0.375	0.351	0.351
Variance	12.47	0.90	9.323	1.660	6.991	5.296
Standard deviation	3.53	0.95	3.053	1.288	2.644	2.301
Coefficient of variation	4.88	1.52	3.914	1.823	2.527	2.244

14.4.8 Mineral Deposit Variography

Variography is the analysis of the spatial continuity of grade. Micon's QPs performed various iterations with 3-D variograms, in order to identify the best parameters for the deposits of the Candelones Project.

First, down-the-hole variograms were constructed for each zone, to establish the nugget effect to be used in the modelling of the 3-D variograms. Figure 14.5 to Figure 14.8 show the resulting major variograms of the 4 zones, with the CMC oxide zone variograms being updated for this report and sulphide areas remaining the same as in 2021. For that variographic work, the CE east and west zones were split onto separate areas.

Figure 14.5
CMC Oxidized Zone – Variograms

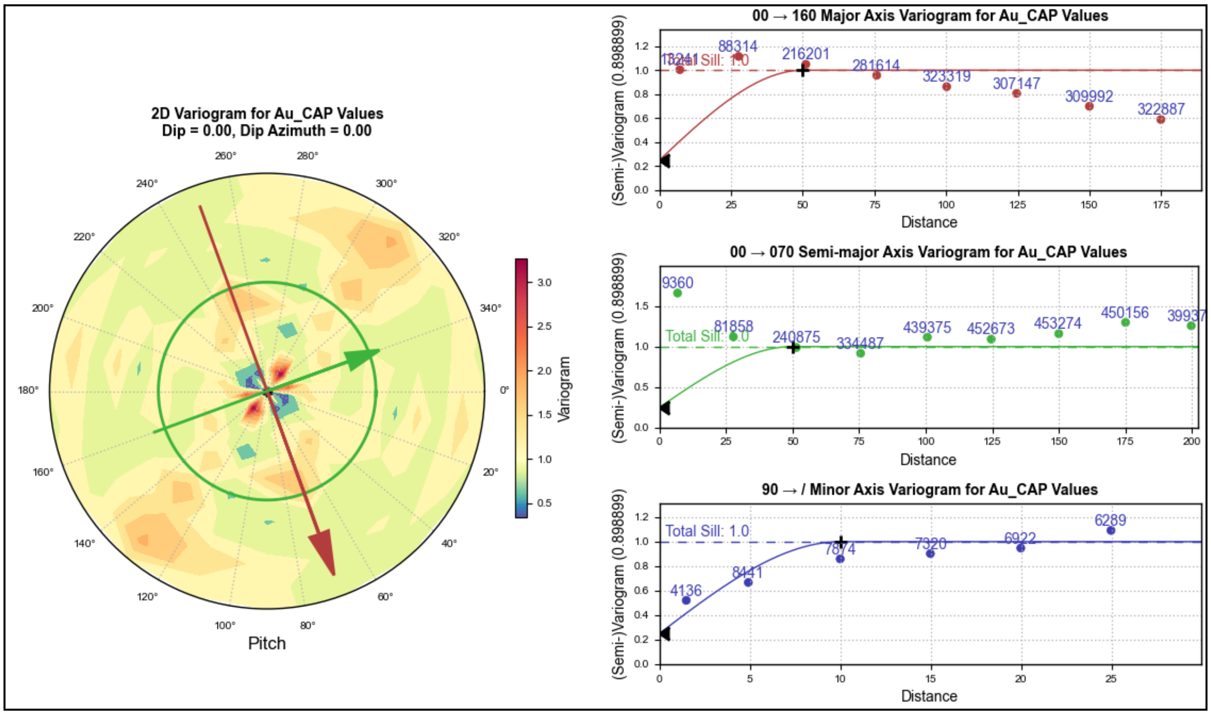


Figure 14.6
CMC Sulphide Zone – Variograms

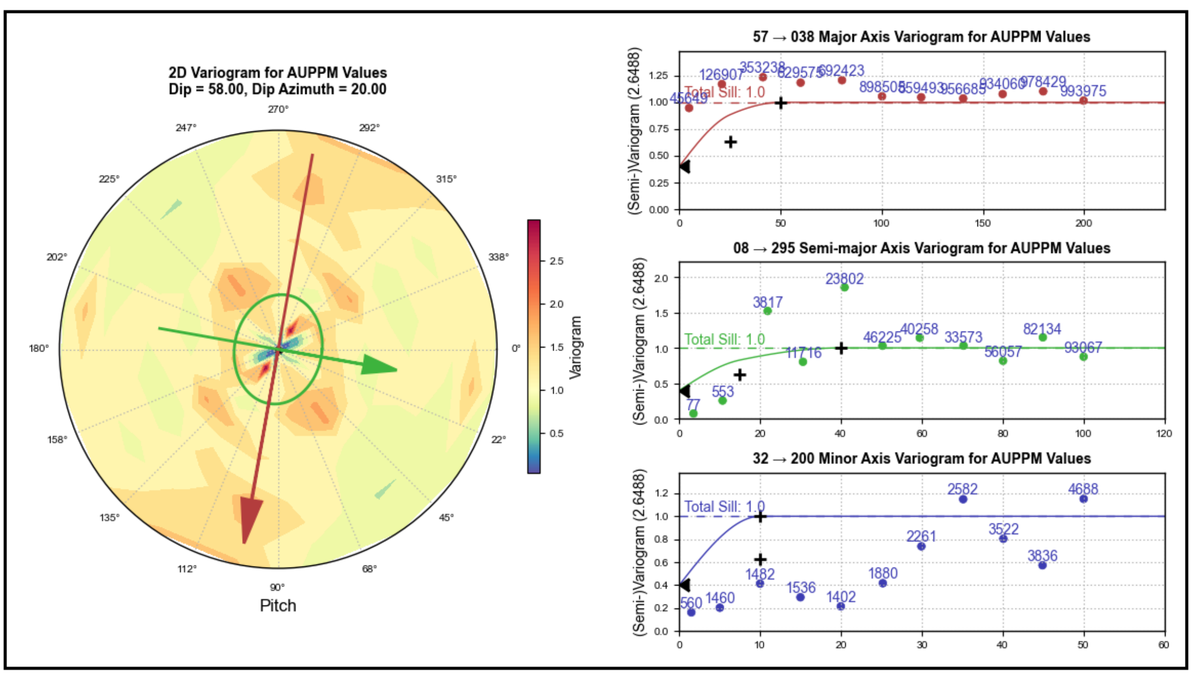


Figure 14.7
CE Zone East – Variograms

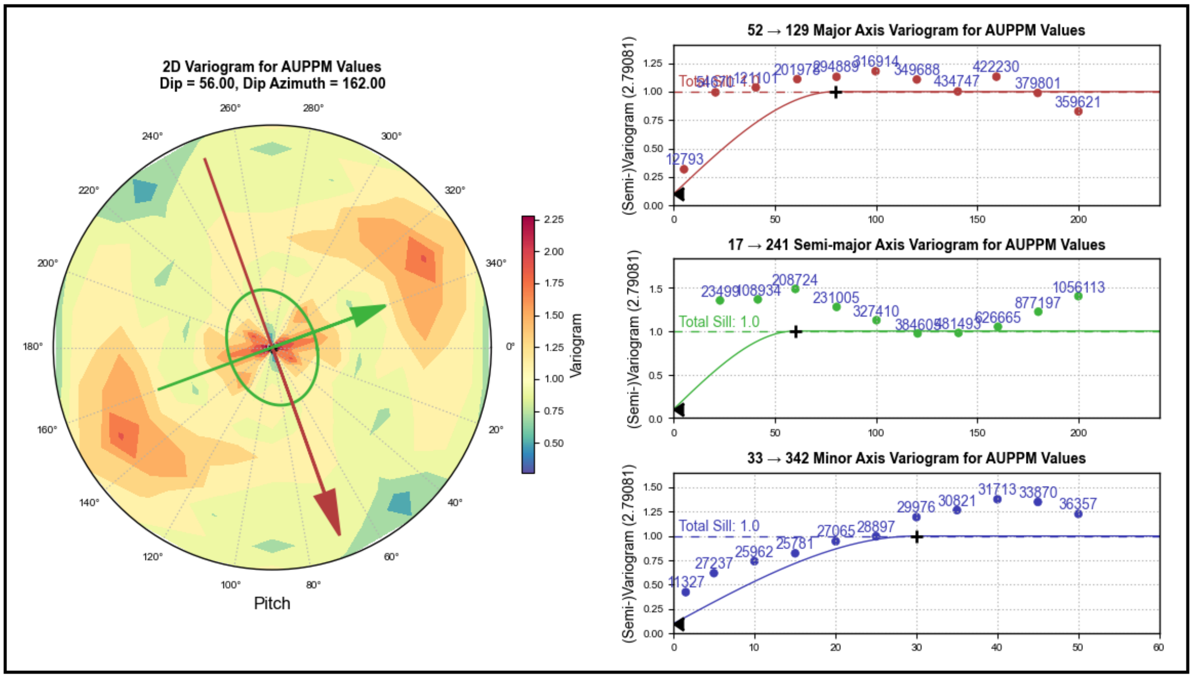
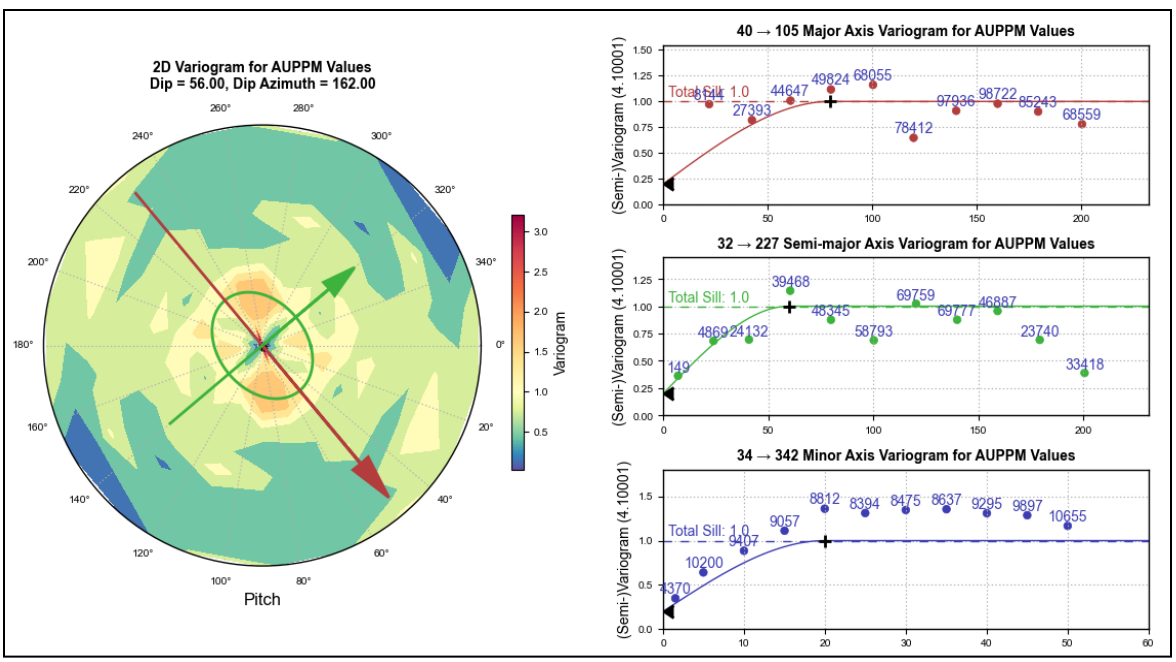


Figure 14.8
CE Zone West – Variograms



14.4.9 Continuity and Trends

The CMC and CE zones show acceptable grade continuity, although these zones have different and very clear orientations and dips. The CMC oxide zone has a 160º bearing according to the variograms modelled (Figure 14.5).

The mineralization trends are clear for both CMC and CE.

14.5 Mineral Resource Estimation

14.5.1 Block Model

Two block models were constructed:

- The first contains the CMC oxide and sulphides zones. The proximity of these zones allowed for the interpolation of the zones to be completed using the same model, with the oxide zone separated from the sulphide zone for the purposes of resource estimation.
- The second block model contains the CE zone.

A summary of the definition data for both block models is contained in Table 14.5.

Table 14.5
Summary of Information for the Candelones Project Block Models

Description	Block Model (CMC)	Block Model (CE)
Dimension X (m)	1,600	2,140
Dimension Y (m)	1,150	1,220
Dimension Z (m)	450	650
Origin X (Easting)	216,000	217,600
Origin Y (Northing)	2,131,110	2,131,000
Origin Z (Upper Elev.)	650	620
Rotation (º)	0	0
Block Size X (m)	10	10
Block Size Y (m)	10	5
Block Size Z (m)	5	5
Child Block Size XYZ (m)	2 x 2 x 1	2.5 x 2.5 x 2.5

14.5.2 Search Strategy and Interpolation

A set of parameters were derived to interpolate the block grades, based on the results of variographic analysis. A summary of the Candelones Project ordinary kriging interpolation parameters is provided in Table 14.6.

Table 14.6
Candelones Project, Ordinary Kriging Interpolation Parameters

Rock* Code(s)	Pass	Orientation			Variogram Parameters		Search Parameters					
		Az (°)	Plunge (°)	Dip (°)	Nugget	Sill	Range Major Axis (m)	Range Semi-Major Axis (m)	Range Vertical Axis (m)	Minimum Samples	Maximum Samples	Maximum Samples per Hole
CMC	1	Dynamic Anisotropy (search ellipse follows deposit curvature)			0.25	0.674/0.224	80	50	40	6	20	2
CMC	2				0.25	0.674/0.224	160	100	80	2	12	2
CE-E	1	Dynamic Anisotropy (search ellipse adjusted to deposit variable azimuths and dips)			0.10	0.90	80	60	30	15	30	5
CE-E	2				0.10	0.90	80	60	30	10	20	5
CE-E	3				0.10	0.90	160	120	60	2	20	5
CE-W	1				0.20	0.80	80	60	30	15	30	5
CE-W	2				0.20	0.80	80	60	30	10	20	5
CE-W	3				0.20	0.80	120	90	30	2	20	5

*Note: The CE deposit was split into East and West due to structural interpretation of a fault zone.

14.5.3 Prospects for Economic Extraction

The mineral resource estimates have been constrained using economic estimates that consider both open pit (shallow mineralization) and underground (mineralization below the conceptual pit) mining scenarios. The optimized pit shells are conceptual in nature and are based on the economic parameters stated herein, applied using the Lerchs-Grossman algorithm contained in the Datamine NPV Scheduler software. The potential underground blocks are also conceptual in nature and are based on identifying a reasonable spatially continuous tonnage sufficient to justify an eventual underground development. No specific underground mining method nor economic model was evaluated, but scattered and isolated blocks were excluded from the resource estimate.

The mineral resource estimate and open pit optimization have been prepared without reference to surface rights or the presence of overlying private property, public infrastructure or geographical constraints.

The Candelones Project has been evaluated using gold assays only for the updated oxide resources, while the sulphide resources were evaluated using silver and copper assays as well.

Operating costs were estimated based on similar operations with some modifications to reflect the contractor costs for the oxides obtained by Unigold. It is Micon's QP's opinion that the costs are reasonable, but they were not developed from first principles and are considered conceptual in nature.

Table 14.7 summarizes the open pit and underground economic assumptions upon which the resource estimate for the Candelones Project is based. All monetary values are expressed as US dollars.

Table 14.7
Summary of the Candelones Project Economic Assumptions for the Conceptual Open Pit and Underground Mining Methods

Candelones Parameters	Oxides (Updated 2022)		Sulphides (2021)
	Oxides	Transition	
Au price $/oz	$1,800	$1,800	$1,700
Ag price $/oz	N/A	N/A	$20.00
Cu price $/lb	N/A	N/A	$4.00
Au recovery	88%	59%	84%
Ag recovery			55%
Cu recovery			87%
Open Pit Mining Cost $/t	$1.85	$2.75	$2.85
Processing Cost (Heap Leach) $/t	$7.90	$7.90	
Processing Cost (Flotation) $/t			$25.00
G&A Cost $/t	$2.39	$2.39	$2.39
Open Pit Overall Cost $/t	$12.14	$13.04	$30.24
Underground Mining Cost $/t			$60.00
Underground Overall Cost $/t			$87.39
Open Pit Au Cut-off g/t	0.20	0.34	0.66
Au Eq. Cut-off g/t			0.65

Open Pit NSR Cut-off ($/t)			$20.24
Underground Au Cut-off (g/t)			1.9
Underground Au-Eq Cut-off (g/t)			1.89
Underground NSR Cut-off ($/t)			$77.39
Open pit slope	45	45	45

The open pit parameters noted above were input into the pit optimization software and a series of nested pit shells representing varying revenue factors (gold prices) were generated.

The pit shell maximizing NPV (optimum pit) indicated that the mining cut-off grades for open pit mining are:

- Oxide mineralization (starter pit) 0.20 g/t.
- Transition mineralization (starter pit) 0.34 g/t.
- Sulphide mineralization (ultimate pit) $20/t NSR.
- Sulphide mineralization (underground) $77/t NSR.

The stripping ratios for the optimized resulting pit shells are 0.23 for the CMC starter pit (Oxide + Transition only), 0.91 for the CMC ultimate pit and 7.46 for the CE deposit.

For the underground mining scenario, the model indicated that the mining cut-off value is $77/t NSR for the sulphide mineralization. There is no oxide mineralization in the underground scenario.

14.6 Classification of the Mineral Resource Estimate

Micon's QPs have classified the mineral resource estimate of the Candelones Project as being in the Measured, Indicated and Inferred categories. The criteria for each category are as follows:

- Measured Resources:
  - All oxide blocks in the CMC deposit within 20 m of an informing sample, with a significant density of informing samples from drill holes, test pits and trenches.
  - All sulphide blocks in the CE deposit within 25 m of an informing sample.
- Indicated Resources:
  - All oxide blocks in the CMC deposit within 20 m of an informing sample, but with a lesser density of informing samples from drill holes, test pits and trenches.
  - All sulphide blocks in the CE deposit within 40 m of an informing sample.
- Inferred Resources:
  - All remaining blocks within the CMC oxide wireframe.
  - All transition and sulphide blocks in the CMC wireframe.
  - All remaining sulphide blocks in the CE wireframe.

All Measured and Indicated resources were subjected to a final, manual grooming check for reasonableness.

The resulting categorizations of the oxide mineral resources of the CMC zone is shown in Figure 14.9. The categorizations for the sulphide mineral resources for the CE zone are shown in Figure 14.10. Sulphide mineral resources for the CMC zone are all inferred and are not shown.

Figure 14.9
CMC Zone Oxidized Resource Categories

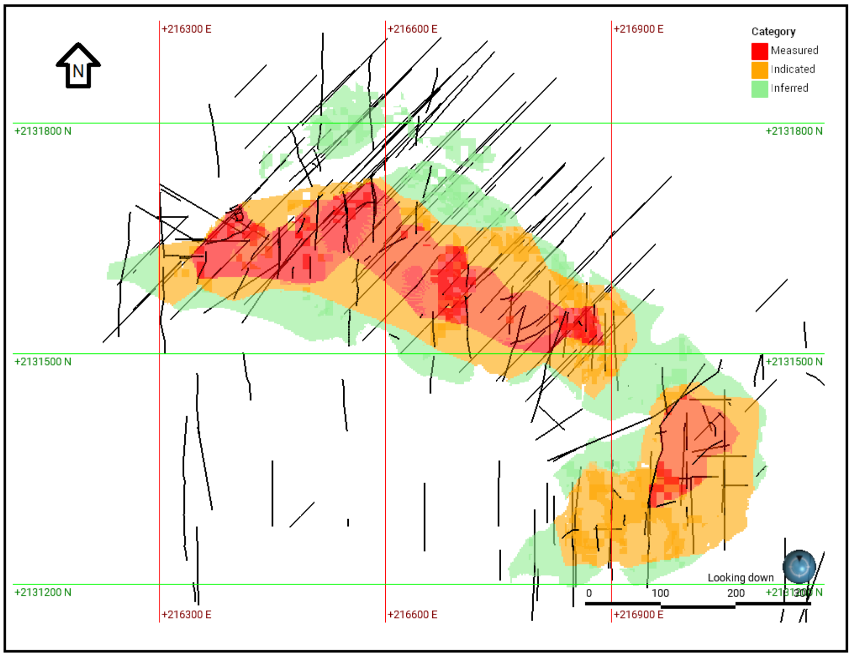
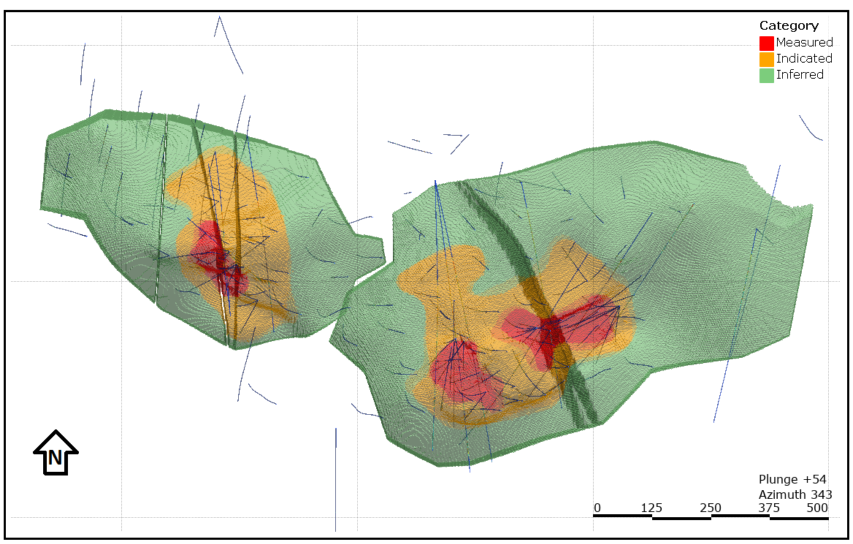


Figure 14.10
CE Sulphide Zone Resource Categories



14.7 MINERAL RESOURCE STATEMENT FOR THE CANDELONES PROJECT

The mineral resource estimates for the Candelones Project are summarized in Table 14.8 (updated oxide resources). and Table 14.9 (sulphide resources)

Mineral resources which are not mineral reserves do not have demonstrated economic viability. At the present time, Micon and the QPs do not believe that the mineral resource estimate is materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

Micon and the QPs consider that the resource estimate for the Candelones Project has been reasonably prepared and conforms to the current 2014 CIM standards and definitions for estimating resources. The mineral resource estimate can be used by Unigold's as its basis for the ongoing exploration at the Candelones Project.

Due to the uncertainty and lower confidence levels that are attached to inferred mineral resources, they must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the life-of-mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101. However, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

The mineral resources summarized in Table 14.8 (oxide resources, CMC) and Table 14.9 (sulphide resources, CMC and CE) are shown graphically in Figure 14.11, Figure 14.12 and Figure 14.13, respectively.

Table 14.8
Updated Oxide Mineral Resource Estimate for Candelones Project, Effective Date August 08, 2022

<table>
<tr><th>Deposit</th><th>Mining Method</th><th>Mineralization Type</th><th>Category</th><th>COG</th><th>Tonnes (x1,000)</th><th>Au g/t</th><th>Au oz (x1,000)</th><th>Strip Ratio</th></tr>
<tr><td rowspan="10">CMC</td><td rowspan="10">Open Pit</td><td>OB (Heap Leach)</td><td rowspan="2">Measured</td><td rowspan="4">0.20</td><td>15</td><td>0.68</td><td>0</td><td rowspan="10">0.23</td></tr>
<tr><td rowspan="2">Oxide (Heap Leach)</td><td>2,527</td><td>0.83</td><td>67</td></tr>
<tr><td rowspan="3">Indicated</td><td>2,444</td><td>0.60</td><td>47</td></tr>
<tr><td>OB (Heap Leach)</td><td>39</td><td>0.67</td><td>1</td></tr>
<tr><td>Transition (Heap Leach)</td><td>0.34</td><td>710</td><td>0.66</td><td>15</td></tr>
<tr><td colspan="2">Total Measured + Indicated</td><td></td><td>5,735</td><td>0.71</td><td>130</td></tr>
<tr><td>OB (Heap Leach)</td><td rowspan="3">Inferred</td><td rowspan="2">0.20</td><td>6</td><td>0.60</td><td>0</td></tr>
<tr><td>Oxide (Heap Leach)</td><td>1,088</td><td>0.43</td><td>15</td></tr>
<tr><td>Transition (Heap Leach)</td><td>0.34</td><td>160</td><td>0.59</td><td>3</td></tr>
<tr><td colspan="2">Total Inferred</td><td></td><td>1,255</td><td>0.45</td><td>18</td></tr>
</table>

Notes:

1. The Updated Oxide Mineral Resource Estimate is reported using two different cut-off grades; 0.21 g/t Au for the Oxide rock and 0.34 g/t Au for the Transition rock, both cut-off for an open pit mining scenario. The oxide resources are inclusive of the oxide mineral reserves but are exclusive of the sulphide resources.
2. The cut-off grade was calculated using a gold price of US$1,800 per ounce with Heap Leach metallurgical recoveries of 88% for Oxide rock and 59% for Transition rock, using cost assumptions of US$2.25/t for mining Oxide rock, US$2.75/t for mining Transition rock, US$5.97/t for mineral processing and US$1.93/t for G&A.
3. The resource estimate applies different grade capping thresholds to each of the deposits ranging from 1.0 g/t Au to 10.0 g/t Au applied on 1.0 metre composites.
4. The current Mineral Resource has been updated using a high-precision LiDAR and Total Station topographic survey, all resource supporting data including drillholes, trenches and test pits were projected accordingly to new elevations using this DTM surface.
5. The weathering zones of Oxidized cover and Transition (Oxide-Sulphide) were remodelled from scratch using the drill logs provided by Unigold.
6. The mineral resources above were modelled using a subblock model with a parent block size of 10 m x 10 m x 5 m and child blocks size of 2 m x 2 m x 1 m and constrained within mineralization wireframes. Gold was estimated by Ordinary Kriging using dynamic anisotropy search. The max range of the variogram models generally are between 50 m x 50 m x 5 m and 80 m x 45 m x 5 m. The interpolation was constrained to selected composites flagged within each domain; Candelones Main (CM) and Candelones Connector (CC) also known as CMC.
7. The mineral resources presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards of Disclosure for Mineral Projects (NI 43-101).
8. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant modifying factors.
9. The quantity and grade of reported Inferred Resources are uncertain in nature and there has not been sufficient work to define these Inferred Resources as Indicated or Measured Resources. It is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
10. Tonnage estimates are based on bulk densities individually measured and were interpolated for each of the weathered zones of Overburden (OB), Oxide (OX) and Transition (TR). Resources are presented as undiluted and in-situ.
11. This mineral resource estimate is dated August 08, 2022. The effective date for the drill-hole database used to produce this updated mineral resource estimate is April 13, 2022.
12. Tonnages and ounces in the tables are rounded to the nearest thousand. Numbers may not total due to rounding.
13. Mr. William J. Lewis, P.Geo. and Mr. Alan J. San Martin, MAusIMM(CP) of Micon International Limited., who are qualified persons as defined by NI 43-101 are responsible for the completion of the updated mineral resource estimate.

Table 14.9
Sulphide Mineral Resource Estimate for the Candelones Project, Effective Date May 10, 2021

Deposit	Mining Method	Category	NSR$ Cut-off	Tonnes (x1,000)	AuEq g/t	Au g/t	Ag g/t	Cu %	AuEq oz (x1,000)	Au oz (x1,000)	Ag oz (x1,000)	Cu lb (x1,000)	Strip Ratio
CE	Open Pit (Ultimate)	Measured	20	6,280	2.22	1.90	3.28	0.18	449	383	662	25,042	7.46
		Indicated	20	13,098	1.63	1.40	4.18	0.12	688	591	1,762	34,201	
		M+I	**20**	**19,378**	**1.82**	**1.56**	**3.89**	**0.14**	**1,137**	**974**	**2,425**	**59,243**	
		Inferred	20	18,594	1.55	1.38	2.93	0.09	928	826	1,749	36,022	
CMC			20	4,448	1.38	1.25	1.17	0.07	197	178	167	7,207	0.91
CMC + CE		**Inferred Subtotal**	**20**	**23,042**	**1.52**	**1.36**	**2.59**	**0.09**	**1,125**	**1,005**	**1,916**	**43,229**	N/A
CE	Underground	Measured	77	759	3.15	2.65	1.88	0.29	77	65	46	4,836	N/A
		Indicated	77	348	2.73	2.35	2.32	0.22	31	26	26	1,652	
		M+I	**77**	**1,107**	**3.02**	**2.56**	**2.02**	**0.27**	**107**	**91**	**72**	**6,488**	
		Inferred	77	417	2.63	2.32	3.53	0.17	35	31	47	1,535	
CMC			77	338	2.72	2.46	0.81	0.15	30	27	9	1,114	
CMC + CE		**Inferred Subtotal**	**77**	**755**	**2.67**	**2.38**	**2.31**	**0.16**	**65**	**58**	**56**	**2,649**	
Sulphides Total Measured + Indicated				**20,484**	**1.89**	**1.62**	**3.79**	**0.15**	**1,244**	**1,065**	**2,497**	**65,731**	
Sulphides Total Inferred				**23,797**	**1.55**	**1.39**	**2.58**	**0.09**	**1,190**	**1,063**	**1,972**	**45,878**	

Notes:
1. Sulphide Mineral Resource Estimate is reported using two different NSR$ cut-offs; 20 NSR$ for the sulphide open pit mining scenario and 77 NSR$ the sulphide underground mining scenario. The sulphide resources are reported exclusive of the oxide resources.
2. The cut-off grade was calculated using a gold price of US$1,700 per ounce with Heap Leach metallurgical recoveries of 84% for gold, 55% for silver and 87% for copper, using cost assumptions of US$2.85/t for open pit mining, US$60.00/t for mining, US$25.00/t for mineral processing and US$2.39/t for G&A.
3. The resource estimate applies different grade capping thresholds to each of the deposits ranging from 1.0 g/t Au to 10.0 g/t Au applied on 1.0 metre composites.
4. The sulphide Mineral Resource continues to use the topography which was derived from a previous DTM based on grid data, purchased by Unigold. All sulphide resource supporting data including drillholes, trenches and test pits were projected accordingly to new elevations using this DTM surface.
5. The Sulphide zones were remodelled from scratch using the drill logs provided by Unigold.
6. The mineral resources above were modelled using a subblock model with a parent block size of 10 m x 10 m x 5 m and child blocks size of 2 m x 2 m x 1 m and constrained within mineralization wireframes. Gold was estimated by Ordinary Kriging using dynamic anisotropy search. The max range of the variogram models generally are between 50 m x 50 m x 5 m and 80 m x 45 m x 5 m. The interpolation was constrained to selected composites flagged within each domain; Candelones Main (CM) and Candelones Connector (CC) also known as CMC.
7. The mineral resources presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards of Disclosure for Mineral Projects (NI 43-101).
8. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant modifying factors.
9. The quantity and grade of reported Inferred Resources are uncertain in nature and there has not been sufficient work to define these Inferred Resources as Indicated or Measured Resources. It is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
10. Tonnage estimates are based on bulk densities individually measured and were interpolated for sulphide zone. Resources are presented as undiluted and in-situ.
11. The sulphide mineral resource estimate is dated May 10, 2021.
12. Tonnages and ounces in the tables are rounded to the nearest thousand. Numbers may not total due to rounding.
13. Mr. William J. Lewis, P.Geo. and Mr. Alan J. San Martin, MAusIMM(CP) of Micon International Limited., who are qualified persons as defined by NI 43-101 are responsible for the completion of the updated mineral resource estimate.

Figure 14.11
Oxide Pit - CMC Block Model and US$1,800 Pit Shell Isometric View

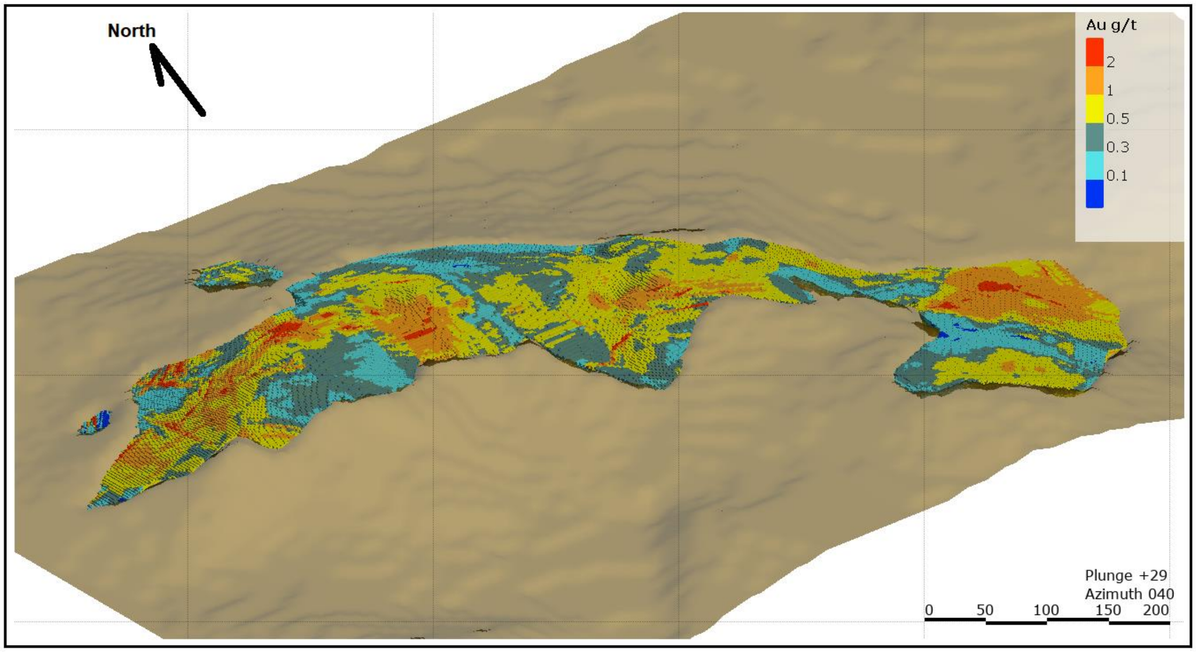


Figure 14.12
Ultimate Pit (Oxides and Sulphides) CMC Block Model and (US$1,800 Oxide and US$1,700 Sulphide) Pit Shell Isometric Views

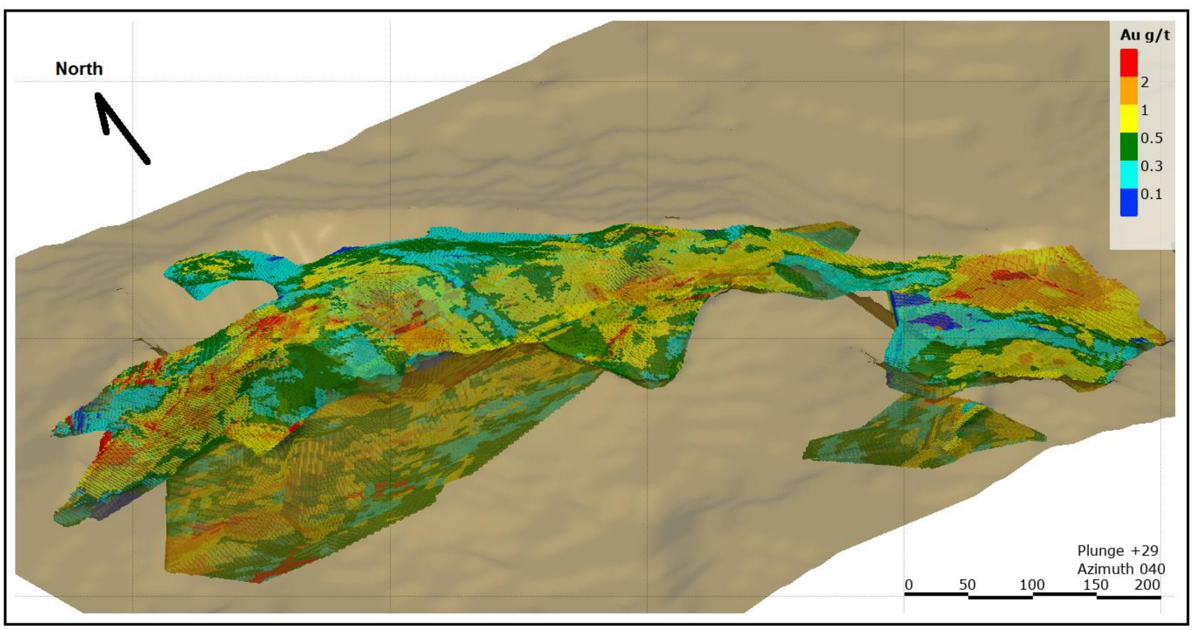
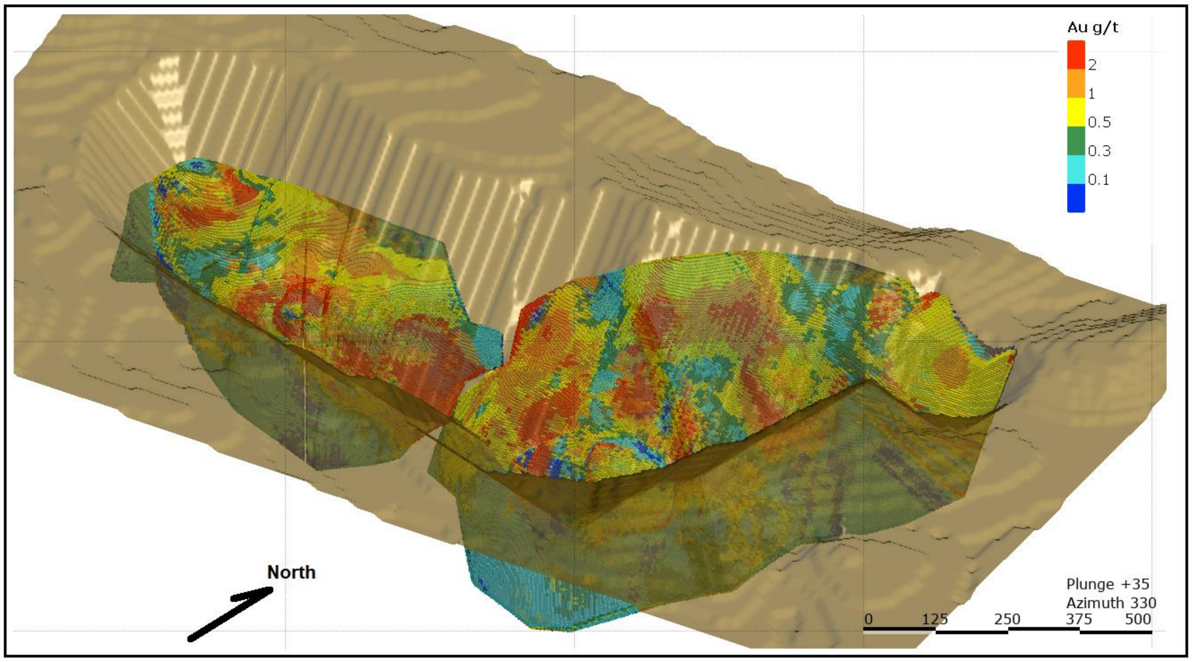


Figure 14.13
CE Block Model and US$1,700 Pit Shell Isometric View



14.8 Mineral Resource Validation

Micon QPs have validated the block model using two methods: visual inspection and trend analysis.

14.8.1 Visual Inspection

The model blocks and the drill hole intercepts were viewed in section, to ensure that the grade distribution in the blocks was honouring the drill hole data. Figure 14.14 and Figure 14.15 are typical vertical sections for the CMC and CE zones, respectively. The degree of agreement between the block grades and the drill intercepts is satisfactory.

14.8.2 Swath Plots

The block model grades, and the grades of the informing composites, were compared by swath plots, examples of which are shown in Figure 14.16 and Figure 14.17.

In the CE block model, the East side shows a greater number of blocks and slightly lower average grade. This is due to the Low-Grade zone cap added to help the open pit optimization strip ratio.

The swath plots show a good spatial correlation between the composite grades and the block model grades.

Figure 14.14
Typical Vertical Section for the CMC Zone

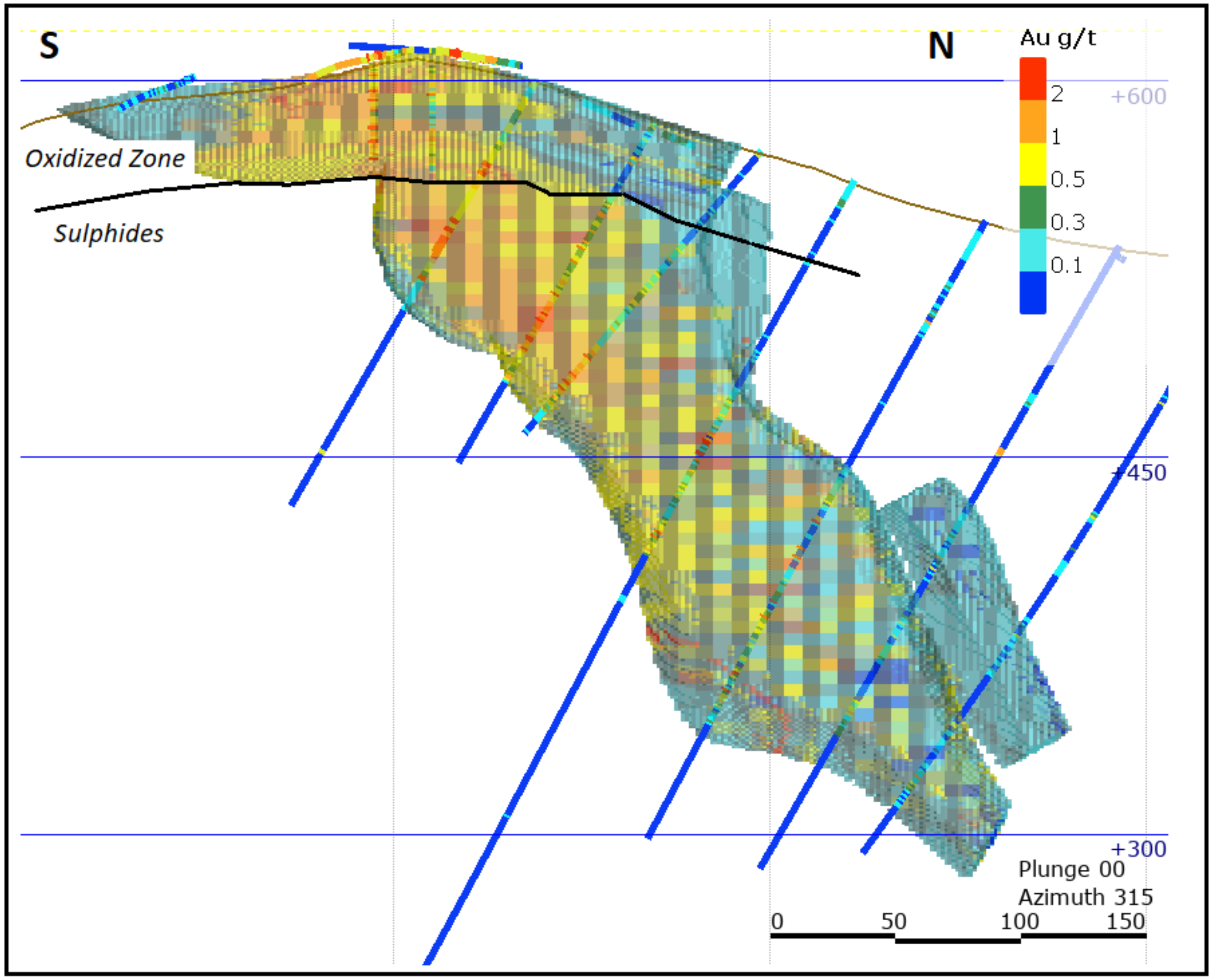


Figure 14.15
Typical Vertical Section for the CE Zone

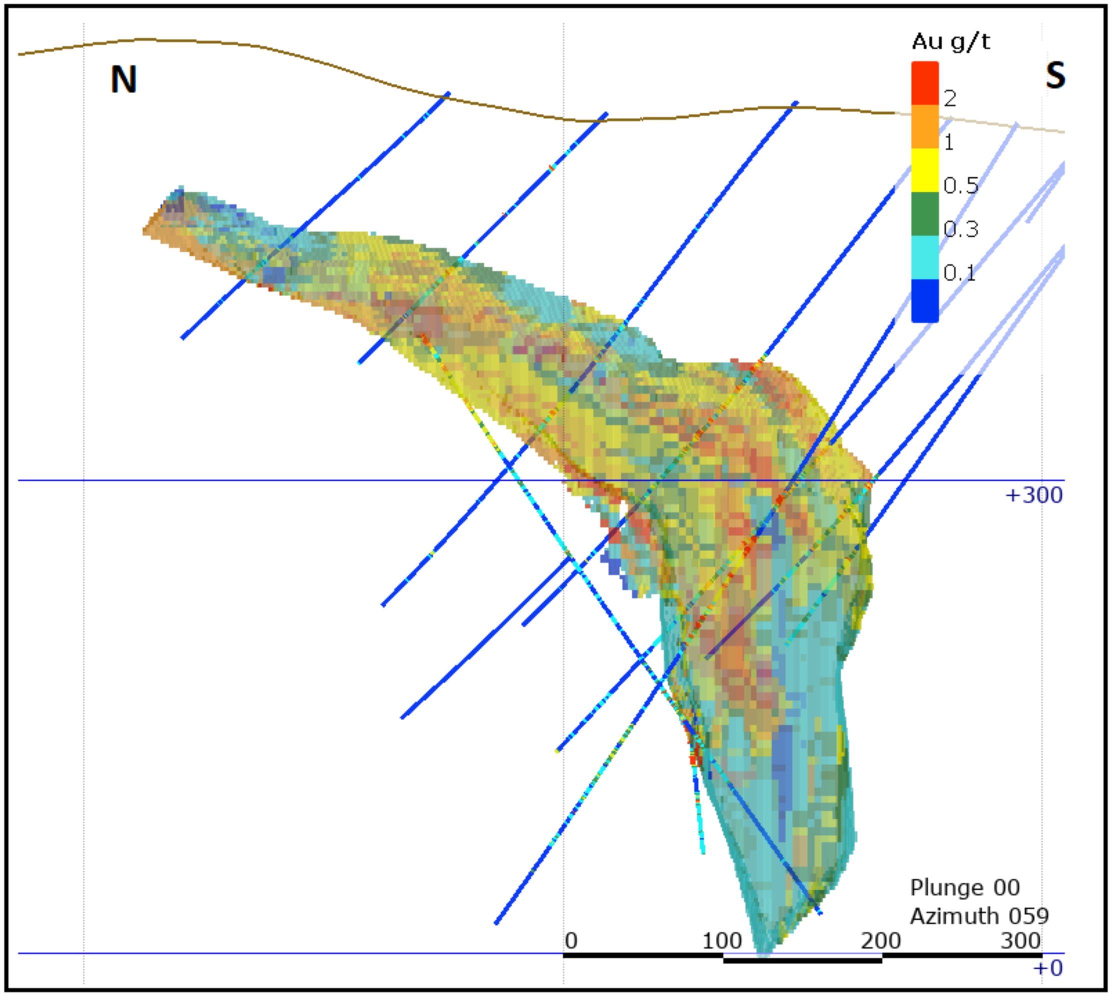


Figure 14.16
Results for the CMC Zone Swath Plot, Composite versus Block Model

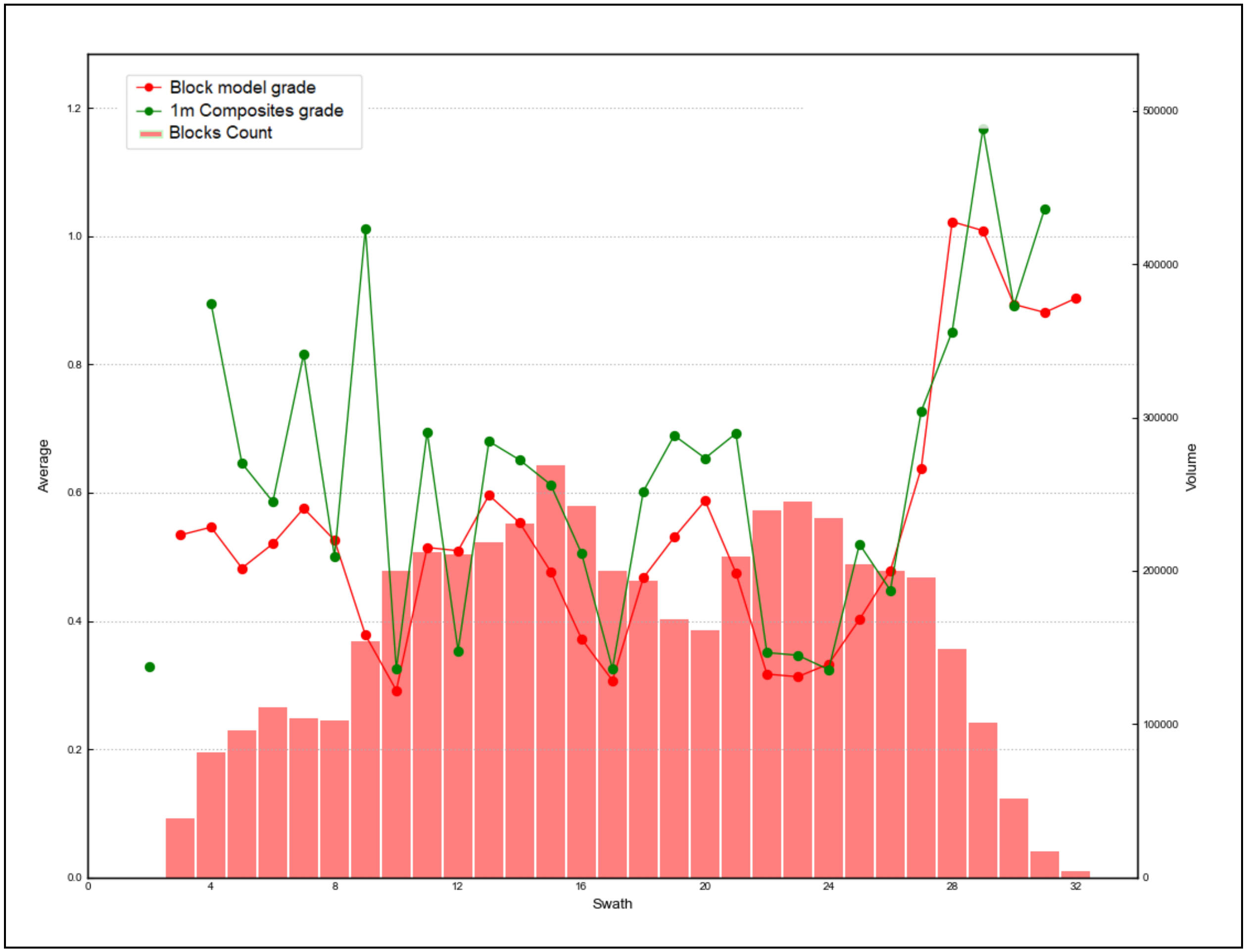
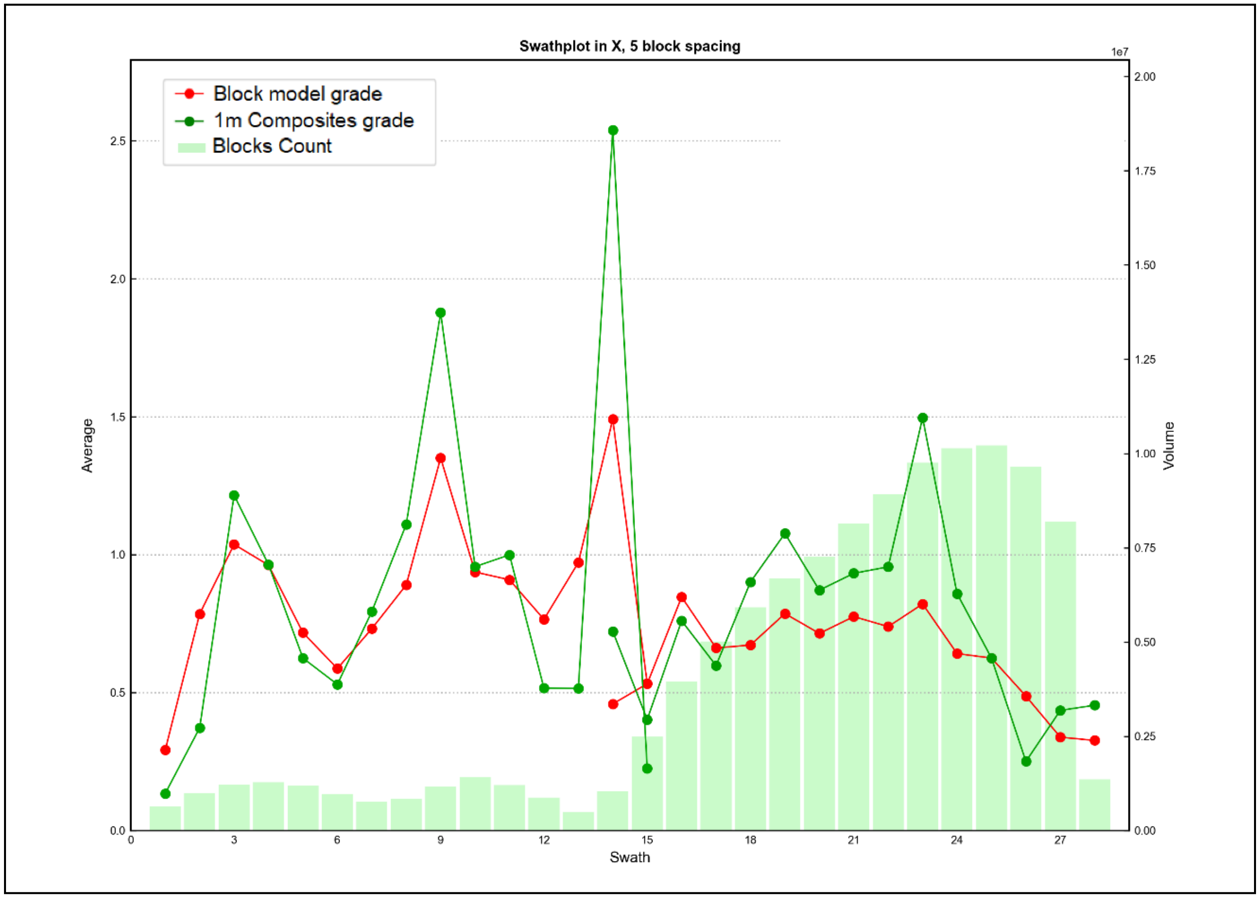


Figure 14.17
Results for the CE Zone Swath Plot, Composite versus Block Model



14.9 Mineral Resource Sensitivity

The grade/tonnage curves for the CMC oxide base case at US$ 1,750/oz gold and both the CMC and CE sulphide base cases at US$ 1,700/oz gold are shown in Figure 14.18, Figure 14.19 and Figure 14.20. Figure 14.21, Figure 14.22 and Figure 14.23 show the revenue factors for the nested pit shells (CMC oxide, CMC oxide and sulphide and CE), with each bar representing the ore/waste ratio for the pit at the corresponding gold prices.

Figure 14.18
CMC Grade/Tonnage Curve Oxide Starter Pit

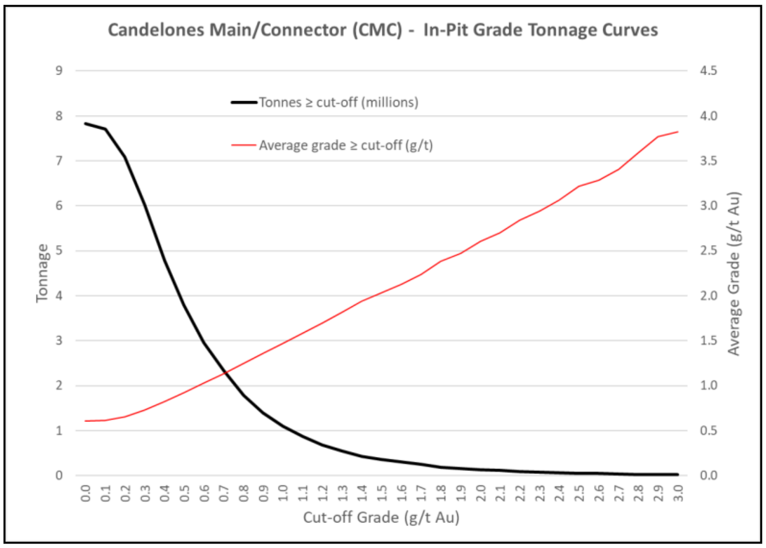


Figure 14.19
CMC Grade/Tonnage Curve – Sulphides Ultimate Pit

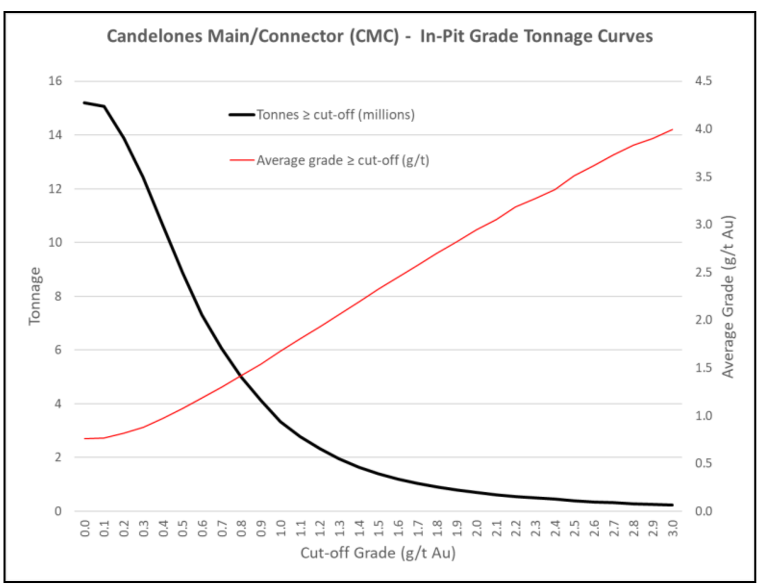


Figure 14.20
CE Grade/Tonnage Curve

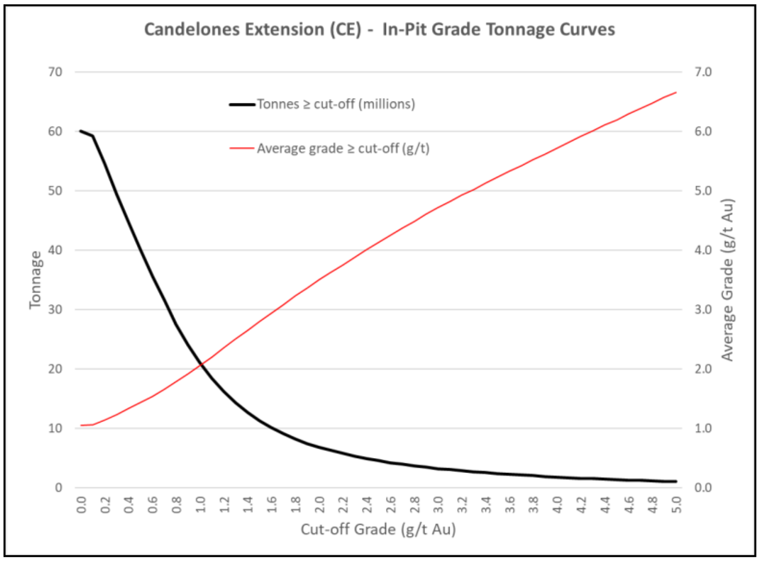


Figure 14.21
Simple Revenue Factors for each Nested Pit Shell for the Oxides at the CMC Deposit

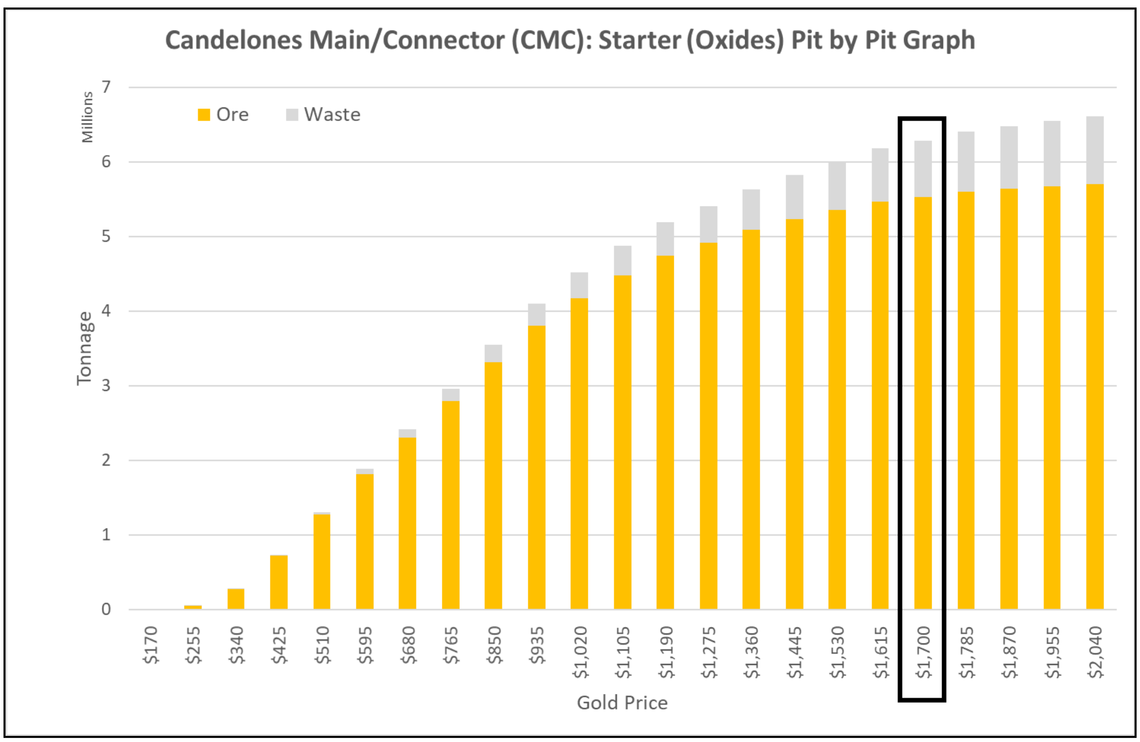


Figure 14.22
Simple Revenue Factors for each Nested Pit Shell for the Ultimate (Oxides & Sulphides) at the CMC Deposit

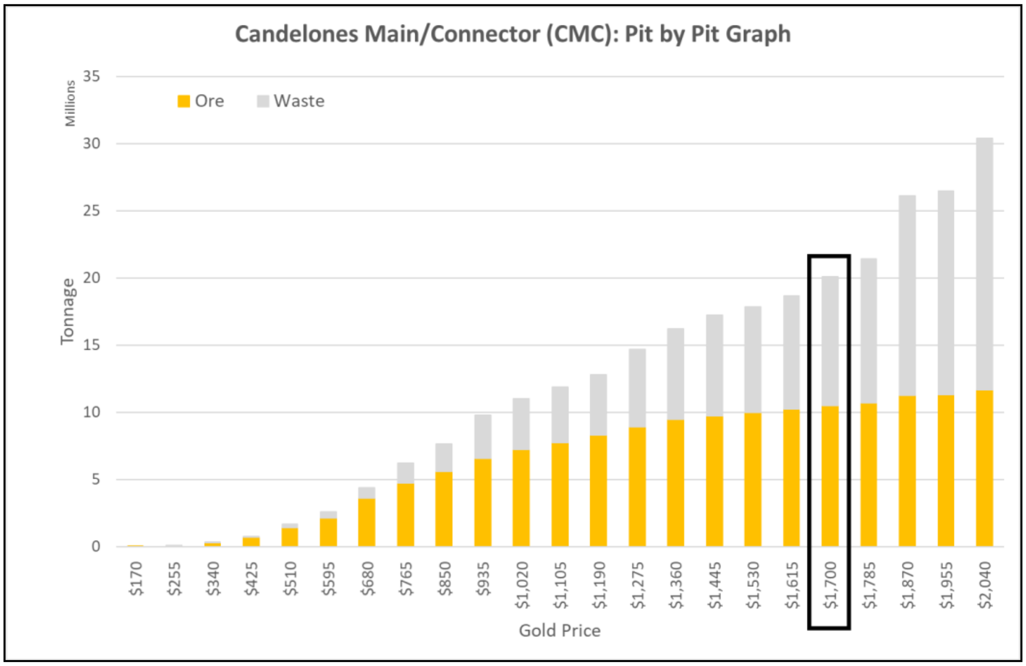
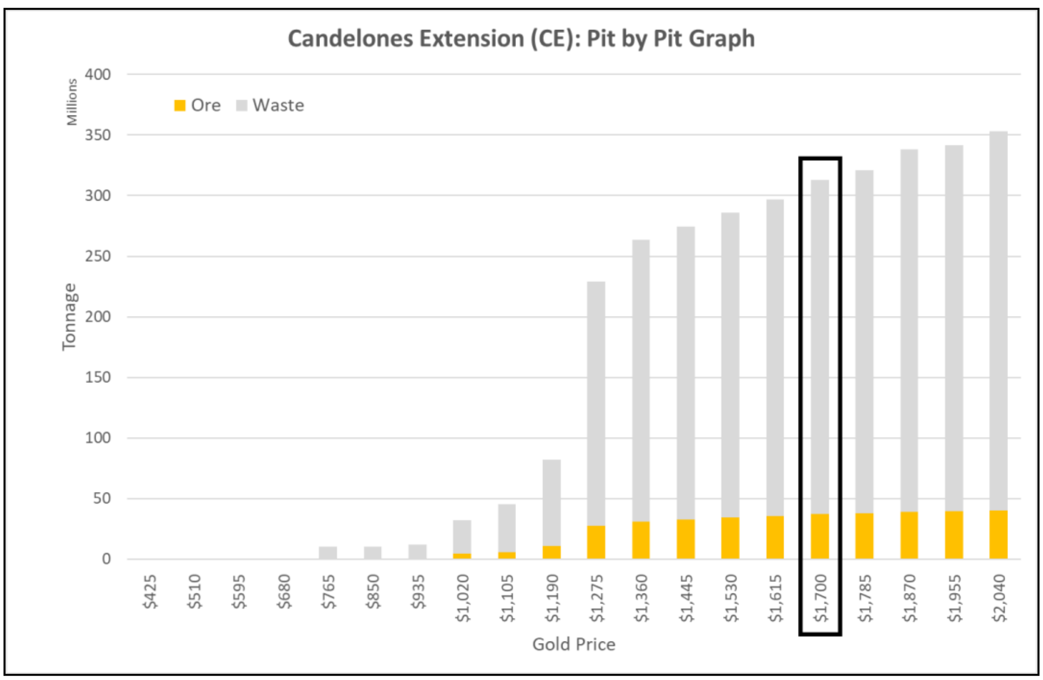


Figure 14.23
Simple Revenue Factors for each Nested Pit Shell at the CE Deposit



15.0 MINERAL RESERVE ESTIMATES

15.1 MINERAL RESERVE STATEMENT

As outlined by The Canadian Institute of Mining, Metallurgy and Petroleum within the CIM Definition Standards on Mineral Resources and Mineral Reserves (CIM Definition Standards for Mineral Resources & Mineral Reserves, 2014), the definition of a Mineral Reserve is as follows:

> *"A Mineral Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include the application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified."*
>
> *"Modifying Factors are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors."*
>
> *"The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported."*

The Mineral Reserves classifications are further subdivided to highlight the degree of certainty of the estimate. For Mineral Reserves, the following definitions are taken from the CIM Definition Standards for Mineral Resources & Mineral Reserves, 2014 and applied to this report:

- *"Probable Mineral Reserve" is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.*
- *"Proven Mineral Reserve" is the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.*

The CIM Definition Standards provide for a direct relationship between Mineral Resources and Mineral Reserves. Indicated Mineral Resources can be converted to Probable Mineral Reserves and Measured Mineral Resources can be converted Proven Mineral Reserves, all pending the application of the Modifying factors. In other words, the level of geoscientific confidence for Probable Mineral Reserves is similar to that required for the in-situ determination of Indicated Mineral Resources and for Proven Mineral Reserves is the same as that required for the in-situ determination of Measured Mineral Resources.

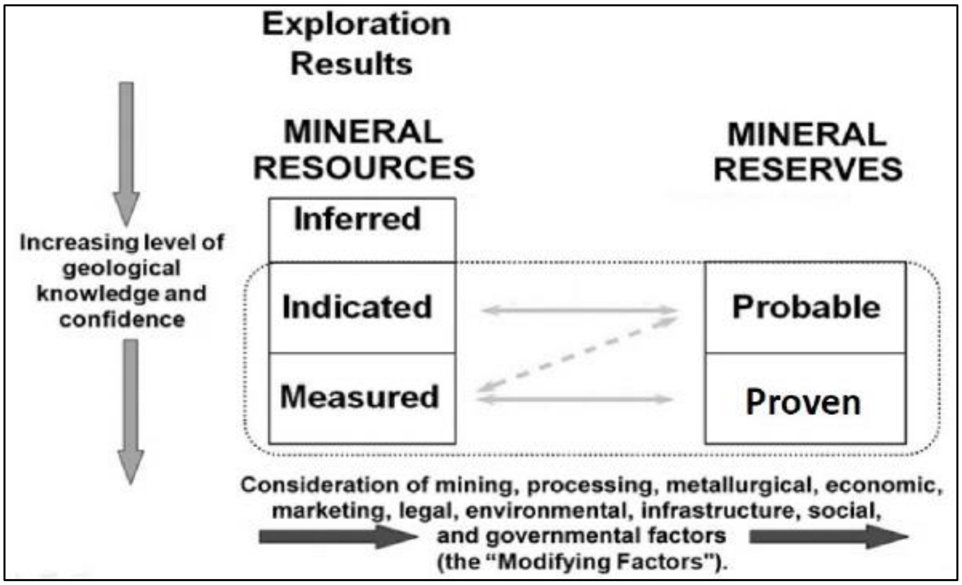
According to the CIM Definition Standards for Mineral Resources & Mineral Reserves, 2014:

- *"An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve…"*

All inferred resources in the deposit have been considered as waste.

Figure 15.1 displays the relationship between the Mineral Resource and Mineral Reserve categories.

Figure 15.1
Relationship between Mineral Resources and Mineral Reserves Categories



This section presents the estimated mineral reserves for the CMC oxide deposit.

The Candelones oxide deposit has been designed for extraction by conventional truck/shovel open pit mining methods. The basis for the open pit mine design that supports the mineral reserve estimates herein is discussed in Section 15.3.

Table 15.1 summarizes the Candelones oxide mineral reserve tonnage and grades, which have been estimated according to current CIM standards.

15.2 Mineral Reserve Block Model

The block model used as the basis for the mineral reserve estimate is the same as the resource model described earlier herein. The block model has not been regularized, and the blocks size remained at 10 m x 10 m x 5 m (X-Easting, Y-Northing, Z-elevation) with no rotation applied.

The block model extents were constrained by the topography and cells above surface have been removed.

Table 15.1
Open Pit Mineral Reserve Tonnages and Grades for the Candelones Project

Mineralization Type	Category	COG	Tonnes (x1,000)	Au g/t	Au oz (x1,000)	Strip Ratio
OB (Heap Leach)	Proven	0.208	-	-	-	0.40
Oxide (Heap Leach)			2,564	0.79	65	
Transition (Heap Leach)			-	-	-	
Total Proven			**2,564**	**0.79**	**65**	
OB (Heap Leach)	Probable	0.337	-	-	-	
Oxide (Heap Leach)			2,384	0.57	43	
Transition (Heap Leach)			649	0.62	13	

Mineralization Type	Category	COG	Tonnes (x1,000)	Au g/t	Au oz (x1,000)	Strip Ratio
Total Probable			**3,033**	**0.58**	**56**	
Total Proven + Probable			**5,597**	**0.67**	**121**	

Notes:

1. The oxide Mineral Reserves Estimates are reported at two different cut-off grades: 0.208 g/t Au for the Oxide and 0.337 g/t Au for the Transition, both for surface mining scenario.
2. The cut-off grade was calculated using a gold price of US$1,650 per ounce, US$2.74/g for selling costs and royalties, with Heap Leach metallurgical recoveries of 88% for Oxide rock and 59% for Transition rock, using cost estimates of US$2.25/t for mining the oxide, US$2.75/t for mining the transition, US$5.56/t for mineral processing and US$1.31/t for G&A.
3. The Mineral Reserve above were based on the resource model.
4. The Mineral Reserve presented here were estimated by Micon using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards of Disclosure for Mineral Projects.
5. The mineral resources are inclusive of the mineral reserves.
6. Inferred resources have been excluded from the current Mineral Reserves estimate.
7. Tonnage estimates are based on bulk densities individually measured and were interpolated for each of the weathered zones of Overburden (OB) – 2.14 t/m^3, Oxide (OX) – 2.31 t/m^3 and Transition (TR) – 2.64 t/m^3.
8. This Mineral Reserve estimate is dated October 07th, 2022 and is based upon the updated Mineral Resource estimate dated August 8th, 2022.
9. Tonnages and ounces in the tables are rounded to the nearest thousand. Numbers may not total due to rounding.
10. Mr. Abdoul Aziz Dramé, P.Eng, of Micon International Limited., a Qualified Person as defined by NI 43-101 responsible for the mineral reserves estimate.

15.3 Open Pit Optimization

Open pit optimization was conducted using Datamine Studio NPVS software to determine the optimal shape that satisfies economic, operational, and technical requirements suitable to a feasibility study. This task was undertaken based on the Lerchs-Grossmann algorithm, using incremental price factors of 1% along with a 5% yearly discount rate and assuming a mining rate of 5,000 t/d.

Datamine Studio OP software has been used to perform the subsequent design of the open pit which was guided by the optimized pit shell from the previous step. The resulting pit solid was used for the production scheduling and the Mineral Reserves estimate.

15.3.1 Pit Slope Geotechnical Assessment

The mineralized deposit at Candelones is primarily an oxide weathered rock with some portions of transitional material. Due to the mountainous nature of the topography, the mining activity will result in a flattened surface with no standing pit wall at the end of the operation. Therefore, no detailed geotechnical study has been conducted. Overall pit slope angles, inter-ramp slope angle, ramp and bench sizes have been designed according to the natural angle of rest of the host rock as well as the size of the equipment selected for the operation (Table 15.2).

All geotechnical related parameters used for both pit optimization and design comply with international mining standards and have been verified by observation of the mine site.

Slope monitoring and ground water control programs are strongly recommended for all stages of pit development. Those should include geotechnical and tension crack mapping, and surface displacement monitoring program using surface prisms. The surface water that develops behind the pit walls should be monitored and depressurized as needed.

Table 15.2
Final Optimization and Design Geotechnical Parameters

Pit Slope Parameters	
Final Bench Height (m)	5.0
Bench Face Angle (^{o})	37.0 to 40.0
Inter-Ramp Angle (^{o})	NA (no ramps in the pit walls)
Overall Slope Angle (^{o})	40.0

15.3.2 Mining Dilution and Ore Loss

The mining dilution has been assessed by considering the nature of the operation. Given that no drilling activity is planned and given the relatively small size of equipment, an allowance of 2.5% has been made for the mining dilution (0.25 m over 10 m block). The size of the equipment and the bench height also allow for a minimal ore loss of 2.5%.

For each mineralized block in the production schedule, diluted grades were calculated by considering the in-situ grades and assigning zero grade to the dilution tonnage. The density is the same for both mineralized ore and waste, therefore, the density for the mined blocks remained the same as the in-situ density.

15.3.3 Pit Optimization Parameters and Cut-Off Grade

The total ore-based cost is estimated at $6.87/t, which includes processing (heap leach) and general and administration costs, no provision has been made for sustaining capital and closure costs. Table 15.3 summarizes the cost assumptions that comprise the total ore cost.

Table 15.3
Ore Based Costs Parameters

Costs Assumptions	
Processing – Heap Leach ($/t)	5.56
General & Administration ($/t)	1.31
Sustaining Capital ($/t)	0.00
Mine Closure ($/t)	0.00
Total Ore-Based ($/t)	**6.87**

A unit reference mining cost is used for a "starting mining point" typically located near the pit crest or surface, which is at elevation 575.0 m for the Candelones pit. The reference mining cost is then increased incrementally according to pit depth, accounting for the additional cycle time (hauling cost) and extra ripping for the rock. The reference mining cost is estimated at $2.25/t with an incremental depth factor of $0.020/t per 5 m bench. The reference mining costs is based on a 1.9 km round trip cycle, along with 15% of the material requiring some ripping and considering the density of the oxide material. Most of the oxide resource assumes a small percentage of ripping, along with mechanical loading by excavator, with no drilling and blasting necessary. As the pit deepens, an aggressive ripping program with D8 triple shank and excavator ripper will be used to prepare the bench for loading by excavator. This will occur at or near the transition ore/waste zone, at the bottom of the planned pit development.

Mining factors have been applied for the transition and the waste material.

The following options have been considered for the ore and waste mining from the Candelones Pit:

- All the oxidized ore will be hauled directly from the pit to the stacker. 34% of the feed will be agglomerated and the remaining 66% will not.
- Classification and agglomeration was added for the upper portion of the deposit, to limit and mitigate any potential percolation issues at the base of the heap leach pad as well as to maximize gold recovery.
- All the oxidized waste material will be hauled directly from the pit to the waste dump location.
- All oxidized ore which requires agglomeration will go through a screening process. The remaining ore will go directly to pad.
- The costs for the transitional material will be the same as the oxidized material for both ore and waste, except for an extra cost for ore due to the screening process.

Table 15.4 summarizes the components which comprise the mining cost.

Table 15.4
Mining Costs Summary

Mining Costs Assumptions	
Ore Direct from Pit to Pad ($/t)	1.91
Waste Direct from Pit to Dump ($/t)	1.83
Agglomeration ($/t)	1.02
Screening ($/t)	1.02
Transition – Extra ($/t)	0.5
Ripping & Hauling ($/t/Bench)	**0.02**
Total Ore-Oxide ($/t)	**2.25**
Total Waste-Oxide ($/t)	**1.89**
Total Ore-Transition ($/t)	**2.75**
Total Waste-Transition ($/t)	**2.39**

Gold recovery estimates for oxide and transition mineralization are based on a column leach test work completed at Bureau Veritas Commodities Canada Ltd. metallurgical test laboratories, Vancouver, where preliminary results indicate 88% gold extraction in 30 days for -19 mm oxide mineralization and over 59% gold extraction in 43 days for -12.5 mm transition mineralization. This study uses a weighted average of 85% leach recovery with a 70-day leach cycle.

A gold price of $1,650/oz has been used to reflect the 3-year trailing average as of July, 2022 (Source: Kitco Website).

A selling cost of $3.00/oz, pay-ability of 99.92% and royalties of 5% have all been applied in the cut-off grade calculations. Table 15.5 is a summary of the parameters used for the cut-off calculations and Table 15.6 is a summary of the pit optimization parameters.

Table 15.5
Summary of the Cut-Off Grades Parameters

Parameters	Oxide	Transition
Au Price ($/oz)	1,650	1,650
Recovery - Process (%)	88.0%	59.0%
Mining Dilution (%)	2.5%	2.5%
Pay-ability (%)	99.92%	99.92%
Royalties (%)	5.00%	5.00%
Selling ($/oz recovered)	3.00	3.00
Waste - Free dig ($/t)	$1.84	$2.39
Ore - Free dig ($/t)	$2.25	$2.75
Cost Factor - Waste	0.82	1.06
Cost Factor - Ore	1.00	1.22
Heap Leach ($/t)	$5.56	$5.56
Miscellaneous ($/t)	$0.00	$0.00
Cut-off - Breakeven (g/t)	**0.208**	**0.337**
Cut-off - Heap Leach (g/t)	**0.159**	**0.238**

Table 15.6
Summary of the Pit Optimization Parameters

Pit Optimization Parameters	
NPV Discount Rate (%)	5.0%
Mining Dilution (%)	2.5%
Mining losses (%)	2.5%
Pit Slope (°)	40°
Bench Height (m)	5.0
Max bench/year (*)	15.0
Mined depth/year (m)	75.0
Discount Rate/bench (%)	0.33%
Density - Oxide (t/m^3)	2.31
Density - Transition (t/m^3)	2.64
Swelling Factor - Oxide (*)	1.25
Swelling Factor - Transition (*)	1.27
Density_Broken - Oxide (t/m^3)	1.85
Density_Broken - Transition (t/m^3)	2.08

For the open pit, a break-even cut-off grade (COG) has been calculated is used in defining the economic pit. Mining costs have been excluded from the cut-off grade calculation, since all material within the pit shell, both ore and waste must be mined, and the decision as to whether the material is economic to process is made at the pit rim. However, the total mining costs are accounted for in determining the net present value (NPV) of the operation.

15.3.4 Open Pit Optimization Results

The results of the nested Lerchs-Grossman optimized pit shells for 0.01% incremental price factors using the parameters in Table 15.2 through Table 15.6 are presented in Table 15.7. Pit Shell number 81 corresponding to a price factor 0.84% and a gold price $1,386/oz has been selected as the basis for the final pit design in this study. The pit shell captures 99.68% of the maximum NPV and has a total tonnage of 5.38 Mt of ore grading 0.698 g/t and 0.95 Mt of waste.

Figure 15.2 presents the ore and waste tonnes in addition to the relative NPV, of the individual nested pit shells.

Figure 15.3 presents a view of the ultimate pit shell selected for the design purposes.

Table 15.7
Optimized Lerchs-Grossman nested Pit-by-Pit Summary

Pit Phase	Price Factor (%)	NPV (M$)	Revenue (M$)	Processing Cost (M$)	Mining Cost (M$)	Total Ore (Mt)	Ore Grade (g/t)	Total Waste (Mt)	Strip W:O (*)	% Max NPV (%)
Pit 1	4%	0.52	0.54	0.02	0.01	0.00	5.40	0.00	0.00	0.49%
Pit 2	5%	0.72	0.75	0.02	0.01	0.00	5.20	0.00	0.00	0.69%
Pit 3	6%	1.58	1.66	0.06	0.02	0.01	4.21	0.00	0.02	1.51%
Pit 4	7%	2.25	2.39	0.10	0.03	0.01	3.76	0.00	0.04	2.15%
Pit 5	8%	2.93	3.12	0.14	0.05	0.02	3.43	0.00	0.02	2.79%
Pit 6	9%	3.70	3.96	0.19	0.07	0.03	3.18	0.00	0.03	3.52%
Pit 7	10%	7.27	7.94	0.49	0.17	0.07	2.51	0.00	0.02	6.93%
Pit 8	11%	8.95	9.84	0.65	0.23	0.10	2.33	0.00	0.02	8.53%
Pit 9	12%	12.02	13.33	0.96	0.34	0.14	2.17	0.00	0.03	11.46%
Pit 10	13%	14.54	16.25	1.24	0.44	0.18	2.03	0.00	0.02	13.87%
Pit 11	14%	17.56	19.80	1.62	0.56	0.24	1.90	0.01	0.02	16.75%
Pit 12	15%	22.08	25.16	2.22	0.77	0.32	1.76	0.01	0.02	21.06%
Pit 13	16%	24.40	27.93	2.53	0.89	0.37	1.71	0.01	0.03	23.27%
Pit 14	17%	28.37	32.76	3.14	1.10	0.46	1.62	0.01	0.03	27.05%
Pit 15	18%	33.92	39.71	4.10	1.46	0.60	1.50	0.03	0.05	32.34%
Pit 16	19%	37.07	43.66	4.66	1.65	0.68	1.46	0.03	0.04	35.34%
Pit 17	20%	40.35	47.85	5.28	1.87	0.77	1.41	0.03	0.04	38.48%
Pit 18	21%	42.37	50.46	5.67	2.03	0.83	1.38	0.04	0.05	40.40%
Pit 19	22%	46.47	55.88	6.57	2.35	0.96	1.32	0.05	0.06	44.31%
Pit 20	23%	49.84	60.44	7.37	2.63	1.07	1.28	0.06	0.05	47.52%
Pit 21	24%	54.44	66.80	8.57	3.05	1.25	1.21	0.06	0.05	51.91%
Pit 22	25%	59.28	73.67	9.95	3.51	1.45	1.15	0.07	0.05	56.53%
Pit 23	26%	61.59	76.98	10.62	3.76	1.55	1.13	0.08	0.05	58.72%
Pit 24	27%	64.01	80.52	11.35	4.02	1.65	1.11	0.09	0.05	61.04%

Pit Phase	Price Factor (%)	NPV (M$)	Revenue (M$)	Processing Cost (M$)	Mining Cost (M$)	Total Ore (Mt)	Ore Grade (g/t)	Total Waste (Mt)	Strip W:O (*)	% Max NPV (%)
Pit 25	28%	65.82	83.15	11.90	4.22	1.73	1.09	0.09	0.05	62.76%
Pit 26	29%	67.65	85.87	12.48	4.44	1.82	1.07	0.10	0.06	64.51%
Pit 27	30%	70.23	89.80	13.36	4.76	1.95	1.05	0.12	0.06	66.96%
Pit 28	31%	72.20	92.80	14.02	5.03	2.04	1.03	0.13	0.06	68.84%
Pit 29	32%	74.21	95.93	14.75	5.30	2.15	1.02	0.14	0.07	70.76%
Pit 30	33%	75.20	97.50	15.13	5.44	2.20	1.01	0.15	0.07	71.70%
Pit 31	34%	79.47	104.51	16.95	6.09	2.47	0.97	0.16	0.07	75.78%
Pit 32	35%	81.36	107.68	17.76	6.41	2.59	0.95	0.18	0.07	77.58%
Pit 33	36%	84.38	112.97	19.25	6.96	2.80	0.92	0.21	0.07	80.46%
Pit 34	37%	86.00	115.85	20.08	7.27	2.92	0.91	0.22	0.07	82.00%
Pit 35	38%	87.56	118.65	20.87	7.57	3.04	0.89	0.23	0.08	83.49%
Pit 36	39%	88.73	120.71	21.44	7.80	3.12	0.88	0.25	0.08	84.60%
Pit 37	40%	90.13	123.31	22.19	8.12	3.23	0.87	0.27	0.08	85.94%
Pit 38	41%	91.94	126.77	23.25	8.54	3.38	0.86	0.30	0.09	87.67%
Pit 39	42%	92.51	127.87	23.59	8.67	3.43	0.85	0.30	0.09	88.21%
Pit 40	43%	93.85	130.54	24.45	9.02	3.56	0.84	0.33	0.09	89.48%
Pit 41	44%	94.23	131.31	24.69	9.12	3.59	0.84	0.33	0.09	89.85%
Pit 42	45%	94.70	132.24	24.99	9.23	3.64	0.83	0.34	0.09	90.29%
Pit 43	46%	95.57	134.10	25.64	9.48	3.73	0.82	0.35	0.09	91.12%
Pit 44	47%	96.01	135.01	25.94	9.60	3.78	0.82	0.36	0.09	91.54%
Pit 45	48%	96.49	136.06	26.29	9.77	3.83	0.82	0.38	0.10	92.00%
Pit 46	49%	96.96	137.10	26.65	9.92	3.88	0.81	0.39	0.10	92.45%
Pit 47	50%	97.27	137.78	26.90	10.02	3.92	0.81	0.39	0.10	92.74%
Pit 48	51%	97.90	139.28	27.45	10.26	4.00	0.80	0.41	0.10	93.35%
Pit 49	52%	98.38	140.42	27.86	10.44	4.06	0.80	0.43	0.11	93.81%
Pit 50	53%	98.65	141.06	28.10	10.54	4.09	0.79	0.44	0.11	94.07%
Pit 51	54%	99.31	142.73	28.76	10.83	4.19	0.78	0.47	0.11	94.69%
Pit 52	55%	99.58	143.42	29.02	10.94	4.22	0.78	0.48	0.11	94.95%
Pit 53	56%	99.88	144.17	29.32	11.06	4.27	0.78	0.48	0.11	95.23%
Pit 54	57%	100.28	145.22	29.76	11.23	4.33	0.77	0.49	0.11	95.61%
Pit 55	58%	100.46	145.71	29.95	11.31	4.36	0.77	0.49	0.11	95.79%
Pit 56	59%	100.75	146.52	30.29	11.46	4.41	0.77	0.51	0.12	96.06%
Pit 57	60%	101.08	147.47	30.68	11.65	4.47	0.76	0.53	0.12	96.38%
Pit 58	61%	101.31	148.16	30.97	11.79	4.51	0.76	0.54	0.12	96.60%
Pit 59	62%	101.70	149.37	31.51	12.01	4.59	0.75	0.55	0.12	96.97%
Pit 60	63%	101.90	149.99	31.79	12.13	4.63	0.75	0.56	0.12	97.16%
Pit 61	64%	102.04	150.43	31.98	12.22	4.65	0.75	0.57	0.12	97.30%
Pit 62	65%	102.29	151.25	32.35	12.39	4.71	0.74	0.59	0.13	97.53%
Pit 63	66%	102.63	152.43	32.84	12.68	4.78	0.74	0.64	0.13	97.86%

Pit Phase	Price Factor (%)	NPV (M$)	Revenue (M$)	Processing Cost (M$)	Mining Cost (M$)	Total Ore (Mt)	Ore Grade (g/t)	Total Waste (Mt)	Strip W:O (*)	% Max NPV (%)
Pit 64	67%	102.86	153.24	33.21	12.86	4.83	0.73	0.66	0.14	98.08%
Pit 65	68%	103.01	153.75	33.44	12.98	4.87	0.73	0.68	0.14	98.22%
Pit 66	69%	103.11	154.15	33.62	13.07	4.89	0.73	0.69	0.14	98.32%
Pit 67	70%	103.35	155.05	34.04	13.28	4.96	0.73	0.71	0.14	98.54%
Pit 68	71%	103.48	155.57	34.28	13.42	4.99	0.72	0.73	0.15	98.67%
Pit 69	72%	103.60	156.07	34.53	13.52	5.03	0.72	0.74	0.15	98.78%
Pit 70	73%	103.70	156.48	34.74	13.62	5.06	0.72	0.75	0.15	98.87%
Pit 71	74%	103.75	156.71	34.86	13.67	5.07	0.72	0.76	0.15	98.92%
Pit 72	75%	103.82	157.06	35.04	13.75	5.10	0.72	0.77	0.15	99.00%
Pit 73	76%	103.95	157.66	35.34	13.91	5.14	0.71	0.79	0.15	99.12%
Pit 74	77%	104.10	158.41	35.68	14.14	5.19	0.71	0.83	0.16	99.26%
Pit 75	78%	104.15	158.68	35.82	14.21	5.21	0.71	0.84	0.16	99.31%
Pit 76	79%	104.29	159.44	36.19	14.45	5.27	0.71	0.88	0.17	99.44%
Pit 77	80%	104.36	159.82	36.38	14.56	5.30	0.70	0.90	0.17	99.50%
Pit 78	81%	104.40	160.10	36.53	14.64	5.32	0.70	0.91	0.17	99.55%
Pit 79	82%	104.46	160.48	36.72	14.75	5.35	0.70	0.93	0.17	99.60%
Pit 80	83%	104.49	160.64	36.81	14.80	5.36	0.70	0.94	0.17	99.63%
Pit 81	**84%**	**104.54**	**160.99**	**36.99**	**14.91**	**5.38**	**0.70**	**0.95**	**0.18**	**99.68%**
Pit 82	85%	104.60	161.42	37.22	15.05	5.42	0.70	0.98	0.18	99.73%
Pit 83	86%	104.62	161.65	37.35	15.11	5.44	0.69	0.98	0.18	99.76%
Pit 84	87%	104.65	161.90	37.49	15.19	5.46	0.69	1.00	0.18	99.79%
Pit 85	88%	104.70	162.29	37.72	15.30	5.49	0.69	1.01	0.18	99.83%
Pit 86	89%	104.72	162.52	37.84	15.38	5.51	0.69	1.02	0.19	99.85%
Pit 87	90%	104.74	162.76	37.98	15.46	5.53	0.69	1.03	0.19	99.87%
Pit 88	91%	104.79	163.39	38.33	15.68	5.58	0.68	1.08	0.19	99.92%
Pit 89	92%	104.81	163.70	38.52	15.76	5.61	0.68	1.08	0.19	99.94%
Pit 90	93%	104.82	163.78	38.57	15.79	5.61	0.68	1.08	0.19	99.94%
Pit 91	94%	104.84	164.11	38.76	15.91	5.64	0.68	1.11	0.20	99.96%
Pit 92	95%	104.85	164.39	38.93	16.01	5.67	0.68	1.12	0.20	99.97%
Pit 93	96%	104.87	164.73	39.14	16.12	5.70	0.68	1.14	0.20	99.99%
Pit 94	97%	104.87	164.97	39.27	16.23	5.72	0.68	1.16	0.20	100.00%
Pit 95	98%	104.87	165.04	39.30	16.26	5.72	0.68	1.17	0.20	100.00%
Pit 96	99%	104.88	165.25	39.43	16.33	5.74	0.67	1.18	0.21	100.00%
Pit 97	100%	104.88	165.41	39.51	16.41	5.75	0.67	1.20	0.21	100.00%

Figure 15.2
Graph of Ore and Waste Tonnes along with NPV of Optimized Nested Shells

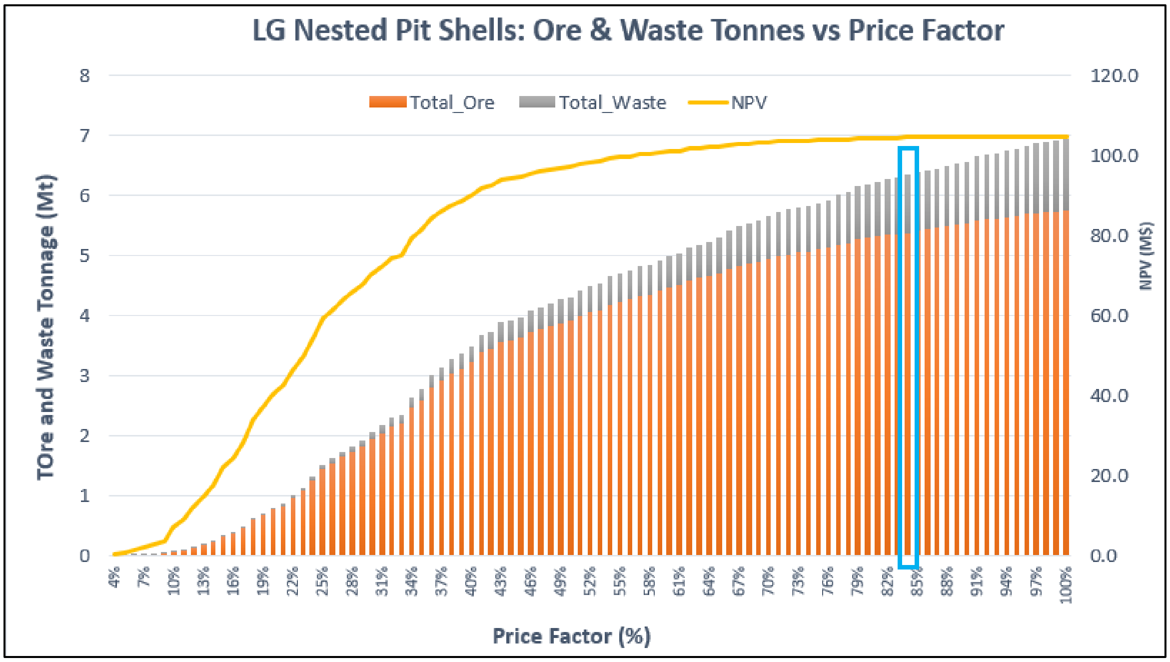
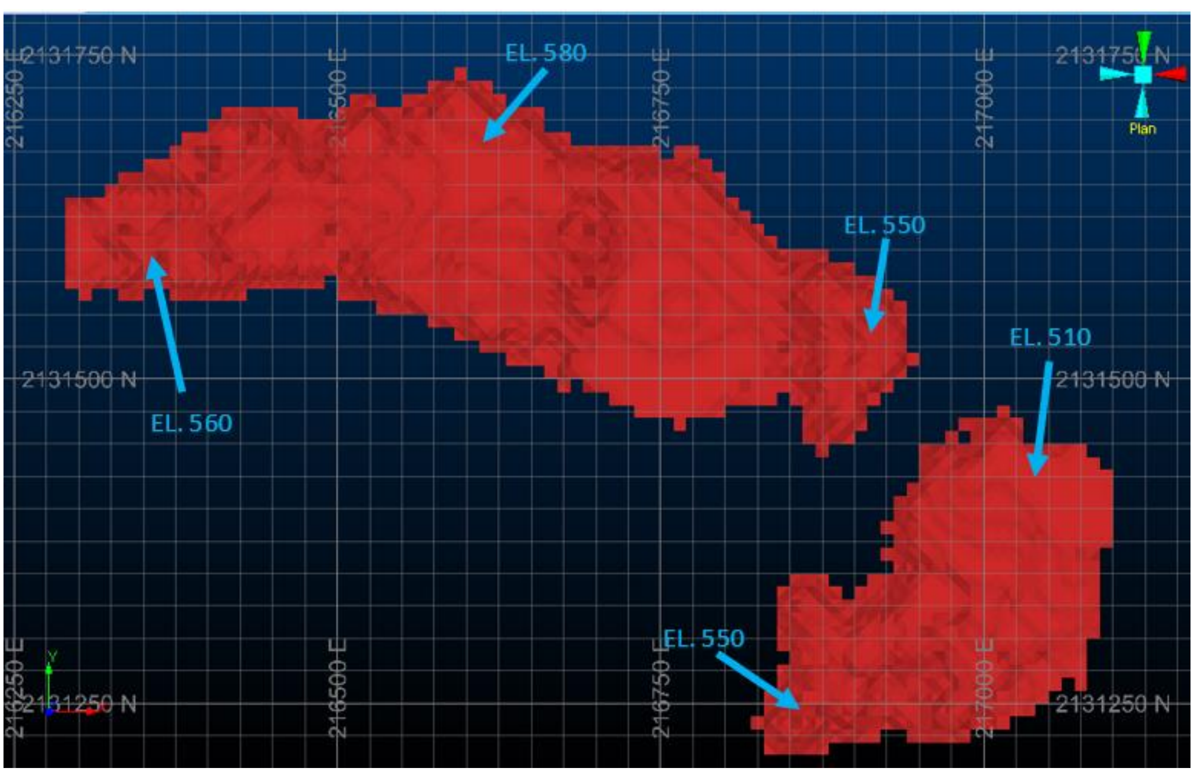


Figure 15.3
Location Map of the selected Pit for Design Purposes (Shell 81 – Price Factor 84)



15.4 OPEN PIT DESIGN

15.4.1 Open Pit Design Criteria

Single lane ramp has been selected to optimize the cycle time and ensure safety, given the constraints related to the possible waste dumps and heap leach facilities. Given the mountainous nature of the topography, no in-pit ramps are required in the pit walls. Benches will be accessed for truck haulage from points along the pit crest. The in-pit haulage ramps/roads should be detailed at the Detailed Engineering design stage of the Project.

The ramps and haul roads have been designed for the largest planned equipment, a 41-t haul truck (CAT745) with a canopy width of 3.80 m. For single lane traffic, industry best-practices recommend a haul roads width of at least two-and a half times the width of the largest vehicle. Haul road width has therefore been designed at 10.0 m width with a gradient of 8%.

On the outside edge of the road, a safety berm should be constructed of aggregate rock, to a minimum height of the radius of the largest tire using the ramp. The rolling radius of the truck tire is 0.8 m, but a CAT 120 grader tire is larger, between 1.28 and 1.35 m, so that a berm height of 1.4 m and 2.8 m width is required.

A water drainage ditch is planned on the highwall to capture run-off from the pit wall surface and provide drainage from the running surface. The ditch is designed as 1.4 m wide. To facilitate drainage of the roadway, a 2% cross slope on the ramp is planned.

A minimum mining width of 20 m was used, when determining the smallest width that can be safely and optimally excavated between phases or at the bottom of a pit. This value is driven by the operating width of the primary excavator, in this case the CAT349 hydraulic excavator, which is 10.96 m wide and has a 6.9 m boom reach and 3.08 m^3 bucket capacity.

Table 15.9 summarizes the mine design criteria.

Table 15.8
Mine Design Criteria Summary

Pit Slope Parameters	
Final Bench Height (m)	5.0
Berm Height (m)	2.0
Berm Width (m)	2.2
Ditch Width (m)	1.4
Ramp Width (m)	10.0
Ramp Gradient (%)	8.0%
Final Slope Angle (^{o})	38.0
Minimum Mining Width (m)	20.0

15.4.2 Open Pit Design Results

The Candelones Oxide Deposit is mined with two pits, as shown in Figure 15.4. The Main Pit (Pit 1), aligned north-west to south-east, measures 650 m along strike and 175 m in width. The Secondary Pit (Pit 2), which is oriented approximately north-south, is 240 m long and 150 m wide. Both pits have an average depth of 30 m.

The Main Pit design assumes access to the highest point in elevation at the north. The Secondary Pit design assumes access in the centre from the west. This provides access to the pushbacks and to shorten haul distances to the leach pad and waste dump from both pits.

Table 15.9, below, provides a comparative summary of the optimized pit shell versus the design. The design of the Candelones oxide deposit resulted in a higher stripping ratio, mainly attributed to the initial shape of the optimized pit shell.

During the design stage, several factors contributed to the increased amount of waste material. Those factors are: minimum mining width at pit bottom, bench face angles and overall pit slope angle. Those factors had had to be considered for the final schedule. However, the ultimate pit shell calculations only considered the overall pit slope angle, as a result, providing a less realistic open pit shell.

The pit optimization may require revision with the updated economic parameters during Detailed Engineering prior to the operations phase.

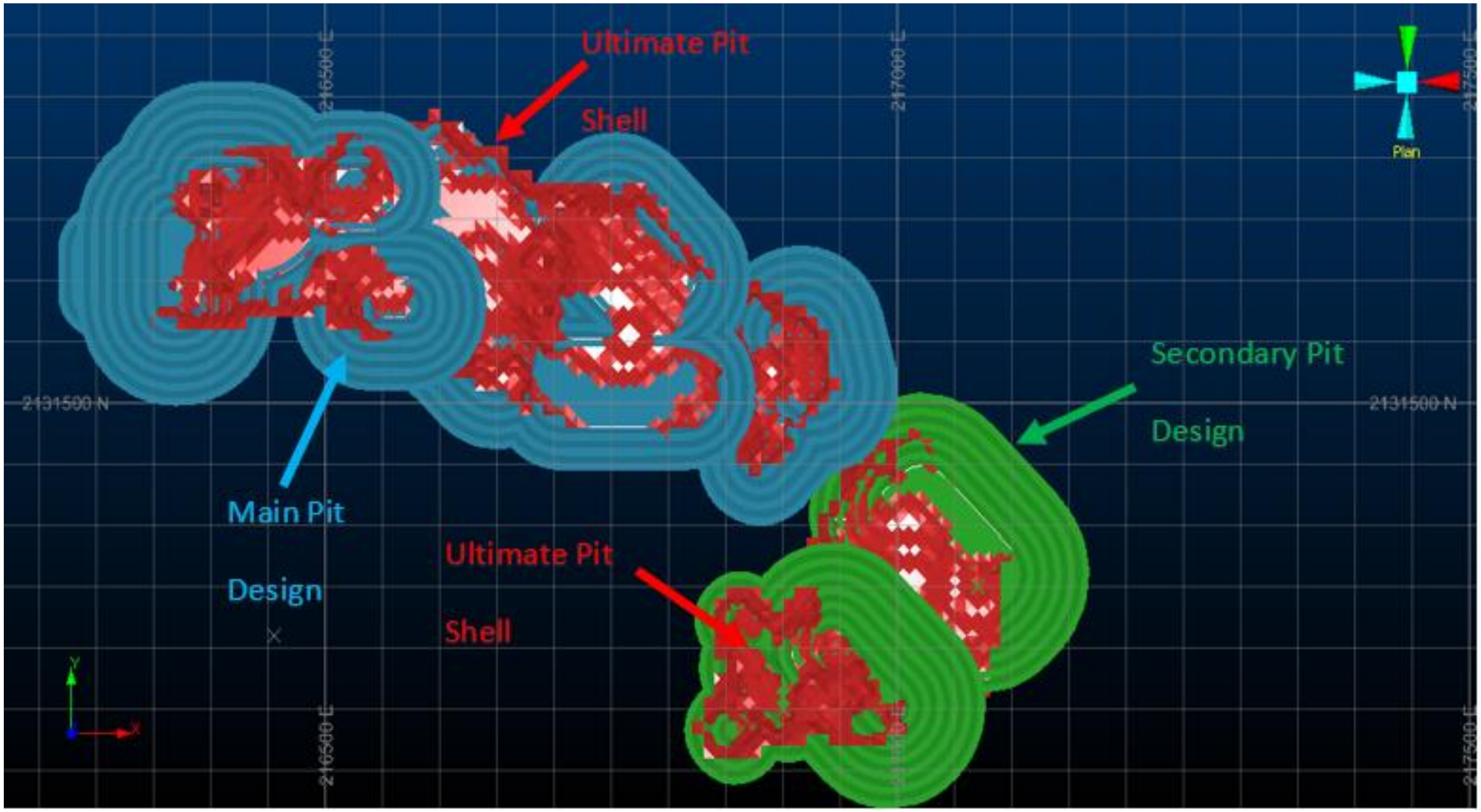
Table 15.9
Optimized Pit Versus Design Pit Summary of Quantities

Category	Rock Type	Parameters	*Units*	Optimized Pit	Design Pit	Variation Unit	Variation (%)	Comments
Proven	Ox	Ore_201	*t*	2,544,526	2,563,848	19,322	0.8%	
Probable	Ox	Ore_202	*t*	2,309,884	2,384,499	74,615	3.2%	
Probable	Tr	Ore_302	*t*	530,197	648,984	118,787	22.4%	Majority of the change in Tr (56%)
		Au_201	*g*	2,034,185	2,025,354	-8,831	-0.4%	
		Au_202	*g*	1,361,902	1,349,178	-12,724	-0.9%	
		Au_302	*g*	360,069	399,975	39,906	11.1%	Majority of the change in Tr (65%)
		Au_201	*g/t*	0.799	0.790	-0.009	-1.1%	
		Au_202	*g/t*	0.590	0.566	-0.024	-4.1%	
		Au_302	*g/t*	0.679	0.616	-0.063	-9.3%	Majority of the change in Tr (66%)
		Au_201	*oz*	65,401	65,117	-284	-0.4%	
		Au_202	*oz*	43,786	43,377	-409	-0.9%	
		Au_302	*oz*	11,577	12,860	1,283	11.1%	Majority of the change in Tr (65%)
Proven & Probable	**Ox & Tr**	**Total Ore**	*t*	**5,384,608**	**5,597,331**	212,723	4.0%	Small increase in ore (profit)
		Ore Grade	*g/t*	**0.698**	**0.674**	-0.024	-3.4%	Small decrease in grade (loss)

Category	Rock Type	Parameters	*Units*	Optimized Pit	Design Pit	Variation		Comments
						Unit	(%)	
		Total Waste	*t*	**954,959**	**2,231,654**	1,276,695	133.7%	Large increase in waste (cost)
		Strip Ratio	*t:t*	**0.18**	**0.40**	0.22	122.2%	Large increase in SR (cost), still very low
		Total Material	*t*	**6,339,567**	**7,828,985**	1,489,418	23.5%	Moderate increase in Total Material (cost)
		Au	*g*	**3,756,157**	**3,774,507**	18,350	0.5%	Insignificant increase in ore (profit)
		Au	*oz*	**120,763**	**121,353**	590	0.5%	Insignificant decrease in grade (loss)

Figure 15.4 shows details of the pit design.

Figure 15.4
Optimized Pit (Red) Versus Design Pit (Blue & Green) Comparative Map



16.0 MINING METHODS

16.1 OPEN PIT MINING METHODS

It was determined that mining of the CMC oxide deposit would be best performed by open pit methods. This involves the extraction of the unmineralized overburden, oxidized dacite and a small amount of mineralized transition zone material, all contained in a shallow pit, over an operating period of slightly more than three years.

The mineralized material will be stacked onto the leach pad, while waste material will be placed on the waste dump to the south-east of the pit. Standard encapsulation methods will be employed in the waste dump, to mitigate the effects of potentially acid generating waste rock stored there.

The operations will consist of a conventional open pit truck and shovel, with no drilling and blasting activities involved. No crusher will be utilized over the life of the mine; however, the coarser material will be handled by a ripping process. The open pit will be fully operated by a contractor, while Unigold will remain responsible for sourcing the aggregates for construction.

16.2 PUSHBACKS AND MINING PHASES

Mining of the Candelones oxide mineral reserves is planned over six phases distributed over two separate pits: The Main Pit (Phases 1, 2, 4E and 4W) and the Secondary Pit (Phases 3E and 3W).

Pit phasing improves the economics of the Candelones Oxide Project by feeding the heap leach with higher grade material during the earlier years and/or delaying waste stripping until later years. The rock weathering and feed location has played an important role in the phasing process. No internal phases (i.e., nested shells) have been designed due to the relatively small size of the deposit.

Mining at the Candelones Oxide Project begins with Phases 1 and 3E because of their higher grades. Also, the proximity of Phase 3E to the waste dump minimizes the trucking cycle and gives more flexibly as to the waste disposal throughout the mine life. Also, the material in Phase 3E is coarser and should be less impacted by the rainy season. The other phases have been sequenced following the same principles.

The pit designs are based on the optimized pit shells described in Section 15.3 and the design parameters outlined in Section 15.4, repeated here in Table 16.1.

Quantity statistics for each of the mining phases are summarized in Table 16.2 and depicted in Figure 16.1.

16.3 MINE, GENERAL ARRANGEMENT AND SURFACE INFRASTRUCTURE

The Figure 16.2 represents an overview of all major installations for the Candelones Oxide Site: heap leach facility, waste dump (trees and limber), waste rock storage, ADR process plant, open pit, reservoir and ponds.

Table 16.1
Mine Design Criteria Summary

Pit Slope Parameters	
Final Bench Height (m)	5.0
Berm Height (m)	1.4
Berm Width (m)	2.8
Ditch Width (m)	1.4
Ramp Width (m)	10.0
Ramp Gradient (%)	8.0%
Final Slope Angle (^{0})	38.0
Minimum Mining Width (m)	20.0

Table 16.2
Mining Phases Quantities (From Design Pit)

Parameters	Units	Phase 1 Pit 1	Phase 3E Pit 2	Phase 3W Pit 2	Phase 2 Pit 1	Phase 4E Pit 1	Phase 4W Pit 1	Total
Total Ore	**Tonnes**	1,272,470	1,196,897	522,427	2,165,230	363,969	76,338	**5,597,331**
Ore Grade	**g/t**	0.737	0.860	0.444	0.633	0.440	0.586	**0.674**
Total Waste	**Tonnes**	359,038	383,682	365,584	870,535	210,243	42,571	**2,231,654**
Strip Ratio	*	0.28	0.32	0.70	0.40	0.58	0.56	**0.40**
Rock	**Tonnes**	1,631,508	1,580,579	888,011	3,035,765	574,212	118,909	**7,828,985**
Metal Total	**Grams**	937,802	1,028,765	231,988	1,371,176	160,079	44,697	**3,774,507**
Metal Total	**Ounces**	30,151.0	33,075.6	7,458.6	44,084.3	5,146.7	1,437.0	**121,353.2**

Figure 16.1
Map of the Mining Phases (Pushbacks) of Candelones

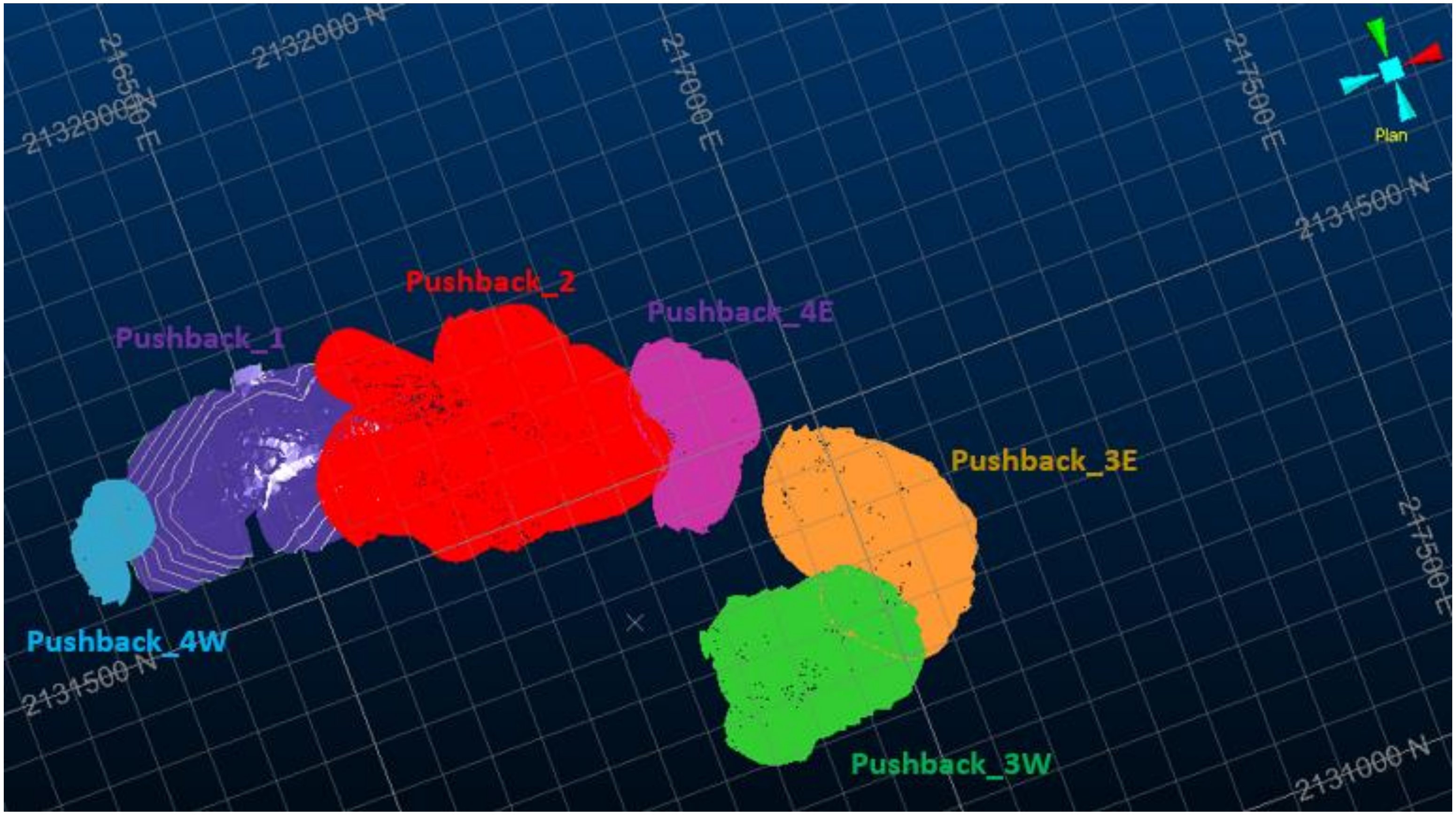
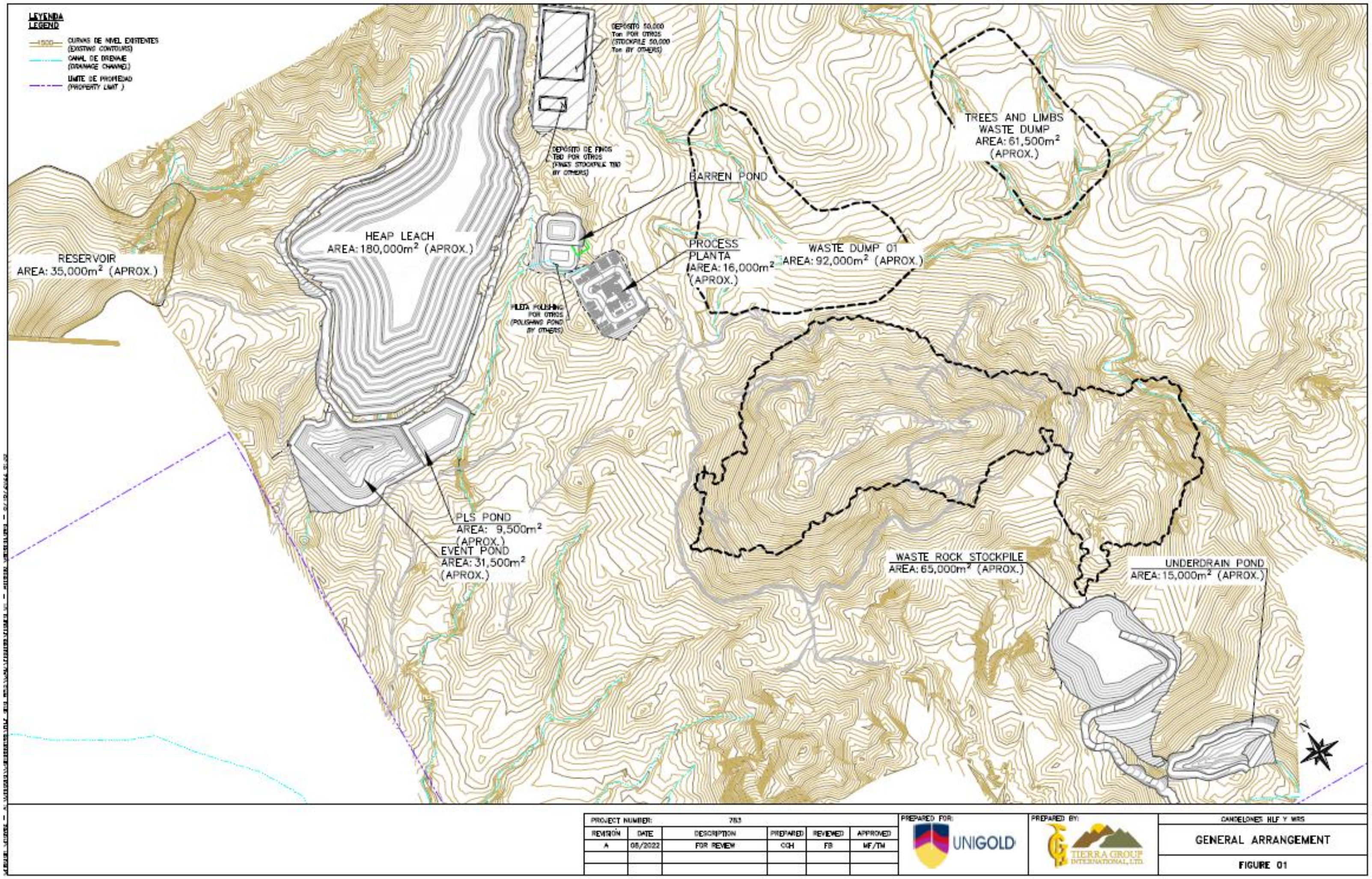


Figure 16.2
General Layout of the Surface Infrastructure



16.3.1 Heap Leach Facility

The HLF at the Candelones Oxide site has been designed to accommodate 1.825 million tonnes of ore per year (Mt/yr) over 3.3 years, for a total heap capacity of approximately 5.6 Mt. After being extracted by standard open pit mining methods, the ore to be agglomerated is then processed through screening, with the remaining non-agglomerated ore being delivered directly to the pad and stacked on the HLF using a conveyor/stacker system.

The surface area of the HLF is approximately 180,000 m^2, and it will have a 61 m vertical height (67 m toe to crest) and an overall slope angle of 21.8° (2.5H:1V). The average bulk density of material in the HLF is 1.6 t/m^3.

Detailed information about the HLF can be found in Section 18 of this report.

16.3.2 Waste Rock Storage

The Waste Rock Storage (WRS) will be located in a dedicated area, south-east section of the HLF. Acid-Base Accounting testwork indicates the waste rock to be non-acid generating. The current WRS has been designed to store up to 1 Mt of Non-Potentially Acid Generating (NPAG) waste rock material.

The total waste material generated from the operations will be approximately 2.2 Mt. The remaining 1.2 Mt will be hauled and stored in the Secondary Pit (Phases 3E and 3W) once they are completely mined out. The capacity planned for the two pushbacks combined will be 2.5 Mt, providing some flexibility to the scheduling of waste material movement, and minimizing the overall environmental footprint.

The design parameters will remain the same: 43,000 m^2 surface area, 39 m height, 1.7 t/m^3 average bulk density, overall slope angle of 2.0H:1V.

Detailed information about the WRS can be found in the Section 18 of the current report.

16.3.3 Ore Stockpile

The ore stockpile for the Candelones Oxide Project has been designed to make up for a tonnage shortfall in ore movement during the rainy months of the year. The maximum capacity required is 97,500 t/yr, before depletion. This estimate has been based on the average rainfall recorded at the local weather station on the Candelones site.

The stockpile will not be used to segregate lower grade mineralized material from high grade ore. The short mine life span does not permit that,

The ore stockpile pile is located in the vicinity of the HLF, as shown in Figure 16.2.

16.3.4 Surface Access Haul Roads

The surface haul roads have been designed for a one-way traffic between the pit, the HLF and the WRS. Surface availability is challenging because of the mountainous nature of the topography, and the loop-type of traffic was deemed the best alternative to minimize equipment interactions.

Two main haul roads will be utilized during the LOM. One will access the Main Pit from the top of the mountain, and the other will be used for the Secondary Pit at the bottom. The second access haul road to the Secondary Pit may provide some flexibility during days of heavy rain, given the level of oxidization of the material (coarser rock) compared to the Main Pit.

16.4 MINE PRODUCTION SCHEDULE

The mining and processing schedules have been generated using Datamine Studio NPVS. The optimization process has been conducted not only to maximize the Project NPV but also to continuously feed the heap leach pad despite operational challenges in the rainy months. The optimization includes mine sequencing and mining rate, stockpile usage and rehandling, and fleet usage.

16.4.1 Mining Extraction Schedule

The production requirements for the Candelones Oxide Project have been established with a mining rate that would deliver the optimal balance between the minimal operational and capital costs and the maximum revenue from gold, especially early in the life of the operation.

A mining rate of 5,000 t/d has been selected and this would result in a life-of-mine of f approximately 3.3 years (39 months). The ramp up period occurs over the first two months, followed by 36 months of mining at peak capacity, and the last month of post-peak production ramping down. The target peak mining rate is 150 kt/month (5,000 t/d); however, this production rate has been adjusted to reflect the rainy season that occurs during the months of May, through October. Table 16.3 provide a detailed monthly target mining rate and stockpiling strategy.

Table 16.4 provide a detailed monthly mine production schedule, along with the movement of stockpile material.

Table 16.3
Estimated Monthly Target Mining Rates and Stockpiling Strategy

Year	Month Year	Month Total	Factor %	Mined (t)	Stockpile In (t)	Stockpile Out (t)	Processed (t)
1	**January**	**1**	0.5	75,000	0	0	75,000
1	February	2	0.75	112,500	0	0	112,500
1	March	3	1	150,000	0	0	150,000
1	April	4	1.15	172,500	22,500	0	150,000
1	May	5	0.85	127,500	0	0	127,500
1	June	6	0.9	135,000	0	0	135,000
1	July	7	1	150,000	0	0	150,000
1	August	8	0.9	135,000	0	0	135,000
1	September	9	0.85	127,500	0	12,000	139,500
1	October	10	0.85	127,500	0	12,000	139,500
1	November	11	1	150,000	0	0	150,000
1	December	12	1.1	165,000	15,000	0	150,000
2	**January**	**13**	1.15	172,500	22,500	0	150,000
2	February	14	1.15	172,500	22,500	0	150,000
2	March	15	1.15	172,500	22,500	0	150,000
2	April	16	1.1	165,000	15,000	0	150,000
2	May	17	0.85	127,500	0	22,500	150,000
2	June	18	0.9	135,000	0	15,000	150,000
2	July	19	1	150,000	0	0	150,000
2	August	20	0.9	135,000	0	15,000	150,000
2	September	21	0.85	127,500	0	22,500	150,000
2	October	22	0.85	127,500	0	22,500	150,000
2	November	23	1	150,000	0	0	150,000
2	December	24	1.1	165,000	15,000	0	150,000
3	**January**	**25**	1.15	172,500	22,500	0	150,000
3	February	26	1.15	172,500	22,500	0	150,000
3	March	27	1.15	172,500	22,500	0	150,000
3	April	28	1.1	165,000	15,000	0	150,000
3	May	29	0.85	127,500	0	22,500	150,000
3	June	30	0.9	135,000	0	15,000	150,000
3	July	31	1	150,000	0	0	150,000
3	August	32	0.9	135,000	0	15,000	150,000
3	September	33	0.85	127,500	0	22,500	150,000
3	October	34	0.85	127,500	0	22,500	150,000
3	November	35	1	150,000	0	0	150,000
3	December	36	1	150,000	0	0	150,000
4	**January**	**37**	1	150,000	0	0	150,000
4	February	38	1	150,000	0	0	150,000
4	March	**39**	1	150,000	0	7,500	150,000

Table 16.4
Detailed Mine Production Schedule and Stockpile Movement

Month Total	Ore Mined (t)	Ore Grade (g/t)	Waste Mined (t)	Strip Ratio (t:t)	Rock Total (t)	Au Total (oz)	Stockpile In (t)	Stockpile Out (t)
1	75,172	0.459	20,316	0.27	95,488	1,108	0	0
2	112,758	0.582	52,885	0.47	165,643	2,110	0	0
3	149,674	0.755	42,489	0.28	192,163	3,631	0	0
4	173,123	0.71	87,944	0.51	261,067	3,950	23,214	0
5	126,789	0.894	38,547	0.3	165,336	3,644	0	0
6	135,038	0.715	44,178	0.33	179,216	3,103	121	0
7	149,932	0.802	11,211	0.07	161,143	3,864	26	0
8	135,021	0.96	7,829	0.06	142,850	4,169	0	0
9	127,573	0.669	25,642	0.2	153,215	2,745	0	11,839
10	126,825	0.779	14,245	0.11	141,070	3,176	0	11,521
11	149,692	0.674	33,607	0.22	183,299	3,245	0	0
12	164,985	0.722	54,799	0.33	219,784	3,832	15,365	0
13	173,008	0.745	60,449	0.35	233,457	4,146	23,104	0
14	171,725	0.76	54,043	0.31	225,768	4,197	22,227	0
15	172,381	0.595	112,424	0.65	284,805	3,299	22,465	0
16	165,913	0.518	19,518	0.12	185,431	2,761	16,001	0
17	126,949	0.469	13,541	0.11	140,490	1,916	2,909	25,866
18	135,395	0.771	12,613	0.09	148,008	3,358	0	14,511
19	149,744	0.684	10,495	0.07	160,239	3,293	0	0
20	135,141	0.651	15,380	0.11	150,521	2,830	0	14,765
21	126,620	0.746	12,529	0.1	139,149	3,035	0	22,486
22	127,253	0.516	10,904	0.09	138,157	2,112	0	22,486
23	150,965	1.025	55,121	0.37	206,086	4,977	1,058	0
24	164,040	0.865	141,359	0.86	305,399	4,561	14,136	0
25	172,734	0.442	105,770	0.61	278,504	2,454	22,824	0
26	172,753	0.485	120,192	0.7	292,945	2,693	22,847	0
27	172,059	0.786	13,820	0.08	185,879	4,349	22,586	0
28	164,902	0.621	14,522	0.09	179,424	3,290	15,378	0
29	126,716	0.701	21,351	0.17	148,067	2,855	0	23,189
30	135,974	0.889	40,373	0.3	176,347	3,886	0	13,931
31	149,195	0.506	24,448	0.16	173,643	2,427	0	0
32	134,584	0.714	135,157	1	269,741	3,088	0	15,321
33	128,580	0.759	27,351	0.21	155,931	3,138	0	21,326
34	127,069	0.518	68,636	0.54	195,705	2,116	0	22,486
35	149,940	0.751	203,972	1.36	353,912	3,622	34	0
36	150,145	0.554	283,061	1.89	433,206	2,677	0	0
37	148,854	0.466	92,747	0.62	241,601	2,228	0	0
38	149,914	0.412	71,524	0.48	221,438	1,986	10	0
39	88,196	0.523	56,662	0.64	144,858	1,483	0	4,573
Total	**5,597,331**	**0.674**	**2,231,654**	**0.4**	**7,828,985**	**121,353**	**224,306**	**224,306**

Figure 16.3 depicts the production schedule by material type (ore versus waste) and the stripping ratio. The ore feed is constant throughout the LOM. The stripping ratio is very low at approximately 0.5 waste:ore and peak at the end of the Year 3 (Month 36).

Figure 16.3
Ore and Waste Material Movement Schedule versus Stripping Ratio

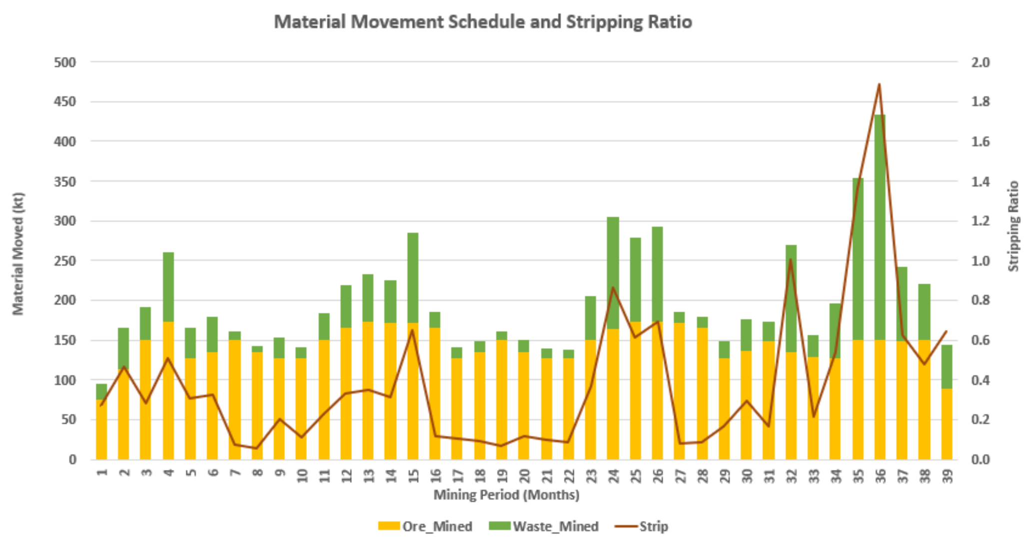
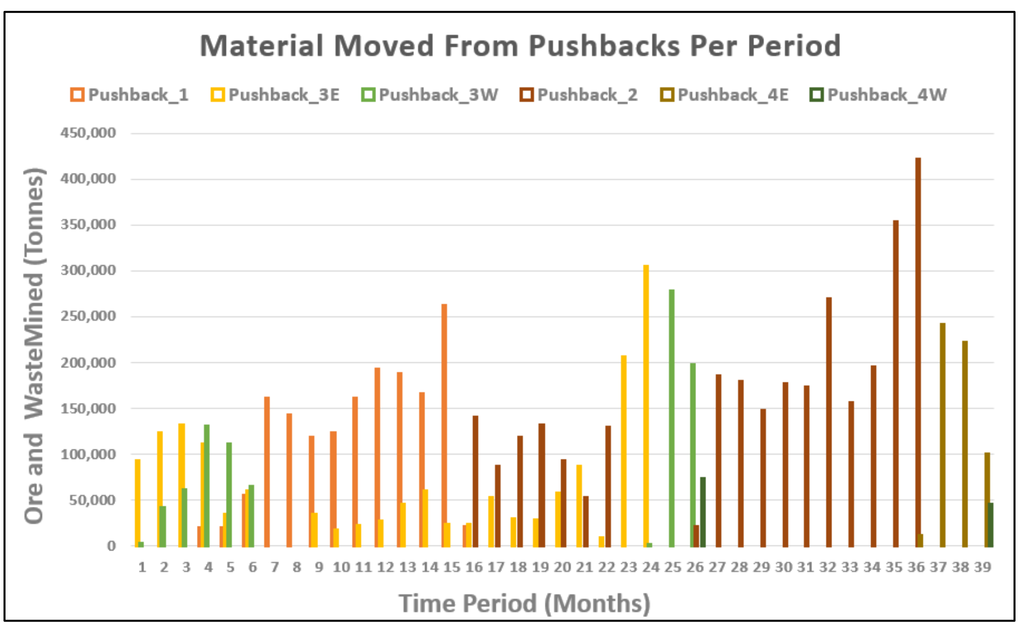


Figure 16.4 provides a breakdown of the mining within each of the phases in the Candelones Oxide Project. On average, there are two active phases, to provide flexibility during the rainy months.

Figure 16.4
Ore and Waste Material Movement Schedule Per Mining Phases



Given its higher grade, lower stripping ratio, and close proximity to the waste dump, mining starts with Phase 3E in the Secondary Pit. This also prioritizes making the phase location available for in-pit waste dumping near the end of the LOM. Pushback 3W follows for similar reasons. The other advantage of this schedule is to mitigate the risk during the rainy season that starts in the early months of the Project, because the Secondary Pit contains coarser material. Pushback 1 follows, then Pushback 2, completing mining activities with Phases 4E.

16.4.2 Processing (Heap Leach) Schedule

The peak capacity of deliveries to the heap leach pad is reached starting Month 3. However, the production drops slightly in the subsequent months because of the limited stockpile material available to compensate for the rainy season shortfalls. However, peak of the production is attained starting at Month 10 and stays constant until the last month, during which the remainder of the ore available in the deposit is not sufficient to feed the heap leach pad.

The processing schedule has been optimized to maximize the Net Present Value (NPV) for the Project (tonnes and grades) and to minimize material rehandling.

Table 16.4 provide a detailed monthly heap leach feed schedule along with the stockpile material movement. The final three months of heap leach feed consists entirely of low-grade from Pushbacks 4E and 4W.

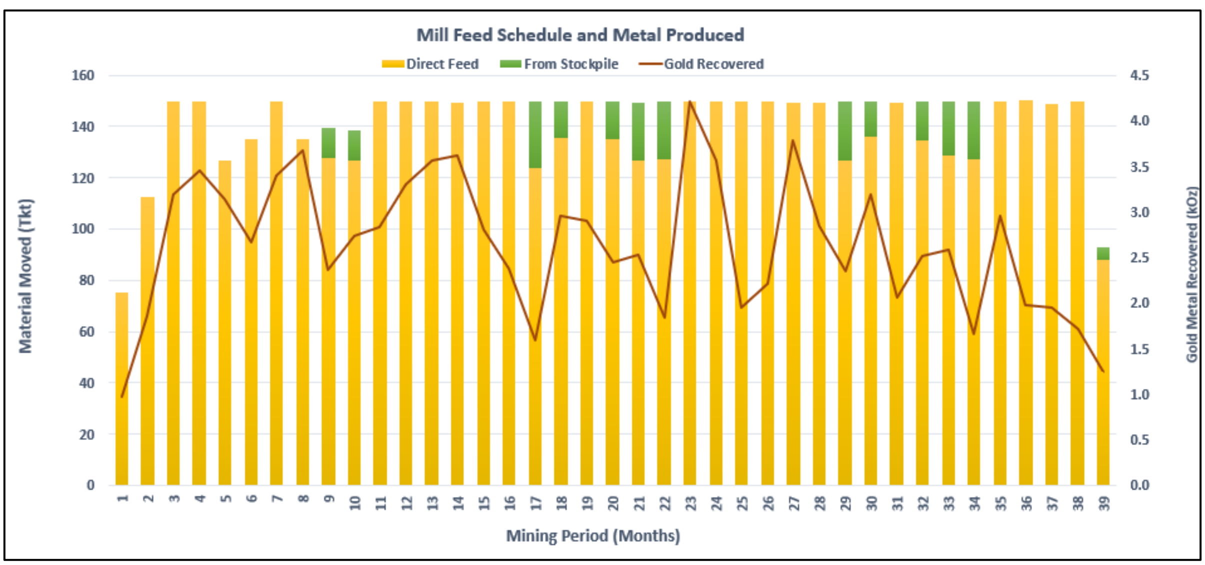
Table 16.5
Detailed Heap Leach Feed Schedule and Stockpile Movement

Month Total	Direct Feed (t)	From Stockpile (t)	Ore Processed (t)	Ore Grade (g/t)	Gold Recoverable (Ounces)
1	75,172	0	75,172	0.459	975.2
2	112,758	0	112,758	0.582	1,856.4
3	149,674	0	149,674	0.755	3,193.7
4	149,908	0	149,908	0.710	3,458.9
5	126,789	0	126,789	0.894	3,132.1
6	134,918	0	134,918	0.715	2,671.2
7	149,906	0	149,906	0.802	3,400.5
8	135,022	0	135,022	0.960	3,668.7
9	127,574	11,839	139,413	0.669	2,369.6
10	126,826	11,521	138,346	0.779	2,744.5
11	149,692	0	149,692	0.674	2,835.5
12	149,619	0	149,619	0.722	3,303.9
13	149,904	0	149,904	0.745	3,568.5
14	149,498	0	149,498	0.760	3,624.3
15	149,916	0	149,916	0.595	2,806.8
16	149,911	0	149,911	0.518	2,385.3
17	124,040	25,866	149,906	0.469	1,588.3
18	135,395	14,511	149,906	0.771	2,954.5
19	149,743	0	149,743	0.684	2,897.4
20	135,141	14,765	149,906	0.651	2,448.6

Month Total	Direct Feed (t)	From Stockpile (t)	Ore Processed (t)	Ore Grade (g/t)	Gold Recoverable (Ounces)
21	126,620	22,486	149,106	0.746	2,527.2
22	127,252	22,486	149,738	0.516	1,847.1
23	149,906	0	149,906	1.025	4,208.9
24	149,904	0	149,904	0.865	3,561.0
25	149,910	0	149,910	0.442	1,946.4
26	149,906	0	149,906	0.485	2,209.8
27	149,473	0	149,473	0.786	3,790.0
28	149,524	0	149,524	0.621	2,849.0
29	126,717	23,189	149,906	0.701	2,346.3
30	135,975	13,931	149,906	0.889	3,195.7
31	149,196	0	149,196	0.506	2,061.3
32	134,585	15,321	149,906	0.714	2,516.6
33	128,581	21,326	149,906	0.759	2,582.0
34	127,069	22,486	149,554	0.518	1,665.3
35	149,906	0	149,906	0.751	2,963.5
36	150,145	0	150,145	0.554	1,983.6
37	148,854	0	148,854	0.466	1,946.0
38	149,903	0	149,903	0.412	1,721.9
39	88,197	4,573	92,770	0.523	1,243.2
Total	**5,373,025**	**224,306**	**5,597,330**	**0.674**	**103,048.7**

Figure 16.5 outlines the heap leach feed by source (ore direct feed and stockpile) and the resulting gold ounces produced.

Figure 16.5
Heap Leach Feed Sources and Gold Recoverable



The monthly quantity of gold produced shows considerable variability over the mine life. This is mainly attributable to the grade's differences among the pushbacks. Further optimization will be conducted during the operational phase of the Project.

16.5 Mine Operations and Equipment Selection

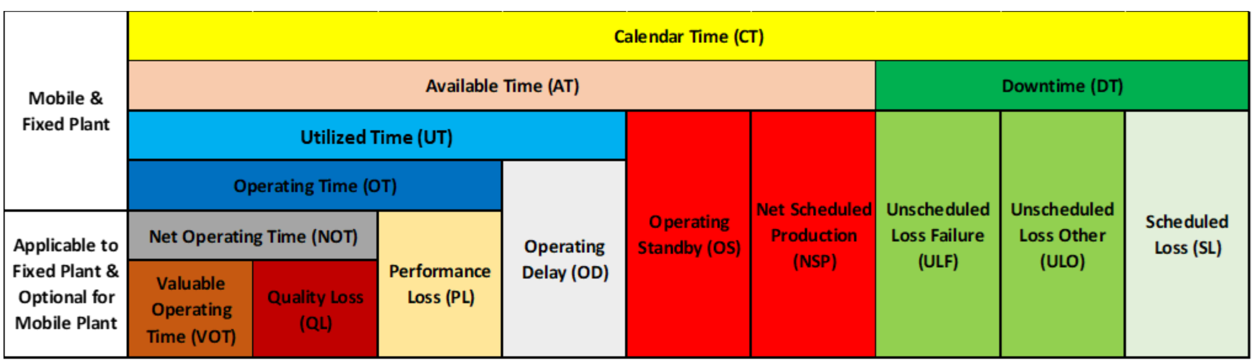
An operating mine site's primary activities consist of loading the materials from one or multiple sources by excavators (or shovels) and hauling the loaded material to specific destinations, using transportation systems such as trucks. It is a critical to have the appropriate size and number of equipment units to maximize the costs/return curve.

The mining operations at the Candelones Oxide Project are to be performed using conventional open pit techniques with small scale excavators and articulated haulage trucks. The open pit is to be excavated with 5 m benches, with no drilling and blasting activities involved. A complete contractor mining open pit operation is planned, with Unigold outsourcing certain support activities, such as the supply of aggregate rock for haul road maintenance.

16.5.1 Production Time Allocation Schedule

The allocation of time categories for the mine schedule and equipment productivity is based on the following definitions in Figure 16.6.

Figure 16.6
Mine Operations Time Allocation



Once in operation, the Candelones mine will operate 360 days per year on one-12-hour shift per day.

Five days per year are scheduled for non-operation (Scheduled Loss – SL).

The assumed deration of available time to Net Operating Time is approximately 65%, resulting in an equivalent utilized time to approximately 234 full days of production (one full day is considered a single shift of twelve hours) for a total annual 2,947 hours.

16.5.2 Excavators Cycle Time

The estimated loading time cycle for the hydraulic excavators is shown in Table 16.6, for a six-pass match between loader and hauler.

The loading activities will be performed by two 3.2 m^3 (CAT349) excavators – one in ore and one in the waste. The excavators will be matched with a fleet of 40 t payload capacity articulated trucks. If the operational constraints allow, one of the excavators will be used to load ore to build the stockpile. The two excavators will also be complemented by an excavator-riper of 3.2 m^3 bucket capacity, to handle the coarser material.

A wheel loader CAT966 will primarily be taking care of the stockpile rehandling activities while complementing the main excavator in in waste management.

The loading cycle for an excavator consists of spotting (waiting for a truck to arrive), loading the bucket from the face, swing the boom towards the truck, dump the material inside the truck bucket and then swing back empty to towards the loading face. Those steps, except the spotting, are repeated for each excavator bucket load until the truck maximum payload is attained.

The loading time cycle for the hydraulic excavators is shown in Table 16.6, for a six-pass loader to hauler ratio. The average cycle time for the excavators will be 260 seconds, approximately 4.3 minutes.

Table 16.6
Loading Cycle Time

Action	Time (s)
Spotting	20
Loading	10
Swing Loaded	10
Dumping	10
Swing Back Empty	10
Total for 6 Buckets	240
Total Loading	260

16.5.3 Trucks Cycle Time

Haulage will be performed with 40 t (CAT745) articulated trucks. The truck fleet productivity and cycle times have been estimated for each period and all possible destinations such as heap leach pad and the waste dump storage. A haulage simulation was done to study the number of truck and shovel units required.

The truck cycle time will consist of four distinct parts. The first will start with loading at the face. Assuming that there will be another truck being loaded by the excavator (one complete loading cycle), the truck will spot a few moments prior to receiving the 6-bucket loads, resulting in a total loading time of 520 seconds. The second part of the truck cycle will consist of the truck travelling loaded, at an average speed of 17 km/h to either the heap leach pad or the waste dump storage. In the third part of the cycle, the truck will empty its payload at the destination. Assuming that the destination facility will have another truck emptying its payload, the truck will have to perform the spotting and dumping actions. The fourth section of the journey consists of returning empty at a speed of 20 km/h to the shovel face, to reload material and the cycle resumes.

Given the differences in the location of each mining block and the off-loading destinations, the resulting travelling times will also be different. The total fixed times for each journey – Part 1 and Part 3 are estimated to account for 600 seconds, or approximately 10.0 minutes.

The estimates for the truck cycle time (excluding travelling loaded and empty) are summarized in Table 16.7.

Table 16.7
Haulage Cycle Time Parameters

Parameter	Time (Seconds)
Queuing	260
Spotting	20
Loading	240
Total Loading	**520**
Queuing	40
Spotting	20
Dumping	20
Total Dumping	**80**
Total Fixed	**600**

Table 16.8 summarizes the average distance from each mining location (pushbacks) to each of the destinations (heap leach and waste dump). It is assumed that Phases 1, 3E and 3W will truck their waste directly to the waste dump storage. Phases 2 and 4 will dump their waste material back in-pit into Phases 3E and 3W.

Although the pit operations are planned as fully managed by the contractor, there is assumed to be an additional haulage costs when the distance exceeds a 1.9 km roundtrip. For longer distances there is assumed an extra mining costs of 0.02 $/t/bench.

Table 16.8
Average Truck Haulage Distances

Pushback Number	One Way to Heap Leach Facility (m)	One Way to Waste Dump Storage (m)
1	753	1,136
3E	1,124	432
3W	1,208	317
2	987	805
4E	1,031	574
4W	578	1,289

Estimates have been made for the total travelling time to each location and from each pushback, as summarized in Table 16.9.

Table 16.9
Total Truck Travelling Time

Pushback Number	Loaded to HLF (s)	Loaded to WDS (s)	Empty From HLF (s)	Empty From WDS (s)	Total Trip HLF (s)	Total Trip WDS (s)
1	159	241	136	204	295	445
3E	238	91	202	78	440	169
3W	256	67	217	57	473	124
2	209	170	178	145	387	315
4E	218	122	186	103	404	225
4W	122	273	104	232	226	505

It is assumed that 10 hours will be available per 12 hours shift (83% availability). This accounts for line-up meetings, lunch breaks and end of shift procedures. During the dry season, the production rate has been increased by 15% to 5,750 t/d to build the stockpile for the low production days during the rainy season. Table 16.9 summarizes the total cycle time for mining ore and waste as well as the number of trucks required to achieve the 5,000 t/d and 5,750 t/d scenarios. These calculations consider a bucket fill factor of 95%, so that the effective payload of the truck would be 38 t.

Table 16.10 suggests that 3 to 5 trucks will be sufficient to fulfil the production requirements.

Table 16.10
Total Truck Cycle Time and Equipment Required

Pushback Number	Total Cycle HLF (s)	Total Cycle WDS (s)	Trips Per Shift Per Truck	Trucks Required Ore - 5,000 t/d	Trucks Required Ore - 5,750 t/d
1	895	1,045	40	3.3	3.8
3E	1,040	769	34	3.9	4.5
3W	1,073	724	33	4.0	4.6
2	987	915	36	3.7	4.2
4E	1,004	825	35	3.8	4.3
4W	826	1,105	43	3.1	3.5

Given that the contractor will have 6 trucks (40 t) available at any given time, the number of trucks allocated to the waste movement will be driven by the number of trucks required for ore haulage. Therefore, at least one truck will be assigned to waste management at any given time.

16.5.4 Mine Support Equipment

The mining support equipment includes dozers, graders, a water truck, a fuel truck and a service/tire truck. Miscellaneous ancillary equipment is also required to supplement major equipment maintenance and support during the ongoing pit operations.

The dozers will operate on active benches and around the operating excavators. The dozers will also build roads and berms, scale walls and rip hard toes. On waste dump storages and stockpiles the dozers will maintain positive grades and provide safety berms for the trucks for dumping.

Graders will maintain roads and provide a level running surface at dump and pit bench surfaces.

Water trucks will also assist in the road maintenance activities by managing the dust control and providing safer conditions via improved air quality and driver visibility.

A complement of ancillary equipment will also be assigned to functions such as fueling, work area lighting, excavation capability for ditching etc.

Pick-up trucks and crew-cabs will be available to transport mine personnel and supervisors, technical staff and maintenance personnel.

Table 16.11 summarizes the list of auxiliary equipment required to operate the Candelones mine.

Table 16.11
List of Equipment Required

Equipment	Number Required
Excavator CAT349	2
Articulated Trucks CAT745	5
Excavator-Ripper CAT349	1
Wheel Loader CAT966	1
Tractor Dozer D6	1
Tractor Dozer D8	1
Grader	1
Water Truck	1
Fuel Truck	1
Drum Compactor CAT933 1	1

16.5.5 Mine Personnel Requirements

The mining operation will be conducted by the contractor's team while the owner's team will consist of the technical staff. All staff will be on 12 hours shift and 7 days on / 7 days off rosters.

The owner's team personnel requirements are set forth in Table 16.12.

Table 16.12
Owner's Team Personnel Requirements

Owner's Team	Number Required
Mine Manager	1
Mine Superintendent	1
Mine Planning Technician	1
Surveyor	1
Geology Superintendent	1
Production Geologist	2
Geological Technician	2
Total	**9**

Each piece of equipment requires that there be operators on the payroll. Table 16.13 estimates of the number of operators per piece of equipment to meet development and production targets in the LOM production schedule. The Contractor's team, as summarized in Table 16.13 are primarily equipment operators, maintenance personnel, shift supervisors and a project manager.

Table 16.13
Contractor's Team Personnel Requirements

Contractor's Team	Number Required
Operations manager	1
Shift Supervisor	4
Truck Operator	8
Front Loader Operator	1
Hydraulic Excavator Operator	4
Dozer Operator	3
Grader Operator	1
Water Truck Operator	1
Maintenance Supervisor	1
Maintenance Planner	1
Mechanics	6
Maintenance Support	4
Total	**35**

17.0 RECOVERY METHODS

The process facilities for the Candelones Oxide Project have been sized to process a resource of 5.6 Mt in a run-of-mine heap leach operation over a 3-4 year time frame. The facility design is based on the interpretation of the metallurgical testwork results as described in Section 13.0 and process design criteria.

17.1 SUMMARY

From the Candelones Main and Connector open pit areas, approximately 5,000 t/d of oxide mineralization will be mined and then transported into the heap leach pad area. The material fed to the leaching process will be coarse screened to remove competent rock from the more friable fine fraction. The fines will be passed through an agglomerator where cement and cyanide will be added to ensure that the fines are suitable for heap leaching. The coarse material will be combined with the agglomerated fines as required and transported to the heap leach pad area by CAT 740 trucks delivering to a stacking system. This will be located in the middle section of the heap pad area and will consist of two grasshopper conveyors and a mobile stacker. The heap leach pad will be irrigated with a barren leach solution (BLS) containing up to 1,000 ppm of NaCN and lime to ensure that suitably high solution pH is present in the leachate after leaching. Gold dissolution is expected to be relatively rapid and to reach 89% of the contained gold extraction after 90 days of leaching. A portion of silver will be recovered as well.

Pregnant leach solution (PLS), the main product of the leaching process, will be pumped from the main PLS pond to the feed tank of the carbon-in-columns (CIC) circuit. The PLS solution will be contacted in a counter current process with activated carbon to adsorb the dissolved previous metals. The loaded carbon from the CIC circuit will then report to an adsorption, desorption and regeneration (ADR) plant, comprising acid wash, elution, carbon preparation – regeneration and disposal, electrowinning cells and a refinery to produce Doré bars.

The discharge stream from the CIC circuit is termed barren solution and reports to a barren solution tank where lime and cyanide are added to ensure that sufficient reagents and suitable conditions for safe leaching are present within the heap leach

The predicted precious metal dissolutions and reagent consumptions were determined from column leach testwork carried out by Bureau Veritas Commodities Canada Ltd., Vancouver. The process design criteria are based on the analysis of the metallurgical test data including bottle roll testing with a focus on column leach test results. The metallurgical testwork is described in Section 13.0.

The process design criteria summary for the Candelones Oxide Project are presented in Table 17.1.

The heap leach process flowsheet is presented in Figure 17.1, with the process plant layout presented in Figure 17.2.

Table 17.1
Process Design Criteria Summary

Item	Units	Design	Source
Mineralized Material Characteristics			
Average density (oxide/transition mineralization)	t/m^3	2.17 / 2.34	2020 mineral resource estimate
Average crushed ore bulk density	t/m^3	1.30	Estimate from phase 1 2020 column test
Moisture in Mineralized Material	wt.%	4.0%	Estimate
Screening and Agglomeration			
Annual throughput	t/y	1,825,000	From Client
Average operating daily throughput	t/d	5,000	Derived
Average hourly throughput	t/h	417	Derived
Shifts per day	#	2.0	From client
Hours per shift	h	8.0	From client
Days per week	days	7.0	From client
Operating days per year	days	365	From client
Fines screen size	mm	12-15	Estimated from met test results
% Fines generated	%	25	
Cement addition	kg/t	4-5	Column Testing
Heap Leaching			
Heap leach pad total project life tonnage	kt	5,157	Mine design (includes inferred resources)
Number of pads	#	1	Assumed
Pregnant solution pond capacity	m^3	26,500	Derived
Barren pond storage capacity	m^3	15,000	Derived
Operating days per year	days	365	Assumed
Average daily throughput	t/d	5,000	From client
Operating days per week	days	7	Assumed
Operating hours per day	h	24	Assumed
Average solution flux per leach cycle	t/t	2.0	Based on phase 1column tests
Average leach cycle (total)	days	61	Derived
Average pregnant solution flow	m^3/h	400	Derived
Average gold recovery	%	89	Estimate from testwork
Gold in pregnant solution (average/design)	g/t	0.29 / 0.38	Derived
Cyanide consumption	g/t	720	Estimate from testwork
Cyanide solution strength	%	0.05	Estimate from testwork
Hydrated lime consumption	kg/t	3.00	Estimate from testwork
Adsorption-Desorption- Regeneration			
Type of columns	-	CIC Gravity	Assumed
Number of columns	#	4	Assumed
Column carbon capacity	t	6	Derived
Elution circuit type	-	Zadra	Assumed
Elution circuit capacity	t	3	Derived
Number of electrowinning cells	#	2	From vendor
Concentrated acid type	-	36% HCL	From vendor
Caustic type	-	25% NaOH	From vendor
Cyanide type	-	30% NaCN	From vendor

Figure 17.1
Candelones Project Heap Leach Process Flowsheet

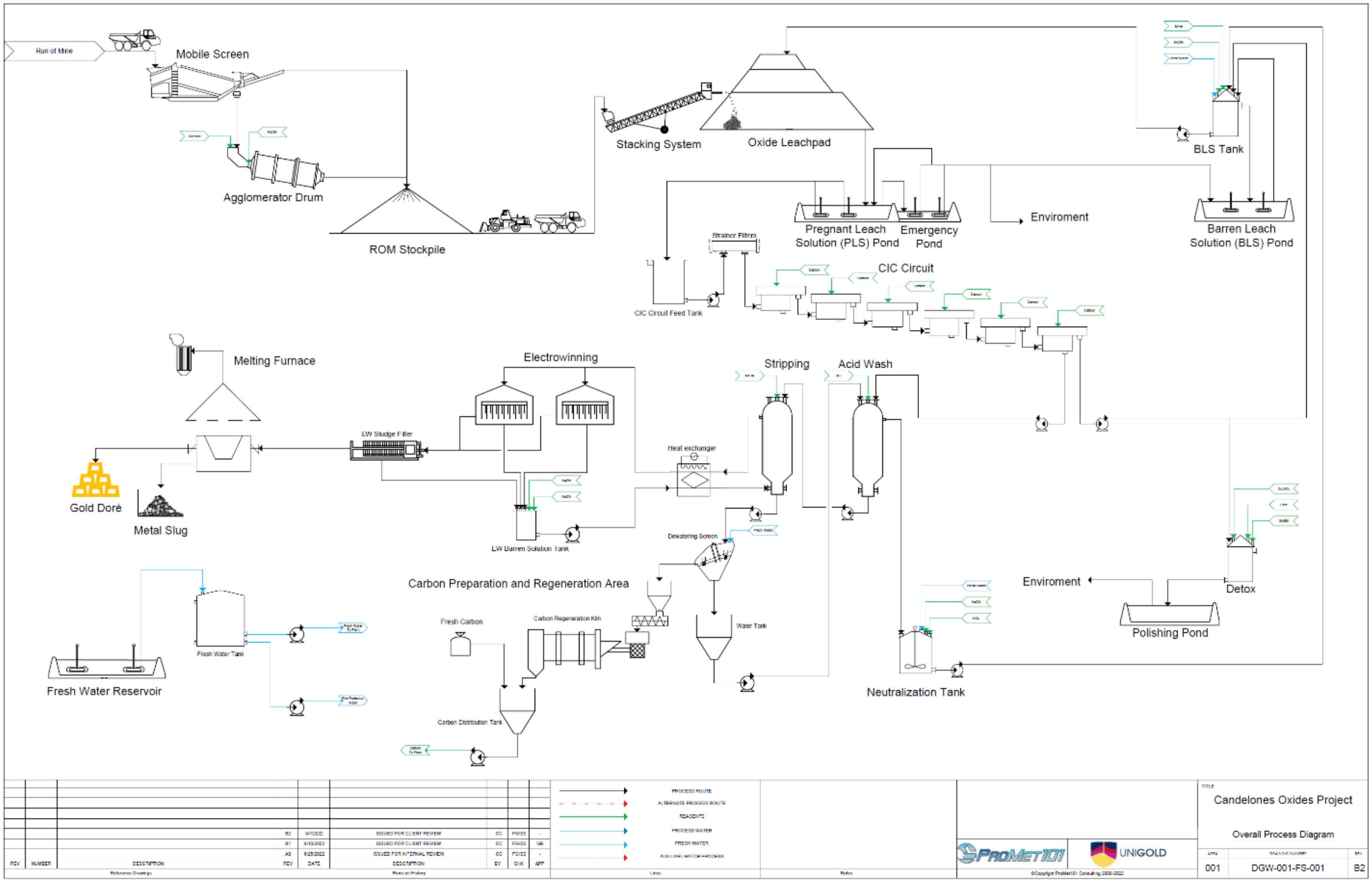
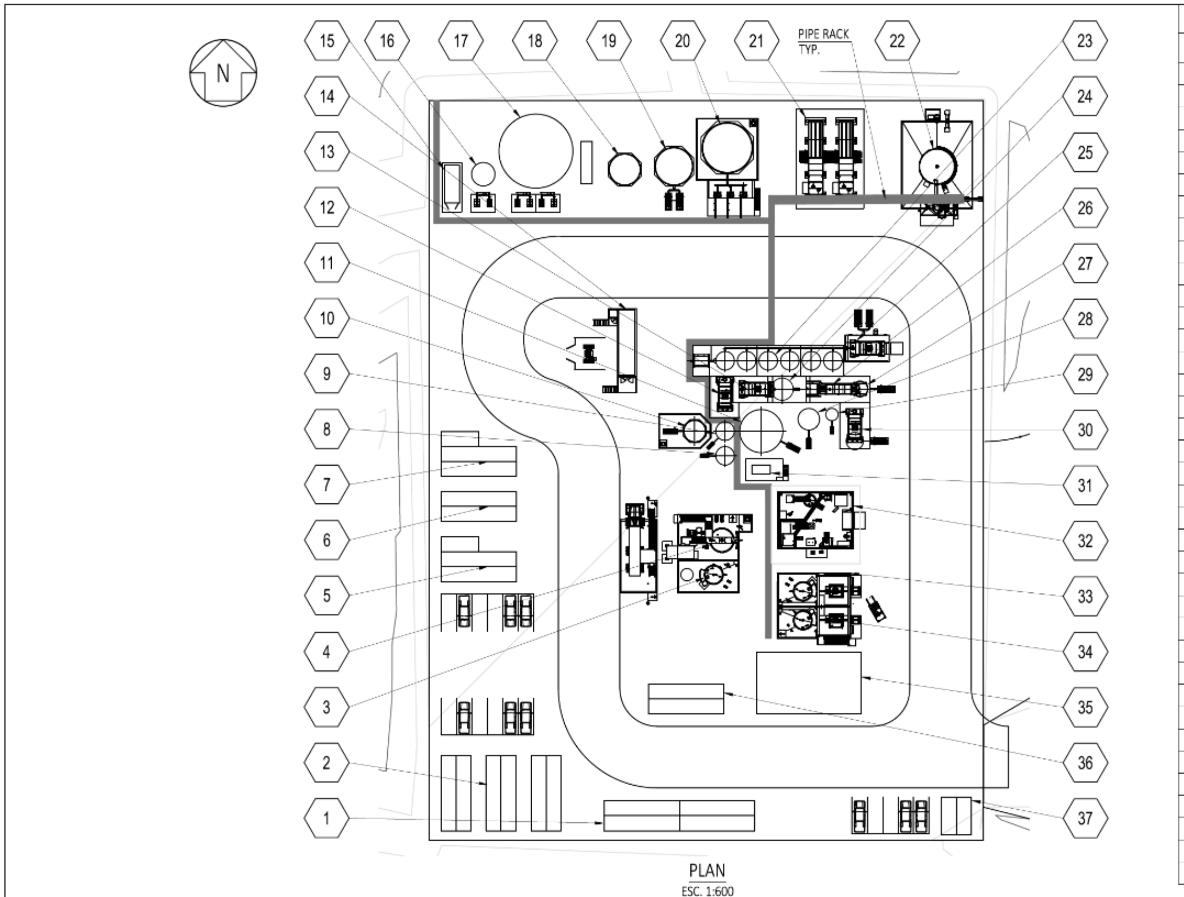


Figure 17.2
Candelones Project Heap Leach Process Plant Layout



EQUIPMENT LIST

ITEM	DESCRIPTION	TAG
1	WAREHOUSE	-
2	ACCOMODATION AREA	-
3	HCL AREA	-
4	LIME AREA	-
5	CHANGE ROOM	-
6	LUNCH ROOM	-
7	OFFICES AREA	-
8	STRIP VESSEL	420-TK-02
9	ACID WASH VESSEL	420-TK-01
10	NEUTRALIZATION TANK	420-TK-01
11	CARBON FINES TANK	430-TK-04
12	LOADED CARBON DESLIMING SCREEN	420-SC-01
13	KILN DEWATERING SCREEN	430-SC-01
14	SWITCH ROOM	-
15	WATER TREATMENT PLANT	800-WT-01
16	POTABLE WATER TANK	800-TK-03
17	FRESH WATER TREATMENT TANK	800-TK-02
18	DETOX TANK	440-TK-02
19	BLS LEACH TANK	440-TK-01
20	CIC CIRCUIT FEED TANK	410-TK-01
21	GENERATORS	-
22	DIESEL TANK	-
23	CARBON IN COLUMNS - AREA 410	-
24	KILN FEED BIN	430-BN-01
25	CIC CARBON SAFETY SCREEN	410-SC-01
26	CARBON REGENERATION KILN	430-KN-01
27	CARBON QUENCH TANK	430-TK-02
28	CARBON TRANSPORT WATER TANK	430-TK-05
29	CARBON ATTRITION TANK	430-TK-01
30	CARBON SIZING SCREEN	430-SC-02
31	CARBON FINES FILTER	430-FL-01
32	ELECTROWINNING REFINERY	-
33	SODIUM CYANIDE AREA	-
34	CAUSTIC SODA AREA	-
35	REAGENTS STORAGE	-
36	LABORATORY	-
37	GATE HOUSE	-

REF. NUMBER	REFERENCE DESCRIPTION	REV. No.	DATE	REVISION	BY	CHECKED	APPROVED
		A	29.09.22	PRELIMINARY ISSUE	MD		

UNIGOLD

PROMET 101

CANDELONES OXIDES PROJECT
CLIENT: UNIGOLD
PROCESS PLANT
DO NOT SCALE — A1
AREA: 000 — DRAWING NUMBER: PRJ-300-ME-0005 — REVISION: A

17.2 PROCESS DESCRIPTION

17.2.1 Screening, Agglomeration and Stacking

ROM material will be extracted from the mine and then trucked to the plant stockpile area. This area was designed to contain a live ROM stockpile up to 95,500 t. A front-end loader (FEL) will be used to feed the material dumped from the mine onto a mobile screening plant, which will separate the coarse leach material feed (above 150 mm) from the fines< 12-15 mm. The coarse material will report to a stockpile. The fine particles will be agglomerated with cement and sodium cyanide to improve permeability and to avoid potential percolation issues that were identified in the column testing. The fine material will be transported by conveyor belt into an agglomerating drum. Cement will be delivered to site via truck and stored in a 50 t silo and fed to the agglomerator via a feed conveyor at a ratio of 5 kg cement per tonne of ore. A sodium cyanide tote will be used for cement curing with the mineral and will be fed directly into the agglomerator with additional barren solution as required for moisture control.

The agglomerator nominal throughput is designed as 90 t/h based on 25% of the feed being fines and operating two 12-hour shifts per day. This equipment is effectively to be used during the first year of operation when the more weathered material is to be processed and its use will be reduced once the more competent rock is encountered in the following years.

The agglomerated material along with the coarse mineral will be loaded into CAT 740 haul trucks and transported into to the stacking area. A front-end loader (FEL) will load the material into a hopper which feeds the grasshopper conveying and stacking conveyor system. The stacking and conveying system are designed for a nominal throughput of 226 t/h based on operating seven days per week, 24 hours per day and a 92% equipment availability.

17.2.2 Heap Leaching, Pregnant and Barren Solution Management

The ROM heap leach pad will consist of eleven lifts of approximately 4.5 to 5 metres in height, with the stacking system being used to move along the pad area to prepare the different lifts. After the leaching area is stacked and leveled, the irrigation system will be assembled using drip-tube piping as solution emitter.

Barren solution to be used as the irrigation fluid will be controlled to contain cyanide at a concentration of 0.05% NaCN, with milk of lime added to achieve a solution pH of 10.5. The irrigation rate selected for design purposes is 10 L/h/m^2. The total irrigation volume has been selected at 400 m^3/h which will allow for a total of 40,000 m^2 of leaching area to be irrigated.

The solution that has percolated through the heap will drain out and flow by gravity to a 30,000 m^3 Pregnant Leach Solution (PLS) pond located at the bottom of the heap leach. The collected pregnant solution will be pumped to the process plant, using one of two vertical turbine pumps with the second one as a standby pump. The PLS pond has a capacity of 26,530 m^3, to contain up to 72 hours of a no power event.

An emergency pond is located next to the PLS pond and will be used in emergency events to collect excess rainwater falling on the heap leach pad. This pond will only be used when the contained precious metals and residual cyanide are below threshold levels. The emergency pond is equipped with two submersible pumps which can be used to send the water to either the PLS pond or the barren leach solution pond.

Barren solution from the discharge of the CIC will be pumped to the 140 m^3 Barren Leach Solution (BLS) tank, where sodium cyanide and lime are added to achieve the desired concentration and pH prior to being returned to the heap leach pad. Two centrifugal pumps will deliver the BLS to the heap leach pads to be used for irrigation purposes. A ring main for barren solution will be installed to allow for equal distribution of barren solution to all parts of the heap leach pad as required. Solution losses via evaporation from the heap leach pad and ponds will be made up via fresh-water addition to the barren circuit. A 5,000 m^3 barren solution pond will be constructed adjacent to the process facility with excess barren solution being allowed to flow by gravity to this pond, and then returned to the barren solution circuit as required via one of two submersible pumps.

A DETOX circuit will be included which will utilize the SO_2 process to destroy cyanide in solution if required. The evaporation rates at the heap leach will result in a net consumption of water and as such no discharge of solution is envisaged. However, the DETOX circuit may be used as required for inventory management and also to ensure that no free cyanide bearing solutions leave the plant. An agitated detox tank will be installed and can be used to treat up to a 100 m^3/h of solution, using Sodium Metabisulphite (SMBS) and Copper Sulphate prior to reporting to a polishing pond and then to the environment. Close control of the operation of this circuit will be undertaken to ensure that no release to the environment above specified limits will occur.

17.2.3 Carbon in Column Circuit

The pregnant leach solution from the heap leach process will be pumped from the PLS pond to the CIC circuit. The circuit consists of a 420 m^3 CIC feed tank which receives the PLS solution. From here, one of two centrifugal pumps will send the solution through one of two strainers to ensure that no coarse material that could contaminate the carbon enters the CIC circuit. The discharge from the strainers will report to the first of the CIC tanks. The CIC tanks consist of a single train of six 3.0 m diameter by 2.1 m high carbon absorption tank columns operating in a cascade counter-current configuration. Each column will have a capacity of 6 t of activated carbon.

The columns will be operated in a counter current mode with fresh carbon being added to the last column and pregnant solution to the first column. Carbon will be moved as required from the first column and replaced with carbon from the second column and so on. Carbon will be moved as required on a daily basis but adjusted to operating conditions.

The barren solution which is obtained after passing all the solution through the last CIC circuit column, will be pumped to a safety screen to recover any possible carbon present in the solution and then contained into a BLS sump to allow the two pumps to transfer this solution into the BLS tank.

17.2.4 Desorption (ADR)

The ADR plant will operate on a daily batch basis. The flowsheet for this plant starts with a desliming screen that is used to wash the carbon with fresh water and returning that wash water back to the CIC process. The carbon will then be fed via gravity to the acid washing column . A dilute hydrochloric acid solution (3.0% by mass) will be used to dissolve and remove scale, carbonates or any other acid soluble forms adsorbed in the carbon. An acid dilution tank and pumps will be used to prepare and then circulate the diluted HCl solution through the acid wash column during the acid wash cycle.

A sump pump is allocated in this area to recover any spillage from the desorption process area and pump it to the neutralization tank.

The dilute acid will be transferred to a neutralization tank at the end of the acid wash cycle and the liquid pH increased to 10.0 by the addition of caustic soda. Solution from the acid wash is send to an agitated neutralization tank. Once neutralized the solution will be pumped via transfer pump to the BLS tank.

Once the acid wash cycle is finished, the loaded carbon will be transferred using a centrifugal pump into a pressurized strip vessel for gold desorption. A strip solution with an elevated level of cyanide and high pH will be used to strip the gold and silver from the carbon in this elution vessel. The strip solution will be heated in a series of heat exchangers to 140 °C, and then passed through the elution column until 10-12 bed volumes have been achieved. The gold and silver desorbed from the carbon will create a loaded strip solution, which will pass through the heat exchanger before being sent back to the electrowinning area.

The elution column is designed in an up-flow manner to improve the distribution of the stripping solution inside the column. Loaded strip solution leaving the stripping vessel will pass through external dual filters before passing the cooling heat exchanger, to reduce the loaded strip solution temperature and to prevent boiling. Gasses generated as part of the acid wash cycle and stripping vessel operation are safe to be vented to the atmosphere, using a fan designed for this duty.

After desorption is complete, the stripped carbon will be pumped to the kiln dewatering screen to remove water and carbon fines, and then transferred to the carbon regeneration kiln.

17.2.5 Electrowinning and Refining

The loaded strip solution will be continuously pumped to an electrowinning (EW) distribution box which will feed the two electrowinning cells where the gold and silver will be recovered from solution as soft-precious metal sludge.

The stripped solution from the EW cells will report to the EW barren solution tank, where extra sodium cyanide is added and caustic soda dosed to achieve a pH of 12 prior to it being returned to the heat exchanger for reheating and elution.

The gold/silver sludge will be washed from the cell cathodes and pumped into an EW sludge filter using a diaphragm pump, to generate a wet filter cake for subsequent calcining. Any fumes generated during the electrowinning process will be removed via the electrowinning fan and dust collector.

After filtration, the EW sludge will be calcined in an oven to remove additional moisture before smelting. The dried sludge will be placed on pans and stored in racks. Later, each pan will be mixed with the appropriate amount of flux and added to a propane fired crucible melting furnace. The gold and silver will be separated from the slag material and recovered as a doré bar product. The gases and dust generated by the smelting process will be withdrawn using a furnace hood and dust captured in a dust collector. Clean gasses will be sent to the atmosphere using a fan.

17.2.6 Carbon Preparation, Regeneration and Handling

A carbon preparation, regeneration and disposal circuit will be used to ensure that carbon fines generated during transport are removed prior to use. In addition, rejection of carbon fines from the circuit that may have significant quantities of precious metals will be done to minimise losses and also allow for the recovery and sale of the same.

Fresh carbon is added into an agitated carbon attrition tank, which blends the carbon along with process water recovered from the carbon regeneration area, to ensure that any near sized or fragile particles from transport can be rejected in the subsequent screening. The carbon is pumped onto a carbon sizing screen, where the carbon is again washed using fresh water with the coarse fraction being sent to the CIC circuit This coarse carbon will go into a Regenerated carbon holding tank along with the recovered and regenerated carbon, then it will be transferred by pump to the CIC circuit, whenever a CIC column needs to be refilled. The fine carbon will go into the carbon fines tank.

The carbon recovered after the stripping process will need to be regenerated at times and as such a carbon regeneration kiln is provided for the process. In order to regenerate the carbon adsorption properties, the recovered carbon is roasted using a kiln, where the organic contaminants will be removed by thermal regeneration at approximately 750ºC. This process starts with washing the carbon recovered in a kiln dewatering screen using fresh water, to remove all fine carbon particles before feeding the kiln. The coarse recovered carbon will be fed into the kiln feed bin which has a screw feeder, which will feed the horizontal rotary diesel fired carbon regeneration kiln, where the adsorption properties of the carbon will be regenerated. The hot carbon falling out from the kiln is captured by a carbon quench tank, which is filled with fresh water to drop the carbon temperature and store it. Finally, this carbon is transferred using a centrifugal pump onto the carbon sizing screen, to join the fresh carbon whenever a new batch of carbon is needed for the CIC process.

The fines carbon particles recovered from the fresh and carbon regeneration process are collected into a carbon fines tank, where the carbon fines will be pumped and dewatered using a filter press. The dewatered carbon fines will be stored in bulk bags for later disposal or sale depending on gold assay. The excess of water recovered from the dewatering process is returned to the carbon fines tank. A carbon transport water tank will receive any water overflow coming from the tanks, this water is used in the carbon regeneration area or can be pumped into the acid wash vessel.

17.2.7 Reagents

17.2.7.1 Hydrochloric Acid

Hydrochloric acid will arrive as 50% solution in trucks of 16.8 m^3. The acid will be transferred and stored into a 20 m^3 stainless steel Hydrochloric acid (HCL) storage tank. The preparation of the diluted acid will be done in the diluted acid tank, mixing the pure acid pumped from the HCL storage tank with fresh water. The diluted acid will be pumped to the ADR plant using two metering pumps.

A HCL diaphragm sump pump will be placed in the area to collect any spillage and send it to the diluted acid tank.

17.2.7.2 Hydrated Lime

Hydrated lime will be delivered in trucks and stored in a 50-ton capacity lime silo, with approximately 3.5 days of storage. The lime will be screw-conveyed from the silo into an agitated milk of lime mix tank, in combination with fresh water to prepare the milk of lime at a 15% w/w. Once preparation is done, the milk of lime will be transferred using a milk of lime transfer pump to an agitated milk of lime distribution tank, where the milk of lime will be stored and injected into the milk of lime distribution ring. Two centrifugal pumps will be used to distribute the lime mainly to the BLS tank for pH control and occasionally for the CIC circuit feed tank.

17.2.7.3 Sodium Hydroxide (Caustic Soda)

Sodium hydroxide will arrive in the form of 1,500 kg pallets of 25 kg bags of solids caustic soda flake and will be stored in a covered storage area. The bags will be dropped into a hopper bag breaker and mixed with fresh water at the caustic soda mix tank to produce a 50% w/w concentration. The caustic soda will be transferred using a centrifugal pump into a 10 m^3 caustic soda distribution tank. From here, the caustic soda will be pumped using metering pumps to ADR plant (neutralization tank), cyanide preparation area and EW barren solution tank for pH control.

17.2.7.4 Cyanide

Cyanide will be delivered as sodium cyanide, in the form of 1,500 kg pallets of 25 kg bags of solid sodium cyanide and will be stored in a covered storage area. The bags will be dropped into a hopper bag breaker and mixed with fresh water at the sodium cyanide mixing tank to produce a 20% w/w concentration cyanide solution. This solution will be transferred by pump to the sodium cyanide distribution tank and then distributed into the barren solution pipe ring using two metering sodium cyanide distribution pumps which operate in a duty/standby configuration. Caustic soda will be available to be injected in the sodium cyanide mix and distribution tank for pH control.

The 20% w/w cyanide solution will be pumped into the BLS tank to achieve a final dosing concentration of 0.05% into the leaching irrigation circuit. The cyanide solution will be added into the EW barren solution tank to achieve a concentration of 0.5%.

A sodium cyanide sump diaphragm pump will be allocated in the area to return any spillage back into the sodium cyanide distribution tank.

17.2.7.5 Sodium Metabisulphite (SMBS)

SMBS will be delivered in the form of 1,500 kg pallets of 25 kg bags of solid SMBS and will be stored in a covered storage area. An SMBS solution at 25% concentration will be made up as required as this material has a relatively short shelf life when generated. A tote will be set next to the detox tank with a prepared solution of SMBS and fresh water to be used for cyanide destruction.

17.2.7.6 Copper Sulphate ($CuSO_4$)

Copper sulphate will be delivered in 1,500 kg pallets of 25 kg bags of copper sulphate crystals and will be stored in a covered storage area. A copper sulphate solution at 10% concentration by mass will be made up as required to support the DETOX circuit operation when discharge of plant solutions is required. A tote will be set next to the detox tank with a prepared solution of $CuSO_4$ and fresh water to be used for cyanide destruction.

17.2.7.7 Activated Carbon

Hard-granular activated carbon sized from 6 to 20 mesh will be required for the adsorption circuit. A make-up rate of 15 g/t was assumed for design. Drums or bags of carbon will be delivered to site and first passed through the attritioning makeup circuit to reject any fines generated during transport.

18.0 PROJECT INFRASTRUCTURE

18.1 INFRASTRUCTURE (HLF AND WRS)

18.1.1 Site Conditions

18.1.1.1 Climatology

A climatological evaluation was conducted, including:

- Regional meteorological stations managed by the Dominican Meteorological Office (ONAMET).
- Regional stations obtained from the National Oceanic and Atmospheric Administration (NOAA).
- On-site meteorological stations provided by Unigold.

Tierra Group's QPs selected stations located within 75 km of the Project with a minimum record period of 50 years. These data were used to develop design storm events and return periods for the Project.

18.1.1.2 Seismicity

Tierra Group's QPs performed a seismic hazard analysis (SHA) for the HLF and WRS sites. The SHA includes results from both deterministic and probabilistic methods. Probabilistic analyses were completed by specifying parameters for the seismic hazard source model, identifying applicable seismic sources, and applying attenuation equations to determine peak ground acceleration (PGA) values. Deterministic analyses were performed using five equally weighted attenuation relationships to evaluate seismic hazards resulting from a maximum credible earthquake (MCE). An MCE, by definition, has no specific recurrence interval and is the largest reasonably conceivable earthquake possible along a recognized fault or within a geographically defined tectonic province under the presently known or presumed tectonic framework.

Table 18.1 summarizes the PGA values determined through the probable and deterministic assessments and used in slope stability analyses under seismic conditions.

Table 18.1
PGA Values for Slope Stability

Facility	PGA
HLF	0.34 g (1/475)
PLS/Events Pond	0.51 g (MCE)
WRS	0.28 g (1/475)

18.1.1.3 Groundwater

Table 18.2 summarizes the groundwater levels measured after drilling at the HLF and WRS sites.

Table 18.2
HLF and WRS Groundwater Levels

Site *	Groundwater Level (bgs)
HLF	20.6 m
WRS	11.1 m

Note: These levels were not obtained from piezometers; and should be considered as a reference only. Piezometers installation is recommended.

18.1.1.4 Geotechnical Investigation

HLF and Ponds Site

Tierra Group's QPs completed 31 test pits, ten boreholes, three seismic multi-channel analyses of surface waves (MASW) and seven seismic refraction (SR) geophysical lines. The zones underlying the HLF site include (from top to bottom):

- Topsoil – Approximately 0.2 m to 0.5 m (thickness).
- Laterite – Approximately 0.2 m to 2.5 m (thickness).
- Saprolite – Approximately 0.8 m to 4.5 m (thickness).
- Saprock – Extends between 0.0 m to 20.5 m below ground surface (bgs).
- Saprock/Bedrock – Encountered at depths between 2.7 and 20.5 m bgs.

The HLF will be constructed on the Laterite and Saprolite zone. All topsoil and loose material will be removed before the facility, and its components, are constructed. The Laterite and Saprolite zone depths vary from approximately 0.2 m to 0.5 m bgs. In-situ percolation tests resulted in an average permeability coefficient of approximately 2.4×10^{-3} centimetres per second (cm/s). Laboratory permeability tests on undisturbed samples yielded an average permeability coefficient of approximately 4.4×10^{-4} cm/s. Shear strength testing for this formation has been completed.

WRS Site

Tierra Group's QPs completed 24 test pits, three boreholes, one seismic MASW, and three SR lines. Zones beneath the WRS site include, from top to bottom:

- Topsoil – Approximately 0.2 m to 0.5 m (thickness).
- Laterite – Approximately 0.3 m to 0.6 m (thickness).
- Saprolite – Approximately 1.1 m to 2.7 m (thickness).
- Saprock – Extends between 0.0 m to 8.8 m bgs.
- Saprock/Bedrock – Encountered at average depths of approximately 8.7 m bgs.

The WRS will be constructed on the Laterite and Saprolite zone. All topsoil and loose material will be removed before the facility, and its components, are constructed. The Saprolite and Laterite zone depths vary from approximately 0.2 m to 0.5 m bgs. In-situ percolation tests resulted in an average permeability coefficient of approximately 3.9×10^{-4} cm/s. Shear strength testing for this formation has been completed.

18.1.2 Candelones HLF Design

18.1.2.1 Overview

The HLF has been designed for a 1,800,000 tonnes per year production rate for a total heap capacity of approximately 5.6 Mt (LOM). The ore will be mined by standard open pit mining methods, processed through crushing, and stacked on the HLF using a conveyor/stacker system. The solution will be applied to the ore's surface, percolate through the ore, and be conveyed by gravity, through the solution collection system to the PLS Pond. The solution will be delivered to the plant for processing or, under large storm events, overflow into the Events Pond.

18.1.2.2 Design Basis

The HLF design standards adopted for the Project include:

- Canadian Dam Association (CDA, 2019) guidelines.
- State of Nevada Division of Environmental Protection permitting requirements (these are not regulatory requirements in the Dominican Republic but are considered standards for best practice).

Table 18.3 and Table 18.4 summarize the minimum design criteria and parameters, respectively.

Table 18.3
HLF Design Criteria

Structure	Element	Criteria
Seismic and Slope Stability		
Leach Facility	Static factors of safety (FOS) (during operations)	≥ 1.3
	Static FOS (post-construction)	1.5
	Pseudo-Static FOS	≥ 1.05
	Post-Earthquake FOS	≥ 1.1
PLS/Events Pond	Static FOS (during operations)	1.3
	Static FOS (post-construction)	1.5
	Pseudo-Static FOS	1.05
	Post-Earthquake FOS	1.1
	Hazard Classification	TBD
Solution and Water Management		
PLS Pond	Storage	Solution from HLF (Operational Volume 24 hours, drain down Volume 24 hours), minimum volume to operate the pump (1.5 m) and freeboard.
Events Pond	Storage	Storage volume resulting from the 100-year, 24-hour storm event, wet season volume, and freeboard.

Structure	Element	Criteria
Stormwater Diversion		
Perimeter Diversion Channels	Conveyance	Peak flow resulting from the 100-year, 24-hour storm event (If required)
Emergency Spillways		
Solution Collection Channel	Conveyance	Peak flow resulting from the 100-year, 24-hour storm event (HLF is supposed to be without ore, worst condition)
PLS Pond Spillway	Conveyance	Peak flow resulting from the 100-year, 24-hour storm event (PLS is supposed to be full, worst condition)

Table 18.4
HLF Design Parameters

Tasks	Description
HLF Containment System	
Prepared Subgrade	The prepared subgrade should have a smooth surface with maximum particle size according to the specifications.
Geosynthetic Clay Liner	The design will utilize a geosynthetic clay liner (GCL), which will have a hydraulic conductivity no greater than 5×10^{-9} cm/s
Geomembrane Liner	LLDPE liner (80-mil single-sided textured as required for slope stability). Due to the arching loads, the geomembrane liner must be protected from the additional loads adjacent to the drain piping system.
Ponds Containment System	
Prepared Subgrade	The prepared subgrade should have a smooth surface with maximum particle size according to the specifications.
Geosynthetic Clay Liner (GCL)	The design will utilize GCL, which will have a hydraulic conductivity no greater than 5×10^{-9} cm/s
Primary Geomembrane Liner	HDPE liner (80-mil smooth as required for slope stability).
Secondary Geomembrane Liner	HDPE liner (80-mil smooth as required for slope stability).
Sump Leak Detection System	
Geonet Liner	Leak detection system consisting of geonet HDPE or equivalent between primary and secondary geomembrane on the pond slopes and bottom to direct possible flows toward leak detection sump and well system (150-mm typical HDPE pipe placed between liners)
Collection System	
Drain-pipes	100-mm diameter corrugated and perforated polyethylene (PE) N-12, or equivalent, collection pipes (tertiary pipes) placed in a herringbone fashion placed on 6-m maximum centres. 300-mm diameter corrugated and perforated PE N-12, or equivalent. Secondary pipes spaced as necessary to handle the solution application. 450-mm diameter corrugated and perforated PE N-12, or equivalent. Primary pipes spaced as necessary to handle the solution application. 450-mm diameter solid HDPE discharge pipes to route flows to the PLS Pond. Maximum allowable deflection under load of 15%.

Tasks	Description
Overliner Drain Fill	The heap leach pad geomembrane liner will be covered by a minimum of 0.6 m of Overliner Drain Fill, well-graded and free-drainage granular material with less than 5% particles passing the No. 200 ASTM sieve size. No moisture conditioning or compaction of the Overliner Drain Fill is required. Hydraulic Conductivity should maintain a minimum of one order of magnitude higher permeability than the overlying ore heap.
Underdrain System	
Drain-pipes	100-mm diameter corrugated and perforated polyethylene (PE) N-12, or equivalent, collection underdrain pipes placed in spaced as necessary to handle the leakage and infiltration flow by the rainfall on the basin upstream channels 100-mm diameter corrugated and no perforated polyethylene (PE) N-12, or equivalent, collection underdrain pipes placed in spaced as necessary to direct the leakage and infiltration flow by the rainfall on the basin upstream channels to Underdrain Collection Sump
Heap Leach Pad	
Expected Ore Tonnage (LOM)	5.6 Mt
Stacking Method	Conveyor
Ore Production Rate	1.8 Mt per year
Life of Mine (LOM)	3.3 years
Ore Heap Height	61-m maximum height (measured vertical from heap crest to liner system)
	67 m measured from heap toe to crest
Heap Overall Slope	2:5H:1V, 21.8° (to be determined based on stability analysis)
Stack/Lift Height	Individual ore lifts (5-m height for the first 12 lifts and 7-m height for the last lift) stacked at natural angle-of-repose (with benches width as required for a 2.5H:1V design slope).
Ore Setback	5-m minimum setback from the perimeter berm limits, inside edge.
Ore Density	Placed bulk density 1.60 t/m^3
Ore Geotechnical Parameters	Internal Friction angle (ϕ’) = 29.8° (effective) Cohesion (c) = 0 kPa
Ore Angle of Repose	34° (1.5H:1V)
Seismicity	0.34 g (1 in 475-year Return Period)
Solution Application	
Application Rate	10 L/h/m^2 (nominal) 12 L/h/m^2 (design)
Application Method	Buried Driplines or Wobbler Sprinklers
Solution Flow	404 m^3/h (nominal) 484.8 m^3/h (design)
Leach Cycle	75 days
Active Leach Surface	40,404 m^2
PLS Pond	
Pond Sizing	Minimum Operating Volume (1.5 depth): 3,819 m^3 Operational Volume (24 hours): 9,697 m^3

Tasks	Description
	Drain down Volume (24 hours): 9,697 m^3 Freeboard Volume (0.6 m): 3,311 m^3 Total Volume: 26,524 m^3
Pond Design Depth	7 m
Pond Configuration	Irregular shape Top elev: 522 m Bottom elev: 515 m
Pond Bottom Grade	Grade to drain to leak detection sump
Freeboard	0.6-m
Crest Width	5.0 m (minimum)
Berm Slopes	2H:1V lined interior
Anchor trench	1.0 m (depth) × 0.6 m (width)
Events Pond	
Seismicity	0.51 g (MCE) Mw 7.0
Pond Sizing	IDF Volume (100-year 24-hour): 31,810 m^3 Wet Season Volume (from water balance): 155,059 m^3 Freeboard Volume (0.6 m): 12,144 m^3 Total Volume: 199,013 m^3
Pond Design Depth	Variable
Pond Configuration	Irregular shape Top elev: 522 m Bottom elev: 498 m
Freeboard	0.6 m
Crest Width	5.0 m (minimum)
Berm Slopes	2H:1V lined interior
Anchor trench	0.6 m (depth) × 0.6 m (width)
Barren Pond	
Pond Sizing	Solution application rate (8 Hours): 3,880 m^3 Freeboard Volume (0.9 m): 2,620 m^3 Total Volume: 6,500 m^3
Pond Design Depth	5.5 m
Pond Configuration	Square shape Top elev: 551.4 m Bottom elev: 545.9 m
Pond Bottom Grade	Grade to drain to leak detection sump
Freeboard	0.9 m
Crest Width	5.0 m (minimum)
Berm Slopes	2H:1V lined interior
Anchor trench	1.0 m (depth) × 0.6 m (width)

Tasks	Description
Perimeter Roads Construction	
Roads Access Width	6 m minimum road crest width along the outside pond edge (with a safety berm)
Maximum Road Grade	27.0%
Perimeters Diversion Channel	
Channels	North Diversion Channel (HLF-NDC) East Diversion Channel (HLF-EDC) West Diversion Channel (HLF-WDC) South Diversion Channel (HLF-SDC)
Storm Event	186 mm (100-year, 24-hour storm)
Freeboard	0.3 m (minimum)
Lined	Concrete-filled Geoweb
Side Slopes	1H:1V
Slope channel	1 % (minimum)
Velocity	5 m/s (maximum flow velocity)
Solution Collection Channel (HLF-SCC)	
Storm Event	186 mm (100-year, 24-hour storm), It is assumed that the area occupied by the pipes does not contribute to the hydraulic capacity.
Freeboard	0.3 m (minimum)
Lined	Geomembrane
Side Slopes	2H:1V lined interior
Slope channel	3% (minimum)
Velocity	5 m/s (maximum flow velocity)
PLS Pond Spillway (HLF-PPS)	
Storm Event	186 mm (100-year, 24-hour storm), the PLS is assumed to be full.
Freeboard	0.3 m (minimum)
Lined	Geomembrane
Side Slopes	2H:1V lined interior.
Slope channel	1% (minimum)
Velocity	5 m/s (maximum flow velocity)
Spillway Configuration	10.0 m (width) × 1.1 m (depth)
Underdrain System	
Underdrain Pipes	100-mm diameter corrugated and perforated polyethylene (PE) N-12, or equivalent, placed at the foundation's lowest point. The pipes will be in a trench with a trapezoidal cross-section with a 0.6 m base, 0.6 m height.
Underdrain Collection Sump	
Pond Sizing	IDF Volume (100-year 24-hour): 1,100 m^3 Operation Volume (24-hours): 181 m^3 Total Volume: 1,281 m^3
Pond Design Depth	5.3 m
Pond Configuration	Square shape Top Elev: 491.3 m Bottom Elev: 486.0 m
Spillway	2.0 m (width)x 0.2 m (depth)

18.1.2.3 HLF Description

The HLF's lined area is 165,200 square metres (m^2). The pad is designed to stack ore to a maximum height of approximately 67 m with a 2.5H:1V (horizontal:vertical) overall slope. The HLF is expected to have about 5.6 Mt of capacity, and a nominal solution application rate of 10 litres per hour per square metre ($L/h/m^2$). The HLF plan view and associated components are illustrated in Figure 18.1.

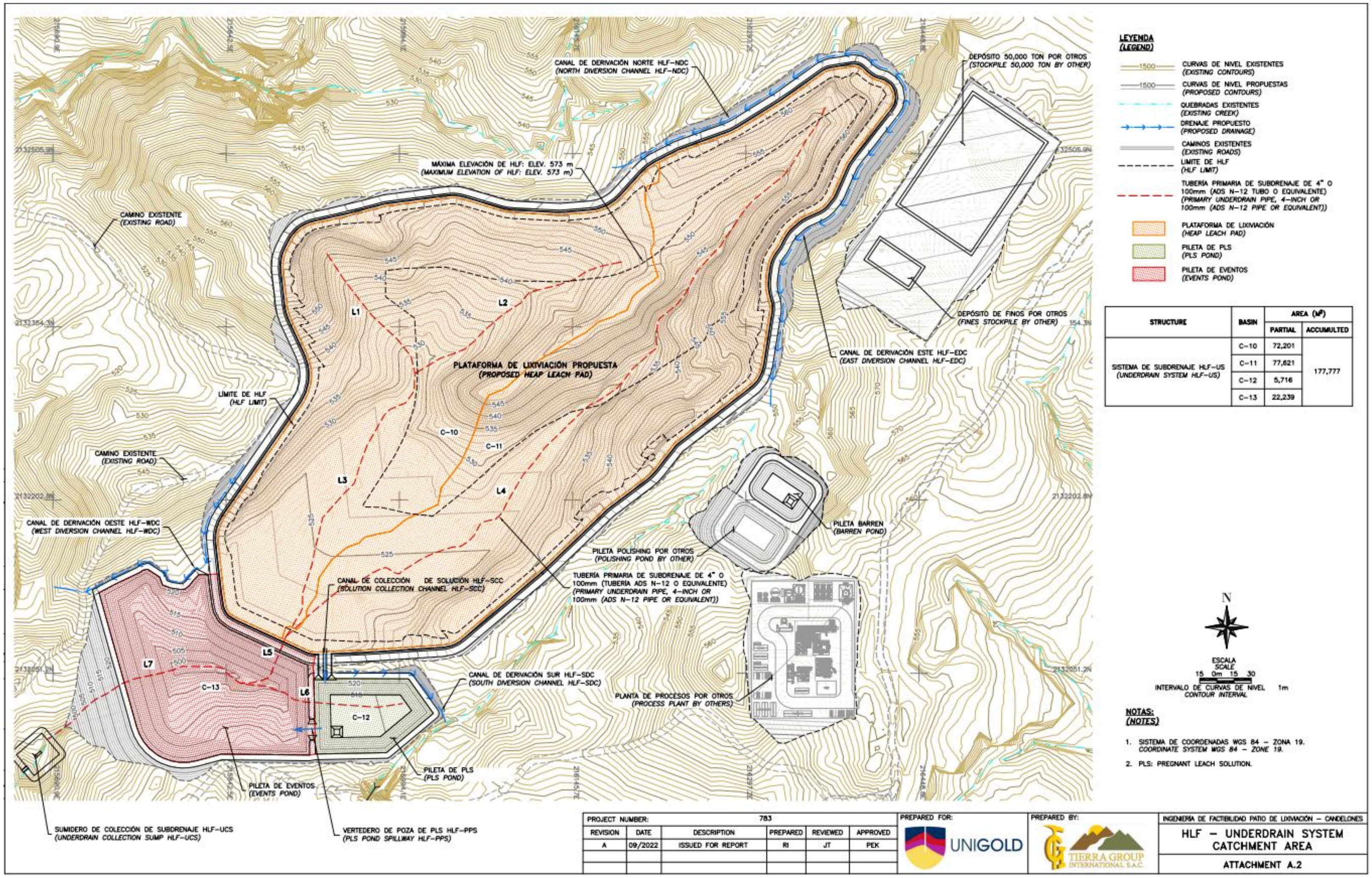
The HLF consists of the following:

- A single composite lined heap leach pad covering 165,200 m^2 (lined area).
- A double composite lined PLS Pond to provide 23,213 m^3 of storage capacity and 0.6 m of freeboard (equivalent to 3,311 m^3).
- A double composite lined Barren Pond to provide 4,237 m^3 of storage capacity and 0.6 m of freeboard (equivalent to 1,198 m^3).
- A single composite lined Events Pond to provide 186,869 m^3 of storage capacity and 0.6 m of freeboard (equivalent to 12,144 m^3).
- A single composite lined Underdrain Sump to provide a minimum of 1,281 m^3 of storage capacity up to the spillway invert.

Underdrain System

The underdrain system consists of gravel drain trenches (trapezoidal cross-section with 0.6 m base, 0.6-m height) with 100-mm diameter perforated pipes constructed along existing drainages within the HLF and ponds. The underdrains will discharge into a collection sump located southwest of the HLF.

Figure 18.1
HLF Plan View and Associated Components



Liner System

The composite liner system will include (from bottom to top):

- Prepared subgrade: scarify, moisture condition, and recompact the subgrade to obtain a minimum Standard Proctor of 95%.
- Low Permeability Layer:
  - Soil liner: a minimum 300 mm thick low permeability soil obtained from borrow areas, moisture conditioned, and compacted to 95% of modified Proctor, to provide a permeability of 1×10^{-6} cm/s or less.
  - GCL (NWL-60 for the HLF and NWL-35 for Ponds).
- 2.00-mm (80-mil) LLDPE single-sided textured geomembrane.
- A minimum 600-mm thick crushed, clean, and free-draining liner cover drain fill placed in a single uncompacted lift above the geomembrane. The drain fill layer thickness will be increased to a minimum of twice the pipe diameter above the large-diameter primary and secondary drainpipes to minimize the risk of excessive deflection or crushing. The liner cover drain fill material will have a permeability greater than 1×10^{-2} cm/s or a minimum of one order of magnitude higher than the overlying ore heap permeability.

Solution Collection System

A gravity flow solution collection piping system will be installed within the HLF. The solution collection system consists of a liner cover drain fill and a network of solution collection pipes conveying flows to the PLS Pond. The solution collection system components include:

- 100-mm diameter corrugated and perforated polyethylene (PE) N-12 or equivalent lateral tertiary collection pipes in a herringbone pattern on 6-m centres.
- 300-mm diameter corrugated and perforated dual wall N-12 PE or equivalent secondary collection pipes.
- 450-mm diameter corrugated and perforated dual wall N-12 PE or equivalent primary collection pipes.
- 450-mm diameter solid HDPE SDR 11 discharge collection pipes that will drain into the PLS Pond.

18.1.2.4 Water Balance

The Tierra Group's QPs developed a water balance model using GoldSim V12.0 program (GoldSim, 2018). The model determines the water volumes that drain from the HLF to the PLS/Events Pond under various annual precipitation scenarios (average, wet, and dry), evaporation (average annual), and the inflow design flood (IDF) associated with the 100-year, 24-hour IDF. These stormwater runoff volumes estimate:

- PLS and Events Pond minimum storage volumes.
- Make-up water demand.

The deterministic water balance developed for the proposed HLF accounts for inflows, such as rain and leach solution (including make-up water), and outflows such as evaporation and consumptive loss due to ore wetting. The evaluated water balance scenarios resulted in:

- The HLF, PLS, and Events Pond water balance is positive for the average hydrological scenarios of rain and evaporation, the input and output main sources being the precipitation on the HLF and the water retained by ore moisture loss.
- With a confirmed start-up volume of 70,000 m^3, it will be possible to supply the Plant demand considering the occurrence of 1 dry year during the LOM.
- With a confirmed total Combined Pond (PLS + Events Pond) capacity of 225,537 m^3, it will be possible to contain the monthly variation volumes of the wet season and the IDF volume (100 year, 24-hour) considering the occurrence of 1 wet year (any of the 3 years).

18.1.2.5 Process Solution Ponds

The PLS and Events Pond were sized following the Project design criteria and using the water balance results.

PLS Pond

The PLS Pond is designed to provide storage for process flow exiting the HLF through the 450 mm diameter pipelines. The PLS Pond has been sized to have 26,524 m^3 of total storage capacity (without freeboard). The pond has an irregular shape with its longest dimensions measuring approximately 66 m wide and 105 m long at its crest and 7 m deep with 2H:1V side slopes.

The PLS Pond’s main components include:

- Leak detection system.
- Double composite lined system.
- Spillway designed to overflow into the Events Pond.

Events Pond

The Events Pond is a single composite lined facility that contains excess process solution and rainfall associated with extreme events. The Events pond will require a 24.0 m embankment that will be constructed out of rockfill. Current crest elevation is 522 masl with a 2H:1V downstream slope and a 5.0 m crest width. The design criteria include storage for the IDF volume (100-year, 24-hour event) and the maximum fluid accumulation during the wet season. The Events Pond has been sized to have a total storage capacity of 199,013 m^3 (with 0.6 m of freeboard). The pond has an irregular shape bounded by the HLF platform to the north and PLS Pond to the east with a top crest elevation of 522 masl and a bottom elevation of 505 masl with a 2H:1V side slope.

18.1.2.6 Stacking Plan

The approximate volume of ore placed and the available leaching area by lift was determined using a simplified ore stacking plan based on a proposed lift height of 5 m. Table 18.5 summarizes the stacking plan for the Candelones Project.

Table 18.5
HLF Design Parameters

Lift # and Elev. (m)	Area (m²)	Lift Vol. (m³)	Cumulative Vol. (m³)	Lift Vol. (t)	Cumulative Vol. (t)	Days per Lift (Total Days)
#1 (528 m)	33,605	76,241	76,241	122,274	122,274	25
#2 (533 m)	49,363	209,512	285,933	335,220	457,494	68 (93)
#3 (538 m)	63,051	281,626	567,560	450,602	908,095	92 (185)
#4 (543 m)	71,693	327,910	895,469	524,656	1,432,751	107 (292)
#5 (548 m)	82,711	377,395	1,272,865	603,832	2,036,584	123 (415)
#6 (553 m)	91,806	432,254	1,705,119	691,607	2,728,191	141 556)
#7 (558 m)	88,701	441,714	2,146,833	706,742	3,434,932	144 (700)
#8 (563 m)	78,270	405,945	2,552,778	649,512	4,084,444	133 (833)
#9 (568 m)	63,638	339,684	2,892,462	543,494	4,627,939	111 (944)
#10 (573 m)	45,399	251,920	3,144,382	403,073	5,031,012	82 (1,026)
#11 (578 m)	29,895	171,237	3,315,619	273,979	5,304,991	56 (1,082)
#12 (583 m)	17,041	101,864	3,417,484	162,983	5,467,974	33 (1,115)
#13 (590 m)	6,246	82,284	3,499,767	131,654	5,599,628	27 (1,142)

18.1.2.7 Water Management System

The HLF water management strategy separates non-contact and contact waters from the HLF. Diversion channels will divert upstream stormwater runoff into existing drainages. As a result, there will be minimal contributing flows outside the HLF limits.

Major hydraulic structures (contact and non-contact) associated with the HLF components include:

- HLF – Non-Contact Water.
- North Diversion Channel (HLF-NDC).
- West Diversion Channel (HLF-WDC).
- East Diversion Channel (HLF-EDC).
- South Diversion Channel (HLF-SDC).
- HLF - Contact Water.
- Solution Collection Channel (HLF-SCC) discharging into the PLS Pond.
- PLS Pond Spillway (HLF-PPS) connects the PLS Pond and Events Pond.

Additionally, the underdrain system (HLF-US) will be considered for collecting and conducting spring water and leaks below the HLF, PLS Pond, and Events Pond and discharging into the Underdrain Collection Sump (HLF-UCS).

18.1.2.8 Stability Analysis

The HLF stability analysis included evaluating the foundation, a toe platform, liner interface system, and ore stacking. The analysis considered maximizing the ore tonnage for construction and operation with setbacks incorporated into the heap slopes to reduce erosion potential. The HLF was modeled with a maximum crest elevation of 590 masl and a platform at the toe to increase overall stability.

The stability analysis completed for cross-sections A (HLF) and B (pond embankment) resulted in acceptable minimum FOS values for static and post-earthquake conditions. Slope stability model results for the HLF and PLS/Events Pond embankment are listed in Table 18.6 and Table 18.7, respectively.

Pseudo-static analyses (seismic) were run using a horizontal loading coefficient of 0.17 g applied as an inertial force. This is approximately one-half the PGA value (Hynes-Griffin and Franklin, 1984). For this slope stability analysis, the PLS/Events Pond embankment was analyzed for the MCE, with a PGA of 0.51 g. Subsequently, a horizontal loading coefficient of 0.26 g was applied as an inertial force to evaluate stability.

Table 18.6
Slope Stability Results – HLF

Location / Slip Surface Shape	Static FOS		Pseudo-Static FOS		Post-Earthquake FOS	
	Min.	Computed	Min.	Computed	Min.	Computed
Circular Failure	1.3	1.85	1.05	1.0	1.1	1.41
Slip through Liner System Interface (Composite)	1.3	1.69	1.05	1.0	1.1	1.18
Slip through Liner System Interface (Block Failure)	1.3	1.85	1.05	1.09	1.1	1.18

Table 18.7
Slope Stability Results – PLS/Events Pond

Location / Slip Surface Shape	Static FOS		Pseudo-Static FOS (MCE)		Post-Earthquake FOS	
	Min.	Computed	Min.	Computed	Min.	Computed
Downstream Slope	1.5	1.57	1.0	0.77	1.2	1.54

The PLS/Events Pond embankment was evaluated using the MCE, resulting in a pseudo-static FOS below 1.0. Pseudo-static analyses tend to be conservative because they assume that the horizontal force acting on the slope is permanent and in one direction. However, dynamic loads due to an earthquake are momentary and happen for a short time. Therefore, a pseudo-static FOS equal to or less than 1.0 does not necessarily imply that slope failure is imminent but rather the potential for some permanent downward slope movement.

When pseudo-static FOS results are less than 1.0, deformation analyses should be performed to assess deformations caused by a seismic event. Simplified deformation analyses were conducted to evaluate if predicted deformations were acceptable. Table 18.8 summarizes the deformation analysis results.

Table 18.8
Deformation Analysis Results – HLF and PLS/Events Pond

Facility / Location (Slip Surface Shape)	Pseudo-Static FOS	PGA	Yield Acceleration (FOS = 1.0)	Mean Deformation (cm)
HLF (Circular Failure)	1.01	0.34 g (1/475)	0.17 g	10.9
HLF (Slip through Liner)	1.02	0.34 g (1/475)	0.185	7.6
Pond, Downstream Slope	0.77	0.51 g (MCE)	0.14 g	43.9

The HLF deformation analysis indicates displacements between 7.6 and 10.9 cm. Sliding displacement larger than 30 cm could potentially tear the geomembrane. The PLS/Events Pond embankment deformation analysis resulted in a displacement of less than 50 cm. As the Project advances into detailed design, engineering requirements, such as minimum crest freeboard to accommodate potential displacement will need to be defined.

18.1.3 Candelones WRS Design

18.1.3.1 Overview

Waste rock will be disposed in a dedicated WRS located southeast of the HLF. The WRS has been designed to store up to 1 Mt of non-acid generating (NAG) waste rock material (Acid-Base Accounting testwork indicates waste rock to be non-acid generating). The WRS will be developed using a progressive approach that combines construction with an operation involving sequential site preparation, underdrain construction, waste rock placement, and temporary/permanent surface water diversion channels and Underdrain Pond.

Figure 18.2 illustrates the WRS plan view, which has a 4.3-hectare (ha) footprint and a maximum 39 m height.

18.1.3.2 Design Basis

The WRS design criteria standards were adopted from the British Columbia Mine Waste Rock Pile Research Committee's (BCMWRPRC) Mined Rock and Overburden Piles Investigation and Design Manual – Interim Guidelines (Piteau Associates, 1991). The design criteria and parameters are summarized in Table 18.9 and Table 18.10, respectively.

The WRS is designed to meet or exceed the Official Dominican Republic Standard Environmental Law No. 64-00 (Ministerio de Medio Ambiente y Recursos Naturales (MARENA), 2000), which establishes the environmental protection requirements for mineral leaching systems in the Dominican Republic. MARENA does not provide a design flood event, earthquake recurrence interval, or required minimum slope stability FOS.

Figure 18.2
WRS Configuration and Surroundings

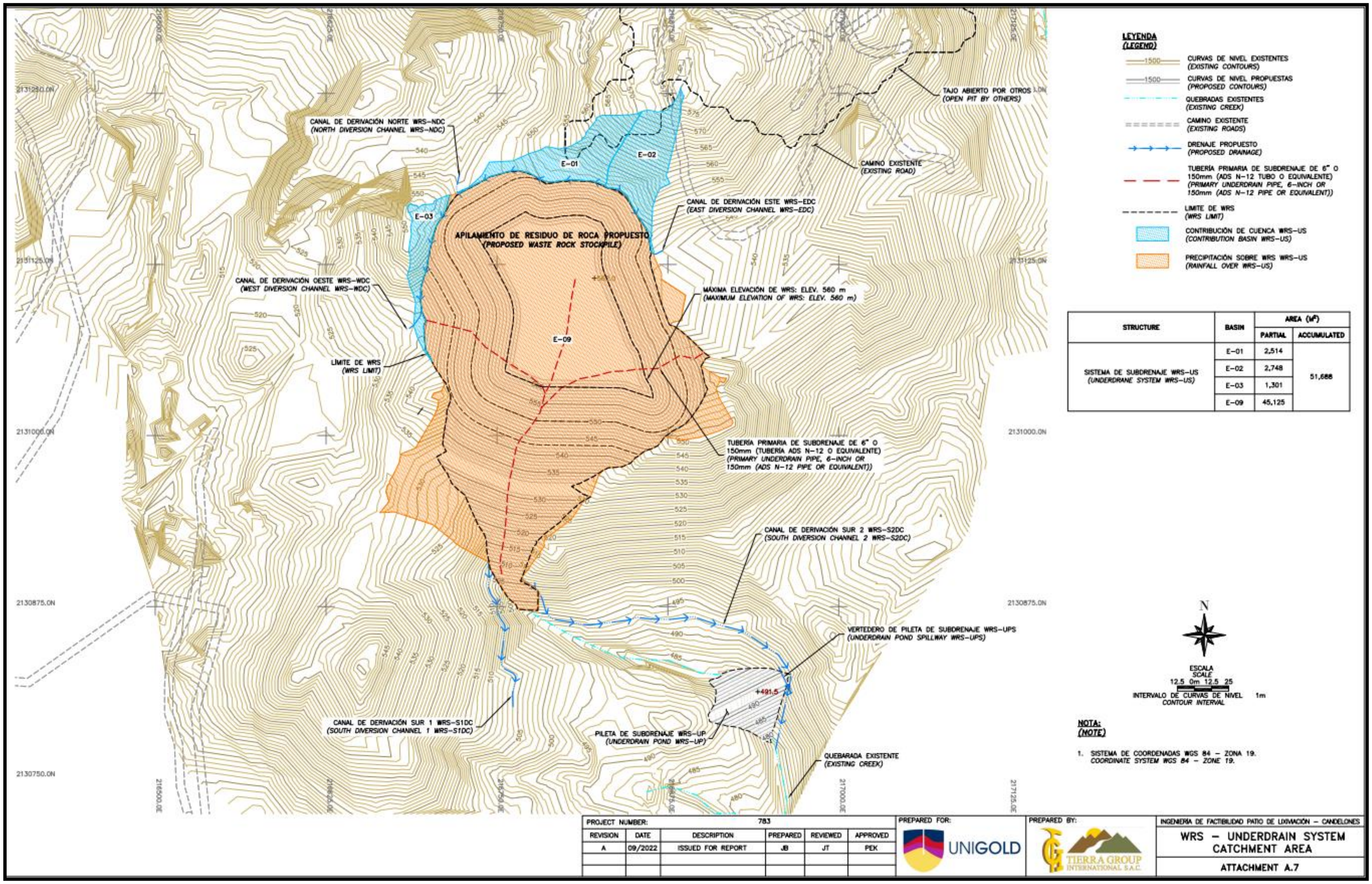


Table 18.9
WRS Design Criteria

Structure	Element	Criteria
Seismic and Slope Stability		
Waste Rock Stockpile	Static FOS (short-term)	1.3
	Static FOS (long-term)	1.5
	Pseudo-Static FOS	1.1
	Post-Earthquake FOS	1.1
Stormwater Diversion		
Temporary Perimeter Diversion Channels	Conveyance	Peak flow resulting from the 100-year, 24-hour storm event (If required)
Permanent Diversion Channels	Conveyance	Peak flow resulting from the 100-year, 24-hour storm event (If required)
Emergency Spillways		
Underdrain Pond Spillway	Conveyance	Peak flow resulting from the 100-year, 24-hour storm event (Underdrain Pond is supposed to be full, worst condition)
Underdrain System		
Underdrain System	Conveyance	Convey infiltration through the WRS associated with the 100-year, 24-hour storm, and subsurface (spring) flow produced by average annual rainfall infiltration in the basins upstream of the channels.
Underdrain Pond	Storage	Store runoff during the three wettest months of the year

Table 18.10
WRS Design Parameters

Tasks	Description
Foundation Preparation	
Waste Rock Stockpile	Clear and grub vegetation (remove as part of stripping excavation). Mulch and stockpile with topsoil for reclamation use.
Waste Rock Storage	
Expected Tonnage	1.0 Mt
WRS Height	39-m maximum height.
Waste Rock Density	Placed bulk density 1.7 t/m^3
Seismicity	0.28 g (1 in 475-Year Return Period)
Material Type	Non-PAG waste
Stacked Ore Density (t/m^3)	1.7
Front of Heap Slope (H: V)	2.75
Side and Back Slopes of Heap (H: V)	2.5
Angle of Repose – Waste Rock (o)	To be determined
Service Life (years)	3
Temporary Diversion Channels	
Diversion Channels	East Diversion Channel (WRS EDC 1yr) West Diversion Channel (WRS WDC 1yr)
Storm Event	186 mm (100-year, 24-hour storm)

Tasks	Description
Freeboard	0.3 m (minimum)
Lined	Rockfill
Side Slopes	2H:1V
Slope channel	1% (minimum)
Velocity	3 m/s (maximum flow velocity)
Permanent Diversion Channels	
Diversion Channels	East Diversion Channel (WRS-NDC) West Diversion Channel (WRS-EDC) West Diversion Channel (WRS-WDC) West Diversion Channel (WRS-S1DC) West Diversion Channel (WRS-S2DC)
Storm Event	186 mm (100-year, 24-hour storm)
Freeboard	0.3 m (minimum)
Lined	Concrete-filled Geoweb
Side Slopes	1H:1V
Slope channel	1% (minimum)
Velocity	3 m/s (maximum flow velocity)
WRS Underdrain Pond Spillway (WRS-UPS)	
Storm Event	186 mm (100-year, 24-hour storm)
Freeboard	0.3 m (minimum)
Lined	Concrete-filled Geoweb with exposed rock
Side Slopes	1H:1V lined interior
Slope channel	1% (minimum)
Velocity	5 m/s (maximum flow velocity)
WRS Underdrain Pond (WRS-UP)	
Seismicity	0.51 g (MCE) Mw 7.0
Pond Sizing	Runoff generated by three wettest months (570 mm in August, September, and October): 13,835 m^3
Pond Design Depth	8.5 m
Pond Configuration	Square shape Top elev: 491.5 m Bottom elev: 483.0 m

18.1.3.3 Underdrain System

The underdrain system consists of a network of gravel drain trenches (trapezoidal cross-section with 0.6-m base, 0.6-m height) with 100-mm diameter perforated pipes constructed along existing drainages within the WRS. The underdrains will discharge into a collection pond located downstream of the WRS.

18.1.3.4 Stacking Plan

Waste rock will be placed in lifts by haul trucks to a maximum elevation of 562 m providing an overall slope between 2.5H:1V to 2.75H:1V. Stacking will start from the lowest WRS elevation and extend upwards to the north. As waste rock is placed, a haul road will be constructed on the WRS slope, and temporary diversion ditches will manage stormwater and prevent erosion on the downstream slope. Table 18.11 summarizes the stacking plan.

Table 18.11
WRS Stacking Plan Summary

Elev. (m)	Volume (m^3)	Cumulative Vol. (m^3)	Lift Volume (t)	Cumulative Vol. (t)	Year
#1 (543 m)	196,702	196,702	334,393	334,393	1
#2 (550 m)	196,601	393,302	334,222	668,615	2
#3 (562 m)	194,932	588,235	331,385	1,000,000	3

18.1.3.5 Water Management System

The WRS water management strategy uses the same strategy as the HLF, keeping non-contact water separate from contact water. In addition, the WRS includes permanent and temporary water management structures designed to capture and convey stormwater around and off the WRS surface during operation. A detailed description of the water management structures, including hydrologic and hydraulic analysis, design criteria, and methodology used in the design, is provided in the design report.

Major hydraulic structures (contact and non-contact) associated with the WRS components include:

- WRS – Non-Contact Water:
  - 1-year of operation (temporary structures).
    - East Diversion Channel (WRS EDC-1yr).
    - West Diversion Channel (WRS WDC-1yr).
  - 2 years of operation and final stage (permanent structures):
    - North Diversion Channel (WRS-NDC).
    - East Diversion Channel (WRS-EDC).
    - West Diversion Channel (WRS-WDC).
    - South 1 Diversion Channel (WRS-S1DC).
    - South 2 Diversion Channel (WRS-S2DC).
- WRS – Contact Water:
  - Ditches (WRS-D).
  - Underdrain System (WRS-US).
  - Underdrain Pond Spillway (WRS-UPS).

Contact water management strategy will be to convey WRS runoff in ditches (WRS-D) routed to the Underdrain Pond (WRS-UP). Additionally, water infiltrating the WRS will be collected and conveyed by the Underdrain System (WRS-US) to the WRS-UP. Water will be discharged from the WRS-UPS after water quality testing indicates acceptable discharge concentrations are met. The WRS-UPS includes an emergency spillway to discharge excess water during high rainfall events.

18.1.3.6 Stability Analysis

The WRS stability analysis included evaluating the planned foundation and anticipated stacking conditions. The WRS was modeled with a maximum crest elevation of 562 masl, 2.75H:1V slopes, and an intermediate bench.

A PGA of 0.28 g corresponding to a 475-year return period earthquake event was used to analyze the WRS under seismic conditions. The pseudo-static analyses were run using a horizontal loading coefficient of 0.14, applied as an inertial force, approximately one-half the PGA value (Hynes-Griffin and Franklin, 1984).

The WRS stability analysis resulted in acceptable minimum FOS values for static and post-earthquake conditions. The slope stability results are presented in Table 18.12 and Table 18.13.

Table 18.12
Slope Stability Results - WRS

Location / Slip Surface Shape	Static FOS		Pseudo-Static FOS		Post-Earthquake FOS	
	Min.	Computed	Min.	Computed	Min.	Computed
Circular Failure	1.5	1.52	1.1	0.81	1.1	1.18

Table 18.13
Slope Stability Results – Underdrain Pond

Location / Slip Surface Shape	Static FOS		Pseudo-Static FOS (MCE)		Post-Earthquake FOS	
	Min.	Computed	Min.	Computed	Min.	Computed
Downstream Slope	1.5	2.21	1.0	0.92	1.2	1.90

Pseudo-static analysis (seismic) resulted in a FOS less than 1.1. Therefore, a simplified deformation analysis was performed to estimate potential displacement under the design earthquake. An average displacement of approximately 34.5 cm was estimated for the WRS. This displacement is acceptable as the facility is not lined and does not impound water. An average displacement of approximately 3.8 cm was estimated for the Underdrain Pond. As the Project advances into detailed design, engineering requirements such as minimum crest freeboard to accommodate potential displacement will need to be defined.

19.0 MARKET STUDIES AND CONTRACTS

19.1 MARKET STUDIES AND CONTRACTS

The primary minerals (gold, silver, copper and zinc) identified on the Candelones property so far are readily traded on the world market, with benchmark prices generally based on the London market (London fix). Due to the size of the commodities market for gold, silver and copper, any production activity from Unigold's Candelones Project will not influence the commodity prices. Zinc is not deemed to be economically recoverable at this time.

The production from the oxide heap leach operation will primarily recover gold, with silver being a by-product of the process. Copper will not be recovered as part of the heap leach process.

Due to the readily traded nature of the primary minerals, there were no specific market studies or contracts completed to support this Feasibility Study. All consultants utilized three independent contracting/suppliers' firms to supply quotations on mining, related earthworks, liner services, piping estimates and other Project related services.

Gold production and the potential silver biproduct will be generally sold to banks, financial institutions, or refiners. Gold sales would be based on then current spot prices as based on public markets. No anticipated direct marketing of the metal is contemplated.

Reference has been made to metals outlook provided by two Canadian chartered banks, as well as Kitco.

It is believed that the doré produced at the Candelones Oxide Project will be of a quality comparable with other gold and precious metals producers and, therefore, will be acceptable to all refineries. The base case gold price of US $1,650.00/oz has been selected based on forecasted commodity pricing with consideration given to the three-year trailing average.

Dore produced at the Candelones Oxide Project will be shipped by armored transport from site direct to either Santiago or Santo Domingo and then by air to a refining facility.

At this time no contracts have yet been made for gold refining or sales.

Table 19.1 has been prepared to illustrate a list of current service / contractor providers used for the preparation of the feasibility study, potential future contractors or service providers have been added to the list to identify future or pending service contracts for the detailed engineering work program.

Table 19.1
Summary of Current and Future Service / Contractor Providers

#	Contractor	Description of Services	Location	Work Area	Comments	Selected Contract	Received Quotes	Future Quotes to be received
1	Ecoterra	Mining and Earthworks	DR based	Heap Leach Facility and Open Pit Mining	Quotation made on all earthworks and open pit mining		x	
2	Rodikon	Mining and Earthworks	DR based	Heap Leach Facility and Open Pit Mining	Quotation made on all earthworks and open pit mining		x	
3	Sococo	Mining and Earthworks	DR based	Heap Leach Facility and Open Pit Mining	Quotation made on all earthworks and open pit mining	Selected for best price and experience	x	
4	Tierra Group International	Geotec and HLF design	US based	Heap Leach Facility and Waste stockpile	Quotation made on all HLF design and WRS design	Selected for experience in HLF design/build	x	
5	Earthtec	Geotec HLF support	DR based	Heap Leach Facility and Waste stockpile	Quotation made on sample delivery, soils, oxides	Selected for incountry experience	x	
6	SGG	Geophysics Reflectivity Survey	PAN based	Heap Leach Facility and Waste stockpile	Quotation based on all Geotec areas	Selected for experience	x	
7	ATT Geotec soil testing	Geotec soil testing	US based	Heap Leach Facility and Waste stockpile	Quotation based on all Geotec areas	Selected for experience	x	
8	ST Domingo Geotec Drilling	SP testing, geotec support	DR based	Heap Leach Facility and Waste stockpile	Quotation based on all Geotec areas	Selected for 2023 detailed engineering		x
9	AR-DR soil testing	Geotec soil testing	DR based	Heap Leach Facility and Waste stockpile	Quotation based on all Geotec areas	Not chosen	x	
10	Promet 101	Process design, ADR, Project Management	MX based	ADR Plant, Process Piping/Pumping, Installation	Quotation made on ADR Plant, process control, metallurgical support	Selected for owner build experience	x	
11	Bureau Veritas Mining Labs	Assay Support, Metallurgical Testing	CAN based	Geological Assay Support, Met and Column Testing	Ongoing support	Selected contract for project support	x	
12	Mettest/McClelland Labs	Heap Leach Metallurgical Testing	US based	Detailed metallurgical testing on oxides	Recommended metallurgical testing labs	Selected contract for project support	x	
13	Newfields Laboratories	Physical Properties Testing / Geotec	US based	Physical properties of Heap Leach Oxide	Recommended testing labs	Selected contract for project support	x	
14	Docalsa	Lime supplier	DR based	Local hydrated lime supplier	Recommended local lime supplier	Selected contract for project support	x	
15	RR Topografia	Survey services supplier	DR based	Open pit and HLF areas	Potential survey services supplier	Under review		x
16	IMCA	Caterpillar equipment, generators supply	DR based	Total project power supply	Potential power services supplier	Under review	x	
17	Project Director	Complete project engineering support	DR based	Total project engineer build support	Experienced project manager/GM/VP ops	Under review	x	
18	DR Management Team	Chief Geologist, Environmental/CSR Manager	DR based	Company Support	Experienced multilingual managers	Under contract	x	
19	Canadian Mint	Gold and Silver Refining	CAN based	Refining Doré bars	Support to Canadian based offshore mining companies	Under review		x
20	Brinks	Transportation of Doré bars to Canada	US based	Transporting Doré bars from site to Ottawa Mint	Currently supply services to Pueblo Viejo Mine, to Ottawa Mint	Under review		x
21	Marat	Baseline Environmental Study	DR based	Complete Oxide Project	Local services provider	Under contract	x	
22	Knight Piesold	Oversight of Baseline Study	CAN based	Oversight of Oxide Project Baseline	Senior Environmental Engineering Services Firm	Under contract	x	
23	DR Environmental Services Firms	Environmental Impact Assessment	DR based	Complete Oxide Project EIA	Local services provider (quotations to be received)	Under review		x
24	Knight Piesold	Oversight of EIA	CAN based	Oversight of EIA	Senior Environmental Engineering Services Firm	Under review		x

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

This review is based on secondary information obtained from Unigold management personnel and represents an update to previous Micon technical studies. Whist every effort has been made to include relevant and up to date information, it should be noted that environmental and social baseline studies for the Project are still ongoing, and that the Environmental and Social Impact Assessment (ESIA) process has not yet been completed.

20.1 Environmental Studies

According to the established permitting process for mining projects in the Dominican Republic, an ESIA does not formally commence until 1) the Ministry of Energy and Mines (MEM) has granted the exploitation concession and 2) the Ministry of Environment and Natural Resources (MENR) has issued the Terms of Reference (ToR) for the environmental study. Given that the exploitation license application for Neita Sur is still under review with the authorities, the formal ESIA process has not yet commenced.

Unigold has initiated environmental and social baseline studies in advance of the formal ESIA process commencing, in order to collect as much information as possible and ensure a full understanding of the environmental and social context, along with any potential risks and impacts. This approach is aligned with Good International Industry Practice (GIIP) and will also help optimise the overall timescale before mining and processing operations can commence.

The scope of work for the baseline studies and the ESIA, effectively the ToR, was developed by Knight Piésold Consulting in 2021. The scope was designed in accordance with the relevant national mining and environmental regulations and also considers GIIP, specifically International Finance Corporation (IFC) Performance Standards, Equator Principles and World Bank Environmental, Health and Safety (EHS) Guidelines.

Scientific baseline studies for the Project are currently being undertaken by an independent consultancy company from the Dominican Republic (Marat). Primary and secondary data collection is being performed over a 12-month period to ensure that seasonal variations are taken into account during fieldwork. The studies are particularly focused on water resources, biodiversity and socio-economic considerations, though all relevant environmental components are being evaluated.

The Western limit of the Neita Concession is defined by the Rio Libón and the international border with Haiti. The Project site is not located within any protected areas, though it is part of the wider Hispaniola Endemic Bird Area (EBA) which stretches across the Dominican Republic and Haiti. There are a number of state parks, national forests and national parks within the wider region surrounding the Project. The closest protected area is the Nalga de Maco National Park, located approximately 10 km away. This park is also part of the Loma Nalga de Maco and Río Limpio Important Bird Area (IBA). Protected species designated by the International Union for Conservation of Nature (IUCN) are known to exist within the region, and careful management of wildlife interactions will be needed. Unigold has advised that wildlife activity at the Project site is low.

The latest schedule indicates that the ESIA report will be completed in 2023.

20.2 Environmental Management

Unigold has committed to responsible mining practices and released its first Environmental, Social and Governance (ESG) report in 2021. Unigold states that it aligns with a number of internationally recognised guidelines and standards, including the IFC Performance Standards, Equator Principles, Carbon Disclosure Project, Global Reporting Initiative, and ICMM guidelines.

20.2.1 Water Management

Water supply for the Project will be obtained entirely by collecting rainwater in a surface storage lagoon and pumping it to the required locations around the Project site. The Project site is located in an area of high rainfall and a preliminary water balance has been developed; it is understood from Unigold that sufficient water supply will be available. Groundwater will not be used as a water source, and it is understood from Unigold that groundwater ingress is not expected to occur in open pit mining areas. Any rainwater accumulating in mining areas will be diverted into settlement ponds.

The Project will operate a closed-loop water management system. Project infrastructure and facilities have been designed so that no process water will be discharged to the environment, either from normal operations, cleaning and maintenance activities, or emergency events. Domestic wastewater and sewage from offices and accommodation camps will be collected in septic tanks, which will be emptied periodically by authorised contractors.

Baseline studies are ongoing to understand hydrology, hydrogeology, water quality and water use in the area surrounding the Project site, and potential impacts to water quantity and quality will be assessed in the forthcoming ESIA. It is understood from Unigold that the oxide ore is not Potentially Acid Generating (PAG) material and, hence the risk of acid rock drainage and metal leaching (ARDML) is low.

20.2.2 Waste Management

Mineral waste will be stored in a conventional Waste Rock Dump (WRD). A Tailings Storage Facility (TSF) will not be required for the Project due to the nature of the heap leach process and Adsorption Desorption Recovery (ADR) method used.

A Waste Management Plan will be developed for all non-mineral waste generated by the Project. The plan will include provision for waste collection, segregation, temporary storage, and recycling or disposal. The Project will aim to reuse or recycle as much waste as possible, either within Project operations or for the benefit of local community programs. Particular consideration will be given to waste packaging from process reagents, with the procurement process designed to favour bulk delivery, minimise packaging, and enable re-use where possible and safe to do so. Cyanide boxes will be incinerated. A waste management facility will be established on site with appropriate segregation areas for different types of hazardous and non-hazardous waste, and recyclables.

20.2.3 Environmental Monitoring

Environmental monitoring is currently being undertaken to establish baseline conditions, and appropriate monitoring of environmental receptors will continue throughout the life of the Project. Details of specific monitoring programs will be finalised after the ESIA is completed. As part of the current exploration activities, weather stations have been established in two locations, and basic monitoring is being undertaken for water quality, noise levels and air quality.

20.2.4 Environmental and Social Management System

Unigold has developed policies for environment, community engagement, and health and safety, and these will be reviewed and updated as necessary as the Project develops.

An Environmental Adaptation and Management Plan (PMAA) will be developed for the Project and submitted to the regulatory authorities as part of the Environmental Permit Application for the Neita Sur exploitation license, in accordance with legal requirements. The PMAA will be incorporated into Unigold's Environmental and Social Management System (ESMS) and will be reviewed periodically. In addition to the overall PMAA, specific management plans and procedures will also be developed for the ESMS, and will include provision for water, air quality, soils and sediment, waste management, cyanide, and biodiversity. A Stakeholder Engagement Plan and Preliminary Closure Plan will also be developed.

Unigold will develop appropriate management plans and procedures for occupational health and safety, which may be integrated into the ESMS or managed via a separate system, depending on management preferences.

20.3 PERMITTING

Mining activity, and the granting of exploration and exploitation (mining) licenses, in the Dominican Republic is governed by Mining Law No. 146 (1971) and Regulation No. 207-98 (1998). The responsible governing body is the MEM, with mining activity specifically overseen by the Director General of Mining (DGM).

Dominican Republic Law requires environmental permits to be obtained for exploration and mining activities, in addition to the exploration and mining licences. The environmental permitting process for all phases of mining is governed by Environmental Law No. 64-00 (2000). Environmental permits contain specific terms and conditions, including compliance with all relevant legislation and standards, implementation of appropriate monitoring and mitigation measures, and the submission of environmental compliance reports every 6 months. For exploitation licenses, a full ESIA report must be submitted to MENR, along with a documented PMAA.

20.3.1 Project Permitting Status

The Candelones Project is located entirely within the Neita Concession (lease area), which covers a total land area of 21,030.75 ha. Unigold owns 100% of the exploration rights within the Neita concession. The current exploration license was granted on 10 May, 2018, (Mining Resolution R-MEM-CM-016-2018), with a validity of three years. Subsequently, on 24 March, 2021, the DGM approved the first of two possible one-year extension periods to the exploration license, until 10 May, 2022.

Instead of requesting a second one-year extension to the Neita exploration license (which would have been valid until May, 2023), Unigold submitted an application on 25 February, 2022, to convert approximately half of the concession area (9,900 ha) into an exploitation (mining) license under the name of Neita Sur (Neita South). This application has successfully passed the initial technical evaluation from the DGM and has been delivered to the MEM for review, comments and approval. As of this date, the application is currently undergoing the final stages of review with the MEM's Mines Vice Ministry Technical Department and a decision from the authorities is pending. If granted, the exploitation license for Neita Sur would give Unigold the sole right to extract sub-surface metallic minerals for a 75-year period.

Also, on 25th February, 2022, Unigold submitted an application to retain the remaining portion of the Neita concession, to be known as Neita Norte (Neita North) under a new 5-year exploration licence. Following review of the application by the regulatory authorities, official public notices concerning this new exploration license application were published in national newspapers on 1 and 12 September, 2022. The second notice initiated a 30-day period of consultation, whereby submission of comments can be made by interested parties and the general public. Any comments will subsequently be reviewed prior to a decision being made by the authorities. As per verbal confirmation from the DGM, no comments were received during the consultation period.

Unigold obtained an environmental permit from the MENR to support the Neita exploration license on 16 October, 2018 (Environmental Permit No. 0225-03), and this was subsequently extended in 2020, 2021 and 2022. The permit covers the same geographic area as the exploration license and contains a number of obligations and conditions.

In preparation for obtaining the Environmental Permit which will be required to support the Neita Sur exploitation license, Unigold has commenced baseline studies that will inform an ESIA. The ESIA process for Neita Sur will formally commence once the exploitation license has been granted, after which MENR will issue a formal Terms of Reference (ToR) for the ESIA.

The environmental permit in support of the Neita Sur exploitation license would only be issued following submission of a satisfactory ESIA report to the regulatory authorities, and completion of the associated technical review and public consultation process. Supplementary permits are also anticipated to be required for construction of ancillary buildings, roads and utilities, and hazardous material storage and transport. Construction, mining, and processing activities cannot commence until the environmental permitting process is complete, and surface rights for land use and access have been negotiated with current landowners.

20.4 Social and Community Management

As part of the comprehensive legal framework for environmental management in the Dominican Republic, Law No. 64-00 requires a consultation process that involves communities in the evaluation of environmental impacts and in consideration of alternatives. Formal public consultation with local communities and stakeholders has not yet been undertaken for the Candelones Project, as the ESIA process has not formally commenced.

Unigold representatives held several meetings during 2021-2022 to discuss the Project components with the regulatory authorities and meetings have also been held with affected landowners to discuss temporary access and use of the land for the exploration drilling operations.

Unigold has a community relations team in place, and that team is the first point of contact for any questions or complaints regarding the Project. A Stakeholder Engagement Plan and formal grievance mechanism will be developed for the Project, to capture any concerns from the local community and enable any necessary corrective or preventative actions to be implemented.

Unigold has supported a number of community development projects as part of its ongoing commitment to corporate social responsibility, including health, education and infrastructure projects. Unigold also contributes to on-going programmes for re-forestation and land reclamation and supports local government tree and plant nurseries.

20.5 Mine Closure

Closure will be undertaken on a progressive basis, with remedial earthworks and revegetation taking place as soon as each area is no longer in commercial use. The main closure process at the end of the Project will comprise three key stages: removal of Project infrastructure and remediation of Project areas, construction of closure infrastructure required for long term management of the site, and post-closure monitoring and inspection. A documented closure plan will be produced for the Project.

In keeping with legislative requirements and GIIP, stakeholder consultation will be undertaken as part of the closure process, so that the local community can provide input to future land use and socio-economic benefits can be maximised.

20.5.1 Post-Closure Monitoring

Post-closure monitoring will be undertaken for a minimum of 5 years, and will include surface water, air quality, soil and reforestation. This monitoring will ensure ongoing compliance with regulatory obligations and international commitments, and will allow any maintenance requirements for restored areas to be identified and implemented prior to the end of the defined aftercare period.

20.5.2 Closure Costs

A preliminary estimate of closure costs is provided in Table 20.1. These costs will be reviewed throughout the life of the mine and revised as necessary.

As required by Article 47 of Environmental Law 64-00, 10% of the closure costs will be required to be deposited in advance with the regulatory authorities as a financial guarantee / surety bond. The payment schedule and confirmation of the bond amount will be agreed upon once the environmental permitting process is complete.

Table 20.1
Preliminary Closure Costs

Closure Phase	Estimated Cost
Phase 1 – Dismantling and Removal	$2,827,881
Phase 2 – Construction of Closure Infrastructure	$115,000
Phase 3 – Post-Closure Monitoring and Inspection	$166,360
Sub-Total	**$3,109,241**
18% Tax (ITBIS)	$477,519
Contingency (30%)	$620,744
Total	**$4,662,787**

Note that closure costs have been provided by Unigold.

21.0 CAPITAL AND OPERATING COSTS

21.1 GENERAL INFORMATION

Estimates of the capital and operating costs used in the economic assessment of the Project are described in this Section.

The estimates are expressed in third quarter 2022 United States dollars, without provision for escalation. Where appropriate, an exchange rate of DOP 54/US$ has been applied. The expected accuracy of the capital and operating estimates is ±15%.

21.2 CAPITAL COSTS

Table 21.1 summarizes the estimated capital expenditures for the Candelones Oxide Project.

Table 21.1
Capital Expenditure Summary

Item	Initial Capital US$'000	Sustaining Capital US$'000	LOM Total US$'000
Mining	1,708	935	2,643
Processing Plant	9,972	-	9,972
Infrastructure	16,420	-	16,420
EPCM, Indirect	1,825	-	1,825
Owners Costs	1,896	-	1,896
Sub-total before contingencies	**31,822**	**935**	**32,757**
Contingencies	4,099	-	4,099
Grand total Capital	**35,922**	**935**	**36,857**
Closure and Rehabilitation	466	4,663	5,129

21.2.1 Basis of the Estimate

21.2.1.1 Mining Capital

Pre-production mining expenditures comprise contractor mobilization/demobilization and establishment charges, as well as the purchase of office trailers, light vehicles, survey equipment and computers. In addition, provision has been made for clearing and grubbing of the initial open pit area and haul road footprint, based on unit rates and lump-sum amounts provided by Unigold's preferred bidder for the mining contract.

Table 21.2 summarizes the breakdown of the initial and annual sustaining mining capital expenditures.

Table 21.2
Initial and Sustaining Mining Capital Expenditures

Item	Initial Capital US$'000	Year 1 US$'000	Year 2 US$'000	Year 3 US$'000	Year 4 US$'000	LOM Total US$'000
Mobilization/Demob.	201	-	-	-	201	**402**
Establishment/Maint.	565	44	44	44	-	**698**
Clearing and Grubbing	393	55	221	161	-	**830**
Haul roads	549	55	55	55	-	**714**
Grand total Capital	**1,708**	**154**	**320**	**260**	**201**	**2,643**

21.2.1.2 Processing Facility Capital

The capital cost estimate for the processing facility was developed based on the conventional work breakdown structure typically used for mineral processing projects. The scope of the process facility capital expenditure estimate extends from the receipt of ore from the mine at the screening and agglomeration plant, through conveying and placement of heap leach material using conveyors and stackers, barren solution piping to the heap leach facility, pregnant solution pumping and piping to the main process facility, gold recovery plant using CIC, reagent facilities, smelter, carbon regeneration and barren solution return.

The proposed Project construction plan is to source bulk materials from international providers and field fabricate any equipment that is too large to be transported via container or road vehicles within country. Unit rates for construction work were estimated using local wages for skilled and semi-skilled labour. The proposed execution strategy is to maximise the use of local labour and only source international labour as required for specialised tasks. Mexico has been identified as a suitable source of skilled labour, due to location and language issues.

Process Flow Diagrams and Process Control diagrams were developed as part of the feasibility study to define the proposed process facility scope and these were in turn used to develop plant layouts to determine volumes of earthworks, concrete, structural steel for estimating purposes. The equipment, valve and instrument lists generated from the process control diagrams were used as the basis for estimation of material to be procured and sent to site for construction. Quotations for major mechanical equipment were obtained from international vendors and material costs from similar recent projects used for the balance of equipment. The opportunity exists to source second hand equipment to minimize total capital expenditure and this will form part of the execution strategy for the following phase of the Project.

Unit rates for piping, steel and electrical cable were obtained from international suppliers for input into the CAPEX estimation. Rates for earthworks and concrete were obtained from local suppliers in the Dominican Republic

Table 21.3 summarizes the breakdown for the initial processing capital expenditures.

Table 21.3
Summary for the Initial Processing Capital Expenditures

Item	LOM Total US$'000
Heap leaching	337
Agglomeration & Stacking area	1,208
CIC, Carbon Prep and ADR	7,134
Refinery	745
Reagents	382
Process Plant Water Systems & Utilities	166
Sub-total Direct Capital Expenditure	**9,972**
Vehicles	50
Engineering	998
Construction Management	270
Pre-commissioning & Commissioning	154
Spares	203
First fills	100
Travel costs	50
Sub-total EPCM and Indirect	**1,825**
Site Infrastructure	155
Contingency	1,793
Grand Total	**13,745**

21.2.1.3 Waste Rock Storage Capital

Unigold requested Tierra Group International, Ltd. (Tierra Group) to estimate the material quantities and capital cost for the Candelones Waste Rock Stockpile (WRS). The calculated material quantities and costs include the underdrain pond, spillway, diversion channel, and haul road. The material items included earthworks, aggregates, and geosynthetics.

Quantities were calculated using AutoCAD Civil 3D software and the following documents:

- Design Criteria
- Detailed Design Drawings (100%) for the Candelones WRS, dated August, 2022.

The material quantities estimate considered:

- Earthworks cut and fill.
- Geosynthetics including an 11% increase due to waste, scrap, or overlap based on Tierra Group's experience with past projects.

Table 21.4 summarizes the specific considerations and assumptions in calculating the material quantities.

Table 21.4
WRS - Material Quantities Considerations and Assumptions

Item		Consideration/Assumption
Earthworks		
1.1	Clear and Grub	Clear and grub the WRS and related structures (Underdrain Pond, spillway, diversion channel, and haul road).
1.2	Topsoil Cut	A topsoil depth of approximately 0.5 metres.
2.1.1, 3.1.6, 4.1.1, 5.1.1	Cut from Grading	Cut volumes include the WRS and related structures to achieve the specific design grades and capacities. These excavation volumes were calculated using the projected structure's bottom surfaces and the current topography, excluding topsoil.
2.2, 3.1.4, 3.1.7, 4.1.2, 6.1.2	Structural Fill for Grading	Fill volumes include the WRS and related structures to achieve the specific design grades and capacities. These volumes were calculated using the projected structure's bottom surfaces and the current topography.
3.1.1	Underdrain Trench Excavation	Volume was obtained by multiplying the typical underdrain cross-sectional area by the underdrain total length.
3.1.2	Bedding Layer Over the Trench	Volume was obtained by multiplying the typical bedding layer underdrain cross-sectional area (10 cm) by the underdrain total length.
3.1.3	Underdrain Gravel	Volume was obtained by multiplying the typical underdrain gravel cross-sectional area by the underdrain total length.
Aggregates		
4.3.1, 5.3.1	Concrete F'c 280 kg/cm^2	Volume was obtained using the Geoweb total area by depth (10 cm).
Piping		
3.2.1-3.2.5	Piping	Piping lengths and accessories were directly measured in AutoCAD Civil 3D based on the WRS Underdrain System design.
Geosynthetics		
3.2.6-3.2.7	Underdrain Pond Geotextile and Geomembranes	Area was obtained by measuring the WRS Underdrain Pond 3D area in AutoCAD Civil 3D, including anchor trenches.
4.2.1	Underdrain Pond Spillway Geoweb	Area was obtained by measuring the channel design 3D area in AutoCAD Civil 3D.
5.2.1	Diversion Channel Geoweb	Area was obtained by measuring the channel design 3D area in AutoCAD Civil 3D.

Quotations were requested from local contractors and industry-known suppliers to obtain unit prices for various items and activities such as earthworks, geosynthetics, and piping. The following companies submitted quotes for the Candelones Project:

- Geosynthetics: Maggiora, Soluciones Ambientales, Agru, and Solmax.
- Piping: Soluciones Ambientales, Tricon, Maggiora.
- Earthworks: Sococo.

The criterion to select the unit prices from several suppliers and contractors was conservative and considered the completeness and detail of the quotations.

Table 21.5 provides a breakdown of the initial Waste Rock Storage (WRS) capital expenditures.

Table 21.5
Initial Waste Rock Storage Capital Expenditure

Item	LOM Total US$'000
Site preparation	1,552
Earthworks	141
Piping and Geosynthetics	97
WRS Underdrain Pond Spillway	16
WRS Diversion Channels	576
Haul road	38
Drill & blast, etc.	82
Freight and other costs	166
Sub-total	2,668
Design Allowance	153
Contingency	400
Grand total WRS Capital	**3,221**

21.2.1.4 Heap Leach Facility Capital

Tierra Group estimated the material quantities and engineering capital cost for the Candelones Heap Leach Facility (HLF). The calculated material quantities and costs include the process ponds (Pregnant Leach Solution (PLS) and Barren), Events Pond, access roads and diversion channels. The material items included earthworks, aggregates, piping, and geosynthetics with quantities calculated using AutoCAD Civil 3D. The following documents were considered:

- Design Criteria.
- Detailed Design Drawings (100%) for the Candelones HLF, dated August, 2022.
- Material quantities estimates.
- Earthworks cut and fill.
- Geosynthetics including an 11% increase due to waste, scrap, or overlap based on Tierra Group's experience with past projects.
- Pipework quantities do not include waste, scrap, or overlap.

Table 21.6 summarizes the specific considerations and assumptions in calculating the material quantities.

Table 21.6
HLF - Material Quantities Considerations and Assumptions

Item		Consideration/Assumption
Earthworks		
1.1	Clear and Grub	Clear and grub the HLF, process ponds, perimetral access road, and diversion channels areas.
1.2	Topsoil Cut	A topsoil depth of approximately 0.5 metres.

Item		Consideration/Assumption
2.1, 3.1.6, 6.1.1, 7.1.1, 8.1.1, 9.1.1, 10.1.1, 13.1.1	Cut from Grading	Cut volumes include the HLF and related structures (ponds, channels, etc.) to achieve the specific design grades and capacities. These volumes were calculated using the projected structure's bottom surfaces and the current topography, excluding topsoil.
4.1.1-4.1.2, 6.1.3-6.1.4, 8.1.4-8.1.5, 9.1.3-9.1.4, 10.1.3-10.1.4, 13.1.3-+13.1.4	Anchor Trench	Cut/fill volumes were calculated by multiplying the cross-sectional area by the anchor trench total length.
2.2, 3.1.4, 3.1.7 6.1.2, 7.1.2, 8.1.2, 9.1.2, 10.1.2, 13.1.2	Structural Fill for Grading	Fill volumes include the HLF and related structures (ponds, channels, etc.) to achieve the specific design grades and capacities. These volumes were calculated using the projected structure's bottom surfaces and the current topography, excluding topsoil.
3.1.1	Underdrain Trench Excavation	Volume was obtained by multiplying the typical underdrain cross-sectional area by the underdrain total length.
3.1.2	Bedding Layer Over the Trench	Volume was obtained by multiplying the typical bedding layer underdrain cross-sectional area (10 cm) by the underdrain total length.
3.1.3	Underdrain Gravel	Volume was obtained by multiplying the typical underdrain gravel cross-sectional area by the underdrain total length.
4.1.3	Drain Gravel (Overliner)	Volume was obtained by multiplying the 3D HLF area by the overliner depth (0.6 m). The overliner depth quantity was increased two times the pipe diameter above the primary and secondary collection pipes.
Aggregates		
11.2.1	Concrete F'c 280 kg/cm^2	Volume was obtained using the Geoweb total area by depth (10 cm).
Piping		
3.2.1-3.2.6, 5.1-5.9, 6.2.3-6.2.5, 13.2.6	Piping	Pipe lengths and accessories were measured in AutoCAD Civil 3D based on the underdrain leak collection and recovery system (LCRS) design.
Geosynthetics		
3.2.7-3.2.8	Underdrain System Nonwoven Geotextile and Geomembrane	Areas obtained by multiplying the geotextile and geomembrane cross-sectional circumference by the underdrain lengths.
4.2.1-4.2.2	HLF Liner (Geomembrane and GCL)	Areas obtained by measuring the HLF 3D area in AutoCAD Civil 3D, including anchor trenches.
6.2.1-6.2.2	Solution Collection Channel Geomembrane and GCL	Areas obtained by measuring the solution collection channel design area in AutoCAD Civil 3D, including anchor trenches.
8.2.1-8.2.4	PLS Pond Liner (Geomembrane, Geonet and GCL)	Areas obtained by measuring the PLS Pond 3D area in AutoCAD Civil 3D.
9.2.1-9.2.2	Events Pond (Geomembrane and GCL)	Areas obtained by measuring the Events Pond 3D area in AutoCAD Civil 3D.
10.2.1-10.2.2	Spillway Liner (Geomembrane and GCL)	Areas obtained by measuring the Spillway 3D area in AutoCAD Civil 3D.
13.2.1-13.2.2	Barren Pond Liner (Geomembrane, Geonet, and GCL)	Areas obtained by measuring the Diversion Channels 3D area in AutoCAD Civil 3D.
Miscellaneous (Geotechnical Instrumentation)		
12.1.3	VWP Wire	Obtained using the pipe length increased by 5%

The engineering capital cost estimate also considered quotations from various local contractors and industry-known suppliers to obtain unit prices for various items and activities such as earthworks, geosynthetics, and piping. The following companies submitted quotations for the Candelones Project:

- Geosynthetics: Maggiora, Soluciones Ambientales, Agru, and Solmax.
- Piping: Soluciones Ambientales, Tricon, Maggiora.
- Earthworks: Sococo.

The criterion to select the unit prices from several suppliers and contractors was conservative and considered the completeness and detail of the quotations.

Table 21.7 provides a breakdown of the initial HLF capital expenditures.

Table 21.7
Initial Heap Leach Facility Capital Expenditure

Item	Initial Capital US$'000
Site Preparation	1,564
HL Pad grading	1,337
Underdrain System	260
HL Pad Liner	3,469
Solution Collection System	330
Solution Collection Channel	52
Perimeter Access	421
PLS Pond	335
Event Pond	1,302
Spillway	5
Diversion Channels	60
Instrumentation Plan	12
Barren Pond	157
Drill & blast, etc.	2,792
Freight & other	617
Design Allowance	731
Contingency	1,907
Grand Total HLF Capital	**15,351**

21.2.1.5 Owner Costs

Owner's costs are estimated on the basis of head count for a three-shift rotation, anticipated wages and salaries by band including on-costs. Non-labour costs comprise contractual and professional services, software license fees, computer hardware and initial recruitment and training expenses. Table 21.8 provides a breakdown of Owner's Costs for the pre-production period.

Table 21.8
Owner's Capital Costs

Item	Initial Capital(US$'000)
Owner's Construction Team	194
Plant Operations	186
Plant Maintenance	58

Item	Initial Capital(US$'000)
Senior Management & Admin.	318
Owner's Geological & Mining team	191
General and Administration	92
EH&S	100
Sub-total Labour	**1,140**
Recruitment and training	192
Administrative expenses	32
Information and Communications Technology	179
Health, Safety, Environment and Social	200
Contractual Services	53
Corporate costs	100
Grand Total Owner's Costs	**1,896**

21.3 OPERATING COSTS

Table 21.9 summarizes the LOM cash operating costs for Candelones Oxide Project. The basis of estimate for each area is given below.

Table 21.9
Life-of-Mine Cash Operating Costs

Parameters	LOM Total $'000	$/t Treated	US$/oz Au
Mining costs	23,107	4.13	224
Processing costs	31,056	5.55	302
General & Administrative costs	7,316	1.31	71
Subtotal Cash Operating Costs	**61,479**	**10.98**	**597**
Selling expenses incl. Royalty	17,826	3.18	173
Total Cash Cost	**79,305**	**14.17**	**770**

21.3.1 Mine Operating Costs

The mining cost estimate is based on the volumes reflected in the open pit production schedule, with the application of unit rates provided by Unigold's preferred open pit contractor, Sococo S.A.

Table 21.10 provides a breakdown of the mining operating cost estimate.

Table 21.10
Mining Operating Costs

	LOM Total $'000	$/t Treated	US$/oz Au
Waste Mining	4,334	0.77	42.1
Ore Mining	15,046	2.69	146.1
Ripping and Overhaul provision	1,239	0.22	12.0
Fixed costs (grade control, assays, survey, etc.)	2,488	0.45	24.2
Total Mining Cost	**23,107**	**4.13**	**224.4**

21.3.2 Processing Operating Costs

The process operating costs were based on the process facility design for the power and labour costs and analysis of the metallurgical test results for the consumables.

The total connected load for the process facility is estimated at 700 kW with a 75% power consumption factor on a 24 hour per day basis. Power is to be provided using leased 1.0 MW diesel generators with an estimated power cost of US$ 0.41/kWh.

The main reagent cost, consumption rates and source of pricing were as follows:

- Cyanide
  - Consumption rate 0.9 kg/t (Column test consumption ~ 0.7-0.8 kg/t).
  - Pricing and source: US$ 2,280 US$/t Quadra delivered to DR.
- Lime
  - Consumption rate 3.0 kg/t.
  - Pricing and source: US$ 290/t in country delivered price to site.
- Hydrochloric acid
  - Consumption rate 0.1 kg/t.
  - Pricing and source: US$ estimate based on similar project and location.
- Caustic Soda
  - Consumption rate 0.058 kg/t.
  - Pricing and source: US$ estimate based on similar project and location.
- Cement
  - Consumption rate 5.0 kg/t for 30 % of deposit.
  - Pricing and source: US$ 190/t - in country delivered price to site.

An organization chart to suit the size and complexity of the operation was prepared in order to estimate the annual operating and maintenance personnel costs.

Table 21.11 provides a breakdown of the processing operating cost estimate.

Table 21.11
Process Operating Costs

	LOM Total $'000	$/t Treated	US$/oz Au
Process Labour	4,118	0.74	40.0
Power	5,818	1.04	56.5
Reagents	19,427	3.47	188.6
Fuel – propane	36	0.01	0.4
Maintenance	922	0.16	9.0
Lubrication	75	0.01	0.7
Leach Pad Drip Emitters	659	0.12	6.4
Total Processing Cost	**31,056**	**5.55**	**301.6**

21.3.3 General and Administrative

The general and administrative (G&A) labour cost estimate is based on the estimated head count for each administrative area, and anticipated wages and salaries by band including on-costs. Non-labour costs comprise contractual and professional services, software license fees, and ongoing recruitment and training expenses.

Table 21.12 provides a breakdown of the general and administrative cost estimate.

Table 21.12
General and Administrative Operating Costs

	LOM Total $'000	$/t Treated	US$/oz Au
Management & Administration	1,726	0.31	16.8
General	688	0.12	6.7
Environmental Health and Safety	598	0.11	5.8
Geology and Mining	845	0.15	8.2
Administration	2,412	0.43	23.4
General	389	0.07	3.8
Contractual services	659	0.12	6.4
Total G&A Cost	**7,316**	**1.31**	**71.1**

22.0 ECONOMIC ANALYSIS

22.1 CAUTIONARY STATEMENT

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 a number of 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:

- Mineral Resource and Mineral Reserve estimates.
- Assumed commodity prices and exchange rates.
- The proposed mine production plan.
- Projected mining and process recovery rates.
- Assumptions as to mining dilution.
- Capital and operating cost estimates and working capital requirements.
- Assumptions as to closure costs and closure requirements.
- Assumptions as to environmental, permitting and social considerations and 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.
- Geotechnical or hydrogeological considerations differing from what was assumed.
- Failure of mining methods to operate as anticipated.
- Failure of plant, equipment or processes to operate as anticipated.
- Changes to assumptions as to the availability and cost of electrical power and process reagents.
- Ability to maintain the social licence to operate.
- Accidents, labour disputes and other risks of the mining industry.
- Changes to interest rates.
- Changes to tax rates and availability of allowances for depreciation and amortization.

22.2 BASIS OF EVALUATION

Micon has prepared its economic assessment of the Project on the basis of a discounted cash flow model, from which the Internal Rate of Return (IRR) and Net Present Value (NPV) can be determined.

Assessments of NPV are generally accepted within the mining industry as representing the economic value of a project, after allowing for the cost of capital invested.

The objective of the study was to determine the potential viability of an open pit mine, heap-leach pad and gold recovery plant on site. In order to do this, the cash flow arising from the base case has been forecast. The sensitivity of Project IRR and NPV to changes in base case assumptions is then examined.

22.3 Macro-Economic Assumptions

22.3.1 Exchange Rate and Inflation

All results are expressed in United States dollars, except where otherwise stated. Cost estimates and other inputs to the cash flow model for the Project have been prepared using constant, third quarter 2022 money terms, without provision for escalation or inflation.

22.3.2 Weighted Average Cost of Capital

In order to find the NPV of the cash flows forecast for the Project, an appropriate discount factor must be applied which represents the weighted average cost of capital (WACC) imposed on the Project by the capital markets. The cash flow projections used for the evaluation have been prepared on an all-equity basis. This being the case, WACC is equal to the market cost of equity.

In line with the cost of capital estimated for other gold producers, Micon has selected an annual discount rate of 5% for its base case and has tested the sensitivity of the Project to changes in this rate.

22.3.3 Expected Metal Prices

Project revenues will be generated from the sale of gold doré bars. Figure 22.1 presents monthly average prices for gold over the past ten years, along with the 36-month trailing average price over that period.

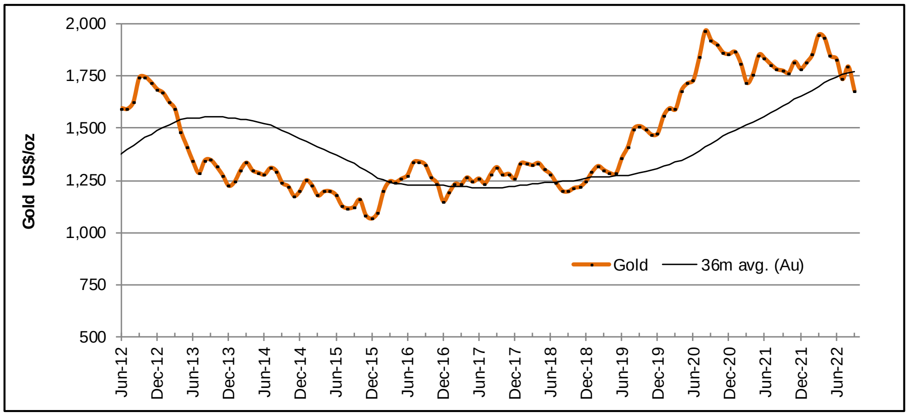
The Project has been evaluated using a constant gold price of US$1,650/oz Au. This is close to current market levels and below the average achieved over the 36 months ending 30 September, 2022.

22.3.4 Taxation and Royalty Regime

Dominican Republic provincial income and mining taxes have been provided for in the economic evaluation. There is a 5% royalty on gold sales payable to the Government of the Dominican Republic. The amount paid to the Government under this royalty forms a minimum tax and is credited against Income tax payable. Should income tax payable be lower than the royalty paid, no refund of the royalty amount is allowed. Depreciation of capital costs is allowed on a unit of production basis, and income tax is levied at the rate of 27% on net earnings. Unigold is also subject to a levy of 5% of after-tax income payable to support local community projects. According to Unigold’s public disclosure there is also an outstanding option held by a third party to acquire a 2% revenue royalty over the project.

Micon has applied a 10% royalty on revenue in order to account for the various tax and community burdens, and also applied a 27% tax on remaining income in the economic analysis presented for this study.

Figure 22.1
Spot Gold Price, Monthly Average 2012-2022



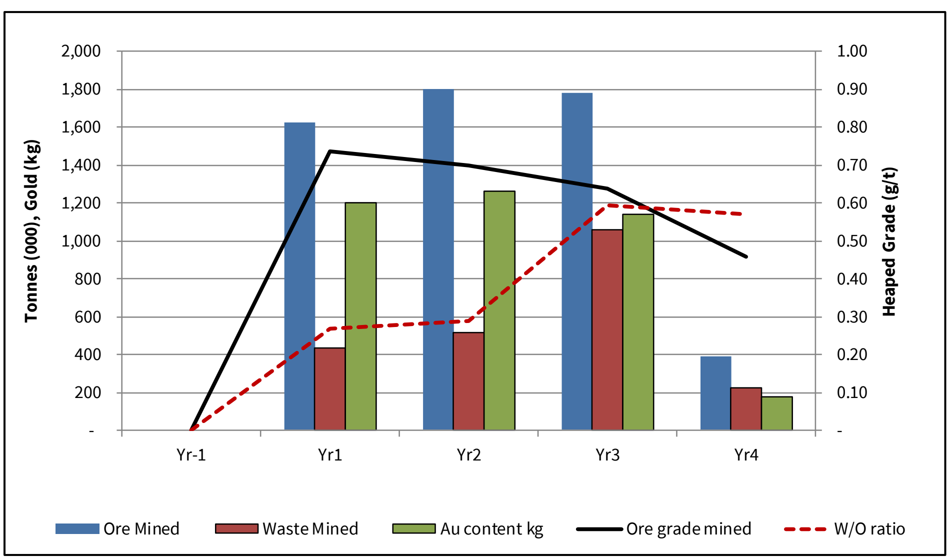
22.4 Technical Assumptions

The technical parameters, production forecasts and estimates described earlier in this report are reflected in the base case cash flow model. These inputs to the model are summarised below.

22.4.1 Mine Production Schedule

Figure 22.2 shows the annual tonnages of waste rock and material heaped on the leach pad, the average ore grade, stripping ratio and the gold content of the material to be leached.

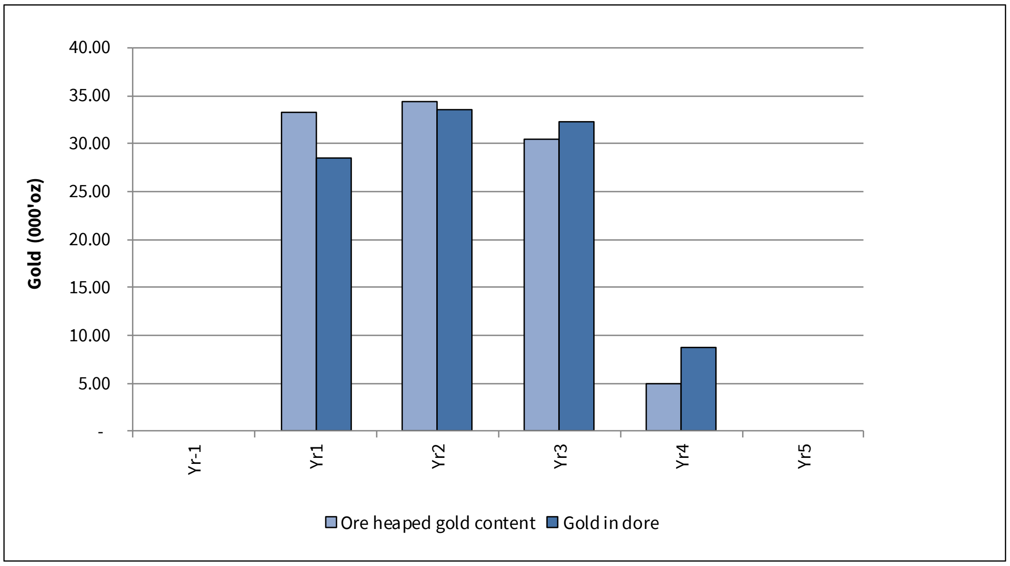
Figure 22.2
Annual Mine Production Schedule



22.4.2 Heap Leach Production

Heap leach extraction of gold has been modelled assuming 88.0% recovery from oxide material and 58.9% from the transition zone, for a weighted average recovery of 84.9% (Figure 22.3). Notwithstanding column testwork showing more rapid leaching, the cash flow model assumes that full recovery of the leachable gold will require 3 months from placement of material on the heap.

Figure 22.3
Gold Production and Sales



A further 7 days of sales is provided in working capital for accounts receivable. Stores and accounts payable are provided for with 45 and 30 days, respectively.

22.4.3 Operating Margin

Figure 22.4 shows the annual sales revenues compared to capital expenditure and cash operating costs. The Project is forecast to generate an average operating margin of 53% over the LOM period. Total cash costs are $770/oz. All-in Sustaining Costs (AISC) are estimated at $829/oz and All-in Costs are $1,178/oz.

22.4.4 Project Cash Flow

The Project LOM base case cash flow is presented in Table 22.1 and summarized in Figure 22.5. Annual cash flows are set out in Table 22.2.

Pre-tax cash flows provide an internal rate of return (IRR) of 52.4%; when discounted at the rate of 5% per year, the pre-tax net present value (NPV_5) is $38.2 million. Because of the short operating life, both undiscounted, and when discounted at 5% per year, the pre-tax payback period is approximately 1.5 years.

After-tax cash flows provide an IRR of 43.6%; after-tax NPV_5 is $30.6 million. Profitability index (i.e., the ratio of NPV_5/Initial Capital) is 0.9. Undiscounted, the after-tax payback period is 1.6 years. When discounted at 5% per year, it extends to 1.7 years.

Figure 22.4
Annual Revenues, Capital and Cash Operating Costs

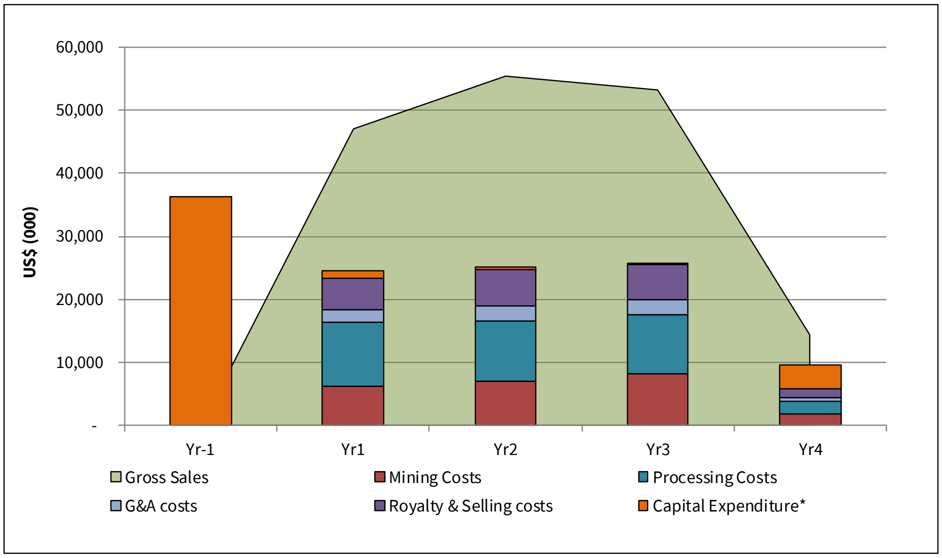


Table 22.1
Life-of-Mine Cash Flow Summary

	LOM Total $'000	$/t Processed	US$/oz Au
Gross Revenue	**169,894**	**30.35**	**1,650**
Mining costs	23,107	4.13	224
Processing costs	31,056	5.55	302
General & Administrative costs	7,316	1.31	71
Subtotal Cash Operating Costs	61,479	10.98	597
Selling expenses incl. Royalty	17,826	3.18	173
Total Cash Cost	**79,305**	**14.17**	**770**
Net cash operating margin	**90,589**	**16.18**	**880**
Initial capital	35,922	6.42	349
Sustaining capital	935	0.17	9
Closure provision	5,129	0.92	50
Net Cash flow before tax	**48,603**	**8.68**	**472**
Taxation	8,788	1.57	85
Net Cash flow after tax	**39,815**	**7.11**	**387**
All-in Sustaining Cost per ounce (AISC)			829
All-in Cost per ounce (AIC)			1,178

Figure 22.5
Life of Mine Annual Cash Flows

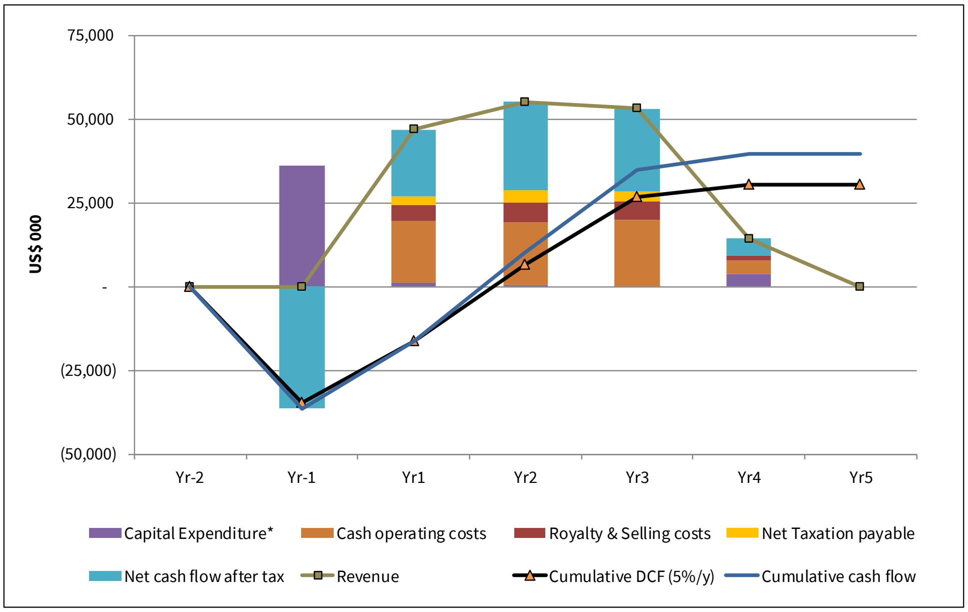


Table 22.2
Life of Mine Production and Annual Cash Flows

Period	Units	LOM Total	Yr-1	Yr1	Yr2	Yr3	Yr4
Tonnes treated (t'000)	t'000	5,597	-	1,612	1,800	1,799	387
Heaped Grade	g/t Au	0.67	-	0.74	0.70	0.64	0.46
Gold Content	koz Au	121.35	-	38.23	40.44	36.98	5.70
Gold Sales (payable oz)	koz Au	102.97	-	28.47	33.54	32.27	8.69
Gross revenue	**$'000**	**169,894**	**-**	**46,970**	**55,342**	**53,252**	**14,331**
Mining	$'000	23,107	-	6,190	7,052	8,109	1,757
Processing	$'000	31,056	-	10,064	9,538	9,426	2,028
G&A	$'000	7,316	-	2,107	2,353	2,351	506
Cash operating costs	$'000	61,479	-	18,360	18,943	19,886	4,290
Selling costs	$'000	17,826	-	4,930	5,807	5,584	1,504
Total Cash Costs	$'000	79,305	-	23,290	24,750	25,471	5,794
Net cash operating margin	**$'000**	**90,589**	**-**	**23,680**	**30,592**	**27,781**	**8,537**
Initial capital	$'000	35,922	35,922	-	-	-	-
Sustaining capital	$'000	935	-	154	320	260	201
Closure provision	$'000	5,129	466	-	-	-	4,663
Change in working capital	$'000	-	-	1,033	151	(24)	(1,159)
Net Cash flow before tax	**$'000**	**48,603**	**(36,388)**	**22,493**	**30,121**	**27,545**	**4,832**
Taxation	$'000	8,788	-	2,398	3,513	2,878	-
Net Cash flow after tax	**$'000**	**39,815**	**(36,388)**	**20,096**	**26,608**	**24,667**	**4,832**
Disc. cash flow (5%)	$'000	30,637	(34,656)	18,227	22,985	20,294	3,786
Cumulative disc. cash flow	$'000		(34,656)	(16,428)	6,557	26,851	30,637

Period	Units	LOM Total	Yr-1	Yr1	Yr2	Yr3	Yr4
		Before Tax	**After Tax**				
Internal Rate of Return	%	52.4%	43.6%				
Undiscounted cash flow	$'000	48,603	39,815				
Net Present Value (5%)	$'000	38,214	30,637				
Net Present Value (7.5%)	$'000	33,853	26,795				
Net Present Value (10%)	$'000	29,954	23,367				
Total Cash Cost	**US$/oz**	**770**					
All-in Sustaining Cost	**US$/oz**	**829**					
All-in Cost	**US$/oz**	**1,178**					

22.5 SENSITIVITY STUDY AND RISK ANALYSIS

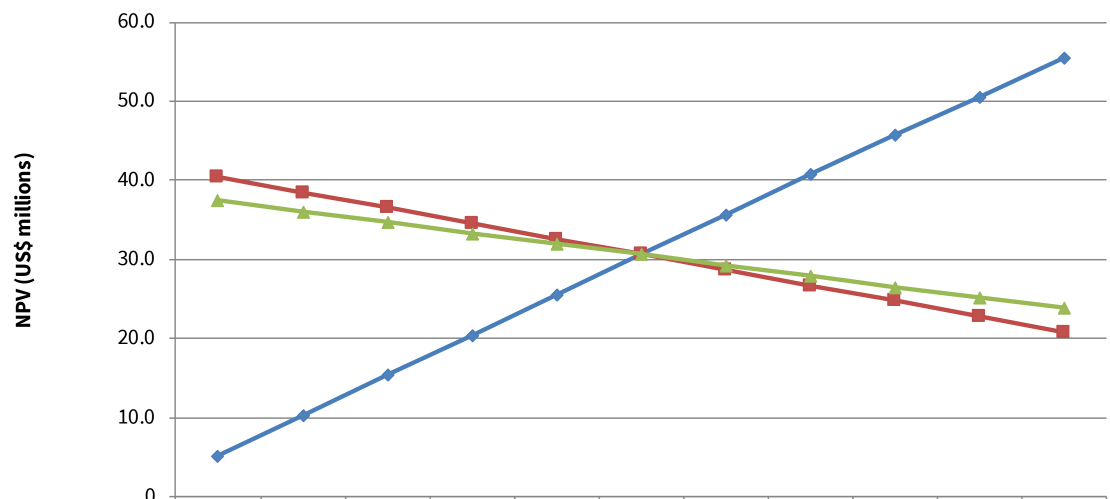
Micon tested the sensitivity of the base case after-tax NPV_5 to changes in metal price, operating costs and capital investment for a range of 25% above and below the base case values. The impact on NPV_5 to changes in other revenue drivers such as gold grade of material treated and the percentage recovery of gold from processing is equivalent to gold price changes of the same magnitude, so these factors can be considered as equivalent to the price sensitivity.

Figure 22.6 shows the results of changes in each factor separately. With NPV_5 remaining positive across the range tested for each variable, the chart demonstrates robust viability of the Project. NPV is most sensitive to revenue factors: with a 25% reduction in price (i.e., a reduction to $1,237.50/oz) NPV_5 falls to $5.1 million. The Project is less sensitive to changes in operating or capital costs, with an increase of 25% in each factor separately reducing NPV_5 to $20.8 million and $23.8 million, respectively.

Figure 22.7 shows the sensitivity if IRR to the same factors. As with NPV_5, IRR remains positive across the range tested. Adverse changes of 25% in revenue drivers reduce IRR to 12.2%, whereas the same factors applied to capital and operating costs reduces IRR to 31.9% and 30.0, respectively.

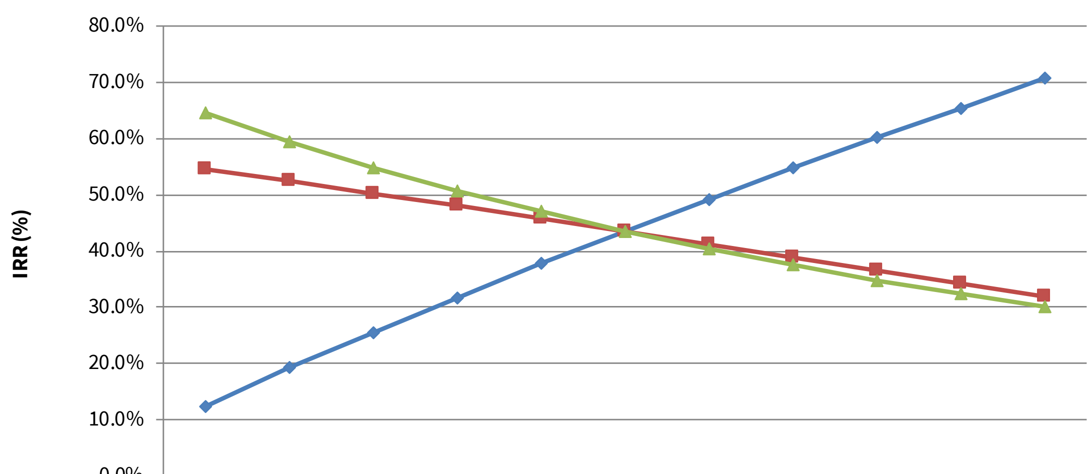
The sensitivity of NPV_5 and IRR to specific gold prices between $1,400/oz and $1,900/oz are shown in Table 22.3.

Figure 22.6
Sensitivity of Base Case NPV to Capital, Operating Costs and Gold Price



	75%	80%	85%	90%	95%	100%	105%	110%	115%	120%	125%
Revenue drivers	5.1	10.3	15.4	20.5	25.6	30.6	35.7	40.7	45.7	50.7	55.6
Operating costs	40.5	38.5	36.5	34.6	32.6	30.6	28.7	26.7	24.7	22.8	20.8
Capital costs	37.4	36.1	34.7	33.4	32.0	30.6	29.3	27.9	26.6	25.2	23.8

Figure 22.7
Sensitivity of Base Case IRR to Capital, Operating Costs and Gold Price



	75%	80%	85%	90%	95%	100%	105%	110%	115%	120%	125%
Revenue drivers	12.2%	19.1%	25.6%	31.7%	37.7%	43.6%	49.2%	54.8%	60.2%	65.5%	70.7%
Operating costs	54.7%	52.5%	50.3%	48.1%	45.8%	43.6%	41.3%	39.0%	36.7%	34.3%	31.9%
Capital costs	64.6%	59.5%	54.9%	50.8%	47.0%	43.6%	40.4%	37.5%	34.8%	32.3%	30.0%

Table 22.3
Gold Price Sensitivity

Gold Price (US$/oz)	NPV_5 (US$M)	IRR (%)
1,400	15.3	25.4%
1,450	18.3	29.1%
1,500	21.4	32.8%
1,550	24.5	36.5%
1,600	27.6	40.0%
1,650	**30.6**	**43.6%**
1,700	33.7	47.0%
1,750	36.8	50.4%
1,800	39.8	53.8%
1,850	42.8	57.1%
1,900	45.8	60.3%

22.6 CONCLUSION

The QP concludes that, based on the forecast production, capital and operating cost estimates presented in this study, the Project base case demonstrates an all-in sustaining cost (AISC) of US$829/oz, and that the base case presents a potentially viable Project at gold prices above US$1,400/oz. Sensitivity to changes in gold price (or grade), capital and operating costs are all low, with NPV_5 and IRR remaining positive for adverse changes of 25% in each factor, indicating robust viability of the Project.

23.0 ADJACENT PROPERTIES

23.1 General

The mining industry of the Dominican Republic continues to evolve over time as various projects are explored or slowly brought into production. There are few operating mines, most of which are located within the Cordillera Central tectonic terrane, approximately 200 km to the southeast of Neita Concession. These include:

1.	Barrick	Pueblo Viejo	Gold.
2.	Xstrata	Falcondo	Nickel.
3.	Cormidom	Cerro de Maimon	Gold and Copper.

These mining projects are all located within the same tectonic terrane as the Neita Concession.

In addition, there are a number of exploration concessions granted along the Cordillera Central tectonic terrane.

The Direccion General de Minera Mapa Actualizado Diario indicates that, in Q4 2020, Barrick International Ltd. applied for two exploration concessions, east and adjacent to the Neita Concession. At the time of this report, the applications have withdrawn and resubmitted under the name of Bohio Resources DR SAS.

The nearest advanced stage property to the Neita Concession is the Romero Project, owned by GoldQuest Mining Corporation (GoldQuest), which is located approximately 40 km southeast of the Neita Concession, within the Tireo Formation.

GoldQuest contracted JDS Energy and Mining to complete a Preliminary Feasibility Study on the Romero Project. The results of the study were released in November, 2016 and are summarized in a Technical Report titled “NI 43-101 Pre-Feasibility Study Technical Report for the Romero Gold Project, Dominican Republic”, with an effective date of October 27, 2016.

On January 22, 2018, GoldQuest announced that Minister Isa Conde, the Minister of Energy and Mines (MEM) of the Dominican Republic, had completed his review of GoldQuest's Exploitation Permit Application for the Romero Project, approved the Application, and sent it to the President of the Republic for ratification. At the date of this report, the President has yet to ratify the Exploitation Permit. The most recent press release on March 31, 2022 from GoldQuest stated *“The response by government officials was positive regarding support of the project, however, no commitment was made or timetable provided as to when the decision would be made with respect to the Permit.”*

Published information indicates that the Romero Project is hosted within rocks of the Upper Tireo Formation and contains polymetallic (gold, silver, copper and zinc) deposits, similar to the Candelones discoveries within the Neita Concession.

The mineralization and deposits described in this Technical Report for the Candelones Project are entirely contained on the property and there are no adjacent mineral properties which directly affect the Candelones Project.

23.2 QP COMMENTS

Micon's QP has not verified the information regarding the mineral deposits and showings described above that are outside the immediate area of the Candelones Project. The information regarding the various projects contained in this section of the report, which was both provided by Unigold and researched individually by the Micon QP, is not necessarily indicative of the mineralization at the Candelones Project.

24.0 OTHER RELEVANT DATA AND INFORMATION

24.1 CURRENT PROJECT STATUS

At the time of preparing this Technical Report, Unigold continues to work with the Government of the Dominican Republic to convert a portion of the Candelones Concession into a Mineral Exploitation (Mining) permit. Upon receipt of the "Mining" permit, the Ministry of Environment will require Unigold to commission and deliver an Environmental and Social Impact Assessment covering the development of the oxide portion of the deposit. After review and successful completion of all parameters stated in the Terms of Reference, and after acquiring all related permits to operate, an Environmental license will be issued to Unigold.

The technical review by the General Directorate of Mining ("DGM") has been completed. The application has been forwarded to the Ministry of Energy and Mines, for its approval and/or subsequent Presidential approval. Unigold is hopeful that this Exploitation Concession Licence will be granted, but the process remains constrained by Government schedules.

25.0 INTERPRETATION AND CONCLUSIONS

25.1 General

Unigold has been conducting exploration and mining studies on its 100% held Candelones Concession in the Dominican Republic since its acquisition in 2002. During this period, Unigold has undertaken a number of exploration programs to identify the extent of the mineralization on the Concession, as well as further studies to assess the economic nature of the mineralization.

The exploration and further studies have now culminated in this Feasibility Study for the oxide portion of the mineralization. Further work and studies remain to be conducted to determine the full extent and economics of the sulphde portion of the mineralization.

25.2 Mineral Resource estimate

The Candelones Project is currently composed of two distinct zones of mineralization zones: CMC and CE. The present Candelones resource update is focused on the oxidized portion of the CMC zone, with no change to the model used for the previous May, 2021 sulphide estimate. Unigold conducted infill drilling and prepared a new topographic survey on the oxide portion of the deposit in 2022 which have been incorporated into this oxide mineral resource update.

The sulphide portions of the CMC and the CE models were reinterpreted in 2021 using the results obtained from the 2019, 2020 and early 2021 drilling, along with updated economic parameters. The work in 2021 resulted in upgrading the previous sulphide resources from inferred into measured and indicated categories for portions of the mineral resources.

25.2.1 Supporting Data

The Candelones Project database provided to Micon is comprised of 564 drill holes and 31 test pits, with a total of 107,839 m of drill core and containing 67,814 samples. This database was the starting point from which the two mineralized envelopes, CMC and CE, were modelled.

The mineral resource update for the oxidized CMC zone, used only the data contained within the wireframes, so that the effective number of drill holes and samples used to produce the updated 2022 resource estimate consist of 229 drill holes, including 61 new drill holes from 2020 and 2022, and 21 test pits, totalling 6,017 samples of mineralized intercepts.

In addition to the drill holes, Micon's QPs included trench sample data for the CMC zone, as it assisted in defining the shape of the outcropping mineralization. A total of 70 trenches containing 2,778 samples were used in the resource estimate.

For the 2021 CE resource, Micon's QPs used 153 drill holes with a total of 13,700 samples inside the wireframes.

The CMC area topography was updated for the mineral resources using LiDAR technology, which is a high resolution and accurate digital terrain model (DTM) to better assess the oxide cover. The use of this new topographic surface only moved drill holes up or down in elevation when compared to the topographic surface used for the previous estimate and resulted in no appreciable difference between the two estimates.

The remaining sulphide mineral resources at the Candelones Project continues to use the topography which was derived from a previous DTM based on grid data, purchased by Unigold. Some collar and trench elevations were corrected using this topographic surface when the mineral resources were estimated in 2021. The DTM is based on satellite imagery and can exhibit errors, due to heavy vegetation covering the land surface or rugged terrain. The corrected collar and trench elevations, therefore, may also be subject to some minor errors. In the opinion of Micon's QPs, however, this would have minimal effect on the sulphide resource estimate.

A total of 841 revised density measurements were delivered to Micon's QPs, from which average densities were calculated for the CMC deposit, as well as for waste rock. The overall average density value of the Candelones Project is 2.64 g/cm^3. Out of the total measurements, a total of 688 density values were used for the updated 2022 resource estimate for the CMC deposit, following a more specific sequential selection starting from the shallowest overburden, followed by oxidized rock, transition rock, sulphides and waste rock. The CE density was updated in 2021 because the number of data increased to 2,986 density measurements from the 298 density measurements used for the previous 2013 resource estimate.

Unigold provided Micon with initial three-dimensional (3-D) wireframes representing the mineralized envelopes for the CMC and CE zones. Micon's QPs reviewed and modified the wireframes to correct some irregular shapes that caused volume losses, and to ensure that the drill hole intercepts were snapped to the wireframe. Once these changes were completed, the resulting envelopes were discussed with Unigold prior to finalizing the wireframes. The wireframes for the oxide mineralization of the CMC zone have been updated to reflect both the new topographic surface and the new oxide drilling. The sulphide mineralization wireframes remain the same as those used in the 2021 as there has been no update to the sulphide resources.

The capping grade selection was based on log-normal probability plots for the oxidized and sulphide zones. After the grade capping was completed, the selected intercepts for the Candelones Project were composited into 1.0 m equal length intervals, with the composite length selected based on the average original sampling length.

Two block models were constructed for the Project:

- The first contains the CMC oxide and sulphides zones. The proximity of these zones allowed for the interpolation of the zones to be completed using the same model with the oxide zone separated from the sulphide zone for the purposes of resource estimation.
- The second block model contains the CE sulphide zone.

25.2.2 Prospects for Economic Extraction

The mineral resource estimates have been constrained using economic assumptions that consider both open pit (shallow mineralization) and underground (mineralization below the conceptual pit) mining scenarios. The optimized pit shells are conceptual in nature and are based on the economic estimates stated herein, applied using the Lerchs-Grossman algorithm contained in the Datamine NPV Scheduler software. The potential underground blocks are also conceptual in nature and are based on identifying a reasonable spatially continuous tonnage sufficient to justify an eventual underground development. No specific underground mining method nor economic model was evaluated, but scattered and isolated blocks were excluded from the resource.

The mineral resource estimate and open pit optimization for the CMC Oxide zone have been prepared without reference to surface rights or the presence of any overlying private property or public infrastructure or geographical constraints.

The Candelones Oxide Project has been evaluated using gold assays only for the updated oxide resources.

Operating costs were estimated based on similar operations with some changes to reflect the contractor costs for the oxides obtained by Unigold. It is Micon's QP's opinion that the costs are reasonable, but they were not developed from first principles and are considered conceptual in nature.

Table 25.1 summarizes the open pit and underground economic assumptions upon which the resource estimate for the Candelones Project is based. All monetary values are expressed as US dollars.

Table 25.1
Summary of the Candelones Project Economic Assumptions for the Conceptual Open Pit and Underground Mining Methods

Candelones Parameters	Oxides (Updated 2022)		Sulphides (2021)
	Oxides	Transition	
Au price $/oz	$1,800	$1,800	$1,700
Ag price $/oz	N/A	N/A	$20.00
Cu price $/lb	N/A	N/A	$4.00
Au recovery	88%	59%	84%
Ag recovery			55%
Cu recovery			87%
Open Pit Mining Cost $/t	$1.85	$2.75	$2.85
Processing Cost (Heap Leach) $/t	$7.90	$7.90	
Processing Cost (Flotation) $/t			$25.00
G&A Cost $/t	$2.39	$2.39	$2.39
Open Pit Overall Cost $/t	$12.14	$13.04	$30.24
Underground Mining Cost $/t			$60.00
Underground Overall Cost $/t			$87.39
Open Pit Au Cut-off g/t	0.20	0.34	0.66
Au Eq. Cut-off g/t			0.65
Open Pit NSR Cut-off ($/t)			$20.24
Underground Au Cut-off (g/t)			1.9
Underground Au-Eq Cut-off (g/t)			1.89
Underground NSR Cut-off ($/t)			$77.39
Open pit slope	45	45	45

The open pit parameters noted above were input into the pit optimization software and a series of nested pit shells representing varying revenue factors (gold prices) were generated.

The pit shell maximizing NPV (optimum pit) indicated that the cut-off grade for open pit mining is:

- Oxide mineralization (starter pit) 0.20 g/t.
- Transition mineralization (starter pit) 0.34 g/t.
- Sulphide mineralization (ultimate pit) \$20/t NSR.
- Sulphide mineralization (underground) \$77/t NSR.

The stripping ratios for the optimized resulting pit shells are 0.23 for the CMC starter pit (Oxide + Transition only), 0.91 for the CMC ultimate pit and 7.46 for the CE deposit.

For the underground mining scenario, the model indicated that the mining cut-off value is \$77/t NSR for the sulphide mineralization. There is no oxide mineralization in the underground scenario.

25.2.3 Classification of Resources

Micon' QPs have classified the mineral resource estimate of the Candelones Project as being in the Measured, Indicated and Inferred categories. The criteria for each category are as follows:

- Measured Resources:
  - All oxide blocks in the CMC deposit within 20 m of an informing sample, with a significant density of informing samples from drill holes, test pits and trenches.
  - All sulphide blocks in the CE deposit within 25 m of an informing sample.
- Indicated Resources:
  - All oxide blocks in the CMC deposit within 20 m of an informing sample, but with a lesser density of informing samples from drill holes, test pits and trenches.
  - All sulphide blocks in the CE deposit within 40 m of an informing sample.
- Inferred Resources:
  - All remaining blocks in the CMC oxide zone.
  - All transition and sulphide blocks in the CMC zone.
  - All remaining sulphide blocks in the CE zone.

All Measured and Indicated resources were subjected to a final, manual grooming check for reasonableness.

25.2.4 Mineral Resource Estimate

The mineral resources for the Candelones Project are summarized Table 25.2 (updated oxide resources). and Table 25.3 (sulphide resources).

Table 25.2
Updated Oxide Mineral Resource Estimate for Candelones Project, Effective Date August 08, 2022

Deposit	Mining Method	Mineralization Type	Category	COG	Tonnes (x1,000)	Au g/t	Au oz (x1,000)	Strip Ratio
CMC	Open Pit	OB (Heap Leach)	Measured	0.20	15	0.68	0	0.23
		Oxide (Heap Leach)			2,527	0.83	67	
			Indicated		2,444	0.60	47	
		OB (Heap Leach)			39	0.67	1	
		Transition (Heap Leach)		0.34	710	0.66	15	
		Total Measured + Indicated			**5,735**	**0.71**	**130**	
		OB (Heap Leach)	Inferred	0.20	6	0.60	0	
		Oxide (Heap Leach)			1,088	0.43	15	
		Transition (Heap Leach)		0.34	160	0.59	3	
		Total Inferred			**1,255**	**0.45**	**18**	

Notes:

1. The oxide Mineral Resource Estimate is reported using two different cut-off grades; 0.21 g/t Au for the Oxide rock and 0.34 g/t Au for the Transition rock, both cut-offs for an open pit mining scenario. The oxide resources are inclusive of the oxide mineral reserves but are exclusive of the sulphide resources.
2. The cut-off grade was calculated using a gold price of US$1,800 per ounce with Heap Leach metallurgical recoveries of 88% for Oxide rock and 59% for Transition rock, using cost assumptions of US$2.25/t for mining Oxide rock, US$2.75/t for mining Transition rock, US$5.97/t for mineral processing and US$1.93/t for G&A.
3. The resource estimate applies different grade capping thresholds to each of the deposits ranging from 1.0 g/t Au to 10.0 g/t Au applied on 1.0 metre composites.
4. The current Mineral Resource has been updated using a high-precision LiDAR and Total Station topographic survey, all resource supporting data including drillholes, trenches and test pits were projected accordingly to new elevations using this DTM surface.
5. The weathering zones of Oxidized cover and Transition (Oxide-Sulphide) were remodelled from scratch using the drill logs provided by Unigold.
6. The mineral resources above were modelled using a subblock model with a parent block size of 10 m x 10 m x 5 m and child blocks size of 2 m x 2 m x 1 m and constrained within mineralization wireframes. Gold was estimated by Ordinary Kriging using dynamic anisotropy search. The max range of the variogram models generally are between 50 m x 50 m x 5 m and 80 m x 45 m x 5 m. The interpolation was constrained to selected composites flagged within each domain; Candelones Main (CM) and Candelones Connector (CC) also known as CMC.
7. The mineral resources presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards of Disclosure for Mineral Projects (NI 43-101).
8. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant modifying factors.
9. The quantity and grade of reported Inferred Resources are uncertain in nature and there has not been sufficient work to define these Inferred Resources as Indicated or Measured Resources. It is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
10. Tonnage estimates are based on bulk densities individually measured and were interpolated for each of the weathered zones of Overburden (OB), Oxide (OX) and Transition (TR). Resources are presented as undiluted and in-situ.
11. This mineral resource estimate is dated August 08, 2022. The effective date for the drill-hole database used to produce this updated mineral resource estimate is April 13, 2022.
12. Tonnages and ounces in the tables are rounded to the nearest thousand. Numbers may not total due to rounding.
13. Mr. William J. Lewis, P.Geo. and Mr. Alan J. San Martin, MAusIMM(CP) of Micon International Limited., who are qualified persons as defined by NI 43-101 are responsible for the completion of the updated mineral resource estimate.

25.3 Mineral Reserve Block model and Estimate

The block model used as the basis for the mineral reserve estimate is the same as the resource model which has been completed Micon using Leapfrog Geo software. The block model has not been regularized, and the blocks size remained at 10 m x 10 m x 5 m (X-Easting, Y-Northing, Z-elevation) with no rotation applied.

All inferred resources in the deposit have been considered as waste and excluded from the optimized pit shell, regardless of their grade.

The Candelones Oxide Project has been designed for extraction by conventional truck/shovel open pit mining methods. Table 25.4 summarizes the Candelones Project oxide mineral reserve tonnage and grades, which have been estimated according to CIM standards.

Table 25.3
Sulphide Mineral Resource Estimate for the Candelones Project, Effective Date May 10, 2021

Deposit	Mining Method	Category	NSR$ Cut-off	Tonnes (x1,000)	AuEq g/t	Au g/t	Ag g/t	Cu %	AuEq oz (x1,000)	Au oz (x1,000)	Ag oz (x1,000)	Cu lb (x1,000)	Strip Ratio
CE	Open Pit (Ultimate)	Measured	20	6,280	2.22	1.90	3.28	0.18	449	383	662	25,042	7.46
		Indicated	20	13,098	1.63	1.40	4.18	0.12	688	591	1,762	34,201	
		M+I	**20**	**19,378**	**1.82**	**1.56**	**3.89**	**0.14**	**1,137**	**974**	**2,425**	**59,243**	
		Inferred	20	18,594	1.55	1.38	2.93	0.09	928	826	1,749	36,022	
CMC			20	4,448	1.38	1.25	1.17	0.07	197	178	167	7,207	0.91
CMC + CE		**Inferred Subtotal**	**20**	**23,042**	**1.52**	**1.36**	**2.59**	**0.09**	**1,125**	**1,005**	**1,916**	**43,229**	N/A
CE	Underground	Measured	77	759	3.15	2.65	1.88	0.29	77	65	46	4,836	N/A
		Indicated	77	348	2.73	2.35	2.32	0.22	31	26	26	1,652	
		M+I	**77**	**1,107**	**3.02**	**2.56**	**2.02**	**0.27**	**107**	**91**	**72**	**6,488**	
		Inferred	77	417	2.63	2.32	3.53	0.17	35	31	47	1,535	
CMC			77	338	2.72	2.46	0.81	0.15	30	27	9	1,114	
CMC + CE		**Inferred Subtotal**	**77**	**755**	**2.67**	**2.38**	**2.31**	**0.16**	**65**	**58**	**56**	**2,649**	
Sulphides Total Measured + Indicated				**20,484**	**1.89**	**1.62**	**3.79**	**0.15**	**1,244**	**1,065**	**2,497**	**65,731**	
Sulphides Total Inferred				**23,797**	**1.55**	**1.39**	**2.58**	**0.09**	**1,190**	**1,063**	**1,972**	**45,878**	

Notes:

1. The sulphide Mineral Resource Estimate is reported using two different NSR$ cut-offs; 20 NSR$ for the sulphide open pit mining scenario and 77 NSR$ the Sulphide underground mining scenario. The sulphide resources are reported exclusive of the oxide resources.
2. The cut-off grade was calculated using a gold price of US$1,700 per ounce with Heap Leach metallurgical recoveries of 84% for gold, 55% for silver and 87% for copper, using cost assumptions of US$2.85/t for open pit mining, US$60.00/t for mining, US$25.00/t for mineral processing and US$2.39/t for G&A.
3. The resource estimate applies different grade capping thresholds to each of the deposits ranging from 1.0 g/t Au to 10.0 g/t Au applied on 1.0 metre composites.
4. The sulphide Mineral Resource continues to use the topography which was derived from a previous DTM based on grid data, purchased by Unigold. All sulphide resource supporting data including drillholes, trenches and test pits were projected accordingly to new elevations using this DTM surface.
5. The Sulphide zones were remodelled from scratch using the drill logs provided by Unigold.
6. The mineral resources above were modelled using a subblock model with a parent block size of 10 m x 10 m x 5 m and child blocks size of 2 m x 2 m x 1 m and constrained within mineralization wireframes. Gold was estimated by Ordinary Kriging using dynamic anisotropy search. The max range of the variogram models generally are between 50 m x 50 m x 5 m and 80 m x 45 m x 5 m. The interpolation was constrained to selected composites flagged within each domain; Candelones Main (CM) and Candelones Connector (CC) also known as CMC.
7. The mineral resources presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards of Disclosure for Mineral Projects (NI 43-101).
8. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant modifying factors.
9. The quantity and grade of reported Inferred Resources are uncertain in nature and there has not been sufficient work to define these Inferred Resources as Indicated or Measured Resources. It is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
10. Tonnage estimates are based on bulk densities individually measured and were interpolated for sulphide zone. Resources are presented as undiluted and in-situ.
11. The sulphide mineral resource estimate is dated May 10, 2021.
12. Tonnages and ounces in the tables are rounded to the nearest thousand. Numbers may not total due to rounding.
13. Mr. William J. Lewis, P.Geo. and Mr. Alan J. San Martin, MAusIMM(CP) of Micon International Limited., who are qualified persons as defined by NI 43-101 are responsible for the completion of the updated mineral resource estimate.

Table 25.4
Summary of the Mineral Reserve Tonnages and Grades for the Candelones Project

Mineralization Type	Category	COG	Tonnes (x1,000)	Au g/t	Au oz (x1,000)	Strip Ratio
OB (Heap Leach)	Proven	0.208	-	-	-	0.40
Oxide (Heap Leach)			2,564	0.79	65	
Transition (Heap Leach)			-	-	-	
Total Proven			**2,564**	**0.79**	**65**	
OB (Heap Leach)	Probable	0.337	-	-	-	
Oxide (Heap Leach)			2,384	0.57	43	
Transition (Heap Leach)			649	0.62	13	
Total Probable			**3,033**	**0.58**	**56**	
Total Proven + Probable			**5,597**	**0.67**	**121**	

Notes:

1. The oxide Mineral Reserves Estimates are reported at two different cut-off grades: 0.208 g/t Au for the Oxide and 0.337 g/t Au for the Transition, both for surface mining scenario.
2. The cut-off grade was calculated using a gold price of US$1,650 per ounce, US$2.74/g for selling costs and royalties, with Heap Leach metallurgical recoveries of 88% for Oxide rock and 59% for Transition rock, using cost assumptions of US$2.25/t for mining the oxide, US$2.75/t for mining the transition, US$5.56/t for mineral processing and US$1.31/t for G&A.
3. The Mineral Reserve above were based on the resource model which used a subblock model with a parent block size of 10 m x 10 m x 5 m and child blocks size of 2 m x 2 m x 1 m and constrained within mineralization wireframes. Gold was estimated by Ordinary Kriging using dynamic anisotropy search. The max range of the variogram models generally are between 50 m x 50 m x 5 m and 80 m x 45 m x5 m. The interpolation was constrained to selected composites flagged within each domain; Candelones Main (CM) and Candelones Connector (CC) also known as CMC.
4. The Mineral Reserve presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards of Disclosure for Mineral Projects (NI 43-101).
5. Mineral Reserves have demonstrated economic viability. The estimate of Mineral Reserves differs from the Mineral Resources the use of modifying factors such as economical, technical, environmental, permitting, legal, title, market or other relevant modifying factors which demonstrate the economic viability of the mineral deposit. The mineral resources are inclusive of the mineral reserves.
6. Inferred resources have been excluded form the current Mineral Reserves estimate.
7. Tonnage estimates are based on bulk densities individually measured and were interpolated for each of the weathered zones of Overburden (OB), Oxide (OX) and Transition (TR).
8. This Mineral Reserve estimate is dated October 07th, 2022 and is based upon the updated Mineral Resource estimate dated August 8th, 2022.
9. Tonnages and ounces in the tables are rounded to the nearest thousand. Numbers may not total due to rounding.
10. Mr. Abdoul Aziz Dramé, P.Eng, of Micon International Limited., is qualified person as defined by NI 43-101 are responsible for the completion of the updated mineral reserves estimate.

25.4 MINING

Open pit optimization was conducted using Datamine Studio NPVS software to determine the optimal shape that satisfies economic, operational, and technical requirements suitable to a feasibility study. This task was undertaken based on the Lerchs-Grossmann algorithm, using incremental price factors of 1% along with a 5% yearly discount rate and a design mining rate of 5,000 t/d. The values of the blocks in the block model are then used to define a pit shell that has the highest possible total economic value, subject to the required pit slopes.

Datamine Studio OP software has been used to perform the subsequent design of the open pit which was guided by the optimized pit shell from the previous step. The resulting pit solid was used for the production scheduling and the Mineral Reserve estimate.

Most of the mineralized orebody used for this study is oxide weathered rock with a portion comprised of transitional material. Due to the mountainous nature of the topography, the mining activity will result in a flattened surface with no standing pit wall at the end of the operation. Therefore, no detailed geotechnical study has been conducted at this point. Overall pit slope angles, inter-ramp slope angle, ramp and bench sizes have been designed according to the natural angle of repose of the host rock as well as the size of the equipment selected.

All geotechnical related parameters used for both pit optimization and design comply with international mining standards and have been verified by an observation of the mine site.

Mining dilution has been assessed. Given that no drilling and blasting activity is planned and given the relatively small size of equipment, an allowance of 2.5% has been made for the mining dilution (0.25 m over 10 m block). The size of the equipment and the bench height also allow for a minimal ore loss of 2.5%.

A unit reference mining cost is used for a “starting mining point” typically located near the pit crest or surface, which is at Elevation 575.0 m for the Candelones pit. The reference mining cost is then incremented according to pit depth, accounting for the additional cycle time (hauling cost) and all extra ripping for the rock. The reference mining cost is estimated at $2.25/t with an incremental depth factor of $0.020/t per 5 m bench. The reference mining costs is based on a 1.9 km round trip cycle along with 15% of the material requiring some ripping. Most of the oxide resource assumes a small percentage of ripping along with mechanical loading by excavator with no drilling and blasting necessary. As the pit deepens an aggressive ripping program with D8 triple shank and excavator ripper will be used to prepare the bench for loading by excavator. This will occur at or near the transition ore/waste zone at the bottom of the planned pit development.

The Candelones Deposit will be mined using two pits. The main pit is aligned north-west to south-east, measures 650 m along strike and 175 m in width. The second pit is oriented north-south and is 240 m m long and 150 m wide. Both pits have an average depth of 30 m with the mining planned over six phases. The main pit consists of Phases 1, 2, 4E and 4W and the second pit consists of Phases 3E and 3W.

The mining rate of 5,000 t/d has been selected provide a mine life of approximately 3.3 years (39 months). The ramp up period occurs over the first two months, followed by 36 months of mining at peak capacity, the last month of post-peak production ramping down. The target peak mining rate is 150 kt/month (5,000 t/d), but this production rate needed to be adjusted to reflect the rainy season that occurs during the months of May, June, August, September and October.

25.5 PROCESSING

The metallurgical response of the oxide ores to conventional column testing using alkaline cyanide solutions indicated that the mined material will be eminently suitable to processing using heap leaching and conventional carbon in column recovery methods.

A staged heap leach will be placed and irrigated with barren solution from the process facility with added lime and cyanide solution to facilitate the dissolution of gold from the mined material. Run of mine material will be delivered to a screening and agglomeration area where the material will be screened, coarse material stockpiled and the fine material passed through an agglomerator where binder (cement and barren solution) will be added. The agglomerated and coarse material will be recombined and trucked to a conveying/stacking system for placement on the individual heap leach pads. A sprinkler system will be used to irrigate the individual heap leach pads that are in operation at any point in time to effect the desired dissolution of gold.

The pregnant solution from the heap leach pad will flow by gravity to the pregnant solution pond and then be pumped to the pregnant solution tank at the process facility. The Carbon in Column circuit will be fed from this pregnant solution tank at a controlled flow rate to ensure good adsorption in the circuit, with the final solution reporting as barren solution to the barren tank and emergency pond. This barren solution will be dosed as required with cyanide and lime solution and then, in turn returned to the heap leach pads.

Carbon in the CIC circuit will be pumped counter currently to the pregnant solution flow and eventually to the dewatering screens of the Adsorption, Desorption, Recovery facility (ADR). In this circuit, the carbon may be acid washed as required in fibreglass acid wash vessels and then the carbon is to be transferred to the elution vessel for subsequent elution of gold from the carbon. A high pH and cyanide solution is to be made up using caustic soda and cyanide, heated using a diesel fired boiler and heat exchangers and then the eluted solution is passed through stainless steel mesh electrowinning cells to precipitate out the gold from solution. The gold sludge will be recovered via filtration with subsequent drying and smelting to generate the gold bars.

A separate detoxification circuit will form part of the process flowsheet and excess barren solution can be neutralized to below the required cyanide limits and discharged.

25.6 CAPITAL AND OPERATING COSTS

The cost estimates are expressed in third quarter 2022 United States dollars, without provision for escalation. Where appropriate, an exchange rate of DOP 54/US$ has been applied. The expected accuracy of the capital and operating estimates is ±15%.

25.6.1 Capital Costs

Table 25.5 summarizes the estimated capital expenditures for the Candelones Oxide Project.

Table 25.5
Capital Expenditure Summary

Item	Initial Capital US$'000	Sustaining Capital US$'000	LOM Total US$'000
Mining	1,708	935	2,643
Processing Plant	9,972	-	9,972
Infrastructure	16,420	-	16,420
EPCM, Indirect	1,825	-	1,825

Owners Costs	1,896	-	1,896
Sub-total before contingencies	**31,822**	**935**	**32,757**
Contingencies	4,099	-	4,099
Grand total Capital	**35,922**	**935**	**36,857**
Closure and Rehabilitation	466	4,663	5,129

25.6.2 Operating Costs

Table 25.6 summarizes the LOM cash operating cost estimates for Candelones oxide Project.

Table 25.6
Life-of-Mine Cash Operating Costs

Parameters	LOM Total $'000	$/t Treated	US$/oz Au
Mining costs	23,107	4.13	224
Processing costs	31,056	5.55	302
General & Administrative costs	7,316	1.31	71
Subtotal Cash Operating Costs	**61,479**	**10.98**	**597**
Selling expenses incl. Royalty	17,826	3.18	173
Total Cash Cost	**79,305**	**14.17**	**770**

25.7 ECONOMIC ANALYSIS

25.7.1.1 Project Cash Flow

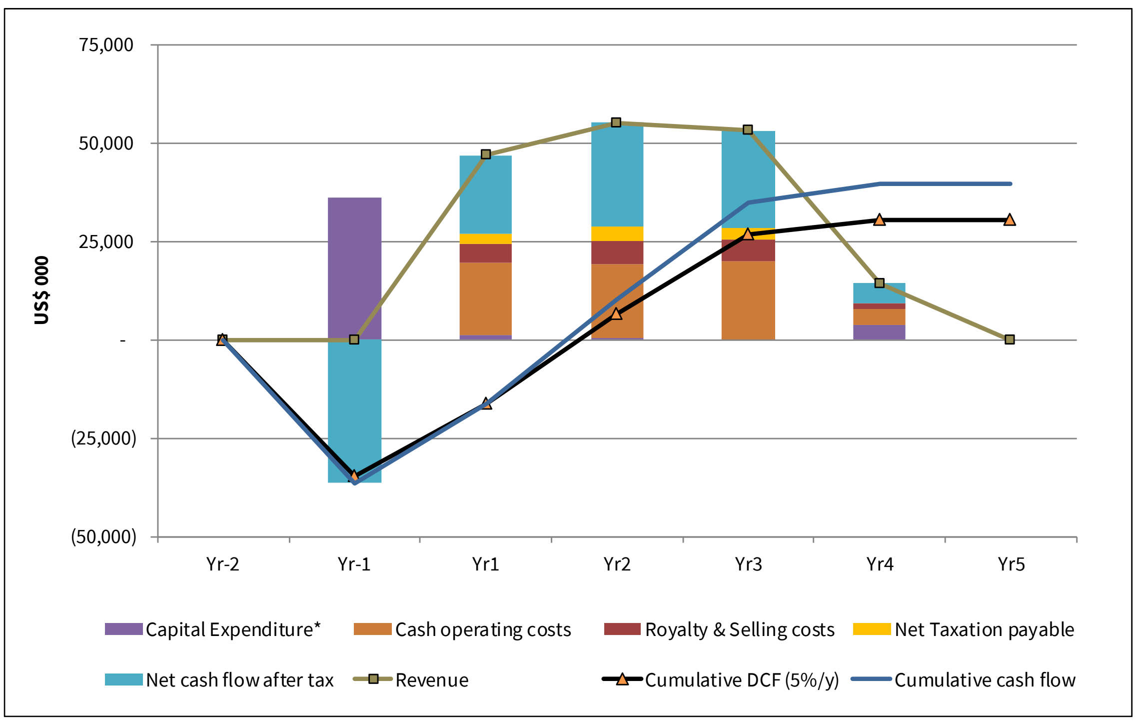
The Project LOM annual production and base case cash flow is presented in Table 25.7 and the cash flow is summarized in Figure 25.1.

Table 25.7
Life-of-Mine Cash Flow Summary

Period	Units	LOM Total	Yr-1	Yr1	Yr2	Yr3	Yr4
Tonnes treated (t'000)	t'000	5,597	-	1,612	1,800	1,799	387
Heaped Grade	g/t Au	0.67	-	0.74	0.70	0.64	0.46
Gold Content	koz Au	121.35	-	38.23	40.44	36.98	5.70
Gold Sales (payable oz)	koz Au	102.97	-	28.47	33.54	32.27	8.69
Gross revenue	$'000	169,894	-	46,970	55,342	53,252	14,331
Mining	$'000	23,107	-	6,190	7,052	8,109	1,757
Processing	$'000	31,056	-	10,064	9,538	9,426	2,028
G&A	$'000	7,316	-	2,107	2,353	2,351	506
Cash operating costs	$'000	61,479	-	18,360	18,943	19,886	4,290
Selling costs	$'000	17,826	-	4,930	5,807	5,584	1,504
Total Cash Costs	$'000	79,305	-	23,290	24,750	25,471	5,794
Net cash operating margin	$'000	90,589	-	23,680	30,592	27,781	8,537

Period	Units	LOM Total	Yr-1	Yr1	Yr2	Yr3	Yr4
Initial capital	$'000	35,922	35,922	-	-	-	-
Sustaining capital	$'000	935	-	154	320	260	201
Closure provision	$'000	5,129	466	-	-	-	4,663
Change in working capital	$'000	-	-	1,033	151	(24)	(1,159)
Net Cash flow before tax	$'000	48,603	(36,388)	22,493	30,121	27,545	4,832
Taxation	$'000	8,788	-	2,398	3,513	2,878	-
Net Cash flow after tax	$'000	39,815	(36,388)	20,096	26,608	24,667	4,832
Disc. cash flow (5%)	$'000	30,637	(34,656)	18,227	22,985	20,294	3,786
Cumulative disc. cash flow	$'000		(34,656)	(16,428)	6,557	26,851	30,637
		Before Tax	**After Tax**				
Internal Rate of Return	%	52.4%	43.6%				
Undiscounted cash flow	$'000	48,603	39,815				
Net Present Value (5%)	$'000	38,214	30,637				
Net Present Value (7.5%)	$'000	33,853	26,795				
Net Present Value (10%)	$'000	29,954	23,367				
Total Cash Cost	US$/oz	770					
All-in Sustaining Cost	US$/oz	829					
All-in Cost	US$/oz	1,178					

Figure 25.1
Life of Mine Annual Cash Flows



Pre-tax cash flows provide an internal rate of return (IRR) of 52.4%; when discounted at the rate of 5% per year, the pre-tax net present value (NPV5) is $38.2 million. Both undiscounted, and when discounted at 5% per year, the pre-tax payback period is approximately 1.5 years.

After-tax cash flows provide an IRR of 43.6%; after-tax NPV5 is $30.6 million. Profitability index (i.e., the ratio of NPV5/Initial Capital) is 0.9. Undiscounted, the after-tax payback period is 1.6 years. When discounted at 5% per year, it extends to 1.7 years.

25.7.2 Sensitivity Study and Risk Analysis

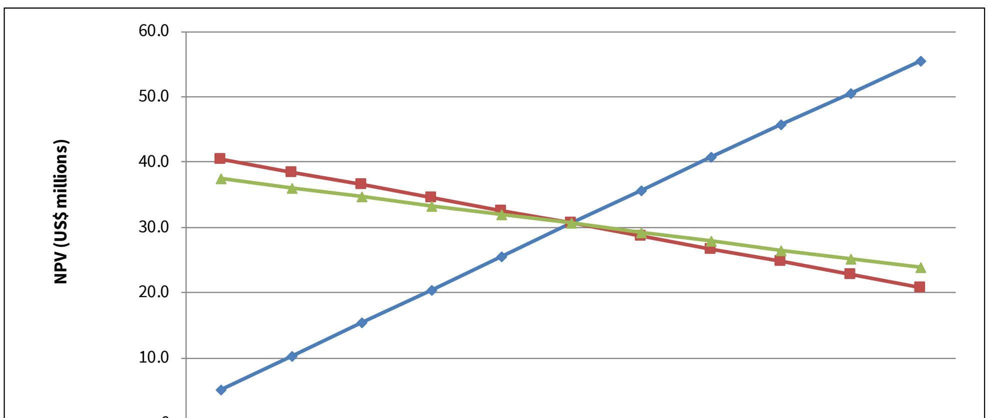
Micon tested the sensitivity of the base case after-tax NPV_5 to changes in metal price, operating cost and capital investment for a range of 25% above and below base case values. The impact on NPV_5 to changes in other revenue drivers such as gold grade of material treated and the percentage recovery of gold from processing is equivalent to gold price changes of the same magnitude, so these factors can be considered as equivalent to the price sensitivity.

Figure 25.2 shows the results of changes in each factor separately. With NPV_5 remaining positive across the range tested for each variable, the chart demonstrates robust viability of the Project. NPV is most sensitive to revenue factors: with a 25% reduction in price (i.e., a reduction to $1,237.50/oz) NPV_5 falls to $5.1 million. The Project is less sensitive to changes in operating or capital costs, with an increase of 25% in each factor separately reducing NPV_5 to $20.8 million and $23.8 million, respectively.

Figure 25.3 shows the sensitivity of IRR to the same factors. As with NPV_5, IRR remains positive across the range tested. Adverse changes of 25% in revenue drivers reduce IRR to 12.2%, whereas the same factors applied to capital and operating costs reduces IRR to 31.9% and 30.0, respectively.

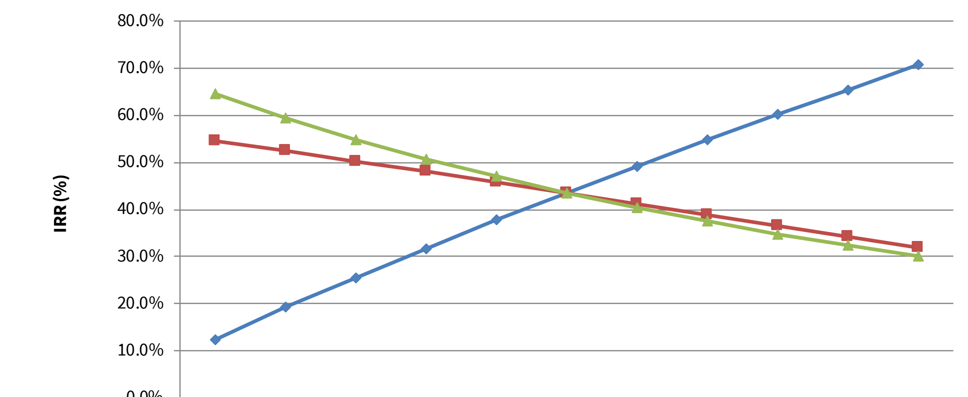
The sensitivity of NPV_5 and IRR to specific gold prices between $1,400/oz and $1,900/oz are shown in Table 25.8.

Figure 25.2
Sensitivity of Base Case NPV to Capital, Operating Costs and Gold Price



	75%	80%	85%	90%	95%	100%	105%	110%	115%	120%	125%
Revenue drivers	5.1	10.3	15.4	20.5	25.6	30.6	35.7	40.7	45.7	50.7	55.6
Operating costs	40.5	38.5	36.5	34.6	32.6	30.6	28.7	26.7	24.7	22.8	20.8
Capital costs	37.4	36.1	34.7	33.4	32.0	30.6	29.3	27.9	26.6	25.2	23.8

Figure 25.3
Sensitivity of Base Case IRR to Capital, Operating Costs and Gold Price



	75%	80%	85%	90%	95%	100%	105%	110%	115%	120%	125%
Revenue drivers	12.2%	19.1%	25.6%	31.7%	37.7%	43.6%	49.2%	54.8%	60.2%	65.5%	70.7%
Operating costs	54.7%	52.5%	50.3%	48.1%	45.8%	43.6%	41.3%	39.0%	36.7%	34.3%	31.9%
Capital costs	64.6%	59.5%	54.9%	50.8%	47.0%	43.6%	40.4%	37.5%	34.8%	32.3%	30.0%

Table 25.8
Gold Price Sensitivity

Gold Price (US$/oz)	NPV_5 (US$M)	IRR (%)
1,400	15.3	25.4%
1,450	18.3	29.1%
1,500	21.4	32.8%
1,550	24.5	36.5%
1,600	27.6	40.0%
1,650	**30.6**	**43.6%**
1,700	33.7	47.0%
1,750	36.8	50.4%
1,800	39.8	53.8%
1,850	42.8	57.1%
1,900	45.8	60.3%

25.7.3 Conclusion

The QP concludes that, based on the forecast production, capital and operating cost estimates presented in this study, the Project base case demonstrates an all-in sustaining cost (AISC) of US$829/oz, and that the base case presents a potentially viable project at gold prices above US$1,400/oz. Sensitivity to changes in gold price (or grade), capital and operating costs are all low, with NPV_5 and IRR remaining positive for adverse changes of 25% in each factor, indicating robust viability of the Project.

25.8 PROJECT RISKS AND OPPORTUNITIES

25.8.1 Project Risks

The Candelones Oxide Project will be exposed to risks which may impact the economics of this specific project.

As in many projects utilizing heap leach and open pit methods, some risks can be external and out of control of the project, such as metal prices, market conditions, current supply and demand challenges, changes in Government legislation, climate changes and, in this Project's case, proximity to a National Border.

Risk Matrix Table 25.10 and Table 25.11 illustrate the risk parameters used in Table 25.12, Project Risks.

Table 25.9
Likelihood of Occurrence Definitions

Definitions	Criteria
5 – Frequent	91% – 100% — It is expected to occur in most circumstances
4 – Probable	76% – 90% — Will probably occur some of the time
3 – Occasional	26% – 75% — Might occur some of the time
2 – Remote	11% – 25% — Could only occur infrequently
1 – Unlikely	0% – 10% — May only occur in exceptional circumstances

Source: Based on Industry Standards

Table 25.10
Severity Definition

Severity	H&S	Financial Exposure	Schedule
5 – Catastrophic	One or more deaths, and/or significant irreversible effects on one or more people.	Greater than USD 10M	Greater than 1 month
4 – Critical	Extensive damages or diseases or irreversible disability (damage to one or more people).	Up to USD 10M	One month
3 – Problematic	Medium-term reversible disability of one or more people. Significant medical treatment. Disability or lost time due to injury.	Up to USD 5M	One week
2 – Moderate	Recordable injuries or illness with up to one week work restriction.	Up to USD 1M	Two days
1 – Minor	Minor injuries, FAI, MTI (no work restriction)	Up to USD 500K	One day

Table 25.11
Candelones Project Risks

Area	Risk Type	Risk Category	Potential Risk/Issue	Consequences	Project Risk			Mitigation Strategy	Residual Risk		
					Severity	Likelihood	Risk Level		Severity	Likelihood	Risk Level
Overall Project (Open Pit, HLF, Roads, Infrastructure)	Health and Safety	Human	Overall H&S	Harm to Personnel, Infrastructure and/or Environment	5 Catastrophic	1 Unlikely	HIGH	Training all personnel, SOP, Signage, Medical emergency facilities	4 Critical	1 Unlikely	MEDIUM
Overall Project (Open Pit, HLF, Roads, Infrastructure)	Proximity to International Border	Site Security	H&S, Environment, Site Security	Site security compromised, Environmental Consequences, Theft of Gold	4 Critical	2 Remote	MEDIUM	Direct involvement of government security forces at the border; security measures taken on site.	2 Minor	1 Unlikely	LOW
Overall Project (Open Pit, HLF, Roads, Infrastructure)	Technical	Environmental	Unrecognized Environmental issues	Potential Work Stoppage, Project Delays	3 Problematic	3 Occasional	HIGH	Ongoing Rapport with Environmental Ministry, Detailed work on ESIA reduces risk	2 Moderate	2 Remote	LOW
Overall Project (Open Pit, HLF, Roads, Infrastructure)	Technical	Environmental	Reclamation Expenses Risks	CAPEX higher than anticipated	3 Problematic	2 Remote	MEDIUM	Detailed Engineering, qualified contractors, experience level of contractors, ARD controls	2 Moderate	1 Unlikely	LOW
Acid Rock Drainage	Technical	Environmental	ARD issue	Higher OPEX and reclamation cost	4 Critical	2 Remote	MEDIUM	Appropriate management of any potential sulfides by utilizing execution plan identified in reclamation plan	2 Moderate	1 Unlikely	LOW
Gold Market Prices	Financial	Cost/Schedule	Low prices	Reduced revenue and cash flow	4 Critical	3 Occasional	HIGH	Proper market study and financing	2 Moderate	3 Occasional	MEDIUM
Mining (Open Pit, HLF)	Technical	Cost/Schedule	Changes to Production Costs	OPEX Increase, Changes to financial dynamics	2 Moderate	2 Remote	LOW	Detailed Engineering, qualified contractors, experience level of contractors, KPI driven	2 Moderate	1 Unlikely	LOW
Site preparation of Open Pit and HLF	Technical	Cost/Schedule	Excessive Tree cover, Topsoil and Waste movement	CAPEX Increase	3 Problematic	3 Occasional	MEDIUM	Detailed Engineering, identify waste/ore areas, manage slope stability in pit	3 Problematic	2 Remote	MEDIUM
Mining and Process	Technical	Cost/Schedule	Equipment Failure	Delay in Production	3 Problematic	3 Occasional	MEDIUM	PST maintenance schedule, backup equipment, redundancy in equipment	2 Moderate	2 Remote	LOW
Power	Technical	Cost/Schedule	Generator failure	Delay in Production	3 Problematic	3 Occasional	MEDIUM	PST maintenance schedule, backup equipment, redundancy in equipment	2 Moderate	2 Remote	LOW
Overall Permiting Process, ESIA Support	Technical	Cost/Schedule	Mayor changes to schedule and cost	Delay in Production	3 Problematic	4 Probable	HIGH	Detailed Engineering Support to ESIA Process, Reduces risk, Ongoing communication with Environment Authorities	1 Minor	2 Remote	LOW
Hydrogeological Risks	Technical	Technical	Water Management Process	No process water to begin	4 Critical	4 Probable	VERY HIGH	Follow criteria for water balance calculation (start with 70000 m3 of water)	2 Moderate	3 Occasional	HIGH
Hydrogeological Risks	Technical	Technical	Surface Water Management Facilities	Loss of control in rainy season	4 Critical	4 Probable	VERY HIGH	Ensure that detailed engineering covers surface water management	2 Moderate	3 Occasional	HIGH
Geology	Technical	Technical	BM doesn't achieve calculated grade	Production not achieved	3 Problematic	2 Remote	MEDIUM	Continuous Production sampling	1 Minor	2 Remote	LOW
Mine Plan	Technical	Technical	Unrealistic Mine Plan	Production not achieved	3 Problematic	2 Remote	MEDIUM	Execute detailed mine plan analysis	1 Minor	2 Remote	LOW
Overall Project (Open Pit, HLF, Roads, Infrastructure)	Technical	Construction	Geotechnical Risks	Delays in construction, potential CAPEX increase	2 Moderate	3 Occasional	MEDIUM	Detailed Engineering, qualified contractors, experience level of contractors	1 Minor	1 Unlikely	LOW
Procurement/Logistics	Technical	Procurement	Critical path procurement, transport damage, port issues	Schedule delays, extra cost due to damages	4 Critical	2 Remote	MEDIUM	Procurement tied directly to the engineering plan, identify critical path items, delivery at port with CP items two months lead	2 Moderate	2 Remote	LOW
Overall Project (Open Pit, HLF, Roads, Infrastructure)	Project Detail	Engineering	Material Changes, Long lead supplies, Deliveries, Availability	Delays due to rescheduling Construction Process	5 Catastrophic	2 Remote	HIGH	Owner project manager implements procurement plan, execution of plan, detailed engineering plan	4 Critical	1 Unlikely	MEDIUM

The most important project risks identified for this project are summarized in Table 25.12 This list illustrates many of the challenges but does not completely identify all risks associated with the Project. A more detailed risk analysis will be part of future planned work and detailed engineering analysis. The future ESIA will likely identify more risk factors that will need to be addressed.

This Project will have typical risks associated with open pit mining. The reduction in elevation during the mining process, geotechnical conditions, equipment availability, productivity and personnel will be similar to those operations in other mining jurisdictions. The processing plant is a standard ADR plant with “off-the-shelf” components and is similar to other heap leach operations. No new technology is being applied in this operation which reduces execution risk.

25.8.2 Opportunities

A number of opportunities have been identified that may enhance the economics of this operation. The opportunities noted here have not been considered in this study however they should be considered in future engineering and project reviews:

1) Availability of local experienced mining contractors with experience in heap leach and mining operations may enhance productivity within the mine and reduce costs.
2) There is a large workforce in the local area and although these potential employees will require training, the local population seems eager and willing to support project and gain employment.
3) Power generation for this project is based solely on diesel-powered generators. Future power generation using renewable energy sources such as solar, wind and/or biomass may produce economic benefits in addition to obvious environmental benefits.
4) Unigold is supporting local universities to educate geologists and engineers through an internship program. This program could be accelerated to allow a rapid change-over from expat to domestic labour.
5) There are likely opportunities to fine-tune both open-pit mining sequencing and production to control dilution and utilize waste.
6) There is the possibility to fine-tune heap leaching cycles to improve the timing of recoveries.
7) The sulphides at Candelones Extension represent a large resource that may benefit from installed infrastructure at the Oxide Project. These resources can benefit from both expansion and delineation drilling.
8) Continuous improvement processes should be initiated as soon as possible to gain control over operational changes that may affect productivity.

26.0 RECOMMENDATIONS

26.1 PLANNED EXPENDITURES AND BUDGET PREPARATION

An overview of the proposed annual project budget is presented in Table 26.1. The budget forms part of the capital expenditures noted in this report.

Unigold's primary objective is to start the necessary work to bring the Candelones Oxide Project into production once it receives the approvals necessary from the Dominican government. This will consist of the necessary environmental studies and the detailed geotechnical and engineering studies prior to beginning construction.

Unigold plans to continue a public relations campaign to educate the local communities on the benefits of mining and the proposed oxide Project development.

Table 26.1
Unigold's Proposed Annual Project Budget for the Candelones Project

Item	Detail	US% 000
Mining	Optimization open pit Detail design	70
Tierra Group	Recommendations Detail Engineering, Heap Leach Facility, Waste Rock Site	884
Promet 101	Recommendations Detail design, Metallurgical and engineering	983
Contingency		194
Total		**2,131**

Micon's QPs have reviewed the proposed annual project budget for the Candelones Project and agrees with the nature of the expenditures. The budget is subject to Unigold's ability to secure funding as well as management's ability to secure the necessary approvals and agreements necessary to advance the Project and the approval of Unigold's board.

26.2 FURTHER RECOMMENDATIONS

26.2.1 Recommendations Micon

Micon's QPs agree with the general direction of Unigold's previous exploration programs and economic studies for the Candelones Project. The QPs for this Feasibility Study make the following additional recommendations:

1. The QPs recommend that Unigold should continue exploring the extent of the sulphide mineralization at the Candelones Project, so that it may be able to translate from mining the Oxide directly into the sulphide material once the oxide material has been exhausted.
2. The QPs recommend that slope monitoring and ground water control programs be conducted for all stages of pit development. These should include geotechnical and tension crack

mapping, and surface displacement monitoring program using surface prisms. The surface water that develops behind the pit walls should be monitored and depressurized as needed.

3. The QPs recommend that further optimization is conducted during the operational phase, in order to improve the cash margins of production.

It is recommended that the Project be advanced to production through the normal process of permitting, financing, detailed engineering, and construction. Estimated costs for engineering and construction are included in the capital cost of this Feasibility Study. Ongoing risk mitigation efforts should be undertaken on a continuous basis throughout the Project development, construction and into the production phase.

26.2.2 Recommendations Tierra Group

Facility designs were developed based on the limited data and information available before, or collected during, the feasibility study. Where incomplete data was available, designers relied on conservative assumptions based on a broad base of previous experience with similar designs and geophysical (climate, hydrology, geology, and geotechnical) conditions. Additional confirmatory engineering analyses is required prior to completing detailed engineering and preparing Issued for Construction (IFC) design drawings. This includes but is not limited to:

1. Complete supplementary borehole drilling for the HLF and WRS sites using HQ3 drilling wireline triple tube core barrel. Drilling should include in-situ testing in boreholes, such as standard penetration tests (SPT) and permeability tests for the geological units identified during the recently completed geotechnical investigation;
2. Perform geotechnical laboratory testing on core samples for the Saprock and Bedrock units;
3. Additional laboratory testing of agglomerated ore as initial results indicate that agglomeration may be required for the life-of-mine;
4. Geotechnical investigation to identify locations for local borrow materials that will be required for construction, particularly for overliner gravels;
5. Further evaluation should be performed to assess the HLF and WRS hydrogeologic conditions. Tierra Group recommends installing piezometers to establish a groundwater characterization and to monitor groundwater levels and chemistry at the HLF and WRS;
6. Monitoring of existing stream flows should be considered to measure sediment transportation in existing streams. This will provide valuable input for refining the design of sediment control structures;
7. Additional site-specific precipitation and evaporation measurements should be collected to better calibrate the water balance;
8. The HLF water balance should be expanded to include, or included within, a site-wide water management plan and balance. A specific uncertainty is both construction and process start-up water demand/supply;

9. Dam breach analyses should be developed to support dam consequence classification for the Events Pond and Underdrain Pond dams. Results from the dam breach study may require a more robust design and additional geotechnical investigation;
10. Advance geochemical characterization of site materials to refine predictions of contact water chemistry for water treatment and to support water management for operations and closure. The geochemical characterization should include kinetic testing of waste rock, additional characterization of spent ore, and further identification and characterization of cover and borrow source materials;
11. Hydraulic evaluations of potential cover materials, cover performance, and the HLF draindown are recommended to support closure water quality evaluations and water treatment design;
12. A supplementary drilling program should be completed using a geotechnical rig, including in-situ testing (i.e., standard penetration test and permeability) and sampling.
13. Piezometer installation should be considered as part of the supplementary drilling program. Groundwater conditions for the geotechnical analysis reported herein were adopted based on water levels measured in boreholes during the drilling program; no piezometers were installed.
14. Additional confirmatory engineering analyses is required prior to completing detailed engineering and preparing Issued for Construction (IFC) design drawings that includes geotechnical laboratory testing on the Saprock and bedrock units, dam breach analysis, borrow materials geotechnical investigation, among others

Tierra Group's estimated cost for the additional work is included within the Total Project Capital (Table 21.1 Capital Expenditures summary).

26.2.3 Recommendations Promet 101

Metallurgical Testing and the design of the recovery facilities for this project have been done using industry standards. Promet 101 makes the following recommendations:

1. While the column testing has been consistent in generating similar extraction results for each test it is recommended that further column tests be carried out to expand on the database of information, increase knowledge of gold and silver dissolutions, reagent consumptions and also the physical performance of the columns themselves. Further evaluation of the consumption of reagents including cement is recommended to increase the accuracy of cost estimations.
2. Further testing to generate parameters for detailed design of the proposed facility such as carbon activity and equilibrium, copper solubility, cyanide consumption variability among others is recommended.
3. A Project Execution Plan that focuses on how to minimise capital expenditures, identify key service providers, develop a logistics plan and a detailed project schedule is recommended to be advanced prior to the detailed engineering stage of the project.

4. Some assumptions have been made with regards to the recovery plant site location. Geotechnical evaluations should be advanced prior to detailed design of these facilities.
5. Evaluation of potential second-hand equipment in the market is recommended to be advanced prior to the start of detailed design as this equipment becomes available in a sporadic nature.

The estimated costs for advancing the above concepts are included within the capital costs shown in Table 21.1 Capital Cost Summary.

27.0 DATE AND SIGNATURE PAGE

27.1 MICON INTERNATIONAL LIMITED

"William J. Lewis" {signed and sealed as of the report date}

William J. Lewis, P.Geo Senior Geologist	Report Date: December 20, 2022. Oxide Mineral Resource Effective Date: August 08, 2022. Oxide Mineral Reserve Effective Date: October 07, 2022.

"Alan San Martin" {signed and sealed as of the report date}

Ing. Alan San Martin, MAusIMM(CP) Mineral Resource Specialist	Report Date: December 20, 2022. Oxide Mineral Resource Effective Date: August 08, 2022. Oxide Mineral Reserve Effective Date: October 07, 2022.

"Christopher Jacobs" {signed and sealed as of the report date}

Christopher Jacobs, MBA, CEng, MIMMM President and Mining Economist	Report Date: December 20, 2022. Oxide Mineral Resource Effective Date: August 08, 2022. Oxide Mineral Reserve Effective Date: October 07, 2022.

"Abdoul Aziz Dramé" {signed and sealed as of the report date}

Abdoul Aziz Dramé, P.Eng. Mining Engineer	Report Date: December 20, 2022. Oxide Mineral Resource Effective Date: August 08, 2022. Oxide Mineral Reserve Effective Date: October 07, 2022.

27.2 TIERRA GROUP INTERNATIONAL

"Mathew Fuller" {signed and sealed as of the report date}

Mathew Fuller, C.P.G., P.Geo,	Report Date: December 20, 2022.
Principal	Oxide Mineral Resource Effective Date: August 08, 2022.
	Oxide Mineral Reserve Effective Date: October 07, 2022.

27.3 PROMET101 CONSULTING

"Stuart J. Saich" {signed and sealed as of the report date}

Stuart J. Saich, B.S.Sc. Chem Eng.	Report Date: December 20, 2022.
Director and Process Engineering Consultant	Oxide Mineral Resource Effective Date: August 08, 2022.
	Oxide Mineral Reserve Effective Date: October 07, 2022.

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28.2 Internet Sources

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Unigold Inc., website www.unigoldinc.com

29.0 CERTIFICATES

CERTIFICATE OF QUALIFIED PERSON
William J. Lewis

As the co-author of this report for Unigold Inc. entitled "NI 43-101 F1 Technical Report Updated Mineral Resource Estimate and Feasibility Study for the Oxide Portion of the Candelones Project, Neita Sur Concession, Dominican Republic" dated December 20, 2022, with an oxide mineral resource effective date of August 08, 2022, and an oxide mineral reserve effective date of October 07, 2022, I, William J. Lewis do hereby certify that:

1. I am employed by, and carried out this assignment for, Micon International Limited, Suite 601, 90 Eglington Ave. East, Toronto, Ontario M4P 2Y3, tel. (416) 362-5135, e-mail wlewis@micon-international.com;

2. I hold the following academic qualifications:

B.Sc. (Geology)	University of British Columbia	1985

3. I am a registered Professional Geoscientist with the Association of Professional Engineers and Geoscientists of Manitoba (membership # 20480); as well, I am a member in good standing of several other technical associations and societies, including:
   - Association of Professional Engineers and Geoscientists of British Columbia (Membership # 20333).
   - Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories (Membership # 1450).
   - Professional Association of Geoscientists of Ontario (Membership # 1522).
   - The Canadian Institute of Mining, Metallurgy and Petroleum (Member # 94758).

4. I have worked as a geologist in the minerals industry for over 35 years;

5. I am familiar with NI 43-101 and, by reason of education, experience and professional registration, I fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes 4 years as an exploration geologist looking for gold and base metal deposits, more than 11 years as a mine geologist in underground mines estimating mineral resources and reserves and over 20 years as a surficial geologist and consulting geologist on precious and base metals and industrial minerals;

6. I have read NI 43-101 and this Technical Report has been prepared in compliance with the instrument;

7. I visited the Candelones Project in 2013, 2017 and most recently for 5 days between October 22 and 26, 2019 to review the drilling programs on the property, discuss the ongoing QA/QC program and emerging geological model for the Project as well as discuss various other aspects of the Project.

8. I have written or co-authored previous Technical Reports for the mineral property that is the subject of this Technical Report;

9. I am independent Unigold Inc. and its subsidiaries according to the definition described in NI 43-101 and the Companion Policy 43-101 CP;

10. I am responsible for all Sections of this Technical Report, except for the following sections 1.1 to 1.8, 2 to 12.1.1, 14.1 to 14.3, 14.7, 19, 23, 24, 25.1, 25.2, 26 and 28.

11. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make this technical report not misleading;

Report Dated this 20th day of December, 2022 with a oxide mineral resource effective date of August 08, 2022 and an oxide mineral reserve effective date of October 07, 2022.

"William J. Lewis" {signed and sealed as of the report date}

William J. Lewis, B.Sc., P.Geo.
Director and Senior Geologist

CERTIFICATE OF QUALIFIED PERSON
Ing. Alan J. San Martin, MAusIMM(CP)

As the co-author of this report for Unigold Inc. entitled "NI 43-101 F1 Technical Report Updated Mineral Resource Estimate and Feasibility Study for the Oxide Portion of the Candelones Project, Neita Sur Concession, Dominican Republic" dated December 20, 2022, with an oxide mineral resource effective date of August 08, 2022, and an oxide mineral reserve effective date of October 07, 2022, I, Alan J. San Martin, do hereby certify that:

1. I am employed by, and carried out this assignment for, Micon International Limited, whose address is Suite 601, 90 Eglington Ave. East, Toronto, Ontario M4P 2Y3., tel: (416) 362-5135, e-mail asanmartin@micon-international.com.
2. I hold a Bachelor Degree in Mining Engineering (equivalent to B.Sc.) from the National University of Piura, Peru, 1999;
3. I am a member in good standing of the following professional entities:
    - The Australasian Institute of Mining and Metallurgy (AusIMM), Membership #301778
    - Canadian Institute of Mining, Metallurgy and Petroleum, Member ID 151724
    - Colegio de Ingenieros del Perú (CIP), Membership # 79184
4. I have been working as a mining engineer and geoscientist in the mineral industry for over 20 years;
5. I am familiar with the current NI 43-101 and, by reason of education, experience and professional registration as Chartered Professional, MAusIMM(CP), I fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes 5 years as Mining Engineer in exploration (Peru), 4 years as Resource Modeller in exploration (Ecuador) and 12 years as Mineral Resource Specialist and mining consultant in Canada;
6. I have read NI 43-101 and Form 43-101F1 and the portions of this Technical Report for which I am responsible have been prepared in compliance with that instrument and form.
7. I have visited the property that is the subject of the Technical Report for 4 days between May 21, 2013 and May 24, 2013.
8. I have co-authored previous Micon reports for the property that is the subject of the Technical Report.
9. I am independent of Unigold Inc. and its related entities, as defined in Section 1.5 of NI 43-101.
10. I am responsible for Sections 14.4 to 14.6, 14.8 and 14.9 of this Technical Report.
11. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make this technical report not misleading.

Report Dated this 20th day of December, 2022 with a oxide mineral resource effective date of August 08, 2022 and an oxide mineral reserve effective date of October 07, 2022.

"Alan J. San Martin" {signed and sealed}

Ing. Alan J. San Martin, MAusIMM(CP)
Mineral Resource Specialist

CERTIFICATE OF QUALIFIED PERSON
Christopher Jacobs, CEng, MIMMM

As the co-author of this report for Unigold Inc. entitled "NI 43-101 F1 Technical Report Updated Mineral Resource Estimate and Feasibility Study for the Oxide Portion of the Candelones Project, Neita Sur Concession, Dominican Republic" dated December 20, 2022, with an oxide mineral resource effective date of August 08, 2022, and an oxide mineral reserve effective date of October 07, 2022, I, Christopher Jacobs, do hereby certify that:

1. I am employed as a Vice President and Mining Economist by, and carried out this assignment for, Micon International Limited, Suite 601, 90 Eglington Ave. East, Toronto, Ontario M4P 2Y3. tel. (416) 362-5135, email: cjacobs@micon-international.com.

2. I hold the following academic qualifications:

   B.Sc. (Hons) Geochemistry, University of Reading, 1980;

   M.B.A., Gordon Institute of Business Science, University of Pretoria, 2004.

3. I am a Chartered Engineer registered with the Engineering Council of the U.K.

   (registration number 369178).

4. Also, I am a professional member in good standing of: The Institute of Materials, Minerals and Mining; and The Canadian Institute of Mining, Metallurgy and Petroleum (Member).

5. I am familiar with NI 43-101 and by reason of education, experience and professional registration, fulfill the requirements of a Qualified Person as defined in NI 43-101. I have worked in the minerals industry for more than 35 years; my work experience includes 10 years as an exploration and mining geologist on gold, platinum, copper/nickel and chromite deposits; 10 years as a technical/operations manager in both open-pit and underground mines; 3 years as strategic (mine) planning manager and the remainder as an independent consultant when I have worked on a variety of deposits including gold and base metals.

6. I visited the Property that is the subject of this report over 3 days between August 30, 2022 and September 1, 2022.

7. I am responsible for Sections 1.13, 1.15, 20, 22 and 25.7 of this Technical Report.

8. I am independent of Unigold Inc. and its related entities, as defined in Section 1.5 of NI 43-101.

9. I have read NI 43-101 and the Sections of this report for which I am responsible have been prepared in compliance with the instrument.

10. As of the date of this certificate to the best of my knowledge, information and belief, the sections of this Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make this report not misleading.

Report Dated this 20th day of December, 2022 with a oxide mineral resource effective date of August 08, 2022 and an oxide mineral reserve effective date of October 07, 2022.

"Christopher Jacobs" {signed and sealed}

Christopher Jacobs, CEng, MIMMM
President & Mining Economist

CERTIFICATE OF QUALIFIED PERSON
Abdoul A. Drame, B.Eng., P.Eng.

As the co-author of this report for Unigold Inc. entitled "NI 43-101 F1 Technical Report Updated Mineral Resource Estimate and Feasibility Study for the Oxide Portion of the Candelones Project, Neita Sur Concession, Dominican Republic" dated December 20, 2022, with an oxide mineral resource effective date of August 08, 2022, and an oxide mineral reserve effective date of October 07, 2022, I, Abdoul Aziz Drame, do hereby certify that:

1. I am employed as a Mining Engineer by, and carried out this assignment for, Micon International Limited, 601 – 90 Eglinton Ave East, Toronto, ON M4P 2Y3. tel. (416) 362-5135, email: adrame@micon-international.com.
2. I hold the following academic qualifications:
    - Bachelor of Mining Engineering, Ecole Polytechnique, Montreal, Quebec, Canada, 2016.
3. I am a registered Professional Engineer of Ontario (License # 100543529).
4. I am familiar with NI 43-101 and by reason of education, experience and professional registration, fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes over 7 years integrating an operations with project experience across a range of mining studies of varying complexity through scoping, pre-feasibility, feasibility, and operational phases. I have a firm understanding of mining methods, mine planning, and scheduling in conjunction with in-depth knowledge of underground drill and blast design and execution.
5. I have read NI 43-101 and this Technical Report has been prepared in compliance with the instrument.
6. I have visited the Candelones Project from August 30th to September 1st of 2022, to review all site infrastructures, discuss with the potential contractors and the local communities, validate various other aspects of the Project.
7. I have not written or nor co-authored any previous Technical Reports for the mineral property that is the subject of this Technical Report.
8. I am independent Unigold Inc. and its subsidiaries according to the definition described in NI 43-101 and the Companion Policy 43-101 CP.
9. I am responsible for Sections 1.9, 1.10, 12.1.2, 15, 26, 25.3 and 25.4 of this Technical Report.
10. As of the date of this certificate to the best of my knowledge, information and belief, the sections of this Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make this report not misleading.

Report Dated this 20th day of December, 2022, with a oxide mineral resource effective date of August 08, 2022 and an oxide mineral reserve effective date of October 07, 2022.

"Abdoul A. Drame" {signed and sealed as of the report date}

Abdoul A. Drame, B.Eng., P.Eng.
Mining Engineer

CERTIFICATE OF QUALIFIED PERSON
Matthew L. Fuller

As the co-author of this report for Unigold Inc. entitled "NI 43-101 F1 Technical Report Updated Mineral Resource Estimate and Feasibility Study for the Oxide Portion of the Candelones Project, Neita Sur Concession, Dominican Republic" dated December 20, 2022, with an oxide mineral resource effective date of August 08, 2022, and an oxide mineral reserve effective date of October 07, 2022, I, Matthew L. Fuller do hereby certify that:

1. I am employed by Tierra Group International, Ltd., and carried out this assignment for, Micon International Limited, 601 – 90 Eglinton Ave East, Toronto, ON M4P 2Y3, tel. (416) 362-5135

2. I hold the following academic qualifications:
    - B.Sc. (Geology) Colorado State University 1982

3. I am a registered Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Colombia (membership # 199825) and Certified Professional Geologist with the American Institute of Professional Geologist (# 8757); as well, I am a member in good standing of several other technical associations and societies, including:
    - Licensed Engineering Geologist (LEG): Washington (#2135, 2003).
    - Registered Geologist: Kansas (RG) (#550, 2004).
    - Registered Environmental Professional (REP): Ministerio del Medio Ambiente y Recursos Naturales, El Salvador (#0155, 1995).
    - Registered Member – Society for Mining Metallurgy and Exploration (# 04116803).

4. I have worked as an engineering geologist in the mining geotechnical industry specializing in tailings and heap leach design for over 30 years.

5. I am familiar with NI 43-101 and, by reason of education, experience and professional registration, I fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes two years as an exploration geologist, two years in the geotechnical ground modification industry and 32 years in the geotechnical engineering design industry.

6. I have read NI 43-101 and this Technical Report has been prepared in compliance with the instrument.

7. I visited the Candelones Project the on 16 –18 February 2021, performing heap leach facility reconnaissance and mapping, establishing a geotechnical investigation program, and performed a geotechnical assessment of representative foundation and ore drill core.

8. I am independent Unigold Inc. and its subsidiaries according to the definition described in NI 43-101 and the Companion Policy 43-101 CP;

9. I am responsible for Sections 1.12, 12.1.3, and 18 of this Technical Report.

10. As of the date of this certificate, to the best of my knowledge, information, and belief the Technical Report contains all scientific and technical information that is required to be disclosed to make this technical report not misleading;

Report Dated this 20th day of December, 2022, with a oxide mineral resource effective date of August 08, 2022 and an oxide mineral reserve effective date of October 07, 2022.

"Matthew L. Fuller" {signed and sealed as of the report date}

Matthew L. Fuller
Engineering Geologist

CERTIFICATE OF QUALIFIED PERSON
Stuart J Saich

As the co-author of this report for Unigold Inc. entitled "NI 43-101 F1 Technical Report Updated Mineral Resource Estimate and Feasibility Study for the Oxide Portion of the Candelones Project, Neita Sur Concession, Dominican Republic" dated December 20, 2022, with an oxide mineral resource effective date of August 08, 2022, and an oxide mineral reserve effective date of October 07, 2022, I, Stuart J Saich do hereby certify that:

1. I am employed by, and carried out this assignment for, Promet101 Consulting, Brisbane Australia, e-mail stuart.saich@promet101.com
2. I hold the following academic qualifications:

   B.Sc. (Chem Eng) University of Natal, South Africa 1986
3. I am a registered Fellow member of the Australian Institute of Mining and Metallurgy (Membership # 222028) I am a member in good standing of several other technical associations and societies, including:
   - SME Membership # 04101270
   - The Canadian Institute of Mining, Metallurgy and Petroleum (Member # 631368)
4. I have worked as a process engineer in the minerals industry for over 35 years;
5. I am familiar with NI 43-101 and, by reason of education, experience and professional registration, I fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes 4 years in operations on minerals processing plants, 14 years with EPC entities in the development of projects from grass roots and or brownfield projects in the mineral processing industry and a further 17 years running Promet101 consulting in Chile, Canada and Australia. I have had significant experience in the construction of minerals processing plants in challenging environments similar to that the Candelones Project.
6. I have authored Sections1.11, 1.14, 13, 17, 21, 25.5 and 25.6 of the NI 43-101 which has been prepared in compliance with the instrument;
7. I visited the Candelones Project in June, 2022 to review the metallurgical sample selection methodologies, the geological department and the proposed mine and process facility locations.
8. I am independent Unigold Inc. and its subsidiaries according to the definition described in NI 43-101 and the Companion Policy 43-101 CP;
9. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make this technical report not misleading;

Report Dated this 20th day of December, 2022, with a oxide mineral resource effective date of August 08, 2022 and an oxide mineral reserve effective date of October 07, 2022.

"Stuart J Saich" {signed and sealed as of the report date}

Stuart J Saich, B.Sc Chem Eng.
Director and Process Engineering Consultant – Promet101 Consulting