



**VICTORIA**  
GOLD CORP

TECHNICAL REPORT  
**EAGLE GOLD MINE**  
YUKON TERRITORY, CANADA

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### NOTICE

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## Appendices

Appendix A	Mineral Tenure Information
Appendix B	Qualified Person Certificates

# 1 EXECUTIVE SUMMARY

## 1.1 Introduction

Victoria Gold Corp. (Victoria Gold or VGC) employees, Mr. Nico Harvey, Mr. Paul Grey, and Mr. Jeff Winterton, with the support of Independent Qualified Persons (IQPs), Mr. Mike Levy, and Mr. Marc Jutras prepared a Technical Report (the Report) on the Eagle Gold Mine (the Mine) for Victoria Gold. The Mine is located in the Mayo Mining District of Central Yukon Territory, approximately 45 kilometres (km) north of the community of Mayo.

This report uses the guidance of the Canadian Securities Administrators' National Instrument (NI) 43-101 and Form 43-101F1 and Canadian Institute of Mining (CIM) guidance on Resource and Reserve Estimation. Much of the technical and financial information in this Technical Report is derived from updates to the 2019 Technical Report based on actual operating performance and costs from recent operations.

This Technical Report has been prepared with the support of Independent Qualified Persons (IQPs) supplied by JDS Energy & Mining (JDS) and Ginto Consulting Inc. (Ginto), as well as several non-independent QPs who are current employees of Victoria Gold.

Costs presented in this report will be reported in C\$ unless otherwise specified.

## 1.2 Project Description

The Eagle and Olive deposits are situated within Victoria Gold's Dublin Gulch property. The Eagle deposit is actively being mined using open pit (OP) methods. The Olive deposit will also be mined using OP methods, coming into production in 2031 to extend mine life. Based on current reserves, the Eagle deposit will provide 117.7 million tonnes (Mt) of ore while the Olive deposit will provide 6.5 Mt for a total of 124.3 Mt from January 2023 until completion of operations in 2034. Waste mining will total 122.9 Mt for an overall strip ratio of 0.99:1. The production rate will be an average of 11.5 million tonnes per annum (M t/a) comprised of 31,500 t/d ore at full production rates over a 10-year mine life. A total of 17.1 Mt of lower grade material will be stockpiled during mining operations for processing at the end of the mine life, adding an additional year and half of processing operations.

Run of mine ore is fed through a three-stage crushing plant to produce an 80% passing ( $P_{80}$ ) 12.5 mm product. Crushed ore is conveyed and stacked on one of two HLP's using a series of fixed and mobile conveyors.

Gold is extracted from ore into a solution by a heap leaching process using two heap leaching pads (HLPs) – a primary HLP and a secondary HLP. The primary HLP will be in operation until 2029 when the secondary HLP will come online. The secondary HLP has been sized to accommodate all remaining reserves with

capacity for expansion. Gold is being leached with cyanide solution and recovered by an Adsorption-Desorption-Regeneration (ADR) carbon plant.

A total of 2,048 koz of gold will be recovered over a twelve-year mine life from 76% overall recovery.

### 1.3 Property Description and Ownership

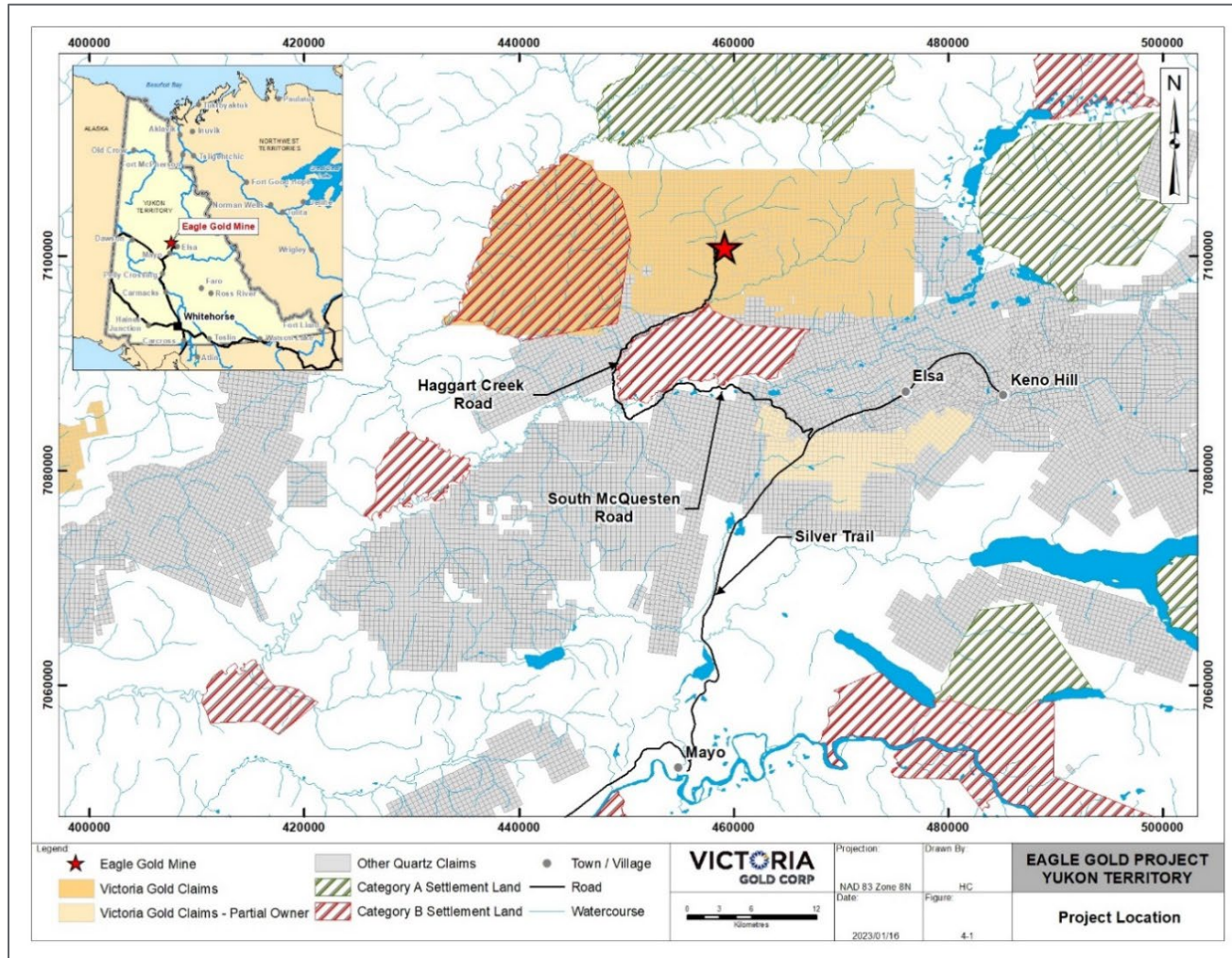
The Eagle Gold Mine is situated approximately 350 km north of the Yukon capital of Whitehorse (Figure 1-1). The centre of the mine is at approximately 64°01'30" N latitude and 135°49'30" W longitude or Universal Transverse Mercator (UTM) Coordinates 7,100,060N / 459,680E, Zone 8, North American Datum (NAD) 83. Access to the project from Mayo is via the Silver Trail (Highway 11), onto the South McQuesten and Haggart Creek Roads which terminate at the mine site.

The Mine is situated within the Dublin Gulch property, which is a contiguous block of 1,914 quartz claims, 10 quartz leases, and one federal crown grant all of which are under the control of Victoria Gold's wholly owned, directly held subsidiary Victoria Gold (Yukon) Corp. The Dublin Gulch property is rectangular in shape and extends approximately 26 km in an east-west direction and 13 km in a north-south direction covering an aggregate area of approximately 35,000 hectares (ha).

A property location map is provided in Figure 1-1.



Figure 1-1: Property Location Map



Source: VGC (2023)

## 1.4 Geology & Mineralization

The Dublin Gulch property (Eagle Gold Mine) is underlain by upper Proterozoic to lower Paleozoic clastic sedimentary rocks that have undergone regional deformation including Cretaceous age thrust faulting and subsequent granitoid intrusions. Mineralization is associated with granitic intrusive bodies, here described as the Eagle Zone and Olive Zone gold deposits, which are hosted primarily in granodioritic rocks. The gold deposits occur within the Tombstone Gold Belt, located in the eastern portion of the Tintina Gold Province, which also hosts the Brewery Creek deposit and other gold occurrences in the Yukon.

The property is located on the northern limb of the McQuesten Antiform and is underlain by Proterozoic to Lower Cambrian-age Hyland Group metasediments and the Dublin Gulch intrusion, a granodioritic stock. The Dublin Gulch Stock is comprised of four intrusive rock phases, the most significant of which is Granodiorite. The stock has been dated at approximately 93 Mega annum (Ma).

The metasediments are the product of greenschist-grade regional metamorphism. Proximal to the Dublin Gulch Stock, these metasediments have undergone metasomatism and contact metamorphism. A hornfelsic thermal halo surrounds the stock and within the halo, the metasediments have been altered to schist, marble, and skarn.

The Eagle and Olive Zones belong to the RIRGS class (Reduced Intrusion-Related Gold Systems) of mineral deposits.

The Eagle Zone gold occurrence is localized at the narrowest exposed portion of the stock. The Eagle Zone mineralization is comprised of sub-parallel extensional quartz veins that are best developed within the granodiorite.

Sulphides account for less than 5% of vein material and occur in the centre, on the margin, and disseminated throughout the veins. The most common sulphide minerals are pyrrhotite, pyrite, arsenopyrite, chalcopyrite, sphalerite, bismuthinite, molybdenite and galena. Secondary potassium feldspar is the dominant mineral in alteration envelopes. Sericite-carbonate is generally restricted to narrow vein selvages, although alteration zones of this type also occur with no obvious relation to veins. Gold mineralization also occurs within the metasedimentary rock package immediately adjacent to the granodiorite.

The Eagle Zone is the principal concentration of mineralization within the property. The Eagle Zone is irregular in plan and is approximately 1,600 m long (east-west) and 600 m wide north-south. The Eagle Zone is near-vertical and has been traced for about 500 m below surface. Current drilling indicates that the mineralization is relatively continuous along this length and is open in several directions, including at depth. Mineralization occurs as elemental gold, both as isolated grains and most commonly in association with arsenopyrite, and less commonly with pyrite and chalcopyrite. The sulphide content in the veins is typically less than 5%, and is less than 0.5% within the deposit overall, with 1 to 4% carbonate (calcite) present.

The Olive Zone gold occurrence is localized at the contact zone on the northwest flank of the granodiorite intrusive and located 2.5 km northeast of the Eagle Zone. Olive measures approximately 20 to 80 m in width, 900 m in length, and has been drilled to approximately 175 to 250 m in depth. Over 97% of the gold mineralization in the Olive Zone is hosted in granodiorite.

Compared to Eagle, the Olive mineralization is more associated with sulphides and quartz-sulphide veining in an interpreted shear-zone setting. An oxidation zone and a transition zone, from near total oxidation to only sulphides, have been defined. Veins can be only sulphides or sulphides with white quartz. Pyrite plus arsenopyrite (or arsenical pyrite) and quartz-pyrite veins are common, within the overall NE trending zone of mineralization.

## 1.5 History, Exploration and Drilling

Exploration drilling for intrusive-hosted gold mineralization began in the early 1990's and continued sporadically by several owners through 2004, including through StrataGold Corporation (Strata Gold). Victoria Gold acquired StrataGold in 2009, and continued exploration drilling on the property. Since 2012, the majority of Victoria Gold's exploration work has been in-fill drilling at the Eagle Zone, and exploration efforts including trenching, geophysical surveys and drilling at the Olive Zone. In the winter of 2011-2012, Victoria Gold conducted a targeted in-fill drilling program consisting of core and Reverse Circulation (RC) drilling of an additional 130 drill holes in the Eagle Zone. The purpose of the targeted in-fill drilling program was to better define Measured and Indicated Mineral Resources. In 2017, an additional 2,557 metres (m) of diamond drilling from four diamond drill holes was completed in the Eagle Zone.

The Olive Zone had been explored prior to Victoria Gold's ownership, with initial drilling in 1992, and sporadic follow-up drilling for a total of 19 holes by 2007. Victoria Gold conducted additional drilling of 58 holes in 2010-2012, in-fill drilling of 61 holes in 2014, and an additional 89 drill holes in 2016 in the Olive Zone.

The additional drilling allowed the Olive Zone to be defined as a Mineral Resource. Additional exploration work conducted at the Olive Zone included 17 shallow trenches in 2014 and 29 trenches in 2016, to expose and sample oxidized sulphide mineralization and help define the surface trace and extensions to mineralization. As well, a program of Induced Polarization (IP)-Resistivity geophysical surveys was conducted over the core area of the Olive Zone in 2015. The results of the program concluded that there is a good correlation of IP chargeability highs with the modelled zone of anomalous gold mineralization in drilling, and a direct association of the gold with increased sulphide content.

A summary of exploration drilling and trenching, for which sample analyses have been used for Mineral Resource estimation, are presented below for the Eagle Zone in Table 1-1 and the Olive Zone in Table 1-2.

Table 1-1: Summary of Annual Exploration Programs – Eagle Zone

Company	Year	Number of Holes	Metres Drilled	Type
Canada Tungsten	1977	65	11,315	DDH
Queenstake Resources	1986	4	705	DDH
Can Pro	1989	4	653	DDH
Ivanhoe Goldfields	1991	16	2,410	DDH
Amax Gold Inc.	1992	13	1,943	DDH
Amax Gold Inc.	1993	56	7,729	RC
Amax Gold Inc.	1993	10	1,476	DDH
Ivanhoe Goldfields	1993	10	2,078	RD
First Dynasty Mines	1995	40	8,354	RC
First Dynasty Mines	1995	25	4,946	DDH
New Millennium Mining	1996	21	4,114	DDH
New Millennium Mining	1996	37	5,271	RC
New Millennium Mining	1996	19	189	Auger
New Millennium Mining	1996	33	797	Water
StrataGold	2005	34	8,105	DDH
StrataGold	2006	10	4,282	DDH
StrataGold	2007	20	5,627	DDH
StrataGold	2008	15	4,429	DDH
Victoria Gold	2009	10	5,122	DDH
Victoria Gold	2009	4	1,321	Geotech
Victoria Gold	2010	20	3,592	DDH
Victoria Gold	2010	5	1,341	Geotech
Victoria Gold	2011	3	616	Geotech
Victoria Gold	2011-2012	33	4,337	RC
Victoria Gold	2011-2012	58	17,538	DDH
Victoria Gold	2017	59	8,423	DDH
Victoria Gold	2020	1	844	DDH
Victoria Gold	2021	12	6,149	DDH
Victoria Gold	2022	22	9,892	DDH
<b>TOTAL</b>		<b>605</b>	<b>129,488</b>	

Source: Wardrop (2012), Updated by VGC (2022)

Table 1-2: Summary of Annual Exploration Programs – Olive Zone

Company	Year	Number of Holes/Trenches	Metres Drilled/Trenched	Type
Prior owners	1991, 1992	7	959	RC and DDH
Prior owners	2007	5	868	DDH
Prior owners	1989,2009	10	707	Trenches
Victoria Gold	2010	19	4,144	DDH
Victoria Gold	2011	24	4,486	DDH
Victoria Gold	2011	4	300	RC
Victoria Gold	2012	11	2,997	DDH
Victoria Gold	2014	61	8,594	DDH
Victoria Gold	2014	10	1,027	Geotech
Victoria Gold	2014	17	885	Trenches
Victoria Gold	2016	89	12,546	DDH
Victoria Gold	2016	41	1,376	Trenches
Victoria Gold	2017	78	14,984	DDH
Victoria Gold	2017	25	1,076	Trenches
Victoria Gold	2018	10	1,929	DDH
Victoria Gold	2018	8	607	Trenches
<b>TOTAL DRILLING</b>		<b>318</b>	<b>52,834</b>	
<b>TOTAL TRENCHES</b>		<b>101</b>	<b>4,651</b>	

Source: Wardrop (2012), Updated by VGC (2022)

## 1.6 Metallurgical and Mineral Processing Test Results

Extensive metallurgical testing programs including column leach, bottle roll leach, gravity concentration and flotation tests were conducted on various composites from the Eagle deposit. Comminution, compacted permeability, cyanide neutralization and humidity cell studies were also performed. Additional testing including bottle roll leach and column leach tests were conducted on composites from the Olive deposit.

Leach data on the Eagle Zone composites, crushed with a high-pressure grinding roll and with conventional cone crushers, were compiled at several crush sizes. The results from the column leach test programs indicate that gold recovery ranged from 68% to 79%.

Leach data was also compiled on Olive oxide, transition and sulphide composites, crushed with conventional cone crushers. Gold recoveries ranged from 54% to 68%.

The column leach test results show that crushing to a P<sub>80</sub> size of approximately 6.5 mm with conventional crushers will lead to the projected recoveries for Eagle as summarized in Table 1-3, as projected by Forte Dynamics Inc. (Forte). Forte uses a first principal fraction-extraction equation by rock type to estimate total heap leach recovery from operations, specific to each rock type and their respective tonnages and grades, as a function of time. This provides a long-term ultimate recovery that can be expected.

Ongoing testwork during operations has shown that gold recovery is not materially sensitive to crush size, over the tested size ranges. Gold extraction rate, however, is a function of crush size. Subsequently, a crush size of 12.5 mm was selected to optimize pad operations by balancing extraction rate and permeability. No changes to the ultimate recoveries as outlined in Table 1-3 are expected.

Long term ultimate recoveries based on bottle roll and column testing were projected for each rock type and are shown in Table 1-3. Field leach recoveries for Olive have been previously projected by Kappes, Cassidy and Associates (KCA) in 2016. Overall leach pad gold recoveries are dependent on the distribution of ore types and function of time. While these ultimate recoveries represent long term results, recovery as a function of time during active mining and leaching is estimated using the fraction-extraction values presented in Section 13.

Table 1-3: Summary of Gold Recovery by Ore Type

*Eagle – Ultimate Recoveries		**Olive – Ultimate/LOM Recoveries	
Type A - Weathered Granodiorite	85.8%	Oxide	75.7% / 66%
Type B - Fresh to Weakly Altered Granodiorite	73.1%		
Type C - Sericitic, Chloritic, Carbonate Altered Granodiorite	74.9%	Transition	N/A / 55%
Type E - Weathered Metasediments	77.2%	Sulphide	N/A/ 53%

N/A = not available

\* Source: Forte (2018)

\*\* Source: KCA (2016)

## 1.7 Mineral Resource Estimates

The Eagle Gold Mine consists of the Eagle deposit, which the Eagle Main zone is currently being mined, and the Olive deposit, located approximately 2.5 km northeast of the Eagle deposit. This Technical Report includes an update to the November 2019 mineral resource estimate. For this update, two block models of grade estimates were derived, one for each deposit.

### 1.7.1 Eagle Deposit

A total of 35 new holes were drilled in the Eagle Main zone since the November 2019 mineral resource estimate. The holes targeted the Eagle Main zone's extension at depth and to the west. With this



additional drilling it was possible to join the previously named Eagle Extension zone to the Eagle Main zone. The drill hole database is comprised of 513 holes with 74,289 assays of gold in g/t for a total of 115,393 m of drilling. The original gold assays were composited to 1.52 m intervals as it is the most common sampling length with 65% of the data sampled to this length.

The geology model of the Eagle Main zone was built as a mineralized envelope with a cut-off grade of 0.15 g/t Au. The delineation of the model utilized the drill hole database of gold grades and the granodiorite unit as a geologic control on gold mineralization.

The high-grade gold outliers of the 1.52 m composites within the mineralized zone were capped to 18.0 g/t. Statistics conducted on the capped composites showed a lognormal distribution of well-behaved gold grades with a low coefficient of variation of 1.78.

The spatial continuity of the gold grades was examined with a variographic study. Results showed a main direction of gold grade continuity to the northeast at an azimuth of 50° and a range of 81 m. The second-best direction of continuity was observed to be vertical with a range of 59 m.

The gold grades of the Eagle Main zone were estimated using an ordinary kriging technique into a 10 m x 10 m x 5 m orthogonal block model. A minimum of 2 and maximum of 12 samples were used to calculate a gold grade estimate from the capped 1.52 m composites. A 3-pass estimation approach was used for the grade interpolation process and estimates were calculated within the mineralized zone only. The gold grade estimates were visually and statistically validated to ensure that no bias is present, and that the level of smoothing/variability is adequate.

The mineral resource was classified as measured, indicated, and inferred. The mineral resources were constrained within a pit shell optimized from a Lerchs-Grossman algorithm with the following parameters: US\$ 1,700/oz Au, US\$ 1.50/t mining, US\$ 2.00/t processing, US\$ 2.50 G&A, recoveries between 71% and 82%, and 45° pit slope.

The remaining mineral resources of the Eagle Main zone are presented below at a 0.15 g/t gold grade cut-off with an effective date of December 31, 2022 (Table 1-4).



Table 1-4: Pit Constrained Remaining Mineral Resources at a 0.15 g/t Au Cut-off — Effective December 31, 2022 – Eagle Main Zone

Zone	Tonnage tonnes	Avg Au Grade g/t	Content oz	Tonnage tonnes	Avg Au Grade g/t	Content oz
<b>Measured</b>				<b>Indicated</b>		
Eagle Main Zone	36,236,598	0.622	704,653	197,960,177	0.565	3,595,980
<b>Measured + Indicated</b>				<b>Inferred</b>		
Eagle Main Zone	233,196,775	0.574	4,303,536	29,595,257	0.516	497,018

Notes:

1. The effective date for the Mineral Resource estimate is December 31, 2022;
2. Mineral Resources are inclusive of Mineral Reserves;
3. 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, taxation, sociopolitical, marketing, or other relevant issues;
4. The CIM definitions were followed for classification of Mineral Resources. The quantity and grade of reported inferred Mineral Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred Mineral Resources as an indicated Mineral Resource and it is uncertain if further exploration will result in upgrading them to an indicated or measured Mineral Resource category; and
5. Mineral Resources are reported at a cut-off grade of 0.15 g/t Au, using a gold price of US\$1,700/ounces and a US\$/CAN\$ exchange rate of 0.75.

Source: Ginto (2022)

## 1.7.2 Olive Deposit

A total of 92 holes and 19 trenches were added to the drill hole database of the Olive deposit since the November 2019 mineral resource estimate. It should be mentioned that the Olive mineral resources reported in the November 2019 Technical Report are the same as for the 2016 Feasibility Study. The drill hole database is comprised of 357 holes and 81 trenches with 41,409 assays of gold and silver in g/t for a total of 65,277 m of drilling. The original gold and silver assays were composited to 1.52 m intervals as it is the most common sampling length with over 40% of the data sampled to this length.

The Olive deposit is comprised of two main zones; the Olive Zone and the Shamrock Zone, located 60 m to the north of the Olive's zone eastern extent. The geology model was built as mineralized envelopes with a cut-off grade of 0.1 g/t Au using 5 m composites due to the gold mineralization's discontinuity at a local scale. The Olive Zone is made of 28 mineralized sub-zones and the Shamrock Zone is made of 13 mineralized sub-zones. The mineralized zones are oriented to the northeast at azimuths varying from 45° to 60°.

The high-grade gold outliers of the 1.52 m composites within the mineralized zones were capped to 25.0 g/t for the Olive Zone and 18.0 g/t for the Shamrock Zone. Statistics conducted on the capped composites

showed lognormal distributions of more heterogeneous gold populations when compared to the Eagle deposit.

The spatial continuity of the gold and silver grades was examined with a variographic study. Results showed a main direction of gold grade continuity at an azimuth of 70° and ranges varying from 45 m to 54 m. For silver grades, the main direction of continuity varied from 70° to 80° azimuths with ranges varying from 41 m to 44 m.

The gold and silver grades of the Olive deposit were estimated using an ordinary kriging technique into a 10 m x 10 m x 5 m block model oriented at an azimuth of 70°. A minimum of 2 and maximum of 12 samples were used to calculate a gold grade estimate from the capped 1.52 m composites. A 3-pass estimation approach was used for the grade interpolation process and estimates were calculated within the mineralized zones only. The gold and silver grade estimates were visually and statistically validated to ensure that no bias is present, and that the level of smoothing/variability is adequate.

The mineral resource was classified as measured, indicated, and inferred. The mineral resources were constrained within a pit shell optimized from a Lerchs-Grossman algorithm with the following parameters: US\$ 1,700/oz Au, US\$ 1.50/t mining, US\$ 3.75/t processing, US\$ 0.75 G&A, recoveries between 52% and 69%, and 45° pit slope.

The mineral resources of the Olive deposit are presented below at a 0.40 g/t gold grade cut-off with an effective date of December 31, 2022 (Table 1-5).

Table 1-5: Pit Constrained Mineral Resources at a 0.4 g/t Au Cut-off - Effective December 31, 2022 - Olive Deposit

Zone	Tonnage tonnes	Avg Au Grade g/t	Au Content oz	Avg Ag Grade g/t	Ag Content oz	Tonnage tonnes	Avg Au Grade g/t	Au Content oz	Avg Ag Grade g/t	Ag Content oz
<b>Measured</b>						<b>Indicated</b>				
Olive Zone	3,481,357	1.010	113,047	2.13	238,407	6,431,158	0.956	197,669	1.77	365,977
Shamrock Zone	-	-	-	-	-	1,718,941	0.923	51,010	5.40	298,432
Olive + Shamrock	3,481,357	1.010	113,047	2.13	238,407	8,150,099	0.949	248,679	2.54	664,409
<b>Measured + Indicated</b>						<b>Inferred</b>				
Olive Zone	9,912,515	0.975	310,727	1.89	602,333	5,073,258	1.148	187,249	1.73	282,179
Shamrock Zone	1,718,941	0.923	51,010	5.40	298,432	434,409	1.379	19,260	7.67	107,124
Olive + Shamrock	11,631,456	0.967	361,737	2.41	900,765	5,507,667	1.166	206,509	2.20	389,302

Notes:

1. The effective date for the Mineral Resource estimate is December 31, 2022;
2. Mineral Resources are inclusive of Mineral Reserves;
3. 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, taxation, sociopolitical, marketing, or other relevant issues;
4. The CIM definitions were followed for classification of Mineral Resources. The quantity and grade of reported inferred Mineral Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred Mineral Resources as an indicated Mineral Resource and it is uncertain if further exploration will result in upgrading them to an indicated or measured Mineral Resource category; and
5. Mineral Resources are reported at a cut-off grade of 0.4 g/t Au, using a gold price of US\$1,700/ounces and a US\$/CAN\$ exchange rate of 0.75.

Source: Ginto (2022)

## 1.8 Mineral Reserve Estimate

The Mineral Reserve for the property is based on the Mineral Resource estimate for Eagle and Olive.

The Mineral Reserves were developed by examining each deposit to determine the optimal and practical mining method. Cut-off grades (COGs) were then determined based on appropriate mine design criteria, the adopted mining method, production capacity, and economic factors. A shovel and truck open pit mining method was selected for the two deposits.

The estimated Proven and Probable Mineral Reserves total 124.3 Mt at 0.65 g/t Au, containing 2,584 koz gold (Table 1-6). The COGs for Eagle and Olive are listed in Table 1-7.

Table 1-6: Open Pit Mineral Reserve Estimate by Deposit

Area	Classification	Ore (Mt)	Diluted Grade (g/t)	Contained Gold (k oz)
Eagle	Proven	21.1	0.68	464
	Probable	96.6	0.63	1,943
	<b>Total</b>	<b>117.7</b>	<b>0.64</b>	<b>2,407</b>
Olive	Proven	2.6	0.87	72
	Probable	4.0	0.82	104
	<b>Total</b>	<b>6.5</b>	<b>0.84</b>	<b>176</b>
<b>Eagle + Olive</b>	<b>Total</b>	<b>124.3</b>	<b>0.65</b>	<b>2,584</b>

Notes:

1. A gold price of US\$1,550/oz is assumed;
2. The effective date for the Mineral Reserve estimate is December 31, 2022 and are classified based on 2014 CIM definitions;
3. Eagle Reserves are reported at a cut-off grade of 0.20 g/t, and recoveries ranging from 73% to 86%;
4. Olive Reserves are reported at a cut-off grade of 0.24 to 0.31 g/t, and recoveries ranging from 52% to 76%;
5. A US\$:C\$ exchange rate of 0.75;
6. Dilution has been applied at 5.0% for Eagle reserves and 9.0% for Olive reserves; and
7. Gold ounces are reported as contained and do not include allowances for processing losses.

Source: VGC (2022)

Table 1-7: COGs by Deposit and Material Type

Rock Type	Direct Crushed Feed - COG (g/t)	LG Stockpile - COG (g/t)
Eagle - Oxide Granodiorite	0.28	0.20
Eagle - Altered Granodiorite	0.32	0.20
Eagle - Unaltered Granodiorite	0.33	0.20
Eagle - Oxide Metasediments	0.31	0.20
Eagle - Unaltered Metasediments	0.31	0.20
Olive - Oxide	0.36	0.24
Olive - Mixed	0.43	0.29
Olive - Sulphide	0.45	0.31

Notes:

1. Direct Crushed Feed - COG: Bottom break-even cut-off grade for material that are fed direct from the pit to the Primary Crusher/Primary Crusher Pad; and

2. LG Stockpile - COG: Incremental cut-off grade for material that are placed directly from the pit to the LG stockpile that covers leaching, re-handling, and extra incremental haulage costs only.

Source: VGC (2023)

The mineral reserve estimations take into consideration on-site operating costs (mining, processing, site services, freight, general and administration), geotechnical analysis for open pit wall angles, metallurgical recoveries, and selling costs. In addition, the Mineral Reserves incorporate allowances for mining dilution and overall economic viability.

## 1.9 Mining

The Eagle deposit is being (and the Olive deposit will be) mined using conventional open pit methods, and operate as a drill, blast, shovel, and haul operation with a nominal rate of 34,000 t/d of ore and a remaining mine life of 10 years. Open pit mining operations are comprised of a fleet of 22 m<sup>3</sup> front shovels, 12 m<sup>3</sup> front-end loaders and 136 tonnes (t) haul trucks. This fleet is supported by ancillary equipment, including: drills, graders, dozers and light vehicles. Benches are mined at a height of 10 m in both ore and waste with an overall 20 m effective bench height based on a double-bench final wall configuration.

Mining commenced in Q2 of 2019 in the Eagle pit to provide waste rock for construction and allow for access roads to be built. Stacking and leaching of the primary HLP commenced shortly afterwards in Q3 of 2019. Mining operations are well advanced now, with mining of Phase 1 complete and mining of Phase 2 and 3 of the Eagle Pit ongoing. Open pit mining will focus on the various Eagle pit phases with the smaller Olive pit coming into production in 2031 to extend mine life. Open pit mining will be completed in Q2 of 2032. Crushing and loading onto the heap leach facilities will be completed in early Q1 of 2034.

Starting from 2023, the mine is expected to produce a total of 124.3 Mt of heap leach feed and 122.9 Mt of waste, at a 0.99:1 overall strip ratio. Ore to be crushed will be hauled to the primary crusher located towards the north-east side of the Eagle pit. Low grade ore will be hauled to a stockpile commencing in 2024 for processing at the end of the mine life.

The current LOM plan focuses on achieving consistent heap leach production rates, mining of higher value material early in the production schedule, as well as balancing grade and strip ratios. The handling of the ore from the crusher to the HLPs is included in the open pit scheduling and operating cost estimation. Table 1-8 summarizes the LOM material movement by year for both the mine and the heap leach facilities.

Table 1-8: LOM Production Schedule

	Unit	Total	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>EAGLE</b>														
Ore Mined to Crusher	kt	100,611	9,500	10,494	11,494	11,494	11,494	11,494	11,494	11,494	8,994	2,659	-	-
Ore Grade to Crusher	g/t	0.70	0.82	0.73	0.78	0.80	0.74	0.70	0.69	0.54	0.53	0.64	-	-
Ore Mined to LG Stockpiles	kt	17,125	-	2,199	3,074	2,812	3,011	2,661	3,370	-	-	-	-	-
Ore Grade to LG Stockpile	g/t	0.25	-	0.24	0.25	0.25	0.25	0.25	0.25	-	-	-	-	-
Total Ore Mined	kt	117,736	9,500	12,693	14,568	14,305	14,505	14,155	14,864	11,494	8,994	2,659	-	-
Total Ore Grade	g/t	0.64	0.82	0.64	0.67	0.69	0.63	0.61	0.59	0.54	0.53	0.64	-	-
Reclaimed from LG Stockpiles	kt	17,125	-	-	-	-	-	-	-	-	-	4,799	11,494	832
Ore Grade	g/t	0.25	-	-	-	-	-	-	-	-	-	0.25	0.25	0.25
Waste Mined	kt	106,607	16,688	20,632	15,142	8,694	5,989	10,925	13,066	10,916	4,255	299	-	-
Total Mined	kt	224,343	26,188	33,324	29,710	23,000	20,494	25,080	27,930	22,410	13,249	2,958	-	-
Strip Ratio	w:o	0.91	1.76	1.63	1.04	0.61	0.41	0.77	0.88	0.95	0.47	0.11	-	-
<b>OLIVE</b>														
Ore Mined to Crusher	kt	6,536	-	-	-	-	-	-	-	-	2,500	4,036	-	-
Ore Grade	g/t	0.84	-	-	-	-	-	-	-	-	0.89	0.81	-	-
Waste Mined	kt	16,288	-	-	-	-	-	-	-	-	8,739	7,549	-	-
Total Mined	kt	22,824	-	-	-	-	-	-	-	-	11,239	11,585	-	-
Strip Ratio	w:o	2.49	-	-	-	-	-	-	-	-	3.50	1.87	-	-
<b>TOTAL MINE</b>														
Ore Mined to Crusher	kt	107,147	9,500	10,494	11,494	11,494	11,494	11,494	11,494	11,494	11,494	6,695	-	-
Ore Grade	g/t	0.71	0.82	0.73	0.78	0.80	0.74	0.70	0.69	0.54	0.61	0.74	-	-
Ore Mined to LG Stockpiles	kt	17,125	-	2,199	3,074	2,812	3,011	2,661	3,370	-	-	-	-	-
Ore Grade	g/t	0.25	-	0.24	0.25	0.25	0.25	0.25	0.25	-	-	-	-	-
Total Ore Mined	kt	124,272	9,500	12,693	14,568	14,305	14,505	14,155	14,864	11,494	11,494	6,695	-	-
Total Ore Grade	g/t	0.65	0.82	0.64	0.67	0.69	0.63	0.61	0.59	0.54	0.61	0.74	-	-
Reclaimed from LG Stockpiles	kt	17,125	-	-	-	-	-	-	-	-	-	4,799	11,494	832
Ore Grade	g/t	0.25	-	-	-	-	-	-	-	-	-	0.25	0.25	0.25
Ore Stacked	kt	124,272	9,500	10,494	11,494	11,494	11,494	11,494	11,494	11,494	11,494	11,494	11,494	832
Stacked Ore Grade	g/t	0.65	0.82	0.73	0.78	0.80	0.74	0.70	0.69	0.54	0.61	0.53	0.25	0.25
Waste Mined	kt	122,895	16,688	20,632	15,142	8,694	5,989	10,925	13,066	10,916	12,994	7,848	-	-
Total Mined	kt	247,167	26,188	33,324	29,710	23,000	20,494	25,080	27,930	22,410	24,488	14,543	-	-
Strip Ratio	w:o	0.99	1.76	1.63	1.04	0.61	0.41	0.77	0.88	0.95	1.13	1.17	-	-

Source: VGC (2023)

## 1.10 Recovery Methods

Gold is recovered through a conventional heap leach operation with a gold recovery plant. Ore is crushed through three-stage crushing and then conveyed and stacked on one of two heap leach pads. Gold is leached from the crushed ore with a cyanide solution and recovered in an ADR plant. Gold doré bars are poured on site and shipped off site for further refining by third parties.

The process flowsheet utilized at the Eagle Gold Mine is a standard and well proven recovery method in industry. Ultimate recovery of the mine is projected to be 76%.

### 1.10.1 Ore Crushing and Handling

Ore from the Eagle pit is sent to a three-stage crushing plant. The crushing circuit consists of one 375 kW primary gyratory crusher, one 932 kW secondary cone crusher and three, parallel 932 kW tertiary cone crushers. Crushing plant feed material, with a maximum top size of 1,000 mm, is trucked from the open pits and dumped directly into the primary gyratory crusher at a throughput of approximately 29,500 t/d. Primary crushed ore is conveyed to secondary crushing, or if a downstream process is down, the material is stockpiled. Stockpiled primary crushed ore is reclaimed back as supplemental feed to the secondary crusher. The secondary and tertiary crushers can receive up to 39,200 t/d. Final product size after tertiary crushing is a P<sub>80</sub> of 12.5 mm. Crushed product feeds a series of conveyors and grasshopper conveyors to a radial stacker on the HLP. Lime is added prior to stacking on the HLP for pH control.

### 1.10.2 Heap Leach Pad

The constructed primary HLP will accommodate up to 92 Mt of ore and is located approximately 1.2 km north of the Eagle Zone orebody, in the Ann Gulch valley. The base of the primary HLP is located at an elevation of 880 m above sea level (masl), and at full height, the primary HLP will extend up Ann Gulch to an elevation of approximately 1,225 masl at the top of the planned ore stack. Stacking of the primary HLP is ongoing.

The proposed secondary HLP will commence in 2029 and will accommodate the remaining ore (with expansion potential) and is planned to be located approximately 3 km east of the Eagle Zone orebody near the Olive Zone pit. The base of the secondary HLP is planned to be located in the upper portion of the basin at an elevation of 1,300 masl, and at full height, the secondary HLP will extend to an elevation of approximately 1,500 masl at the top of the planned ore stack.

The primary HLP is comprised of a number of elements: a confining embankment to provide stability to the base of the HLP and a sump for operational in-situ storage of process solution, a lined storage area for the ore to be leached, pumping wells for the extraction of solution, a lined events pond to contain excess solution in extreme events, upstream surface water interceptor ditches, and leak detection, recovery and monitoring systems to ensure the containment of solution. The secondary HLP design is proposed to mimic the primary HLP.



The primary HLP is irrigated with a barren cyanide-caustic solution fed from the process plant through pipelines and drip emitters incorporated in the HLP. The barren solution percolates through the HLP and dissolves gold producing a gold-bearing “pregnant” solution. The pregnant solution is pumped from the HLP at a nominal rate of 2,070 m<sup>3</sup>/h to the carbon adsorption circuit. The flowrate of barren solution is based on a 45-day primary leach cycle and a secondary leach cycle of additional 45-days assuming an application rate of 7-10 l/h/m<sup>2</sup> and a lift height of 12 m.

Stacking on the HLPs was initially planned to cease for the three coldest months of the year. This was to prevent the potential of freezing occurring on the HLP. Operations to date have demonstrated stable solution temperatures and a reduced risk of HLP freezing, allowing year-round stacking operations on the HLP.

### 1.10.3 Processing Plant

The pregnant solution enters the ADR plant through the carbon adsorption circuit, which consists of two trains of five cascading-flow carbon columns. The barren solution discharged from the final carbon column is pumped to the barren solution tank. Liquid sodium cyanide solution, caustic, and antiscalant are added to the barren solution to maintain the required pH and cyanide concentrations for leaching.

Loaded carbon is extracted from the first carbon adsorption columns at a rate of 8 t/d (4 t/d per train) and is acid washed prior to advancing to the desorption circuit for gold recovery in the strip vessel. The pregnant solution from the strip vessel flows to the electrowinning circuit. At the conclusion of the strip cycle, the stripped carbon is thermally regenerated in the carbon reactivation kiln and then returned to the carbon columns.

Gold sludge is plated onto steel wool cathodes in the electrowinning cells. The gold-bearing sludge is dried, fluxed, and then smelted to produce gold doré. Transportation and refinement of the doré bars is performed by third parties.

## 1.11 Infrastructure

The Eagle Gold Mine development included the construction of various ancillary facilities and related infrastructure, for which locations were selected to take advantage of local topography, to accommodate environmental considerations, and reduce capital and operating costs.

Current mine facilities and infrastructure include:

- A primary heap leach pad, comprised of a sump, a lined storage area, an in-heap storage area, pumping wells, events ponds, diversion ditches, leak detection, recovery, and monitoring systems;
- Fresh water supply systems to treat and distribute process, fire, and potable water;
- Access and site roads;

- Water treatment infrastructure, including potable and sewage treatment infrastructure;
- Power supply and distribution, including:
  - A 43.5 km long, 69 kV power supply line from the Yukon Energy Corporation’s power grid McQuesten switching station, approximately 25 km southeast of the property;
  - 13.8 kV power distribution from the mine site substation to all the facilities; and
  - Process control and instrumentation communication systems.
- Ancillary facilities, including:
  - Warehouse, cold storage, and laydown areas;
  - Mine dry;
  - Administration buildings;
  - On-site fuel storage for diesel, gasoline & propane;
  - On-site explosive storage and magazines;
  - Assay laboratory;
  - Lime Silo;
  - Temporary and permanent camp accommodations complete with recreation area, commissary, first aid and laundry facilities;
  - An incinerator;
  - Guard shack and entrance gate;
  - Truck shop, with four maintenance bays and one full size wash bay; and
  - Water Treatment Plant (WTP).

Future mine facilities and infrastructure will include:

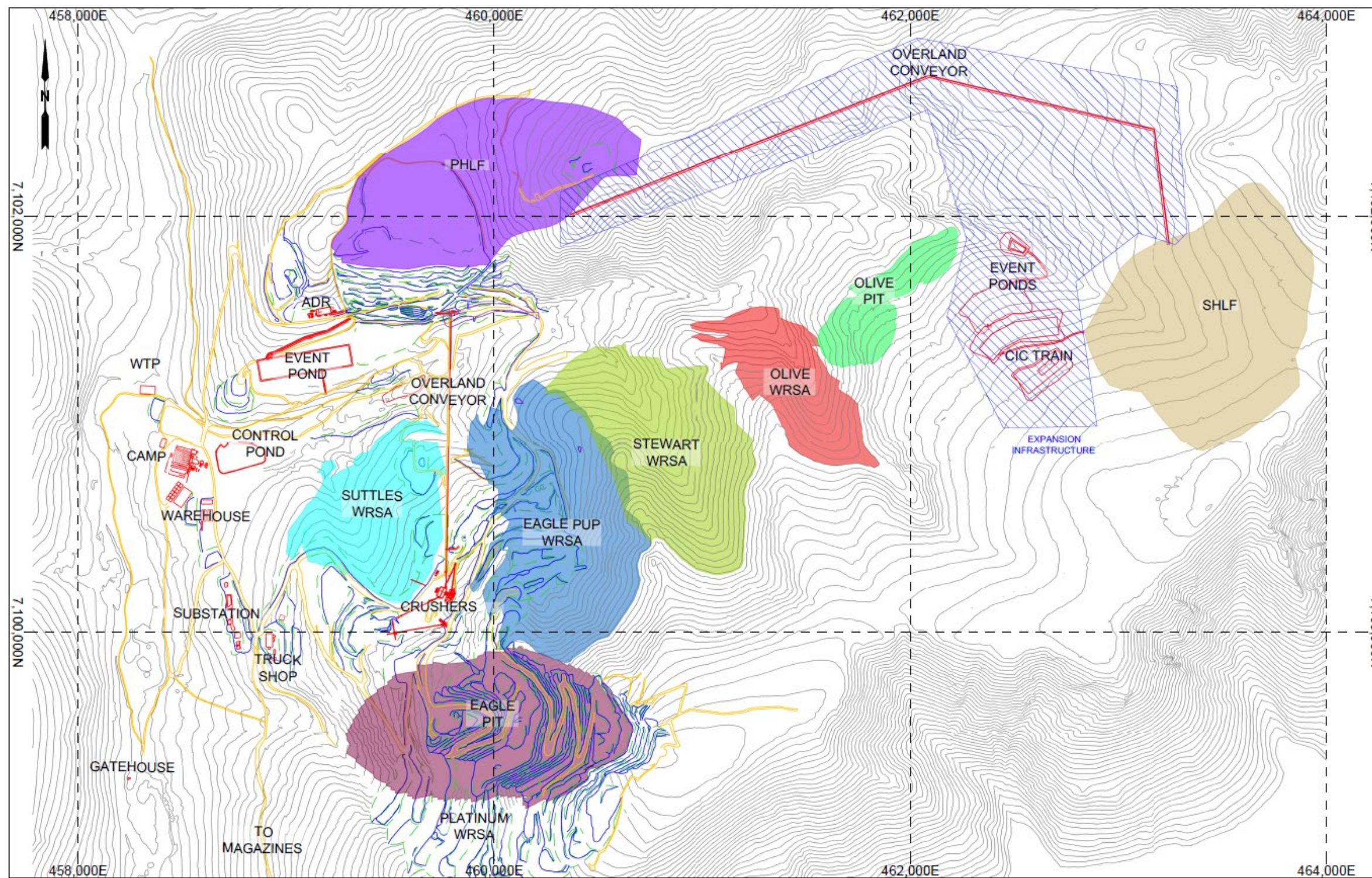
- A secondary heap leach pad, comprised of a sump, a lined storage area, an in-heap storage area, pumping wells, events ponds, diversion ditches, leak detection, recovery, and monitoring systems;
- An additional CIC train and building for the secondary heap leach pad. Loaded carbon will be trucked to the existing ADR building for further processing; and

- An overland conveyor from the termination of existing conveyors to the second heap leach.

A current site layout is provided in Figure 1-2.



Figure 1-2: Eagle Gold Mine Site Layout



Source: VGC (2023)



## 1.12 Environment and Permitting

The Eagle Gold Mine has been assessed under the *Yukon Environmental and Socio-Economic Assessment Act* (YESAA) and currently holds a Quartz Mining License (QML) and a Water Use License (WUL) to construct, operate and close the Project.

As discussed in Section 1.5, the project area has an extensive exploration history involving a number of prior operators, some of whom had undertaken the collection of baseline environmental, socio-economic, land use, and heritage data. In 2007, StrataGold re-initiated the collection of environmental baseline data, which includes the disciplines of climate, water quality, hydrology, hydrogeology, aquatic biota, wildlife, air quality and vegetation. Fieldwork to characterize climatic, hydrological, hydrogeological, air, vegetation and water quality conditions is ongoing.

Victoria Gold and prior operators have also characterized local and regional land use and socio-economic conditions, First Nations land use and activities, and archaeological and heritage resources.

Prior to construction or operational activities taking place, mining projects in the Yukon are required to undergo an assessment of potential project effects pursuant to the YESAA. The YESAA process mandates that an applicant describes the scope of the project, the existing environmental and socio-economic setting, potential environmental and socio-economic effects of the project, and the measures that will be instituted by the applicant to mitigate those effects. The applicant also has a statutory obligation to consult any First Nation or resident of any community residing in the territory in which the project will be located or might have significant environmental or socio-economic effects on.

This duty to consult the parties must be completed to the satisfaction of the Yukon Environmental and Socio-Economic Assessment Board (YESAB), based upon their consideration of any submitted material and discussions with the parties before the formal review of a project may commence.

The YESAA review process results in a recommendation by the YESAB to federal, territorial or First Nation governments or agencies that will regulate or permit the proposed activity for measures to reduce, control or eliminate project effects. These governments or agencies, referred to as Decision Bodies, will then decide whether to accept, reject, or vary the YESAB's recommendation in a final Decision Document. Upon receipt of positive final Decision Documents by the Decision Bodies, a project may then proceed to the licensing phase.

Mining projects in the Yukon require permits and approvals issued pursuant to various federal and territorial legislation. The major regulatory approvals that must be received for a mining project during the licensing phase are generally a QML, under Section 135 of the *Yukon's Quartz Mining Act*, and a WUL, under Sections 6 (1) and 7 (1) of the *Waters Act* (Yukon).

The Eagle Gold Project has successfully completed the YESAA environmental assessment resulting in a positive final Decision Document in 2013. Victoria Gold subsequently applied for and received a QML and a Type A WUL for the construction, operation, and closure of the Project.

Collectively the QML and WUL currently allow for:

- The extraction of 92 Mt of ore from the Eagle open pit;
- The construction of the Primary HLP;
- The development of two Waste Rock Storage Areas (WRSAs) immediately adjacent to the pit for the permanent storage of 132 Mt of waste rock;
- The construction and operation of crushing and conveying infrastructure;
- The construction and operation of an ADR plant;
- The development of site haul roads; and
- The construction and operation of all water management infrastructure required for mine and waste-water treatment and for the extraction and/or conveyance of water required for processing.

Pursuant to the QML and WUL, Victoria Gold was able to begin the construction of the above facilities and undertake the associated activities immediately upon posting a bond, providing issued for construction drawings, and satisfying other minor requirements.

Project components not currently included in the QML or WUL include the Olive pit, expansion of one of the WRSAs into an adjacent watershed, the secondary HLP and the related project infrastructure required for developing these facilities. The project components not currently included in the QML or WUL will need to undergo a review pursuant to the YESAA and require the subsequent amendment to each license. Victoria Gold has estimated permitting of these additional elements can be completed within three years.

The Olive pit and associated WRSA, development of a third WRSA, expansion of one of currently permitted WRSAs into an adjacent watershed, the secondary HLP and the related project infrastructure required for developing these facilities are not considered in the mine plan until 2026. This provides sufficient time to complete the assessment of the facilities pursuant to the YESAA and receive the required regulatory amendments in advance of intended development and does not present a significant risk of interruption to operations.

## 1.13 First Nations' Considerations

The project is located entirely within the Traditional Territory of the First Nation of Na-Cho Nyäk Dun (FNNND). The statutory requirement to consult on the project and to satisfy previous, and any future, assessments of the project under the YESAA involves the FNNND. To ensure that the FNNND, and the community of Mayo, have an opportunity for input at all key stages of project development, Victoria Gold has made it a priority to conduct early and ongoing consultation with the FNNND, and the community of Mayo, to ensure opportunities for input from both parties at all key stages of project development.

On October 17, 2011, Victoria Gold and the FNNND signed a comprehensive Cooperation and Benefits Agreement (CBA). The CBA replaced an earlier Exploration Cooperation Agreement and applies to the Eagle Gold Mine development and exploration activities conducted by Victoria Gold anywhere in the FNNND Traditional Territory south of the Wernecke Mountains.

The objectives of the CBA are to:

- Promote effective and efficient communication between Victoria Gold and the FNNND in order to foster the development of a cooperative and respectful relationship and FNNND support of Victoria Gold's exploration activities on the project;
- Provide business and employment opportunities, related to the project, to the FNNND and its citizens and businesses in order to promote their economic self-reliance;
- Establish a role for the FNNND in the environmental monitoring of the project and the promotion of environmental stewardship;
- Set out financial provisions to enable the FNNND to participate in the opportunities and benefits related to the project; and
- Establish a forum for Victoria Gold and the FNNND to discuss matters related to the project and resolve issues related to the implementation of the CBA.

## 1.14 Capital Cost Estimates

Capital costs on a year-by-year basis are presented in Table 1-9, and total \$291.9 M, not including a \$65.3M provision for closure/reclamation. Capital expenditures at the Eagle Gold Mine are broken into the following group:

- Mining: Repurchasing retired equipment, major rebuilds of the production fleet, purchases of additional production equipment as required to achieve the LOM plan, geotechnical infrastructure & investigations, general site infrastructure (haul road expansions);
- Processing: Phased liner expansions of the Primary HLF, permanent conveyor extensions, Secondary HLF, additional CIC column and building, secondary overland conveyor, control & event ponds for secondary HLF, semi-mobile crusher for Olive, replacement of grasshoppers and stacking equipment, additional generators & powerline expansion; and
- General & Administrative: Light vehicle replacements, camp infrastructure, small site infrastructure works, etc.

Capital projects at the Eagle Gold Mine are forecasted on an annual basis with an emphasis placed on the upcoming budgeting year. Capital cost assumptions in this report reflect the current life of mine assumptions and design criteria for the mine. Estimates are based off current actual costs and designed quantities.



Table 1-9: LOM Capital Expenditures

	LOM	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Mining Operations	<b>111.5</b>	15.1	11.0	19.7	15.2	10.6	11.7	12.7	7.4	8.0	-	-	-	-
Process Operations	<b>41.1</b>	10.1	7.0	4.0	4.0	4.0	3.0	3.0	3.0	2.0	1.0	-	-	-
Growth	<b>139.3</b>	13.1	4.2	18.9	9.1	20.5	58.1	15.4	-	-	-	-	-	-
<b>Total</b>	<b>291.9</b>	<b>38.3</b>	<b>22.2</b>	<b>42.6</b>	<b>28.4</b>	<b>35.1</b>	<b>72.8</b>	<b>31.2</b>	<b>10.4</b>	<b>10.0</b>	<b>1.0</b>	-	-	-
Reclamation	<b>65.3</b>	1.6	-	-	-	-	-	-	-	-	6.7	10.1	16.8	30.2

Source: VGC (2023)

## 1.15 Operating Cost Estimates

Operating costs include all normal, recurring costs of production including:

- Open pit mining (labour, maintenance, fuel, explosives, technical services);
- Processing (process consumables, maintenance);
- Site services (camp, site infrastructure and maintenance);
- General & Administrative (Health & Safety, Environment, HR, supply chain, general admin, corporate support);
- Power generation; and
- Site labor.

Operating budgets are based on first principal calculations provided by each respective department as well as historical cost trending. Budgets are updated in detail annually to reflect changes in markets, consumable prices, and site-specific operating parameters. Annual budgets are scrutinized internally by department heads, senior management, and strategic business planners to ensure costs align with business objectives and sufficient detail is present.

The Eagle Gold Mine operating costs consist of both variable and fixed cost items. Variable costs have a linear correlation to cost drivers such as open pit production, equipment hours or process throughput, while fixed costs do not.

For the mineral reserves in this report and the schedule of mining and processing envisioned for them, Table 1-10 depicts modeled estimates of the associated operating costs for the remainder of Eagle Gold Mine’s production schedule in Canadian dollars and in real terms.

Table 1-10: Operating Cost Summary

Category	LOM (M\$)	\$/t Leached <sup>(1)</sup>
Mining	818	3.31 <sup>(2)</sup>
Processing	1122	9.03
Site Services	206	1.66
G&A	284	2.28
<b>TOTAL</b>	<b>2,430</b>	<b>19.55</b>

Notes:

(1) (2) Mining operating costs are presented as \$/t mined.

Source: VGC (2023)

## 1.16 Economic Analysis

An economic model was developed to reflect projected annual cash flows and sensitivities of the project. All costs, metal prices and economic results are reported in Canadian dollars (C\$ or \$) unless stated otherwise.

The parameters used in the economic model and the results are shown in Table 1-11. The LOM economic model does not calculate a meaningful Internal Rate of Return (IRR) as there are no upfront annual net cash outflows. This economic model excludes any servicing of the debt incurred to finance the Project.

All costs and revenues are assumed to be paid and received in the period that they are incurred and produced. There is no working capital in the model.

Table 1-11: Economic Results

Parameter	Unit	Value
Au Price	US\$/oz	1,700
Exchange Rate	US\$:C\$	0.75
Pre-Tax Free Cash Flow	M\$	1,602
	Avg M\$/yr <sup>(1)</sup>	166
After-Tax Free Cash Flow	M\$	1,204
	Avg M\$/yr <sup>(2)</sup>	125

Parameter	Unit	Value
Pre-Tax NPV <sub>5%</sub>	M\$	1,257
After-Tax NPV <sub>5%</sub>	M\$	954

Notes:

(1)(2) For first 8 years of operations.

Source: VGC (2023)

## 1.17 Sensitivities

Sensitivity analyses were performed using gold price, exchange rate, head grade, sustaining capital cost estimate, and operating cost estimate (OPEX) as variables. The value of each variable was changed up to plus and minus 15% independently, while all other variables were held constant. The results of the sensitivity analyses are shown in Table 1-12.

Table 1-12: Sensitivities Analyses

Change	-15%	-10%	-5%	0%	5%	10%	15%
Gold Price	623	735	845	954	1,063	1,172	1,281
F/X Rate	630	739	847	954	1,061	1,168	1,275
Head Grade <sup>(1)</sup>	654	755	855	954	1,054	1,151	1,250
OPEX	1,144	1,080	1,017	954	891	828	764
CAPEX <sup>(2)</sup>	981	972	963	954	945	937	927

Notes:

(1) Head grade sensitivity is only a representation of direct grade increase/decrease and does not reflect any other changes to the mine plan (i.e., COGs or changes to operating costs).

(2) Capex sensitivity does not include reclamation capital.

Source: VGC (2023)

After-tax NPV's were evaluated using a wider range of sensitivities to different combinations of gold price and exchange rate. The sensitivities were calculated between gold prices from \$1,400 to \$2,400/oz and exchange rates between 0.60 to 0.90 US\$:C\$. The results are presented in Table 1-13 in C\$.

Table 1-13: After-Tax NPV<sub>5%</sub> Sensitivity to Gold Price and FX Rate (M \$)

FX	Au Price (US\$/oz)										
	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
0.90	176	330	476	593	703	812	919	1,026	1,133	1,239	1,345
0.85	300	457	584	701	816	929	1,042	1,156	1,269	1,380	1,493

FX	Au Price (US\$/oz)										
	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
0.80	434	574	699	820	941	1,061	1,182	1,301	1,420	1,540	1,659
0.75	563	696	826	954	1,083	1,211	1,338	1,465	1,592	1,719	1,846
0.70	693	832	969	1,107	1,244	1,380	1,517	1,653	1,789	1,925	2,061
0.65	839	987	1,135	1,283	1,429	1,576	1,722	1,869	2,015	2,162	2,308
0.60	1,007	1,168	1,327	1,486	1,645	1,804	1,962	2,121	2,279	2,439	2,600

Source: VGC (2023)

## 1.18 Interpretations and Conclusions

The Eagle Gold Mine is now moving into its fourth year of production since the release of the 2019 Technical Report. The Reserve model has performed exceptionally well, reconciling to within 1% of actual ounces mined to date. Ultimate gold recovery projections remain unchanged from the 2019 Technical Report assumptions. Nameplate production capacity has been achieved and proven and is expected to be maintained moving forward. Costs are higher than the 2019 Technical Report, reflecting recent inflationary pressures and a better understanding of operational requirements moving forward.

The economic analysis presented in this project results in positive free cash flows after tax using the assumptions detailed in this report and supports the Mineral Reserve estimates.

## 1.19 Recommendations

### 1.19.1 Eagle Exploration

The recommended exploration drilling for the Eagle deposit consists of a 3,000 m – 10-hole diamond drill hole program. The program is estimated at \$1.55 million. This program would include six holes along the southern mineralized zone of the Granodiorite contact, two offset holes on the southeast contact near the strongly mineralized trench, and two holes on the north contact dipping south towards platinum gulch, aiming to test the mineralized zone trending to the west.

### 1.19.2 Olive Exploration

The recommended exploration for the Olive deposit drilling consists of a 1,500 m – 5-hole diamond drill hole program. The program is estimated at \$1.14 million. This program would include five holes targeting expansion of the deposit to the west and near Olive creek, aiming to test the intrusive-metasediment contact.

## 2 INTRODUCTION

### 2.1 Basis of Technical Report

This Technical Report was prepared by Victoria Gold, with the support of IQPs supplied by JDS and Ginto.

The purpose of this Technical Report is to:

- Present an updated Life of Mine plan to the 2019 Technical Report that incorporates the recent data and actual economics of the mining operation, including the following:
  - Actual operating cost data;
  - An expanded resource estimate for both the Eagle Zone and the Olive Zone based on new diamond drill information);
  - Updated mine plan and productions schedule; and
  - Updated metal prices and other cost input assumptions.

Much of the technical and financial information in this Technical Report is based on information from the 2019 Technical Report and based on actual operating performance and costs over the subsequent years of operation.

This Technical Report is not triggered by any event and is being voluntarily submitted by Victoria Gold.

### 2.2 Scope of Work and Responsibilities

The Qualified Persons (QPs) preparing this report are specialists in the fields of geology, exploration, Mineral Resource and Mineral Reserve estimation and classification, geotechnical, environmental, permitting, metallurgical testing, mineral processing, processing design, capital and operating cost estimation, and mineral economics.

This report was prepared primarily by Victoria Gold employees and management with the support of some independent consultants. Accordingly, most contributors to this report and QPs are not independent of Victoria Gold.

The following individuals, by virtue of their education, experience, and professional association, are considered QPs as defined in the NI 43-101, and are members in good standing of appropriate professional institutions. The QPs are responsible for specific sections as follows in Table 2-1.

Table 2-1: Qualified Person Responsibilities

Qualified Person	Company	Scope of Responsibility
Nico Harvey, P.Eng.	Victoria Gold Corp.	1, 2 to 6, 15 to 16 (excluding 16.3, 16.8.2), 18 to 26
Paul Gray, P.Geo.	Victoria Gold Corp.	7 to 12, 24
Marc Jutras, P.Eng., M.A.Sc.,	Ginto Consulting Inc.	14
Jeff Winterton, P.E.	Victoria Gold Corp.	13, 17
Michael Levy, P.E., P.G.,P.Eng.,	JDS Energy & Mining Inc.	16.3, 16.8.2

Source: VGC (2023)

Independent QP visits to the Eagle Gold Mine were conducted as follows:

- Michael Levy visited the mine site on September 28-29, 2022 and March 13-17, 2023; and
- Marc Jutras visited the mine site on November 3-5, 2022.

All other QPs are Victoria Gold employees that conduct regular site visits in the performance of their duties.

## 2.3 Sources of Information

The sources of information include data and reports supplied by Victoria Gold personnel as well as documents cited throughout the report and referenced in Section 27. In particular, background project information was taken directly from the following reports:

- “Eagle Gold Project Feasibility Study” prepared by Wardrop Engineering Inc. (Wardrop 2012);
- “Eagle Gold Feasibility Study” prepared by JDS Energy & Mining Inc. (JDS 2016); and
- “Eagle Gold Technical Report” prepared by JDS Energy & Mining Inc. (JDS 2019).



## 2.4 Units, Currency and Rounding

Unless otherwise specified or noted, the units used in this Technical Report are metric. Every effort has been made to clearly display the appropriate units being used throughout this Technical Report. Currency is in Canadian dollars (C\$ or \$) unless otherwise stated.

This report includes technical information that required subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, the QPs do not consider them to be material.

### 3 RELIANCE ON OTHER EXPERTS

The QPs opinions contained herein are based on information provided by Victoria Gold and others throughout the course of the study. The QPs have taken reasonable measures to confirm information provided by others and take responsibility for the information.

The QPs used their experience to determine if the information from previous reports was suitable for inclusion in this Technical Report and adjusted information that required amending.

## 4 PROPERTY DESCRIPTION AND LOCATION

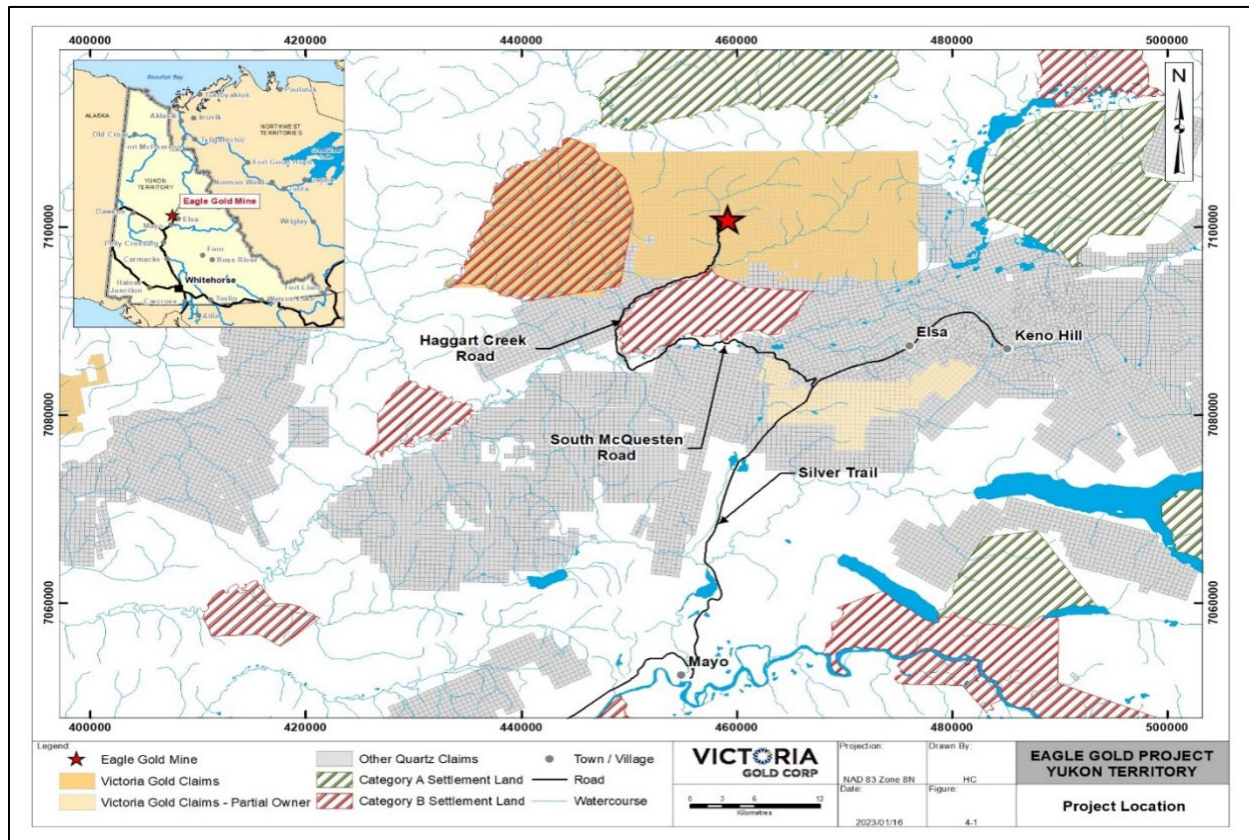
### 4.1 Location

The Eagle Gold Mine is located in central Yukon, in the Traditional Territory of the First Nation of Na-Cho Nyäk Dun (FNNND), and within the Stewart River sub-basin of the Yukon River Watershed. The majority of the Project lies within the Dublin Gulch Watershed. Dublin Gulch is a second order stream that is a tributary to Haggart Creek, which flows to the South McQuesten River. Elevations in the vicinity of the project range from about 730 to 1,525 masl.

The centre of the Project is at approximately 64°01'30" N latitude and 135°49'30" W longitude or UTM Coordinates 7,100,060N / 459,680E, Zone 8, North American Datum (NAD) 83.

A Project location map is provided in Figure 4-1.

Figure 4-1: Eagle Gold Project Location



Source: VGC (2023)

## 4.2 Mineral Tenure

The Mine is situated within the Dublin Gulch property which is a contiguous block of 1,914 quartz claims, 10 quartz leases, and one federal crown grant. All of the Dublin Gulch mineral titles are held by Victoria Gold (Yukon) Corp., a wholly owned-directly held subsidiary of Victoria Gold. The Dublin Gulch property is rectangular in shape and is approximately 35,000 ha.

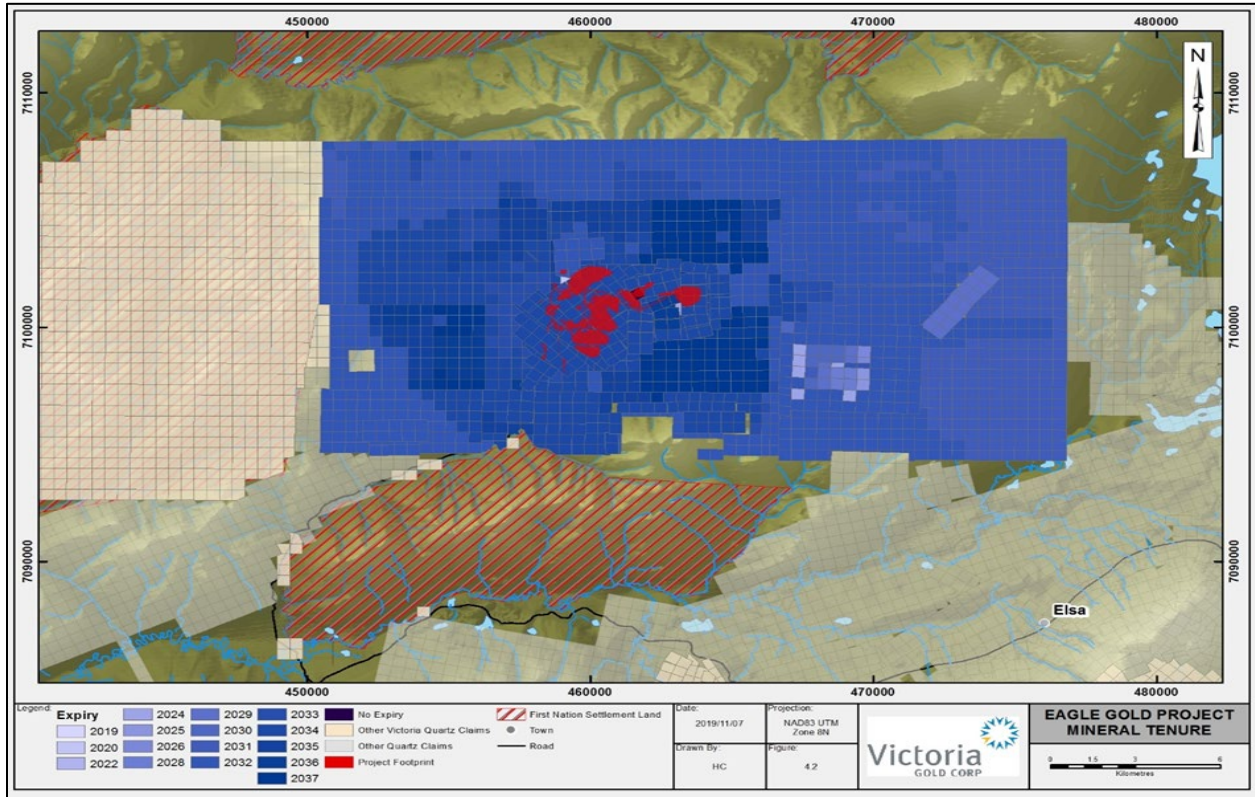
In 1996, the claims which host a portion of the Eagle deposit, as it had been defined at that time, were surveyed by a Canada Lands surveyor to ensure that full title was held over the deposit. The claims that were to host the main HLP for the 1996 mine plan were also surveyed. These surveys were completed and satisfactorily registered and the boundaries of those claims are considered definitive.

In 2013, the claims that host the Eagle deposit as it was then defined, the two WRSAs immediately north and south of the Eagle deposit, and the proposed HLF were surveyed by a Canada Lands Surveyor to define their boundaries and ensure that no gaps in the claims exist. As a result of this process, two additional claims were staked to cover minor errors in historic staking. These surveys have defined the boundaries of the additional claims and the surveyed claims cover the current Eagle open pit, the Eagle Pup and Platinum Gulch WRSAs to the north and south of the Eagle open pit, and the primary HLF.

The mineral rights held by Victoria Gold include all minerals and the right to enter on and use and occupy the surface of the claims for the operation the mine. Mineral claims in Yukon can be maintained in good standing by performing approved exploration work, or making payments in lieu of work, of \$100 per claim per year.

A list of the claims, leases and grant that comprise the Dublin Gulch property are provided in Appendix A and are shown in Figure 4-2.

Figure 4-2: Mineral Tenure Map



Source: VGC (2019)

### 4.3 Mining Rights

The primary legislation governing mining in Yukon is the *Quartz Mining Act* (QMA) and the Quartz Mining Land Use Regulations. The regulatory body charged with overseeing the QMA is the Department of Energy, Mines and Resources (EMR).

Ownership of quartz claims pursuant to the QMA carries the right to surface access and use for the exploitation of minerals contained within the claims. A claim holder must however make an application to the Minister of EMR to engage in development or production activities and may only conduct these activities in accordance with the terms and conditions of a license issued by the Minister. The license issued by the Minister is a Quartz Mining License (QML) which specifies the duration, activities, and claims, among other matters, that a licensee and claim holder must adhere to and operate within.

The permitting required for the Mine is discussed further in Section 20.



## 4.4 Mine Agreements

The Dublin Gulch property is subject to underlying agreements, four of which are material to the Eagle Gold Mine:

- The Eagle deposit falls entirely within claims that are subject to a royalty historically known as the Mar Gold Zone Royalty. This royalty historically required minimum annual royalty payments of \$20,000 or a production royalty of 2% of the gross returns received from the sale of all metals produced from the claims to a maximum of \$1,000,000 after which the royalty reverts to 1%. In 2019, Victoria Gold executed an agreement with the current royalty holder to buy down the production royalty and as such the royalty is now 1% of the gross returns;
- A portion of the Olive deposit falls within a claim that is subject to the Queenstake Mar Tungsten Royalty. This royalty is a 1% net smelter return royalty (NSR) payable only upon the commencement of production;
- The Eagle and Olive deposits fall entirely within claims that are subject to the Osisko Gold Royalty. This royalty is a 5% NSR royalty. After an aggregate of 97,500 ounces of refined gold have been delivered to Osisko, the royalty shall be reduced to a perpetual 3% NSR; and
- The Eagle and Olive deposits fall entirely within claims that are subject to an offtake agreement. The offtake grants the right to purchase up to 25% of the annual gold production at prevailing market prices.

Other than the royalties described above, the project is free and clear of any material liens or third-party interests.

## 4.5 Environmental Liabilities and Considerations

Operational activities related to the Eagle Gold Mine are conducted primarily under QML-0011 granted by EMR under the QMA and a Type A Water Use Licence granted by the Yukon Water Board under the *Waters Act* and the Waters Regulations. These authorizations permit Victoria Gold to construct, operate and reclaim the facilities directly related to the Eagle Gold deposit including the open pit, primary heap leach pad, two waste rock storage areas, processing and crushing plant, mine camp, water management infrastructure, haul and service roads, and liquid and solid waste management facilities. Pursuant to the terms of these authorizations, a surety bond in the amount of \$68.7 M has been arranged and executed by Victoria Gold in favour of the Government of Yukon.

The surety bond represents the maximum cost anticipated, on a two-year look ahead basis for site activities, for a third party to fully reclaim project disturbances and monitor the effectiveness of such reclamation activities (and address maintenance as could be reasonably foreseen). This arrangement is common practice for all Yukon mining projects and is considered a standard mine related matter that does not present significant environmental liability. The value of the surety bond will continue to be assessed,



and agreed upon, every two years by the related regulatory authorities and Victoria Gold for the life of the Project.

## 4.6 Property Risks

There are no known factors that may materially affect access, title or the right or ability to perform any of the activities contemplated herein.

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

### 5.1 Accessibility

The Mine, 90 km from the community of Mayo, has year-round access via the Silver Trail (Highway 11) onto the 45 km access road, the South McQuesten Road (SMR) and the Haggart Creek Road (HCR) which terminates at the Project site. The SMR and the HCR are public roads, regulated under the Yukon Highways Act; however, the SMR is only maintained during the summer by the Yukon Government Department of Highways and Public Works (HPW), whereas the HCR is considered a “public unmaintained” road.

Victoria Gold conducts snow clearing activities on both the SMR and HCR on an as needed basis and general maintenance on the HCR under the authority of permits granted by HPW.

### 5.2 Local Resources and Infrastructure

Mayo has a population of approximately 450 persons and offers accommodation, fuel, a nursing station, and earthmoving contractors. The Yukon Government maintains a 1,400 m gravel airstrip about 3 km north of Mayo, which has been certified by Transport Canada, and has supported scheduled service by air carriers. The Project is about 45 km straight-line distance north-northeast of Mayo. Most major services and supplies are available in Whitehorse.

The Mine is currently connected to the Yukon Energy Corporation electrical grid. All major facilities required by the Mine are operating on grid power.

A broader range of services is available in Whitehorse, Yukon, located about six hours by road to the south of the project. Whitehorse has a population of 34,698 (Yukon Bureau of Statistics) and has regularly scheduled air service to Vancouver, Edmonton, Calgary, and Fairbanks.

The property is approximately 665 km by all-weather highway from the deep sea and barge port of Skagway, Alaska.

### 5.3 Climate

Central Yukon has a northern continental climate. The mean annual temperature for the Mine area is approximately -3.7°C, with an average annual range of 33.5°C measure at a meteorological station located near the Mine camp. January is the coldest month, July the warmest. Annual precipitation in the region ranges from 375 to 600 mm, about half of which falls as snow. The Mine is in operation year-round.

## 5.4 Physiography

The topography of the property area is characterized by rolling hills and plateaus ranging in elevation from approximately 800 masl to a local maximum of 1,650 masl at the summit of Potato Hills and is drained by deeply incised creeks and canyons. The ground surface is covered by residual soil and felsenmeer. Outcrops are rare, comprising generally less than two percent of the surface area, and are limited to ridge tops and creek walls.

Lower elevations are vegetated with black spruce, willow, alder and moss, and higher elevations by subalpine vegetation. Patchy permafrost occurs on north-facing slopes (Figure 5-1 through Figure 5-3). There are sufficient surface rights held by Victoria Gold by virtue of the claims, leases and permits described herein for current mining operations and, with certain amendments to operational licenses, those contemplated in the future.

Figure 5-1: Typical Landscape in the Project Area - Eagle Zone and Platinum Gulch Waste Rock Storage Area



Source: VGC (2023)

Figure 5-2: Typical Landscape in the Project Area - From primary Heap Leach Facility Facing South Toward Crushing Area and Eagle Pit



Source: VGC (2023)



Figure 5-3: Typical Landscape in the Project Area - From Eagle Pit facing North Toward Primary Heap Leach Facility



Source: VGC (2023)

## 6 HISTORY

### 6.1 Management and Ownership

In 1977, Queenstake Resources Ltd. staked the Mar claims in the Ray Gulch area to cover a tungsten bearing skarn. This property was optioned to CanTung, who explored for gold and tungsten during 1977 – 1986 which led to the discovery of the Eagle Zone 3 km southwest of the original tungsten occurrences. In 1991, the property was acquired by Ivanhoe Goldfields.

In 1994, First Dynasty Mines Ltd. acquired the property through its acquisition of Ivanhoe Goldfields, and subsequently formed New Millennium Mining Ltd., and transferred Dublin Gulch to the new entity. In June 2002, First Dynasty changed its name to Sterlite Gold Limited.

In October 2004, StrataGold Corporation purchased the Dublin Gulch and Clear Creek gold properties from Sterlite. In June 2009, through a Plan of Arrangement, StrataGold was acquired by Victoria Gold.

### 6.2 Exploration History

Queenstake focused their exploration activities on an area historically known as Mar Tungsten (now Wolf Tungsten) north-east of the Eagle Zone and completed a small geological mapping and sampling program. When CanTung assumed control of these claims, and additional claims located near the Eagle Zone from another prospector, they retained Bema to manage the program.

Bema conducted first phase geological mapping which included an outcrop sampling program delineating the stratigraphic controls of the tungsten mineralization. This was followed up with a trenching program to expose bedrock in areas of shallow to moderate overburden thickness. CanTung also conducted geophysical survey programs that were later supplemented with Very Low Frequency Electromagnetic (VLF-EM) surveys focused on the tungsten skarns. Subsequently, Bema and CanTung completed an extensive diamond drilling program on the Mar Tungsten Zone and branched out to include trenching along the regional gold fault-vein system. After completing follow-up drilling programs on the tungsten target, CanTung returned the Mar Tungsten Zone and adjacent gold claims to Queenstake.

When Ivanhoe Goldfields acquired the property, they carried out exploration work based on a “Fort Knox-type” intrusive-hosted gold exploration model. Ivanhoe Goldfields continued exploratory work on the Eagle Zone via drilling, trenching, soil sampling, geophysical surveys, baseline environmental monitoring, as well as mineralogical and metallurgical studies.

First Dynasty Mines Ltd. subsequently undertook further exploration work on the Eagle Zone and through the newly formed New Millennium Mining Ltd. engaged Mineral Resource Development Inc. (MRDI) to produce a FS completed in 1997. Due to declining commodity prices, little further exploration work was undertaken on the Eagle Zone until the acquisition of the property by StrataGold Corporation.



In 2006, Wardrop Engineering Inc. (Wardrop) produced a NI 43-101 resource estimate for StrataGold consisting of an Indicated Resource totalling 66.5 Mt grading 0.92 g/t and an Inferred Resource totalling 14.4 Mt grading 0.80 g/t based on historic drilling and StrataGold 's 2005 drill campaign. StrataGold conducted further drilling on Eagle from 2006 – 2008 and Wardrop completed an updated NI 43-101 Mineral Resource estimate on the Eagle Zone Deposit in January 2009 adding 37% to the Indicated Resource for a total of 2.69 M oz of gold averaging 0.849 g/t gold. This Mineral Resource estimate incorporated 13,058 m of drilling from 2006 – 2008 into the previously-stated resource estimate.

In 2008, StrataGold commissioned SRK to complete a Preliminary Assessment for tungsten on the Mar Tungsten deposit (now Wolf Tungsten). SRK estimated an Indicated Resource of 12.7 Mt grading 0.31% WO<sub>3</sub> and an Inferred Resource of 1.3 Mt grading 0.30% WO<sub>3</sub>, an 11-year mine life, 15.5% IRR and NPV of \$24 M at an 8% discount rate.

In June 2009, after Victoria Gold acquired StrataGold, further exploration on the Eagle Zone was conducted and Victoria Gold commissioned a Pre-Feasibility Study (PFS) by Scott Wilson Roscoe Postle Associates. Work in 2009 focused on gathering further information on the Eagle Zone by drilling deep exploration holes and it was found that mineralization extended to considerable depths beyond the pit bottom models at that time.

Further field work around Olive and Shamrock, two targets identified within the Dublin Gulch property by previous operators, identified a continuous, structurally controlled corridor of mineralization, collectively called the 'Potato Hills Trend'.

In 2010, Victoria Gold completed additional exploration and geotechnical drilling on Eagle to quantify alteration, to verify the absence of mineralization (condemnation holes), for exploration, and for geotechnical, engineering, and environmental purposes. Data from the 2010 drill program was incorporated into a May 2011 NI 43-101 update to previous resource and reserve estimates in advance of a FS.

In 2011, 78 holes were drilled on Eagle to quantify alteration, for exploration, and for geotechnical, engineering, and environmental purposes. In February 2012, Victoria Gold announced the results of a NI 43-101 FS for the project completed by Wardrop Engineering Inc., Tetra Tech, with an effective date of April 18, 2012.

During the 2012 and 2013 field seasons, additional holes were drilled for exploration, to verify the absence of mineralization (condemnation holes), and for geotechnical engineering investigation to support detailed engineering.

In 2014, exploration drilling and trenching focused on the Olive Zone with the completion of 68 drill holes for exploration, metallurgical testing, and geotechnical purposes. Material from this program was used to establish the heap leach recoveries and kinetic results in 2015. Victoria Gold continued drilling on the Olive and subsequently the Shamrock Zones in 2016 to support the integration of satellite zones into future mine plans for the Eagle Gold Mine. The exploration program in 2017 continued to primarily focus on satellite zones and other targets within the greater Dublin Gulch claim block with 205 diamond drill

holes completed at the Olive, Shamrock, Bluto, and Rex/Peso targets. Drilling was also completed within the eastern and western extents of the Eagle Zone and Steiner target area.

In 2018, concurrent with the first full year of construction at the Eagle Gold Mine, a modest exploration program was undertaken with 10 drill holes completed on the Olive Deposit.

Since the 2019 Report, two additional drilling programs have been completed. One in late 2020 into 2021, completing 13 holes and another in 2022 completing 22 holes. Both programs were primarily focused on the Eagle “extension” zone. The 2022 program allowed for the extension zone to be joined into the Eagle Main zone.

## 6.3 Production History

Pre-production of the Eagle Pit commenced on March 1, 2019 and continued until commercial production was announced on July 1<sup>st</sup> of 2020. Approximately 13.1 Mt of material was mined during this period.

Since production commenced in 2019, a total of approximately 67.0 Mt of material has been mined from the Eagle pit. This includes 26.8 Mt of ore and 40.2 Mt of waste. As of December 31, 2022, 25.5 Mt of ore was stacked on the primary HLP. The remainder of the ore was placed in short term stockpiles. Total gold production since start up to December 31, 2022 is 448 thousand ounces.

## 7 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Geological Setting

The geological setting of the Dublin Gulch property (Eagle Gold Project or Mine) is one of upper Proterozoic to lower Paleozoic clastic sedimentary rocks that have undergone regional deformation including Cretaceous age thrust faulting and subsequent granitoid intrusions. Mineralization is associated with granitic intrusive bodies, here described as the Eagle Zone and Olive Zone gold deposits, which are hosted primarily in granodioritic rocks.

### 7.2 Regional Geology

The property is located in the north-central part of the Selwyn Basin, which is a fault-controlled epicratonic basin. The stratigraphy of this basin is divisible into four predominantly clastic lithological units. From youngest to oldest they include; the Lower Schist, Keno Hill Quartzite, Upper Schist, and Hyland Group (formerly the Grit Unit). The Lower Schist is of probable Mesozoic age and the Upper Schist and Keno Hill Quartzite are of Paleozoic age (Devonian-Mississippian). The Hyland Group is of Proterozoic to Lower Cambrian age. These units have been juxtaposed by laterally extensive, northward-directed thrusting that occurred in early Cretaceous time.

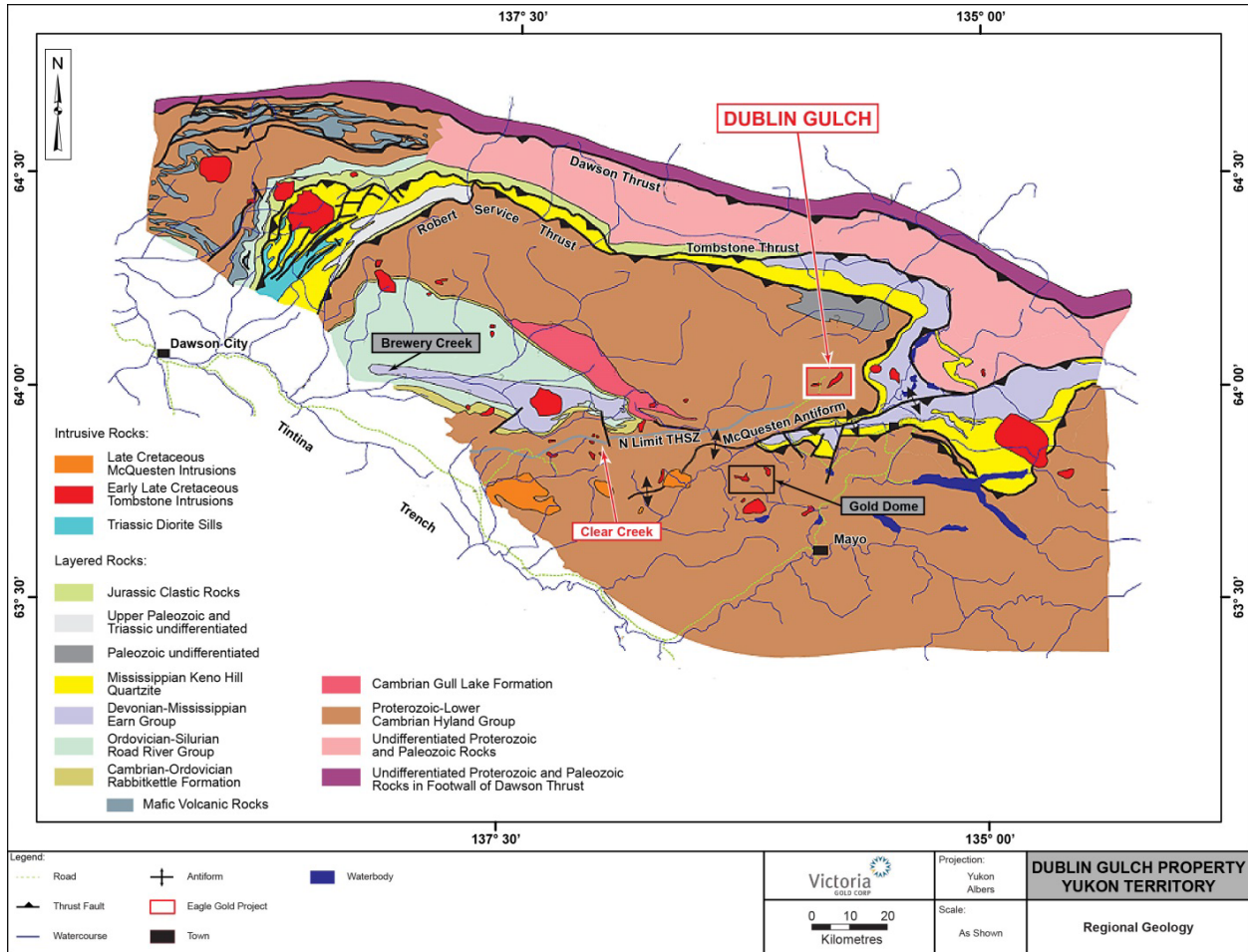
There are three principal thrust sheets in the region known as the Dawson Thrust, the Tombstone Thrust, and the Robert Service Thrust, respectively. The Robert Service Thrust is proximal to the property area and is inferred to have superimposed the Proterozoic–Cambrian age Hyland Group upon the Mississippian-age Keno Hill Quartzite (Figure 7-1).

Four phases of deformation have been documented. Only the first two resulted in the generation of penetrative structures. Thrusting during the first phase resulted in the widespread development of foliation that was subsequently deformed by gentle, regional scale folding during the second phase of deformation. Several east-west trending, west-plunging anticlines in the Dublin Gulch area are attributed to this second deformational event.

During the mid-to-late Cretaceous period, there were three granitoid intrusion events: the Selwyn Suite (between 104 and 98 Ma), the Tombstone Suite (between 94 and 92 Ma), and the McQuesten Suite (64 Ma). The Selwyn and Tombstone intrusive events were probably synchronous with the second regional folding event. Intrusives are commonly emplaced within the Hyland Group, and less commonly within the Upper Schist.

Cretaceous-age deformation and intrusion are possibly related to north-northeast directed subduction and related arc-trench magmatism of the oceanic Farallon Plate beneath continental North America.

Figure 7-1: Regional Geology Setting



Source: Wardrop (2012)

Numerous mineral deposits in the district are associated with the Cretaceous-aged intrusives and they are generally vein, shear, and skarn related. Gold, silver, lead, zinc, and tungsten are the principal elements of economic interest. The Tombstone Suite forms part of the Tombstone Gold Belt, which is the eastern part of the Tintina Gold Province. The Tombstone Suite is the primary source of intrusion-hosted gold deposits in Yukon. The western portion of the Tintina Gold Province has been dextrally displaced approximately 450 km by the Tintina Fault and contains gold deposits that include Fort Knox, Pogo and Donlin Creek in Alaska. In Yukon, Brewery Creek and Dublin Gulch occur within the Tombstone Gold Belt.

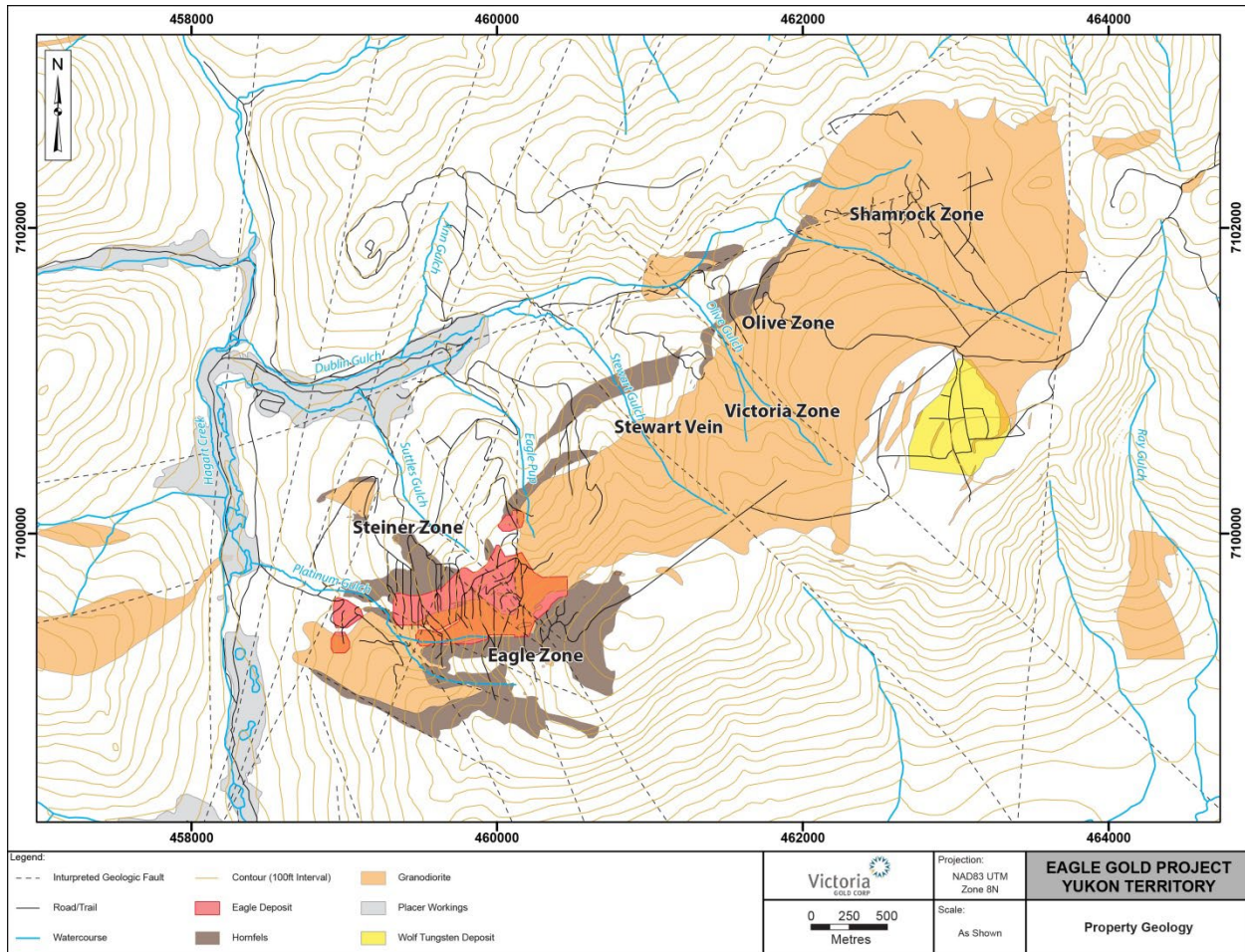
### 7.3 Property Geology

The property is located on the northern limb of the McQuesten Antiform and is underlain by Proterozoic to Lower Cambrian-age Hyland Group metasediments and the Dublin Gulch intrusion, a granodioritic



stock. The stock has been dated at approximately 93 Ma and is assigned to the Tombstone Plutonic Suite (Figure 7-2).

Figure 7-2: Dublin Gulch Property Geology



Source: Wardrop (2012)

The Hyland Group is comprised of interbedded quartzite and phyllite. The quartzite is variably gritty, micaceous, and massive. The phyllite is composed of muscovite- sericite and chlorite. Limestone is a relatively minor constituent of this stratigraphic sequence.

The Dublin Gulch anticline, located midway between Dublin Gulch and Lynx Creek to the south, has folded the metasediments about an axis that trends at an azimuth of 070° and plunges gently to the west-southwest.

The metasediments are the product of greenschist-grade regional metamorphism. Proximal to the Dublin Gulch Stock, they have undergone metasomatism and contact metamorphism. A hornfelsic thermal halo surrounds the stock and within the halo, the coarse clastic components of the Hyland Group have been

altered to quartz-biotite schist; the argillaceous components to sericite-biotite-chlorite schist and the carbonates to marble, wollastonite-quartz skarn and pyroxenite skarn. The halo extends from 80 to 200 m outward from the intrusive.

The Dublin Gulch Stock is comprised of four phases, the most significant of which is granodiorite. Quartz diorite, quartz monzonite, leucogranite and aplite comprise younger intrusive phases that occur predominantly as dikes and sills and cut both the granodiorite and surrounding country rocks. The Stock has intruded the Hyland Group metasediments near their contact with the underlying Upper Schist.

The granodiorite stock is elongate, measuring approximately 5 km in length and trends 070°. It has a maximum width of approximately 2 km. The long axis of the stock is coincident with the axis of the interpreted Dublin Gulch anticline. Sheet-like sills of granodiorite extend from the stock and cut the metasedimentary strata at low angles.

The intrusive-metasediment contact dips shallowly to steeply to the north and northwest on the northern side of the intrusive, and steeply to the north or south along its southern margin. No chilled margin is apparent at the contact.

At least four periods of faulting have been documented in the Dublin Gulch area including low-angle thrusting and bedding-plane faults and normal faults with north, northeast, northwest, and easterly trends. North-trending faults are inferred to have displaced portions of the Dublin Gulch Stock and one of these is interpreted to form the eastern boundary of the Eagle Zone. No apparent fault offset to mineralization has been noted. The northeast and easterly trending structural directions are sub-parallel to mineralization trends and are likely in-part pre-mineral structures.

### 7.3.1 Eagle Zone

The Eagle Zone gold occurrence is localized at the narrowest exposed portion of the stock, near its known western limit. The intrusive-metasediment contact is sharp but irregular and varies between steep attitudes that crosscut metasedimentary foliation, to shallow southwest dips parallel to foliation.

The Eagle Zone is comprised of sub-parallel extensional quartz veins that are best developed within the granodiorite proximal to both the hanging wall and footwall intrusive-metasediment contacts. Veining is apparently best developed on the hanging wall contact, but this may be more apparent than real as more drilling has taken place on the hanging wall side.

Veins are typically composed of white or grey quartz with subordinate potassium feldspar and strike at azimuths of 060° to 085°. They typically dip 60° south to vertical, and range in width from 1 mm to more than 10 cm. Contacts are typically sharp. Vein densities range from less than 1 per metre (/m) to more than 15/m, and average 3 to 5/m. The greatest concentration of veins appears to coincide with both the narrowest constriction as well as the local apex of the intrusion.

Sulphides account for less than five percent of vein material and occur in the centre, on the margin, and disseminated throughout the veins. The most common sulphide minerals are pyrrhotite, pyrite, arsenopyrite, chalcopyrite, sphalerite, bismuthinite, molybdenite and galena.

Secondary potassium feldspar is the dominant mineral in alteration envelopes. Sericite-carbonate is generally restricted to narrow vein selvages, although alteration zones of this type also occur with no obvious relation to veins.

Vein formation can be attributed to contrasts in cohesion and tensile strength between the intrusion and the enclosing metasediments. Embayment's and narrow portions of the Stock represent stress shadows that constitute favourable areas for rheological failure leading to the formation of extensional quartz veins.

Protrusions in the stock created favourable areas for the development of extensional shear-veining in the adjacent country rocks. Gold mineralization also occurs hosted within the metasedimentary rock package immediately adjacent to the granodiorite. This mineralization represents a portion of the Mineral Resource.

### 7.3.2 Olive Zone

The Olive Zone gold occurrence is localized at the contact zone on the northwest flank of the granodiorite intrusive. The intrusive-metasediment contact is sharp and steep to nearly vertical and has a general northeast trend.

Olive is defined by sulphide and quartz-sulphide+carbonate veining at various orientations (parallel to conjugate) to the general northeast mineralized trend, possibly indicative of vein formation within dilational zones or conjugate fractures between two or more shear planes.

Sericitic alteration and sulphide mineralization are more pronounced than at Eagle, and oxidation is less well developed. Moderate to strong sericitic alteration is present throughout the Olive Zone.

Oxidation varies as well from local zones of total oxidation at surface to un-oxidized sulphide-bearing granodiorite at depth. A transition zone from near total oxidation to only sulphides has been defined based on core-logged oxidation codes. Mixed oxides-sulphides are present at surface in shallow trenches. Veins can be comprised of exclusively sulphides or, more commonly, sulphides associated with white quartz.

Over 97% of the gold mineralization in the Olive Zone is hosted in granodiorite just south of the stock-metasedimentary rock contact, with very minor metasediment-hosted mineralization.

## 7.4 Mineralization

The Eagle Zone is the principal concentration of mineralization within the property. Within the Eagle Zone, gold occurs in extensional quartz veins that are most abundant on the hanging and footwall contacts of the narrowest portion of the Dublin Gulch granodiorite near its known western limits. Subordinate quantities of gold mineralization occur in quartz veins within the adjacent metasediments. Veins strike at



azimuths of 060° to 85°, sub-parallel to the intrusive contact and are commonly fractured by repeated movement along the host fractures.

The Eagle Zone is irregular in plan and is approximately 1,600 m long (east-west) and 600 m wide north-south. The Eagle Zone is near-vertical and has been traced for about 500 m below surface. Current drilling indicates that the mineralization is relatively continuous along this length and is open in several directions, including to depth.

Mineralization occurs as elemental gold, both as isolated grains and most commonly in association with arsenopyrite, and less commonly with pyrite and chalcopyrite.

The sulphide content in the veins is typically less than 5%; and is less than 0.5% within the deposit overall, with 1 to 4% carbonate (calcite) present as a buffer, acid generation from the ore and waste rock is not expected to be an issue (Stantec, 2011).

In descending abundance, the principal sulphides present are pyrrhotite, pyrite, arsenopyrite and chalcopyrite. Minor sphalerite, galena and molybdenite are also present. Scorodite and limonite are common weathering products.

The Olive Zone is a narrow-elongated zone sub-parallel to the intrusive-metasediment contact; located approximately 2.5 km northeast of the Eagle Zone. Olive measures approximately 20 to 80 m in width, 900 m in length, and has been drilled to approximately 175 to 250 m in depth. Compared to Eagle, the Olive mineralization is more associated with sulphides and quartz-sulphide veining in an interpreted shear-zone setting; with veining having an orientation at angles to the general northeast mineralized trend.

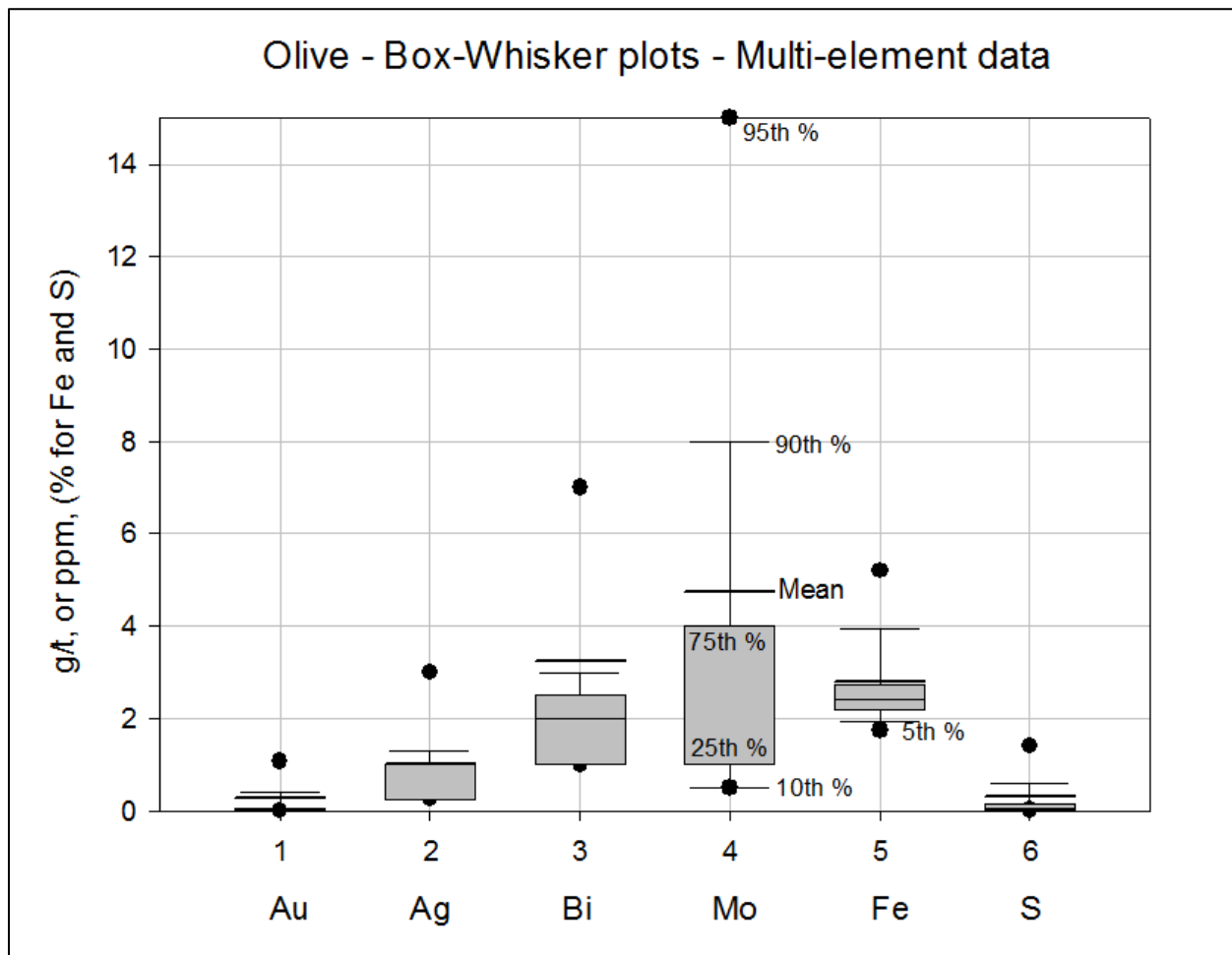
The Olive Zone differs from Eagle in some respects. Olive has more sulphide mineralization as both disseminated pyrite with moderate to strong sericitic alteration, and sulphide and quartz-sulphide veins, and is more tightly structurally controlled along the granodiorite-metasediment contact. Pyrite plus arsenopyrite (or arsenical pyrite) and quartz-pyrite veins to several centimetres in width have an average strike trend of azimuth 120°, and dips of 60° to 80° south, within the overall NE trending zone of mineralization. Vein densities vary significantly; however, trench exposures and assays indicate that good grade mineralization typically hosts multiple centimetre wide sulphide veins, on metre or less spacings, within areas of moderate to strong sericitic alteration with 3 to 5% disseminated sulphides. The most common sulphides noted are pyrite, arsenopyrite, with minor to trace amounts of sphalerite, chalcopyrite, galena, bismuthinite, and molybdenite. Olive also has higher levels of silver than Eagle.

Multi-element geochemistry for Olive, based on over 17,300 analyses, shows the following:

- A good Au-Ag-As correlation; with Au correlation coefficients of 0.50 with Ag, and 0.42 with As;
- A strong Au-Bi correlation coefficient of 0.74;
- A strong Ag-Bi-Cu-Fe correlation; and

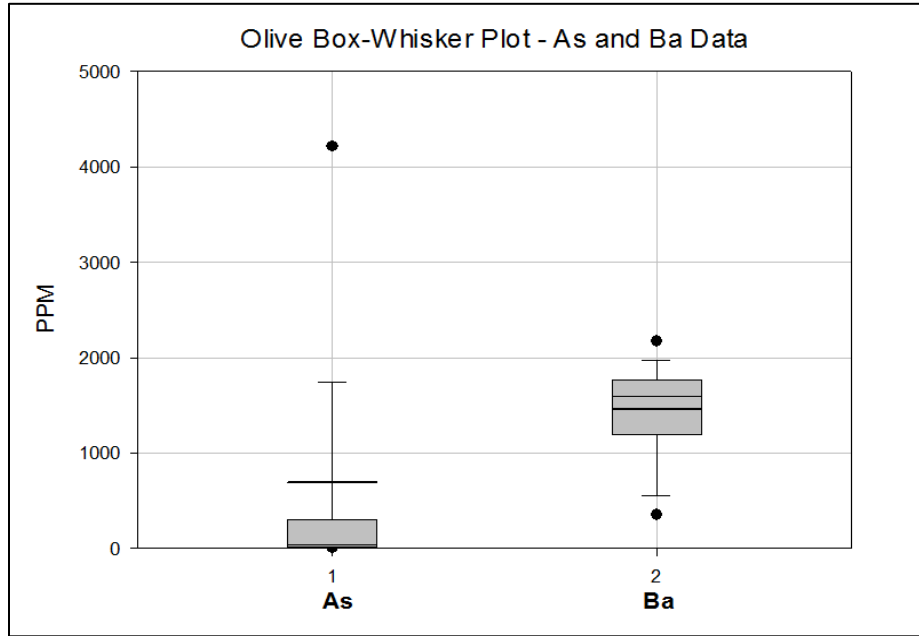
- Overall levels of associated elements at Olive are relatively low, as shown in the box-whisker plots (Figure 7-3, Figure 7-4 and Figure 7-5). Similar multi-element associations at perhaps lower levels are indicated at Eagle, based on a less complete database.

Figure 7-3: Box-Whisker Plot for Olive - Au-Ag-Bi-Mo-Fe-S



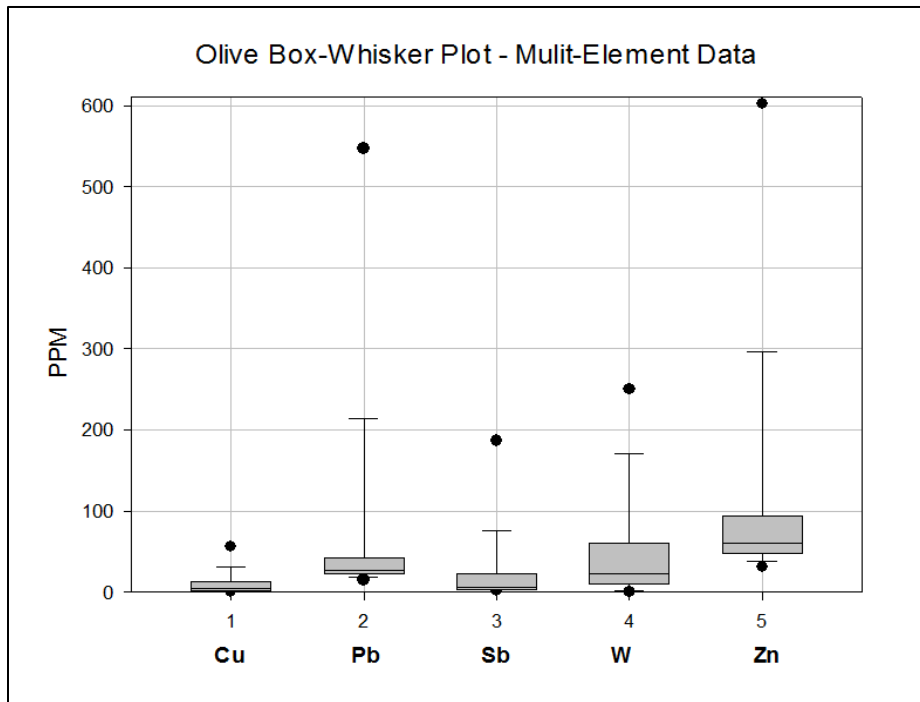
Source: AVMC (2016)

Figure 7-4: Box-Whisker Plot for Olive - As-Ba



Source: AVMC (2016)

Figure 7-5: Box-Whisker Plot for Olive - Cu-Pb-Sb-W-Zn



Source: AVMC (2016)

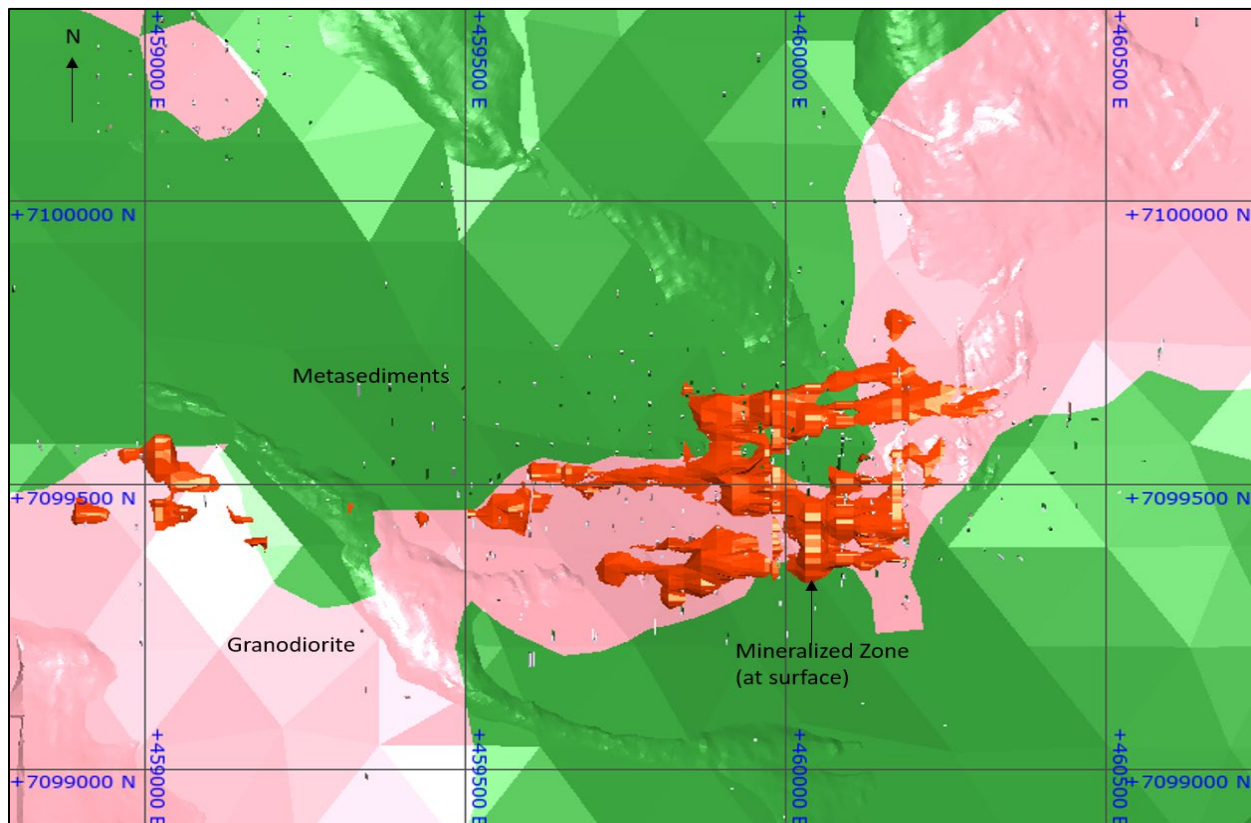
Several other mineralized showings occur within the property. Most of these are related to the Dublin Gulch granodiorite and are in part characteristic of RIRGS deposits similar to the Eagle Gold deposit. Others are more characteristic of later structurally hosted overprinting mineralization. The Wolf (formerly Mar) tungsten deposit is located approximately 3 km east-northeast of the Eagle Zone. Scheelite occurs in a calc-silicate skarn in metasedimentary rocks adjacent to the Dublin Gulch granodiorite.

A number of gold-bearing quartz-sulphide veins occur around the margins of the Dublin Gulch Stock. These veins are narrow (centimetre-scale), steeply dipping and generally strike at about 070°. Silver-quartz-sulphide veins also occur. These distal veins are infrequent relative to the sheeted vein system within the Dublin Gulch Stock and due to their small size, they are not a significant part of the Mineral Resource, with the exception of the Olive Zone.

Since 1978, when documentation of placer mining production was initiated, approximately 110,000 ounces of placer gold has been recovered from the Dublin Gulch area until mining ceased in the mid-1990s. Placer gold is still being actively mined, particularly in the Haggart Creek area. Current placer gold production from these operations is unknown.

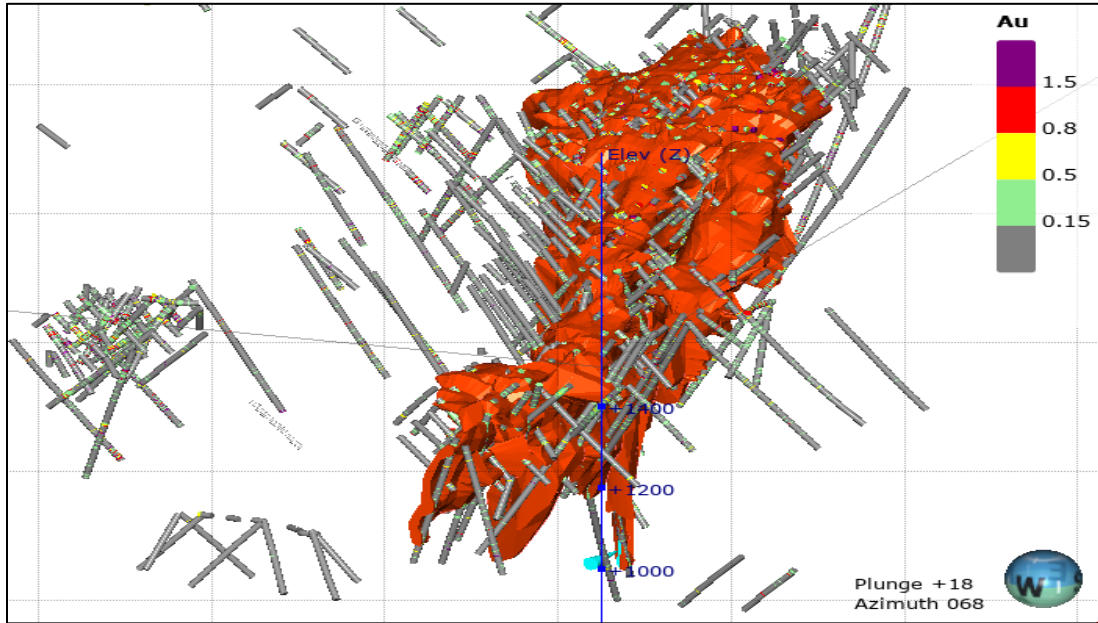
Figure 7-6 through Figure 7-13 show representative geology images for Eagle and Olive.

Figure 7-6: Eagle Simplified Geology Plan Map



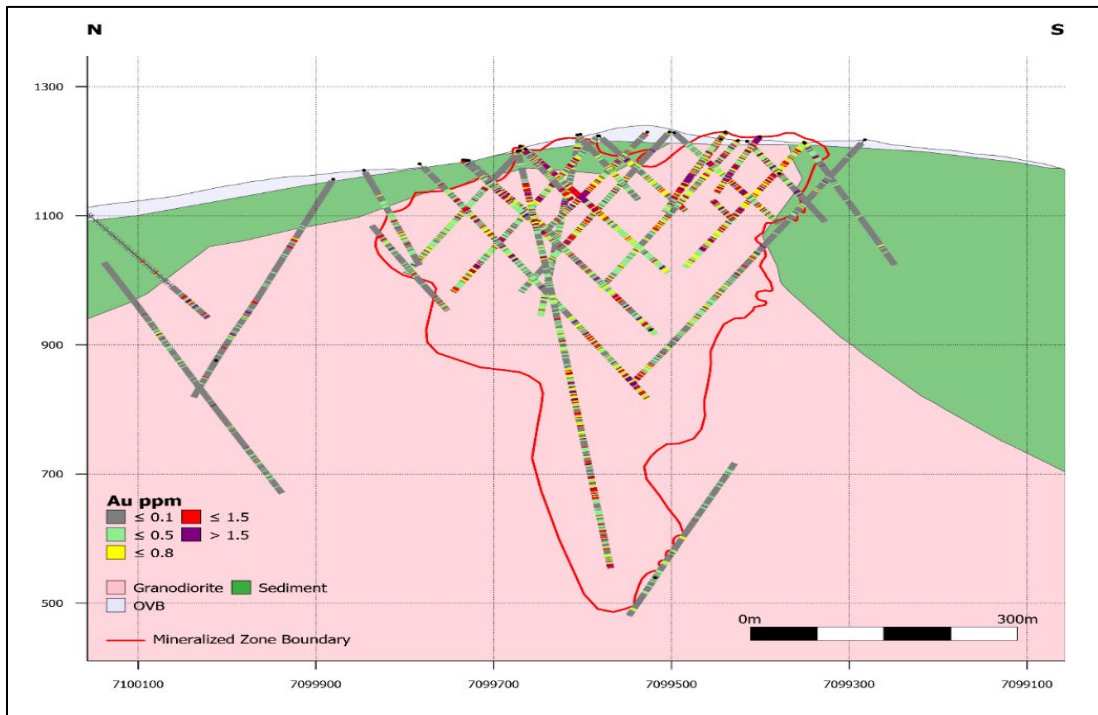
Source: VGC (2023)

Figure 7-7: Eagle Drill Holes and Mineralized Shape - Perspective View



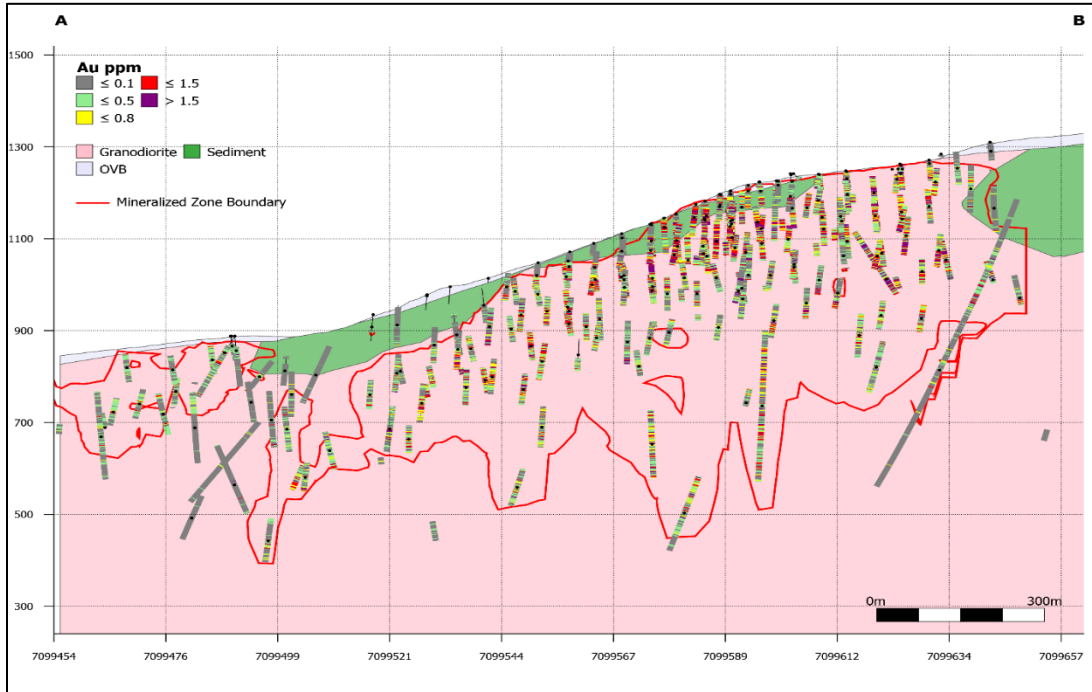
Source: VGC (2023)

Figure 7-8: Eagle Geology and Drill Hole Assays, Representative Cross-Section - View to NE



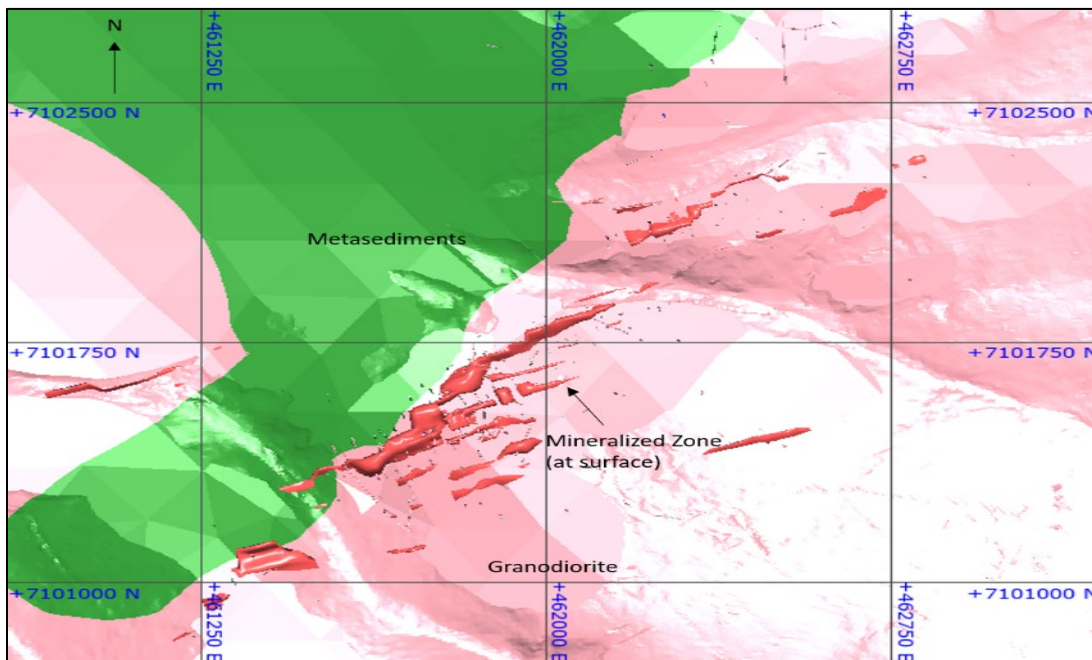
Source: VGC (2023)

Figure 7-9: Eagle Geology and Drill Hole Assays, Long-Section - View to NW



Source: VGC (2023)

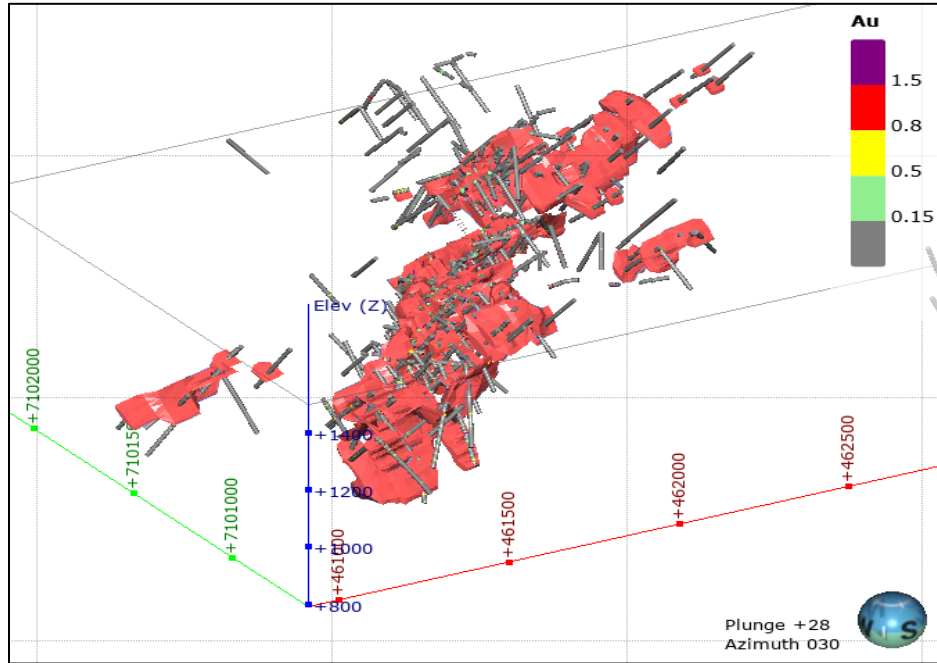
Figure 7-10: Olive Geology - Perspective View Looking NE



Source: VGC (2023)

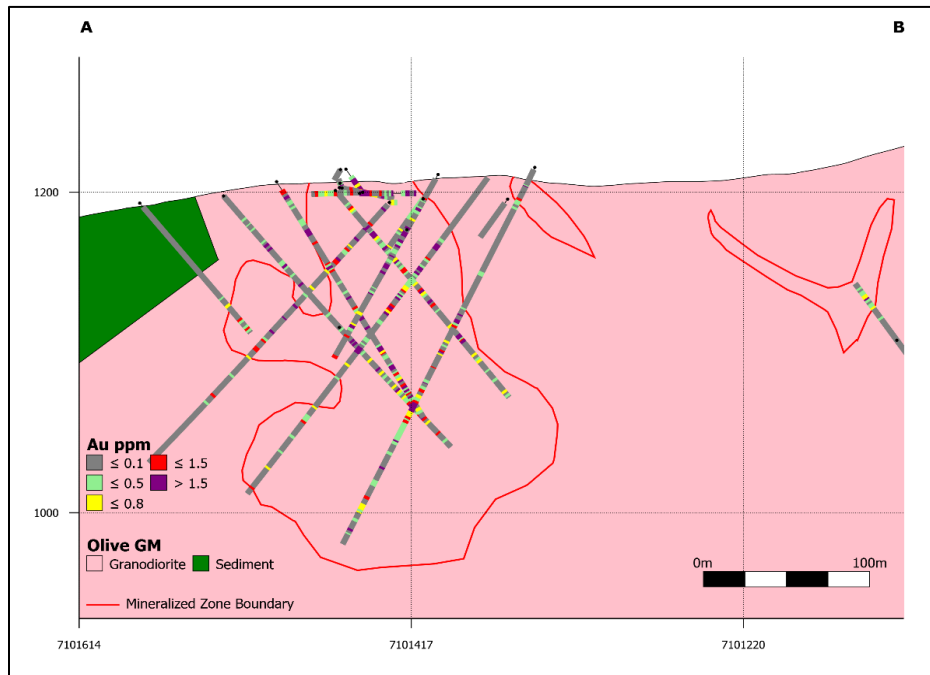


Figure 7-11: Olive Drill Holes, Mineralization Shape, and Interpreted Structures



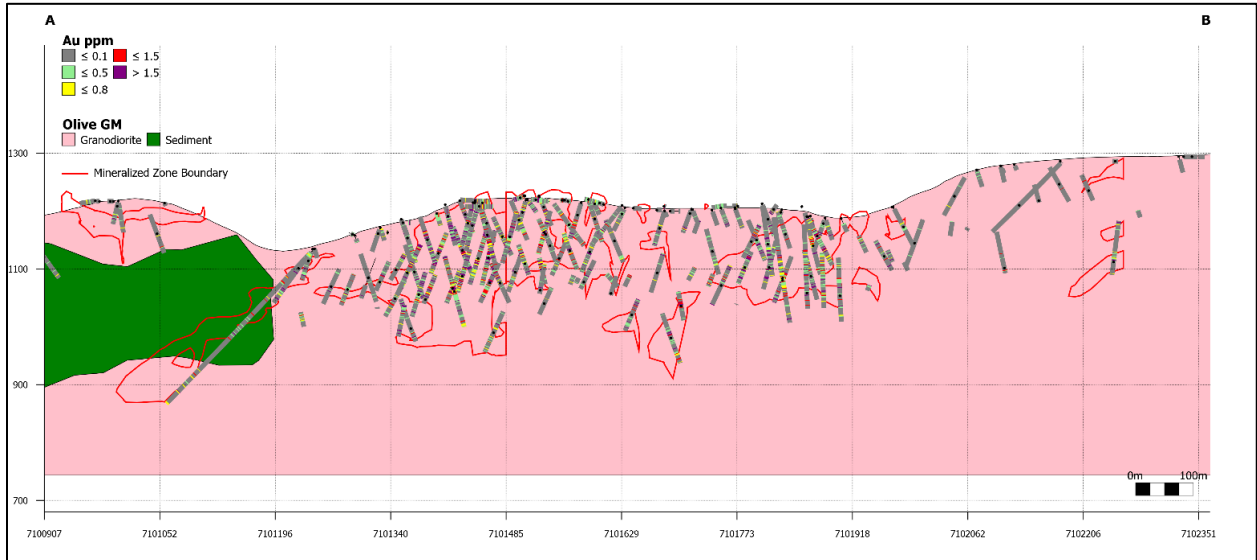
Source: VGC (2023)

Figure 7-12: Olive Geology and Drill Holes Assays, Representative Cross-Section - Looking NE



Source: VGC (2023)

Figure 7-13: Olive Geology and Drill holes Assays, Long-Section - Looking NW



Source: VGC (2023)

## 8 DEPOSIT TYPES

The Dublin Gulch intrusion is part of the mid-Cretaceous Tombstone Intrusive Suite of Alaska-Yukon granitoids, and the Eagle Zone belongs to the RIRGS class (Reduced Intrusion-Related Gold Systems) of mineral deposits. Gold mineralization in the Dublin Gulch intrusion shows strong similarities to the Fort Knox deposit in Alaska, including the presence of sheeted quartz veins and elevated levels of bismuth, arsenic, tellurium, and tungsten. The veins in the Eagle Zone consist of early quartz-scheelite with varied occurrences of pyrrhotite, pyrite and arsenopyrite, and are associated with K-feldspar and minor albite alteration envelopes. These are overprinted by sericite-carbonate and occasional chlorite alteration. The metasediments marginal to the intrusion are mineralized as well, but the bulk of the gold is hosted within the intrusive. The Dublin Gulch Stock is an elongate body trending 070°, with surface dimensions of approximately 6 x 2 km. Exploration for additional gold deposits is ongoing with significant potential for further discoveries.

The Dublin Gulch intrusion is composed of mainly biotite hornblende granodiorite. Minor phases of diorite and granite occur within the intrusion. The overall low sulphide content of the rock, commonly less than 0.5%, and the presence of carbonate (Calcite 1 to 4%) make the rock non-acid generating. In a report prepared by SRK for Stantec in April 2011 (SRK, 2010: Geological Characterization and Water Quality Predictions Eagle Gold Project), SRK states that acid rock drainage (ARD) is not anticipated for the project.

RIRGS' classes of mineral deposits are deposits that are:

- Metaluminous subalkalic intrusions of intermediate to felsic composition that lie near the boundary between ilmenite and magnetite series;
- Associated with carbonic hydrothermal fluids;
- A metal assemblage that variably combines gold with elevated bismuth, tungsten, arsenic, molybdenum, tellurium, and antimony as well as low concentrations of base metals;
- Associated with commonly weak hydrothermal alteration that is really restricted;
- In a tectonic setting well inboard of inferred or recognized convergent plate boundaries; and
- Located in magmatic provinces best or formerly known for tungsten and/or tin deposits.

The RIRGS class of gold deposits was developed based on studies of gold and other mineral deposits hosted in granitoids in the Yukon and Alaska (Hart, C. R., 2007).

Additionally:

- RIRGS deposits are best developed in intrusions that were emplaced into ancient continental margins behind accretionary or collisional orogens and subduction-related magmatic arcs. Preferred host strata include reducing basinal miogeoclinal sedimentary or metasedimentary rocks;

- Thermal gradients surrounding cooling plutons are steep and result in temperature-dependent concentric metal zones that develop outward from pluton margins for distances up to a few kilometres or just beyond the thermal halo;
- Skarns and replacements are generally pluton-proximal with an increase in structural control on more distal mineralization. There is also crustal-scale vertical zonation with epizonal occurrences forming at shallower levels;
- The most distinctive style of gold mineralization in RIRGS deposits is sheeted arrays of parallel, low sulphide, single-stage quartz veins that are found over widths of tens to hundreds of metres and are preferentially located in the cupola of the pluton. These veins are unlike multidirectional, interconnected stockworks characteristic of porphyry systems or antithetic tensional vein arrays typical of orogenic deposits;
- Mineralized plutons have characteristics that indicate the likelihood of generation of hydrothermal fluids, high volatile contents, fluid exsolution, rapid fractionation and zonation, including the presence of porphyritic textures, aplite and pegmatite dikes, quartz and tourmaline veins, greisen alteration, miarolitic cavities and unidirectional solidification textures, preferably in pluton apices;
- RIRGS deposits are associated with felsic, ilmenite-series plutons that lack magnetite, have low magnetic susceptibilities and aeromagnetic response, and have ferric-ferrous ratios of less than 0.3. These types of plutons are uncommon in arc and fore-arc settings where orogenic gold deposits are most common; and
- Intrusion-related deposits are coeval with their associated, causative pluton.

## 8.1 Geological Model

The Eagle Zone geological model is simply described as a zone of mineralization containing sheeted quartz veinlets and post-veining fracturing hosting gold mineralization, located near the apex of a granodioritic stock, and mostly within the stock. As the gold mineralization is generally but not directly related to quartz veining, the geological modelling for resource estimation has been constructed based on the mineralization rather than the veining. A mineralized shape, based on the gold grades in drill holes, has been constructed to confine the resource estimation.

The Olive Zone geological model is that of a structural zone on the flank of the granodiorite stock, hosted essentially entirely in granodiorite, sub-parallel to the intrusive metasediments contact. Detailed structural controls that define the mineralization are interpreted, but not directly defined, and do not offset mineralization. Similar to Eagle, the mineralization for resource estimation purposes is confined by a mineralized shape based on gold grades in drill holes.

## 9 EXPLORATION

### 9.1 Previous Exploration

Prior to Victoria Gold's involvement with the property, numerous drilling campaigns were conducted on the property as described in Section 6. Exploration drilling for intrusive-hosted gold mineralization began in the early 1990's and continued sporadically by several owners through 2004 with the work of StrataGold. Victoria Gold acquired StrataGold in 2009.

The majority of Victoria Gold's exploration work since the 2012 Wardrop FS has been in-fill drilling at the Eagle Zone, and exploration efforts including trenching, geophysical surveys, and diamond drilling at the Olive Zone.

### 9.2 Victoria Gold Exploration

Victoria Gold completed a FS on the Eagle Zone in 2012 (Wardrop, 2012). Following release of this FS and Mineral Resource Estimate, Victoria Gold conducted a targeted in-fill drilling program of an additional 130 drill holes in the Eagle Zone, for the purpose of better definition of Measured and Indicated Mineral Resources. The drilling program was conducted in the winter of 2011-2012. Victoria Gold conducted resource drilling campaign in Eagle, following release of the 2016 Mineral Resource including near-pit satellite deposits within the Eagle Gold Mine infrastructure, consisting of an additional 58 drill holes, four of which are located in the Eagle pit.

The Olive Zone had been explored prior to Victoria Gold's ownership, with initial drilling in 1992, and sporadic follow-up drilling for a total of 19 holes by 2007. Victoria Gold conducted additional drilling of 58 holes in 2010-2012, and in-fill drilling in 2014 with 61 holes and 2016 with 89 drill holes. The Olive Zone was defined as a Mineral Resource for the first time in the 2016 FS report.

Additional exploration work conducted at the Olive Zone included 17 shallow trenches in 2014 and 29 trenches in 2016 to expose and sample oxidized sulphide mineralization and assist definition of the surface trace and extensions to mineralization. As well, a program of third IP-Resistivity geophysical surveys was conducted over the core area of the Olive Zone in 2014, which shows a good correlation of IP chargeability highs with the modelled zone of anomalous gold mineralization in drilling, a direct association of the gold with increased sulphide content. Trenching, sampling and IP-Resistivity surveys are a useful exploration tool to define gold mineralization at Olive and possible extensions to the northeast.

Since 2017, the majority of work on the Eagle and Olive Zones was drilling. The details of the drill programs since 2017 are discussed in Section 10 of this report.

## 10 DRILLING

Previous project drilling has been accomplished by several different companies, from 1977 through 2009, when Victoria Gold became Owner of the property, as indicated in Table 10-1. Discussions of the previous drilling are included in prior NI 43-101 technical reports issued by Victoria Gold (StrataGold) as listed in Section 27.

### 10.1 Eagle Drilling

In 2009, Victoria Gold acquired StrataGold and conducted a ten (10) hole diamond drilling program resulting in 5,122 m drilled.

The 2010 exploration program was designed to add gold ounces to Eagle's existing reserve/resource base by drilling to the west of the existing reserves. The program would define resources in new zones on the Dublin Gulch property; Shamrock and Olive Zones, which were located 2.5 km northeast of the Eagle Zone. A total of twenty (20) holes for 3,952 m was completed.

In 2011, Victoria focused on expanding the known limits of the Eagle deposit which was the subject of the NI 43-101 pre-feasibility study that was underway. The program was to test the 10 km x 3 km Potato Hills Trend, which included the Olive and Shamrock targets, which demonstrated promising drilling results from the Company's 2010 exploration program. Victoria Gold completed the FS on the Eagle Zone in 2012 (Wardrop, 2012). Following release of this FS and Mineral Resource Estimate, Victoria Gold conducted a targeted in-fill drilling program of additional drill holes in the Eagle Zone, for the purpose of better definition of Measured and Indicated Mineral Resources. The 2011 and 2012 exploration drilling programs at the Eagle Zone combined for thirty-three (33) reverse – circulation drill holes, totaling 4,337 m with an additional fifty-eight (58) diamond drill holes totaling 17,538 m, four of which are located in the Eagle pit.

Victoria Gold's 2017 Dublin Gulch Exploration campaign consisted of fifty-nine (59) new holes, totaling 8,423 m, located within and around the area of the Eagle Zone.

Victoria's exploration team continued drilling in late 2020 and into 2021, completing thirteen (13) holes for 6,993 m in the Eagle "extension" zone. Exploration focused on drilling west along strike of the main Eagle mineralization as well as deeper below the pit to prove that mineralization continued at depth. Drilling was conducted for the in-fill and the definition of mineral deposit boundaries, metallurgical samples, and geotechnical information.

In 2022, exploration completed 22 holes for 9,892 m in the Eagle Extension zone. The holes targeted the Eagle Main zone's orebody at depth and Eagle Extension, where the newly defined continuity of mineralization may be used to increase gold resources at the mine. With this additional drilling it was possible to join the previously named Eagle Extension zone to the Eagle Main zone. A summary of the Eagle programs can be found in Table 10-1.



The drill hole database from August 2<sup>nd</sup>, 2022, is comprised of 513 holes with 74,289 assays for gold in g/t and 52,618 assays for silver in g/t, representing a total of 115,393 m of drilling. From the 513 holes, there are 336 diamond drill holes, 169 reverse circulations holes and 8 trenches. Additional details of the drill hole database are presented in Table 10-2. The location of the drill holes are shown in Figure 10-1. There are 35 additional diamond drill holes added to the drill hole database since the previous November 2019 MRE. These holes are targeting the Eagle Main deposit at depth and to the west near surface.

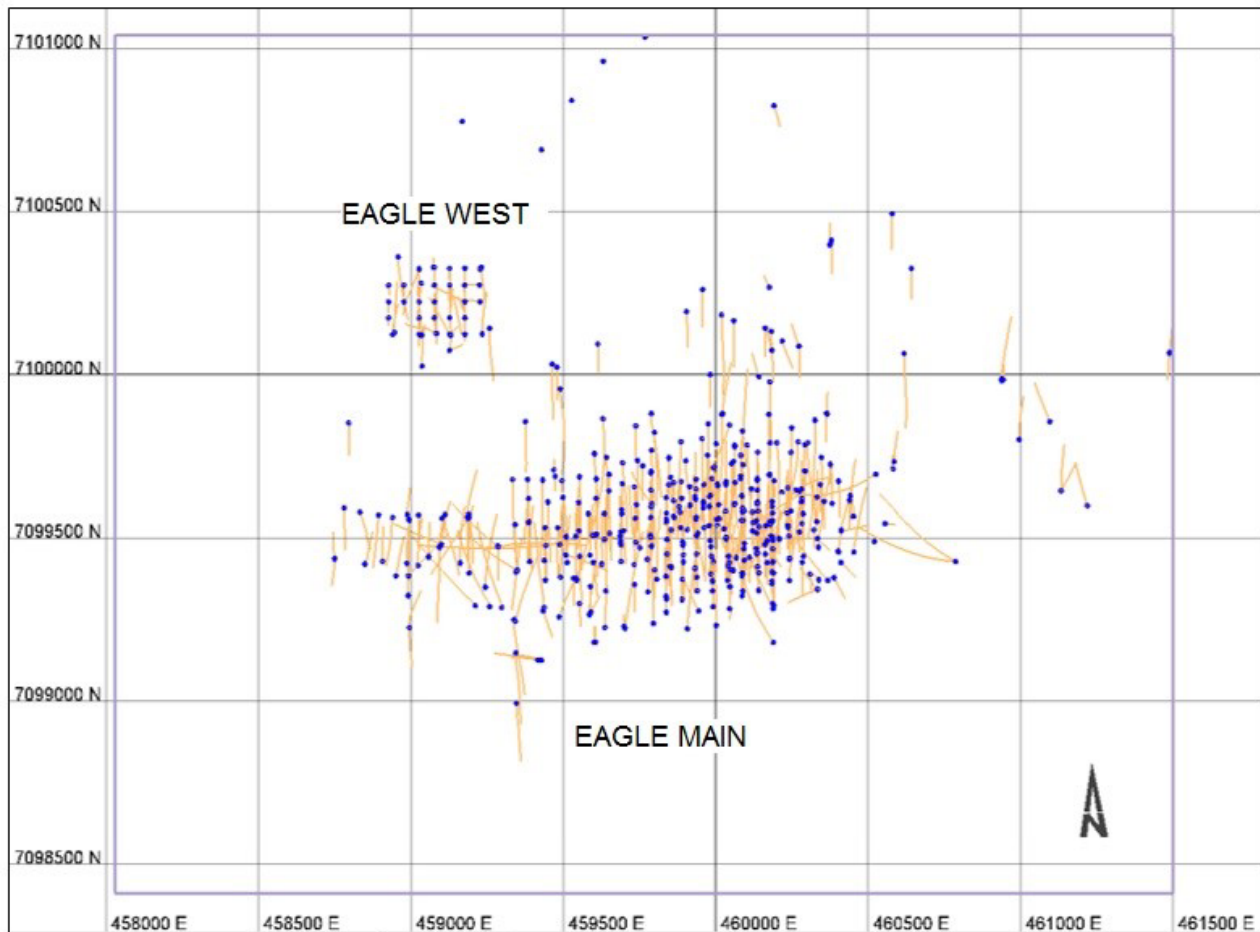
Table 10-1: Project Drilling by Year - Eagle

Company	Year	Number of Holes	Metres Drilled	Type
Canada Tungsten	1977	65	11,315	DDH
Queenstake Resources	1986	4	705	DDH
Can Pro	1989	4	653	DDH
Ivanhoe Goldfields	1991	16	2,410	DDH
Amax Gold Inc.	1992	13	1,943	DDH
Amax Gold Inc.	1993	56	7,729	RC
Amax Gold Inc.	1993	10	1,476	DDH
Ivanhoe Goldfields	1993	10	2,078	RD
First Dynasty Mines	1995	40	8,354	RC
First Dynasty Mines	1995	25	4,946	DDH
New Millennium Mining	1996	21	4,114	DDH
New Millennium Mining	1996	37	5,271	RC
New Millennium Mining	1996	19	189	Auger
New Millennium Mining	1996	33	797	Water
StrataGold	2005	34	8,105	DDH
StrataGold	2006	10	4,282	DDH
StrataGold	2007	20	5,627	DDH
StrataGold	2008	15	4,429	DDH
Victoria Gold	2009	10	5,122	DDH
Victoria Gold	2009	4	1,321	Geotech
Victoria Gold	2010	20	3,592	DDH
Victoria Gold	2010	5	1,341	Geotech
Victoria Gold	2011	3	616	Geotech
Victoria Gold	2011-2012	33	4,337	RC
Victoria Gold	2011-2012	58	17,538	DDH
Victoria Gold	2017	25	6,420	DDH
Victoria Gold	2020	1	844	DDH

Company	Year	Number of Holes	Metres Drilled	Type
Victoria Gold	2021	12	6,149	DDH
Victoria Gold	2022	22	9,892	DDH
<b>TOTAL</b>		<b>625</b>	<b>127,485</b>	

Source: Wardrop (2012), modified by VGC (2022)

Figure 10-1: Plan Map Showing the Distribution of Drilling for the Eagle Zone



Source: Ginto (2022)

Table 10-2: Eagle Drill Hole Database Statistics

Collar Data	Count	Mean	Standard Deviation	Coefficient of Variation	Minimum	Lower Quartile	Median	Upper Quartile	Maximum
Easting (X)	513	459818.0	473.372	0.001	458750.0	459485.0	459914.0	460138.0	461488.0
Northing (Y)	513	99649.1	317.69	0.003	98993.5	99439.6	99570.0	99734.8	101182.0
Elevation (Z)	513	1112.86	140.571	0.126	839.0	988.27	1139.9	1230.05	1410.0
Hole Depth	513	224.937	147.019	0.654	6.0	127.33	199.64	299.61	883.92
Azimuth	513	149.687	115.604	0.772	0.0	0.0	180.0	180.0	368.0
Dip	513	-54.453	10.737	-0.197	-90.0	-59.0	-54	-50.0	4.0
<b>Survey Data</b>									
Azimuth	2263	184.476	112.224	0.609	0.0	166.87	179.2	273.31	369.8
Dip	2263	-57.708	8.148	-0.141	0.0	0.0	0.0	0.0	0.0
<b>Assay Data</b>									
Internal Length (from-to)	73499	1.493	0.439	0.294	0.01	1.5	1.52	1.53	29.6
Gold Grade (g/t)	73499	0.434	1.238	2.85	0.0	0.03	0.12	0.39	52.7
Silver Grade (g/t)	52618	0.755	5.476	7.25	0.0	0.25	0.25	0.25	517.0

Source: Ginto (2022)

## 10.2 Olive Drilling

Prior to Victoria Gold's ownership, the Olive Zone was initially drilled in 1992 containing seven (7) RC and DDH holes totaling 959 m. Olive was then drilled in 2007 for five (5) holes totaling 868 m before Victoria Gold took ownership.

In 2010, Victoria followed up with positive 2009 trenches, drilling nineteen (19) holes for 4,144 m, verifying the historically reported gold mineralization at shallow depths.

Victoria's exploration team conducted a twenty-eight (28) diamond drill program in 2011. Successfully drilling twenty-four (24) DDH holes totaling 4,486 m, as well as four (4) RC holes totaling 300 m.

Victoria's 2012 exploration consisted of a follow up program targeting multiple high hold grade intersections from the 2011 drilling program. In 2012, there were eleven (11) holes drilled totaling 2,997 m.

In 2014, Victoria's exploration program focused on in-fill, step out, and exploration diamond drilling complete with preliminary metallurgical testing. The program successfully culminated sixty-one (61) holes totaling 8,594 m.

The 2016 Olive exploration program was designed to increase confidence in a potential gold resource estimate and expand the Olive Zone along strike and across the interpreted mineralization controlling structure. The Olive-Shamrock Zone has been tested over a strike length of 1.5 km and approximately 300 m in width, with the main focus of 2016 drilling concentrated within an area of approximately 500 m by 300 m, the Olive Main Zone. The program successfully drilled eighty-nine (89) holes totaling 12,546 m.

The 2017 drill campaign was designed to expand upon the Phase II 2016 program in the northeast portion of the Olive deposit testing along strike. The program culminated seventy-eight (78) holes totaling 14,984 m.

In 2018, exploration completed 10 holes for 1,929 m in the Olive Zone.

The drill hole database from December 17<sup>th</sup>, 2018 is comprised of 438 holes with 41,409 assays for gold and silver in g/t, representing a total of 65,277 m of drilling. From the 438 holes, there are 349 diamond drill holes, 8 reverse circulations holes and 81 trenches. Additional details of the drill hole database are presented in Table 10-4. The location of the drill holes is shown in Figure 10-2. There are 92 additional diamond drill holes and 19 trenches added to the drill hole database since the previous 2016 Feasibility Study. A total of 82 diamond drill holes were drilled in 2017 and 10 holes drilled in 2018. No new holes or trenches were added since.

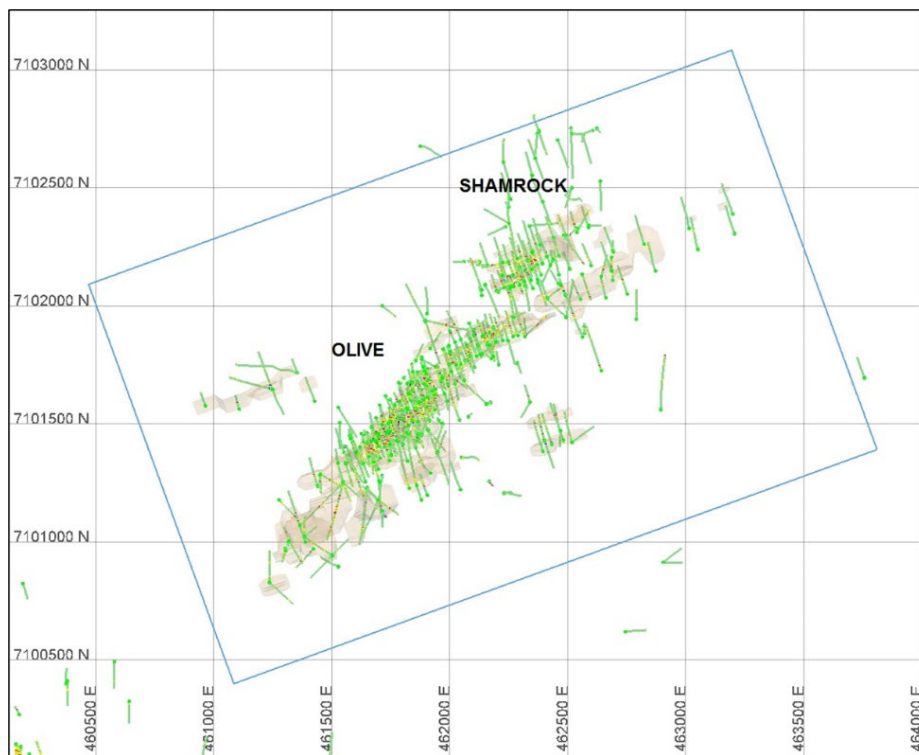
A summary of the annual exploration programs for Olive can be found in Table 10-3.

Table 10-3: Project Drilling by Year - Olive Zone

Company	Year	Number of Holes	Metres Drilled	Type
Prior Owners	1991, 1992	7	959	RC and DDH
Prior Owners	2007	5	868	DDH
Victoria Gold	2010	19	4,144	DDH
Victoria Gold	2011	24	4,486	DDH
Victoria Gold	2011	4	300	RC
Victoria Gold	2012	11	2,997	DDH
Victoria Gold	2014	61	8,594	DDH
Victoria Gold	2014	10	1,027	Geotech
Victoria Gold	2016	89	12,546	DDH
Victoria Gold	2017	78	14,984	DDH
Victoria Gold	2018	10	1,929	DDH
<b>TOTAL</b>		<b>318</b>	<b>52,834</b>	

Source: Wardrop (2012), modified by VGC (2019)

Figure 10-2: Plan Map Showing the Distribution of Drilling for the Olive Zone



Source: Ginto (2022)

Table 10-4: Olive Drill Hole Database Statistics

Collar Data	Count	Mean	Standard Deviation	Coefficient of Variation	Minimum	Lower Quartile	Median	Upper Quartile	Maximum
Easting (X)	447	462010.0	391.368	0.001	460938.0	461747.0	461971.0	462297.0	463207.0
Northing (Y)	447	7.1017e06	483.627	0.0	7.0996e06	7.10144e06	7.10168e06	7.10206e06	7.10275e06
Elevation (Z)	447	1228.41	55.564	0.045	1038.55	1192.61	1215.57	1268.0	1392.0
Hole Depth	447	149.597	73.856	0.494	6.0	103.63	152.4	197.11	407.0
Azimuth	447	232.46	110.016	0.476	0.0	160.0	221.0	340.0	380.0
Dip	447	-43.039	21.698	-0.504	-90.0	-55.0	-50.0	-45.0	20.0
<b>Survey Data</b>									
Azimuth	1194	238.006	107.241	0.451	0.0	159.5	225.5	341.7	380.1
Dip	1194	-48.889	13.959	-0.286	0.0	0.0	0.0	0.0	0.0
<b>Assay Data</b>									
Internal Length (from-to)	42447	1.575	1.143	0.726	0.01	1.41	1.52	1.7	127.97
Gold Grade (g/t)	42447	0.213	1.561	7.34	0.001	0.003	0.003	0.035	131.0
Silver Grade (g/t)	42447	1.038	5.096	4.909	0.0	0.25	0.25	1.0	289.0

Source: Ginto (2022)



## 10.3 Drilling Process

Since 2012, core drilling was done by Kluane Drilling, New Age Drilling Solutions, of Whitehorse, Yukon, and LynCorp Drilling Services Inc. of Smithers, BC. RC drilling was conducted by Midnight Sun Drilling Inc. of Whitehorse, Yukon. Holes were surveyed by a downhole instrument from REFLEX, as soon as the hole was stable, and with no interference from casing, at 75 m intervals thereafter, and at the bottom of the hole.

Core was drilled primarily as HQ core size with 2017 drilling in HTW size. Core was transferred from the core tube into boxes by the drill crew who marked the end of each run with a wooden marker. Hole depth was measured in imperial units (feet) and subsequently converted into metric units (metres) on the depth markers. Core was transported by the drilling company from the drill site to the core logging facility that is located in the camp complex.

Core was laid out for logging inside the core shed and then measured for rock quality designation (RQD), recovery and permanent (aluminum) labels were then affixed to the core boxes. Core was then washed and marked for sampling. Most samples were 1.5 m in length but did not exceed 2 m in length and were shorter if lithological contacts or significant variations in sulphide content were present. In general, the entire length of the hole was sampled.

Core logging observations were transferred to a computer database. Significant observations include rock type, weathering, alteration, foliation angle and intensity, fracture angle and intensity as well as descriptions of any veins present. Several types of alteration (oxidation, silicification, sericitization) were quantified from zero to five with zero equating to no alteration and five representing complete alteration. There is no unique convention with respect to fracture intensity although the attempt was made among those logging to apply the same criteria.

When logging was complete, sample tags were affixed to the core box at the start of each sample interval. Each sample tag was comprised of three pieces: one for the core box, one for the sample bag into which the sample was placed, and the third which remains in the sample book.

Given the variable orientation of mineralized quartz veins, the relationship between sample length and thickness of mineralization is also variable. However, given that the sampling was continuous, and the mineralization is a bulk target, the variability of this relationship is not considered to be detrimental to the objectives of the sampling program.

In addition to the procedures described above, which pertain to all holes drilled since 2012, those holes drilled for geotechnical testing were logged by Mining Plus or BGC Engineering Inc., geotechnical specialists, for a range of parameters relating primarily to pit design.

Core drilling recoveries are generally +90%, and low recovery intervals are addressed in the resource estimation process of the exploratory data analysis (EDA). Several PQ size core holes were drilled for the purpose of metallurgical sample collections.

RC drilling was part of the in-fill program at Eagle, as detailed investigations of RC versus core drilling show no particular bias in the RC assays over core.

Drilling was done as angle holes across the primary strike orientation of the mineralization. The drilling methods, and sample handing procedures are in line with industry norms and are acceptable methods for defining the gold mineralization at the Eagle and Olives Zones.

Core was sawn in half by diamond saw; one half was bagged for assaying and the other half was kept for reference. The sample to be analyzed was put in a plastic bag that contained a sample tag. The sample number was also written on the outside of the bag. Each bag was then closed by cable ties and combined with others to fill woven plastic “rice bags” for shipping. Each rice bag was labelled with the numbers of the samples it contained. The rice bags were expedited by a contract shipper who picked up the samples in camp and delivered them to the assigned laboratory in Whitehorse and Vancouver. Standard chain-of-custody forms were used for the shipping process.

The boxes with the half-core are stored out of doors on covered racks or cross-piled on pallets in the central core storage facility.

Holes were generally sampled in their entirety, unless recovery was particularly poor in any single drilled interval, or the recovered material was considered highly unlikely to be significantly mineralized.

## 11 SAMPLE PREPARATION, ANALYSES AND SECURITY

### 11.1 Sample Preparation and Security

The following discussion in this section is derived from the Wardrop 2012 FS, as the general procedures have not changed since the sample preparation, analyses, and security procedures in use by Victoria Gold for 2011-2017, with the exception of the samples from the 2016 drilling on the Olive Zone, which instead underwent contract sample preparation on-site by SGS Canada Inc., and with selected sample pups shipped from site to the SGS analytical lab in Vancouver.

Other than during the 2016 season, samples were shipped from camp to the ALS Chemex or Acme Analytical (Acme) labs prep laboratory in Whitehorse. The samples were dried, crushed, split, and pulverized, and a 50 g split was sent to the ALS Chemex laboratory in North Vancouver or the Acme Analytical Labs laboratory in Vancouver for analysis. The analytical procedure used by ALS Chemex and Acme is described in this section. The sample preparation and analytical procedure is summarized in Figure 11-1.

In 2020 and 2021, all of the core samples from the Dublin Gulch exploration programs were analyzed at SGS Canada Inc. of Burnaby, B.C. In 2022, approximately half of the core samples were analyzed at SGS Canada Inc. using the same analytical methods as described in Section 11.2. The remaining core samples were analyzed at the MSALABS in Terrace, BC.

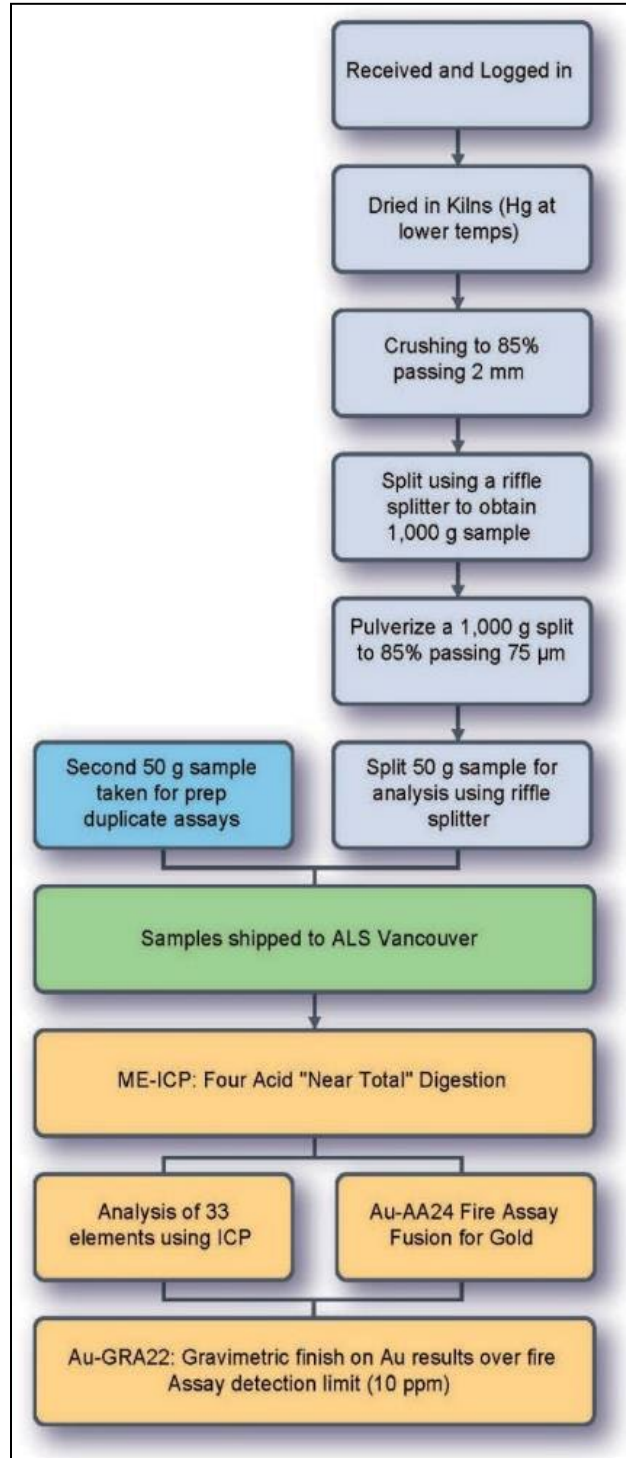
Chain-of-custody measures under Victoria Gold's control were followed with the shipping of samples from camp to Whitehorse and beyond. Receipt of analytical results was restricted to key personnel. The methods of sample preparation, analysis, and security for the 2018 through 2022 programs by Victoria Gold are well documented in the Yukon Assessment Reports. All drill core and field rock samples collected were processed in the below procedures.

Core was sawn in half by diamond saw; one half was bagged for assaying and the other half was kept for reference. The sample to be analyzed was put in a plastic bag that contained a sample tag. The sample number was also written on the outside of the bag. Each bag was then closed by zip ties and combined with others to fill woven plastic "rice bags" for shipping. Each rice bag was labelled with the numbers of the samples it contained. The rice bags were expedited by a contract shipper who picked up the samples in camp and delivered them to the assigned laboratory in Whitehorse, Burnaby, and Terrace. Standard chain-of-custody forms were used for the shipping process as shown in Figure 11-2.

The boxes with the half-core are stored outside and cross-piled on pallets at Eagle's core storage lay down.

Holes were sampled in their entirety, unless recovery was particularly poor in any single drilled interval.

Figure 11-1: Eagle Sample Preparation and Analytical Flowchart



Source: Wardrop (2012)

Figure 11-2: Example of Sample Shipment Form and Chain of Custody Form

**SGS Minerals Services - Geochemistry**  
Sample Submission Form

**Submission Details**

Submitted by: Helena Kuikka  
Company name: Victoria Gold  
Telephone: 604-696-6511  
Email: hkuikka@vgc.com

**Reporting Instructions**

Report to: Victoria Gold Corp.  
Company Name: Victoria Gold Corp.  
Telephone: 604-696-6511  
Address: 1000-1050 W. Pender St  
City: Vancouver Province/State: BC  
Country: Canada Postal/Zip Code:

**Sample Identification and Analysis Instructions**

Project Name:  Core  Rocks  Sediments  Pulp  Tail  
Sample Type:  Concentrate  Metal  Other  
Analysis Type:  Exploration grade  Ore grade  Control grade  Party grade  Oreside grade

Sample Numbers	Number of Samples per Bag	Bag Number	Sample Type	Sample Location	Total Samples
From: C101	To: 100	1	CORE	NG21-049C	100
<b>Totals &gt;&gt;</b>					100

Date: 8/16/2021

**Print 1 Copy with Shipment**

Supervisor: H. Kuikka  
Type of Samples: Trench  
Sampler: Carey  
Expeditor: Smalls  
Ship To: SGS Whitehorse

**Special Notes to Lab**

# Au:10 ppm please reassy with GO\_FA050V

**Prep Duplicate Sample Information**

Prep duplicates occur at every sample ending with "29" or "69" and are a prep duplicate of the previous sample. For example, C00076129 is a prep dup of C00076128.

**Result Circulation**

hkuikka@victoriagoldcorp.com	email	Clab
pgay@victoriagoldcorp.com	email	Clab
tszoztsz@victoriagoldcorp.com	email	Clab

Source: VGC (2022)

## 11.2 Analytical Procedures

The standard analytical procedure for the Eagle Zone was carried out at ALS Chemex in North Vancouver as follows:

- A 50 g sub-sample was taken from the 150 g pulp sample by withdrawing two to three scoops of material from different places in the envelope;
- The 50 g sample was subjected to a gold fire assay with atomic absorption spectroscopy and a 27 to 33 element inductively coupled plasma (ICP) analysis consisting of a four-acid “near total” digestion by hydrofluoric acid (HF)-nitric acid (HNO<sub>3</sub>)-perchloric acid (HClO<sub>4</sub>) digestion, hydrochloric acid (HCl) leach and ICP-atomic emission spectroscopy (AES); and
- All results with gold greater than 10 ppm were subjected to a fire assay with a gravimetric finish (Wardrop, 2009).

The ALS Chemex laboratory in Vancouver, the primary assay lab in use for the project work at Eagle Gold, is accredited to International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) 17025-2005 standards under the Standards Council of Canada, which provides specific assessments of the laboratory’s analytical capabilities. ALS Chemex laboratories in North America are also ISO 9001:2008 registered through SAI Global, ISO registration and accreditation provides independent verification that a quality management system (QMS) is in operation at the analytical laboratory. ALS

Chemex is a worldwide based analytical company that has been providing analytical services to the mining and exploration industry of North America for over 30 years. The ALS Chemex analytical laboratory is located at 2103 Dollarton Hwy, North Vancouver, BC, Canada. ISO registration applies to the ALS Chemex preparation lab located at 78 Mt. Sima Road, Whitehorse, Yukon, Canada.

Approximately 5% of assays were re-assayed for gold alone by Inspectorate Exploration & Mining Services Ltd. (Inspectorate) laboratories at 11620 Horseshoe Way, Richmond, BC, Canada as the umpire (external check).

Inspectorate is used as a secondary lab for check assays. Inspectorate has ISO 9001:2008 certification and is an internationally known and reputable analytical laboratory that provides assay services to the exploration and mining industry.

The same above-described analytical procedure was used for drilling samples from the Olive Zone, most of which were collected in 2014 and 2016. However, the analytical labs involved were Acme Labs in Whitehorse (sample preparation) and Vancouver (analytical) in 2014, and an on-site SGS preparation lab in 2016, as well as the SGS labs in Vancouver during 2016.

Acme Labs has ISO/IEC 17025:2005 Accreditation and ISO 9001 Registration and is a well-known and accepted mining and exploration industry utilized commercial lab. SGS labs is a worldwide leader in analytical services and is ISO 14001:2015 Certified.

In 2020 and 2021, all of the core samples from the Dublin Gulch exploration programs were analyzed at SGS Canada Inc. of Burnaby, B.C. utilizing the GE\_ICP40Q12, 34-element analytical package with GE\_FAA50V5 50-gram fire assay with gravimetric finish for gold on all samples. All core samples were split on-site at Victoria's Nugget exploration camp and shipped to SGS Canada Inc.'s Whitehorse preparation facility. There, samples were sorted and crushed to appropriate particle size (coarse crush) and representatively split to a smaller size (250 grams) for shipment to SGS Canada Inc.'s Burnaby analytical laboratory facilities. A comprehensive system of standards, blanks and field duplicates has been implemented for the 2020 and 2021 Dublin Gulch exploration campaign and is monitored as chemical assay data become available.

In 2022, about half of the core samples were analyzed at SGS Canada Inc. using the same analytical methods as described previously. The other core samples were analyzed at the MSALABS in Terrace, BC utilizing their ICP230, 34-element analytical package with FAS-111 30-gram fire assay, and FAS-415 30-gram fire assay with gravimetric finish for all sample with greater than 10 ppm gold. All core samples were shipped to MSA Labs preparation facility in Vancouver. The samples were then sorted and crushed to appropriate particle size (coarse crush) and representatively split to a smaller size (250 grams) for shipment to MSA analytical laboratory facilities in Terrace. A comprehensive system of standards, blanks and field duplicates has been implemented for the 2022 Dublin Gulch exploration campaign and is monitored as chemical assay data become available. MSALABS has both ISO 17025 accreditation and ISO 9001:2015 Certification.

All laboratories used for the analytical purposes are independent of Victoria Gold.



### 11.3 Quality Assurance and Quality Control Procedures

The Eagle Zone and Olive Zone drill programs employed blanks, duplicates, and standards as part of the quality assurance/quality control (QA/QC) program. The following description of the materials, procedures and results has been adapted from a 2010 QA/QC document prepared by Victoria Gold:

- Crushed dolomite, purchased from a garden-supply centre, was used as blank material. Blanks were made by scooping roughly 200 g of crushed dolomite into a bag which was then added to the sample stream. Three blank controls were added for every 100 samples, usually where the sample numbers ended in 16, 56 and 96, although some were added in other locations according to local mineralizing conditions and at the discretion of the logging geologists;
- Drill core duplicates were obtained by submitting both halves of the core for analysis; with one half representing the original (normal) sample and the other half the duplicate. The gap left in the core box was marked by a piece of wood or polyvinyl chloride plastic pipe;
- Preparation duplicates were collected at the sample preparation stage by splitting a crushed portion of the sample, which was then pulverized. These samples were then issued to the assaying laboratory for analysis; and
- Standard Reference Material (standards) were obtained from Analytical Solutions Ltd., Toronto, who supplied six certified Ore Research & Exploration Assay Standards (OREAS). For the 2016 and 2017 drill programs, some standards were also obtained from CDN Resource Laboratories Ltd, Langley. These are all listed in Table 11-1, together with their mean values and lower and upper limits of two standard deviations.

Table 11-1: Standard Reference Material Statistics

Standard	Mean Value (Au ppm)	Low Threshold (Au ppm)	High Threshold (Au ppm)
OREAS 152a	0.116	0.106	0.126
OREAS 15Pa	1.02	0.96	1.07
OREAS 15Pb	1.06	1	1.12
OREAS 50c	0.836	0.78	0.891
OREAS 52c	0.346	0.312	0.379
OREAS 5Pb	0.098	0.092	0.105
OREAS 60b	2.57	2.35	2.78
OREAS 6Pc	1.52	1.39	1.66
CDN-GS-1P5L	1.53	1.39	1.53
CDN-GS-P4C	0.362	0.326	0.398
CDN-GS-P4E	0.493	0.435	0.551

Standard	Mean Value (Au ppm)	Low Threshold (Au ppm)	High Threshold (Au ppm)
CDN-GS-P5H	0.497	0.441	0.553
CDN-GS-P6	0.626	0.552	0.7
CDN-GS-P6C	0.767	0.689	0.845
CDN-GS-P8E	0.827	0.749	0.905
CDN-GS-P8G	0.818	0.758	0.878
CDN-ME-1405	1.295	1.221	1.369

Source: VGC (2022)

## 11.4 2012-2022 QA/QC Results

The resource database inclusive of 2011-2012 assay results for the Eagle Zone, and the 2011-2016 Olive Zone assay results was examined by the authors of the 2016 Feasibility study update. The drill programs employed blanks, duplicates, and standards as part of the QA/QC program, in a similar fashion to the 2010 QA/QC procedures.

Summary QA/QC results for the post 2016 Eagle and Olive drilling are summarized below:

- A sufficient number of standards, 166 SRM's or Standard Reference Materials for Eagle were inserted into the drilling sample batches sent for analysis. Results showed three out-of-range analysis for a total of 1.8%;
- Blanks totally 868 samples in Eagle showed no instances of assay values greater than 0.05 g/t Au;
- A total of 1,307 standard samples were inserted into the Olive sample stream; 22 failed to assay within +/- two standard deviations of the control value; six of which assayed high, and the remainder lower than the standard value;
- A total of 646 blanks were inserted into the Olive sample stream, one of which failed;
- In all cases for Eagle and Olive, if other standard or blank samples were not included in the batch for which a standard or blank failure occurred, then the batch was re-run;
- Field duplicates and sample preparation duplicates for Eagle and Olive show acceptable ranges of scatter relative to the original assays; and
- The QA/QC program for Eagle and Olive resulted in no significant identified issues.

### 2017-2022

- An additional 538 standards, 556 blanks, and 364 field duplicates, and 365 pulp duplicates were added to the Eagle database from drilling conducted in 2017-2022;

- An additional 343 standards, 351 blanks, and 234 field duplicates, and 231 pulp duplicates were added to the Olive database from drilling conducted in 2017-2022; and
- Results from the 2017-2022 QA/QC programs are consistent with the 2011-2017 results and are considered to be acceptable for the resource update.

The pre-2011 sampling, preparation, security, and QA/QC procedures have been described in previous technical reports, have been reviewed by the authors, and are consistent with current procedures. The authors consider the 2011-2022 sampling, sample preparation, security, analytical procedures, and QA/QC procedures to be consistent with industry standards, and the results obtained verify the data as acceptable for use in resource estimation.

## 12 DATA VERIFICATION

### 12.1 Verifications by Previous Workers

Previous work by others, as described below, has verified the Eagle Zone database as sufficient for use in the Mineral Resource estimation. Wardrop conducted data verifications in 2006 and 2008 in relation to Mineral Resource estimation and reporting.

Data verification was also conducted by SRK in 2011, for the purpose of a resource model used in the 2012 FS and is described in the Wardrop NI 43-101 Technical Report dated April 18, 2012. An extract from this report is summarized as follows below.

“A site visit verified the geology and select drill hole collar coordinates. It also confirmed the geology model of steeply dipping quartz veins and veinlets dominantly hosted in Granodiorite. A visual inspection of select drill core verified the presence and direct relationship of gold assays with quartz veins and veinlets in the Granodiorite and metasedimentary host rocks. Spot checking of the drill hole assay database against the assay certificates noted approximately a 1.7% error rate. A statistical evaluation and visual examination of the data in 3D verified the prior and current use of 13.0 g/t Au as a capping grade for high-grade gold assays, and visually demonstrated hole-to-hole continuity of mineralization. Database errors noted were deemed to have minimal effect on the Mineral Estimate, and SRK concluded that the “Eagle Gold Deposit database is sufficiently well defined, documented, and verified, to allow for use in resource estimation and for definition of reserves in a Feasibility Study”.

Data verification on the 2016 drill hole database was conducted by SRK in 2016 for the purpose of a resource model update described in the 2016 JDS Report “Feasibility Study Technical Report for The Eagle Gold Project”. An extract of this report is summarized as follows below.

“Victoria Gold’s 2016 database included 130 additional drill holes (RC and core), completed since August 2011, for an increase of 39% of data, internal to the mineralized wireframe, as compared to the data used in the resource estimate of the 2012 FS.

The authors undertook a re-examination of the post-2012 FS database by completing the following steps:

- Verifying the database for 2011 and 2012 data against the assay certificates; 14,661 assays representing 27% of the total data were checked and verified with less than 0.5% error rate noted;
- Examining the QA/QC data for 2010 to 2012 that was deemed acceptable;
- Examining in-house versus ALS Chemex bulk density data for use in the resource model;
- Extensively examining the RC versus core assays data, for potential bias and identification of holes or assay intervals to exclude from the resource estimation; and

- Verifying the oxidation surfaces.

As an independent check, the authors compiled assay data from 443 lab assay certificates of the 2011 to 2012 drilling. These constituted of 14,661 assays out of 53,239 total assays (27% of total assays). The compiled assay file was compared with the assay database supplied by Victoria Gold; insignificant errors were identified in the database and were fixed before importing in Datamine software.”

Following the 2016 Feasibility study, a total of 79 holes were drilled in the project region in 2017, with 58 of them in the area of the Main Eagle Zone, including 4 deeper holes drilled within the Main Eagle Zone. It is these 4 deeper holes that comprise the majority of new geologic information within the Main Eagle Zone.

Victoria’s exploration team continued drilling in late 2020 and into 2021, completing thirteen (13) holes for 6,993 m in the Eagle “extension” zone.

In 2022, exploration completed 22 holes for 9,892 m in the Eagle extension zone. The holes targeted the Eagle Main zone’s orebody at depth and Eagle Extension. Statistics of the drill hole database’s content are presented in Sections 14.1.1 and 14.2.1 and Quality Assurance/Quality Control Verification.

Victoria Gold’s QA/QC procedure included standards, duplicates, and blanks to check the accuracy and precision of assay data. The authors evaluated the QA/QC data from 2009 to the 2022 drilling program. QC samples used in the 1990’s historic drilling, and prior to 2009, have been summarized in earlier reports. Commercially supplied standard from Ore Research and Exploration Pty (ORE) as well as CDN Resource Laboratories were used for quality control. For the 2011-2017 drilling campaigns standard and blank frequencies was approximately 3% each, prep and field duplicates were 2% each.

As a part of the QA/QC protocol, QA/QC samples were inserted with the above frequency using the last two digits of the sample ID number. Additional QA/QC samples were inserted by the geologist’s discretion but not to the exclusion of the regular insertion order.

As a standard quality assurance protocol, if assay results were received of standards and/or blanks not within the QC limit, the laboratory was immediately asked to re-assay a particular batch including QC samples. If the re-assay passed the QA/QC criteria, the results of the second batch were used in the resource estimation.

Minimal issues with acceptable limits were identified in the QA, and the authors concluded the assay data is acceptable to be used for the resource estimation. The authors have relied on earlier QP reports done on the QA/QC of historic drilling prior to 2010 as well as the QA review completed for the 2016 Feasibility study and 2019 Technical Report.

### 12.1.1 Bulk Density Verification

Victoria Gold compiled bulk density data from core in-house measurement for the 2016 Feasibility Study update, and a total of 1,227 bulk density determinations were reviewed. Of those, a total of 17 determinations were discarded as being either too high or too low for the respective rock type. The data

were reviewed in detail in comparison with outside labs SGS and ALS Chemex, and to verify representative locations of data within the mineralized zones.

Victoria Gold used a method of weighing the core pieces in air and in water, without the use of paraffin wax for coating the core in order to seal off porosity. In 2012, Victoria Gold sent the same 1,227 core samples to ALS Chemex for outside laboratory density determinations, and ALS used a paraffin wax coating process. As a QA/QC check, Victoria Gold also sent approximately 300 samples to SGS labs, who used the same process as ALS in their density determination method. The Eagle mineralized shape bulk density data was deemed to be sufficiently distributed throughout the deposit to be representative.

It was verified that all data, including in-house, SGS, and ALS, were in close agreement for the approximately 1,210 original data and 300 additional SGS determinations. The bulk density data comparison is shown in Table 12-1.

Table 12-1: Bulk Density Data Used for the Resource Estimation – by Rock Type

SRK Type	FS Type	Classification	In-House (t/m <sup>3</sup> )	SGS (t/m <sup>3</sup> )	ALS (t/m <sup>3</sup> )	Mean Value (t/m <sup>3</sup> )
		ALL DATA (No outliers)	2.66	2.65	2.65	2.65
1	A	Oxidized Granodiorite	2.62	2.62	2.61	2.62
3*	B	Fresh Granodiorite (unaltered)	2.66	2.65	2.65	2.65
2	C	Altered Granodiorite	2.65	2.62	2.63	2.63
4	E	Oxidized Metasedimentary Rock	2.62	2.59	2.61	2.61
6		Fresh Metasedimentary Rock	2.68	2.72	2.66	2.69

Note:

\*This is the correct type code - they were originally numbered from surface downward: Ox, Alt, Fresh, as 1, 2, 3.

Source: AVMC (2016)

An assumed bulk density of 2.00 t/m<sup>3</sup> was used for overburden. Bulk density data by rock type was assigned to resource blocks by the nearest neighbour assignment, using the mean value for each rock type.

It was noted that the published average bulk density value for Granodiorite is 2.67 t/m<sup>3</sup> to 2.79 t/m<sup>3</sup> (Carmichael, 1980); and therefore, the value for Eagle at 2.65 t/m<sup>3</sup> is reasonable.

### 12.1.2 RC Versus Core Assays Verification

An extensive examination was conducted on core versus RC drilling gold assays for possible bias in RC samples during the 2016 Feasibility study report. The authors concluded that there was no material bias in the sampling method comparing core to RC, or orientation of drilling, above a cut-off of 0.15 to 0.20 g/t Au. The effect was minimal on the resource estimation, as the mineralized shell created for Eagle Gold was based on a modified 0.20 g/t Au grade shell.

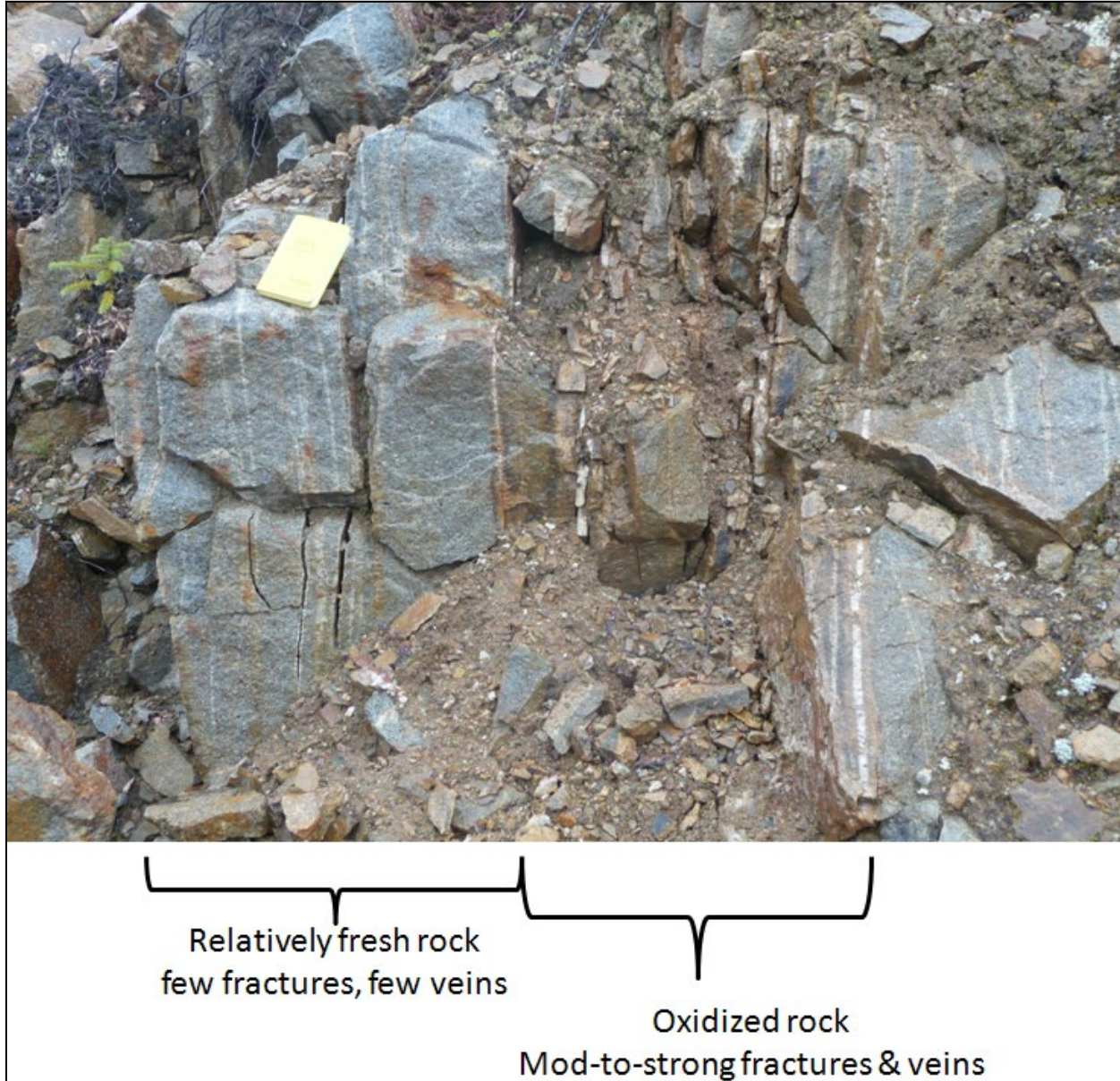


### 12.1.3 Oxidation Surface Verification

For both the Eagle Zone and the Olive Zone, oxidation codes were present in the core logging and the drill hole database and were used to determine metallurgical types with appropriately assigned recoveries.

A review of the oxide codes for Eagle Gold was done for the purpose of the 2012 FS and was updated for the 2016 resource estimate. Observations at site of the core and the surface outcrops suggested that oxide codes in the drill hole logs for Eagle Gold may have been defined based on the relative amount of oxidation noted in the host rocks, not necessarily the amount of oxidation present in gold-bearing veins and fractures. This is of particular concern for the Eagle Zone, as RC drilling comprised a significant portion of the drilling, and oxidation in veins, as opposed to host rock may not be as discernable in RC cuttings. If the vein density is low, yet the rock is still a mineable grade, the core or RC cuttings may appear as a relatively low oxide code, when the veins are indeed well oxidized. Figure 12-1 illustrates the issue.

Figure 12-1: Outcrop - Oxidized Sheeted Quartz Veins in Relatively Fresh Granodiorite



Source: SRK (2011)

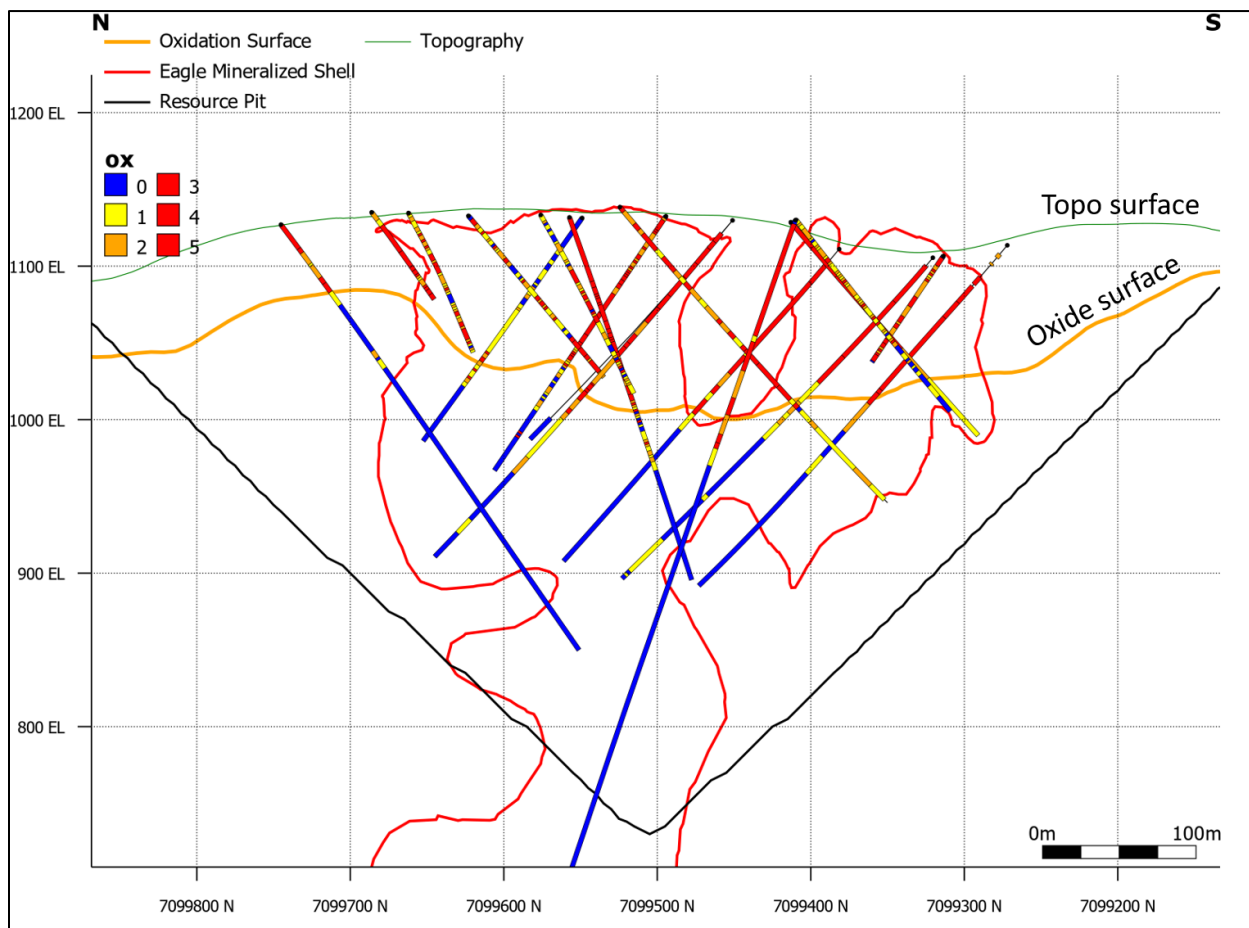
A horizontal drill hole through the outcrop shown in Figure 12-1 would be classified with a mix of oxide codes, yet all the veins and fractures containing quartz and sericite would be classified as oxidized, which is where the gold is located. At a proposed approximate 6.5 mm crush size, intended for the HLP, the oxidized veinlets containing gold will be exposed to leach fluids even if hosted in largely unaltered and unoxidized Granodiorite.

As the oxidation state of veins and veinlets is important, and the oxidation state of Granodiorite (without veins and veinlets) is generally not, the authors took the approach of determining the base of oxidation as the base of the preponderance of oxide code 3 or greater.

A trace of the interpreted base of oxidation was digitized in a cross-section, linking section to section to create a surface, which was then modified in a long section, and to individual holes, to create the surface used in the model.

This process was updated in 2013 after the last drilling program at the Eagle Zone. Figure 12-2 indicates the drill hole codes for oxidation of three or greater (green) and the interpreted oxidation surface (orange) in cross-section for Eagle Gold.

Figure 12-2: Eagle Cross-Section 459992 E Showing Codes and Interpreted Oxidation Surface



Source: VGC (2019)

A general interpretative base of oxidation surface was generated for use in resource modelling. For the area above the interpreted oxide surface, some historical holes have no oxide code and/or low oxide codes (codes Null, 0, and 1), and are surrounded by holes with oxide code 3 or greater. Most of the

conflicting low oxide codes are from older RC holes. These low oxide codes (and no oxide codes) are considered non-representative of the oxidation state of the veins.

The base of oxidation roughly mimicked topography, and generally dipped steeply downward to where the mineralization was of higher grade and corresponding to the structural fracture/vein control of mineralization and oxidation.

An oxide surface was created for the 2012 FS resource model. For the 2016 updated resource estimate, the same process was used and incorporated into the 2012 in-fill drilling program data, to update the oxidation surface. The resulting modified oxide surface changed minimally from the previous 2012 surface. For this updated resource, further discussion on the oxide surface is found in Section 14.1.4.1.

## 12.2 Summary

Eagle and Olive Zone data verifications included:

- Site verifications of rock types;
- Alteration, oxidation, mineralization in trenches and drill hole core;
- Spot check comparisons with assay data;
- Review of Victoria Gold's bulk density determinations; and
- QA/QC procedures and results for which the QA/QC procedures were in place.

The authors concluded that the databases for both the Eagle Zone and the Olive Zone were valid for use in the resource estimation, and were based on proper drilling, assaying, QA/QC procedures, and database construction. There were no identified data limitations or errors that would have bearing on the quality of the Mineral Resource estimations.

## 13 MINERAL PROCESSING AND METALLURGICAL TESTING

Metallurgical testwork for the Eagle Zone was initiated in 1995. A feasibility study was published in 2012 by Wardrop, which included metallurgical test campaigns conducted by Kappes, Cassiday & Associates (KCA) and analyses from Metallurgium. Further testing campaigns were completed by KCA and McClelland Laboratories (MLI) as part of an updated 2016 FS. Additional testing and engineering were overseen by Forte and Victoria Gold employees through 2022 to re-evaluate the need for agglomeration and further refine leach projections. After the review of all metallurgical testwork, an updated ultimate recovery and reagent consumption estimates by ore type were prepared for the Eagle deposit, using a fraction extraction method that estimates heap leach recovery based on the leach pad particle size distribution as a function of time. This first principal approach recognizes that diffusion processes can continue for very long time periods beyond active mining.

Preliminary testwork was completed on the nearby Olive Zone between 2014 and 2015; however, no further work has been performed since then.

### 13.1 Eagle Deposit

Metallurgical testwork focused on a series of primary ore types:

- “A” (Weathered Granodiorite, 40% of total contained gold);
- “B” (Fresh to Weakly Altered Granodiorite, 39% of total contained gold);
- “C” (Sericitic, Chloritic, Carbonate Altered Granodiorite, 7% of total contained gold); and
- “E” (Weathered Sediments, 8% of total contained gold).

For the purposes of the study, ore type “D” (Fine-grained Granodiorite) was considered as ore type “B” when calculating the overall recoveries due to its minimal representation.

#### 13.1.1 Compacted Permeability Testing – KCA, 2017

Several additional tests were conducted by KCA on samples from the Eagle deposit, referred to as the Top 20 (T20) and Bottom 20 (B20) samples, to evaluate the various parameters for the initial material to be placed on the heap leach pad. Initial fill material placed in the heap leach pad starts coarser, at 36 mm, then is reduced to 16 mm, and eventually reduced to the target  $P_{80}$ . Samples were crushed to the particle size distribution (PSD)  $P_{80}$  values ranging from 6.5 mm to 16 mm as determined by Bruno simulation, to mimic various stages of crushing at site. Each compacted permeability test was conducted up to a maximum effective height of 70 m.

KCA used the following test criteria as passing when measuring the response of the various samples:

- Less than 10% slump;
- Measured flows of more than ten times the heap design flow rate;
- Less than 15% pellet break down; and
- Lack of color and clarity of solution.

All T20 and B20 tests passed with minimal slump, however, it should be noted that one of the T20 6.5 mm tests marginally passed for flow rate based on the accepted criteria of ten times the field application rate of 7-10 l/h/m<sup>2</sup>. All other tests comfortably passed based on all criteria without cement addition. Therefore, cement addition is no longer determined to be required, and agglomeration was removed from the process. This agrees with the 2012 FS which stated that compacted permeability tests with simulated loads between 0 and 150 m demonstrated good stability and low slump without cement agglomeration.



Table 13-1: Compacted Permeability Results Summary – Top 20

KCA Sample No.	KCA Test No.	Sample Description	Crush Description	Test Phase	Cement Added, kg/MT	Effective Height, metre	Flow Rate, LpHr/m <sup>2</sup>	Flow Result Pass/Fail	Incremental Slump, %	Cum. Slump, % Slump	Slump Result Pass/Fail	Overall Pass/Fail
67759 A	67767 A	T20	P <sub>80</sub> 16 mm	Primary	0	0	5,272	Pass	1%	1%	Pass	Pass
				Stage Load		20	5,193	Pass	4%	5%	Pass	Pass
				Stage Load		40	5,106	Pass	2%	7%	Pass	Pass
				Stage Load		70	4,995	Pass	2%	9%	Pass	Pass
67759 B	67767 B	T20	P <sub>80</sub> 16 mm Without minus 200 mesh	Primary	0	0	7,139	Pass	0%	0%	Pass	Pass
				Stage Load		20	7,104	Pass	4%	4%	Pass	Pass
				Stage Load		40	7,104	Pass	2%	6%	Pass	Pass
				Stage Load		70	6,959	Pass	3%	9%	Pass	Pass
67759 C	67768 A	T20	P <sub>80</sub> 12 mm	Primary	0	0	6,629	Pass	1%	1%	Pass	Pass
				Stage Load		20	6,433	Pass	4%	5%	Pass	Pass
				Stage Load		40	6,268	Pass	2%	7%	Pass	Pass
				Stage Load		70	5,971	Pass	2%	9%	Pass	Pass
67759 D	67768 B	T20	P <sub>80</sub> 12 mm Without minus 200 mesh	Primary	0	0	7,023	Pass	0%	0%	Pass	Pass
				Stage Load		20	6,907	Pass	4%	4%	Pass	Pass
				Stage Load		40	6,836	Pass	2%	6%	Pass	Pass
				Stage Load		70	6,612	Pass	2%	8%	Pass	Pass
67759 E	67769 A	T20	P <sub>80</sub> 9 mm	Primary	0	0	6,199	Pass	1%	1%	Pass	Pass
				Stage Load		20	5,857	Pass	4%	5%	Pass	Pass
				Stage Load		40	5,512	Pass	2%	7%	Pass	Pass
				Stage Load		70	4,940	Pass	2%	9%	Pass	Pass
67759 F	67769 B	T20	P <sub>80</sub> 9 mm Without minus 200 mesh	Primary	0	0	6,374	Pass	1%	1%	Pass	Pass
				Stage Load		20	5,932	Pass	3%	4%	Pass	Pass
				Stage Load		40	5,686	Pass	2%	6%	Pass	Pass
				Stage Load		70	5,248	Pass	2%	8%	Pass	Pass
67759 G Sp. A	67770 A	T20	P <sub>80</sub> 6.5 mm	Primary	0	0	4,866	Pass	0%	0%	Pass	Pass
				Stage Load		20	3,384	Pass	3%	3%	Pass	Pass
				Stage Load		40	3,260	Pass	2%	5%	Pass	Pass
				Stage Load		70	2,500	Pass	1%	6%	Pass	Pass
67759 G Sp. B	67770 B	T20	P <sub>80</sub> 6.5 mm	Primary	0	0	2,488	Pass	1%	1%	Pass	Pass
				Stage Load		20	2,488	Pass	2%	3%	Pass	Pass
				Stage Load		40	2,311	Pass	2%	5%	Pass	Pass
				Stage Load		70	1,976	Pass	1%	6%	Pass	Pass

KCA Sample No.	KCA Test No.	Sample Description	Crush Description	Test Phase	Cement Added, kg/MT	Effective Height, metre	Flow Rate, LpHr/m <sup>2</sup>	Flow Result Pass/Fail	Incremental Slump, %	Cum. Slump, % Slump	Slump Result Pass/Fail	Overall Pass/Fail
67759 G Sp. C	67770 C	T20	P <sub>80</sub> 6.5 mm	Primary	0	0	3,345	Pass	0%	0%	Pass	Pass
				Stage Load		20	1,617	Pass	3%	3%	Pass	Pass
				Stage Load		40	1,469	Pass	1%	4%	Pass	Pass
				Stage Load		70	1,365	Pass	2%	6%	Pass	Pass
67759 H Sp. A	67771 A	T20	P <sub>80</sub> 6.5 mm Without minus 200 mesh	Primary	0	0	8,751	Pass	1%	1%	Pass	Pass
				Stage Load		20	7,671	Pass	2%	3%	Pass	Pass
				Stage Load		40	6,931	Pass	1%	4%	Pass	Pass
				Stage Load		70	5,728	Pass	2%	6%	Pass	Pass
67759 H Sp. B	67771 B	T20	P <sub>80</sub> 6.5 mm Without minus 200 mesh	Primary	0	0	7,930	Pass	0%	0%	Pass	Pass
				Stage Load		20	7,195	Pass	2%	2%	Pass	Pass
				Stage Load		40	6,907	Pass	2%	4%	Pass	Pass
				Stage Load		70	6,150	Pass	1%	5%	Pass	Pass
67759 H Sp. C	67771 C	T20	P <sub>80</sub> 6.5 mm Without minus 200 mesh	Primary	0	0	7,354	Pass	0%	0%	Pass	Pass
				Stage Load		20	6,391	Pass	3%	3%	Pass	Pass
				Stage Load		40	6,006	Pass	1%	4%	Pass	Pass
				Stage Load		70	5,415	Pass	1%	5%	Pass	Pass
67759 I Sp. A	67772 A	T20	P <sub>80</sub> 6.5 mm (No Bruno)	Primary	0	0	2,122	Pass	0%	0%	Pass	Pass
				Stage Load		20	605	Pass	4%	4%	Pass	Pass
				Stage Load		40	866	Pass	1%	5%	Pass	Pass
				Stage Load		70	757	Pass	2%	7%	Pass	Pass
67759 I Sp. B	67772 B	T20	P <sub>80</sub> 6.5 mm (No Bruno)	Primary	0	0	1,336	Pass	1%	1%	Pass	Pass
				Stage Load		20	876	Pass	3%	4%	Pass	Pass
				Stage Load		40	672	Pass	1%	5%	Pass	Pass
				Stage Load		70	472	Pass	2%	7%	Pass	Pass
67759 I Sp. C	67772 C	T20	P <sub>80</sub> 6.5 mm (No Bruno)	Primary	0	0	1,961	Pass	0%	0%	Pass	Pass
				Stage Load		20	1,327	Pass	4%	4%	Pass	Pass
				Stage Load		40	1,377	Pass	1%	5%	Pass	Pass
				Stage Load		70	1,138	Pass	2%	7%	Pass	Pass
67759 J Sp. A	67773 A	T20	P <sub>80</sub> 6.5 mm Without minus 200 mesh (No Bruno)	Primary	0	0	4,607	Pass	0%	0%	Pass	Pass
				Stage Load		20	3,110	Pass	3%	3%	Pass	Pass
				Stage Load		40	2,579	Pass	1%	4%	Pass	Pass
				Stage Load		70	2,007	Pass	2%	6%	Pass	Pass

KCA Sample No.	KCA Test No.	Sample Description	Crush Description	Test Phase	Cement Added, kg/MT	Effective Height, metre	Flow Rate, LpHr/m <sup>2</sup>	Flow Result Pass/Fail	Incremental Slump, %	Cum. Slump, % Slump	Slump Result Pass/Fail	Overall Pass/Fail
67759 J Sp. B	67773 B	T20	P <sub>80</sub> 6.5 mm Without minus 200 mesh (No Bruno)	Primary	0	0	5,902	Pass	0%	0%	Pass	Pass
				Stage Load		20	5,101	Pass	3%	3%	Pass	Pass
				Stage Load		40	4,372	Pass	2%	5%	Pass	Pass
				Stage Load		70	3,323	Pass	1%	6%	Pass	Pass
67759 J Sp. C	67773 B	T20	P <sub>80</sub> 6.5 mm Without minus 200 mesh (No Bruno)	Primary	0	0	8,181	Pass	0%	0%	Pass	Pass
				Stage Load		20	6,992	Pass	3%	3%	Pass	Pass
				Stage Load		40	6,283	Pass	1%	4%	Pass	Pass
				Stage Load		70	5,079	Pass	1%	5%	Pass	Pass

Source: Forte (2018)

Table 13-2: Compacted Permeability Results Summary – Bottom 20

KCA Sample No.	KCA Test No.	Sample Description	Crush Description	Test Phase	Cement Added, kg/MT	Effective Height, metre	Flow Rate, LpHr/m <sup>2</sup>	Flow Result Pass/Fail	Incremental Slump, %	Cum. Slump, % Slump	Slump Result Pass/Fail	Overall Pass/Fail
67758 A	67760 A	B20	P <sub>80</sub> 16 mm	Primary	0	0	5,511	Pass	0%	0%	Pass	Pass
				Stage Load		20	5,288	Pass	4%	4%	Pass	Pass
				Stage Load		40	5,246	Pass	2%	6%	Pass	Pass
				Stage Load		70	4,647	Pass	3%	9%	Pass	Pass
67758 B	67760 B	B20	P <sub>80</sub> 16 mm Without minus 200 mesh	Primary	0	0	6,311	Pass	0%	0%	Pass	Pass
				Stage Load		20	5,253	Pass	4%	4%	Pass	Pass
				Stage Load		40	4,934	Pass	2%	6%	Pass	Pass
				Stage Load		70	4,778	Pass	3%	9%	Pass	Pass
67758 C	67761 A	B20	P <sub>80</sub> 12 mm	Primary	0	0	5,139	Pass	0%	0%	Pass	Pass
				Stage Load		20	5,010	Pass	5%	5%	Pass	Pass
				Stage Load		40	4,866	Pass	2%	7%	Pass	Pass
				Stage Load		70	4,670	Pass	2%	9%	Pass	Pass
67758 D	67761 B	B20	P <sub>80</sub> 12 mm Without minus 200 mesh	Primary	0	0	5,294	Pass	1%	1%	Pass	Pass
				Stage Load		20	5,119	Pass	3%	4%	Pass	Pass
				Stage Load		40	4,976	Pass	2%	6%	Pass	Pass
				Stage Load		70	4,837	Pass	2%	8%	Pass	Pass
67758 E	67762 A	B20	P <sub>80</sub> 9 mm	Primary	0	0	6,584	Pass	0%	0%	Pass	Pass
				Stage Load		20	6,398	Pass	4%	4%	Pass	Pass
				Stage Load		40	6,191	Pass	2%	6%	Pass	Pass
				Stage Load		70	5,837	Pass	2%	8%	Pass	Pass
67758 F	67762 B	B20	P <sub>80</sub> 9 mm Without minus 200 mesh	Primary	0	0	5,934	Pass	1%	1%	Pass	Pass
				Stage Load		20	5,653	Pass	4%	5%	Pass	Pass
				Stage Load		40	5,262	Pass	1%	6%	Pass	Pass
				Stage Load		70	4,414	Pass	3%	9%	Pass	Pass
67758 G Sp. A	67763 A	B20	P <sub>80</sub> 6.5 mm	Primary	0	0	1,621	Pass	0%	0%	Pass	Pass
				Stage Load		20	1,075	Pass	4%	4%	Pass	Pass
				Stage Load		40	1,077	Pass	1%	5%	Pass	Pass
				Stage Load		70	846	Pass	1%	6%	Pass	Pass
67758 G Sp. B	67763 B	B20	P <sub>80</sub> 6.5 mm	Primary	0	0	1,663	Pass	0%	0%	Pass	Pass
				Stage Load		20	1,204	Pass	3%	3%	Pass	Pass
				Stage Load		40	1,093	Pass	1%	4%	Pass	Pass
				Stage Load		70	1,062	Pass	2%	6%	Pass	Pass

KCA Sample No.	KCA Test No.	Sample Description	Crush Description	Test Phase	Cement Added, kg/MT	Effective Height, metre	Flow Rate, LpHr/m <sup>2</sup>	Flow Result Pass/Fail	Incremental Slump, %	Cum. Slump, % Slump	Slump Result Pass/Fail	Overall Pass/Fail
67758 G Sp. C	67763 C	B20	P <sub>80</sub> 6.5 mm	Primary	0	0	1,599	Pass	0%	0%	Pass	Pass
				Stage Load		20	701	Pass	3%	3%	Pass	Pass
				Stage Load		40	830	Pass	2%	5%	Pass	Pass
				Stage Load		70	801	Pass	1%	6%	Pass	Pass
67758 H Sp. A	67764 A	B20	P <sub>80</sub> 6.5 mm Without minus 200 mesh	Primary	0	0	5,386	Pass	0%	0%	Pass	Pass
				Stage Load		20	3,721	Pass	3%	3%	Pass	Pass
				Stage Load		40	2,927	Pass	1%	4%	Pass	Pass
				Stage Load		70	2,439	Pass	2%	6%	Pass	Pass
67758 H Sp. B	67764 B	B20	P <sub>80</sub> 6.5 mm Without minus 200 mesh	Primary	0	0	7,360	Pass	0%	0%	Pass	Pass
				Stage Load		20	6,131	Pass	3%	3%	Pass	Pass
				Stage Load		40	5,741	Pass	1%	4%	Pass	Pass
				Stage Load		70	4,681	Pass	2%	6%	Pass	Pass
67758 H Sp. C	67764 C	B20	P <sub>80</sub> 6.5 mm Without minus 200 mesh	Primary	0	0	6,459	Pass	0%	0%	Pass	Pass
				Stage Load		20	5,223	Pass	2%	2%	Pass	Pass
				Stage Load		40	4,633	Pass	2%	4%	Pass	Pass
				Stage Load		70	3,687	Pass	1%	5%	Pass	Pass
67758 I Sp. A	67765 A	B20	P <sub>80</sub> 6.5 mm (No Bruno)	Primary	0	0	2,929	Pass	0%	0%	Pass	Pass
				Stage Load		20	2,440	Pass	3%	3%	Pass	Pass
				Stage Load		40	2,168	Pass	2%	5%	Pass	Pass
				Stage Load		70	1,545	Pass	2%	7%	Pass	Pass
67758 I Sp. B	67765 B	B20	P <sub>80</sub> 6.5 mm (No Bruno)	Primary	0	0	4,761	Pass	0%	0%	Pass	Pass
				Stage Load		20	3,946	Pass	4%	4%	Pass	Pass
				Stage Load		40	3,353	Pass	2%	6%	Pass	Pass
				Stage Load		70	2,923	Pass	1%	7%	Pass	Pass
67758 I Sp. C	67765 C	B20	P <sub>80</sub> 6.5 mm (No Bruno)	Primary	0	0	4,019	Pass	1%	1%	Pass	Pass
				Stage Load		20	2,748	Pass	3%	4%	Pass	Pass
				Stage Load		40	2,115	Pass	2%	6%	Pass	Pass
				Stage Load		70	1,747	Pass	2%	8%	Pass	Pass
67758 J Sp. A	67766 A	B20	P <sub>80</sub> 6.5 mm Without minus 200 mesh (No Bruno)	Primary	0	0	10,108	Pass	0%	0%	Pass	Pass
				Stage Load		20	9,297	Pass	3%	3%	Pass	Pass
				Stage Load		40	8,559	Pass	2%	5%	Pass	Pass
				Stage Load		70	7,371	Pass	1%	6%	Pass	Pass

KCA Sample No.	KCA Test No.	Sample Description	Crush Description	Test Phase	Cement Added, kg/MT	Effective Height, metre	Flow Rate, LpHr/m <sup>2</sup>	Flow Result Pass/Fail	Incremental Slump, %	Cum. Slump, % Slump	Slump Result Pass/Fail	Overall Pass/Fail
67758 J Sp. B	67766 B	B20	P <sub>80</sub> 6.5 mm Without minus 200 mesh (No Bruno)	Primary	0	0	5,242	Pass	0%	0%	Pass	Pass
				Stage Load		20	3,674	Pass	3%	3%	Pass	Pass
				Stage Load		40	2,899	Pass	2%	5%	Pass	Pass
				Stage Load		70	2,072	Pass	1%	6%	Pass	Pass
67758 J Sp. C	67766 C	B20	P <sub>80</sub> 6.5 mm Without minus 200 mesh (No Bruno)	Primary	0	0	6,646	Pass	0%	0%	Pass	Pass
				Stage Load		20	5,378	Pass	3%	3%	Pass	Pass
				Stage Load		40	4,618	Pass	1%	4%	Pass	Pass
				Stage Load		70	3,647	Pass	1%	5%	Pass	Pass

Source: Forte (2018)



### 13.1.2 Fraction Extraction Recovery Projections

A review of all metallurgical testwork performed on the Eagle deposit, including chemical and mineralogical assays, bottle roll and column leach tests, and compacted permeability tests was done to define projected kinetic profiles of ore types A, B, C, and E. In reviewing the test results, the variability in total gold recovery as a function of time and rock type was considered, as differences in recovery, and therefore diffusion rates, were observed by the specific rock type and by the composites, which yielded results that may not necessarily coincide with the sum of individual rock sample results. This artifact may be a result of ore variability of the samples collected, coarse gold influence, or other factors. This composite sample variability from individual rock type performance was also noted in the previous review by Metallurgium.

#### 13.1.2.1 Crushed Ore Projection

In all metallurgical testing campaigns, testing via rock type designations was maintained which provided analytical consistency throughout the review. These rock type designations are identified in Table 13-3.

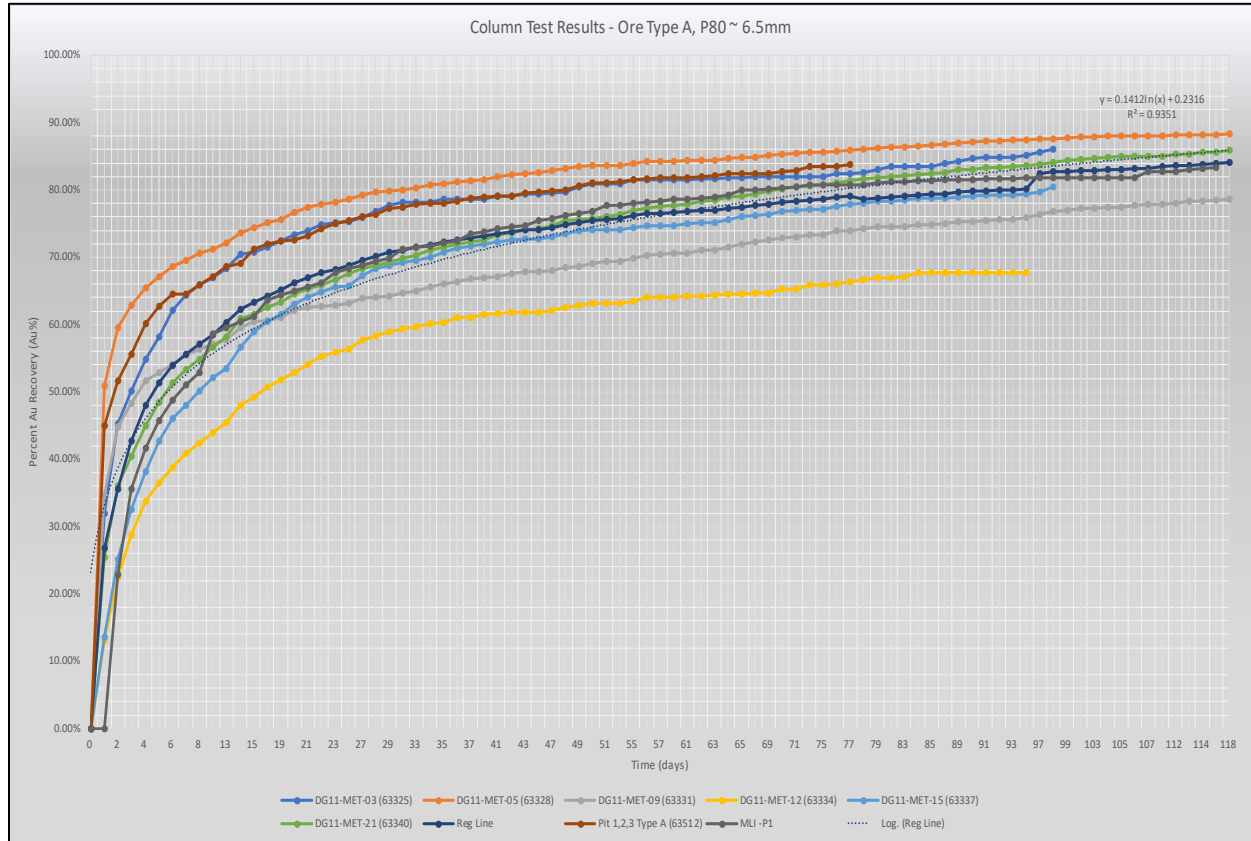
Table 13-3: Ore Type Descriptions

Ore Type	Geological Classification
<b>A</b>	Weathered Granodiorite
<b>B</b>	Fresh to Weakly Altered Granodiorite
<b>C</b>	Sericitic, Chloritic, Carbonate Altered Granodiorite
<b>D</b>	Fine-grained Granodiorite
<b>E</b>	Weathered Sediments

Source: Forte (2018)

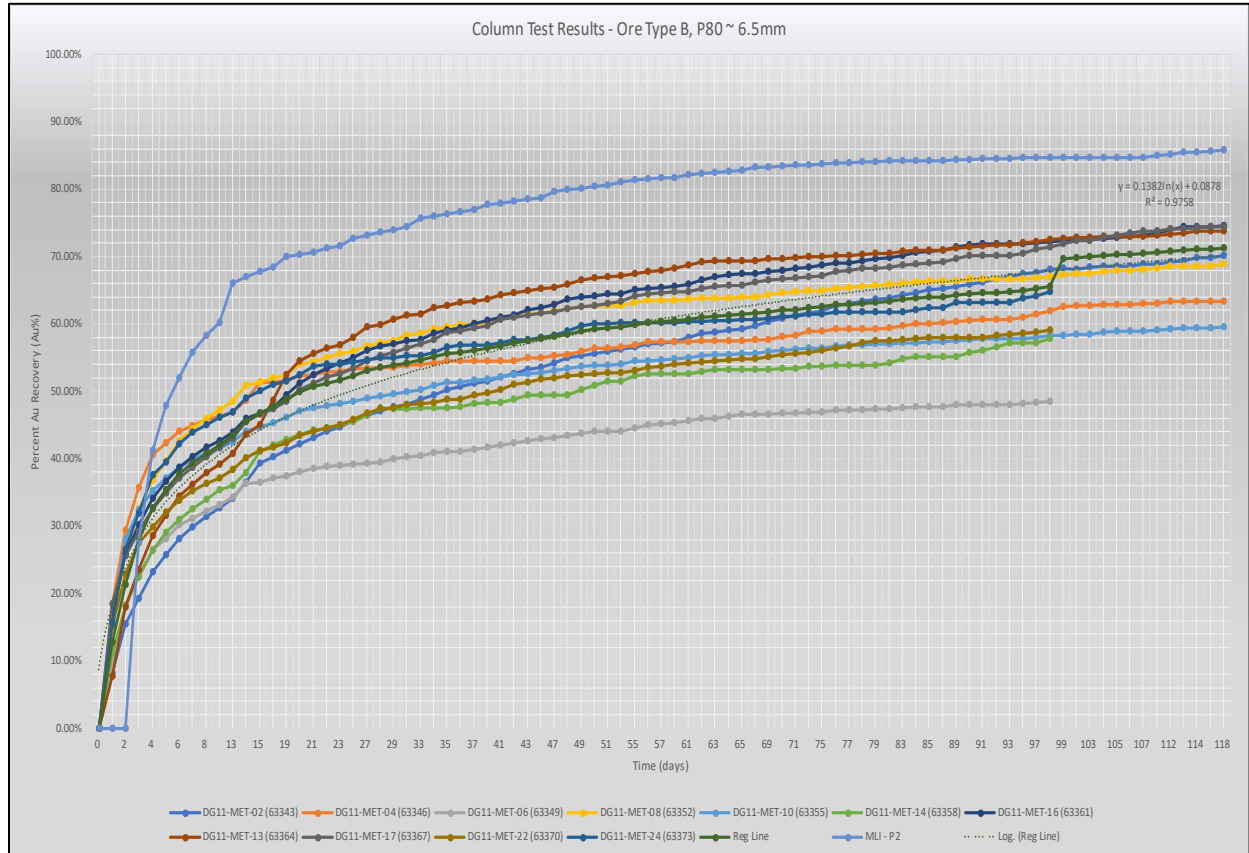
Utilizing actual test data results, all testing performed for Ore Types A, B, C and E were compiled and sorted according to P<sub>80</sub>. Ore Type D was not analyzed in detail as representation of these rock types for the Eagle deposit are expected to be minimal. Figure 13-1 through Figure 13-4 show the column test results for Rock Types A, B, C, and E respectively, with the projected long-term ultimate recoveries for each described further below.

Figure 13-1: Ore Type A P<sub>80</sub> ~6.5 mm Column Test Summary



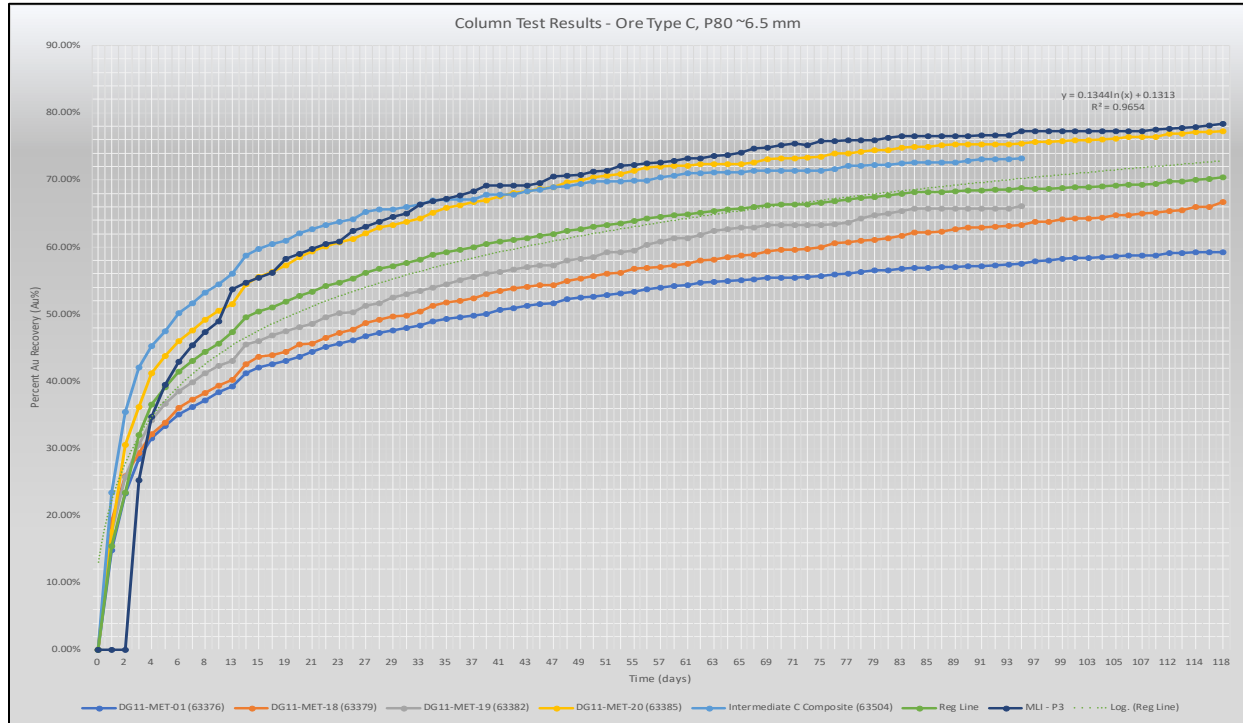
Source: Forte (2018)

Figure 13-2: Ore Type B P<sub>80</sub> ~6.5 mm Column Test Summary



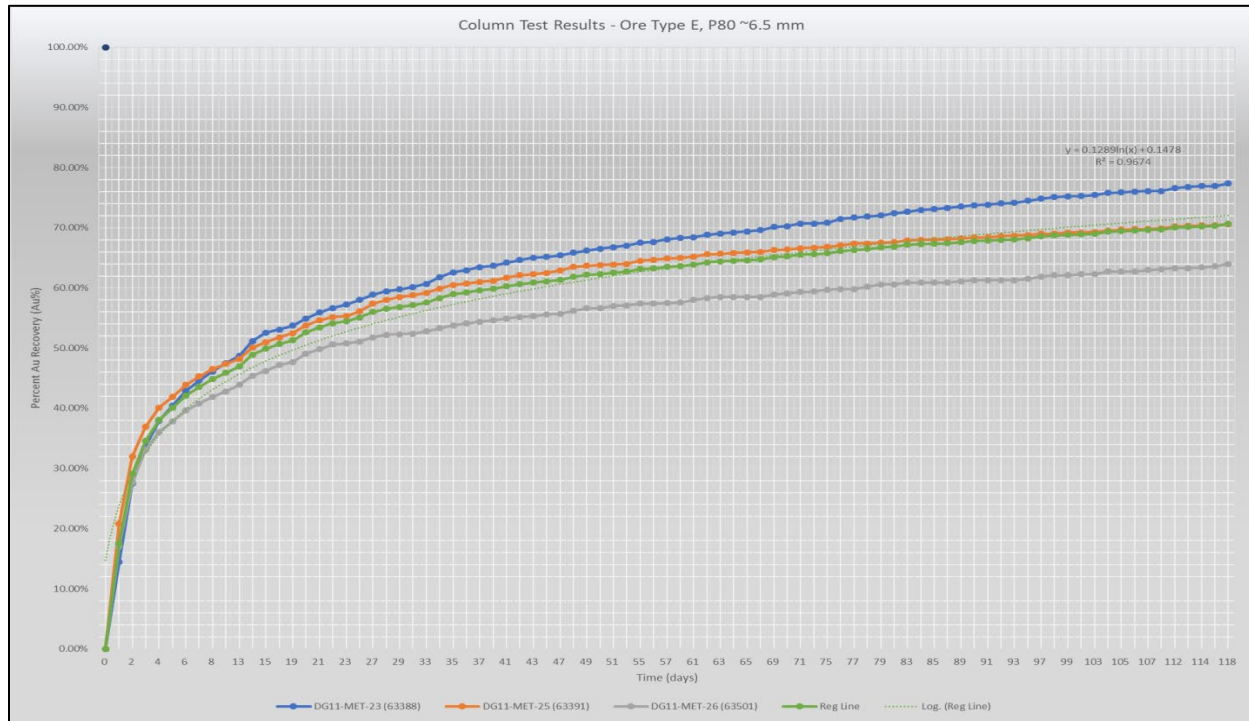
Source: Forte (2018)

Figure 13-3: Ore Type C P<sub>80</sub> ~6.5 mm Column Test Summary



Source: Forte (2018)

Figure 13-4: Ore Type E P<sub>80</sub> ~6.5 mm Column Test Summary



Source: Forte (2018)

For Ore Type A, recoveries ranged from 66.3% to 85.8%, with a standard deviation of 6.3% from this sample set. Average P<sub>80</sub> from this set of column tests was 6.04 mm. It should be noted that while most of the recoveries were approaching asymptotic behavior, slight recovery increases are still seen at the end of the tests, indicating longer leach times would likely yield increased recovery.

For Ore Type B, maximum recoveries ranged from 48.5% to 84.6%, with a standard deviation of 9.3% from this sample set. Average P<sub>80</sub> from this set of column tests was 6.15 mm. While this rock type has the most samples for analysis, it also has the highest standard deviation indicating an increase in variability, which could indicate the presence of coarse gold or mineralogy and alteration variability. However, gravity recovery gold testing did not show economic viability (Rescan, 2009). It should be noted that while the majority of the recoveries were approaching asymptotic behavior, slight recovery increases are still seen at the end of the tests, indicating longer leach times would likely yield increased recovery.

For Rock Type C, maximum recoveries ranged from 57.6% to 77.2%, with a standard deviation of 7.7% from this sample set. Average P<sub>80</sub> from this set of column tests was 6.1 mm. It should be noted that while the majority of the recoveries were approaching asymptotic behavior, slight recovery increases are still seen at the end of the tests, indicating longer leach times would likely yield increased recovery.

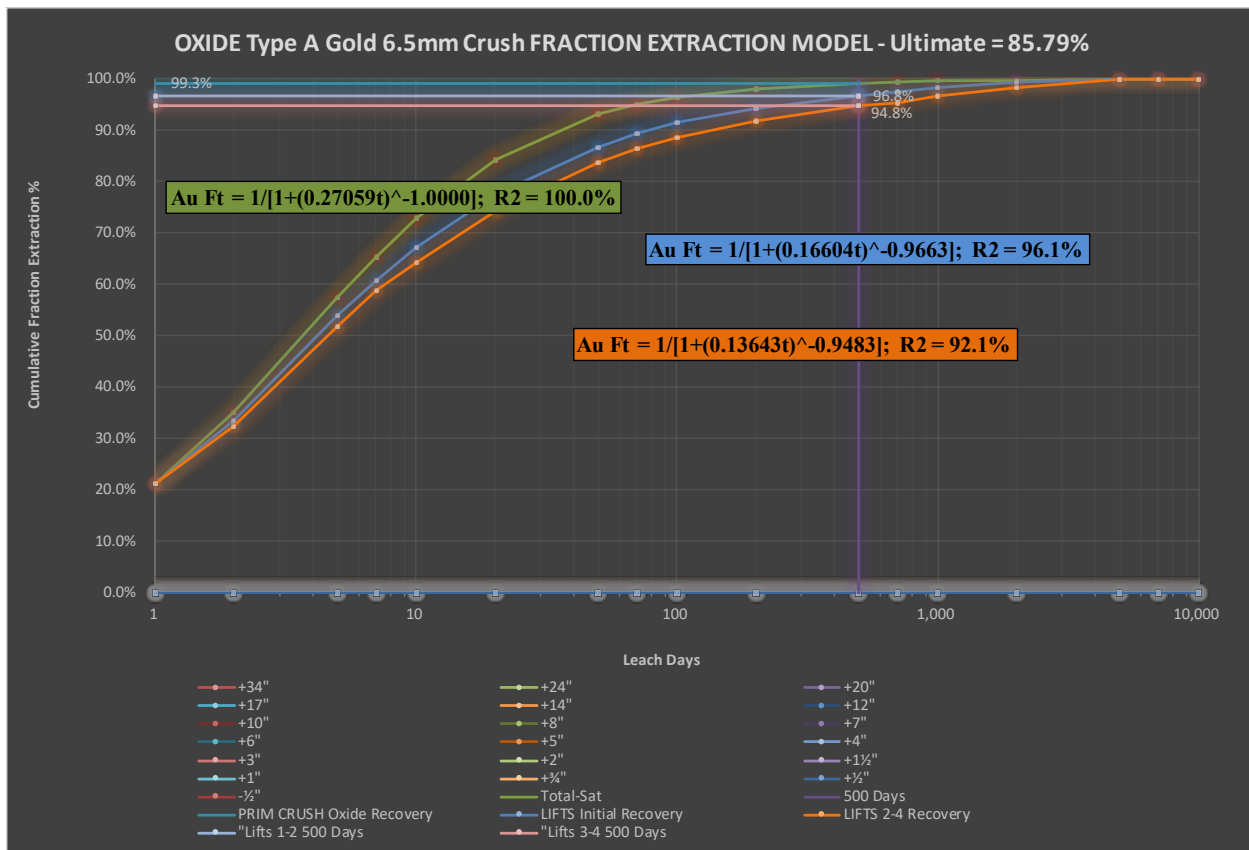
Projections were made of ultimate column test recoveries for each rock type, based on performing a simulated projection of asymptotic behavior of those recovery curves that did not achieve asymptotic behavior, which represented the majority of the tests due to shorter leaching duration. These projections

then serve as the basis of an ultimate long-term recovery fraction extraction estimate, based on the diffusion rate of the individual ore types. Diffusivity of the individual particle sizes, assumed to be spherical particles, was modified by an estimate of the fractional porosity and by the tortuosity of the pores, thereby increasing the diffusion path length. The column tests, by respective particles sizes, were separated and analyzed to calculate diffusion. Figure 13-5 through Figure 13-8 provide the resulting fraction extraction graphs for Rock Types A, B, C, and E respectively.

The lower lines on each of the graphs, shown as “blue” and “orange,” represent the anticipated fraction extraction accounting for in-field performance of heap leaching, representing changes in solution to ore contact as lifts are added to the heap leach in actual operations.

The long-term ultimate recoveries are estimated at 85.8%, 73.1%, 74.9%, and 77.2% for Ore Types A, B, C and E respectively. These values are then multiplied by the fraction extraction equation shown in “blue” for first lift or “orange” for later lifts on each graph to determine an overall projected recovery, which is then multiplied by the head assay grade to obtain projected cumulative recovered troy ounces as a function of time as leaching continues.

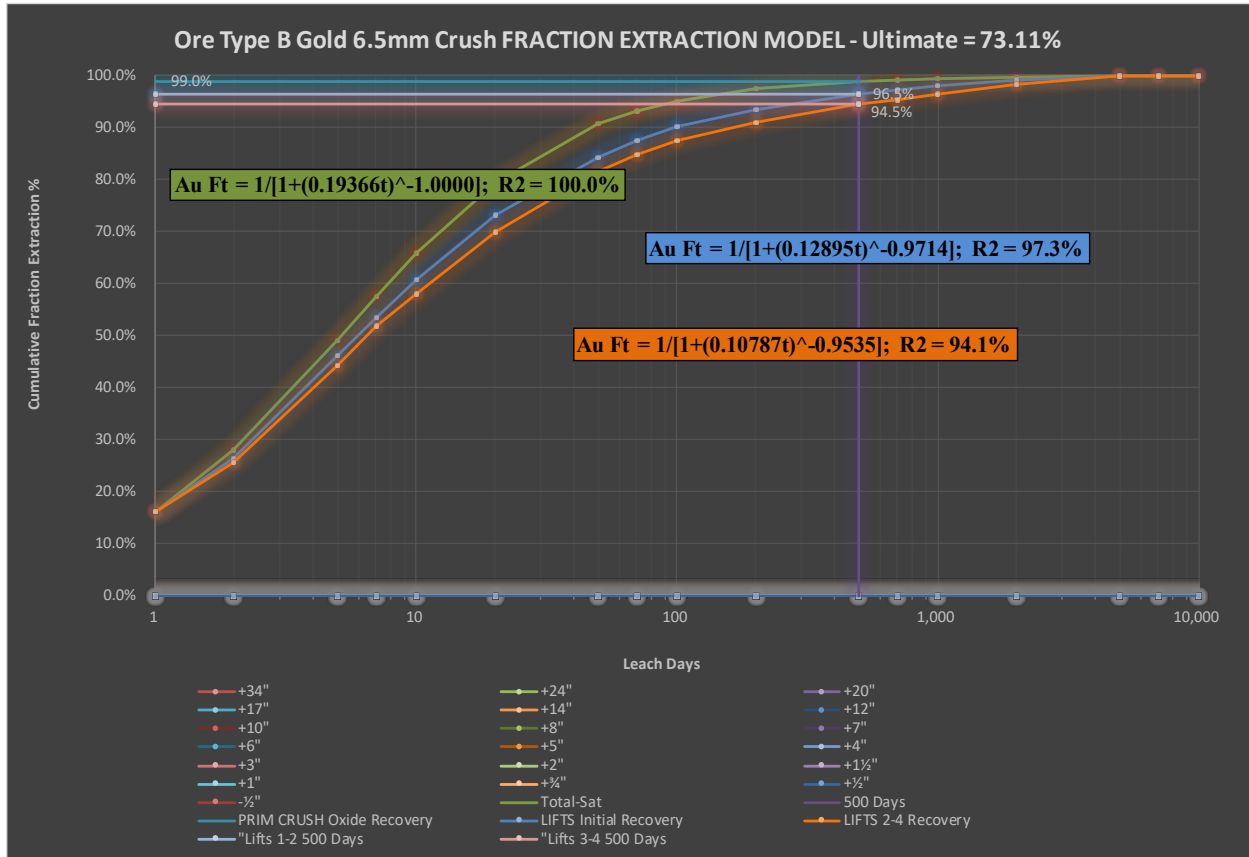
Figure 13-5: Ore Type A, P<sub>80</sub> 6.5 mm Fraction Extraction



Source: Forte (2018)

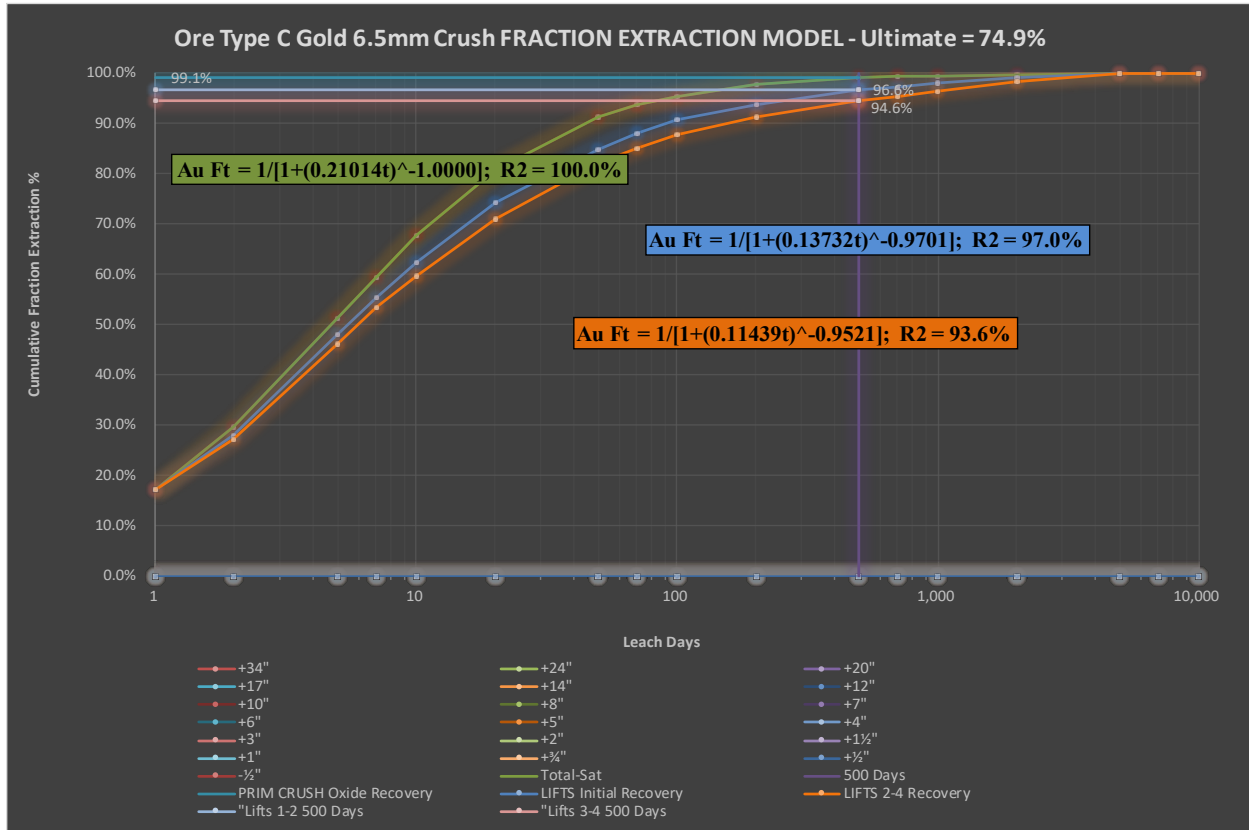


Figure 13-6: Ore Type B, P<sub>80</sub> 6.5 mm Fraction Extraction



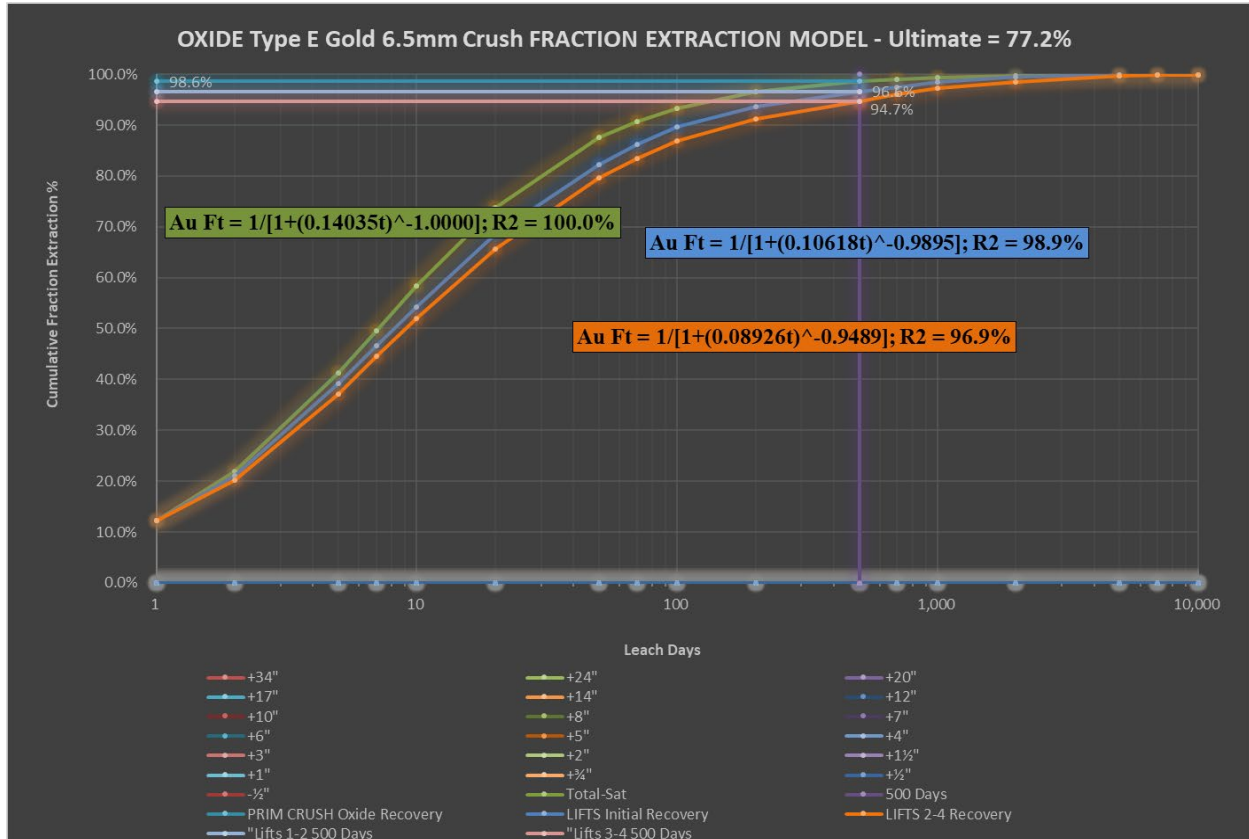
Source: Forte (2018)

Figure 13-7: Ore Type C, P<sub>80</sub> 6.5 mm Fraction Extraction



Source: Forte (2018)

Figure 13-8: Ore Type E, P<sub>80</sub> 6.5 mm Fraction Extraction



Source: Forte (2018)

### 13.1.3 Reagent Consumption

Test results for cyanide consumption and concludes the consumption of the Eagle ore is generally low, averaging 1.19 kg/t NaCN in the columns. A field scale reduction of 26% to 33% is applied, resulting in an estimated consumption rate of 0.30 to 0.39 kg/t NaCN; similar to the 2016 FS estimate of 0.42 kg/t.

Lime consumption was also generally low, ranging from 1.0 to 1.5 kg/t without the addition of cement/agglomeration. While the sulphide sulfur percentages remain low, at 0 to 0.25%, lime addition of 1.0 kg/t is being used until further operational data is obtained and adjustments can be made if warranted.

### 13.1.4 Eagle Deposit Metallurgical Summary

Based on all metallurgical data, and the fraction extraction method of projecting recoveries as a function of time, the following metallurgical assumptions are applied to the Eagle Gold Project:

- Ultimate (10,000 day) gold recoveries of:
  - Type “A” – 85.8%;
  - Type “B” – 73.1%;
  - Type “C” – 74.9%;
  - Type “D” (assumed minimal) – no test data available, assumed to be same recovery as Type “B” (73.1%); and
  - Type “E” – 77.2%.
- Field cyanide consumption of 0.35 kg/t;
- Lime addition of 1 kg/t; and
- Zero cement addition.

Considering the projected recoveries and using a weighted average of the rock types by respective mine plan contained ounces for Eagle Gold project, results in an ultimate long-term recovery of 76%.

### 13.1.5 Ongoing Testwork and Crush Size Optimization

The company has an ongoing metallurgical testwork program in place to verify and refine its recovery estimates. This program involves regular testing of monthly composites and individual ore samples. Results are used to assess the suitability of recovery estimates against processing conditions and operating strategies.

Testwork to date supports the position that gold deportment is primarily composed of cyanide soluble species contained within a permeable host rock matrix. Extraction rates are dependent on crush size and the particle size of gold-bearing minerals, but the ultimate recoveries are consistent over the range of sizes tested. Recovery rates are generally inversely proportional to crush size because of the relative difference in distance leaching reagents must be transported within the host matrix to reach the gold mineral species.

The optimal crush size depends on the combination of extraction rate and hydraulic conductivity of the bulk ore assemblage. Crushing finer reduces mineral extraction time but limits solution flow and leaching efficiency. In contrast, crushing coarser improves solution management but requires matching the

stacking rate. Comparison of actual leaching performance with modeled predictions indicates that a crush size of 12.5 mm yields best balances overall leach solution transport and extraction dynamics to achieve consistent gold recovery.

## 13.2 Olive Metallurgical Test Program

Metallurgical testwork was conducted by KCA between 2014 and 2015 on material for the Olive Zone. Samples tested include bulk sample and core material that were deemed representative at the time they were composited with respect to the aim of the program embarked upon. Investigations have largely focused on heap leaching.

No additional testwork has been completed since the 2016 FS. The methods used by KCA are within industry standards. As such, projections made for Olive during the 2016 FS are still considered valid.

Column leach tests for the KCA February 2015 and June 2015 test programs show similar gold recoveries for oxide material ranging between 67% and 74% at a crush size of 100% passing 9.5 mm (approximately 80% passing 6.3 mm). For heap leach FS purposes, KCA normally discounts laboratory gold extractions by two to three percentage points when estimating field extractions. Based on the column testwork results from the two testing programs, the following LOM gold recoveries are estimated for each ore type at Olive by KCA:

- Oxide 66%
- Sulphide 53%
- Transition 55%

These test results are based on column tests performed for less than 200 days under leach. Applying similar principles as the Eagle results in an estimate of 75.6% recovery for the oxide.

## 14 MINERAL RESOURCE ESTIMATE

This Technical Report presents an update to the Mineral Resource Estimate (MRE) of the Eagle Gold Mine deposit from the November 15, 2019 previous MRE. Since then, 35 additional holes were drilled from 2020 to 2022 in the deeper areas of the Eagle deposit and to its western extension. The update of the mineral resources of the Eagle Gold Mine deposit utilized a similar estimation strategy as for the November 2019 MRE.

An update of the Mineral Resource Estimate of the Olive deposit, located approximately 2.5 km northeast of the Eagle Gold Mine deposit, is also presented in this report. For this update a new geologic interpretation of the mineralized zones at Olive was carried out along with a new estimation strategy, similar to the approach undertaken at Eagle.

The MRE for the Eagle Gold Mine deposit and the Olive deposit were prepared by Independent QP, Marc Jutras, P.Eng., M.A.Sc., Principal, Ginto Consulting Inc., The mineral resources have been estimated in accordance with the "CIM Estimation and Mineral Resources and Reserves Best Practices Guidelines" (CIM, 2019) and have been classified as "Measured", "Indicated" and "Inferred" in conformity with the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines" (May 2014).

Geological data review and modelling, data verification, and QA/QC was carried out by Qualified Persons Marc Jutras, P.Eng., M.A.Sc, and Paul D. Gray, P.Geo. to support the data incorporated into mineral resource estimations for both the Eagle and Olive mineralized zones. Detailed data verification and QA/QC was carried out to support the data incorporated into the mineral resource estimation.

For the Eagle and Olive deposits, the assay compositing, geologic modelling, gold grade estimation, open pit optimization and tabulation of the mineral resources were carried out with the Vulcan® software version 12.0.2. The exploratory data analysis, variographic study, and validation of the grade estimates were performed with GSLIB-type utilities.

MRE methods and results are described for both the Eagle and Olive deposits below.

### 14.1 Eagle Gold Mine Deposit

#### 14.1.1 Drill Hole Database

The drill hole database was received in Excel format on August 2, 2022. It comprises 513 holes with 74,289 assays for gold in g/t and 52,618 assays for silver in g/t, representing a total of 115,393 m of drilling. From the 513 holes, there are 336 diamond drill holes, 169 reverse circulations holes and 8 trenches. Additional details of the drill hole database are presented in Table 14-1 and Table 14-2. The location of the drill holes is shown in Figure 14-1. There are 35 additional diamond drill holes added to the drill hole database since the previous November 2019 MRE. These holes are targeting the Eagle Main deposit at depth and to the west near surface.

Table 14-1: Eagle Drill Hole Database

Hole Type	Number of Holes	Number of Metres	Number of Au Assays	Number of Ag Assays
Diamond Drill Holes	336	89,651	57,720	49,175
Reverse Circulation	169	25,446	16,430	3,391
Trench	8	296	139	52
<b>Total</b>	<b>513</b>	<b>115,393</b>	<b>74,289</b>	<b>52,618</b>

Source: Ginto (2022)

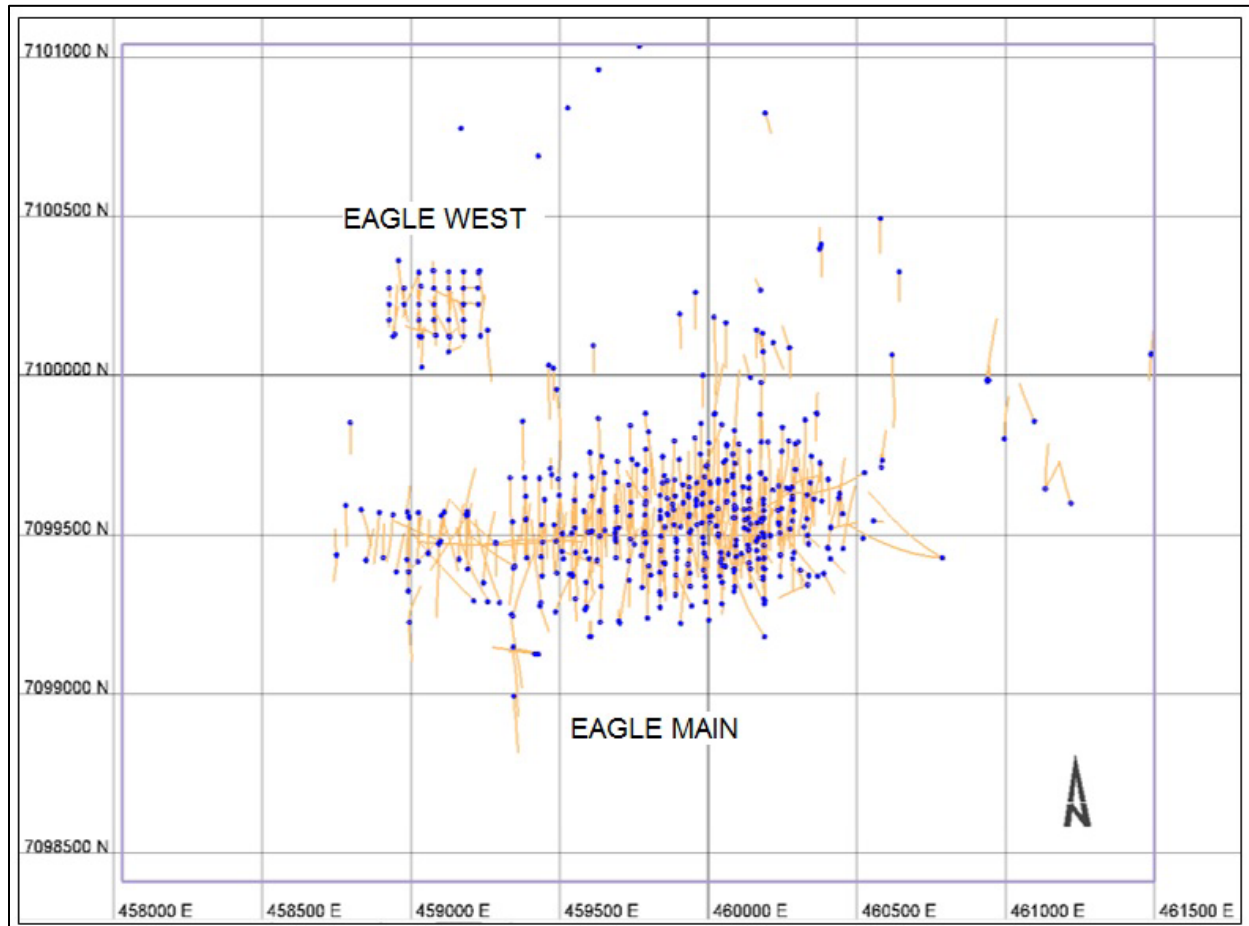
Table 14-2: Eagle Drill Hole Database Statistics

Collar Data	Number of Data	Mean	Standard Deviation	Coefficient of Variation	Minimum	Lower Quartile	Median	Upper Quartile	Maximum	Number of 0.0 values	Number of < 0.0 values
Easting (X)	513	459818.0	473.372	0.001	458750.0	459485.0	459914.0	460138.0	461488.0	—	—
Northing (Y)	513	99649.1	317.69	0.003	98993.5	99439.6	99570.0	99734.8	101182.0	—	—
Elevation (Z)	513	1112.86	140.571	0.126	839.0	988.27	1139.9	1230.05	1410.0	—	—
Hole Depth	513	224.937	147.019	0.654	6.0	127.33	199.64	299.61	883.92	—	—
Azimuth	513	149.687	115.604	0.772	0.0	0.0	180.0	180.0	368.0	—	—
Dip	513	-54.453	10.737	-0.197	-90.0	-59.0	-54.0	-50.0	4.0	—	—
Overburden	513	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—
<b>Survey Data</b>											
Azimuth	2263	184.476	112.224	0.608	0.0	166.87	179.2	273.31	369.8	—	—
Dip	2263	-57.708	8.148	-0.141	0.0	0.0	0.0	0.0	0.0	—	—
<b>Assay Data</b>											
Interval Length (from-to)	73499	1.493	0.439	0.294	0.01	1.5	1.52	1.53	29.6	0	0
AU_GPT	73499	0.434	1.238	2.85	0.0	0.03	0.12	0.39	52.7	13	790
AG_GPT	52618	0.755	5.476	7.25	0.0	0.25	0.25	0.25	517.0	280	21671

Source: Ginto (2022)



Figure 14-1: Eagle Drill Hole Locations – Plan View



Source: Ginto (2022)

### 14.1.2 Geology Model

For this update, the geology model of the previous November 2019 MRE was utilized as an initial model and then modified with the 35 additional drill holes. The geology model of the Eagle Main zone was built as a mineralized envelope with a cut-off grade of 0.15 g/t Au. The delineation of the model utilized the drill hole database of gold grades and the granodiorite unit as a geologic control on gold mineralization. Interpretations of gold mineralization limits were performed on north-south sections spaced at 25 m intervals. A first set of sectional interpretations was carried out from east to west, followed by a second sweep from west to east. In this latter task, a shadow of the section behind and in front of the current section was observed in order to model smooth transitions of the interpreted shapes from section to section. A final modification of the mineralized shapes consisted of the validation of the near surface contacts to ensure that the envelope limits were located within the granodiorite unit. The shape of the mineralized zone is consistent and continuous from east to west with dimensions of approximately 1,750 m east-west, 630 m north-south, and up to 850 m below surface. A separate mineralized area, previously

known as Eagle Extension, was merged to the Eagle Main mineralized zone in this update, based on the latest drilling in the western region of the Eagle Main zone.

The total volume of the Eagle Main Zone derived from the above modeling approach is presented in Table 14-3 and represents a 17.2% increase over the November 2019 model. Only the Eagle Main zone was utilized for this MRE update.

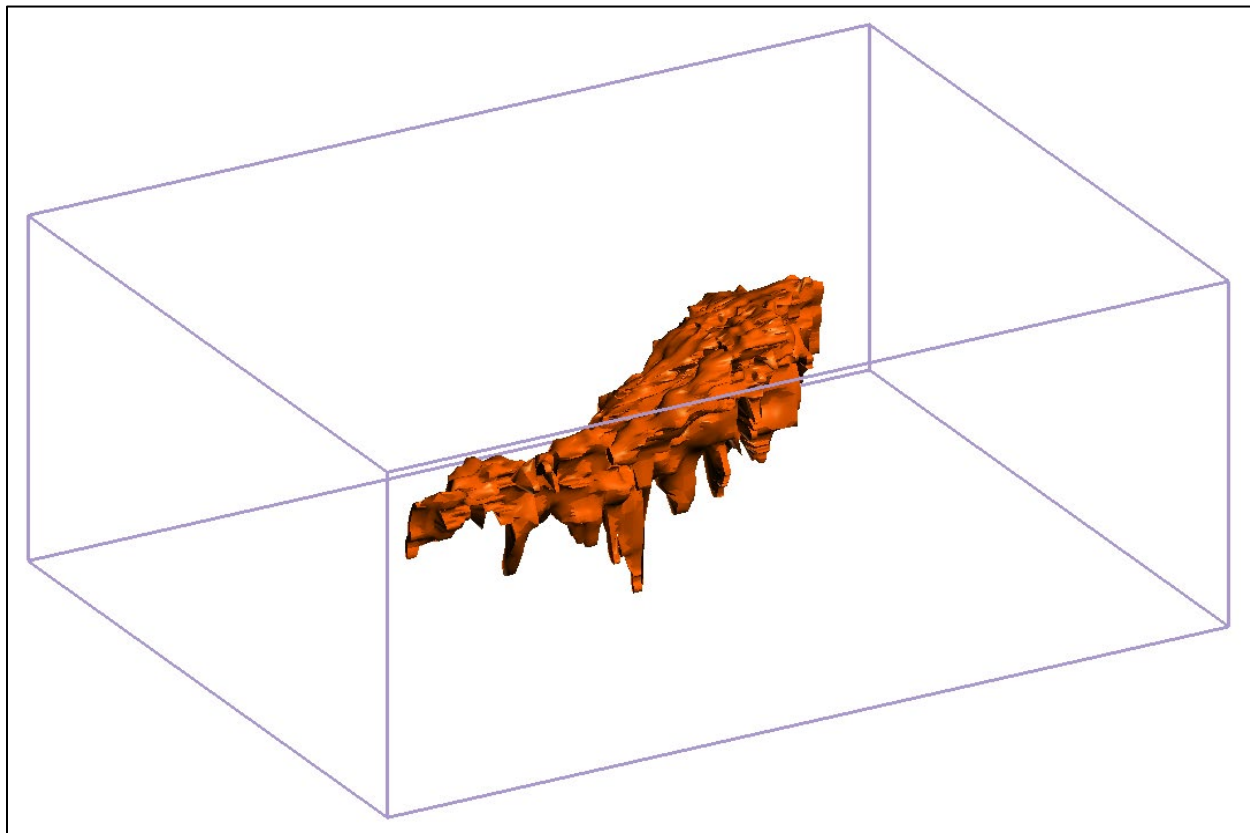
Table 14-3: Wireframe volumes – Eagle Main Zone

Zone	Volume Mm <sup>3</sup>
Eagle Main Zone – December 2022 Update	118.7
Eagle Main Zone – November 2019	101.3

Source: Ginto (2022)

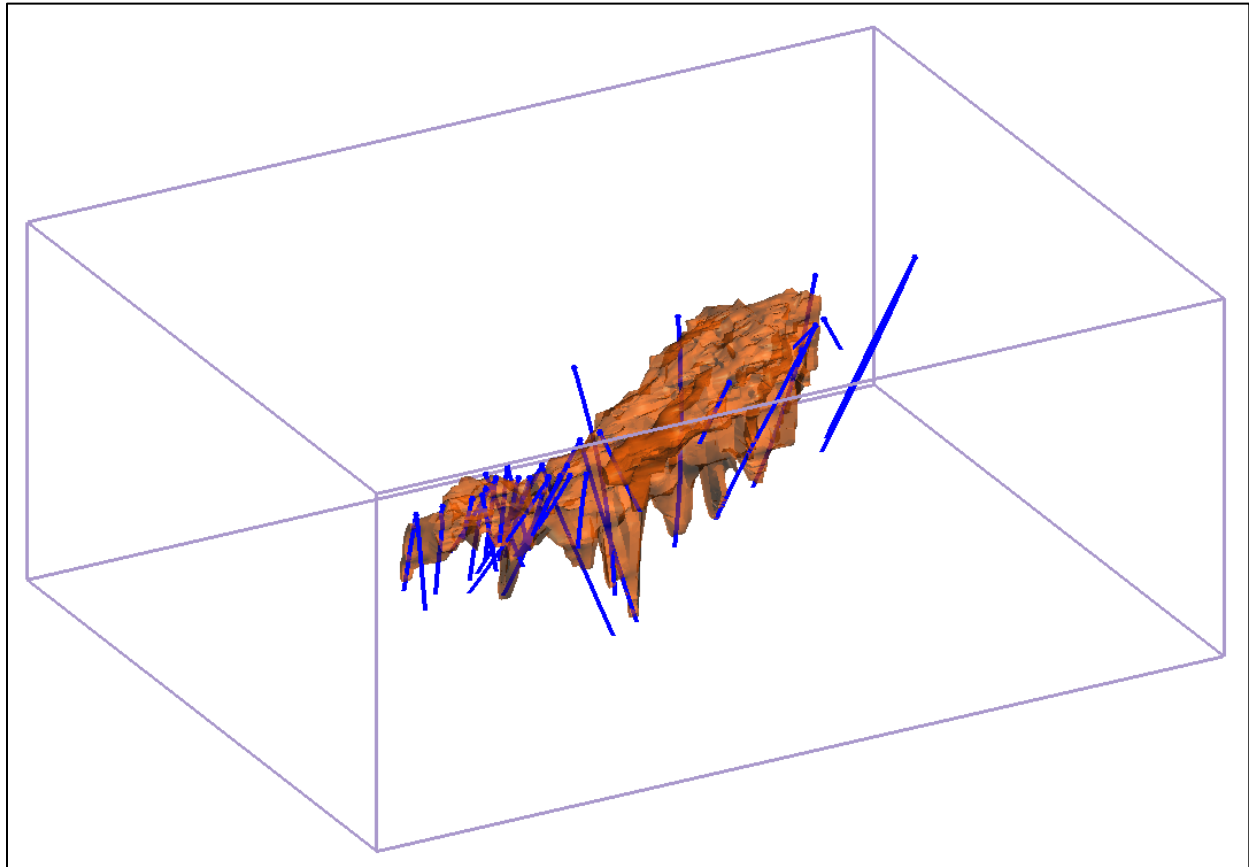
An example of the gold mineralization wireframe of the Eagle Main Zone is shown in Figure 14-2 and with the latest additional holes in Figure 14-3.

Figure 14-2: Geologic Model – Perspective View Looking Northeast – Eagle Main Zone



Source: Ginto (2022)

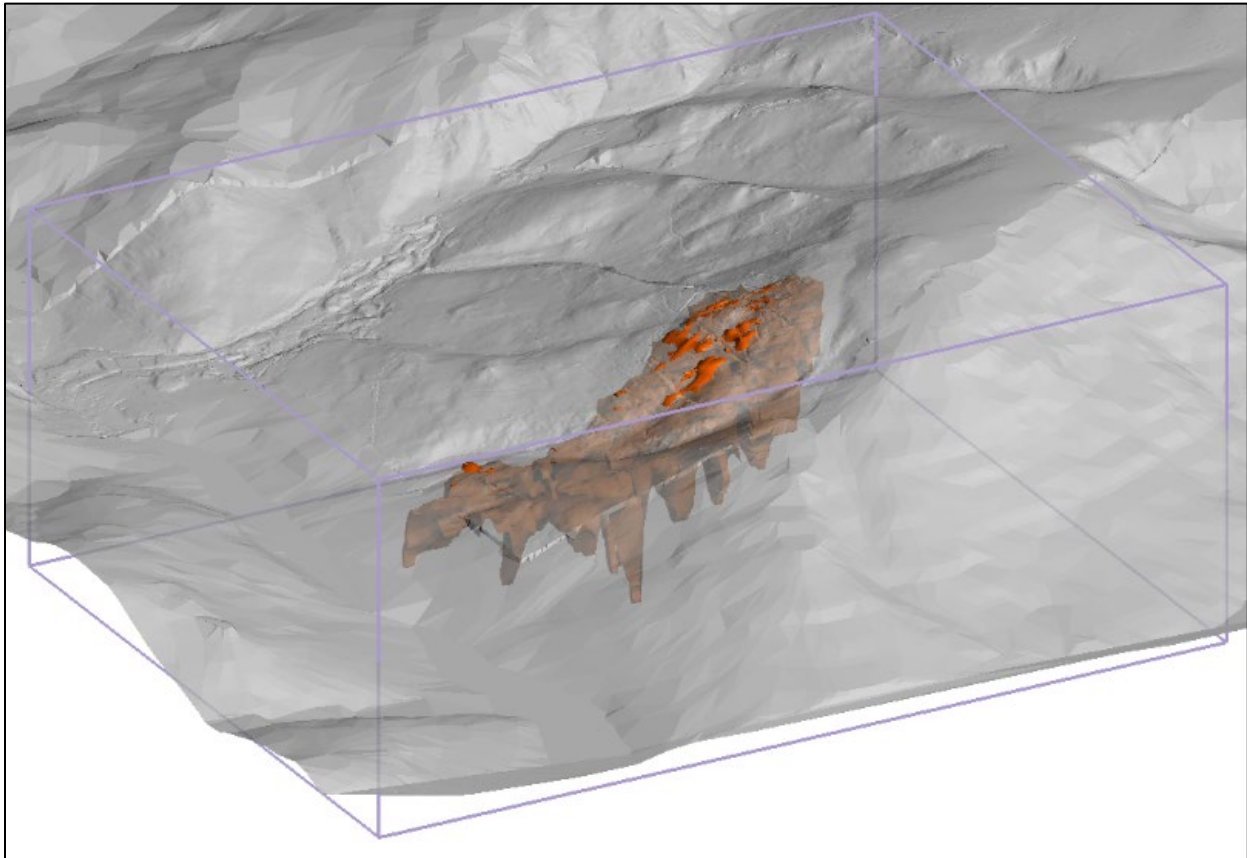
Figure 14-3: Geologic Model With Drill Holes from 2020 to 2022 – Perspective View Looking Northeast – Eagle Main Zone



Source: Ginto (2022)

Models of the overburden and granodiorite developed by Victoria Gold’s geologic team were also provided for the definition of the near surface contact of the mineralized envelope and for the assignment of densities. The Leapfrog® software was used to create overburden and metasediment-granodiorite contact surfaces. A topography surface derived for the 2016 Feasibility Study was utilized in this update to edit the block model by restricting estimates to its surface. An example of the topography surface and the Eagle Main zone is presented in Figure 14-4.

Figure 14-4: Geologic Model with Topographic Surface – Perspective View Looking Northeast – Eagle Main Zone



Source: Ginto (2022)

### 14.1.3 Grade Compositing

The original assays were composited to 1.52 m regular intervals to reflect the most common sampling length of 1.52 m (5 ft) for more than 65% of the assays. This approach ensures that the intrinsic variability of the original assays is respected.

The block height-to-composite length ratio is believed to be adequate with a ratio of 3.3 (5.0 m/1.52 m). As a general rule, a ratio between 2.0 and 5.0 is targeted.

A dynamic compositing process was utilized for this task. In this setting, the residual composites are re-distributed to the full-length composites, to allow for all composites within a domain to have the same composite length. This will avoid artifacts possibly created by the shorter residual composites.

A total of 41,282 Au composites from 377 holes and 25,942 Ag composites from 216 holes resulted from the compositing process in the Eagle Main Zone.

#### 14.1.4 Exploratory Data Analysis

The exploratory data analysis (EDA) is an exercise that allows for a better understanding of the different geometric and statistical aspects of the data under study.

##### 14.1.4.1 Drill Hole Spacing and Orientation

The drill hole spacing within the Eagle Main zone is 22.2 m on average with a median of 18.4 m. The drill hole spacing statistics were derived by calculating the distance of each nearest samples from another hole. A summary of the drill hole spacing statistics is provided in Table 14-4.

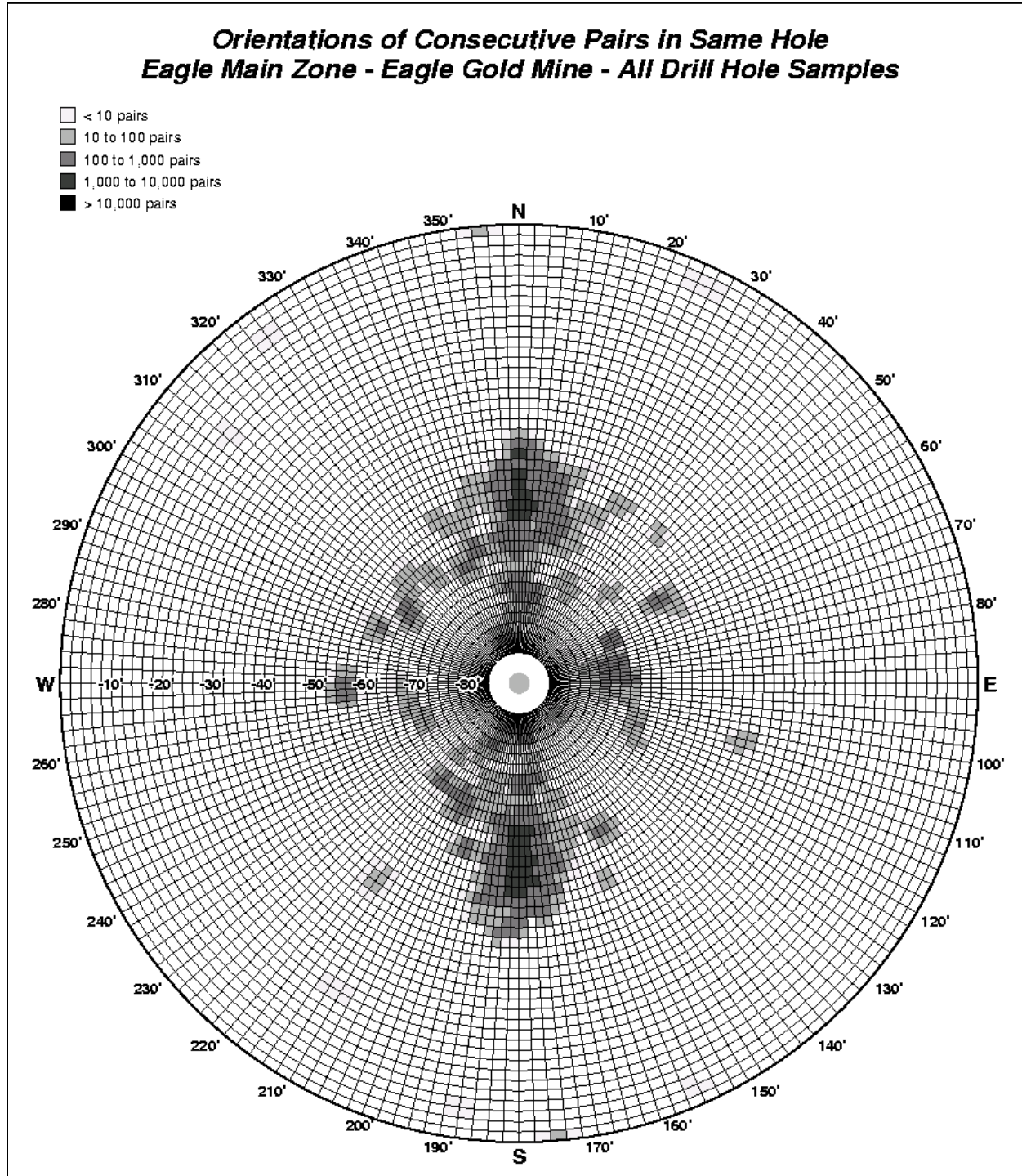
Table 14-4: Drill Hole Spacing Statistics – Eagle Main Zone

Zone	Drill Hole Spacing	
	Average (m)	Median (m)
Eagle Main	22.2	18.4
Out of Eagle Main	50.1	41.4
All	33.5	24.2

Source: Ginto (2022)

The drilling orientation in the Eagle Main Zone is shown in Figure 14-5. As seen in Figure 14-5, a great majority of holes are oriented to the north at 0° azimuth and to the south at 180° azimuth, mostly dipping between -50° and -60°. Note that the azimuths are read from the outer circle while the dips are read from the inner circles.

Figure 14-5: Drill Hole Orientations – Eagle Main Zone



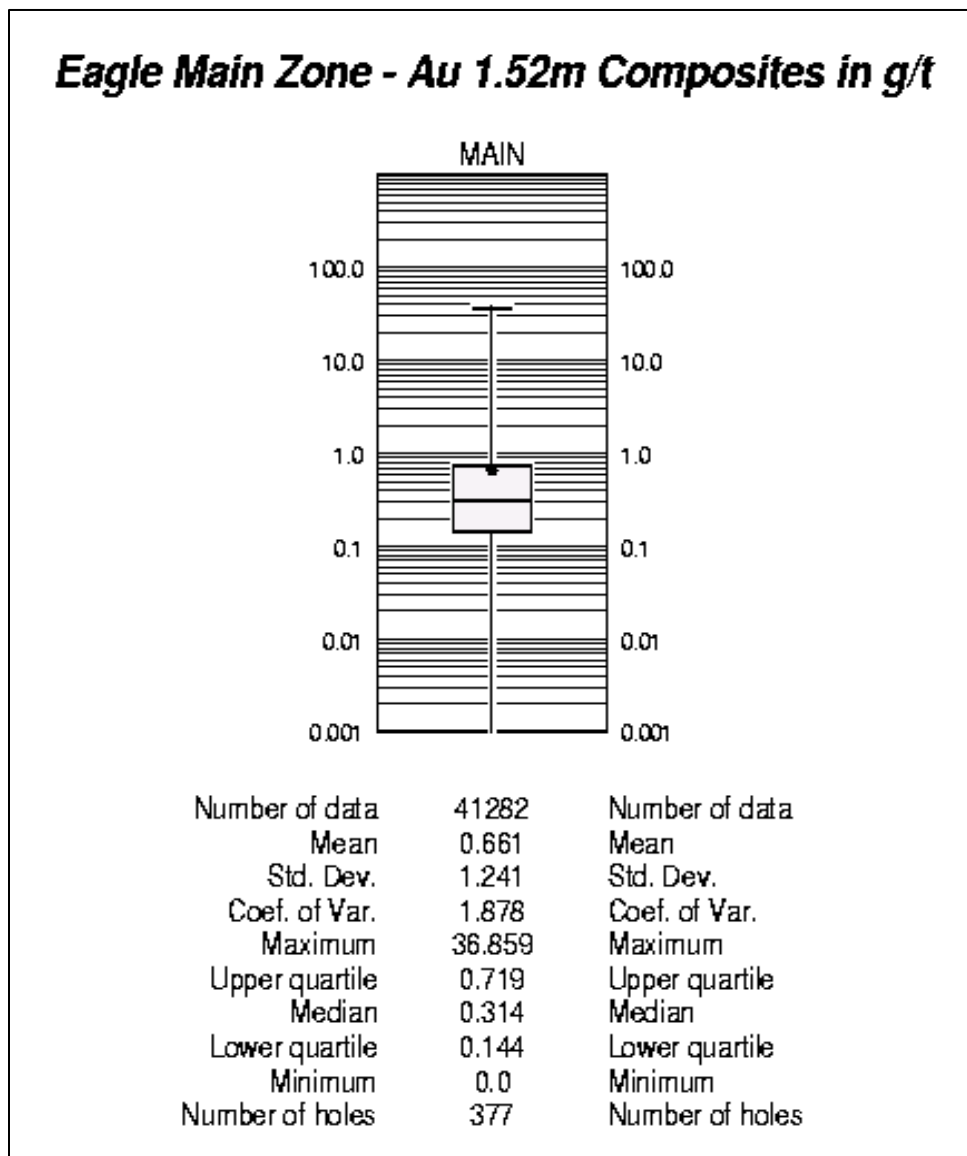
Source: Ginto (2022)



14.1.4.2 Basic Statistics

Basic statistics were conducted on the gold composite data with histograms, probability plots, and boxplots for the Eagle Main Zone. These various analyses show a positively skewed lognormal distribution of gold grades. It is observed that the coefficient of variation (standard deviation divided by the mean) is low with a value of 1.878, indicating a more homogeneous population of gold grade. A coefficient of variation (CV) for gold above 3.0 is usually an indication of a more heterogeneous distribution of grades. Results from the boxplot of the Eagle Main Zone are shown in Figure 14-6.

Figure 14-6: Boxplots of Gold Grade Composites – Eagle Main Zone



Source: Ginto (2022)



### 14.1.4.3 Capping of High-Grade Outliers

It is common practice to statistically examine the higher grades within a population and to trim them to a lower grade value based on the results from specific statistical utilities. This procedure is performed on high-grade values that are considered outliers and that cannot be related to any geologic feature. In the case of the Eagle Main zone, the higher gold grades were examined with three different tools: the probability plot, decile analysis, and cutting statistics. The usage of various investigating methods allows for a selection of the capping threshold in a more objective and supportive manner. For the probability plot method, the capping value is chosen at the location where higher grades depart from the main distribution. For the decile analysis, the capping value is chosen as the maximum grade of the decile containing less than an average of 10% of metal. For the cutting statistics, the selection of the capping value is identified at the cut-off grade where there is no correlation between the grades above this cut-off, or where a jump in the coefficient of variation is observed. The resulting compilation of the capping thresholds is listed in Table 14-5. One of the objectives of the capping strategy is to have less than 10% of the metal affected by the capping process. This was achieved for the Eagle Main Zone with only 1% of the metal content affected, reflecting the more homogeneous nature of the gold population.

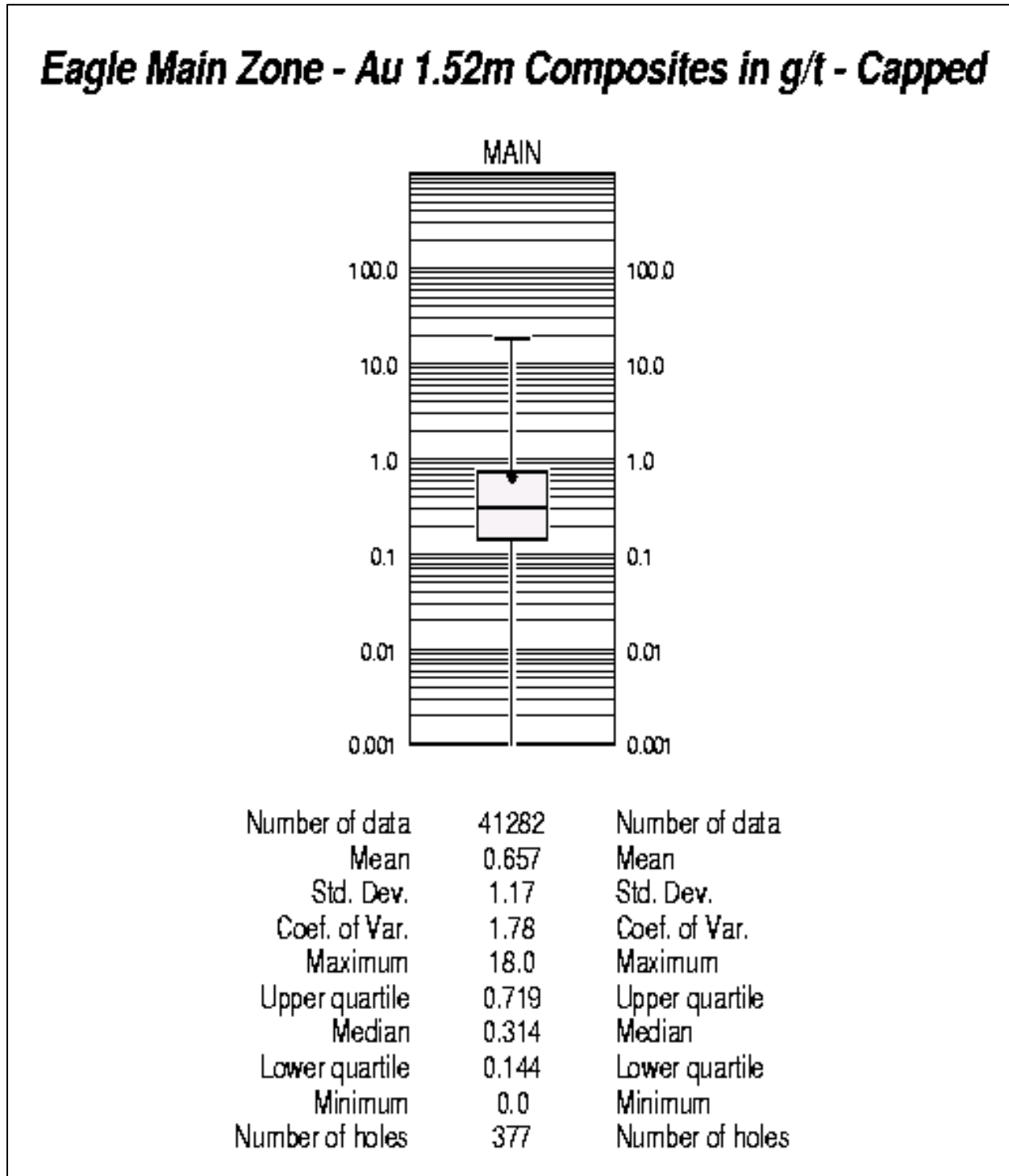
Table 14-5: Capping Threshold of High-Grade Outliers – Eagle Main Zone

Zone	Capping Threshold Au g/t	% of Metal Capped	# Capped Gold Composites
Eagle Main	18.0	1.0	24

Source: Ginto (2022)

A boxplot of capped gold composites is shown in Figure 14-7. As seen, the coefficient of variation is low with a value of 1.78. This denotes a more homogeneous distribution of gold grades which in return indicates that ordinary kriging would be a well-suited grade interpolation method. The capping of the high-grade outliers has only had a minimal influence on the average gold grade of the Eagle Main zone with a reduction of 0.6% after capping. The capping exercise was carried out on the composited assays which provides an equal support for the gold grades examined.

Figure 14-7: Boxplots of Capped Gold Composites – Eagle Main Zone



Source: Ginto (2022)

#### 14.1.4.4 Declustering

A polygonal declustering was applied to the composites to provide a better representation of the statistical parameters of the gold grade distribution. In this process a weight is assigned to each composite based on the volume derived from the half-distances to the nearest surrounding composites. Thus, composites in densely drilled areas are assigned smaller volume-weights than those in sparsely drilled areas. In this case an average gold grade of 0.557 g/t was obtained, indicating a reduction of 19% when removing the clustering effect. These results will be helpful when comparing the grade estimate results to the declustered composites in the validation process.

#### 14.1.5 Variography

A variography study was performed on gold grade composites of the Eagle Main Zone. The objective of this analysis was to spatially establish the preferred directions of gold grade continuity. In turn, the variograms modeled along those directions would be later utilized to select and weigh the composites during the block grade interpolation process. For this exercise, all experimental variograms were of the type relative lag pairwise, which is considered robust for the assessment of gold grade continuity.

Variogram maps were first calculated to examine general gold grade continuities in the XY, XZ, and YZ planes. The next step undertaken was to compute omni-directional variograms and down-hole variograms. The omni-directional variograms are calculated without any directional restrictions and provide a good assessment of the sill of the variogram. As for the down-hole variogram, it is calculated with the composites of each hole along the trace of the hole. The objective of these calculations is to provide information about the short scale structure of the variogram, as the composites are more closely spaced down the hole. Thus, the modeling of the nugget effect is usually better derived from the down-hole variograms.

Directional variograms were then computed to identify more specifically the three main directions of continuity. A first set of variograms were produced in the horizontal plane at increments of 10 degrees. In the same way a second set of variograms were computed at 10° increments in the vertical plane of the horizontal direction of continuity (plunge direction). A final set of variograms at 10° increments were calculated in the vertical plane perpendicular to the horizontal direction of continuity (dip direction). The final variograms were then modeled with a 2-structure spherical variogram. The resulting variogram parameters are presented in Table 14-6, and the modeled variogram in Figure 14-8. For the Eagle Main Zone, it was observed that the best gold grade continuity is along the northeast direction followed by the vertical direction.

Table 14-6: Variogram Model Parameters – Eagle Main Zone

Parameters	Main Eagle Zone		
	Principal	Minor	Vertical
Azimuth*	50°	140°	140°
Dip**	0°	0°	-90°
Nugget Effect C <sub>0</sub>	0.139		
1 <sup>st</sup> Structure C <sub>1</sub>	0.788		
2 <sup>nd</sup> Structure C <sub>2</sub>	0.448		
1 <sup>st</sup> Range A <sub>1</sub>	9.2 m	7.1 m	4.9 m
2 <sup>nd</sup> Range A <sub>2</sub>	81.1 m	27.5 m	58.6 m

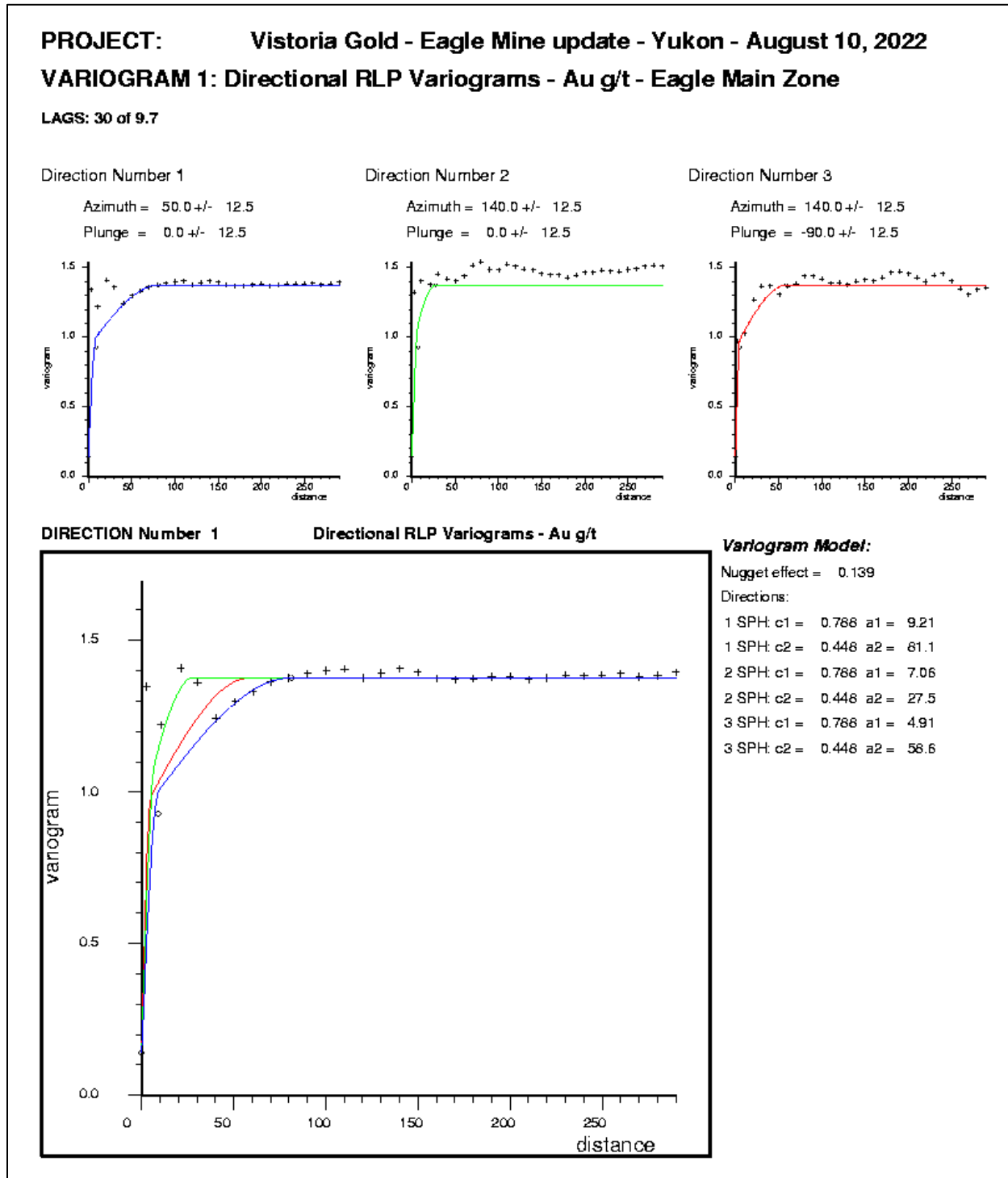
Notes:

\*Positive clockwise from north.

\*\*Negative below horizontal.

Source: Ginto (2022)

Figure 14-8: Variogram Model of the Eagle Main Zone



Source: Ginto (2022)

### 14.1.6 Grade Estimation

The estimation of gold grades into a block model was carried out with the ordinary kriging technique. The estimation strategy and parameters were tailored to account for the various geometrical, geological, and geostatistical characteristics previously identified. The block model's structure is presented in Table 14-7. It should be noted that the origin of the block model corresponds to the lower left corner, the point of origin being the exterior edges of the first block. A block size of 10 m (easting) x 10 m (northing) x 5 m (elevation) was selected to better reflect the orebody's geometrical configuration. The block model is orthogonal with no rotation applied to it.

Table 14-7: Block Grid Definition – Eagle Main Zone

Coordinates	Origin m	Rotation (azimuth)	Distance m	Block Size m	Number of Blocks
Easting (X)	458,030.0	0°	3,470.0	10.0	347
Northing (Y)	7,098,410.0		2,630.0	10.0	263
Elevation(Z)	85.0		1,420.0	5.0	284
Number of Blocks		25,918,124			

Source: Ginto (2022)

The database of 1.52 m capped gold grade composites was utilized as input for the grade interpolation process, along with the mineralized domain model. The size and orientation of the search ellipsoid for the estimation process was based on the variogram parameters modeled for gold. A minimum of 2 samples and maximum of 12 samples were selected for the block grade calculations. No other restrictions, such as a minimum number of informed octants, a minimum number of holes, a maximum number of samples per hole, etc., were applied to the estimation process. A set of 3 estimation runs was utilized for the grade interpolation process. The first estimation run utilized a search ellipsoid dimensioned to the second range of the variograms, while the second and third runs utilized search ellipsoids dimensioned to 1.5 and 3 times the variogram ranges, respectively. There are 92% of the blocks that are estimated from the first pass, 7% from the second pass and 1% from the third pass. The estimation parameters for gold are presented in Table 14-8 and block model variables in Table 14-9.

Table 14-8: Estimation Parameters for Gold – Eagle Main Zone

Pass #	Minimum # of Samples	Maximum # of Samples	Search Ellipsoid – Long Axis – Azimuth / Dip	Search Ellipsoid – Long Axis - Size	Search Ellipsoid – Short Axis – Azimuth / Dip	Search Ellipsoid – Short Axis - Size	Search Ellipsoid – Vertical Axis – Azimuth / Dip	Search Ellipsoid – Vertical Axis - Size
1	2	12	50°/0°	81.0 m	140°/0°	28.0 m	140°/-90°	59.0 m
2	2	12	50°/0°	122.0 m	140°/0°	42.0 m	140°/-90°	89.0 m
3	2	12	50°/0°	244.0 m	140°/0°	84.0 m	140°/-90°	178.0 m

Source: Ginto (2022)

Table 14-9: Block Model Variables – Eagle Main Zone

Variable	Default	Type	Description
xcentre	-	predefined	X Centre
ycentre	-	predefined	Y Centre
zcentre	-	predefined	Z Centre
au_final	-99	float	Au estimate g/t – OK
ag_final	-99	float	Ag estimate g/t - OK
adis_final	-99	float	Average sample distance (m)
class	-99	float	Classification: 1.0=measured, 2.0=indicated, 3.0=inferred
fct_1	0	float	Block fraction in Main Zone (values 0.0 to 1.0)
fct_2	0	float	Block fraction in West Zone (values 0.0 to 1.0)
metrec	0	float	Metallurgical recoveries
oxide	100	float	Percent of block above oxide surface (new 2018 contact surface): 100.0=oxide, 0.0=sulphide
recov	0	float	Recovery based on “type” for pit optimization
sg_1	0	float	SG for Eagle Main, by litho/redox and block fraction
sg_2	0	float	SG for Eagle West, by litho/redox and block fraction
sg	0	float	SG by lithology and redox for all block models. Does not account for block fractions in mineralized zones
topo	100	float	Percent of block below topo surface (2016): 0.0=air, 100.0=rock
type_final	-99	float	Type: 1-oxgr 2-algr 3-ungr 4-oxms 5-unms 10-ovb
pct_1700	100	float	Percent of block above the \$1700 resource pit:0.0=outside pit, 100.0=inside pit

Source: Ginto (2022)



Only blocks within the modeled mineralized domain of the Eagle Main zone were estimated.

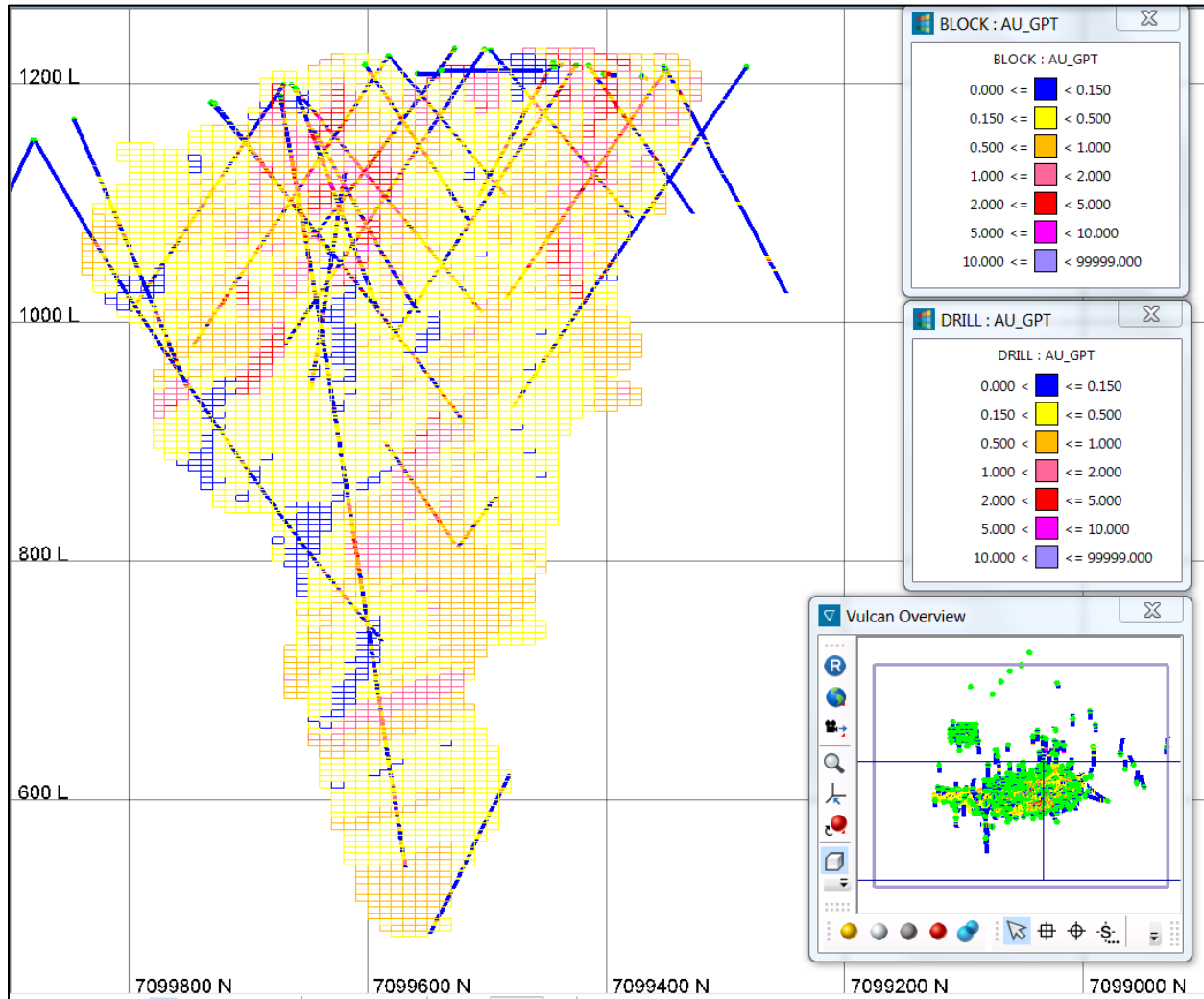
### 14.1.7 Validation of Gold Grade Estimates

Validation tests were carried out on the gold grade estimates to examine the possible presence of a bias and to quantify the level of smoothing/variability.

#### 14.1.7.1 Visual Inspection

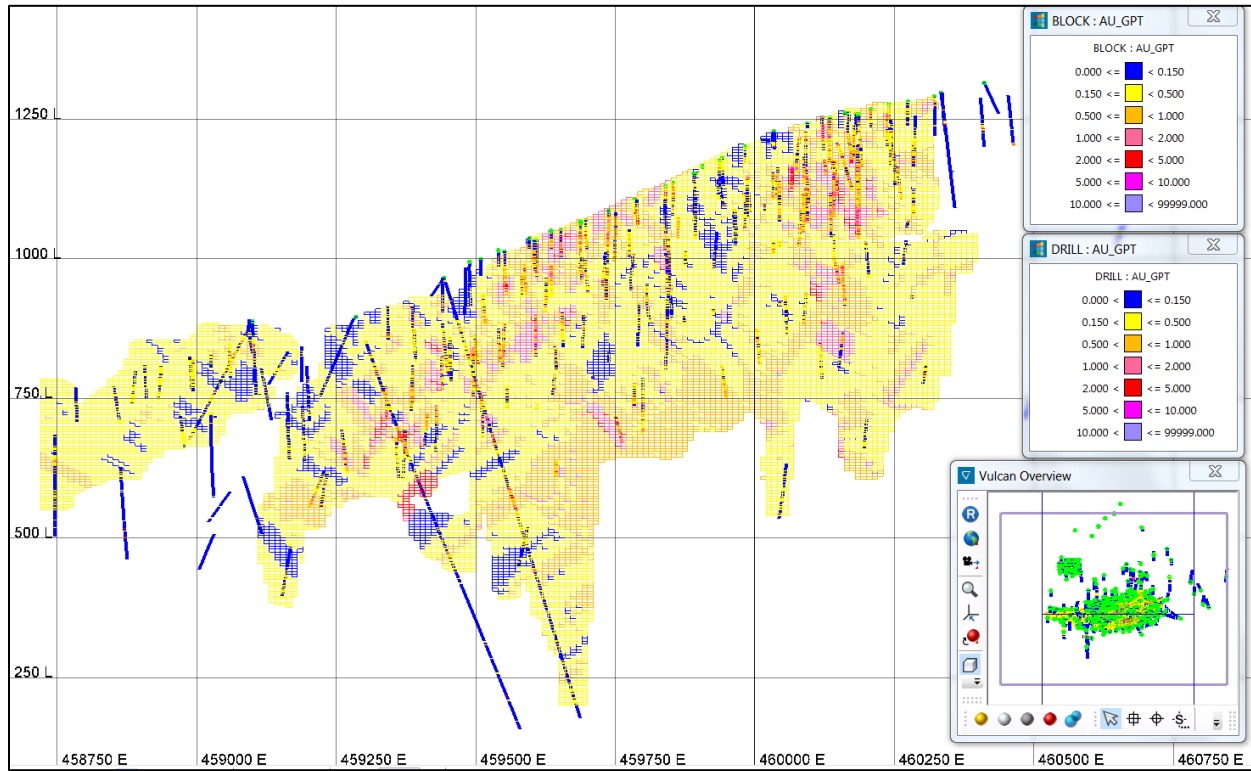
A visual inspection of the block estimates with the drill hole grades on plans and cross-sections was performed as a first check of the estimates. Observations from stepping through the estimates along the different planes indicated that there was overall a good agreement between the drill hole grades and the estimates. The orientations of the estimated grades were also according to the projection angles defined by the search ellipsoid. Examples of cross-sections for gold grade estimates of the Eagle Main Zone deposit are presented in Figure 14-9, Figure 14-10, and Figure 14-11.

Figure 14-9: Section 460,030E - Looking East – Eagle Main Zone: Section 460,030E - Looking East – Eagle Main Zone



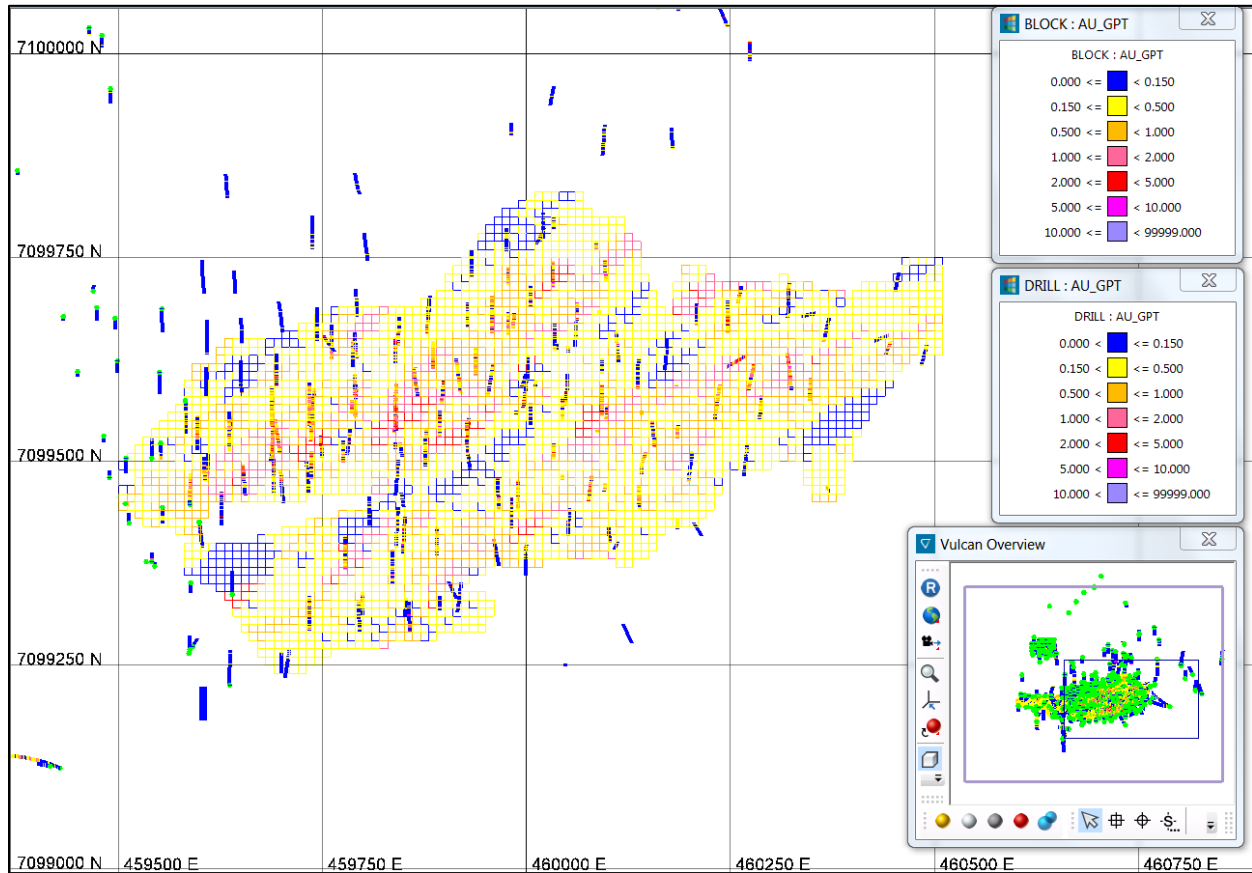
Source: Ginto (2022)

Figure 14-10: Section 7,099,500N – Looking North – Eagle Main Zone



Source: Ginto (2022)

Figure 14-11: Level Plan 1,005EI – Eagle Main Zone



Source: Ginto (2022)

#### 14.1.7.2 Global Bias Test

The comparison of the average gold grades from the declustered composites and the estimated block grades examines the possibility of a global bias of the estimates. As a guideline, a difference between the average gold grades of more than  $\pm 10\%$  would indicate a significant over- or under-estimation of the block grades and the possible presence of a bias. It would be a sign of difficulties encountered in the estimation process and would require further investigation. A polygonal declustered method with a bounding solid corresponding to the estimated volume was utilized for this exercise.

Results of the average gold grade comparison are presented in Table 14-10 for the Eagle Main Zone.

Table 14-10: Average Gold Grade Comparison – Polygonal-Declustered Composites with Block Estimates – Eagle Main Zone

Statistics	Declustered Composites	Block Estimates
Average Gold Grade g/t	0.546	0.541
Difference	-0.9%	

Source: Ginto (2022)

As seen in Table 14-10, the average gold grades between the declustered composites and the block estimates are well within the limits of the tolerance levels of acceptability. It can thus be concluded that no significant global bias is present in the gold grade estimates.

#### 14.1.7.3 Local Bias Test

A comparison of the grade from composites within a block with the estimated grade of that block provides an assessment of the estimation process close to measured data. Pairing of these grades on a scatterplot gives a statistical valuation of the estimates. It is anticipated that the estimated block grades should be similar to the composited grades within the block, however without being of exactly the same value. Thus, a high correlation coefficient will indicate satisfactory results in the grade interpolation process, while a medium to low correlation coefficient will be indicative of larger differences in the estimates and would suggest a further review of the grade interpolation process. Results from the pairing of composited and estimated grades within blocks pierced by a drill hole are presented in Table 14-11 for the Eagle Main Zone.

Table 14-11: Gold Grade Comparison for Blocks Pierced by a Drill Hole – Paired Composite Grades with Block Grade Estimates – Eagle Main Zone

Data	Average Gold Grade g/t	Correlation Coefficient
Composites	0.639	0.763
Block Estimates	0.640	
Difference	0.2%	

Source: Ginto (2022)

As seen in Table 14-11 for gold, the block grade estimates are very similar to the composite grades within blocks pierced by a drill hole, with a high correlation coefficient, indicating satisfactory results from the estimation process.

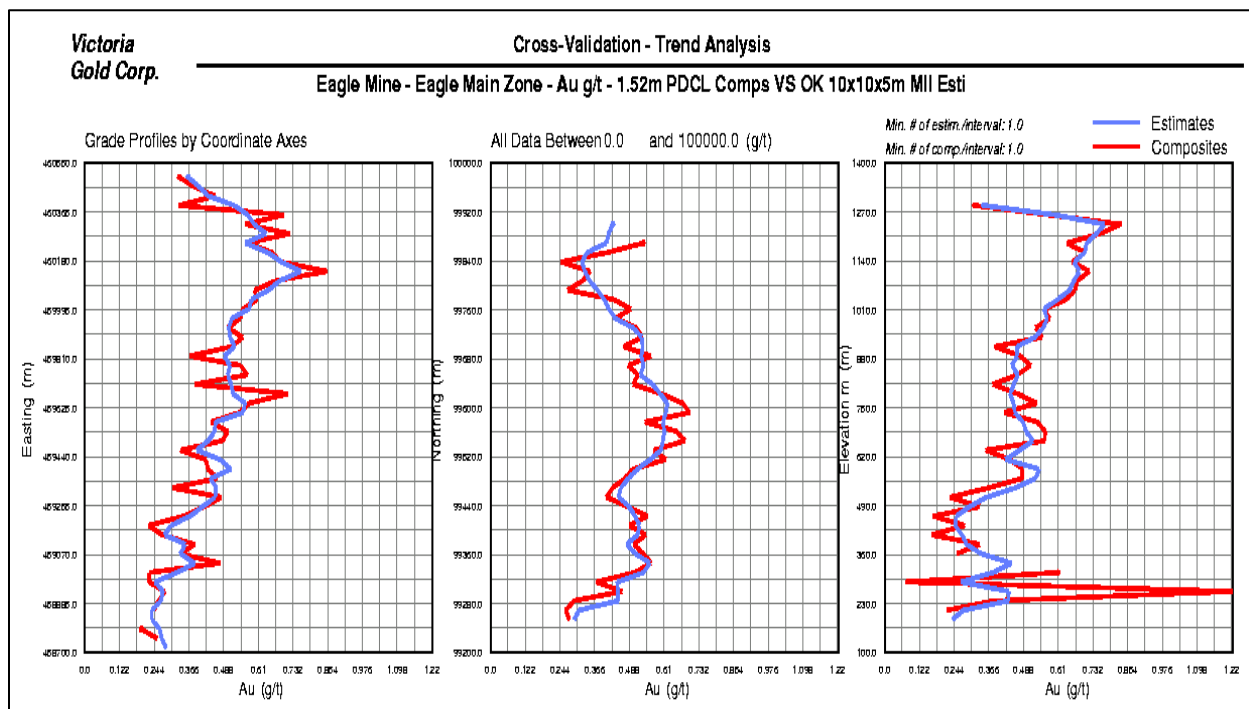
#### 14.1.7.4 Grade Profile Reproducibility

The comparison of the grade profiles of the declustered composites with that of the estimates allows for a visual verification of an over- or under-estimation of the block estimates at the global and local scales.

A qualitative assessment of the smoothing/variability of the estimates can also be observed from the plots. The output consists of three graphs displaying the average grade according to each of the coordinate axes (east, north, elevation). The ideal result is a grade profile from the estimates that follows that of the declustered composites along the three coordinate axes, in a way that the estimates have lower high-grade peaks than the composites, and higher low-grade peaks than the composites. A smoother grade profile for the estimates, from low to high grade areas, is also anticipated in order to reflect that these grades represent larger volumes than the composites.

Gold grade profiles are presented in Figure 14-12 for the Eagle Main Zone.

Figure 14-12: Gold Grade Profiles of Declustered Composites and Block Estimates – Eagle Main Zone



Source: Ginto (2022)

From the plots of Figure 14-12, it can be seen that the grade profiles of the declustered composites are well reproduced by those of the block estimates and consequently that no global or local bias is observed. As anticipated, some smoothing of the block estimates can be seen in the profiles, where estimated grades are higher in lower grade areas and lower in higher grade areas.

#### 14.1.7.5 Level of Smoothing/Variability

The level of smoothing/variability of the estimates can be measured by comparing a theoretical distribution of block grades with that of the actual estimates. The theoretical distribution of block grades is derived from that of the declustered composites, where a change of support algorithm is utilized for

the transformation (Indirect Lognormal Correction). In this case, the variance of the composites' grade population is corrected (reduced) with the help of the variogram model, to reflect a distribution of block grades (10 m x 10 m x 5 m). The comparison of the coefficient of variation (CV) of this population with that of the actual block estimates provides a measure of smoothing. Ideally a lower CV from the estimates by 5 to 30% is targeted as a proper amount of smoothing. This smoothing of the estimates is desired as it allows for the following factors: the imperfect selection of ore blocks at the mining stage (misclassification), the block grades relate to much larger volumes than the volume of core (support effect), and the block grades are not perfectly known (information effect). A CV lower than 5 to 30% for the estimates would indicate a larger amount of smoothing, while a higher CV would represent a larger amount of variability. Too much smoothing would be characterized by grade estimates around the average grade, where too much variability would be represented by estimates with abrupt changes between lower and higher-grade areas.

Results of the level of smoothing/variability analysis are presented in Table 14-12 for the gold grade estimates. As observed in this table, the CVs of the gold estimates are within the targeted range of acceptability. It is thus concluded that the amount of smoothing of the block grade estimates is of an adequate level.

Table 14-12: Level of Smoothing/Variability of Gold Estimates – Eagle Main Zone

CV – Theoretical Block Grade Distribution	CV – Actual Block Grade Distribution	Difference
1.062	0.870	-19.2%

Source: Ginto (2022)

### 14.1.8 Resource Classification

The mineral resource was classified as measured, indicated, and inferred based on the variogram ranges. The average distance of samples from the block center was utilized as the classification criterion. Measured, indicated, and inferred resources were assigned to the estimates of the Eagle Main Zone. The distances to categorize the mineral resource into the different classes are provided in Table 14-13.

Table 14-13: Classification Distances – Eagle Main Zone

Mineralized Zone	Measured	Indicated	Inferred
Main Eagle Zone	≤ 13.0 m	> 13.0 m and ≤ 52.0 m	> 52.0 m

Source: Ginto (2022)



### 14.1.9 Editing of the Block Model

The block model was edited to the topography surface, where the block percentage below the topography surface was stored into a variable. All estimates above topography were removed from the resource calculations. The lithological/oxidation/alteration types were also coded into the block model as shown in Table 14-14.

Table 14-14: Lithology/Oxidation/Alteration Codes – Eagle Main Zone

Code ("type_final")	Lithology/Alteration/Redox
1.0	oxidized granodiorite
2.0	altered granodiorite
3.0	un-altered granodiorite
4.0	oxidized meta-sediments
5.0	fresh meta-sediments
10.0	overburden

Source: Ginto (2022)

### 14.1.10 Mineral Resource Calculations

#### 14.1.10.1 Specific Gravity

The mineral resource was calculated for 10 m (X) x 10 m (Y) x 5 m (Z) blocks with specific gravity (SG) values based on lithology, alteration, and reduced oxidation state. The different SG values utilized for the resource's tonnage calculation are presented in Table 14-15.

Table 14-15: Specific Gravity – Eagle Main Zone

Lithology/Alteration/Redox Codes ("type_final")	Specific Gravity ("sg")
1.0 oxidized granodiorite	2.62
2.0 altered granodiorite	2.63
3.0 un-altered granodiorite	2.65
4.0 oxidized meta-sediments	2.61
5.0- fresh meta-sediments	2.69
10.0- overburden	2.00
Other	2.65

Source: Ginto (2022)

These SG values were derived for the 2016 Feasibility Study and were utilized in the tonnage calculations for this mineral resource update. A total of 1,210 samples analyzed by ALS Chemex and in-house by Victoria Gold for bulk density were checked with 300 determinations by SGS labs. The mean values by rock type, using all data determinations, were used for the mineral resource’s tonnage calculation.

#### 14.1.10.2 Geometallurgical variables

Geometallurgical information was incorporated into the block model with respect to heap leach recoveries (“recov”) and metallurgical recoveries from testwork (“metrec”), as presented in Table 14-16.

Table 14-16: Geometallurgical Data – Eagle Main Zone

Code {“type_final”}	Description	Metallurgical Recovery {“metrec”}	Heap Leach Recovery {“recov”}
1.0	Oxidized Granodiorite	0.79	0.82
2.0	Altered Granodiorite	0.73	0.75
3.0	Un-Altered Granodiorite	0.68	0.71
4.0	Oxidized Meta-Sediments	0.68	0.82
5.0	Un-altered Meta-Sediments	0.68	0.71
10.0	Overburden	n/a	n/a

Source: Ginto (2022)

#### 14.1.10.3 Mineral Resource Constraints

With the objective to satisfy the NI 43-101 requirement of reporting a mineral resource that provides “reasonable prospects for economic extraction”, a pit shell was optimized to constrain the mineral resources. A summary of the resource pit constraining parameters is shown in Table 14-17. The constraining pit shell optimized with the Lerchs-Grossman algorithm is shown in Figure 14-13 for the Eagle Main Zone.

Table 14-17: Mineral Resource Constraining Parameters - Eagle Main Zone

Parameters*	Open Pit
Gold Price	\$1,700/oz
Mining Cost	\$1.50/t
Processing Costs	\$2.00/t
G&A Cost	\$2.50/t
Heap Leach Recoveries	e

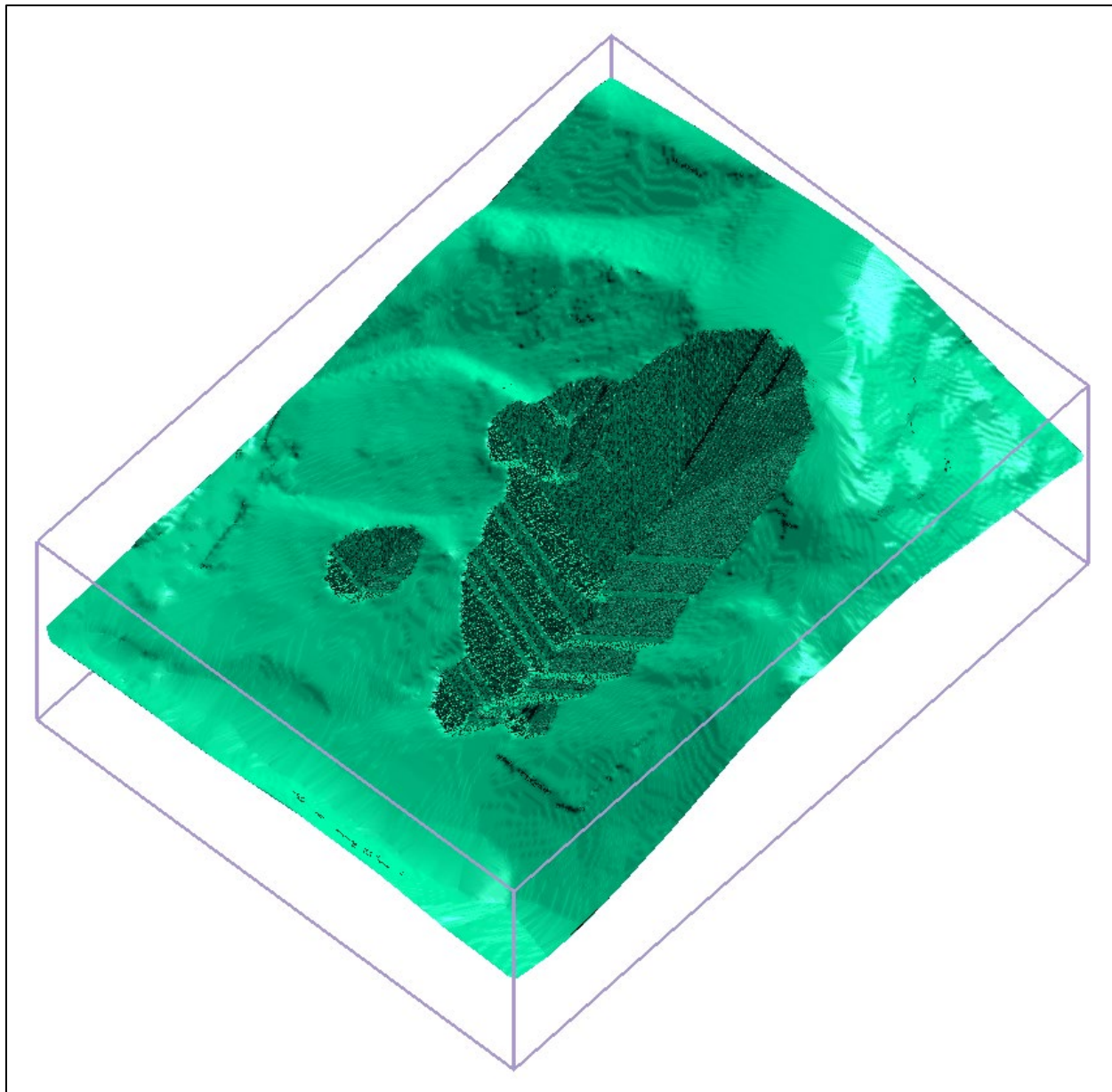
Parameters*	Open Pit
Pit Slopes	45°

Notes:

\*All dollar amounts in US\$.

Source: Ginto (2022)

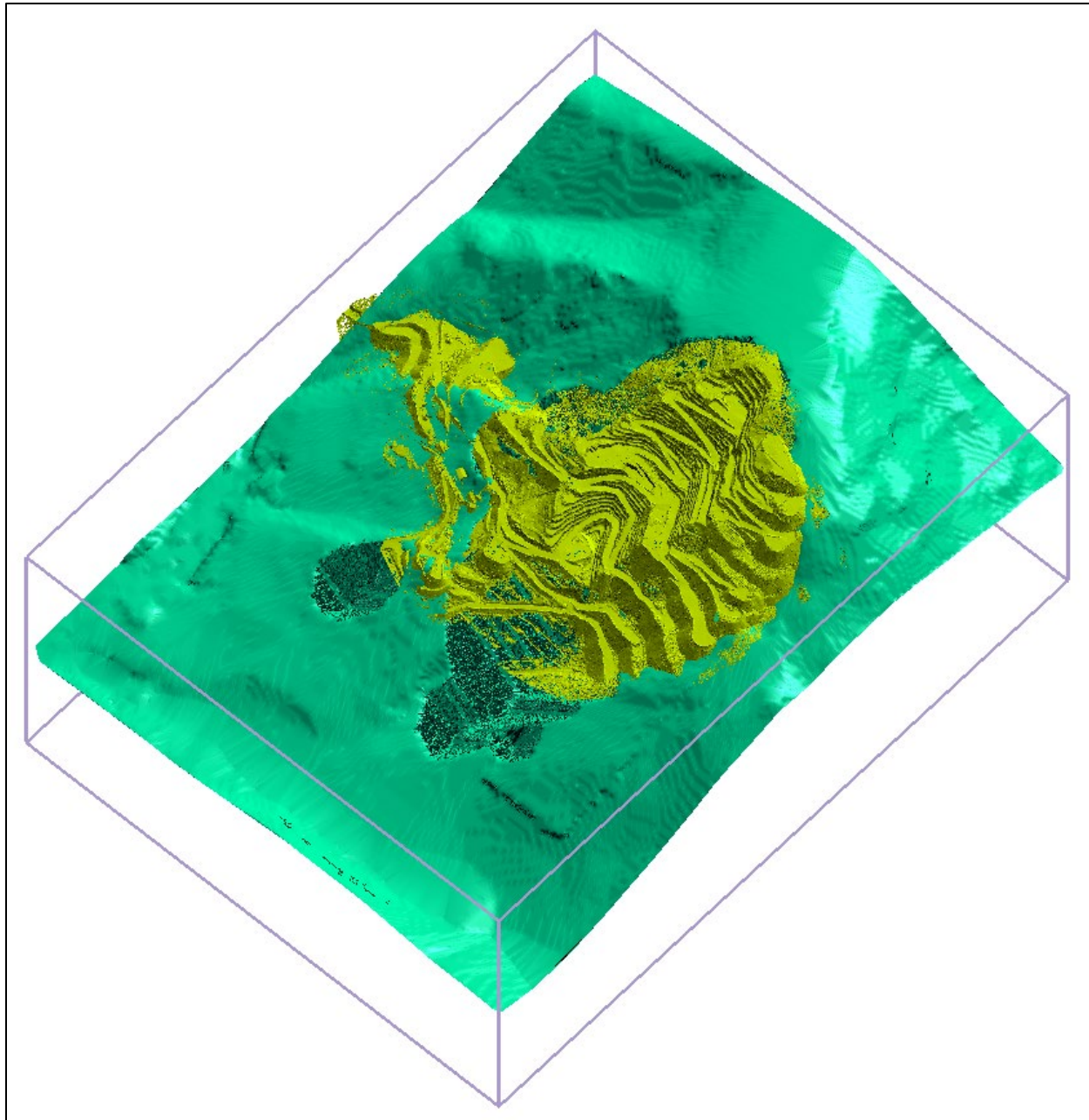
Figure 14-13: Mineral Resource Open Pit Shell – Perspective View Looking Northeast - Eagle Zone



Source: Ginto (2022)

The mineral resources were finally edited to the mined-out surface as of December 31, 2022 in order to represent the remaining mineral resources of the Eagle Main Zone. The mined-out surface within the mineral resource open pit is presented in Figure 14-14.

Figure 14-14: Mined-Out Surface within the Mineral Resource Open Pit Shell – Perspective View Looking Northeast - Eagle Zone



Source: Ginto (2022)

#### 14.1.10.4 Mineral Resource Statement

The remaining mineral resource estimate of the Eagle Main zone is presented in Table 14-18 at a 0.15 g/t Au cut-off grade with an effective date of December 31, 2022. Only the gold grade estimates of the Eagle Main zone were reported in the mineral resource statement. A separate mineralized zone, previously known as the Eagle Extension zone is now part of the Eagle Main zone, based on the recent drilling in this area.

It should be noted that mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves. The estimate of mineral resources may be materially affected by future changes in environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. However, there are no currently known issues that negatively impact the stated mineral resources.

The CIM definitions were followed for the classification of measured, indicated, and inferred mineral resources. The inferred mineral resources have a lower level of confidence and must not be converted to mineral reserves.

Mineral resources are reported in accordance with Canadian Securities Administrators National Instrument 43-101; and have been estimated in conformity with the “CIM Estimation and Mineral Resources and Reserves Best Practices Guidelines” (CIM, 2019) and the “CIM Definition Standards for Mineral Resources and Mineral Reserves” (CIM, 2014).

Table 14-18: Pit Constrained Remaining Mineral Resources at a 0.15 g/t Au cut-off — Effective December 31, 2022 – Eagle Main Zone

Zone	Tonnage tonnes	Avg Au Grade g/t	Content oz	Tonnage tonnes	Avg Au Grade g/t	Content oz
Measured			Indicated			
Eagle Main Zone	35,236,598	0.622	704,653	197,960,177	0.565	3,595,980
Measured + Indicated			Inferred			
Eagle Main Zone	233,196,775	0.574	4,303,536	29,595,257	0.516	497,018

Notes:

1. The effective date for the Mineral Resource is December 31, 2022;
2. Mineral Resources are inclusive of Mineral Reserves;
3. 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, taxation, sociopolitical, marketing, or other relevant issues;
4. The CIM definitions were followed for classification of Mineral Resources. The quantity and grade of reported inferred Mineral Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred Mineral Resources as an indicated Mineral Resource and it is uncertain if further exploration will result in upgrading them to an indicated or measured Mineral Resource category; and

5. Mineral Resources are reported at a cut-off grade of 0.15 g/t Au, using a gold price of US\$1,700/ounces and a US\$/CAN\$ exchange rate of 0.75.

Source: Ginto (2022)

The mineral resources at various gold grade cut-offs are presented in Table 14-19, Table 14-20, Table 14-21 and Table 14-22 for Measured, Indicated, Measured + Indicated, and Inferred resources, respectively.

Table 14-19: Pit Constrained Remaining Measured Mineral Resources at Various Au Cut-Off Grades - Effective December 31, 2022 – Eagle Main Zone

Au Cut-Off g/t	Tonnage tonnes	Avg Au Grade g/t	Au Content oz
0.05	37,710,561	0.589	714,117
0.10	37,117,337	0.597	712,430
<b>0.15</b>	<b>35,236,598</b>	<b>0.622</b>	<b>704,653</b>
0.20	31,994,625	0.667	686,110
0.25	28,717,954	0.717	662,009
0.30	25,726,970	0.769	636,072
0.35	22,908,906	0.823	606,171
0.40	20,383,186	0.879	576,039
0.45	18,244,479	0.932	546,687
0.50	16,371,532	0.984	517,935
0.55	14,638,125	1.039	488,981
0.60	13,096,810	1.093	460,232
0.65	11,660,393	1.151	431,499
0.70	10,455,354	1.206	405,394
0.75	9,345,618	1.263	379,492
0.80	8,362,497	1.321	355,165
0.85	7,430,873	1.383	330,410
0.90	6,643,651	1.443	308,222
0.95	5,998,104	1.499	289,072
1.00	5,437,744	1.553	271,507

Source: Ginto (2022)



Table 14-20: Pit Constrained Remaining Indicated Mineral Resources at Various Au Cut-Off Grades – Effective December 31,2022 – Eagle Main Zone

Au Cut-Off g/t	Tonnage tonnes	Avg Au Grade g/t	Au Content oz
0.05	211,416,722	0.537	3,650,099
0.10	208,300,257	0.544	3,643,172
<b>0.15</b>	<b>197,960,177</b>	<b>0.565</b>	<b>3,595,980</b>
0.20	177,821,820	0.609	3,481,716
0.25	158,018,606	0.657	3,337,833
0.30	139,516,628	0.708	3,175,778
0.35	123,021,070	0.760	3,005,966
0.40	107,343,482	0.816	2,816,157
0.45	93,891,645	0.872	2,632,294
0.50	82,729,918	0.926	2,463,001
0.55	72,544,494	0.982	2,290,377
0.60	63,663,464	1.039	2,126,654
0.65	54,625,710	1.107	1,944,176
0.70	48,199,102	1.165	1,805,327
0.75	42,532,117	1.224	1,673,745
0.80	37,570,945	1.283	1,549,779
0.85	32,988,998	1.347	1,428,656
0.90	29,477,839	1.403	1,329,671
0.95	25,831,822	1.471	1,221,683
1.00	23,011,713	1.531	1,132,701

Source: Ginto (2022)

Table 14-21: Pit Constrained Remaining Measured + Indicated Mineral Resources at Various Au Cut-Off Grades – Effective December 31, 2022 – Eagle Main Zone

Au Cut-Off g/t	Tonnage tonnes	Avg Au Grade g/t	Au Content oz
0.05	249,127,283	0.545	4,365,246
0.10	245,417,594	0.552	4,355,477
<b>0.15</b>	<b>233,196,775</b>	<b>0.574</b>	<b>4,303,536</b>
0.20	209,816,445	0.618	4,168,876
0.25	186,736,561	0.667	4,004,480



Au Cut-Off g/t	Tonnage tonnes	Avg Au Grade g/t	Au Content oz
0.30	165,243,598	0.718	3,814,521
0.35	145,929,976	0.770	3,612,653
0.40	127,726,668	0.826	3,391,975
0.45	112,136,124	0.882	3,179,839
0.50	99,101,450	0.935	2,979,083
0.55	87,182,619	0.991	2,777,759
0.60	76,760,274	1.048	2,586,359
0.65	66,286,103	1.115	2,376,229
0.70	58,654,455	1.172	2,210,139
0.75	51,877,736	1.231	2,053,194
0.80	45,933,441	1.290	1,905,064
0.85	40,419,871	1.353	1,758,262
0.90	36,121,490	1.410	1,637,479
0.95	31,829,926	1.476	1,510,473
1.00	28,449,457	1.536	1,404,935

Source: Ginto (2022)

Table 14-22: Pit Constrained Remaining Inferred Mineral Resources at Various Au Cut-Off Grades – Effective December 31, 2022 – Eagle Main Zone

Au Cut-Off g/t	Tonnage tonnes	Avg Au Grade g/t	Au Content oz
0.05	32,495,891	0.485	506,712
0.10	31,657,113	0.496	504,829
<b>0.15</b>	<b>29,959,257</b>	<b>0.516</b>	<b>497,018</b>
0.20	26,673,541	0.558	478,526
0.25	23,985,038	0.595	458,826
0.30	21,213,570	0.637	434,454
0.35	18,771,472	0.678	409,184
0.40	16,184,093	0.726	377,760
0.45	14,146,905	0.770	350,222
0.50	12,254,531	0.815	321,104
0.55	10,625,171	0.860	293,782
0.60	9,214,830	0.904	267,822

Au Cut-Off g/t	Tonnage tonnes	Avg Au Grade g/t	Au Content oz
0.65	6,913,568	0.998	221,832
0.70	5,626,268	1.071	193,732
0.75	4,749,987	1.135	173,332
0.80	4,017,477	1.201	155,127
0.85	3,397,602	1.270	138,729
0.90	2,997,451	1.323	127,498
0.95	2,302,714	1.442	106,757
1.00	1,943,873	1.528	95,495

Source: Ginto (2022)

#### 14.1.11 Comparison with the November 2019 Mineral Resource Estimate

The updated mineral resources are compared to those of the November 2019 mineral resources in Table 14-23. Both mineral resources compared in this table are pit-constrained and located below the December 31, 2022 mined-out surface.

Table 14-23: Comparison of the Updated Mineral Resources with the November 2019 Mineral Resources - Pit Constrained And Below December 31, 2022 Mined-Out Surface – 0.15 g/t Au Cut-Off – Eagle Main Zone

Estimates	Tonnage tonnes	Avg Au Grade g/t	Content oz	Tonnage tonnes	Avg Au Grade g/t	Content oz
<b>Measured</b>				<b>Indicated</b>		
Nov. 2019 MRE	28,326,708	0.655	596,525	160,890,380	0.594	3,072,610
2022 MRE Update	35,236,598	0.622	704,653	197,960,177	0.565	3,595,980
Difference	6,909,480 +24.4%	-0.033 -5.0%	108,128 +18.1%	37,069,797 +23.0%	-0.029 -4.9%	523,369 +17.0%
<b>Measured + Indicated</b>				<b>Inferred</b>		
Nov. 2019 MRE	189,217,088	0.603	3,669,135	21,443,468	0.523	360,568
2022 MRE Update	233,196,775	0.574	4,303,536	29,959,257	0.516	497,018
Difference	43,979,687 +23.2%	-0.029 -4.8%	634,401 +17.3%	8,515,789 +39.7%	-0.007 -1.3%	136,449 +37.8%

Source: Ginto (2022)

From this table the mineral resources of the Eagle Main zone were increased by 16.8% for the measured and indicated gold content and by 37.8% for the inferred gold content. It is believed that a great portion of these mineral resources stem from the additional drilling undertaken since the November 2019 mineral resources at depth and in the western region of the Eagle Main zone.

#### 14.1.12 Eagle Mineral Resource Discussion

This update of the mineral resources of the Eagle Gold Mine deposit uses the same approach as for the November 2019 MRE. With the addition of 35 new holes, all of the steps leading to the mineral resource estimate were however revisited. One of the major changes considers a mineralized zone, Eagle Main, which is deeper and extended to the west where it now joins with the previously named Eagle Extension zone.

The distribution of gold grades is observed to be homogeneous with a low coefficient of variation of 1.8, following the capping of the high-grade composite outliers to a threshold of 18.0 g/t Au. This capping threshold remains the same as for the November 2019 mineral resource estimate.

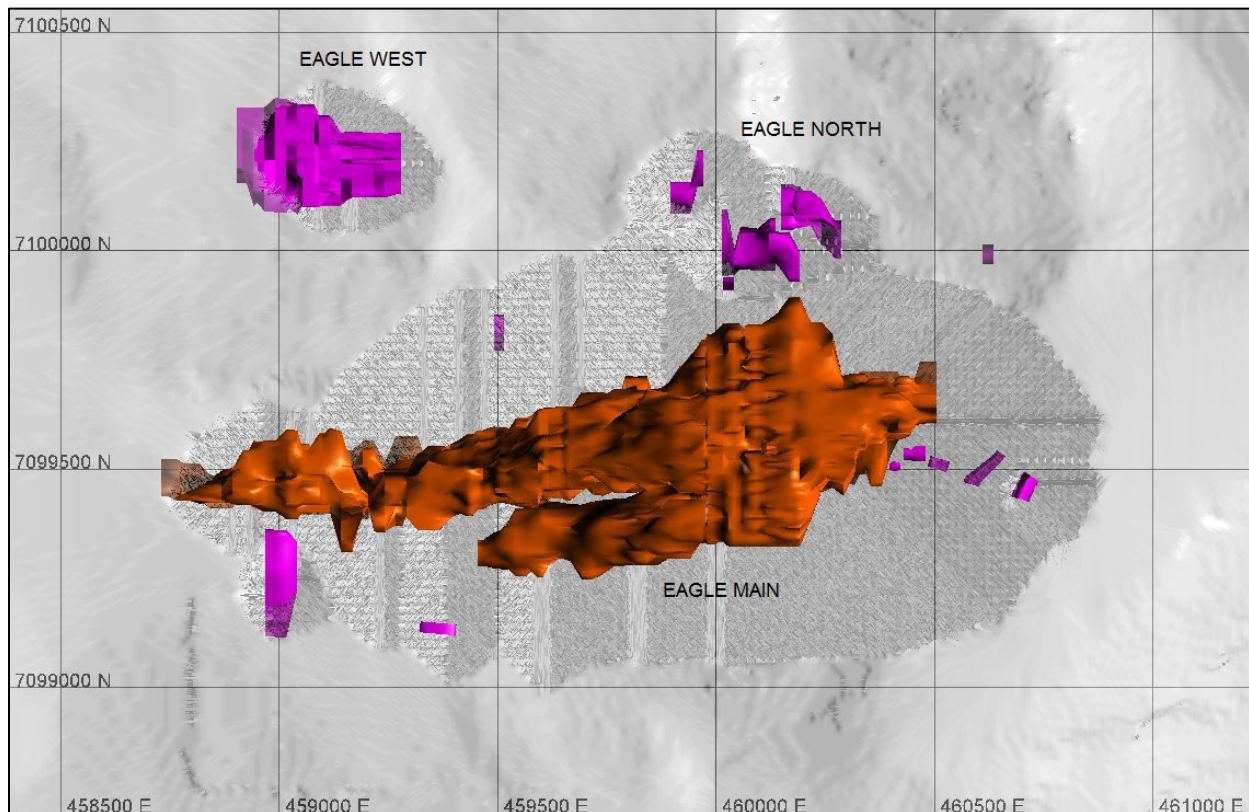
The reassessment of the gold grade continuity from a variographic analysis has shown a better direction of continuity oriented to the northeast rather than to the east as previously defined. A longer range of continuity is thus observed at an azimuth of 50°, confirming the trend observed from the blast hole data.

The grade estimation strategy and the mineral resource classification scheme have remained the same for this update as for the previous November 2019 MRE. Ordinary kriging on capped 1.52 m composites with a 3-pass estimation were utilized. As for the grade estimation parameters, slight changes were implemented based on the new variogram model.

The Eagle Gold Mine is an active operation where the Eagle Main zone is being depleted and as a result of such the mineral resource statement is for the remaining MRE as of December 2022. The main element of interest at Eagle Main is gold. Although silver grades were estimated, they were not reported due to their lower grades.

The addition of 35 drill holes since the November 2019 MRE, has generated a 17% increase of the gold metal content from an expanded mineralized zone of the Eagle Main zone to the west and at depth. Additional mineral resources that were not reported in the MRE statement can be found from smaller mineralized zones in the vicinity of the Eagle Main zone, as shown in Figure 14-15.

Figure 14-15: Additional Mineralized Zones Closed to the Eagle Main Zone: Eagle West, Eagle North, and Satellite Zones – Plan View - Eagle Gold Mine



Source: Ginto (2022)

The satisfactory results from the gold grade validation tests of the Eagle Main zone's estimates indicate that no global or local bias is present, and that the level of smoothing/variability is adequate, thus providing a realistic representation of the mineral resources, considering the current geological understanding and available data.

## 14.2 Olive Deposit

### 14.2.1 Drill Hole Database

The drill hole database was received in Excel format on December 17, 2018. It comprises 438 holes with 41,409 assays for gold and silver in g/t, representing a total of 65,277 m of drilling. From the 438 holes, there are 349 diamond drill holes, 8 reverse circulations holes and 81 trenches. Additional details of the drill hole database are presented in Table 14-24 and Table 14-25. The location of the drill holes is shown in Figure 14-16. There are 92 additional diamond drill holes and 19 trenches added to the drill hole database since the previous 2016 Feasibility Study. A total of 82 diamond drill holes were drilled in 2017

and 10 holes drilled in 2018. As well, 11 trenches were excavated in 2017 and 8 trenches excavated in 2018. No new holes or trenches were added since.

Table 14-24: Olive Drill Hole Database

Hole Type	Number of Holes	Number of Metres	Number of Au Assays	Number of Ag Assays
Diamond Drill Holes	349	60,441	38,574	38,574
Reverse Circulation	8	895	541	541
Trench	81	3,941	2,294	2,294
<b>Total</b>	<b>438</b>	<b>65,277</b>	<b>41,409</b>	<b>41,409</b>

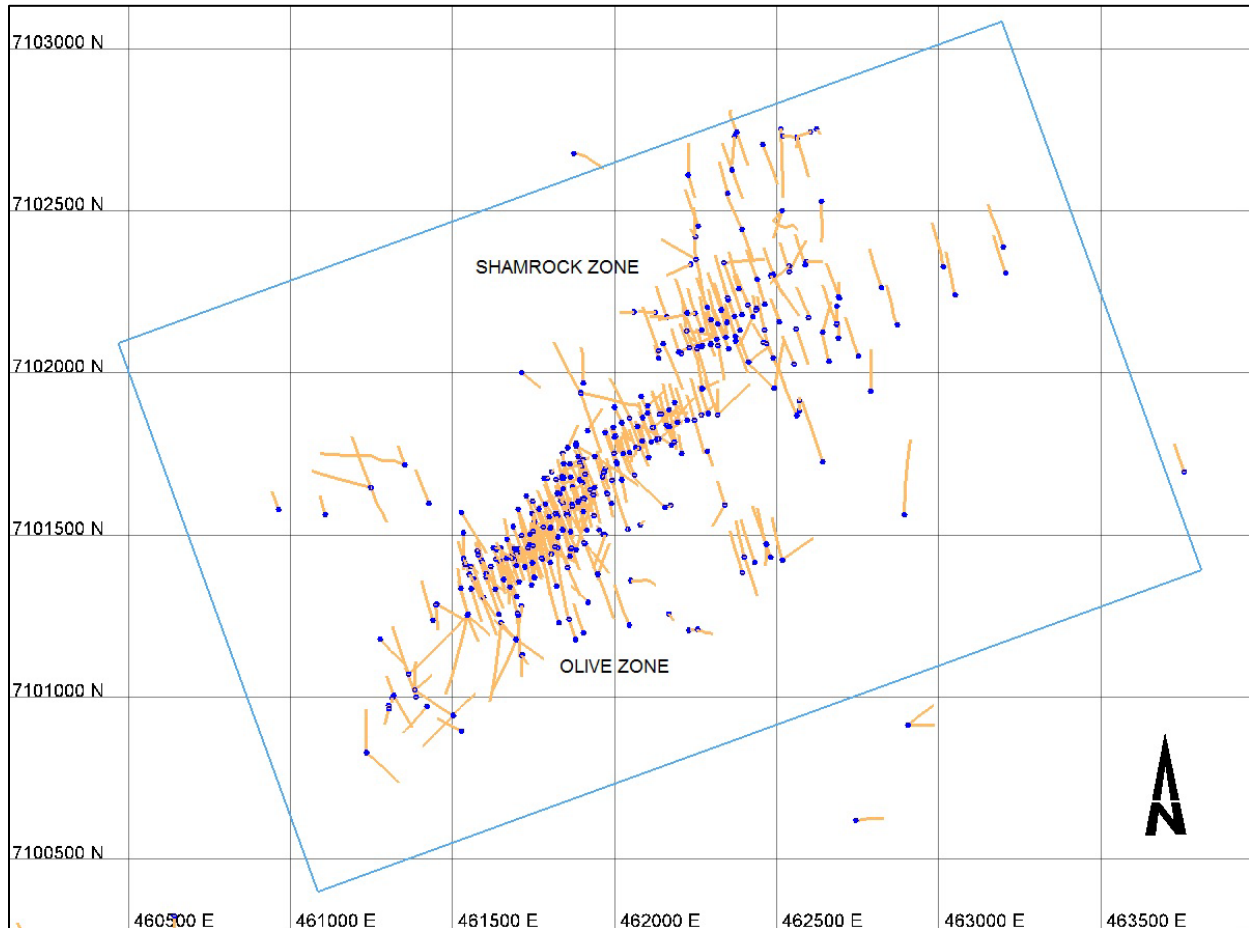
Source: Ginto (2022)

Table 14-25: Olive Drill Hole Database Statistics

Collar Data	Number of Data	Mean	Standard Deviation	Coefficient of Variation	Minimum	Lower Quartile	Median	Upper Quartile	Maximum	Number of 0.0 values	Number of < 0.0 values
Eastings (X)	447	462010.0	391.368	0.001	460938.0	461747.0	461971.0	462297.0	463207.0	—	—
Northing (Y)	447	7.1017e+06	483.627	0.0	7.0996e+06	7.10144e+06	7.10168e+06	7.10206e+06	7.10275e+06	—	—
Elevation (Z)	447	1228.41	55.564	0.045	1038.55	1192.61	1215.57	1268.0	1392.0	—	—
Hole Depth	447	149.597	73.856	0.494	6.0	103.63	152.4	197.11	407.0	—	—
Azimuth	447	232.46	110.016	0.473	0.0	160.0	221.0	340.0	380.0	—	—
Dip	447	-43.039	21.698	-0.504	-90.0	-55.0	-50.0	-45.0	20.0	—	—
Overburden	447	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—
<b>Survey Data</b>											
Azimuth	1194	238.006	107.241	0.451	0.2	159.5	225.5	341.7	380.1	—	—
Dip	1194	-48.889	13.959	-0.286	0.0	0.0	0.0	0.0	0.0	—	—
<b>Assay Data</b>											
Interval Length (from-to)	42447	1.575	1.143	0.726	0.01	1.41	1.52	1.7	127.97	0	0
AU_GPT	42447	0.213	1.561	7.34	0.001	0.003	0.003	0.035	131.0	0	0
AG_GPT	42447	1.038	5.096	4.909	0.0	0.25	0.25	1.0	289.0	995	0

Source: Ginto (2022)

Figure 14-16: Olive Drill Hole Locations – Plan View



Source: Ginto (2022)

## 14.2.2 Geology Model

For this update, a new geology model was constructed from first principals. The interpretation of the gold mineralization was carried out on 25 m spaced northwest-southeast sections oriented at an azimuth of 160°. Due to the discontinuity of the gold mineralization observed from the original sample intervals (mostly 1.5 m), the assay data was composited to a larger interval length of 5 m, which provided greater hole to hole continuity of gold mineralization. In this setting, gold grades above 0.1 g/t were used to delineate mineralized sub-zones.

A visual inspection of vein density and its correlation with gold assays was carried out, in an attempt to determine if the density of the veining or the geological modelling of the vein zones could aid in the deposit modelling. It was concluded that, while there was a general direct relationship of sulphide and quartz vein density to the general location of gold mineralization, the gold grades were geologically not

directly related by a 1:1 ratio to the vein intensity, which is logged as vein density (cm/m of sample). At Olive, approximately 98% of the mineralization is hosted in granodioritic intrusive rock types.

The Olive deposit is comprised of the Olive Zone, which is made of 28 mineralized sub-zones, and the Shamrock Zone, made of 13 mineralized sub-zones. The Shamrock Zone is located approximately 60 m north of the Olive Zone at its eastern extremity. The Olive Zone is oriented along strike at an azimuth of 45° for its western half and at 60° for its eastern half and dipping to the southeast at angles varying from 50° to vertical. It is elongated over 2,250 m along strike with a width of up to 500 m and depth of up to 400 m below surface. The Shamrock Zone is oriented along strike at an azimuth of 60° and dipping to the southeast at angles varying from 50° to vertical. It is smaller in size than the Olive Zone and is elongated over 570 m along strike with a width of up to 250 m and depth of up to 250 m below surface.

The total volume of the Olive and Shamrock Zones derived from the above modeling approach are presented in Table 14-26 and represents a 37.6% increase over the 2016 Feasibility Study model.

Table 14-26: Wireframe Volumes – Olive Deposit

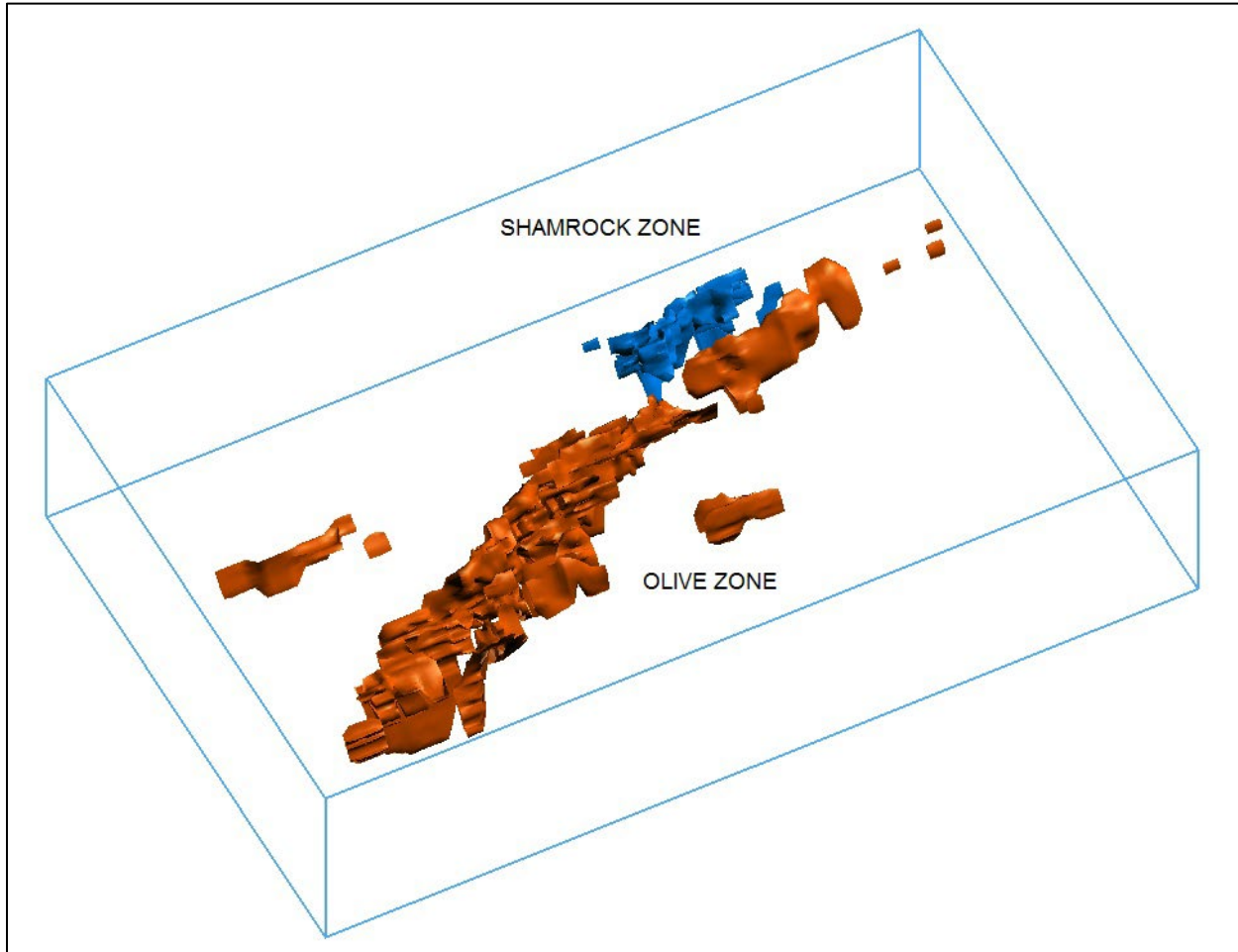
Zones	Volume Mm <sup>3</sup>
Olive Zone – December 2022 Update	22.013
Shamrock Zone – December 2022 Update	2.959
Olive deposit (Olive+Shamrock) – December 2022 Update	24.972
Olive deposit (Olive+Shamrock) – 2016 Feasibility	18.142

Source: Ginto (2022)

An example of the gold mineralization wireframes of the Olive and Shamrock Zones are shown in Figure 14-17 and with the latest additional holes in Figure 14-18.

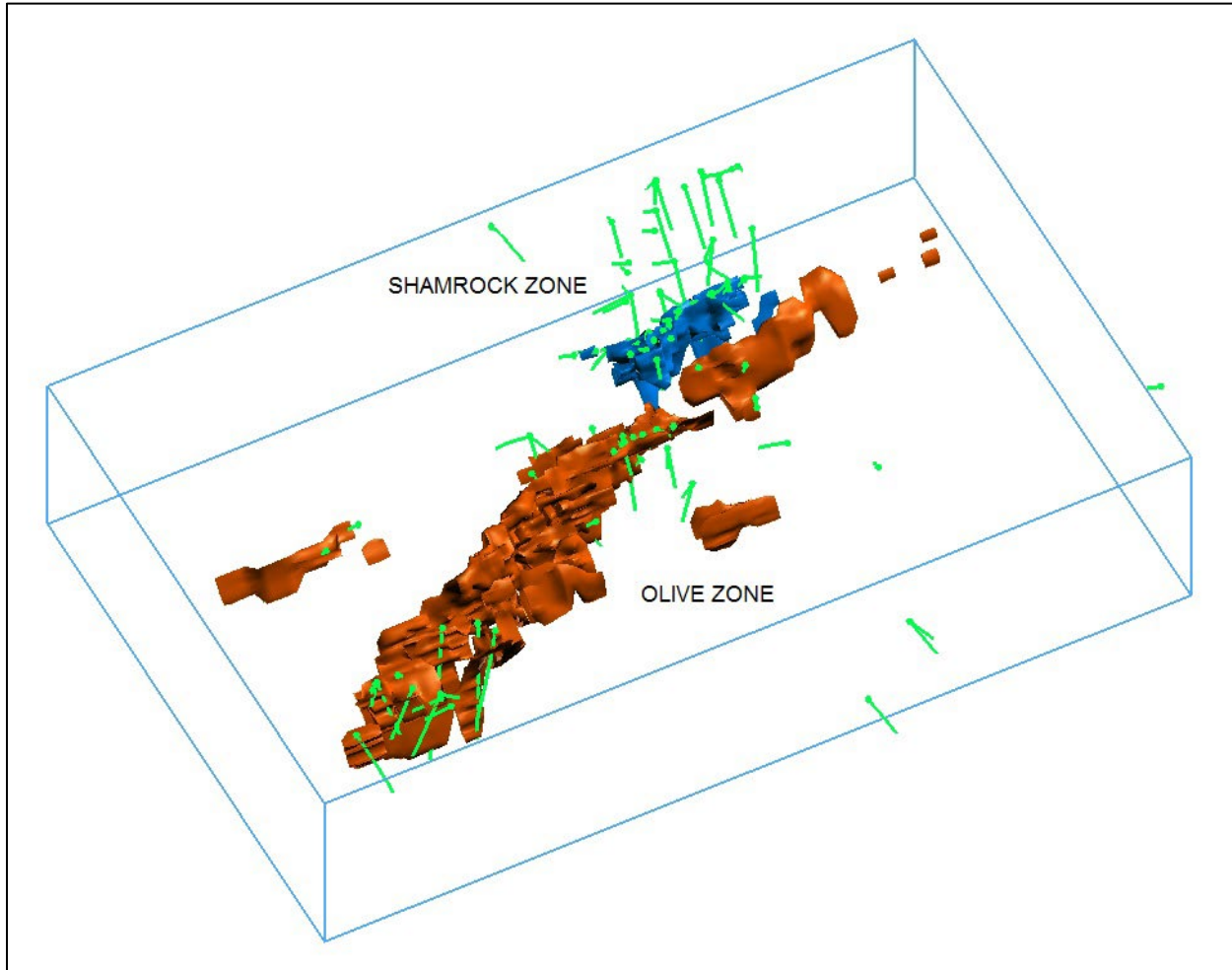


Figure 14-17: Gold Mineralization Model – Perspective View Looking Northeast – Olive and Shamrock Zones



Source: Ginto (2022)

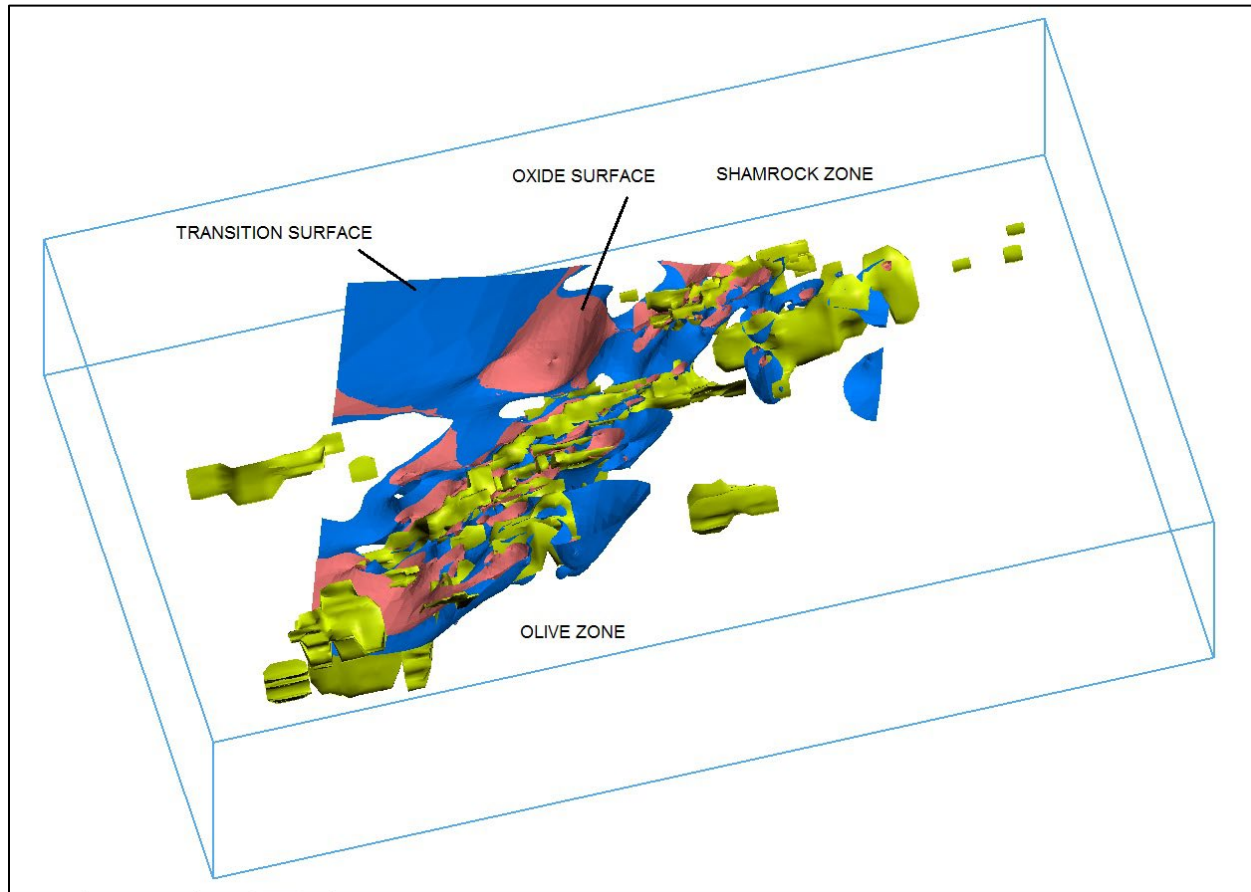
Figure 14-18: Gold Mineralization Model with Drill Holes from 2017 and 2018 – Perspective View Looking Northeast – Olive and Shamrock Zones



Source: Ginto (2022)

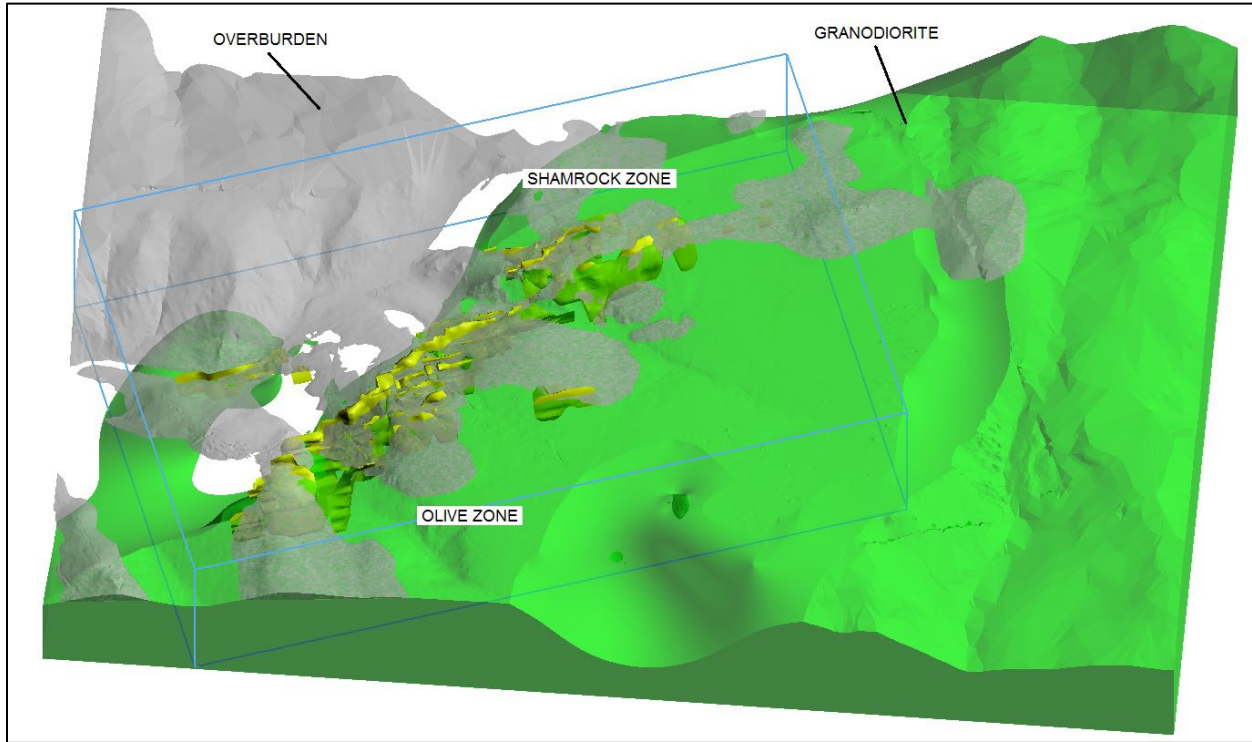
Models of the reduced oxidation (redox) and lithologies were developed by Victoria Gold's geologic team with examples shown in Figure 14-19 and Figure 14-20, respectively.

Figure 14-19: Geologic Model of the Reduced Oxidation with Mineralized Sub-Zones (Yellow) – Perspective View Looking Northeast – Olive Deposit



Source: Ginto (2022)

Figure 14-20: Geologic Model of the Granodiorite and Overburden with Mineralized Sub-Zones (Yellow) – Perspective View Looking Northeast - Olive Deposit



Source: Ginto (2022)

A topography surface derived for the 2016 Feasibility Study was utilized in this update to edit the block model by restricting estimates to its surface. An example of the topography surface at Olive with the modeled mineralized zones is presented in Figure 14-21.

Figure 14-21: Topography Surface with Mineralized Sub-Zones (Yellow) – Perspective View Looking Northeast – Olive Deposit



Source: Ginto (2022)

### 14.2.3 Grade Compositing

The original assays were composited to 1.52 m regular intervals to reflect the most common sampling length of 1.52 m (5 ft) for more than 40% of the assays. This approach ensures that the intrinsic variability of the original assays is respected.

The block height-to-composite length ratio is believed to be adequate with a ratio of 3.3 (5.0 m/1.52 m). As a general rule, a ratio between 2.0 and 5.0 is targeted.



A dynamic compositing process was utilized for this task. In this setting, the residual composites are re-distributed to the full-length composites, to allow for all composites within a domain to have the same composite length. This will avoid artifacts possibly created by the shorter residual composites.

A total of 13,145 Au and Ag composites from 340 holes resulted from the compositing process in the mineralized zones of the Olive deposit.

## 14.2.4 Exploratory Data Analysis

The exploratory data analysis (EDA) is an exercise that allows for a better understanding of the different geometric and statistical aspects of the data under study.

### 14.2.4.1 Drill Hole Spacing and Orientation

The drill hole spacing within the Olive deposit is 23.2 m on average with a median of 17.4 m. The drill hole spacing statistics were derived by calculating the distance of each nearest samples from another hole. A summary of the drill hole spacing statistics is provided in Table 14-27.

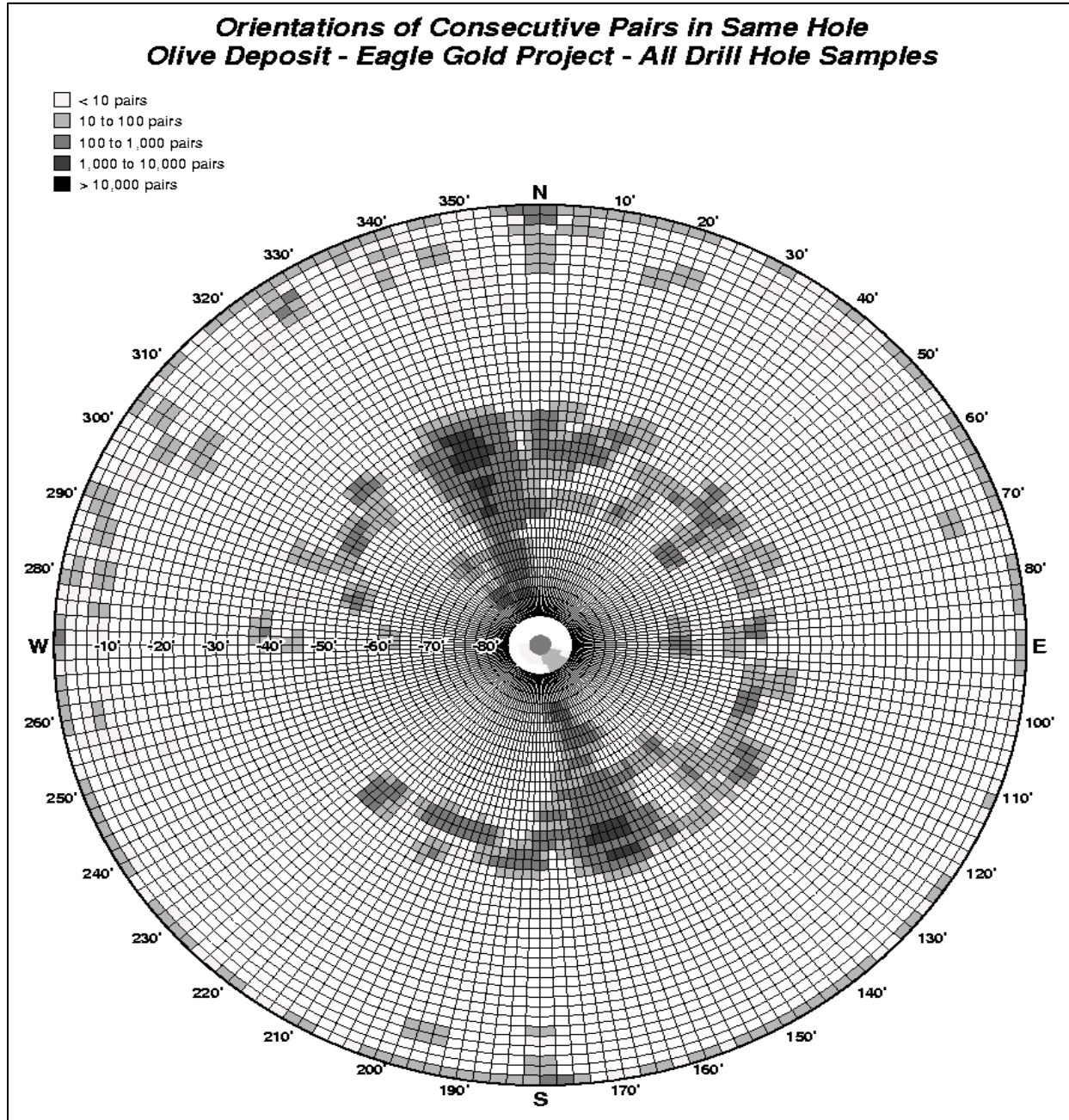
Table 14-27: Drill Hole Spacing Statistics – Olive Deposit

Zone	Drill Hole Spacing	
	Average (m)	Median (m)
Olive	23.2	17.1
Shamrock	23.6	18.8
Olive+Shamrock	23.2	17.4
Out of Olive+Shamrock	40.0	27.6
Overburden	32.3	11.9
All	33.8	23.1

Source: Ginto (2022)

The drilling orientation in the Olive deposit is shown in Figure 14-22. As seen in this figure, there are 2 main orientations of drilling at Olive; to the northwest with azimuths varying from 330° to 355° and dips varying from -45° to -70° to the northwest, and to the southeast with azimuths varying from 150° to 175° and dips varying from -45° to -70° to the southeast. A few other less drilled orientations are also noted to the northeast, southeast and southwest. The various orientations of the trenches can be observed on the outer circle of the orientation plot. Note that the azimuths are read from the outer circle while the dips are read from the inner circles.

Figure 14-22: Drill Hole Orientations – Olive Deposit



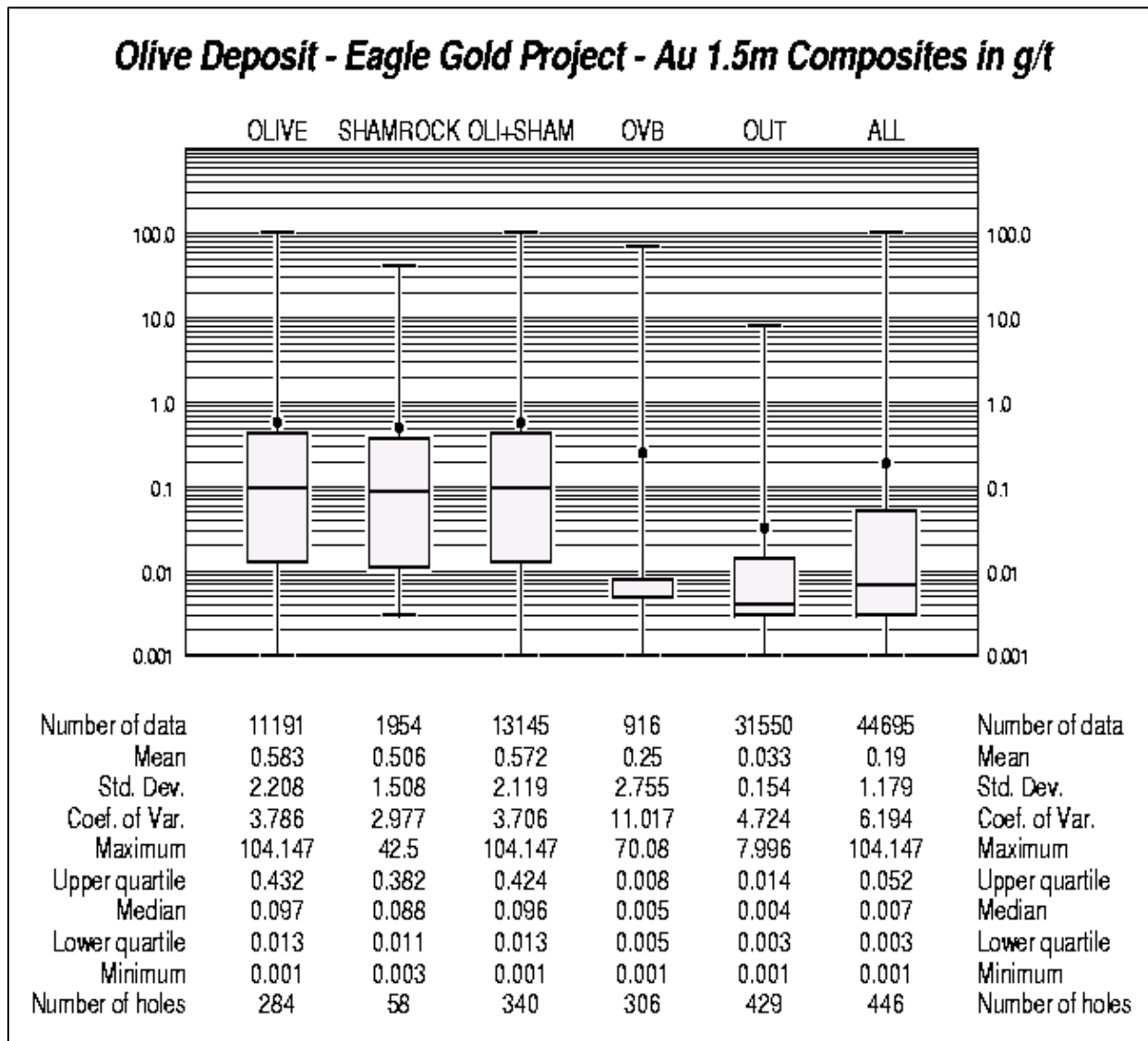
Source: Ginto (2022)



14.2.4.2 Basic Statistics

Basic statistics were conducted on the gold composite data with histograms, probability plots, and boxplots for the Olive deposit. These various analyses show a positively skewed distribution of gold grades. Results from the boxplots of the Olive deposit are shown in Figure 14-23 for gold and in Figure 14-24 for silver.

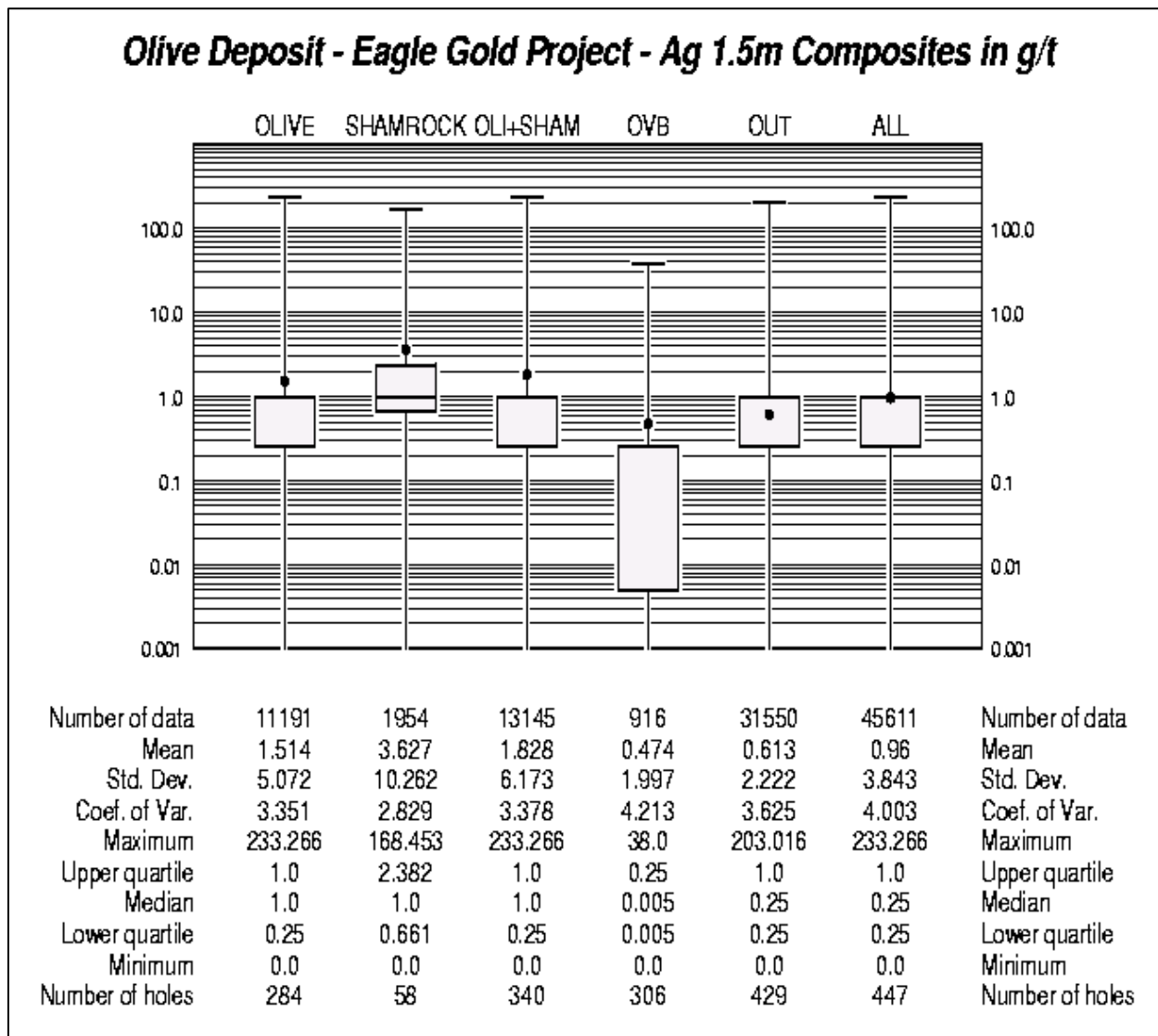
Figure 14-23: Boxplots of Gold Grade Composites – Olive Deposit



Source: Ginto (2022)

From Figure 14-23, it is observed that the coefficient of variations (standard deviation divided by the mean) for the gold grades are slightly high with values around or above 3.0. A coefficient of variation (CV) for gold above 3.0 is usually an indication of a more heterogeneous distribution of grades.

Figure 14-24: Boxplots of Silver Grade Composites – Olive Deposit



Source: Ginto (2022)

From Figure 14-24, it is observed that the coefficient of variations for the silver grades are also slightly high with values around or above 3.0. Similarly to gold, a coefficient of variation above 3.0 is usually an indication of a more heterogeneous distribution of grades.

### 14.2.4.3 Capping of High-Grade Outliers

It is common practice to statistically examine the higher grades within a population and to trim them to a lower grade value based on the results from specific statistical utilities. This procedure is performed on high-grade values that are considered outliers and that cannot be related to any geologic feature. In the case of the Olive and Shamrock Zones, the higher gold and silver grades were examined with three different tools: the probability plot, decile analysis, and cutting statistics. The usage of various investigating methods allows for a selection of the capping threshold in a more objective and supportive manner. For the probability plot method, the capping value is chosen at the location where higher grades depart from the main distribution. For the decile analysis, the capping value is chosen as the maximum grade of the decile containing less than an average of 10% of metal. For the cutting statistics, the selection of the capping value is identified at the cut-off grade where there is no correlation between the grades above this cut-off, or where a jump in the coefficient of variation is observed. The resulting compilation of the capping thresholds is listed in Table 14-28. One of the objectives of the capping strategy is to have less than 10% of the metal affected by the capping process. This was achieved for the gold and silver grades of the Olive and Shamrock Zones. The greater percentage of metal capped observed for gold and silver within the overburden is mainly caused by higher grade outliers when compared to the overall grade populations. In these cases, few high grades carry a large percentage of the metal content.

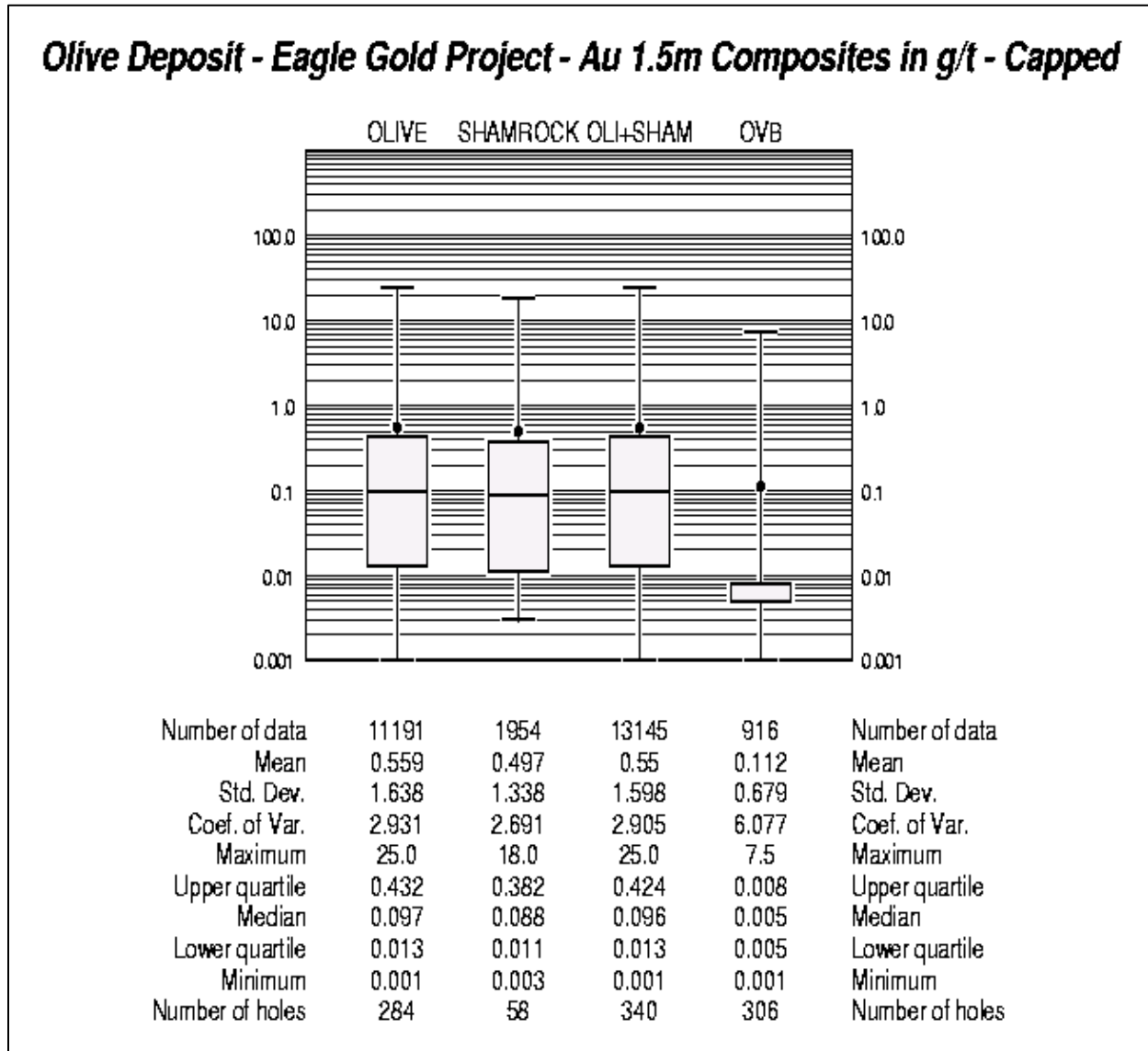
Table 14-28: Capping Thresholds of High-Grade Gold and Silver Outliers – Olive Deposit

Zone	Capping Threshold g/t	% of Metal Capped	# Capped Gold Composites
<b>Gold</b>			
Olive	25.0	4	14
Shamrock	18.0	3	2
Overburden	7.5	40	4
<b>Silver</b>			
Olive	90.0	2	5
Shamrock	90.0	3	9
Overburden	10.0	17	7

Source: Ginto (2022)

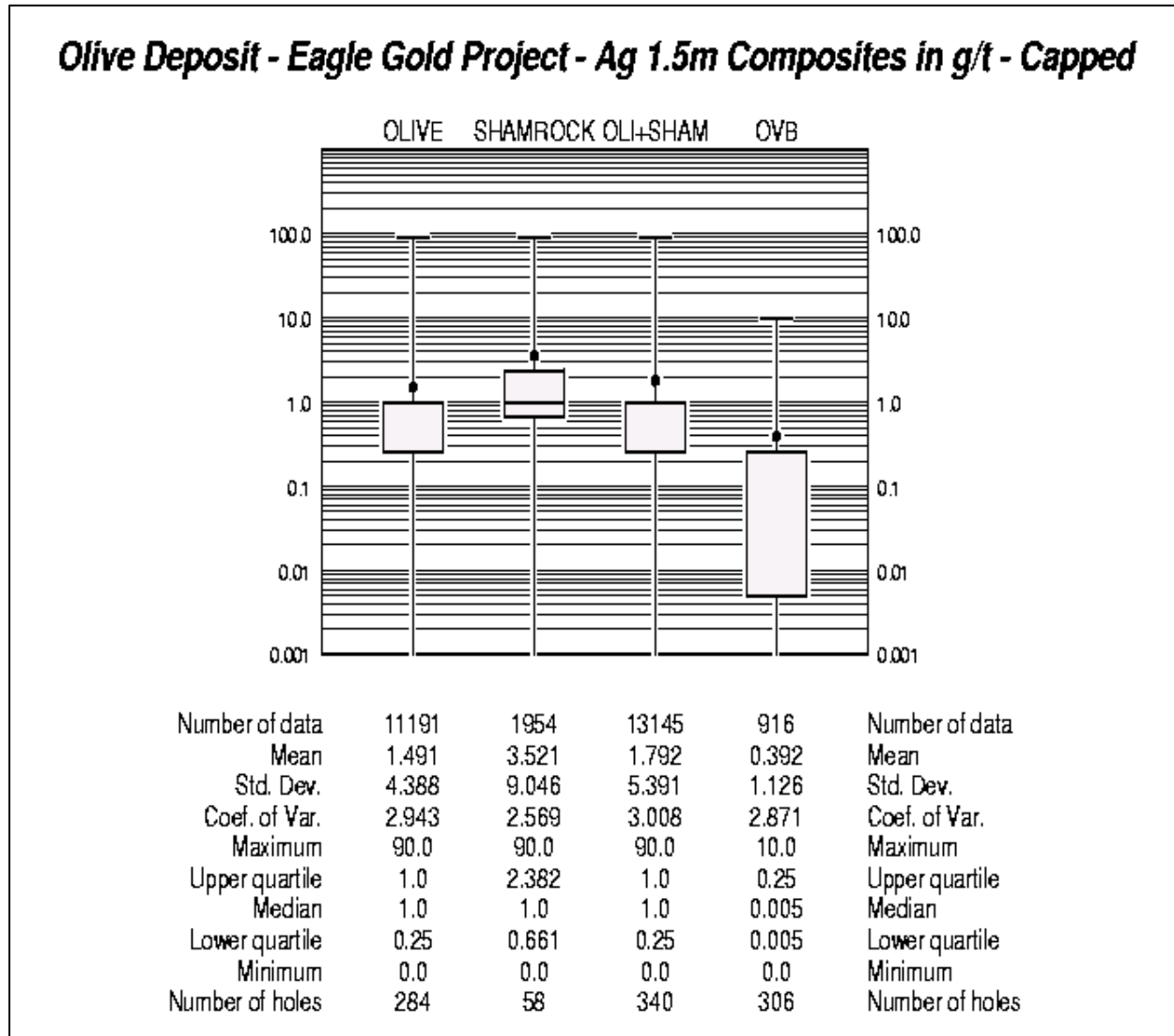
Boxplots of capped composites are shown in Figure 14-25 for gold and for silver in Figure 14-26.

Figure 14-25: Boxplots of Capped Gold Composites – Olive Deposit



Source: Ginto (2022)

Figure 14-26: Boxplots of Capped Silver Composites – Olive Deposit



Source: Ginto (2022)

As seen in these figures, the coefficients of variation for gold and silver were reduced to values below 3.0 from the capping exercise. This indicates a more homogeneous distribution of gold and silver grades which in return indicates that ordinary kriging would be a well-suited grade interpolation method. The capping of the high-grade outliers has only had a minimal influence on the average grades of the Olive and Shamrock Zones with a reduction of 3.8% of the average gold grade and 2.0% of the average silver grade, after capping. The capping exercise was carried out on the composited assays which provides an equal support for the gold and silver grades examined.

#### 14.2.4.4 Declustering

A polygonal declustering was applied to the composites to provide a better representation of the statistical parameters of the gold and silver grade distributions. In this process a weight is assigned to each composite based on the volume derived from the half-distances to the nearest surrounding composites. Thus, composites in densely drilled areas are assigned smaller volume-weights than those in sparsely drilled areas. In this case an average gold grade of 0.419 g/t was obtained, indicating a reduction of 24% when removing the clustering effect. For silver, an average declustered grade of 1.397 g/t was obtained, indicating a reduction of 22%. These results will be helpful when comparing the grade estimate results to the declustered composites in the validation process.

#### 14.2.5 Variography

A variography study was performed on gold and silver grade composites of the Olive deposit. The objective of this analysis was to spatially establish the preferred directions of gold and silver grade continuity. In turn, the variograms modeled along those directions would be later utilized to select and weigh the composites during the block grade interpolation process. For this exercise, all experimental variograms were of the type relative lag pairwise, which is considered robust for the assessment of gold and silver grade continuity.

Variogram maps were first calculated to examine general gold and silver grade continuities in the XY, XZ, and YZ planes. The next step undertaken was to compute omni-directional variograms and down-hole variograms. The omni-directional variograms are calculated without any directional restrictions and provide a good assessment of the sill of the variogram. As for the down-hole variogram, it is calculated with the composites of each hole along the trace of the hole. The objective of these calculations is to provide information about the short scale structure of the variogram, as the composites are more closely spaced down the hole. Thus, the modeling of the nugget effect is usually better derived from the down-hole variograms.

Directional variograms were then computed to identify more specifically the three main directions of continuity. A first set of variograms were produced in the horizontal plane at increments of 10 degrees. In the same way a second set of variograms were computed at 10° increments in the vertical plane of the horizontal direction of continuity (plunge direction). A final set of variograms at 10° increments were calculated in the vertical plane perpendicular to the horizontal direction of continuity (dip direction). The final variograms were then modeled with a 2-structure spherical variogram. The resulting variogram parameters are presented in Table 14-29, and the modeled variograms for gold and silver are provided in Figure 14-36 through Figure 14-41 at the end of Section 14. From this exercise, it was observed that the best directions of gold and silver grade continuity are along strike to the northeast and down dip.

Table 14-29: Variogram Model Parameters For Gold And Silver – Olive Deposit

Parameters	1 – Olive Zone			2 – Shamrock Zone			3 – Overburden		
	Principal	Minor	Vertical	Principal	Minor	Vertical	Principal	Minor	Vertical
<b>Gold</b>									
Azimuth*	70°	160°	160°	70°	160°	160°	80°	170°	80°
Dip**	5°	85°	-5°	0°	-60°	30°	0°	0°	-90°
Nugget Effect C <sub>0</sub>	0.604			0.623			0.162		
1 <sup>st</sup> Structure C <sub>1</sub>	1.143			1.140			1.085		
2 <sup>nd</sup> Structure C <sub>2</sub>	0.449			0.515			0.457		
1 <sup>st</sup> Range A <sub>1</sub>	7.1 m	20.0 m	10.3 m	21.0 m	10.3 m	7.1 m	11.3 m	8.1 m	8.1 m
2 <sup>nd</sup> Range A <sub>2</sub>	44.7 m	42.5 m	25.3 m	54.3 m	35.0 m	23.2 m	41.4 m	28.5 m	12.4 m
<b>Silver</b>									
Azimuth*	80°	170°	170°	70°	160°	160°	90°	180°	90°
Dip**	0°	-70°	20°	0°	-55°	35°	0°	0°	-90°
Nugget Effect C <sub>0</sub>	0.080			0.264			0.084		
1 <sup>st</sup> Structure C <sub>1</sub>	0.532			0.972			1.475		
2 <sup>nd</sup> Structure C <sub>2</sub>	0.705			0.255			0.766		
1 <sup>st</sup> Range A <sub>1</sub>	2.8 m	10.3 m	3.8 m	11.4 m	25.3 m	8.1 m	28.6 m	57.6 m	6.0 m
2 <sup>nd</sup> Range A <sub>2</sub>	40.3 m	74.7 m	18.9 m	43.6 m	48.9 m	30.7 m	53.3 m	60.8 m	11.4 m

Notes:

\*Positive clockwise from north.

\*\*Negative below horizontal.

Source: Ginto (2022)

## 14.2.6 Grade Estimation

The estimation of gold and silver grades into a block model was carried out with the ordinary kriging technique. The estimation strategy and parameters were tailored to account for the various geometrical, geological, and geostatistical characteristics previously identified. The block model's structure is presented in Table 14-30. It should be noted that the origin of the block model corresponds to the lower left corner, the point of origin being the exterior edges of the first block. A block size of 5 m (easting) x 5 m (northing) x 5 m (elevation) was selected to better reflect the orebody's geometrical configuration. The block model is rotated with its X axis at an azimuth of 70°.



Table 14-30: Block Grid Definition – Olive Deposit

Coordinates	Origin m	Rotation (azimuth)	Distance m	Block Size m	Number of Blocks
Easting (X)	461,085.0	70°	2,900.0	5.0	580
Northing (Y)	7,100,400.0		1,800.0	5.0	360
Elevation(Z)	770.0		650.0	5.0	130
Number of Blocks		27,144,000			

Source: Ginto (2022)

The database of 1.52 m capped gold and silver grade composites was utilized as input for the grade interpolation process, along with the mineralized domain model. The size and orientation of the search ellipsoid for the estimation process was based on the variogram parameters modeled for gold and silver. A minimum of 2 samples and maximum of 12 samples were selected for the block grade calculations. No other restrictions, such as a minimum number of informed octants, a minimum number of holes, a maximum number of samples per hole, etc., were applied to the estimation process. A set of 3 estimation runs was utilized for the grade interpolation process. The first estimation run utilized a search ellipsoid, dimensioned to the second range of the variograms, while the second and third runs utilized search ellipsoids dimensioned to 1.5 and 3 times the variogram ranges, respectively. For the Olive Zone, there are 82% of the blocks that are estimated from the first pass, 13% from the second pass and 5% from the third pass. For the Shamrock Zone, 92% of the blocks were estimated from the first pass, 7% from the second pass, and 1% from the third pass. The estimation parameters for gold and silver are presented in Table 14-31 and block model variables in Table 14-32.

Table 14-31: Estimation Parameters for Gold and Silver (First Pass) – Olive Deposit

Zone	Minimum # of Samples	Maximum # of Samples	Search Ellipsoid – Long Axis – Azimuth / Dip	Search Ellipsoid – Long Axis – Size (m)	Search Ellipsoid – Short Axis – Azimuth / Dip	Search Ellipsoid – Short Axis – Size (m)	Search Ellipsoid – Vertical Axis – Azimuth / Dip	Search Ellipsoid – Vertical Axis – Size (m)
<b>Gold</b>								
Olive	2	12	70°/5°	45.0	160°/85°	43.0	160°/-5°	25.0
Shamrock	2	12	70°/0°	54.0	160°/-60°	35.0	160°/30°	23.0
Overburden	2	12	80°/0°	41.0	170°/0°	29.0	80°/-90°	12.0
<b>Silver</b>								
Olive	2	12	80°/0°	40.0	170°/-70°	75.0	170°/20°	19.0
Shamrock	2	12	70°/0°	44.0	160°/-55°	49.0	160°/35°	31.0
Overburden	2	12	90°/0°	53.0	180°/0°	61.0	180°/-90°	11.0

Source: Ginto (2022)

Table 14-32: Block Model Variables – Olive Deposit

Variable	Default	Type	Description
xcentre	-	predefined	X Centre
ycentre	-	predefined	Y Centre
zcentre	-	predefined	Z Centre
au_final	-99	float	Au estimate g/t – OK
ag_final	-99	float	Ag estimate g/t - OK
adis_final	-99	float	Average sample distance (m)
class	-99	float	Classification: 1.0=measured (Olive only), 2.0=indicated, 3.0=inferred
fct_1	0	float	Block fraction in Olive Zone (values 0.0 to 1.0)
fct_2	0	float	Block fraction in Shamrock Zone (values 0.0 to 1.0)
litho	-99	float	Lithology based on block centers: 1.0=granodiorite, 2.0=metasediments, 3.0=overburden
litho_fct	-99	float	Lithology based on block fractions: 1.0=granodiorite, 2.0=metasediments, 3.0=overburden
rdx	-99	float	Reduced oxidation state (redox): 1.0=oxide, 2.0=mix, 3.0=sulphide
recov	0	float	Gold recovery by “rdx”
sg	0	float	SG for full blocks by “litho” and “rdx”
sg_ore	0	float	SG accounts for block fractions in Olive, Shamrock, and overburden
topo	100	float	Percent of block below topo surface (2016): 0.0=air, 100.0=rock
type	-99	float	Type: 1.0=ox-gr 3.0=su-gr 4.0=ox-ms 6.0=su-ms 7.0=mx-gd 8.0=mx-ms
pct_pit	100	float	Percent of block above the \$1700 resource pit:0.0=outside pit, 100.0=inside pit

Source: Ginto (2022)

Only blocks within the modeled mineralized domains of the Olive and Shamrock Zones, as well as the overburden, were estimated using hard boundaries.

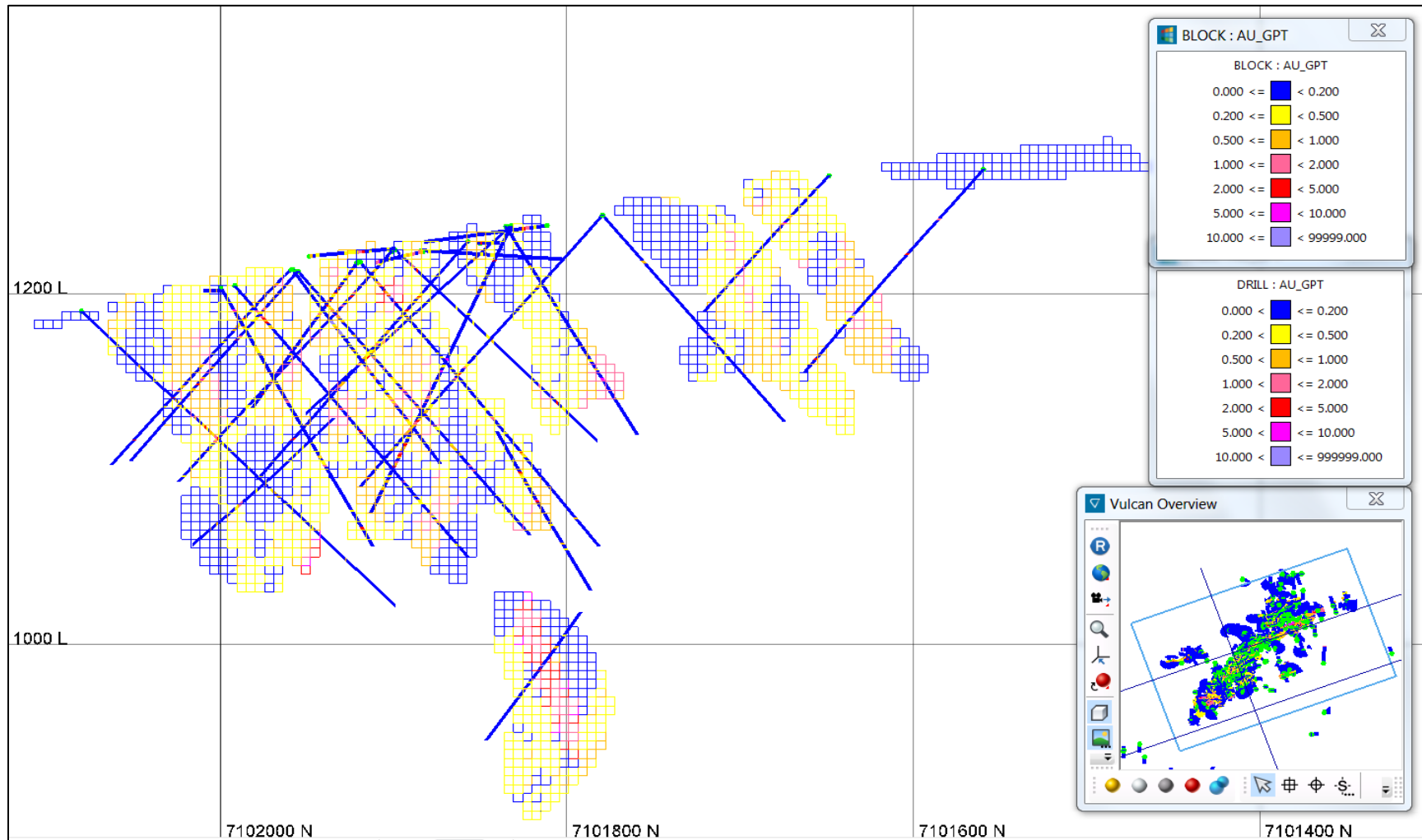
### 14.2.7 Validation of Gold Grade Estimates

Validation tests were carried out on the gold grade estimates to examine the possible presence of a bias and to quantify the level of smoothing/variability.

#### 14.2.7.1 Visual Inspection

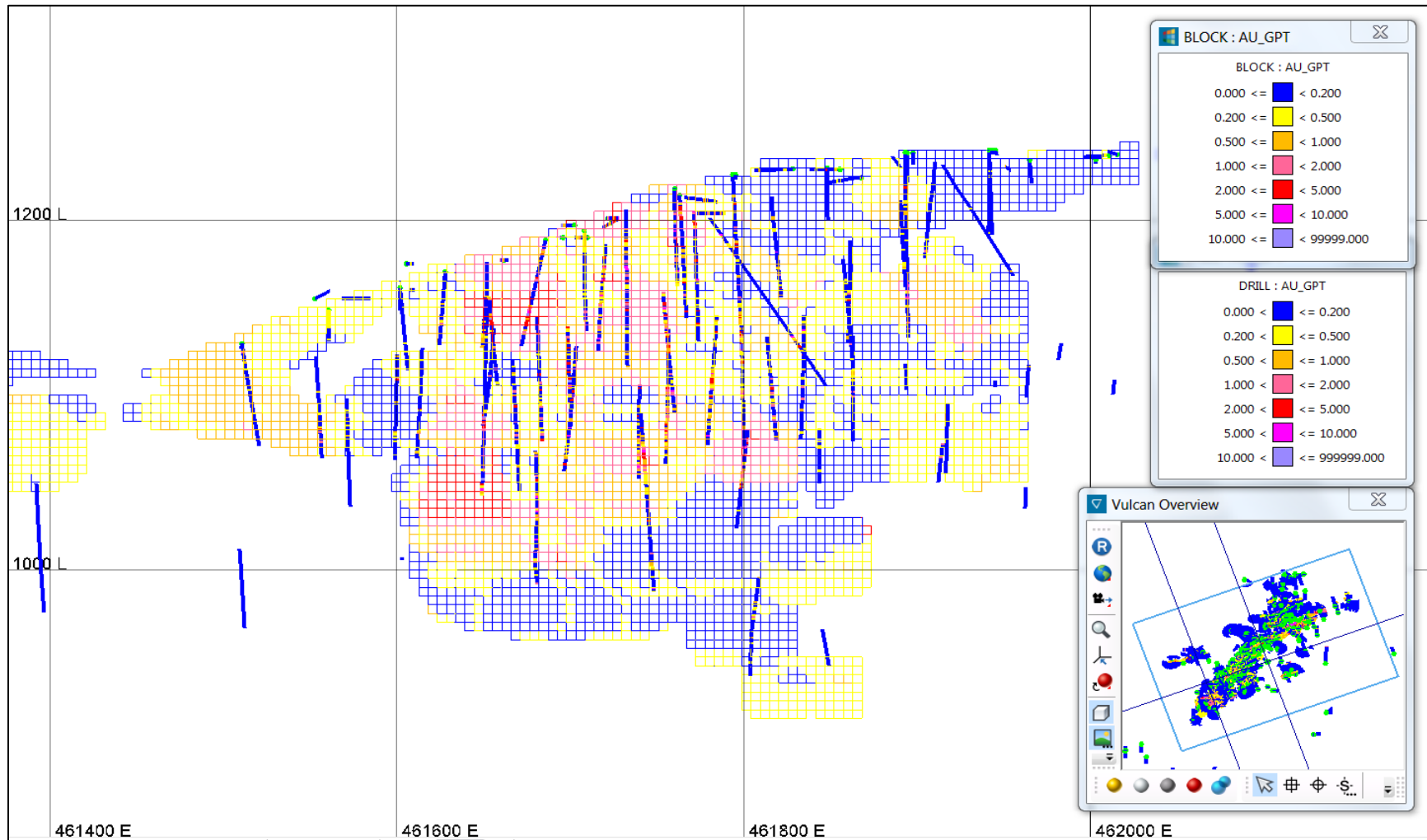
A visual inspection of the block estimates with the drill hole grades on plans and cross-sections was performed as a first check of the estimates. Observations from stepping through the estimates along the different planes indicated that there was overall a good agreement between the drill hole grades and the estimates. The orientations of the estimated grades were also according to the projection angles defined by the search ellipsoids. Examples of cross-sections for grade estimates of the Olive deposit are presented in Figure 14-27, Figure 14-28, and Figure 14-29 for gold, and in Figure 14-30, Figure 14-31, and Figure 14-32 for silver.

Figure 14-27: Northwest-Southeast Section Looking Northeast – Gold Grades - Olive Deposit



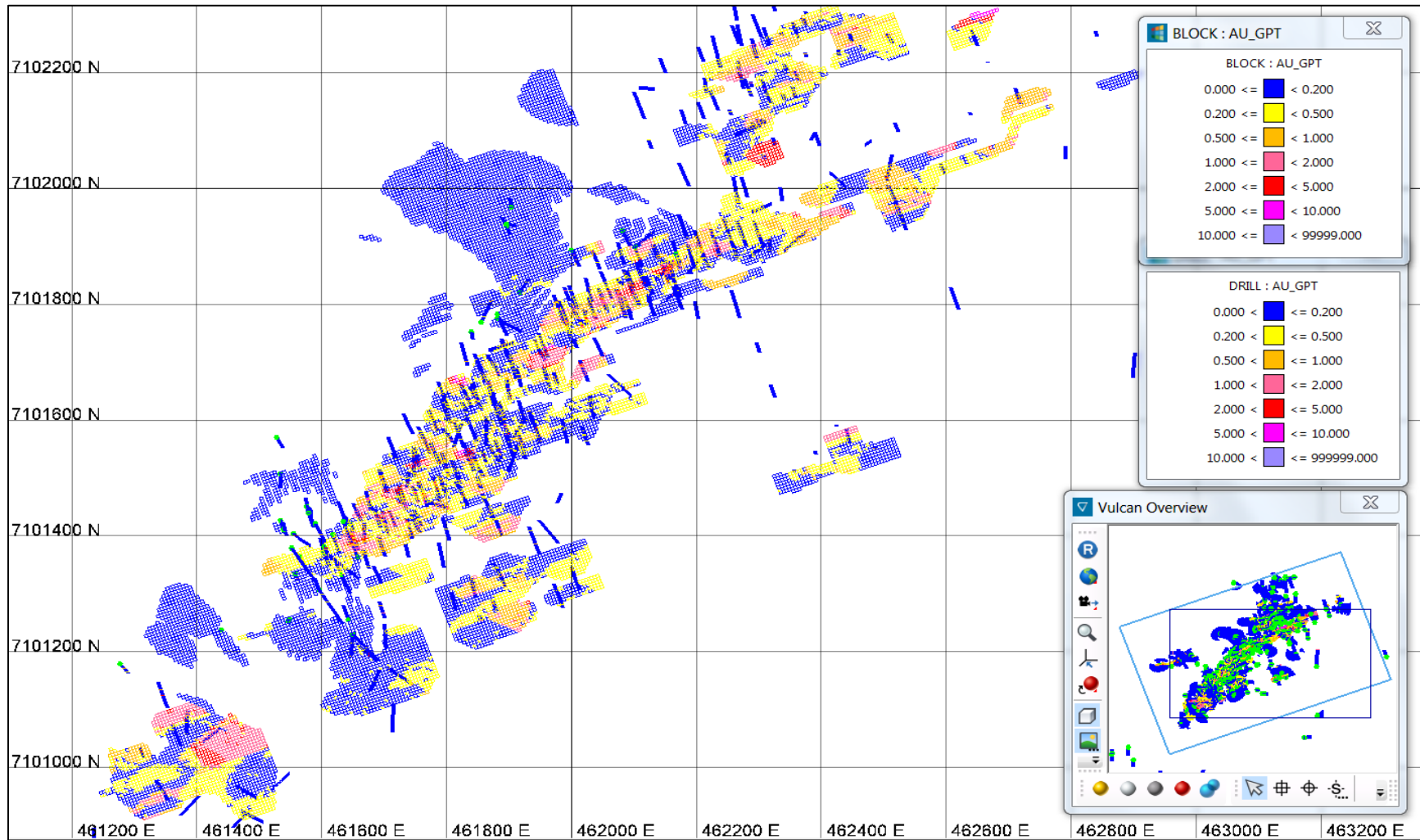
Source: Ginto (2022)

Figure 14-28: Southwest-Northeast Section Looking Northwest – Gold Grades – Olive Deposit



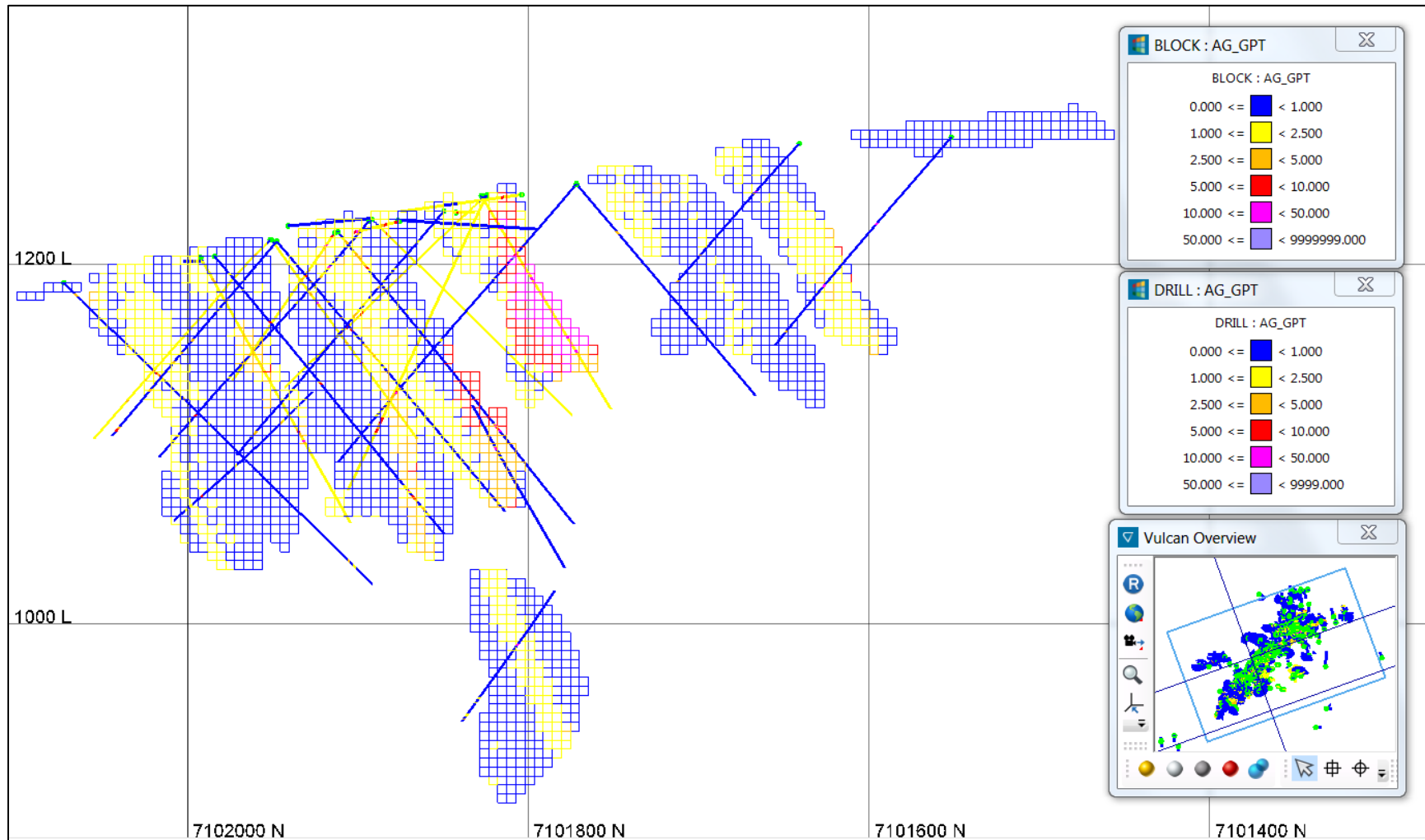
Source: Ginto (2022)

Figure 14-29: Level Plan 1,055E1 – Gold Grades – Olive Deposit



Source: Ginto (2022)

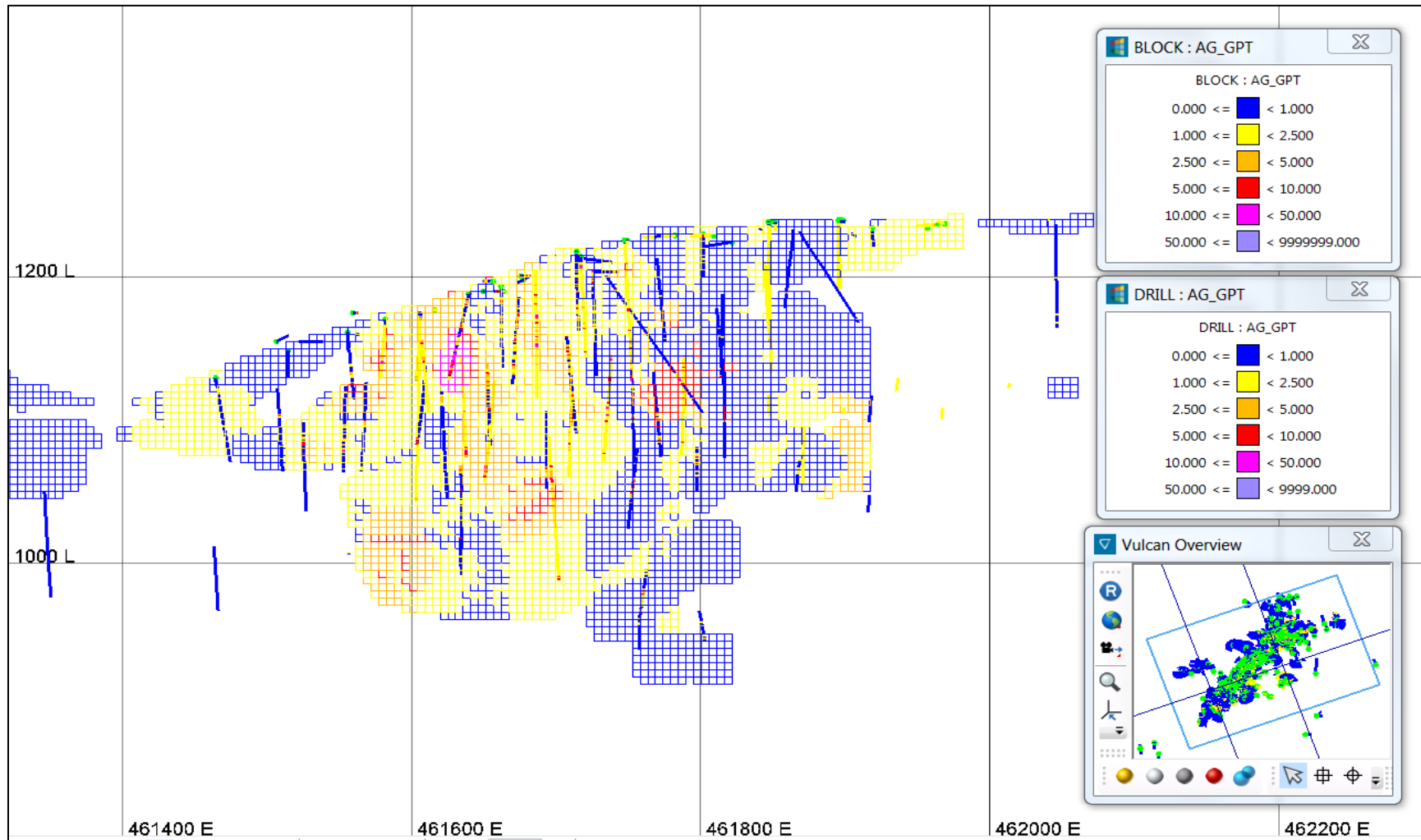
Figure 14-30: Northwest-Southeast Section Looking Northeast – Silver Grades - Olive Deposit



Source: Ginto (2022)

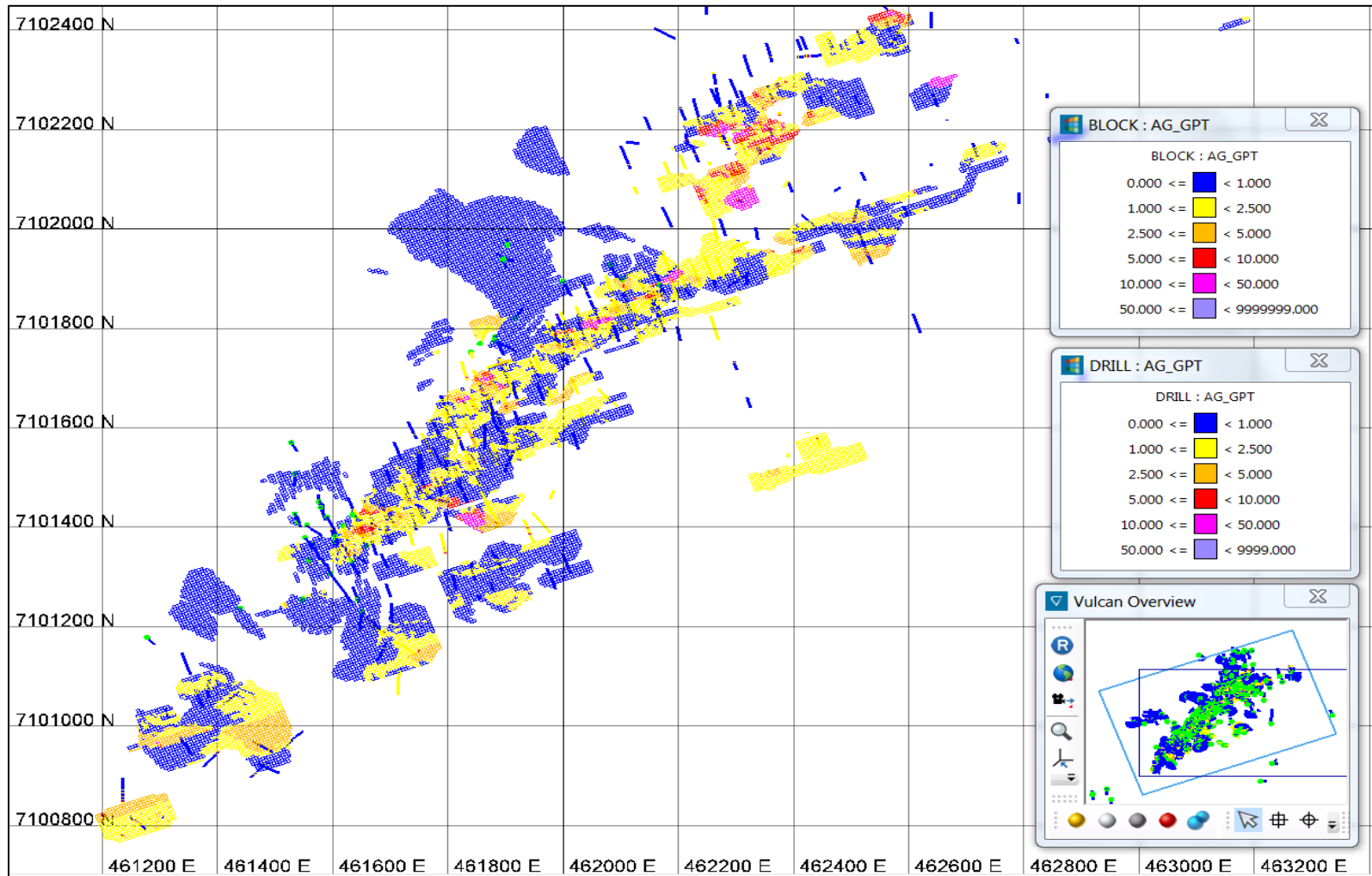


Figure 14-31: Southwest-Northeast Section Looking Northwest – Silver Grades – Olive Deposit



Source: Ginto (2022)

Figure 14-32: Level Plan 1,055E1 – Silver Grades – Olive Deposit



Source: Ginto (2022)

### 14.2.7.2 Global Bias Test

The comparison of the average gold and silver grades from the declustered composites and the estimated block grades examines the possibility of a global bias of the estimates. As a guideline, a difference between the average grades of more than  $\pm 10\%$  would indicate a significant over- or under-estimation of the block grades and the possible presence of a bias. It would be a sign of difficulties encountered in the estimation process and would require further investigation. A polygonal declustered method with a bounding solid corresponding to the estimated volume was utilized for this exercise.

Results of the average gold and silver grade comparisons are presented in Table 14-33 for the Olive deposit.

Table 14-33: Average Gold and Silver Grade Comparisons – Polygonal-Declustered Composites with Block Estimates – Olive Deposit

Statistics	Declustered Composites	Block Estimates
<b>Gold</b>		
Average Gold Grade g/t	0.419	0.428
Difference	2.2%	
<b>Silver</b>		
Average Gold Grade g/t	1.400	1.317
Difference	-5.7%	

Source: Ginto (2022)

As seen in Table 14-33, the average gold and silver grades between the declustered composites and the block estimates are well within the limits of the tolerance levels of acceptability. It can thus be concluded that no significant global bias is present in the gold and silver grade estimates.

### 14.2.7.3 Local Bias Test

A comparison of the grade from composites within a block with the estimated grade of that block provides an assessment of the estimation process close to measured data. Pairing of these grades on a scatterplot gives a statistical valuation of the estimates. It is anticipated that the estimated block grades should be similar to the composited grades within the block, however without being of exactly the same value. Thus, a high correlation coefficient will indicate satisfactory results in the interpolation process, while a medium to low correlation coefficient will be indicative of larger differences in the estimates and would suggest a further review of the interpolation process. Results from the pairing of composited and estimated grades within blocks pierced by a drill hole are presented in Table 14-34 for gold and silver.

Table 14-34: Gold and Silver Grade Comparison for Blocks Pierced by a Drill Hole – Paired Composite Grades with Block Grade Estimates – Olive Deposit

Data	Average Grade g/t	Correlation Coefficient
<b>Gold</b>		
Composites	0.508	0.624
Block Estimates	0.516	
Difference	1.6%	
<b>Silver</b>		
Composites	1.717	0.652
Block Estimates	1.713	
Difference	-0.2%	

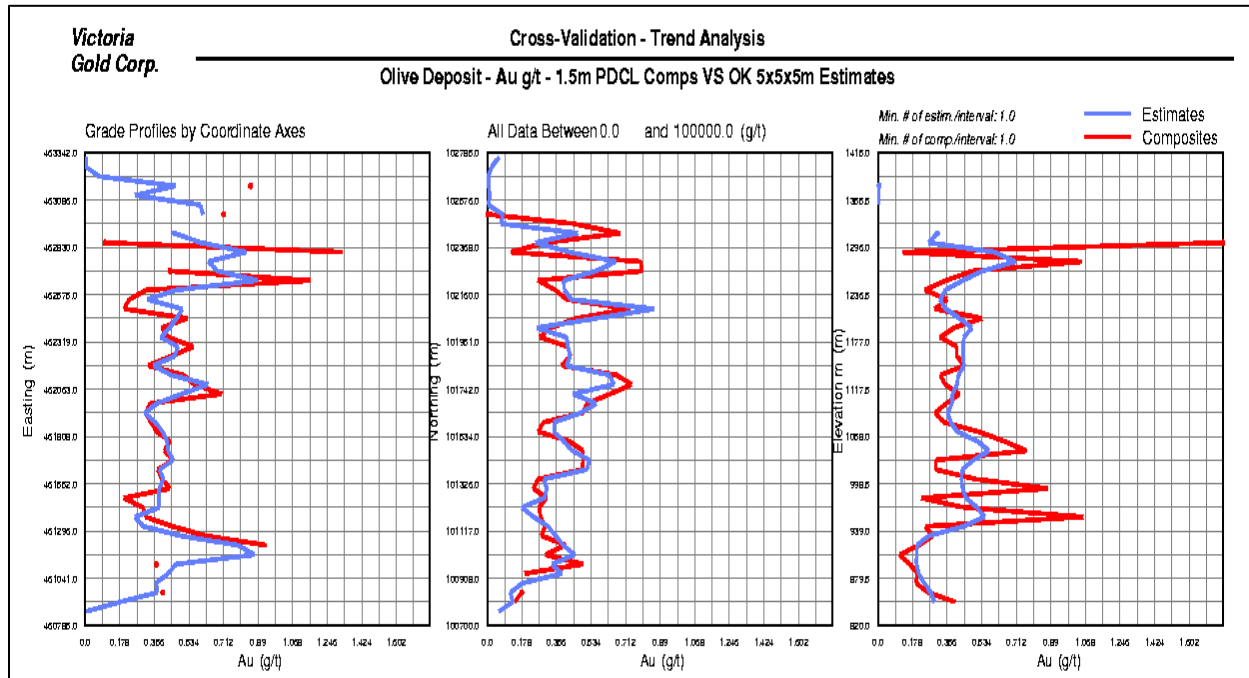
Source: Ginto (2022)

As seen in Table 14-34 for gold and silver, the block grade estimates are very similar to the composite grades within blocks pierced by a drill hole, with higher correlation coefficients, indicating satisfactory results from the estimation process.

#### 14.2.7.4 Grade Profile Reproducibility

The comparison of the grade profiles of the declustered composites with that of the estimates allows for a visual verification of an over- or under-estimation of the block estimates at the global and local scales. A qualitative assessment of the smoothing/variability of the estimates can also be observed from the plots. The output consists of three graphs displaying the average grade according to each of the coordinate axes (east, north, elevation). The ideal result is a grade profile from the estimates that follows that of the declustered composites along the three coordinate axes, in a way that the estimates have lower high-grade peaks than the composites, and higher low-grade peaks than the composites. A smoother grade profile for the estimates, from low to high grade areas, is also anticipated in order to reflect that these grades represent larger volumes than the composites. Grade profiles are presented in Figure 14-33 for gold and in Figure 14-34 for silver.

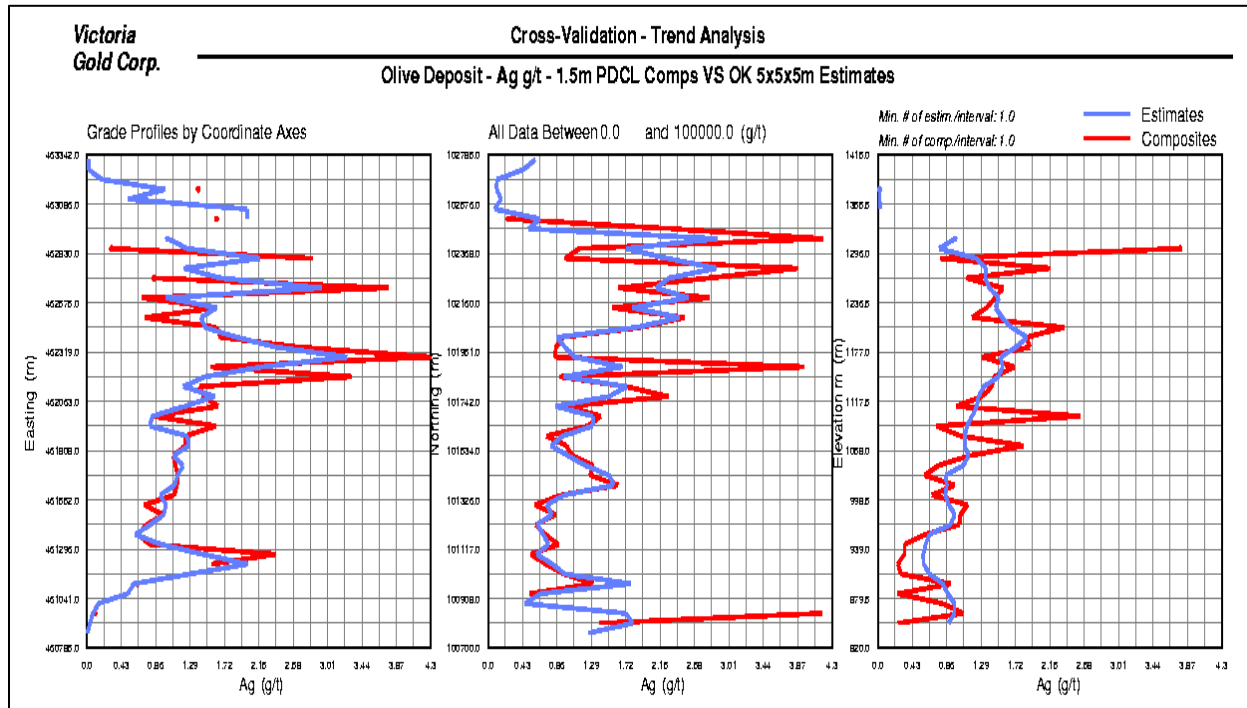
Figure 14-33: Gold Grade Profiles Of Declustered Composites and Block Estimates – Olive Deposit



Source: Ginto (2022)

From the plots of Figure 14-33, it can be seen that the gold grade profiles of the declustered composites are well reproduced by those of the block estimates and consequently that no global or local bias is observed. As anticipated, some smoothing of the block estimates can be seen in the profiles, where estimated grades are higher in lower grade areas and lower in higher grade areas.

Figure 14-34: Silver Grade Profiles of Declustered Composites and Block Estimates – Olive Deposit



Source: Ginto (2022)

Similarly to gold, it can be seen from the plots of Figure 14-34 that the silver grade profiles of the declustered composites are well reproduced by those of the block estimates and consequently that no global or local bias is observed. As anticipated, some smoothing of the block estimates can be seen in the profiles, where estimated grades are higher in lower grade areas and lower in higher grade areas.

#### 14.2.7.5 Level of Smoothing/Variability

The level of smoothing/variability of the estimates can be measured by comparing a theoretical distribution of block grades with that of the actual estimates. The theoretical distribution of block grades is derived from that of the declustered composites, where a change of support algorithm is utilized for the transformation (Indirect Lognormal Correction). In this case, the variance of the composites' grade population is corrected (reduced) with the help of the variogram model, to reflect a distribution of block grades (5 m x 5 m x 5 m). The comparison of the coefficient of variation (CV) of this population with that of the actual block estimates provides a measure of smoothing. Ideally a lower CV from the estimates by 5 to 30% is targeted as a proper amount of smoothing. This smoothing of the estimates is desired as it allows for the following factors: the imperfect selection of ore blocks at the mining stage (misclassification), the block grades relate to much larger volumes than the volume of core (support effect), and the block grades are not perfectly known (information effect). A CV lower than 5 to 30% for the estimates would indicate a larger amount of smoothing, while a higher CV would represent a larger amount of variability. Too much smoothing would be characterized by grade estimates around the

average grade, where too much variability would be represented by estimates with abrupt changes between lower and higher-grade areas.

Results of the level of smoothing/variability analysis are presented in Table 14-35 for the gold and silver grade estimates. As observed in this table, the CVs of the gold and silver estimates are within the targeted range of acceptability. It is thus concluded that the amount of smoothing of the block grade estimates for gold and silver is of an adequate level.

Table 14-35: Level of Smoothing/Variability of Gold and Silver Estimates – Olive Deposit

CV – Theoretical Block Grade Distribution	CV – Actual Block Grade Distribution	Difference
<b>Gold</b>		
2.023	1.467	-27.5%
<b>Silver</b>		
2.250	1.708	-24.1%

Source: Ginto (2022)

## 14.2.8 Resource Classification

The mineral resource was classified as measured, indicated, and inferred in a 2-step process. At first a wireframe of more densely drilled areas was built for the Olive and Shamrock mineralized zones. Within this wireframe, the mineral resources were classified as measured and indicated for the Olive Zone and indicated for the Shamrock Zone, based on the variograms' second ranges. The average distance of samples from the block center was utilized as the classification criterion for this second step. The distances to categorize the mineral resource into the different classes are provided in Table 14-36.

Table 14-36: Classification Distances – Olive Deposit

Mineralized Zone	Measured	Indicated	Inferred
Olive	≤ 12.0 m	> 12.0 m and ≤ 38.0 m	> 38.0 m
Shamrock	-	≤ 37.0 m	> 37.0 m

Source: Ginto (2022)

## 14.2.9 Editing of the Block Model

The block model was edited to the topography surface, where the block percentage below the topography surface was stored into a variable (“topo”). All estimates above topography were removed from the



resource calculations. The lithological/oxidation types were also coded into the block model as shown in Table 14-37.

Table 14-37: Lithology/Oxidation Codes – Olive Deposit

Code (“type”)	Lithology/Alteration/Redox
1.0	oxidized granodiorite
3.0	fresh (sulphide) granodiorite
4.0	oxidized meta-sediments
6.0	fresh (sulphide) metasediments
7.0	transition granodiorite
8.0	transition metasediments

Source: Ginto (2022)

## 14.2.10 Mineral Resource Calculations

### 14.2.10.1 Specific Gravity

The mineral resource was calculated for 5 m (X) x 5 m (Y) x 5 m (Z) blocks with specific gravity (SG) values based on lithology and reduced oxidation state. The SG measurements were performed by Victoria Gold on core samples using the weight in water and air method. The number of SG measurements are as follows; 700 in granodiorite, 70 in metasediments, 69 in oxide, 252 in transition, and 582 in sulphide. Table 14-38 presents the different SG values utilized for the resource’s tonnage calculation for the Olive deposit.

Table 14-38: Specific Gravity – Olive Deposit

Lithology Codes (“litho”)	Redox Codes (“rdx”)	Specific Gravity (“sg”)
1.0 granodiorite	1.0 oxide	2.61
1.0 granodiorite	2.0 transition	2.67
1.0 granodiorite	3.0 sulphide	2.68
2.0 meta-sediments	1.0 oxide	2.61
2.0 meta-sediments	2.0 transition	2.69
2.0 meta-sediments	3.0 sulphide	2.70
3.0 overburden	Other	2.00
Other	Other	2.65

Source: Ginto (2022)

These SG values were derived for the 2016 Feasibility Study and were utilized in the tonnage calculations for this mineral resource update. The mean values by rock type, using all data determinations, were used for the mineral resource’s tonnage calculation.

#### 14.2.10.2 Geometallurgical Variables

Geometallurgical information was incorporated into the block model with respect to recoveries (“recov”) based on the reduced oxidation state (“rdx”), as presented in Table 14-39.

Table 14-39: Geometallurgical Data – Olive Deposit

Redox Code (“rdx”)	Description	Recovery (“recov”)
1.0	oxide	0.69
2.0	transition	0.58
3.0	sulphide	0.52

Source: Ginto (2022)

#### 14.2.10.3 Mineral Resource Constraints

With the objective to satisfy the NI 43-101 requirement of reporting a mineral resource that provides “reasonable prospects for economic extraction”, a pit shell was optimized to constrain the mineral resources. A summary of the resource pit constraining parameters is shown in Table 14-40. The constraining pit shell optimized with the Lerchs-Grossman algorithm is shown in Figure 14-35 for the Olive deposit.

Table 14-40: Mineral Resource Constraining Parameters – Olive Deposit

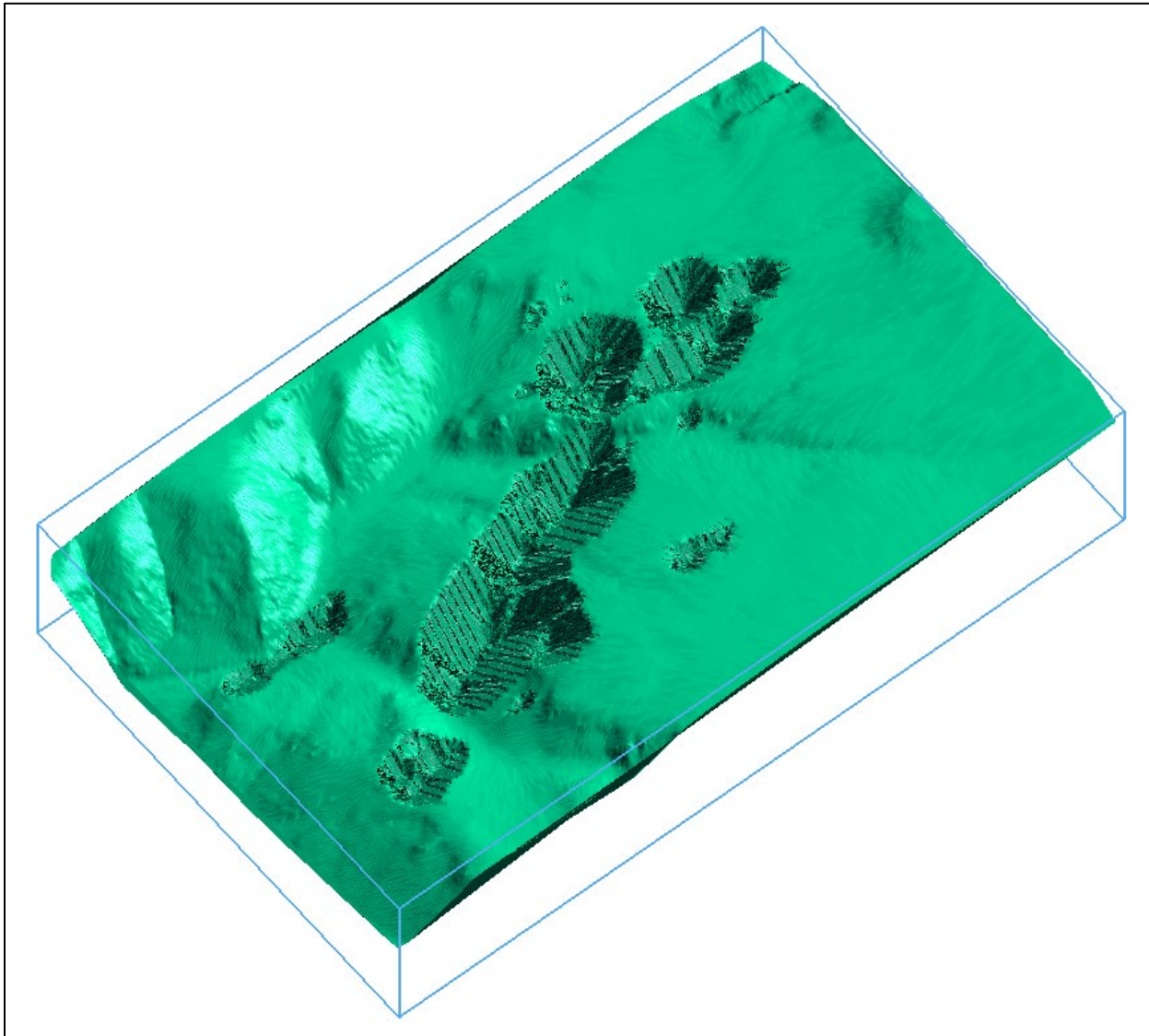
Parameters*	Open Pit
Gold Price	\$1,700/oz
Mining Cost	\$1.50/t
Processing Costs	\$3.75/t
G&A Cost	\$0.75/t
Recoveries	Between 52% to 69%
Pit Slopes	45°

Notes:

\*All dollar amounts in US\$.

Source: Ginto (2022)

Figure 14-35: Mineral Resource Open Pit Shell – Perspective View Looking Northeast – Olive Deposit



Source: Ginto (2022)

#### 14.2.10.4 Mineral Resource Statement

The mineral resource estimate of the Olive deposit is presented in Table 14-41 at a 0.4 g/t Au cut-off grade with an effective date of December 31, 2022. Gold and silver grade estimates of the Olive deposit were reported in the mineral resource statement.

It should be noted that mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be

converted into mineral reserves. The estimate of mineral resources may be materially affected by future changes in environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. However, there are no currently known issues that negatively impact the stated mineral resources.

The CIM definitions were followed for the classification of measured, indicated, and inferred mineral resources. The inferred mineral resources have a lower level of confidence and must not be converted to mineral reserves. It is reasonably expected that the majority of inferred mineral resources could be upgraded to indicated mineral resources with continued exploration.

Mineral resources are reported in accordance with Canadian Securities Administrators National Instrument 43-101; and have been estimated in conformity with the “CIM Estimation and Mineral Resources and Reserves Best Practices Guidelines” (CIM, 2019) and the “CIM Definition Standards for Mineral Resources and Mineral Reserves” (CIM, 2014).

Table 14-41: Pit Constrained Mineral Resources At A 0.4 G/T Au Cut-Off — Effective December 31, 2022 – Olive Deposit

Zone	Tonnage tonnes	Avg Au Grade g/t	Au Content oz	Avg Ag Grade g/t	Ag Content oz	Tonnage tonnes	Avg Au Grade g/t	Au Content oz	Avg Ag Grade g/t	Ag Content oz
<b>Measured</b>						<b>Indicated</b>				
Olive Zone	3,481,357	1.010	113,047	2.13	238,407	6,431,158	0.956	197,669	1.77	365,977
Shamrock Zone	-	-	-	-	-	1,718,941	0.923	51,010	5.40	298,432
Olive + Shamrock	3,481,357	1.010	113,047	2.13	238,407	8,150,099	0.949	248,679	2.536	664,409
<b>Measured + Indicated</b>						<b>Inferred</b>				
Olive Zone	9,912,515	0.975	310,727	1.89	602,333	5,073,258	1.148	187,249	1.73	282,179
Shamrock Zone	1,718,941	0.923	51,010	5.40	298,432	434,409	1.379	19,260	7.67	107,124
Olive + Shamrock	11,631,456	0.967	361,737	2.409	900,765	5,507,667	1.166	206,509	2.199	389,302

Notes:

1. The effective date for the Mineral Resource is December 31, 2022;
2. Mineral Resources are inclusive of Mineral Reserves;
3. 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, taxation, sociopolitical, marketing, or other relevant issues;
4. The CIM definitions were followed for classification of Mineral Resources. The quantity and grade of reported inferred Mineral Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred Mineral Resources as an indicated Mineral Resource and it is uncertain if further exploration will result in upgrading them to an indicated or measured Mineral Resource category; and
5. Mineral Resources are reported at a cut-off grade of 0.4 g/t Au, using a gold price of US\$1,700/ounces and a US\$/CAN\$ exchange rate of 0.75.

Source: Ginto (2022)

The mineral resources at various gold grade cut-offs are presented in Table 14-42, Table 14-43, Table 14-44 and Table 14-45 for Measured, Indicated, Measured + Indicated, and Inferred resources, respectively.

Table 14-42: Pit Constrained Measured Mineral Resources at Various Au Cut-Off Grades - Effective December 31, 2022 – Olive Deposit

Au Cut-Off g/t	Tonnage tonnes	Avg Au Grade g/t	Au Content oz	Avg Ag Grade g/t	Ag Content oz
0.10	6,337,529	0.661	134,683	1.730	352,498
0.20	5,207,861	0.771	129,094	1.850	309,758
0.30	4,203,890	0.897	121,237	2.000	270,316
<b>0.40</b>	<b>3,481,357</b>	<b>1.010</b>	<b>113,047</b>	<b>2.130</b>	<b>238,407</b>
0.50	2,863,086	1.131	104,109	2.260	208,034
0.60	2,359,264	1.256	95,270	2.350	178,252
0.70	1,947,825	1.384	86,672	2.440	152,803
0.80	1,613,489	1.516	78,642	2.550	132,281
0.90	1,362,069	1.640	71,818	2.660	116,485
1.00	1,139,166	1.775	65,009	2.780	101,818

Source: Ginto (2022)

Table 14-43: Pit Constrained Indicated Mineral Resources at Various Au Cut-Off Grades - Effective December 31, 2022 – Olive Deposit

Au Cut-Off g/t	Tonnage tonnes	Avg Au Grade g/t	Au Content oz	Avg Ag Grade g/t	Ag Content oz
0.10	16,506,035	0.585	310,219	2.021	1,072,490
0.20	12,994,209	0.703	293,519	2.169	906,232
0.30	10,148,440	0.830	270,966	2.373	774,293
<b>0.40</b>	<b>8,150,099</b>	<b>0.949</b>	<b>248,679</b>	<b>2.536</b>	<b>664,409</b>
0.50	6,505,145	1.075	224,883	2.726	570,133
0.60	5,196,839	1.207	201,734	2.842	474,818
0.70	4,251,512	1.332	182,085	2.939	401,679
0.80	3,511,357	1.455	164,302	3.032	342,268
0.90	2,916,163	1.579	148,056	3.107	291,337
1.00	2,506,923	1.681	135,523	3.170	255,492

Source: Ginto (2022)

Table 14-44: Pit Constrained Measured + Indicated Mineral Resources At Various Au Cut-Off Grades - Effective December 31, 2022 – Olive Deposit

Au Cut-Off g/t	Tonnage tonnes	Avg Au Grade g/t	Au Content oz	Avg Ag Grade g/t	Ag Content oz
0.10	22,843,564	0.606	445,176	1.939	1,424,422
0.20	18,202,071	0.722	422,780	2.081	1,217,664
0.30	14,352,330	0.849	391,957	2.264	1,044,669
<b>0.40</b>	<b>11,631,456</b>	<b>0.967</b>	<b>361,737</b>	<b>2.409</b>	<b>900,765</b>
0.50	9,368,231	1.093	329,129	2.583	778,105
0.60	7,556,103	1.223	297,105	2.694	654,439
0.70	6,199,336	1.349	268,856	2.786	555,313
0.80	5,124,845	1.474	242,926	2.884	475,137
0.90	4,278,232	1.599	219,909	2.963	407,613
1.00	3,646,089	1.711	200,583	3.051	357,702

Source: Ginto (2022)

Table 14-45: Pit Constrained Inferred Mineral Resources at Various Au Cut-Off Grades - Effective December 31, 2022 – Olive Deposit

Au Cut-Off g/t	Tonnage tonnes	Avg Au Grade g/t	Au Content oz	Avg Ag Grade g/t	Ag Content oz
0.10	9,853,978	0.751	237,772	1.721	545,261
0.20	7,870,581	0.903	228,508	1.930	488,444
0.30	6,538,976	1.038	218,155	2.027	426,041
<b>0.40</b>	<b>5,507,667</b>	<b>1.166</b>	<b>206,509</b>	<b>2.199</b>	<b>389,302</b>
0.50	4,489,968	1.327	191,616	2.431	351,000
0.60	3,885,929	1.448	180,930	2.606	325,522
0.70	3,326,984	1.583	169,337	2.803	299,869
0.80	2,653,535	1.796	153,210	3.118	266,029
0.90	2,395,817	1.898	146,168	3.221	248,076
1.00	2,126,487	2.018	137,950	3.434	234,759

Source: Ginto (2022)

### 14.2.11 Comparison with the 2016 Feasibility Mineral Resource Estimate

The updated mineral resources are compared to those of the 2016 Feasibility mineral resources in Table 14-46. Both mineral resources compared in this table are pit-constrained.



Table 14-46: Comparison of the Updated Mineral Resources with the 2016 Feasibility Mineral Resources - Pit Constrained – 0.4 G/T Au Cut-Off – Olive Deposit

MRE	Tonnage tonnes	Avg Au Grade g/t	Au Content Oz	Avg Ag Grade g/t	Ag Content oz	Tonnage tonnes	Avg Au Grade g/t	Au Content oz	Avg Ag Grade g/t	Ag Content oz
<b>Measured</b>						<b>Indicated</b>				
2016 Feasibility	1,970,000	1.190	75,000	2.310	146,000	7,550,000	1.050	254,000	2.050	498,000
2022 Update	3,481,357	1.010	113,047	2.130	238,407	8,150,099	0.949	248,679	2.536	664,409
Difference	1,511,357 +76.7%	0.783 -15.1%	38,047 +50.7%	1.902 -7.8%	92,407 +63.3%	600,099 +7.9%	0.276 -9.6%	-5,321 -2.1%	8.625 23.7%	166,409 33.4%
<b>Measured + Indicated</b>						<b>Inferred</b>				
2016 Feasibility	9,510,000	1.070	329,000	2.110	645,000	7,330,000	0.890	210,000	1.700	402,000
2022 Update	11,631,456	0.967	361,737	2.409	900,765	5,507,667	1.166	206,509	2.199	389,302
Difference	2,121,456 +22.3%	0.480 -9.6%	32,737 +10.0%	3.750 +14.2%	255,765 +39.7%	-1,822,333 -24.9%	0.060 +31.0%	-3,491 -1.7%	0.217 29.3%	12,698 -3.2%

Source: Ginto (2022)

From this table the mineral resources were increased by 10.0% for the measured and indicated gold content and by 39.7% for the silver content. Conversely, the inferred mineral resources were reduced by 1.7% for the gold content and by 3.2% for the silver content. The differences observed between the 2016 Feasibility and 2022 updated mineral resources of the Olive deposit are mainly attributable to the additional holes drilled in 2017 and 2018, a new interpretation of the mineralized zones, a different grade estimation strategy and a different classification scheme.

#### 14.2.12 Olive Mineral Resource Discussion

This mineral resource of the Olive deposit is a new estimate compared to the previous November 2019 Feasibility Study update, which in turn was the same as the Olive MRE from the 2016 Feasibility Study. It was derived from first principals and includes 92 additional holes and 19 trenches since the November 2019 MRE. All steps leading to the mineral resource estimate were revisited in this study. Silver estimates were also reported for the Olive deposit as they are of higher grade than the Eagle Main zone.

The distribution of gold grades at Olive is observed to be more heterogeneous than at Eagle, with higher coefficients of variation.

The interpretation of the mineralized sub-zones of the Olive and Shamrock Zones was carried out on 5 m composites due to the discontinuous nature of the gold mineralization above 0.1 g/t Au at the sampling scale of 1.5 m. At the larger scale, gold mineralized zones were observed to be more continuous thus allowing to be modeled into more consistent solids.

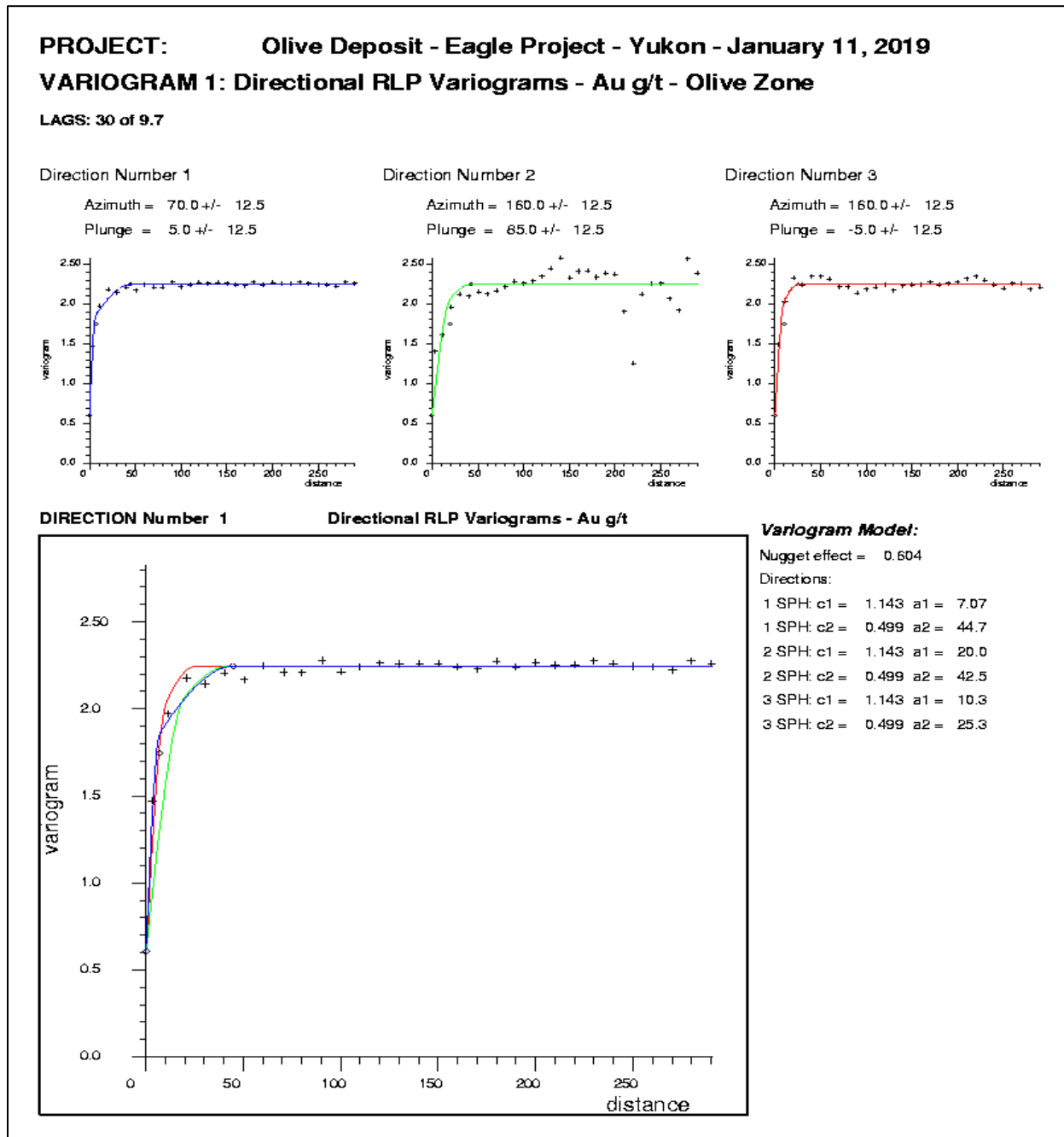
The major direction of continuity of the gold mineralization at Olive was found to be oriented at an azimuth of 70° with ranges varying from 45 m to 55 m. The second-best direction of gold grade continuity was observed to be vertical with ranges varying from 35 m to 43 m.

Smaller block sizes than the November 2019 MRE were used to discretize the estimated gold and silver grades into a block model. Block dimensions of 5 m x 5 m x 5 m were selected to better define the more complex geometries of the Olive and Shamrock mineralized zones.

The validation of the gold and silver grade estimates has shown results within guideline ranges and thus proving to be satisfactory. The slightly lower correlation coefficients for the local bias test combined with slightly higher levels of smoothing of the grade estimates seem to reflect the more discontinuous nature of the gold and silver mineralization. Overall, it is believed that the mineral resource estimates are a fair representation of the Olive deposit, considering the current geological understanding of the deposit and the available data.

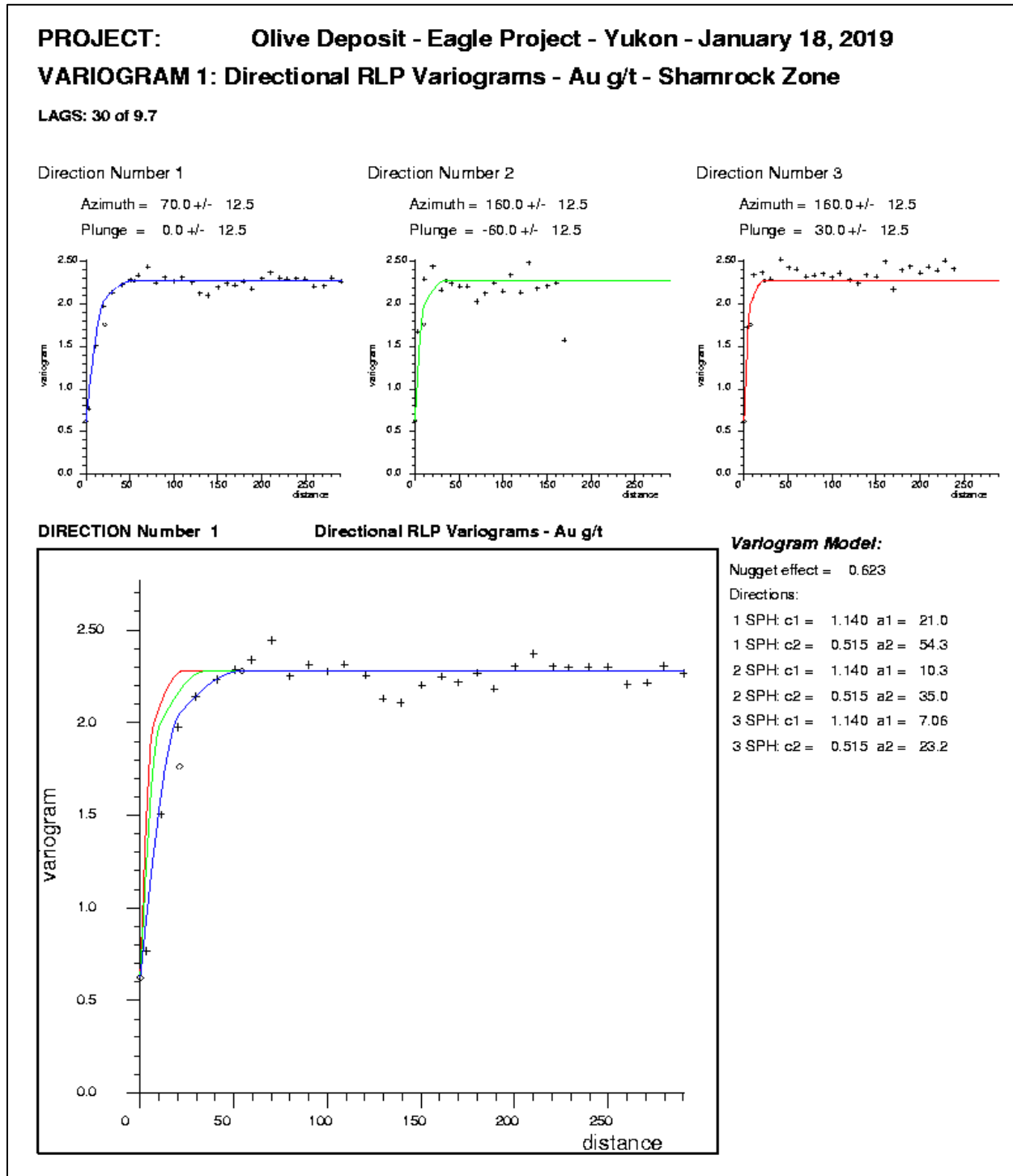
14.2.13 Variograms of the Olive Deposit

Figure 14-36: Variogram of Gold Grades of the Olive Zone – Olive Deposit: Variogram of Gold Grades of the Olive Zone – Olive Deposit



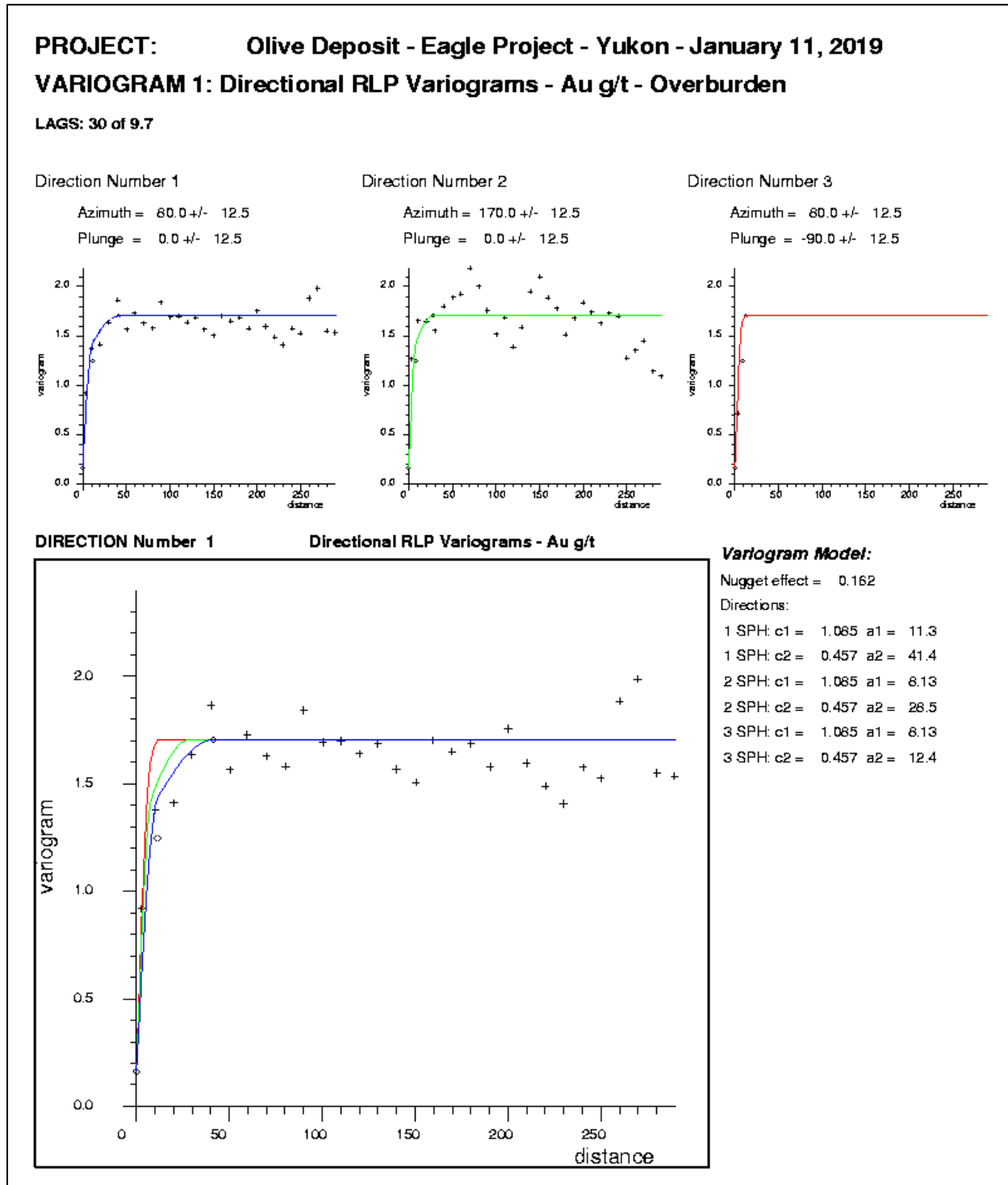
Source: Ginto (2019)

Figure 14-37: Variogram of Gold Grades of the Shamrock Zone – Olive Deposit



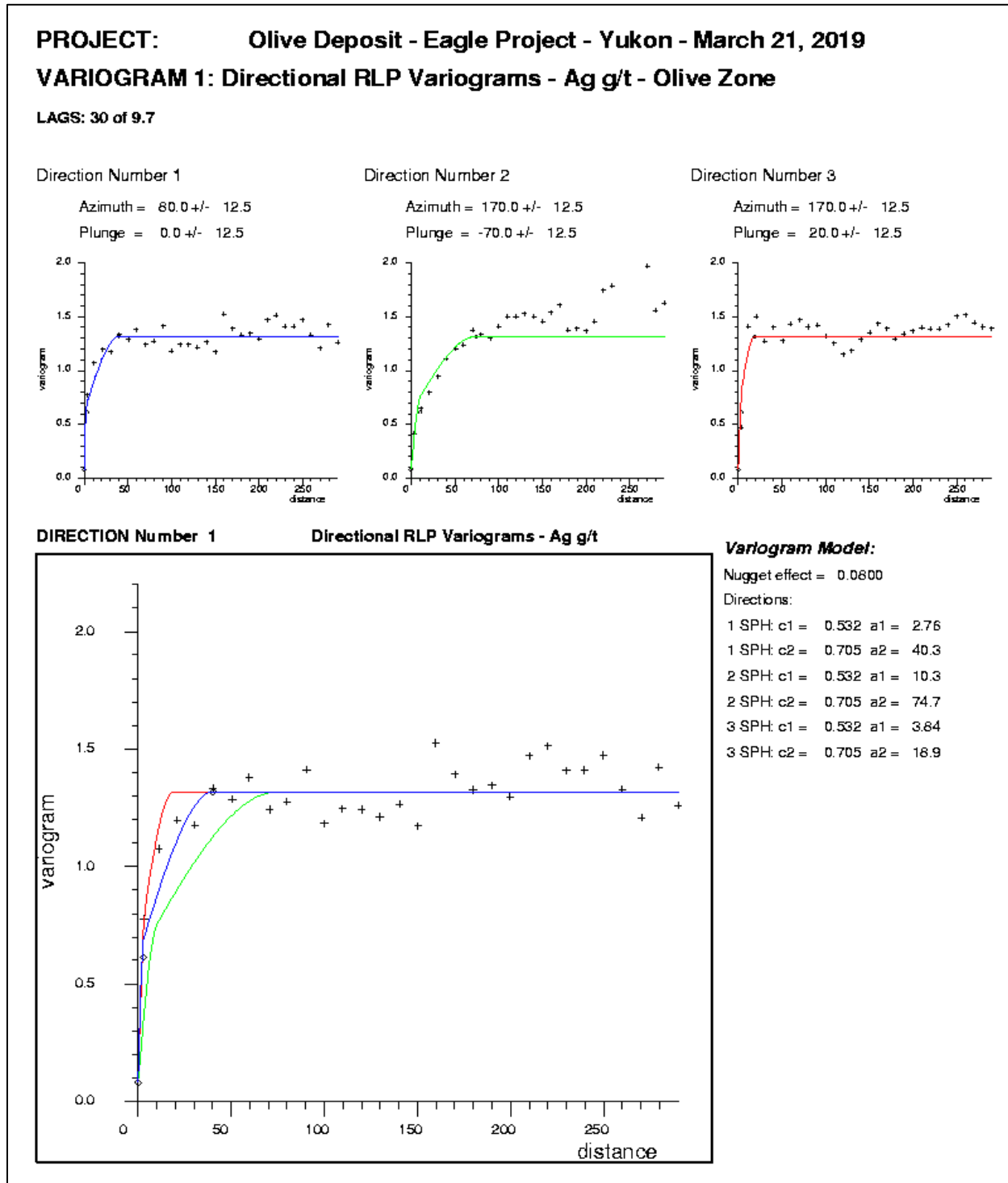
Source: Ginto (2019)

Figure 14-38: Variogram of Gold Grades of the Overburden – Olive Deposit



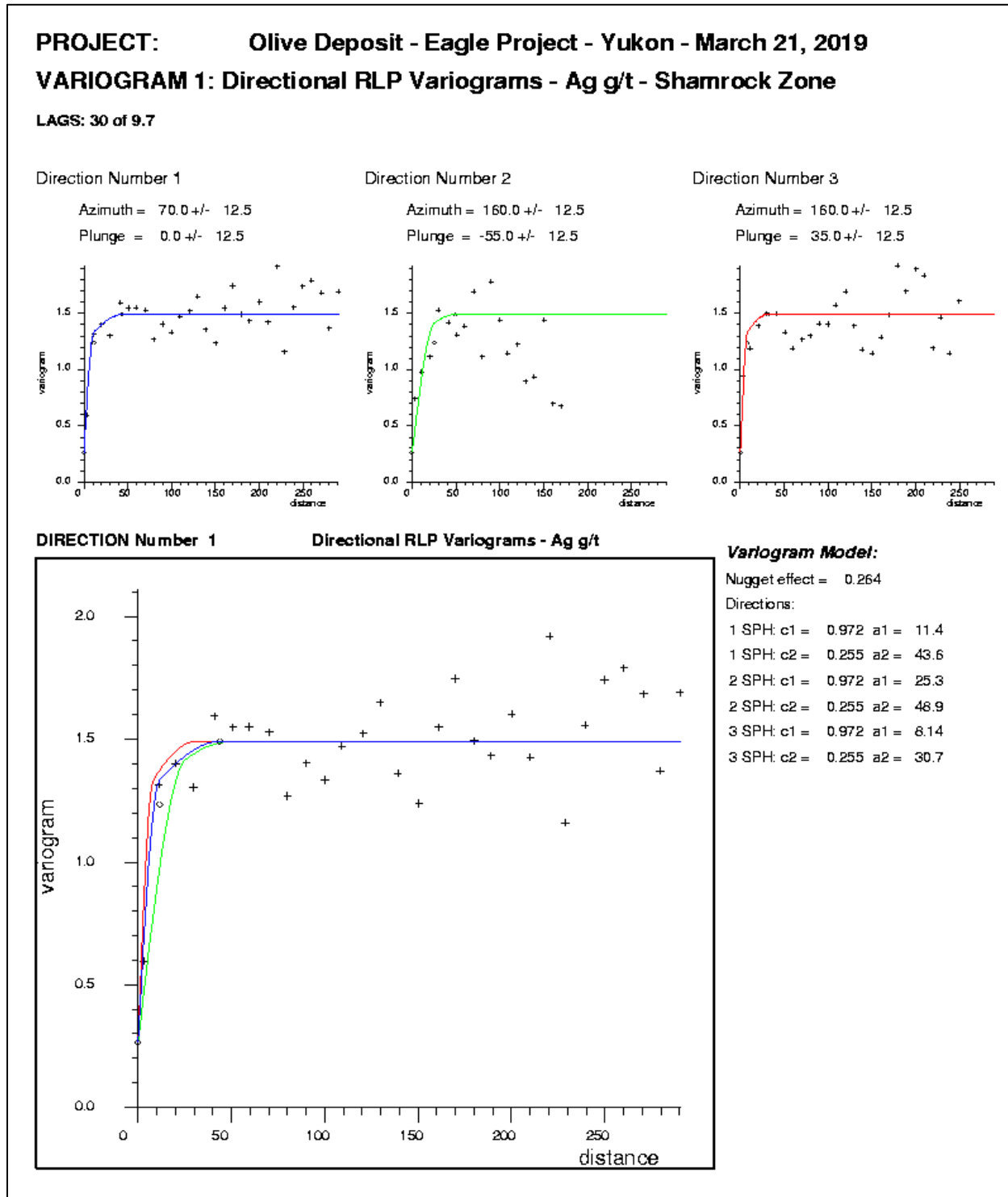
Source: Ginto (2019)

Figure 14-39: Variogram of Silver Grades of the Olive Zone – Olive Deposit



Source: Ginto (2019)

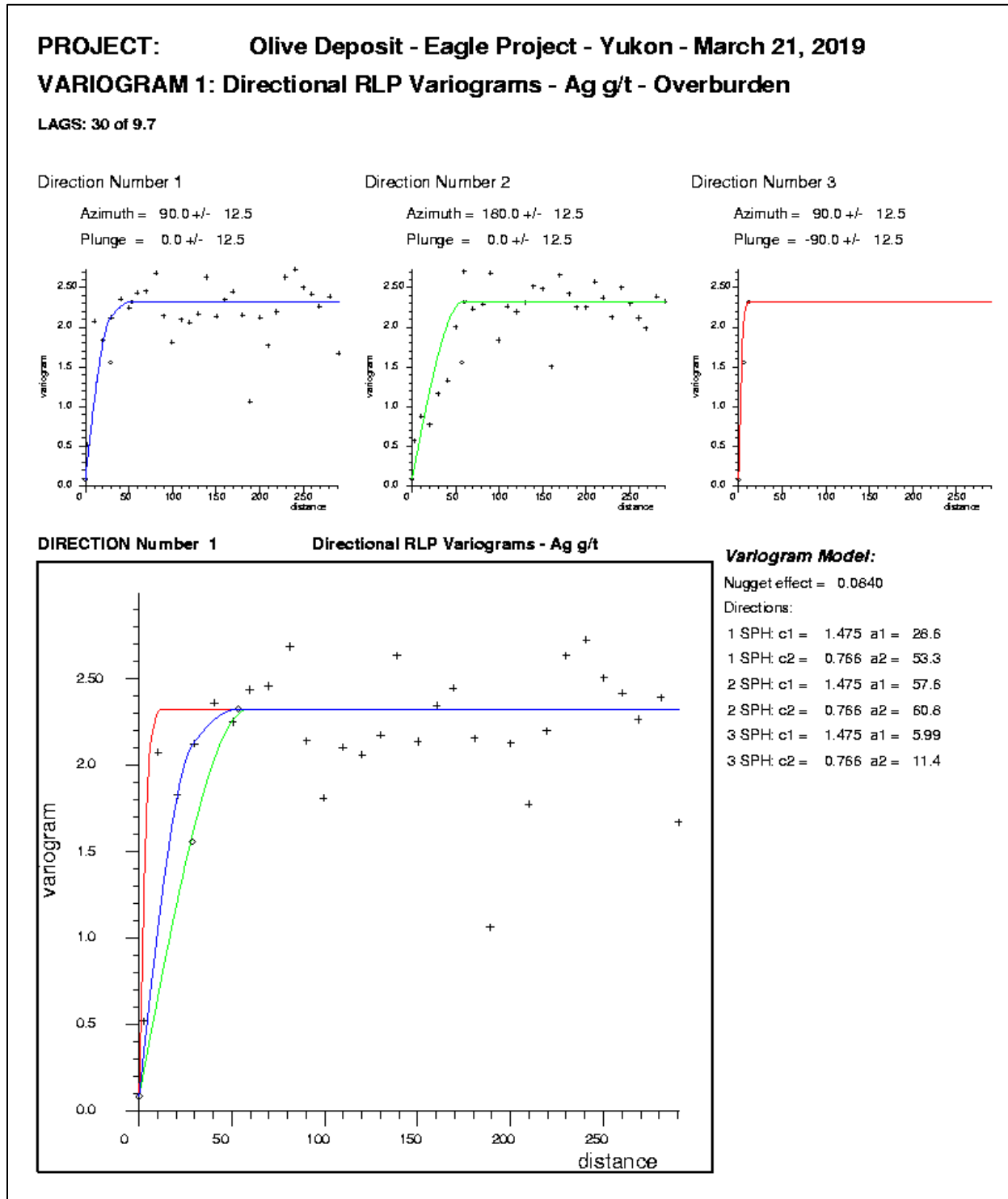
Figure 14-40: Variogram of Silver Grades of the Shamrock Zone – Olive Deposit



Source: Ginto (2019)



Figure 14-41: Variogram of Silver Grades of the Overburden – Olive Deposit



Source: Ginto (2019)

## 15 MINERAL RESERVE ESTIMATE

### 15.1 Introduction

Mineral reserves have been converted from Measured and Indicated Mineral Resources and are reported on a diluted tonnage basis. All Inferred Mineral Resource material has been set to waste. Mineral reserves are reported according to the 2014 CIM standards.

### 15.2 Mineral Reserve Statement

The estimated Proven and Probable Mineral Reserves total 124.3 Mt at 0.65 g/t Au, containing 2,584 k (Table 15-1). The effective date for the Mineral Reserves is 31 December 2022. The Qualified Person for the estimate is Mr. Nico Harvey, P.Eng., Senior Engineer with Victoria Gold.

Table 15-1: Open Pit Mineral Reserves by Deposit

Area	Classification	Ore (M t)	Diluted Grade (g/t)	Contained Gold (k oz)
Eagle	Proven	21.1	0.68	464
	Probable	96.6	0.63	1,943
	<b>Total</b>	<b>117.7</b>	<b>0.64</b>	<b>2,407</b>
Olive	Proven	2.6	0.87	72
	Probable	4.0	0.82	104
	<b>Total</b>	<b>6.5</b>	<b>0.84</b>	<b>176</b>
<b>Eagle + Olive</b>	<b>Total</b>	<b>124.3</b>	<b>0.65</b>	<b>2,584</b>

Notes:

1. A gold price of US\$1,550/oz is assumed;
2. Mineral Reserves have an effective date of December 31, 2022 and are classified based on 2014 CIM definitions;
3. Eagle Reserves are reported at a cut-off grade of 0.20 g/t, and recoveries ranging from 73% to 86%;
4. Olive Reserves are reported at a cut-off grade of 0.24 to 0.31 g/t, and recoveries ranging from 52% to 76%;
5. A US\$:C\$ exchange rate of 0.75;
6. Dilution has been applied at 5.0% for Eagle reserves and 9.0% for Olive reserves; and
7. Gold ounces are reported as contained and do not include allowances for processing losses.

Source: VGC (2023)

### 15.3 Factors that May Affect the Mineral Reserves

While the current assumptions as of the effective date are appropriate for the Mineral Reserves, several factors may affect the Mineral Reserves statement. These areas of uncertainty that may materially impact the statement include, but are not limited to the following:

- Long term metal price assumptions;
- Foreign exchange rates;
- Capital and operating costs estimates;
- Geotechnical slope designs for final pit walls;
- Ability to permit the secondary heap leach facility;
- Unforeseen dilution and or lower than expected recoveries; and
- Environmental, social license and permitting timeline assumptions.

### 15.4 Block Model

10x10x10 m block models for both Olive and Eagle were provided by Marc Jutras as a part of the 2022 Resource Update. These block models were reviewed and simplified for Reserve Estimation. The simplified models contained information relating to: gold grade, resource category (Measured, Indicated, or Inferred), Density, Lithology, and block volumes (above/below topography). Any blocks with the material type overburden or that were classified as inferred were set to have zero grade.

### 15.5 Open Pit Optimization

Pit shells were generated utilizing Deswik's Pseudoflow algorithm. The Pseudoflow algorithm produces a series of nested pit shells based on provided input costs, starting topography, and varying revenue factors. Costs and revenues are modelled into each block to define economic and non-economic blocks for processing. The optimization parameters are outlined in Table 15-2. The optimization result produces indicative NPVs for each successive pit shell based on a defined annual processing rate. These NPV's are only indicative and use for relative comparison between each shell.

Additional analyses and sensitivities were performed to aid in selection of the final pit shell including:

- Practical mining widths between existing and future phases;
- Incremental strip ratios;

- Preliminary mine designs and schedules;
- Incremental costs of additional ounces; and
- Modelling heap leach gold production.

Table 15-2: Pit Optimization Parameters

Parameter	Value	Unit
Process Throughput	11.5	Mt/year
Exchange Rate	0.75	CAD:USD
Refining Cost	\$10	USD/oz
Refining Cost	\$13.42	CAD\$/oz
Mining Cost	\$3.38	\$/t mined
Mining Sustaining Capex	\$0.34	\$/t mined
Processing Cost	\$8.70	\$/t stacked
Processing Sustaining Capex	\$1.34	\$/t stacked
G&A Cost	\$2.10	\$/t stacked
Site Services	\$1.68	\$/t stacked
Long Term Royalty	4%	% of Oz
Gold Price	\$1,600	USD/oz
Gold Price	\$2,148	CAD\$/oz
<b>Overall Pit Slopes</b>		
Eagle	38-49	Degrees
Olive	49	Degrees

Source: VGC (2023)

## 15.6 Operating Cost Estimates

Operating costs are based on historical costs since project inception, the 2023 Budget Mine Plan, and the 2023 Life of Mine plan. For historical costs, more weighting is applied to recent costs to account for current input costs and inflation. Projected life of mine costs is a combination of historical and first principal estimates. Final costs were benchmarked against similar size operations for validity.

## 15.7 Recoveries

Heap leaching recoveries utilized in the pit optimization are based upon the original feasibility estimates stated in Section 13 of this report and outlined in Table 15-3.

Pit optimizations NPV do not account for the time delay involved with heap leaching and gold production. As such, running preliminary schedules and modelling out gold production was required to produce realistic scenarios. This was used in determining ultimate pit shell selection.

Table 15-3: Heap Leach Ultimate Recoveries

Recoveries - Eagle	
Oxidized Granodiorites	85.8%
Altered Granodiorites	74.9%
Unaltered Granodiorites	73.1%
Oxidized Metasediments	77.2%
Unaltered Metasediments	77.2%
Recoveries – Olive	
Oxide	75.6%
Mixed	55%
Sulfide	52%

Source: VGC (2023)

## 15.8 Dilution

Dilution estimates for the Eagle deposit are based on current operational results that indicate a factor of 5.0% is appropriate against the Eagle resource model.

For the Olive deposit external mining dilution was based on calculating the number of waste blocks adjacent to an ore block in the mineral inventory block model (utilizing Hexagon Mining MineSight™ “four side contact routine”). Only blocks which were contained within a given zone (in this case a resource classification of Indicated) and above a given gold cut-off grade were considered as ore blocks.

The number of waste block face contacts, with ore block faces for each block, was calculated on each horizontal plane in the model. The number of waste faces (or edges) may vary from zero (i.e., block is surrounded by ore blocks) to four (i.e., block is totally surrounded by waste blocks). Dilution was estimated using the number of waste edges for each block, an assumed grade of zero for all waste and a width of dilution of 0.3 to 0.5 m for each edge.

The results of the analysis are summarized, by deposit, in Table 15-4. The analysis resulted in external dilutions of 9% being applied to the Olive deposit.

Table 15-4: Olive External Mining Dilution Estimate

# of waste edges	Olive			
	# of blocks	Distribution (%)	Dilution Applied (%)	Contribution to Total External Dilution (%)
0	2,320	24	0	0.0
1	2,561	26	6	1.6
2	2,818	29	12	3.5
3	1,559	16	18	2.9
4	485	5	24	1.2
<b>Total</b>	<b>9,743</b>	<b>100</b>		<b>9%</b>

Source: VGC (2023)

## 15.9 Cut-Off Grades

The overall cut-off grade applied for Mineral Reserves is 0.2 g/t Au for material from the Eagle Pit and 0.24 – 0.31 g/t for the Olive Pit (depending on material type). The cut-off grades were determined based on production capacity, operating cost estimates, existing gold in inventory, and maximizing mine life and NPV. Cut-off grade strategies used in the production schedule are shown in Table 15-5.

Table 15-5: Cut-off Grades

Rock Type	Direct Crushed Feed - COG (g/t)	LG Stockpile - COG (g/t)
Eagle - Oxide Granodiorite	0.28	0.20
Eagle - Altered Granodiorite	0.32	0.20
Eagle - Unaltered Granodiorite	0.33	0.20
Eagle - Oxide Metasediments	0.31	0.20
Eagle - Unaltered Metasediments	0.31	0.20
Olive - Oxide	0.36	0.24
Olive - Mixed	0.43	0.29
Olive - Sulphide	0.45	0.31

Notes:

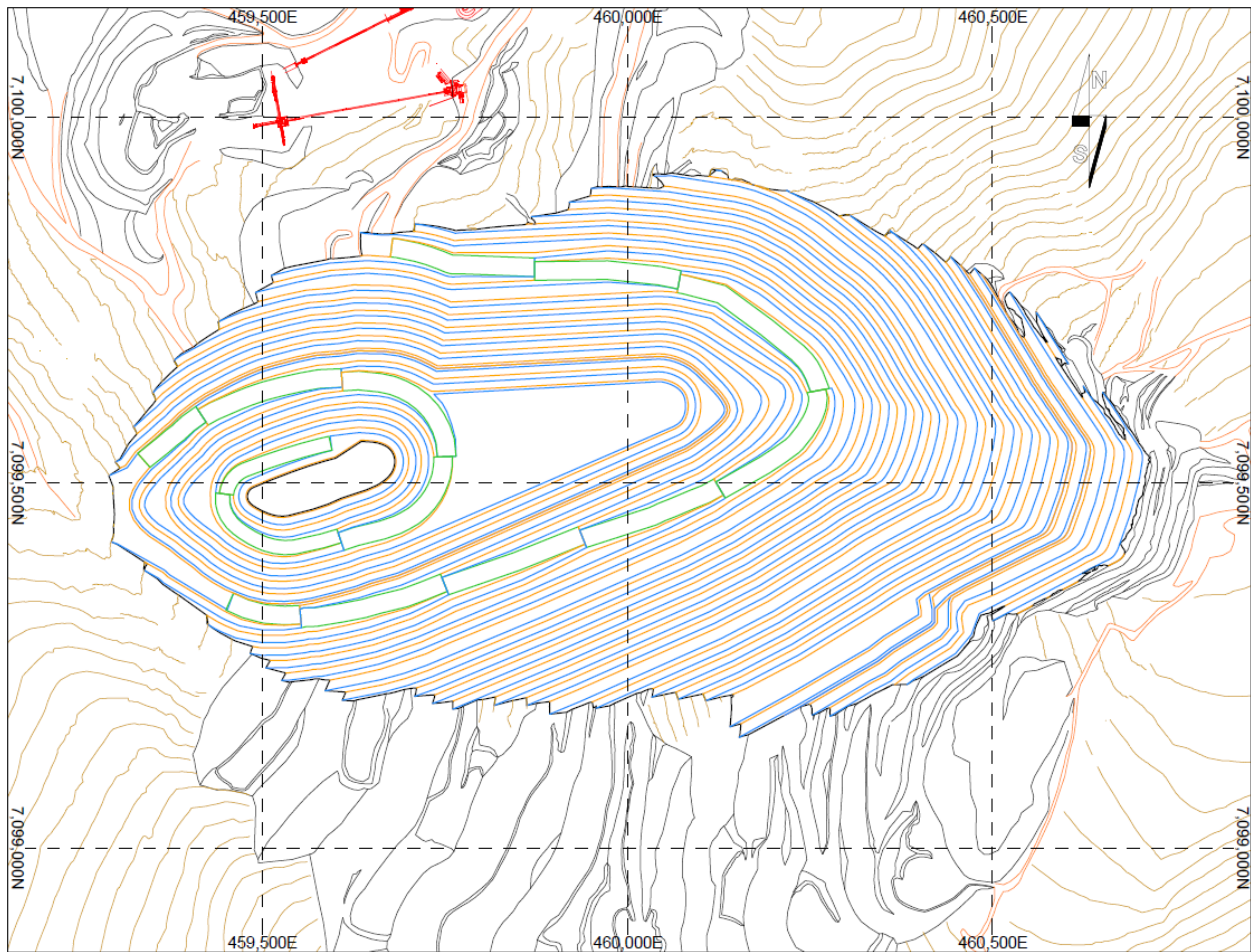
1. Direct Crushed Feed - COG: Bottom Break-even cut-off grade for material that are fed direct from the pit to the crushers and to the Pad; and
2. LG Stockpile - COG: Bottom incremental cut-off grade for material that are placed directly from the pit to the LG stockpile that covers processing, re-handling, and extra incremental haulage costs only.

Source: VGC (2023)

## 15.10 Ultimate Pit Design

For Mineral Reserves, a final ultimate pit was designed utilizing the selected optimization pit shell as guideline. The final pit designs utilize practical mining geometry that is required in an operating mine including minimum haulage widths, geotechnical bench face angles and berms, proper access, and mining widths. Details on the design parameters are included in Section 16.

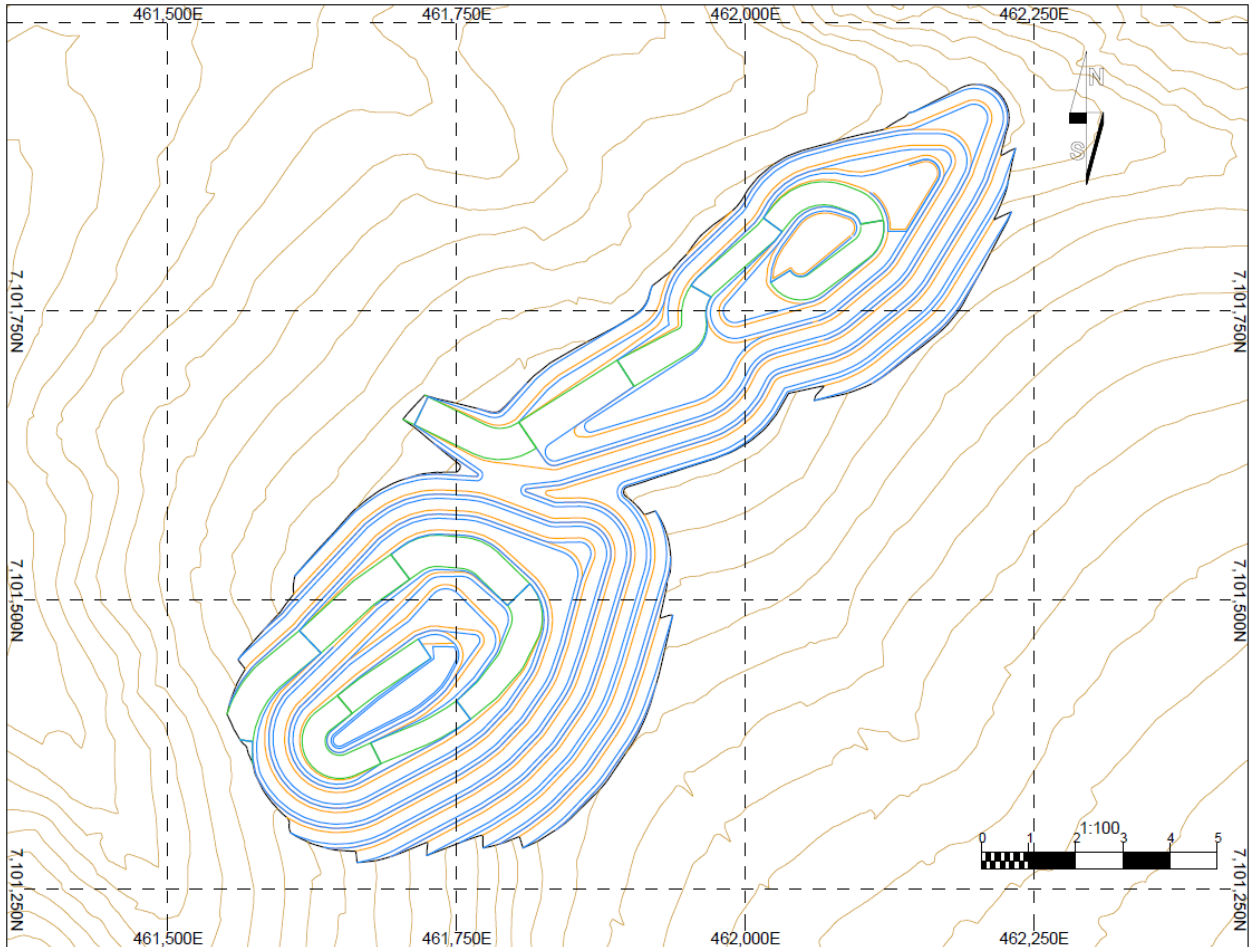
Figure 15-1: Eagle Ultimate Reserve Pit



Source: VGC (2023)



Figure 15-2: Olive Ultimate Reserve Pit

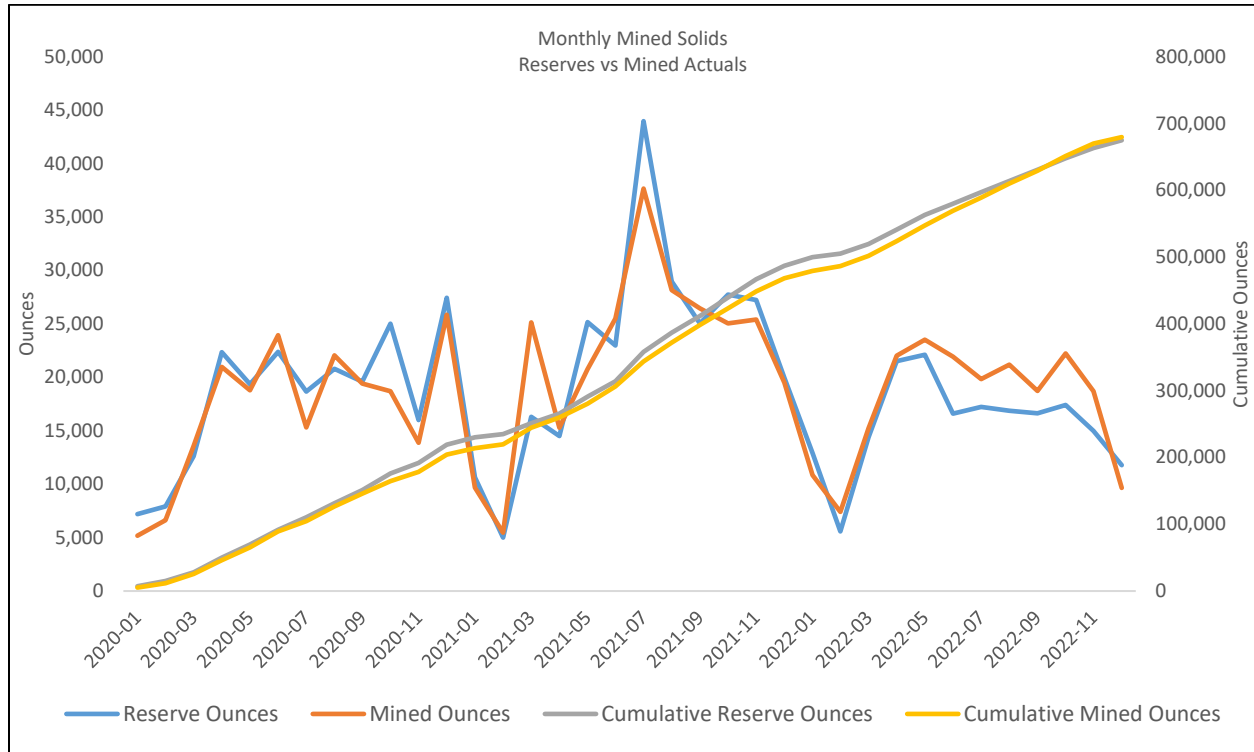


Source: VGC (2023)

## 15.11 Mineral Reserve Validation

The updated Mineral Reserve model was validated by comparison against previously mined out areas. Month end reconciliation solids were utilized to run Reserves at operational cut-off grades and compared against surveyed monthly mined tonnages and assayed grade control results from 2020 to 2022. The total gold ounce difference between the 2022 reserve model and reconciled actuals was approximately 1% increase in mined ounces compared to Reserves, with the actuals having higher tonnages (+5%) and lower grade (-4%). Results are depicted in Figure 15-3.

Figure 15-3: Reserve Validation Against Mined Actuals



## 15.12 Comments on Mineral Reserves

The Mineral Reserves have been prepared as per the 2014 CIM Definition Standards.

In the opinion of the QP, there are no other known factors (environmental, legal, title, taxation, socioeconomic, marketing, political or other) that could materially affect the Mineral Reserves estimate that are not discussed in this Report.

## 16 MINING METHODS

### 16.1 Introduction

The Eagle Gold Mine comprises the Eagle and Olive deposits which are planned to be extracted by traditional open pit shovel and truck mining methods. The mining equipment fleet is owner-operated with its own labour force. Mining activities began in Q2 2019 and have mined a total (ore and waste) of 66.9 M t up to 31 December 2022. Mining to date has all been in the Eagle pit. The first, initial phase of the Eagle pit was completed in early Q1 2022. Current mining activities are ongoing in Phase 2 and 3 of Eagle pit.

### 16.2 Description of Mining Method

The LOM scenario involves an average mining rate of 24.7 Mt/annum, with a targeted processing throughput of up to 11.5 Mt/annum. The mining strategy will include stockpiling of up to 17 Mt of low-grade ore (incremental cut-off grade) to be reclaimed and processed in the final years of operation. Mining of the Olive pit will begin in the final years of the Eagle pit as the benches become too small to sustain targeted throughputs.

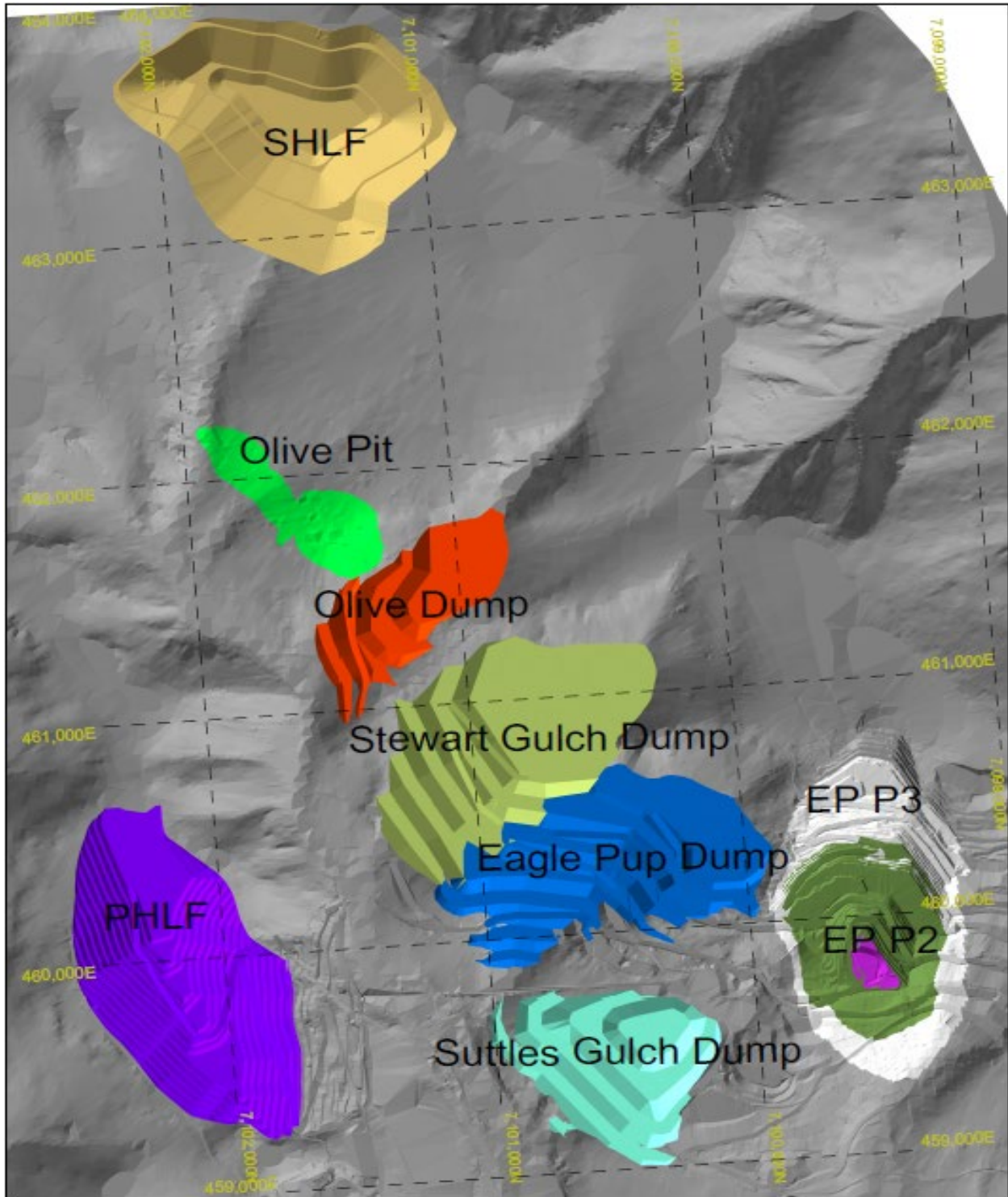
Ore and waste rock are mined in 10 m benches with final walls being double benched. Conventional drill and blast techniques are utilized, including wall control blasting.

The current LOM plan forecasts a total of 245 Mt to be mined over a period of 10 years. Processing of ore to the heap leach facilities is forecasted to total 124 Mt over a period of just over 11 years, with the final year and half primarily being from the rehandling of low-grade stockpiles. Residual gold production is expected to continue for an additional year, bringing the mine life to 12 years.

Total ore mined, including that of stockpile material results in an average LOM strip ratio of 0.99.

Figure 16-1 presents a layout of mining operations, identifying locations of pits and associated phases, waste rock storage facilities, and heap leach facilities.

Figure 16-1: Layout of Mining Areas



Source: VGC (2023)

## 16.3 Geotechnical Considerations

### 16.3.1 Eagle Pit

Pit slope geotechnical design criteria were most recently updated by SRK (2016) as part of the 2016 Feasibility Study. The SRK pit slope design update was based on geotechnical characterization and testing work completed by BGC Engineering Inc. (BGC, 2012) as part of the original, 2012 Feasibility Study. The BGC investigations included geotechnical mapping, geotechnical core logging and oriented core measurements for 12 drill holes as well as hydrogeologic testing, piezometer installation and laboratory strength testing of rock core samples. In addition, basic geotechnical logging parameters such as rock quality designation (RQD) and core recovery were collected by Victoria Gold for most resource drill holes.

A structural geology review and 3D structural model was subsequently developed by SRK (2017) to better understand the potential impacts of the structures on the geotechnical design parameters.

#### 16.3.1.1 Rock Mass Characterization

The Eagle deposit is structurally complex. The deposit contains a high number of structural intersections, often with intense fracturing, alteration, and weathering/oxidation. Consequently, rock mass quality within pit walls can be highly variable.

The deposit is contained within two primary rock types which include a granodiorite stock surrounded by metasediment country rock. The rock quality domains exposed in the pit to date are reasonably similar to those anticipated from the previous Feasibility Study investigations but require continual updating and refinement to address local variations as mining progresses.

The metasediments generally classify as 'Fair' to 'Good' rock mass quality according to the Bieniawski (1976) rock mass rating (RMR) system except where heavily altered or fractured due to the intrusion. To date this has been limited to two primary areas: an approximately 30 to 50 m wide zone around the granodiorite contact and along three or more subvertical, east-northeast trending structures that extend into the east wall from the granodiorite stock. Rock quality in these zones can be 'Poor'.

Granodiorite has only been exposed in the internal, Phase 1 and Phase 2 pits to date where the rock quality is typically 'Poor' to 'Fair' due to intense fracturing and oxidation associated with the core of the mineralization. Internal pit phases have been designed using more conservative angles with single bench heights to account for the lower rock quality compared to double benches in the final, Phase 3 design.

The dominant structural trends observed in pit walls are reasonably consistent with conclusions made from the BGC (2012) oriented core programs but are typically 20° to 30° steeper in dip angle. The steeper foliation dip has resulted in challenging operating conditions in some areas.

Geologic structure exposed to date is generally consistent across much of the pit with the dominant trends described as follows:

- Dominant north-northwest trending, subvertical jointing and faulting;
- Dominant east-northeast trending, subvertical jointing and faulting;
- Moderate to shallow, west to southwest dipping jointing and occasional faulting (along foliation planes in the metasediments); and
- Less frequent, moderate north-northwest and east-northeast dipping jointing.

#### 16.3.1.2 Performance of Existing Pit Walls

A prominent major structural zone (the 'Shear Zone') has been identified crossing through the central portion of the Eagle pit. The 'Shear Zone' trends north-northwest and can be characterized as an approximately 100 m wide zone of exceptionally altered and fractured rock. This material is located mostly within the internal, Phase 1 and 2 pits but a relatively small skin remained in the Phase 3 (final) south wall. It is currently unknown if or how far the Shear Zone may extend into the north wall final pit limits.

Several bench-scale sloughs occurred where the Shear Zone intersects the upper south wall due to the intersection of geologic structures and the weak/altered nature of the rock mass. Based on observations of heavy groundwater seepage in the area, elevated pore water pressures are also suspected to have influenced the movement.

An additional 8 geotechnical drill holes ranging from 53 m to 166 m in length were subsequently drilled in 2021 to better delineate the extents of the Shear Zone in this area. A small pushback was designed to re-establish adequate catch benches in this area and has since been completed. The modified slope was designed at an interramp angle of 42° beginning at elevation 1255 m (60 to 90 m in total height).

Similar bench-scale sloughing has also occurred during mining of the upper two to three benches of the north wall, within the weak, weathered and altered zone at the granodiorite contact. These conditions were exacerbated by an unexpected rotation of the foliation dip. Additional geotechnical drilling is planned for 2023 to further delineate the extent of weathering and alteration associated with this zone. Additional areas of the Phase 3 pit may require modification to more shallow, single bench designs within the upper, weathered and altered materials.

#### 16.3.1.3 Slope Depressurization

Pit slope angles used for the current designs assume slopes are depressurized to a minimum distance of 125 m behind the Phase 3 pit wall as described in SRK (2016) and BGC (2012). BGC (2012 and 2014) recommended the installation of 250 m long horizontal drains to depressurize the 125 m zone.



A total of 8 horizontal drains were installed during 2022 in the Phase 2 and 3 pit walls to begin depressurizing slopes and reducing risk of slope instabilities. The actual length of drains installed ranged between 167 m and 235 m due to poor ground conditions and partial collapsing of the drill holes.

All 8 drains produced water with discharge rates ranging from 10 to 400 l/min (average of 108 l/min) at the completion of drilling. Nearby piezometers showed a rapid response to the drains with decreasing water levels/pressures.

Installation of additional horizontal drains and piezometers are planned for 2023.

#### 16.3.1.4 Slope Stability Analysis

Detailed probabilistic bench design analyses were conducted by SRK (2016) using the software program SBlock (Esterhuizen, 2004). Design acceptability criteria included a maximum probability of failure of 30%, and a minimum catch bench width equal to approximately the 80<sup>th</sup> percentile cumulative catch bench width (i.e., 80% reliability). The analyses were based on the original BGC (2012) discontinuity characterization and strength testing information.

Limit equilibrium slope stability analyses were also conducted by SRK (2016) using Slide (Rocscience, 2015) to confirm stability of the interramp and overall slope angles that resulted from the maximum bench face angles determined from the bench design analyses. For sections where dominant geologic structure such as jointing or foliation were in potentially adverse orientations for pit wall stability, anisotropic strength models were used that assign a weaker shear strength in the direction of the joints or foliation. The interramp and overall slope stability analyses were based on a minimum acceptable safety factor of 1.3 for static loading conditions.

Bench design and interramp stability analyses are in the process of being updated by Victoria Gold and JDS to reflect the actual rock mass and geologic structural conditions measured from pit mapping.

#### 16.3.2 Olive Pit

Basic geotechnical core logging and laboratory strength testing was completed by Mining Plus (2015) for the proposed Olive pit. A total of 9 geotechnical drill holes were logged and oriented as part of the program. An additional 22 resource drill holes were oriented by Victoria Gold geologists during the 2016 resource drilling campaign.

Granodiorite at Olive is of 'Fair' to 'Good' rock mass quality and has significantly fewer major fault structures than the Eagle deposit. The few structures that have been interpreted at Olive are believed to be steeply dipping and not expected to have significantly adverse impacts on pit wall stability for the current pit design. The primary control on pit slope stability at Olive is anticipated to be structural.

Additional geotechnical drilling and characterization will likely be necessary prior to mining Olive pit; however, the existing geotechnical database is considered suitable for a feasibility-level of characterization.



### 16.3.3 Pit Slope Geotechnical Design Criteria

Recommended slope design parameters for the Eagle and Olive final pits are summarized in Table 16-1 based on the dip direction of the pit wall (e.g., for an east-west trending, south facing pit wall, the slope dip direction would be 180° azimuth).

Table 16-1: Recommended Slope Design Parameters for Final Pits

Pit	Sector	Max. Slope Height (m)	Wall Dip Direction		Bench Face Angle (°)	Bench Height (m)	Bench Width (m)	Max. ISA* (°)
			From (°)	To (°)				
Eagle	North	225	130	200	70	20	10	49
	Northeast	280	200	265	70	20	10	49
	East (above elev.1,095 m)	280	265	305	60	20	14	38
	East (below elev. 1,095 m)	210	265	305	60	20	12	40
	South	375	350	85	70	20	10	49
Olive	Southeast	180	90	260	70	20	10	49
	Northwest	110	260	90	70	20	10	49

### 16.3.4 Recommendations for Additional Pit Geotechnical Work

Recommendations for additional work to be completed for the Eagle Pit include the following:

- Continued mapping of major fault structures and updating of the 3D structural model;
- Continued mapping and domaining of dominant discontinuity sets including persistence, spacing and variations in orientation;
- Update slope stability analyses, as needed, based on the newly interpreted 3D fault structures and structural domains;
- Installation of additional horizontal drains targeting the major structural zones identified from pit mapping;
- Installation of additional piezometers, as needed, and continued monitoring of existing installations to assess drain effectiveness and to verify achievement of required depressurization levels;
- Additional geotechnical drilling as mining progresses to confirm existence and extent of anticipated major fault zones intersecting pit walls;

- Continued assessment and improvement of wall control blasting quality and accuracy;
- Continuous monitoring of high walls to ensure that slopes are behaving as anticipated and provide sufficient warning should movements occur. Acquisition of an additional LiDAR or radar system may be necessary depending on available vantage points;
  - Survey prisms can be used to monitor local areas of anticipated or known movements; and
- Additional geotechnical drilling and characterization will likely be necessary prior to mining Olive pit.

## 16.4 Mine Production Schedule

Table 16-2 is a summary of ore (for crush and ROM) and waste rock movement by year and by pit for the LOM production schedule along with the heap leach feed schedule. LOM material moved is 222.3 Mt.

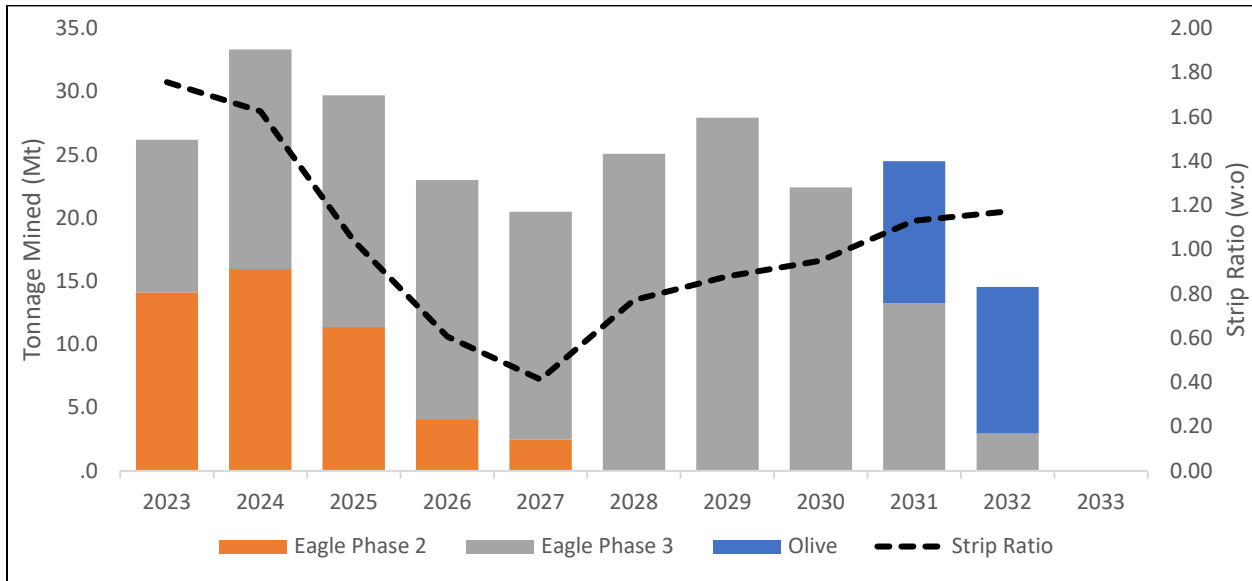
Table 16-2: LOM Production Schedule

	Unit	Total	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>EAGLE</b>														
Ore Mined to Crusher	kt	100,611	9,500	10,494	11,494	11,494	11,494	11,494	11,494	11,494	8,994	2,659	-	-
Ore Grade to Crusher	g/t	0.70	0.82	0.73	0.78	0.80	0.74	0.70	0.69	0.54	0.53	0.64	-	-
Ore Mined to LG Stockpiles	kt	17,125	-	2,199	3,074	2,812	3,011	2,661	3,370	-	-	-	-	-
Ore Grade to LG Stockpile	g/t	0.25	-	0.24	0.25	0.25	0.25	0.25	0.25	-	-	-	-	-
Total Ore Mined	kt	117,736	9,500	12,693	14,568	14,305	14,505	14,155	14,864	11,494	8,994	2,659	-	-
Total Ore Grade	g/t	0.64	0.82	0.64	0.67	0.69	0.63	0.61	0.59	0.54	0.53	0.64	-	-
Reclaimed from LG Stockpiles	kt	17,125	-	-	-	-	-	-	-	-	-	4,799	11,494	832
Ore Grade	g/t	0.25	-	-	-	-	-	-	-	-	-	0.25	0.25	0.25
Waste Mined	kt	106,607	16,688	20,632	15,142	8,694	5,989	10,925	13,066	10,916	4,255	299	-	-
Total Mined	kt	224,343	26,188	33,324	29,710	23,000	20,494	25,080	27,930	22,410	13,249	2,958	-	-
Strip Ratio	w:o	0.91	1.76	1.63	1.04	0.61	0.41	0.77	0.88	0.95	0.47	0.11	-	-
<b>OLIVE</b>														
Ore Mined to Crusher	kt	6,536	-	-	-	-	-	-	-	-	2,500	4,036	-	-
Ore Grade	g/t	0.84	-	-	-	-	-	-	-	-	0.89	0.81	-	-
Waste Mined	kt	16,288	-	-	-	-	-	-	-	-	8,739	7,549	-	-
Total Mined	kt	22,824	-	-	-	-	-	-	-	-	11,239	11,585	-	-
Strip Ratio	w:o	2.49	-	-	-	-	-	-	-	-	3.50	1.87	-	-
<b>TOTAL MINE</b>														
Ore Mined to Crusher	kt	107,147	9,500	10,494	11,494	11,494	11,494	11,494	11,494	11,494	11,494	6,695	-	-
Ore Grade	g/t	0.71	0.82	0.73	0.78	0.80	0.74	0.70	0.69	0.54	0.61	0.74	-	-
Ore Mined to LG Stockpiles	kt	17,125	-	2,199	3,074	2,812	3,011	2,661	3,370	-	-	-	-	-
Ore Grade	g/t	0.25	-	0.24	0.25	0.25	0.25	0.25	0.25	-	-	-	-	-
Total Ore Mined	kt	124,272	9,500	12,693	14,568	14,305	14,505	14,155	14,864	11,494	11,494	6,695	-	-
Total Ore Grade	g/t	0.65	0.82	0.64	0.67	0.69	0.63	0.61	0.59	0.54	0.61	0.74	-	-
Reclaimed from LG Stockpiles	kt	17,125	-	-	-	-	-	-	-	-	-	4,799	11,494	832
Ore Grade	g/t	0.25	-	-	-	-	-	-	-	-	-	0.25	0.25	0.25
Ore Stacked	kt	124,272	9,500	10,494	11,494	11,494	11,494	11,494	11,494	11,494	11,494	11,494	11,494	832
Stacked Ore Grade	g/t	0.65	0.82	0.73	0.78	0.80	0.74	0.70	0.69	0.54	0.61	0.53	0.25	0.25
Waste Mined	kt	122,895	16,688	20,632	15,142	8,694	5,989	10,925	13,066	10,916	12,994	7,848	-	-
Total Mined	kt	247,167	26,188	33,324	29,710	23,000	20,494	25,080	27,930	22,410	24,488	14,543	-	-
Strip Ratio	w:o	0.99	1.76	1.63	1.04	0.61	0.41	0.77	0.88	0.95	1.13	1.17	-	-

Source: VGC (2023)

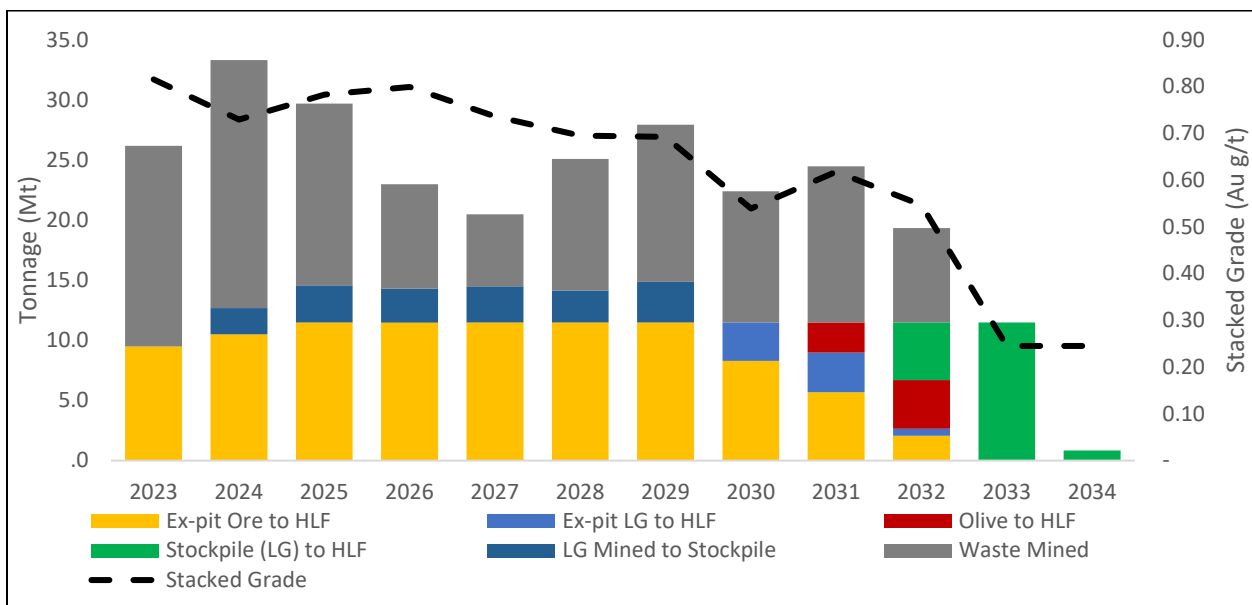
Figure 16-2 and Figure 16-3 summarize yearly material movements for the pits, strip ratio, and ore/waste material movement and gold grades.

Figure 16-2: Yearly Total Mined Tonnages and Mined Gold Grade



Source: VGC (2023)

Figure 16-3: Yearly Ore Movement, Waste Tonnages and Stacked Grade



Source: VGC (2023)

## 16.5 Open Pit Design Criteria

Detailed pit design involves the conversion of the optimized pit shells into an operational open pit mine design. Table 16-3 gives the main parameters used in determining the pit designs. Specific pit slope criteria are provided in Table 16-3.

Table 16-3: Pit Design Parameters

Description	Value
<b>Ultimate Pit Design Parameters – All Pits</b>	
Bench Height	10 m (single, working)
	20 m (double; final pit configuration)
Face Angle	60° to 70° (double bench, final pit)
Berm Width	10 m to 12 m
Inter-ramp Angle (IRA)	38° to 49°
Ramp Width – Double lane	26 m (total excavation)
Ramp Width - Single lane -lower benches	20 m
Ramp Gradient – Double lane	10
Ramp Gradient – Single lane – lower benches	12
Overall Angle (OSA)	36° to 45°

Source: VGC (2023)

## 16.6 Haul Road and Ramp Design Parameters

The main in-pit haul roads and ramps are designed to have an overall road allowance of 26 m in width. The selected road allowance is adequate for accommodating three times the width of the largest haul truck (136 t), with additional room for drainage ditches and safety berms as summarized in Table 16-4.

Table 16-4: In-Pit Haulage Road Design Parameters

Item	Metres
Truck (136 t) operating width	6.3
Running surface – 3 x truck width	18.9
Berm height (Three-quarters tire height)	2.2
Berm width at 45° slopes	4.5
Ditch width	2
Total Road Allowance	26

Source: VGC (2023)

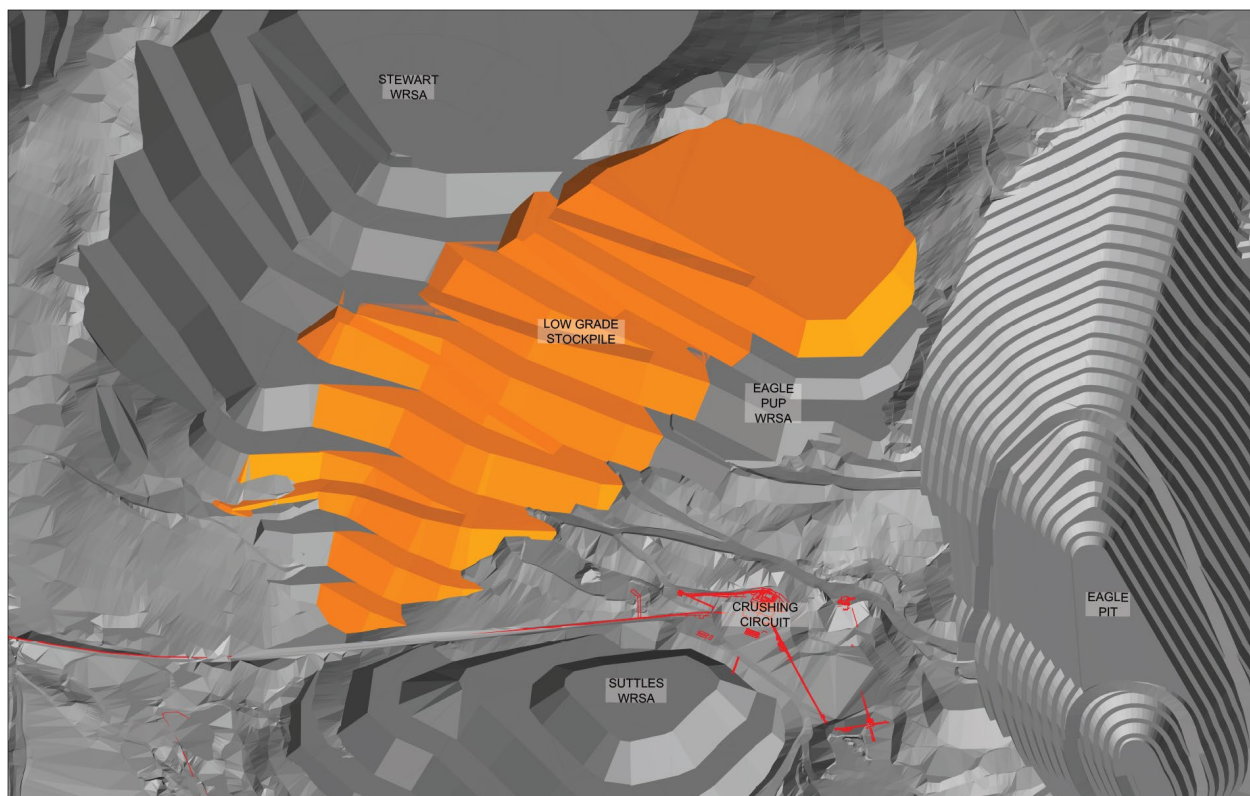
Ramps are designed with a maximum grade of 10% (steepened to 12% for final access to lower portions of the open pits). Ex-pit roads are designed to allow access to roads connecting the various pits to the crusher and waste dumps and are planned to be a maximum of 30 m wide (i.e., an all-fill road).

## 16.7 Stockpile Strategy

Material grading below the Direct Crushed Feed cut-off grade and above the LG stockpile to HLP cut-off grade as denoted in Table 15-5 will be stockpiled for processing at the end of the mine life or fed directly to the crushers when insufficient higher-grade is available. A total of 17.2 Mt will be stockpiled for processing at the end of mine life, adding just under two years of additional processing operations.

The material will be stockpiled along the face of the Eagle Pup WRSA lifts and built from the bottom up with a final slope of 2.5H:1V. Before stockpiling of material can occur, the final lower phase of the Eagle Pup WRSA needs to be established. This is scheduled to be completed in 2023 allowing for stockpiling commencing in 2024. The LG stockpile configuration is shown in Figure 16-4. The stockpile has significant capacity for expansion (capacity as shown is 26.8 Mt).

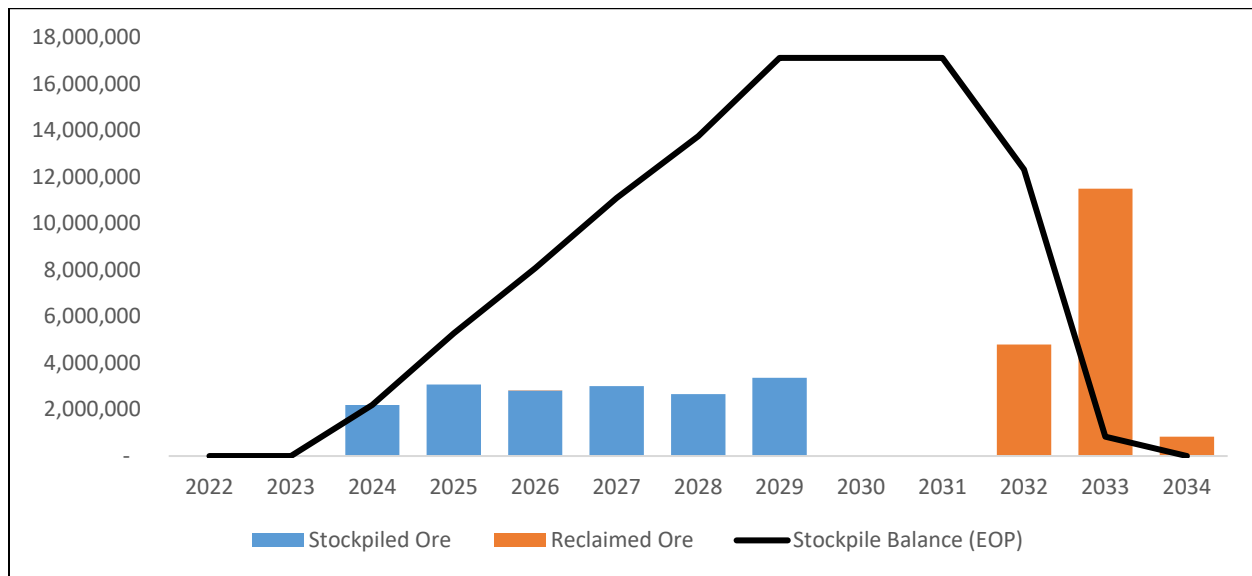
Figure 16-4: Low Grade Stockpile Ultimate Configuration



Source: VGC (2023)

The annual stockpile movement and balance is summarized in Figure 16-5. In years 2030 and 2031 low grade material is hauled directly to the crusher to maintain trucking requirements within the fleet’s capacity.

Figure 16-5: Annual Stockpile Movement and Stockpile Balance



Source: VGC (2023)

## 16.8 Waste Rock Storage

### 16.8.1 Waste Materials

Geochemical characterization studies to identify and quantify the potential for metal leaching and acid rock drainage (ML/ARD) for waste and ore associated with the project were included in the feasibility studies conducted in 1995/1996 by New Millennium Mining Ltd.; in 2007 baseline studies by StrataGold; and in a more comprehensive program completed in 2010 by Stantec. These evaluations have indicated that the waste and ore associated with the project are likely to be non-acid generating. Minor proportions may have some propensity, albeit likely low, to generate localized acidity and therefore likely feasible, nor necessarily of any significant benefit, to sort the small proportion of waste that may have a low potential to generate acid from the vast majority that is anticipated to be non-acid generating. Therefore, waste rock will be placed in the waste rock storage facilities without regard to chemical composition.

Waste rock material produced from the Eagle and Olive pits was divided into three categories, as outlined in Table 16-5.



Table 16-5: Open Pit Waste Rock Definitions

Type	Definition
Metasedimentary	Rock which is highly weathered and foliated and generally shows poor mechanical properties
Intrusive	Rock exhibiting a similar weathering pattern as the metasedimentary but has a noticeably higher inherent strength and a higher structural integrity
Miscellaneous	Includes topsoil (thickness from 0.2 to 0.5 m) and colluvium (thickness from 2 to 7 m)

Source: VGC (2019)

Table 16-6 summarizes the waste material to be mined by material type. Note that no significant amounts of overburden are expected within the various open pits.

Table 16-6: Open Pit Waste Rock Summary

	Unit	Total
<b>Eagle Waste Rock</b>		
Metasedimentary	Mt	51.9
Intrusive	Mt	46.8
Total	Mt	98.8
<b>Olive Waste Rock</b>		
Metasedimentary	Mt	2.1
Intrusive	Mt	14.2
Total	Mt	16.3
<b>Total</b>		
Metasedimentary	Mt	54.0
Intrusive	Mt	61.0
Total	Mt	115.0

Source: VGC (2023)

## 16.8.2 Waste Rock Storage Area Geotechnical Analysis and Recommendations

### 16.8.2.1 Eagle Pup and Platinum Gulch WRSAs

Geotechnical investigation and design of the Eagle Pup and Platinum Gulch WRSAs was originally conducted by BGC (2012d) as part of the 2012 FS. The work program consisted of several field and laboratory investigations (BGC 2010, 2011, 2012b and 2012C), slope stability analyses and development of design recommendations.

A supplemental geotechnical and permafrost investigation was conducted in 2018 by Tetra Tech (2018) which was designed to further characterize permafrost conditions beneath the proposed Eagle Pup WRSA, Platinum Gulch WRSA and 90-Day storage area footprints. The 2018 investigation consisted of sonic drilling of 13 holes, installation of thermistor strings and laboratory testing of frozen and unfrozen overburden soils. Results of the 2018 permafrost investigation were used in conjunction with information acquired from the previous investigations (BGC 2010, 2011, 2012b and 2012C) to delineate areas where unfrozen, ice-poor, and ice-rich soils were anticipated.

Foundation conditions beneath the Eagle Pup and Platinum Gulch WRSAs typically include a thin (0.2 to 0.3 m) veneer organics overlying approximately 1 to 10 m of colluvium. The colluvium depth is typically shallow near the upper valleys and ridge tops and deepens towards lower elevations and valley bottoms. The colluvium soils are variable in composition ranging from boulders and cobble with silt and sand, to silty sand with gravel and cobble.

Frozen ground is common across much of the mine site; however, ice-rich, or potentially thaw-unstable soils are not extensive and are typically localized in drainage bottoms and some north facing slopes. Where present, ice-rich soils are removed from the facility footprints and placed in designated ice-rich storage areas.

The Eagle Pup and Platinum Gulch WRSA are considered to fall under the moderate failure consequence and high geotechnical data confidence category according to the Hawley & Cuning (2017) Guidelines for Mine Waste Dump and Stockpile Design. This category corresponds to minimum acceptable safety factors of 1.2 to 1.3 for static and 1.0 to 1.05 for pseudostatic loading conditions. The JDS (2019) updated slope stability analyses indicated acceptable static safety factors of 1.2 to 1.6 (1.0 to 1.3 pseudostatic) for Platinum Gulch and 1.3 to 1.9 (1.1 to 1.6 pseudostatic) for the Eagle Pup WRSA.

The Platinum Gulch WRSA is near complete and the Eagle Pup WRSA is under construction. Both facilities have rock drains constructed beneath them and have performed well to date with only a couple instances of minor surficial sloughing occurring along bench faces.

### 16.8.2.2 Suttle and Stewart Gulch WRSAs

Victoria Gold is planning an expansion of the Eagle Pup WRSA to the north into Stewart Gulch as well as a potential third WRSA located in Suttle Gulch, immediately north of the open pit and existing 90-day

storage area. Both proposed waste rock facilities are relatively small compared to the operating Eagle Pup WRSA. The ultimate heights of the proposed Suttle and Stewart Gulch WRSAs are approximately 175 m and 140 m, respectively with 45 to 50 m high benches at a 2.5H:1V overall slope angle, similar to the existing WRSAs.

Geotechnical conditions have not yet been investigated in the Stewart Gulch area but currently there is no indication that foundation conditions will be materially different than what was encountered in the Eagle Pup WRSA footprint. Geotechnical investigation, testing and analyses are required to confirm suitable foundation conditions in Stewart Gulch.

Detailed geotechnical analyses have not been completed for the potential Suttle Gulch WRSA. Several previous geotechnical drill holes and test pits exist within the Suttle Gulch WRSA footprint and have been reviewed by JDS at a high level. The existing information indicates high potential for ice-rich and fine-grained materials within portions of the footprint which will likely require removal and placement in a designated ice-rich storage area.

Additional geotechnical investigation, testing and analyses are required to confirm stability of the potential Suttle Gulch WRSA.

### 16.8.3 Waste Rock Scheduling

Eagle waste rock will be hauled to one of four waste rock storage areas immediately adjacent to the open pit. The four WRSA are the Platinum Gulch WRSA (which is now substantially completed), the Eagle Pup WRSA, the Stewart WRSA (an extension of the Eagle Pup WRSA), and the Suttles WRSA. WRSA development has been sequenced to maximize short haul distances for varying stages of the Eagle Gold Mine. Olive waste rock will be hauled to a waste rock storage area immediately south-west of the open pit, otherwise known as the Olive WRSA.

Total waste material removed from the pits from 2023 to end of LOM totals 122.9 Mt. The current designed capacities of the respective WRSA are outlined in Table 16-7. These provide more capacity than is required for the LOM. Additionally, all the WRSA's, aside from the Suttles WRSA, can be expanded significantly to accommodate more waste if required.

Table 16-7: WRSA Available Capacity

	Unit	Total
Eagle Pup	Mt	49.8
Stewart	Mt	69.2
Suttles	Mt	30.0
Olive Dump	Mt	16.6

Source: VGC (2023)

Each WRSA is planned to be constructed in a bottom-up approach by placing material at its natural angle of repose (approximately 1.5H:1V) with appropriate catch benches spaced approximately every 45 m vertically resulting in final slopes of 2.5:1. To date, WRSA construction has shown an approximately 40% swell factor has occurred. This factor has been utilized for the dump capacities. Segregation of the various waste material types, if deemed necessary, will be managed given the extent of the various WRSA designs.

Table 16-8 summarizes annual waste tonnages allocated to the various WRSAs.

Table 16-8: Waste Dump Dispatch

	Unit	Total	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Eagle Pup	kt	<b>47,612</b>	16,688	20,623	10,301	-	-	-	-	-	-	-
Stewart	kt	<b>35,004</b>	-	-	4,850	8,694	5,989	-	-	10,915	4,256	299
Suttles	kt	<b>23,991</b>	-	-	-	-	-	10,925	13,066	-	-	-
Olive Dump	kt	<b>16,288</b>	-	-	-	-	-	-	-	-	8,730	7,558

Source: VGC (2023)

## 16.9 Mine Equipment

The current mine fleet is detailed in Table 16-9. Based on assumed and historical equipment productivities and availabilities, the current fleet is adequate for the life of mine. Beyond this, no additional primary production units are required, aside from repurchasing retired equipment.

Additionally, a fleet of light vehicles provide support for transporting personnel, supervisory/technical staff, and mobile maintenance.

Table 16-9: Current Mining Equipment List

Mining Equipment	# of Units
Cat 6040FS	2
Cat 993K Loader	3
Cat 785D (135t Capacity)	13
Cat 6230 Drill	2
Cat 930 Excavator	1
Cat D10 Dozer	4
Cat 16M Grader	2
Epiroc Pre-split Drill	1
Water Trucks	2
Service/Fuel Trucks	2

Source: VGC (2023)

## 16.10 Mine Personnel and Organization Structure

The Mine operates on a 24-hour/day, 7-days/week and 365-days/year schedule. Operations and maintenance personnel work two 12-hour shifts per day. Production, maintenance, and technical services personnel operate on a 2-week in / 2-week out rotation.

With the exception of the blasting crew, all hourly labour and supervisory personnel rotate between day and night shifts. Management and technical staff work the day shift only. Equipment operator labour requirements are based on the number of equipment units, operating requirements, and shift rotations. Maintenance labour requirements are based on the number of equipment units to be maintained, estimates of mechanical availability, and estimates on the ratio of maintenance labour requirements to the number of units for each open pit fleet type. The mining workforce is estimated to peak at around 122 employees, while the total workforce is estimated at 468.

## 17 PROCESS DESCRIPTION / RECOVERY METHODS

This section describes the recovery methods used for the Eagle Gold project for the crushing, HLP and process facilities. Flowsheet development, operating parameters and design criteria were based on results from metallurgical testwork presented in Section 13. The gold recovery process was designed on the basis of leaching approximately 11.5 Mt of ore per year with an average gold head grade of 0.65 g/t at an overall gold recovery of 76%.

The three-stage crushing plant operates at a nominal primary crushing rate of 29,500 t/d, year-round and a secondary and tertiary crushing rate upwards of 39,200 t/d, also year-round. Barren solution, made up of a cyanide-caustic mixture, is pumped at a nominal rate of 2,070 m<sup>3</sup>/h to a network of supply piping and drip emitters on the HLPs. Pregnant solution is collected in a sump near the bottom of the HLPs and pumped to the 8 t/d carbon ADR plant for gold extraction and the production of gold doré.

The gold ore processing facilities include the following unit operations:

### Crushing and Ore Handling

- Primary crusher: a gyratory crusher with a stationary rock breaker in open circuit, producing a final product P<sub>80</sub> of approximately 115 mm;
- Secondary crusher: a vibrating screen and cone crusher operating in open circuit, producing a final product P<sub>80</sub> of approximately 21 mm;
- Tertiary crushers: three vibrating screens and three cone crushers operating in reverse closed circuit, producing a final product P<sub>80</sub> of 12.5 mm, and
- Heap placement: crushed material is conveyed to the HLP by overland conveyor.

### Heap Leach Pad

- Crushed ore stacking and spreading is by a series of grasshoppers to a radial stacker;
- Ore leaching over a geomembrane liner system; and
- Barren and pregnant solution delivery and recovery piping systems.

### ADR Plant

- Carbon-in-Column (CIC) Adsorption: adsorption of solution gold onto carbon particles in a series of cascading carbon columns;

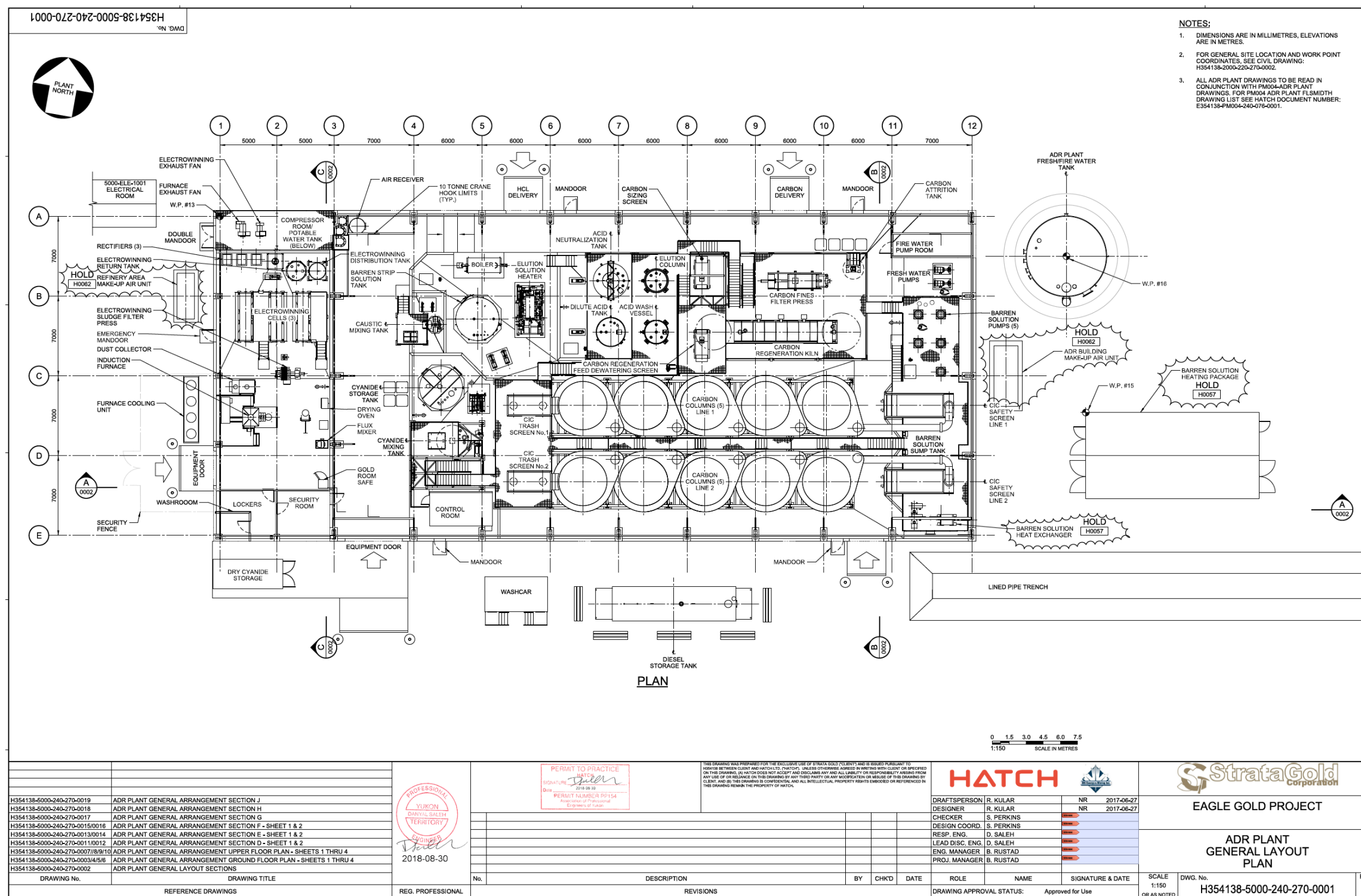
- Desorption: acid wash of carbon to remove inorganic foulants, elution of carbon to produce a gold-rich solution, carbon stripping to recover gold into solution and thermal regeneration of carbon to remove organic foulants; and
- Gold recovery: gold electrowinning (sludge production), filtration, drying, and smelting to produce gold doré.

A process flowsheet and process plant layout are presented in Figure 17-1 and Figure 17-2.





Figure 17-2: Process Plant Layout



Source: JDS (2019)

## 17.1 Process Design Criteria

The process design criteria developed during the 2016 FS is presented below, updated with modifications to match current operations, and includes mass balance detail the annual ore production, major flows, and plant availability. This criterion will be continually updated as necessary throughout operations. The key process design criteria are summarized in Table 17-1.

Table 17-1: Major Process Design Criteria

General	Unit	Value
<b>Crushing</b>		
Primary Crusher	t/d	29,500
Secondary & Tertiary Crusher Capacity	t/d	39,200
Crusher Availability – Secondary & Tertiary	%	73
Crushing Plant Operation	h/d	18
Heap Loading and Spreading Method	-	Grasshoppers and Radial Stacker
Heap Loading Operation	t/d	39,200
Heap Loading Operation	h/d	21
Average LOM Feed Grade	g /t Au	0.64
Overall LOM Recovery	%	76
<b>Ore Characteristics</b>		
Specific Gravity (Average)	t/m <sup>3</sup>	2.65
Dry Crushed HL feed Bulk Density	t/m <sup>3</sup>	1.9
Bond Crusher Work Index (Oxide)	kWh/t (Eagle)	6.9
Abrasion Index (Oxide)	g (Eagle)	0.218
Lime Consumption	kg/t ore	1.0
Cyanide Consumption	kg/t ore	0.35
<b>Crushing</b>		
Primary Crusher Type		Gyratory
Primary Crusher Size	-	MK-II 50-65
Secondary Crusher Type		Standard Medium Cone Crusher
Secondary Crusher Size		MP1250
Tertiary Crushers	#	3
Tertiary Crusher Type		Standard Fine Cone Crusher
Tertiary Crusher Size		MP1250

General	Unit	Value
<b>Heap Leach Pad</b>		
Ultimate Design	mt	203,000,000 (nominal)
		92,000,000 (Primary HLP)
		111,000,000 (Secondary HLP)
Lift Height	m	12
Heap Slope, Overall	h:v	2.5:1
Solution Application Rate	l/hr/m <sup>2</sup>	7-10
Solution Flow Rate	m <sup>3</sup> /h	2,070

Source: VGC (2023)

## 17.2 Process Description

### 17.2.1 Crushing

ROM ore is trucked from the open pits and dumped directly into a primary feed hopper. The primary crusher, a 375-kW gyratory crusher, crushes ROM material from a maximum feed size of 1,000 mm down to a P<sub>80</sub> of approximately 115 mm.

The primary crushing plant is designed to operate year-round at a rate of 29,500 t/d. During periods when the secondary and tertiary plant is scheduled down the crushed material will be conveyed and stockpiled. Otherwise, the primary crusher product is fed directly onto the secondary crushing feed conveyor. The material from the stockpile is reclaimed at a rate of 470 t/h by front-end loader (FEL), and conveyed to the secondary crushing feed conveyor for a combined feed of 39,200 t/d.

If the crushing plant is down, the mine haul trucks dump onto the ROM stockpile. A FEL will be used to reclaim the ROM material and deliver the material to the dump pocket. The ROM stockpile can also be used to feed the crusher if the mining operations are suspended.

Ore from the secondary crushing feed conveyor is transported to the secondary vibrating double deck screen. Screened undersize material is conveyed to the tertiary crushing feed conveyor. The screened oversize feeds the 932-kW secondary cone crusher. The secondary cone crusher product discharges onto the tertiary crushing feed conveyor.

Ore from the tertiary crushing feed conveyor is transported to the tertiary ore stockpile. The material from the stockpile is reclaimed by belt feeders to three tertiary vibrating double deck screens. The oversize material from the screens feeds the tertiary crushers, each installed with 932 kW motors. The crusher product returns to the tertiary crusher feed conveyor. The undersize material, with a target P<sub>80</sub> of 12.5 mm, is transferred by overland conveyors to the HLP for stacking, by a series of grasshoppers that feed a radial stacker.

In addition to the fixed crushing circuit, there is a contractor mobile crushing spread that can operate if the fixed crushing circuit is down. ROM material is hauled to the mobile crusher directly adjacent to the crushing facilities. The mobile crusher spread crushes material to the target  $P_{80}$  and is stockpiled. This circuit can crush material at a rate of up to 500 t/h. Stockpile material is then reclaimed with a loader and placed onto a grasshopper feeding directly to the overland conveyor at rate of 1,000 t/h. Generally, material is crushed and stockpiled while the fixed crushing circuit is operational. During down periods of the fixed plant, stockpiled material is reclaimed. Capital has been allocated to purchase a mobile crusher to reduce the operating costs of utilizing a contractor.

Lime is added to the stockpile feed conveyor from the 200-t lime silo by screw conveyor for pH control, at a rate of 1 kg/t.

### 17.2.2 Heap Leach Pad

The primary HLP can accommodate approximately 92 Mt of ore and is located approximately 1.2 km north of the Eagle pit. The primary HLP is located in the Ann Gulch catchment. The base of the primary HLP confining embankment is located at an elevation of 880 masl, and at full height in Phase 3 of the primary HLP, the heap will extend up Ann Gulch to an elevation of approximately 1,225 masl at the top of the planned ore stack.

The proposed secondary HLP will accommodate the remaining estimated 63.3 Mt of ore (current designed capacity is 111 Mt) and will be located approximately 3 km east of the Eagle pit near the Olive pit. The secondary HLP will be located in the Bawn Boy catchment. The base of the secondary HLP confining embankment is located in the upper portion of the basin at an elevation of 1,300 masl, and at full height in Phase 2, the secondary HLP will extend to an elevation of approximately 1,470 masl at the top of the planned ore stack.

Each HLP comprises (or will comprise, as applicable) a number of elements:

- An earth/rock-filled embankment, to provide stability to the base of the HLP;
- A lined storage area for the ore to be leached;
- A pregnant leach solution (PLS) collection system;
- An in-heap sump for collection and pumping of PLS;
- Events ponds to contain excess solution in extreme events; and
- Leak detection recovery and monitoring systems to ensure the containment of PLS.

The primary HLP is constructed in phases. Phase 1 will accommodate approximately 27.0 Mt of ore, Phase 2 will accommodate 32 Mt and Phase 3 will accommodate the remainder of the tonnage for a total of 92 Mt. The secondary HLP will be constructed in phases with each phase accommodating approximately 20 Mt of ore. The initial phase of the primary HLP was constructed and began operating in 2019. The

secondary HLP will be constructed and begin operations during 2029. The primary HLP and secondary HLP are illustrated in Figure 17-3 and Figure 17-4, respectively.

The liner for the HLPs and events ponds consists of a composite geomembrane and underlying geosynthetic clay liner (GCL) which was used in lieu of a 300 mm thick layer of compacted low-permeability material due to the lack of suitable on-site soils in sufficient quantities. The GCL soil liner provides an equivalent secondary containment to that of a 300 mm minimum thick low permeability soil layer, offering a hydraulic conductivity of  $1 \times 10^{-6}$  cm/sec or lower.

Free-draining granular material was placed on top of the HLP liner together with a network of collection pipes to collect and drain process solutions and storm infiltration, and to minimize hydraulic heads on the liner, thereby reducing the risk of leakage. Piezometers are installed within the liner cover fill at strategic locations to monitor the hydraulic head on the liner system.

The PLS sump area to the elevation of the HLP embankment crest has a double-geomembrane liner installed over a GCL liner together with a leak detection and recovery system (LDRS). The LDRS was installed between the two geomembranes to monitor and contain any leaks through the top geomembrane.

The events ponds are lined with a double-geomembrane liner installed over a GCL liner together with a LDRS. This allows them to contain excess solutions for short durations, if required.

Temporary runoff interceptor ditches or berms are constructed for each phase of the HLPs in order to collect storm water runoff from entering the heap. The interceptors are constructed and in operation before construction of each HLP phase. The temporary interceptors are constructed at the up-gradient limit of each phase of the HLP as the liner will tie into the access road adjacent to the ditches. Once the HLP is ready for the next phase, the temporary interceptor ditch will be filled and regraded for placement of the liner for the next phase.

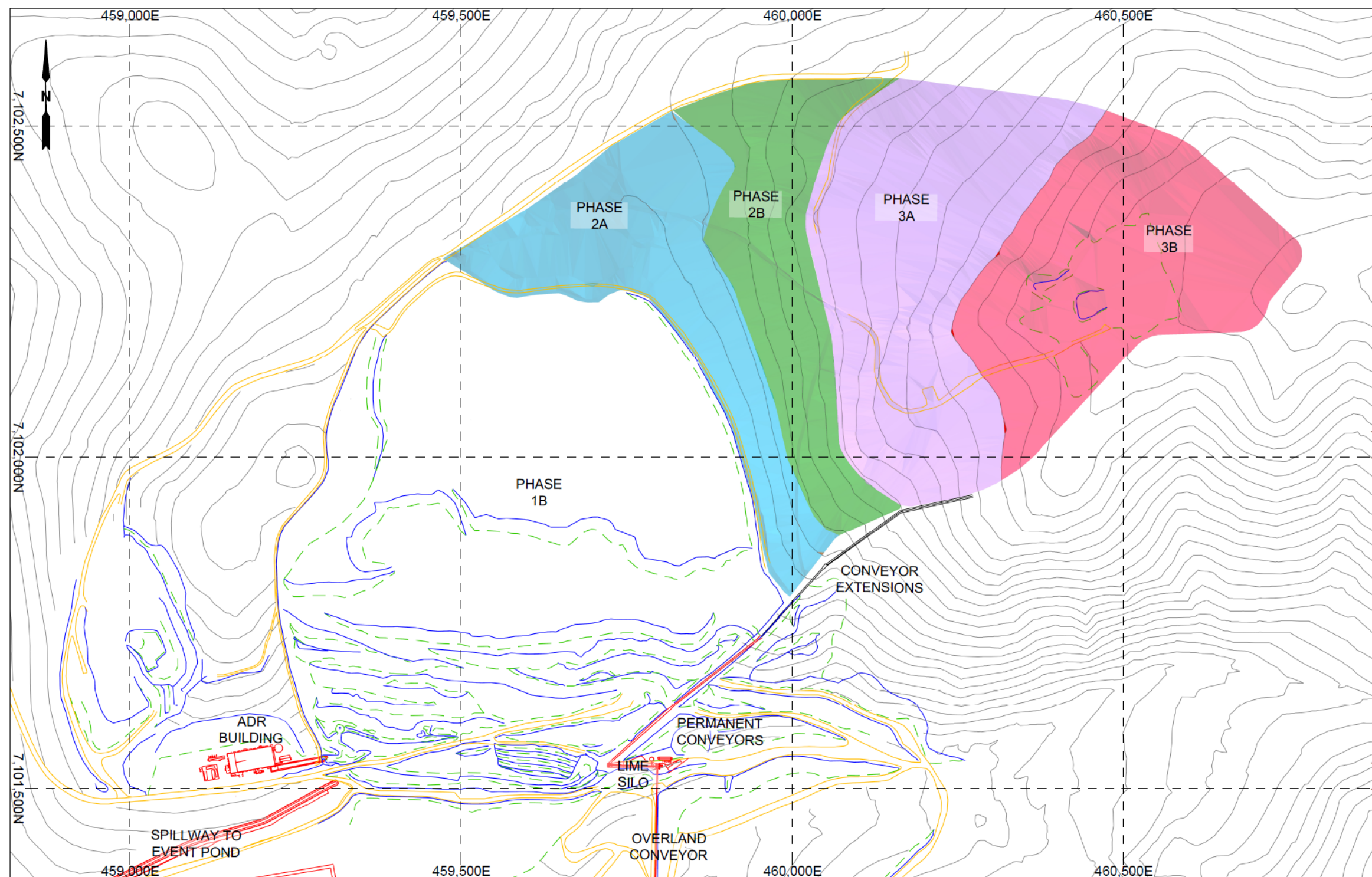
The diversion ditches are sized for the 100-year, 24-hour event, and armoured with riprap. The ditches are backfilled or removed at the end of each phase in order to tie in the HLP liner system and pipework. In the event of an emergency or other unforeseen circumstance in which pumping of solution ceases, or in the event of excessive surface runoff from the HLP, discharge of excess water or solution is directed in a controlled manner through a lined spillway to the events pond. Solution levels within the heap leach are kept low during normal operations. However, during emergency situations, the HLP spillway will prevent overtopping of the embankment, and will maintain containment of the solution at all times. The HLP spillway is designed to safely convey the flow represented as one third between the 1,000-year event and the probable maximum flood (PMF). The event ponds will incorporate internal and outlet spillways to safely pass the PMF peak flows after attenuation through the pond.

The events ponds are sized to provide containment storage for a Probable Maximum Flood (PMF) Event plus 24 hours of draindown from the heap after the in-heap pond has reached its maximum capacity.

The primary HLF events ponds have a combined operational storage capacity of approximately 340,000 m<sup>3</sup> with 1 m of freeboard. The combined storage capacity of the primary HLF events ponds (without freeboard) is 300,000 m<sup>3</sup>.



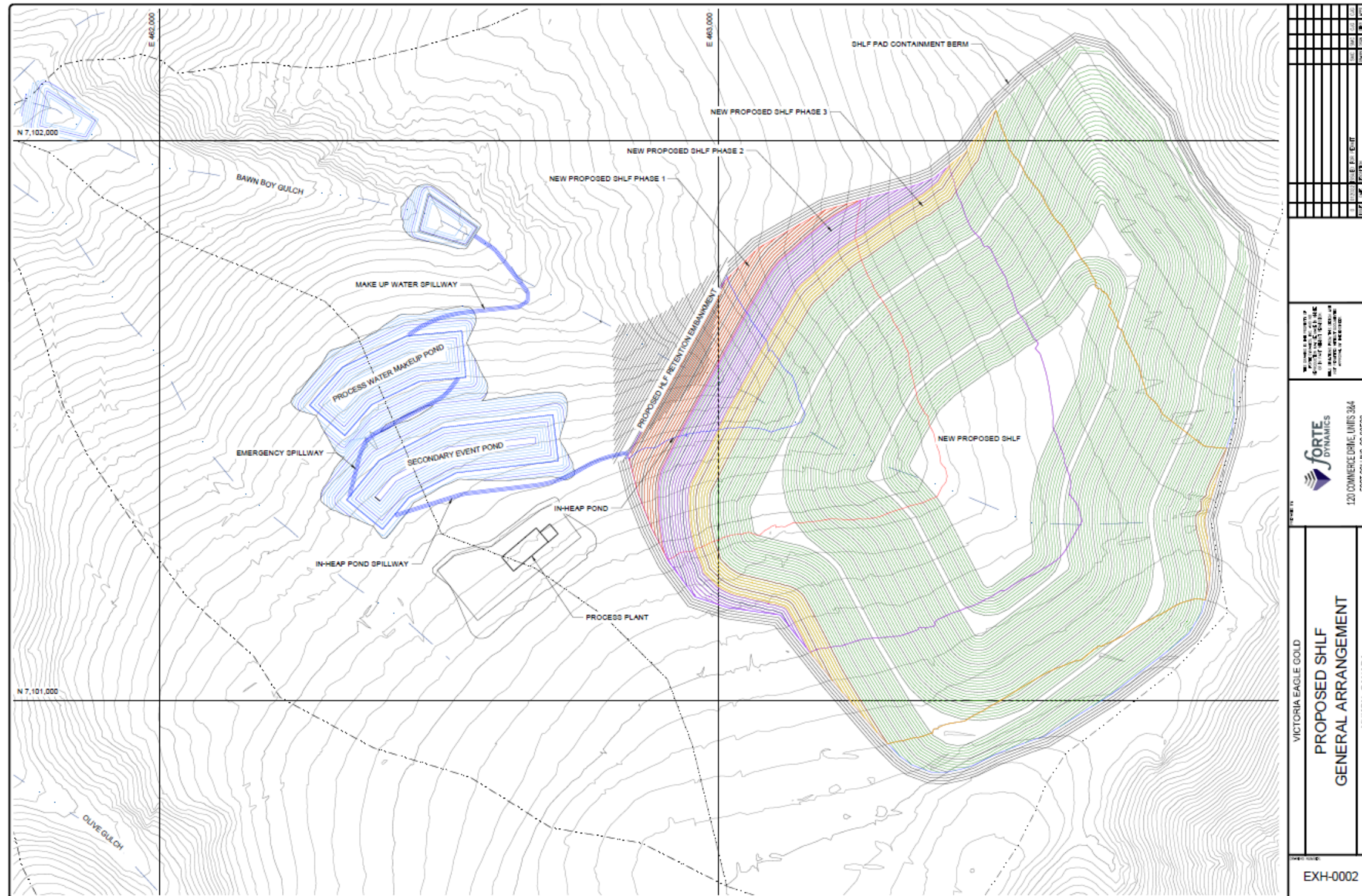
Figure 17-3: Primary HLP



Source: VGC (2023)



Figure 17-4: Secondary HLP



Source: Forte(2023)

### 17.2.3 Ore Stacking Plan

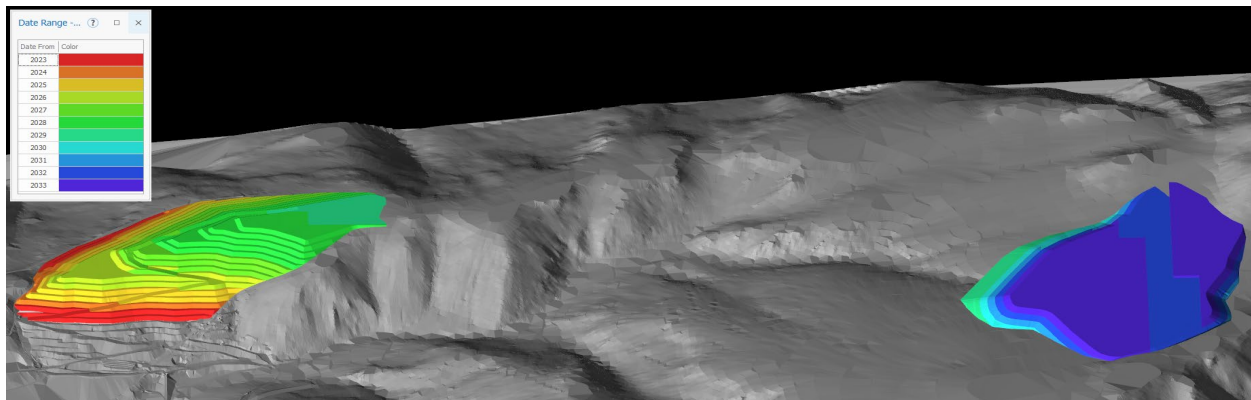
Ore is stacked on the HLP in cells with a series of grasshopper conveyors and a radial stacker. The tonnage on each lift was calculated based on the HLP lift volumes and an average expected bulk density. The total annual tonnage and volumes are listed in the Table 17-2 below.

Table 17-2: Total Annual Tonnage

Year	Primary Heap Leach (Ann Gulch) Mt	Secondary Heap Leach (Bawn Boy) Mt	TOTAL
<b>Pre-2023</b>	25.2	-	<b>25.2</b>
<b>2023</b>	9.5	-	<b>9.5</b>
<b>2024</b>	10.5	-	<b>10.5</b>
<b>2025</b>	11.5	-	<b>11.5</b>
<b>2026</b>	11.5	-	<b>11.5</b>
<b>2027</b>	11.5	-	<b>11.5</b>
<b>2028</b>	11.5	-	<b>11.5</b>
<b>2029</b>	1.1	10.4	<b>11.5</b>
<b>2030</b>	-	11.5	<b>11.5</b>
<b>2031</b>	-	11.5	<b>11.5</b>
<b>2032</b>	-	11.5	<b>11.5</b>
<b>2033</b>	-	11.5	<b>11.5</b>
<b>TOTAL</b>	<b>92.3</b>	<b>56.3</b>	<b>149</b>

Source: VGC (2023)

Figure 17-5: Final Stacking Plan



Source: VGC (2023)



## 17.2.4 Leaching and Barren Solution Delivery

### 17.2.4.1 Barren Solution

#### **Piping and Pumping**

The barren solution is pumped by a series of five pumps to the HLP from the barren solution sump, located in the plant. At full flow, barren solution will be pumped at a nominal rate of 2,070 m<sup>3</sup>/h, where it connects into the HLP distribution system. The system included a leak detection system, including a moisture sensing cable, tied into the plant distributed control system, DCS. On the HLP, the barren solution will be transferred to the drip emitter header pipes.

Barren solution is applied to the heap using drip emitters. The emitters are buried at least 1 m to reduce the likelihood of freezing. The emitter lines are ripped into the ground approximately 1 m apart, running along the length of each cell and on the slopes of the lifts.

#### **Solution Heating**

The ADR plant design allows for barren solution to be heated by a diesel-fired boiler, located adjacent to the plant building, to maintain the thermal balance in the HLP, if required. The boiler is designed to provide 10 M btu/h (British thermal unit per hour) to heat the solution during the initial loading period, before the HLP mass is significant enough to maintain an internal thermal balance. To date the boiler has not seen much use as solution temperatures have not necessitated it.

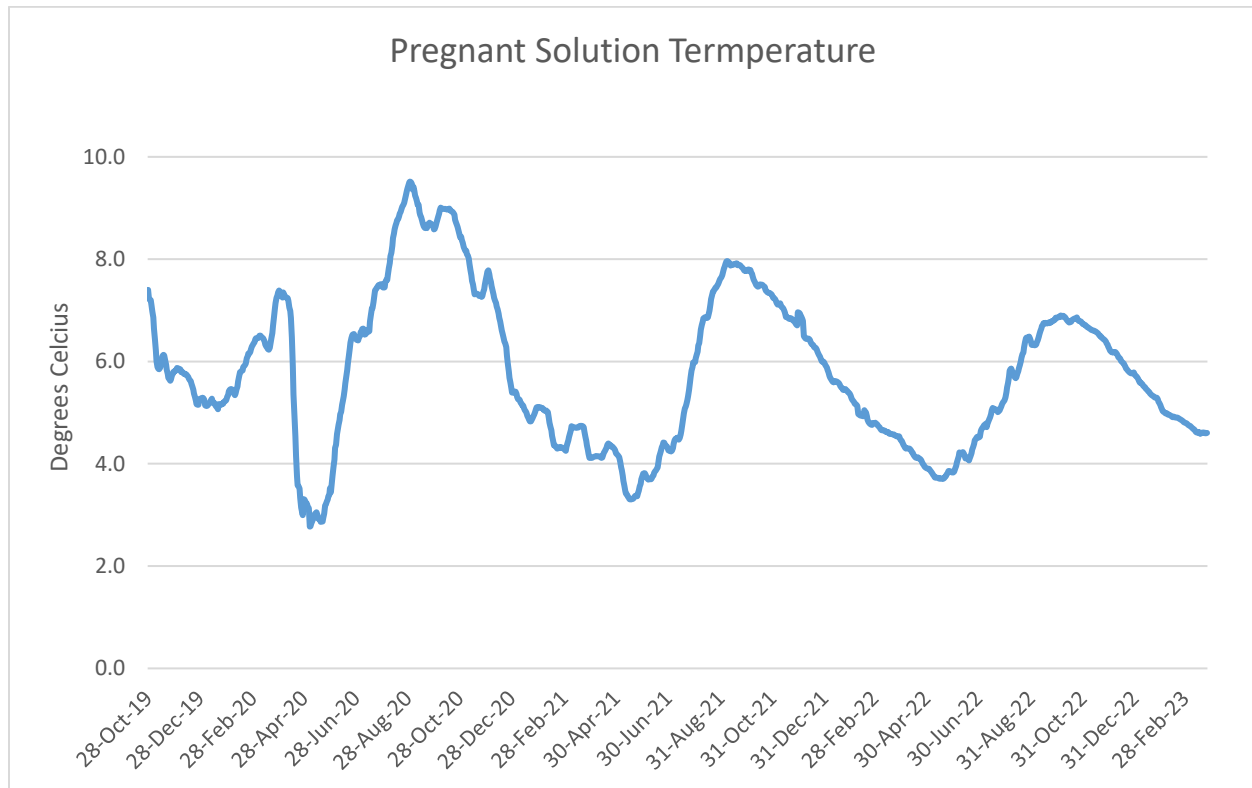
### 17.2.4.2 Pregnant Solution

The pregnant solution is pumped from the collection sump at the toe of the HLP to the ADR plant. The pipeline has been sized for a nominal flowrate of 2,070 m<sup>3</sup>/h. The pregnant solution pipe was run on surface for approximately 400 m to the plant from the HLP, and approximately 4 km from the secondary HLP.

### 17.2.4.3 Cold Weather Considerations

The Eagle Gold Mine is now into its fourth winter period of leaching. Project to date, there have been no material impacts to leaching during winter months. Solution temperature as depicted in Figure 17-6, illustrate that pregnant solution temperatures have never reached below 3°C and have typically been between 4°C and 8°C depending on the time of the year. As the PLHP has matured and grown, the range of temperature fluctuations has decreased and is trending towards a steady state temperature of around 5.5°C.

Figure 17-6: Pregnant Solution Temperature Since Startup



Design provisions are incorporated to add and maintain heat in the process solutions applied to the heap. Since ore particle size, ambient temperatures, delivered ore moisture, and snowfall can have an effect on stacking in winter, the Mine has adopted the following mitigation measures:

- Selected an in-valley heap configuration to create a heat sink;
- Use of an in-heap solution pond for PLS storage;
- Utilization of a track dozer, equipped with a ripper assembly, to rip any frozen areas prior to stacking fresh ore over top;
- Heating of barren solution;
- In-heap temperature monitoring;
- Burying drip emitter lines;
- Heat-tracing and insulating the barren tank;
- Heat-tracing and/or insulating (or burying) pipelines; and

- Generators for back-up power supply to pumps and emergency process equipment.

#### 17.2.4.4 Events Ponds

Lined events ponds, external to the HLPs, were constructed to temporarily store excess process solution that may occur during upset conditions, freshet, and excess precipitation events. The solution contained in these ponds will be recycled back into the heap leach circuit when normal operation resumes. The ponds are sized to contain peak intensity storm events as well as repetitive wet years and/or periods. The pond construction includes a leak detection and recovery system underneath the main liner system.

#### 17.2.4.5 Leachate Solution Collection System

The HLP consists of an engineered liner system in the heap leach facility with the lower section of the HLP acting as an in-heap pond for the primary storage of PLS.

Located above this liner system is a 0.6 m (minimum thickness) layer of drainage rock (all passing 38 mm) which was designed to transmit the PLS to the collection system. This drainage rock serves to efficiently transmit the PLS and protect the primary liner from damage by rocks and/or equipment which might otherwise contact the liner.

The leachate collection piping system consists of a piping network embedded within the drain rock. The collection pipe network consists of a series of drainpipes, spaced, and arranged in a “herringbone” pattern around the larger pipes that conveys the collected fluid (i.e., PLS and storm water flows).

Within the PLS sump, there are three submersible pumps operating and two spares available. The pregnant pumps are each installed with 112 kW motors. Each pump is inserted into an angled pipeline, which connects the collection lines, mechanical pump, and related electrical and control components. These pumps serve to convey the pregnant solution to the process plant.

#### 17.2.4.6 Leak Detection and Recovery System

There are two safety systems installed and designed to detect, contain and pump back any leakage resulting from a possible liner failure before any contamination can reach the groundwater.

A leak detection and recovery system (LDRS) were installed between the upper and lower geomembrane liners, from the sump level to the embankment crest, where the hydrostatic head is greatest. If a leak were to occur, the drain system would collect the PLS via drainpipes, connected to a collection monitoring sump, located in the HLP. The sump was installed with monitoring instruments to provide early alerts to the presence of flow. Collected solution would be pumped back to the ADR plant or the HLP.

There is a secondary drainage system below the liner system throughout the entire HLP area. A leak would trigger an early alert via monitoring instruments. The drain system would collect the PLS, direct it to an

external collection monitoring sump located downstream of the events ponds, and then pump it back to the ADR plant or the HLP.

### 17.2.5 Process Plant

Pregnant solution is pumped from the HLP sump to the ADR plant. The system is constructed to distribute flow between the two trains of cascading carbon-in-columns (CIC). The solution passes down each train with carbon flowing countercurrent up the train. The carbon collects the gold as it moves from the last column to the first column, depleting the solution of residual gold by the end of the train. The barren solution flows from the last carbon column to the barren solution sump and is pumped back to the HLP.

### 17.2.6 Carbon Adsorption

The carbon adsorption circuit consists of two trains of five cascading carbon columns. The pregnant solution is pumped to the carbon adsorption circuit across a stationary trash screen for removal of any debris from the HLP. The solution flows countercurrent to the movement of carbon from column 1 to column 5. The solution overflow from the final column discharges onto a safety screen in order to recover any carbon that may be flushed from the circuit. The barren solution discharges from the safety screen into the barren solution sump. Cyanide solution, caustic solution, antiscalant and make-up water are added to the barren sump as needed. On average, 8 t of loaded carbon from the first carbon columns (4 t from each train) are pumped to the acid wash and stripping circuits each day. The carbon is advanced up the train, with reactivated carbon added to the fifth column.

### 17.2.7 Desorption and Gold Refining

#### 17.2.7.1 Carbon Acid Wash

The loaded carbon is transferred to the acid wash vessel and treated with a dilute nitric acid solution to remove calcium, magnesium, sodium salts, silica, and fine iron particles. The dilute acid solution is pumped into the bottom of the acid wash vessel, exiting through the top of the vessel back to the dilute acid tank, with solution recirculating until the wash is complete. At the conclusion of the acid wash cycle, a dilute caustic solution is used to neutralize the acidity.

#### 17.2.7.2 Carbon Stripping (Elution)

After acid washing, the loaded carbon is transferred to the strip vessel where the adsorbed gold is removed using the ZADRA process. The strip vessel holds approximately 8.0 t of carbon. During elution, solution containing approximately 1.5% sodium hydroxide and 0.2% sodium cyanide, at a temperature of 140°C and 450 kilopascals (kPa), is circulated through the strip vessel. Solution exits the top of the vessel

and is cooled below its boiling point by the heat recovery heat exchanger. Heat from the outgoing pregnant solution is transferred to the incoming cold barren solution.

A diesel-powered boiler is used as the primary solution heater to maintain the barren solution at 140°C. The cooled pregnant solution flows by gravity to the electrowinning cells. At the conclusion of the strip cycle, the stripped carbon is pumped to the carbon-regeneration circuit.

### 17.2.7.3 Carbon Regeneration

The stripped carbon from the strip vessel is pumped to the vibrating dewatering or carbon-sizing screens. The dewatering screen removes the transfer water and fine carbon particles ahead of the regeneration kiln. Oversize carbon from the screen discharges by gravity into the carbon-regeneration kiln-feed hopper. Screen undersize carbon drains into the carbon-fines tank and is filtered and bagged for disposal. The 333 kg/h diesel-fired horizontal kiln treats 8.0 t of carbon per day at approximately 650°C. The regeneration-kiln discharge is transferred to the carbon quench tank by gravity, where it is cooled and pumped back into the CIC circuit.

To compensate for carbon losses by attrition, new carbon is added to the carbon attrition tank. New carbon and fresh water are mixed to break off any loose pieces of carbon prior to being combined with the reactivated carbon in the carbon holding tank, which is transferred into column 5 of each CIC train.

### 17.2.7.4 Refining

Pregnant solution flows by gravity from the elution vessel to a secure gold room. The solution flows through three electrowinning cells operating in parallel. Gold is plated onto knitted-mesh steel wool cathodes in the electrowinning cells. Loaded cathodes are power washed to remove the gold-bearing sludge. The sludge is filtered to remove excess moisture and then dried in an oven. From the oven, the gold material is mixed with fluxes consisting of borax, silica, nitre, and soda ash before being smelted in an induction furnace to produce gold doré and slag. The doré is transported to an off-site refiner for further purification. Slag is processed to remove entrained gold prills and re-melted in the furnace. The doré bars are weighed and stored in a vault prior to secure off-site transportation.

## 17.2.8 Reagents

Sodium cyanide briquettes are delivered to site in sea containers holding 1 t super sacks. The briquettes are mixed with caustic and water in the cyanide mix tank and subsequently transferred to the cyanide solution storage tank. The concentrated cyanide solution is added to the barren tank at a rate of 0.35 kg/t of ore. Cyanide is used in the carbon strip circuit at a concentration of 0.2%.

Sodium Hydroxide (caustic) is supplied to site in 25 kg bags. The caustic is mixed and stored for distribution to the cyanide mixing, acid wash, and strip circuits. The caustic is used to adjust pH of the solution prior



to mixing cyanide. It is also used to neutralize the acid in the acid wash circuit. A solution of 1.5% caustic is mixed with barren solution in the carbon strip circuit for elution.

Nitric acid and antiscalant solutions are supplied to site in 208 L drums and 1 t totes, respectively. The solutions are metered directly from the drums and totes for distribution in the plant.

Quicklime is delivered to the site in bulk by trucks and stored in a 200-t lime silo. The lime is delivered at a rate of approximately 1 kg/t of ore by screw feeder onto the heap leach feed conveyor during heap loading operations.

### 17.2.9 Laboratory

The assay and metallurgical laboratory are equipped to perform sample preparation and assays by AA, fire assay, and cyanide (CN) soluble analyses. The facility is designed to prepare and analyze approximately 3,000 samples per month. The laboratory facility supports exploration, mining, minor environmental sampling, total suspended solids (TSS) monitoring, and process operations. Most of the environmental samples are sent off-site to an accredited laboratory for third party reporting. The laboratory has space available for process optimization and test program as well.

## 18 PROJECT INFRASTRUCTURE AND SERVICES

### 18.1 General Site Arrangement

The Eagle Gold Mine development included the construction of various ancillary facilities and related infrastructure the locations for which were selected to take advantage of local topography, to accommodate environmental considerations, and reduce capital and operating costs.

Current mine facilities and infrastructure include:

- A primary heap leach pad, comprised of a sump, a lined storage area, an in-heap storage area, pumping wells, events ponds, diversion ditches, leak detection, recovery, and monitoring systems;
- Fresh water supply systems to treat and distribute process, fire, and potable water;
- Access and site roads; and
- Water treatment infrastructure, including potable and sewage treatment infrastructure.

Power supply and distribution, including:

- A 43.5 km long, 69 kV power supply line from the Yukon Energy Corporation's power grid McQuesten switching station, approximately 25 km southeast of the property;
- 13.8 kV power distribution from the mine site substation to all the facilities; and
- Process control and instrumentation communication systems.

Ancillary facilities, including:

- Warehouse, cold storage, and laydown areas;
- Mine dry;
- Administration buildings;
- On-site fuel storage for diesel, gasoline & propane;
- On-site explosive storage and magazines;
- Assay laboratory;
- Temporary and permanent camp accommodations complete with recreation area, commissary, first aid and laundry facilities;

- An incinerator;
- Guard shack and entrance gate;
- Truck shop, with four maintenance bays and one full size wash bay; and
- Water Treatment Plant (WTP).

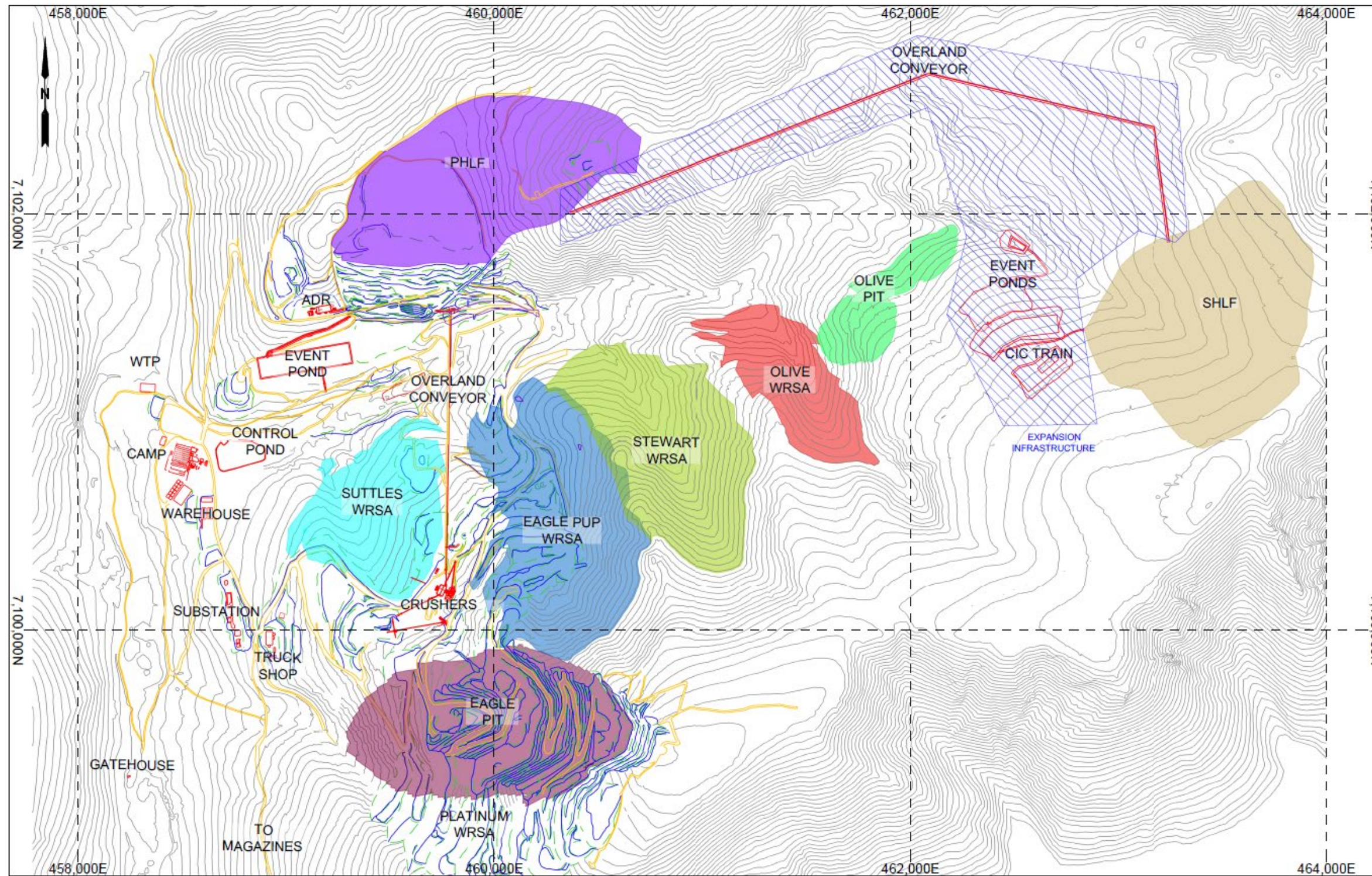
Future mine facilities and infrastructure will include:

- A secondary heap leach pad, comprised of a sump, a lined storage area, an in-heap storage area, pumping wells, events ponds, diversion ditches, leak detection, recovery, and monitoring systems;
- An additional CIC train and building for the secondary heap leach pad; and
- An overland conveyor from the termination of existing conveyors to the second heap leach.

The location of the main project facilities is shown in Figure 18-1.



Figure 18-1: Project Infrastructure



Source: VGC (2023)



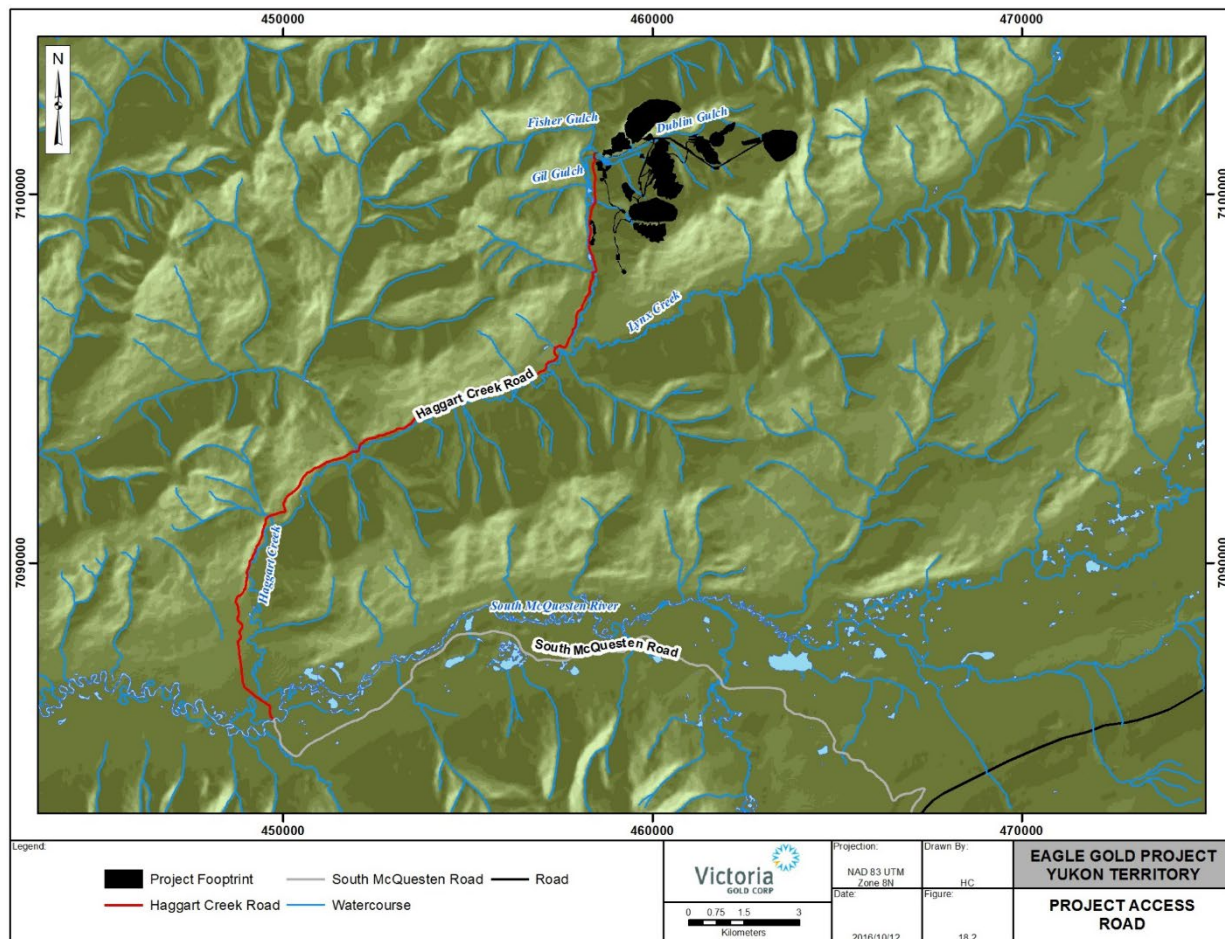
## 18.2 Roads

### 18.2.1 Access Road

Paved and gravels roads—including the Silver Trail Highway (Highway 11), the South McQuesten Road and the Haggart Creek Road (HCR) provide access to the project site (Figure 18-2). Some work was undertaken during construction to upgrade sections of the HCR.

Victoria Gold assumes responsibility for maintenance of the HCR throughout the LOM, and during closure; however, funding and/or work share agreements with the Yukon Department of Highways and Public Works are being utilized by Victoria Gold for maintenance activities and are assumed to continue.

Figure 18-2: Project Access Road



Source: VGC (2023)

## 18.2.2 Site Roads

A network of site roads has been and will continue to be constructed throughout the mine site as required. Roads are divided into three categories depending on use: haul roads, service roads, and access roads. Haul roads currently include the Eagle pit haul road, which connects the Eagle pit to the primary crusher, and roads required to connect the pit to the waste rock storage areas.

The main haul roads have a running width of three times the width of a haul truck with a 2 m high berm, where a drop-off exists above 3 m adjacent to the road. Ditching is provided on the side of the road for drainage. The road sub-base and base requirements are governed by the quality of the subgrade. The maximum haul road grade is 10%. Secondary haul roads are constructed as required and built to suit conditions and use.

Service roads with a running surface of two times the width of a haul truck, and 2 m high berms, connect the Eagle pit to the truck shop area for maintenance purposes. Ditching is provided adjacent to this road as required for drainage. The maximum grade of these roads is 10%.

Access Roads, with 8.5 m running surfaces are constructed to connect other areas of site such as the explosive and magazine storage areas and the ADR plant.

Additional access roads, e.g., for maintenance of the overland conveyor have sufficient width to allow for vehicle access. Ditching and surface grading is provided for all site roads as required, to facilitate drainage and safe usage.

## 18.3 Buildings and Structures

### 18.3.1 Fuel Storage Facilities

Diesel fuel, primarily for the mine fleet and power generation, is stored within a bermed containment area located near the power generating plant.

Diesel and propane storage facilities are located at the ADR plant as the fuel sources for the solution heating boilers and the regeneration kiln.

Diesel and gasoline for light vehicles, and propane storage tanks for the camp facilities, are located adjacent to the permanent camp.

## 18.3.2 Explosives Storage

### 18.3.2.1 On-site Explosives Manufacture and Storage

The explosives manufacture plant, a pre-engineered building provided by the explosives supply contractor, is located southwest of the Eagle pit. Access to the plant is controlled by a locked gate to prevent unauthorized access.

### 18.3.2.2 Explosives Magazine Storage

The explosives magazines, prefabricated Sea Can-type structures, provided by the explosives supply contractor are located south the explosive manufacturing facility. Access to the area is controlled by a locked gate.

## 18.3.3 Pre-Engineered Buildings

Pre-engineered buildings have been constructed for the Primary Crusher building, the Secondary / Tertiary Crusher Building, the ADR plan, and the Truck Shop.

Building construction comprises a structural steel frame, steel girts and purlins and intermediate structural members. Walls are either uninsulated or insulated metal wall panels with insulated roof panels.

## 18.3.4 Modular Buildings

Modular buildings have been used for the accommodation facility, administration offices, assay lab, ERT building and incinerator.

Each building includes heating, ventilation, and air conditioning (HVAC), electrical, piping, fire detection and fire suppression systems as required.

## 18.4 Power

### 18.4.1 Utility Power Supply

The primary electric power for the Eagle Gold project is provided from the Yukon Energy Corporation (YEC) Grid. YEC generates most of the Yukon's electricity supply, and sells wholesale power to ATCO Electric Yukon, and directly to customers in several communities, plus directly supplies large industrial customers. YEC's primary source of power is hydro generation with facilities including the Whitehorse hydro plant,

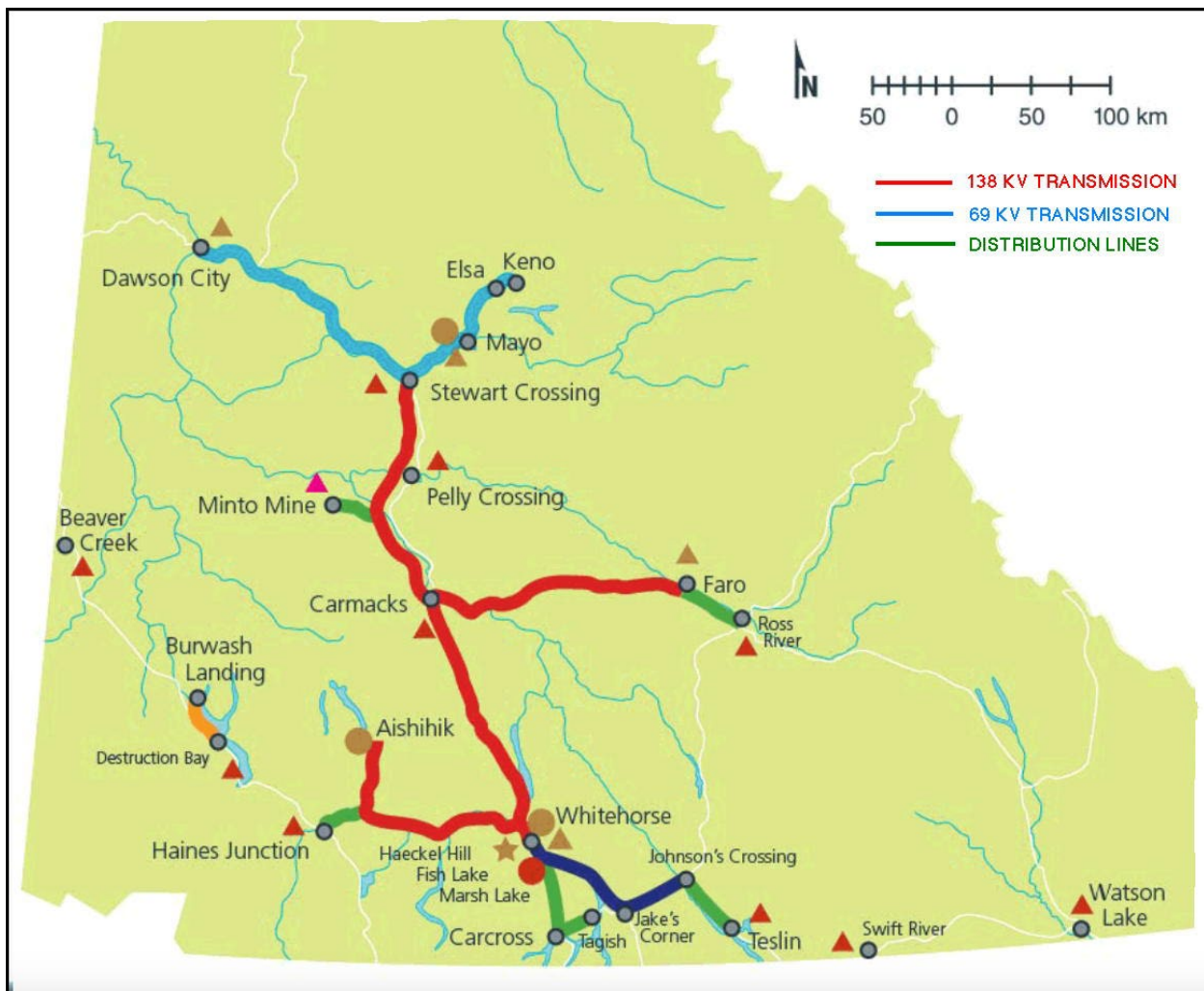


the Aishihik hydro plant, located about 110 km northwest of Whitehorse, and the Mayo A and B hydro plants (Figure 18-3).

YEC has back-up diesel generation primarily in Whitehorse but also has facilities in Faro, Dawson, and Mayo. YEC also has LNG fueled generators in Whitehorse.

YEC owns and operates the Yukon power grid. The grid runs from Dawson YT, its most northern region on the grid, to Whitehorse, its most southern connection.

Figure 18-3: Yukon Electricity Grid (Map by YEC)



Source: YEC (2019)

## 18.4.2 Project Transmission Line

Electric power for the project is provided from the YEC 69 kV transmission line between Mayo and Keno via the new McQuesten switching station, which was constructed as part of the Eagle Gold Mine capital project. The switching station is located at the turn-off from the Silver Trail Highway to the South McQuesten mine access road.

The dedicated 69 kV transmission line for the mine runs 43.5 km from the McQuesten switching station, to a 69 to 13.8 kV step down substation located at the mine site. The line generally runs parallel to the existing access road. It follows the South McQuesten Road to the crossing of the South McQuesten River, and then along the Haggart Creek Road to the mine site. There are several sections where the line deviates somewhat from the road in order to improve constructability, contribute to safety, and improve the long-term reliability of the circuit, while at the same time reducing costs.

## 18.4.3 Eagle Gold Main Substation

The site main 69 kV step-down substation contains an incoming line termination structure, a main incoming circuit switcher (combined breaker and motorized isolating switch) and areal 69 bus work to deliver 69 kV power to two step-down transformers, each with a primary circuit switcher. The transformers are connected to the secondary 13.8 kV metalclad switchgear via cable bus. This switchgear, located in the diesel power plant modular E-house, includes the transformer main secondary circuit breakers, and in addition to the diesel plant generator circuit breakers, it includes circuit breakers for site 13.8 kV power distribution, via overhead lines to the crushing and processing plants, pumping installations, and ancillary facilities.

The two main power transformers are outdoor, oil filled type, designed to CSA Standard C88. They are each rated 69 kV to 13.8 kV, 10/13.5/15 MVA, ONAN/ONAF1/ONAF2 with automatic on-line tap changers. At their maximum fan cooled rating, full redundant capacity is provided. Included are 69 kV station class surge arresters for each transformer and for the incoming line.

Each main power transformer has a secondary neutral grounding resistor, and thus the 13.8 kV distribution system is 3-wire high resistance grounded, providing for both increased safety and system availability, as is standard for mining installations. All loads on the 13.8 kV system are 3 phase 3-wire, or if single phase, utilize two bushing transformers with a 13.8 kV primary rating.

The E-house also mounts a 120-volt DC battery bank for use by both the power plant and substation switchgear and houses the main substation control and protection panel. Note that the utility metering will be located at McQuesten.

An automatically switched 13.8 kV power factor correction capacitor bank is fed from the E house to provide power factor correction as required by YEC, and to assist in voltage control, particularly during starting of large motors.

#### 18.4.4 Diesel Generation

Three modular, diesel generator sets and associated modular E houses are installed at the project site to provide 4.95 MW continuous power for standby (emergency power) to critical loads such as for the accommodations, offices etc. and for essential process loads, in particular to provide freeze protection. The generators also provide supplemental generation as may be required, especially in winter.

The diesel generator set modules are fully insulated with Arctic rated heating and ventilating systems. Each unit includes a day tank, starting batteries, a local control panel, motor control centres (MCC) and other accessories. The E-house contains the generator circuit breakers and the master protection and control equipment.

The diesel generating station central E-house also includes the main substation transformer secondary 13.8 kV circuit breakers, site distribution circuit breakers, the station 120-volt battery bank, the station protection and control panels, and the generating plant and substation combined station service transformers. Separate switched grounding resistors are provided for emergency operation. The station 13.8 kV switchgear is split into two sections (with a normally closed tie breaker) to provide additional emergency serviceability. Mounting the substation equipment in the generating plant E-house eliminated the need for a second E-house and reduced field wiring and installation costs.

The diesel plant is PLC controlled and designed for automatic unattended operation, with power import / export controls for paralleling with the YEC system. Human Machine Interface (HMI) operator stations are included as well as hard wired emergency operator controls. A fibre optic connection is provided to the process plant so that a remote monitoring HMI can be located there. It is to be noted that the station includes the additional functionality as required, to operate continuously in parallel with the utility, as may be required at times.

#### 18.4.5 Site Power Distribution

##### 18.4.5.1 General

Large-capacity power loads are serviced by pad-mounted transformers and dedicated electrical buildings housing switchgear, MCCs and control systems equipment. Small-capacity power loads are be serviced by pole-mounted transformers and electrical and control equipment installed in rooms within the administration, camp, and other buildings, or in outdoor-rated enclosures.

##### 18.4.5.2 13.8 KV

Power is distributed through the site at 13.8 kV via overhead power lines to the primary and secondary / tertiary crusher buildings, the ADR building, the HLP, the camp and other support areas.

#### 18.4.5.3 4,160 V

Large motors such as crushers, barren and pregnant solution pumps and large conveyors are fed from 4,160 V. This voltage is also be used for distribution to local 600 V MCCs via transformers.

#### 18.4.5.4 600 V

Low voltage MCC, switchboards and panels are provided as required throughout the facility. Process loads are powered via 600 V MCCs which are located in close as proximity to the associated equipment.

### 18.5 Water

#### 18.5.1 Water Supply

##### 18.5.1.1 Water Supply Infrastructure

The freshwater system supplies fresh water to the ADR facility area and the camp facility.

Fresh water is pumped from an aquifer via ground wells located in the Dublin Gulch valley, to a common process water / fire water tank located near the ADR building and to the water treatment plant at the camp.

#### 18.5.2 Water Management

The water management infrastructure includes all structures related to the collection, diversion, conveyance, and storage of surface water passing through the project footprint.

The water management infrastructure items are listed in the sub-sections below.

##### 18.5.2.1 Water Diversion Structures

Sources of water that have not been influenced by mining activities (non-contact water) are diverted around mining disturbances. Separation of contact and non-contact waters reduces the downstream impact of mining activities, and it is more economical to minimize the quantity of water that requires treatment.

The network of diversion structures includes long term fixed diversion ditches, and temporary diversion ditches. Each of these structures is described below.

- Non-contact Water Diversion Ditches – a number of diversion ditches have been established during construction to divert non-contact runoff. These channels are typically V-shaped or trapezoidal in cross-section, with rock or vegetated channel lining to prevent erosion. Additional erosion protection is provided as required at slope breaks and channel bends;
- These ditches are generally sized to convey the 10-year 24-hour peak storm for the watershed size; however, ditches located upslope of key mine infrastructure are sized to convey the runoff from a 100-year 24-hour storm event;
- Temporary Non-contact Water Diversion Ditches – at various stages of the mine life temporary (generally consisting of six months to a year) diversions will be required. Construction and maintenance of these structures will be consistent with that of permanent diversion structures;
- Contact Water Interception Structures – contact water is intercepted down gradient of areas that have been disturbed by construction and mining activities. These facilities are optimally located at converging topographic low points to facilitate drainage by gravity. However, they may consist of side-hill ditches that intercept overland sheet flow. These channels are typically V-shaped or trapezoidal in cross-section with rock or geosynthetic channel lining to prevent erosion. Additional erosion protection as required is added at slope breaks and channel bends;
- Similar to diversion ditches, both permanent and temporary interceptor ditches are required;
- Contact Water Interceptor Ditches – typical interceptor ditches include roadside swales that intercept sediment-laden water from heavily trafficked areas. Runoff collected by these interceptor ditches is generally routed to the Lower Dublin Gulch Pond; and
- Temporary Contact Water Interceptor Ditches – at various stages of the mine life temporary (generally consisting of six months to a year) interceptor ditches will be required. Construction and maintenance of these structures will be consistent with that of permanent interceptor structures.

#### 18.5.2.2 Water Storage

The Lower Dublin Gulch Pond is designed to:

- Accumulate all contact runoff and seepage generated in the areas disturbed by mining activities;
- Provide quiescent storage to promote sedimentation; and
- Harvest contact water for re-use in the heap leach process circuit.

The Lower Dublin Gulch Pond is equipped with a primary riser-pipe outlet to prevent the release of sediment-laden water, prior to discharge to the environment. Manually operated slide gates allow the

mine operators to hold back collected runoff when poor water quality prohibits discharge to the environment, or when additional site water is required for process make-up. Secondary discharge capability is provided by riprap-armoured, broad-crested weirs and spillways notched into the pond. The outlet works provide the capability to safely discharge pond water that will accumulate during extreme runoff events or emergency events.

This approach is consistent with general industry standard practices for mine water management.

### 18.5.3 Water Treatment

Active (mechanical and chemical) water treatment facilities are provided as a part of the project and include:

- Potable water treatment plant (PWTP);
- Septic system with leach field for sanitary sewage;
- Cyanide detoxification to treat excess water discharged from the HLP; and
- MWTP to treat site drainage and to further treat HLP discharge after it is processed through the CDP.

Cyanide detoxification and MWTP will operate until the water quality of site and HLP drainage is suitable for discharge through passive treatment facilities while maintaining compliance with water quality discharge standards. Water management practices will be used to provide for compliance with water quality discharge standards.

## 18.6 Process Control and Instrumentation

### 18.6.1 Overview

The plant control system consists of a Distributed Control System (DCS) with PC based Operator Interface Stations (OIS) located in control rooms at the primary crusher and the main control room in the ADR plant.

The DCS, in conjunction with the OIS, perform all equipment and process interlocking, control, alarming, trending, event logging, and report generation. DCS Input/Output (I/O) cabinets are located in electrical rooms throughout the plant and interconnected via a plant wide fibre optic network.

Field instrumentation consists of microprocessor based “smart” type devices. Instruments are grouped into process areas and wired to local field instrument junction boxes located within those areas. Signal trunk cables connect the field instrument junction boxes to DCS I/O cabinets.

Intelligent type MCCs are located in the electrical rooms throughout the plant. MCC remote operation and monitoring is via industrial communications protocol interface to the DCS.

Programmable logic controllers or other third-party control systems supplied as part of mechanical packages are interfaced to the plant control system via Ethernet network interfaces.

## 18.6.2 Communication

A number of integrated systems are provided for on- and off-site communication at the Eagle Gold project site.

A trunked radio system consisting of handheld, mobile and base radios provide wide area coverage for on-site communication by operations.

The VoIP telephone system features four-digit dialing within the mine site, access code-based long-distance calling, and voice mail services. For connectivity, the telephone system utilizes the site local area network (LAN).

The site LAN provides consolidated services into a single network infrastructure. Computers, cameras, telephones, and any IP device requiring connection to the corporate network utilize the LAN. Further to the hardwired portion of the LAN, wireless access points are placed in common areas such as the recreation hall, administration area, dining area and mine offices.

External voice and data communications are provided via the fiber optic line to the McQuesten Switching Station then over microwave radio link.



## 19 MARKET STUDIES AND CONTRACTS

### 19.1 Market Studies

The principal commodity from Eagle operations is gold doré, which is freely traded on the world markets at spot prices that are widely known, so that prospects for sale of any production are virtually assured. Gold doré bars are shipped from site to major refineries. Eagle currently has a refining agreement with the Royal Canadian Mint and a private refining company. The terms and conditions are consistent with standard industry practices. Refining charges include treatment and transportation. Transportation of the doré to either refinery is contracted out by the respective refineries. Responsibility for the doré changes hands at the gold room gate upon signed acceptance by the Refiner or its Transport Provider.

### 19.2 Commodity Prices

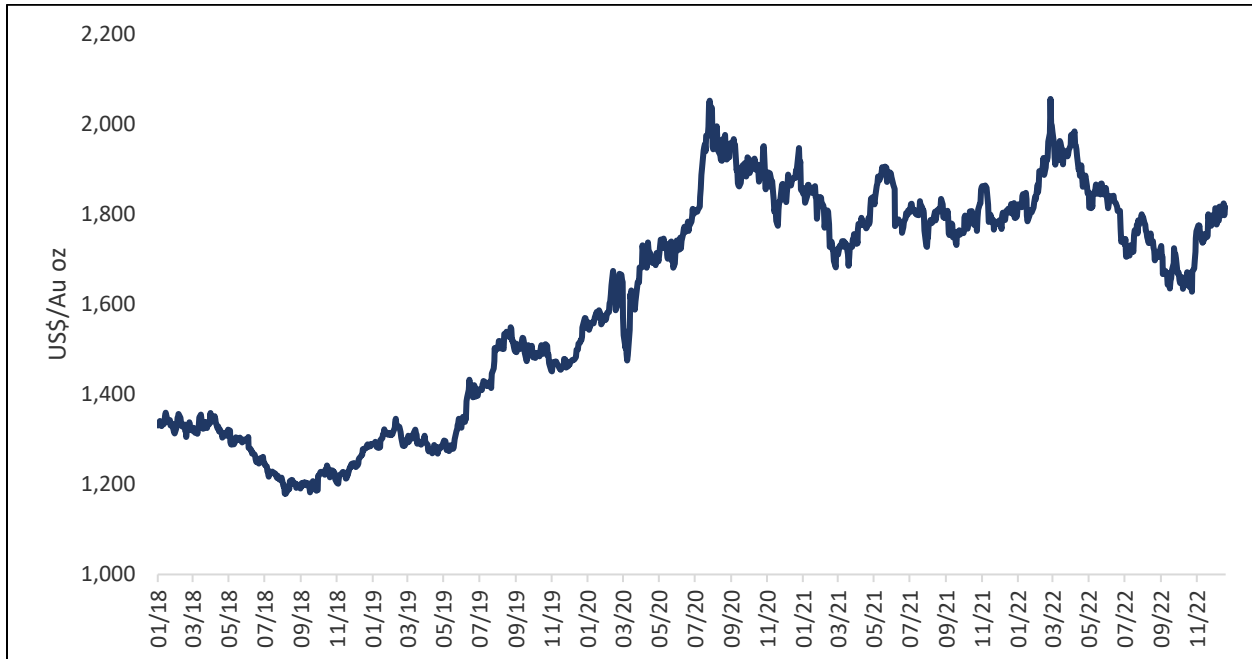
Commodity prices used for Mineral Resources, Reserves, and Economics are set by Victoria Gold Corporate. Metal price assumptions for the project economics herein this report is based off the three-year trailing average for gold, which was at US\$ 1,791/oz as of the effective date of this report. Conservatively, a gold price of US\$ 1,700/oz was selected for the economics.

Metal price assumptions used for the Mineral Resource and Reserves estimates are as follows:

- Mineral Resources: US\$ 1,700/oz; and
- Mineral Reserves: US\$ 1,550/oz.

Both the Mineral Resources and Mineral Reserves as well as the project economics utilized an exchange rate of 0.75 US\$/C\$.

Figure 19-1: Spot Gold Prices



Source: Capital IQ (2023)

### 19.3 Contracts

In addition to the contract mentioned in Section 19.1, there are a variety of major contracts currently in place at the Eagle Gold Mine operation. These contracts include services such as the following: camp catering, explosives management, transportation and logistics, health & security services, survey support, reagent supply, earthworks projects, and fuel supply. Contracts are typically negotiated on an annual basis, and terms are standard of similar contracts in Canada and the Yukon.

### 19.4 Comments on Market Studies and Contracts

The QP note the following:

- Metal prices are set by Victoria Gold’s senior management and are appropriate for the commodity and for use in Mineral Reserves and Mineral Resources assumptions; and
- The major contracts are typical and consistent of an operating mine with a camp in Canada.

## 20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACTS

### 20.1 Environmental Assessment and Permitting

#### 20.1.1 Overview

Prior to construction or operational activities taking place in Yukon, a mining project essentially has to complete three major steps: the collection of a robust environmental and socio-economic baseline dataset; the successful completion of an assessment and a positive record of decision regarding potential effects of the project on valued environmental and socio-economic components; and the application for and acquisition of regulatory approvals.

Victoria Gold concluded all three major steps required for the existing Mine operations and has received positive Decision Documents upon the completion of the assessment of the project under the *Yukon Environmental and Socio-Economic Assessment Act* (YESAA) in 2013. Victoria Gold also holds both a Quartz Mining License and a Type A Water Use License that collectively allow for the construction, operation, and closure of the Eagle Deposit.

#### 20.1.2 Completed Environmental Assessment

In December 2010, Victoria Gold submitted a project proposal to the Yukon Environmental and Socio-Economic Assessment Board (YESAB) to begin the environmental assessment process of the Eagle Gold Mine. The project assessed by the YESAB included consideration of the construction and operation of the Eagle open pit, the Ann Gulch HLP, the two WRSAs located north and west of the open pit, and all facilities and activities required to support mining operations.

On February 19, 2013 the Executive Committee of the YESAB concluded its assessment of the project pursuant to the YESAA. As a result of the assessment, the Executive Committee recommended to the Decision Bodies that the project be allowed to proceed without a review, subject to the terms and conditions identified in the Screening Report and Recommendation for Project Assessment 2010-0267.

On April 6, 2013 Yukon Government (YG) exercised its authority as per YESAA s.75 or s.76 to issue a Decision Document for the project. The YG Decision Document, premised on the commitments made by Victoria Gold as detailed in the Screening Report and Recommendation, agreed with the 123 terms and conditions (recommendations) proposed by the YESAB Executive Committee without variation.

On April 19, 2013 a consolidated Decision Document was completed by federal decision bodies as required under YESAA s.74(1). Fisheries and Oceans Canada, Natural Resources Canada and Transport Canada, in their capacity as the federal decision bodies identified for the project and pursuant to s.76(1)(a) of YESAA,

issued a Decision Document which accepted the recommendation that the project be allowed to proceed without a review, subject to the terms and conditions identified in s. 19 of the Screening Report and Recommendation.

The federal decision bodies were in agreement with the rationale for the recommendation as expressed in the Screening Report and Recommendation.

The completion of the environmental assessment allowed Victoria Gold to enter the regulatory phase for the project.

### 20.1.3 Quartz Mining License

On September 20, 2013, the YG Department of Energy, Mines and Resources (EMR) issued a Quartz Mining License (QML) for the project. The scope of authorization involves the development, production, reclamation and closure of the Eagle open pit mine and gold extraction through heap leaching involving ore crushing, cyanide leaching and a carbon adsorption, desorption, and recovery in accordance with the terms and conditions set out in the QML and the approved plans listed in the QML.

The QML is structured such that additional or updated Mine plans and designs can be submitted to EMR, and subsequently approved under the QML, if they remain within the scope of activities considered through the environmental assessment. The construction and operational activities related to the Eagle deposit undertaken to date have been approved under the QML.

Mining of the Olive deposit, construction and operation of the secondary heap leach pad, additional waste rock dumps, and associated facilities that are not currently considered in the QML will require amendment to the QML upon receipt of positive Decision Documents through the YESAA process.

### 20.1.4 Type A Water Use License

On December 3, 2015, the Yukon Water Board issued a Type A Water Use License (WUL) for the project. The Type A WUL specifies the quantity of water that can be used for all aspects of the project and includes criteria that must be met for discharge of water from the project site. The Type A WUL includes the approval of a range of plans and activities that are also contemplated in the QML and affirms that the plan for construction, operation and closure of the project represents industry standard practice and can move forward subject to certain terms and conditions.

On August 23, 2019, the Yukon Water Board issued an amended Type A WUL for the Project. The amended Type A WUL authorizes the construction and operational activities related to the Eagle Gold deposit.

Both the Type A WUL and QML require the submission of detailed reclamation and closure plans that describe the measures an applicant will take to return the mine site to functional and sustainable ecosystems. Victoria Gold has submitted these reclamation and closure plans which described the covering and revegetation of all disturbance land surfaces, except for the open pits, the draindown, rinsing

and treatment of the HLP, the treatment of mine contact waters, and the subsequent monitoring of the project to ensure closure objectives are met.

The reclamation and closure planning required by the regulatory agencies also requires the submission of estimates for a third party to undertake the proposed reclamation activities as described in Section 4.5.

### 20.1.5 Additional Environmental Assessment and Permitting

The YESAA includes certain triggers related to the alteration of a project which subsequently require additional assessment of a project to ensure environmental and socio-economic values can be protected. The inclusion of the Olive pit, the Stewart Gulch, Suttles Gulch, and Olive WRSA, increasing production rates beyond certain triggers, and the secondary HLP in the mine plan will mean that these activities must be assessed by the YESAB.

The assessment of these activities does not impact Victoria Gold’s ability to continue with previously assessed and licensed work (i.e., mining the Eagle Zone and the use of the WRSAs and HLP associated with Eagle material). Based on the current mine plan, the completion of the three major regulatory steps for mine approval in Yukon can feasibly be accomplished in advance of these facilities being required.

### 20.1.6 Additional Federal and Territorial Permits, Licenses and Authorizations

Table 20-1 provides a list of the federal and territorial act, regulations and guidelines that may apply to the project at various stages of development, operations, and closure.

Table 20-1: List of Relevant Federal and Territorial Acts, Regulations and Guidelines

Applicable Legislation/Regulations	Permit – Approval	Responsible Agency	Expiry Date
<i>Quartz Mining Act</i>	Quartz Mining License	Energy Mines and Resources, Yukon Government	September 20, 2040
<i>Quartz Mining Act</i> Quartz Mining Land Use Regulations	Class IV Mining Land Use Approval	Energy Mines and Resources, Yukon Government	January 18, 2032
<i>Waters Act</i> Waters Regulation	Water License – Type A	Yukon Water Board	September 10, 2040
<i>Waters Act</i> Waters Regulation	Water License – Type B	Yukon Water Board	September 10, 2040
<i>Highways Act</i> Highways Regulations	Work in Highway	HPW, Yukon Government	November 30, 2023 and July 4, 2043

Applicable Legislation/Regulations	Permit – Approval	Responsible Agency	Expiry Date
<i>Environment Act</i> Air Emission Regulations Special Waste Regulations Solid Waste Regulations Storage Tank Regulations Contaminated Sites Regulations	Air Emissions Permit Special Waste Permit Land Treatment Facility Permit Commercial Dump Permit	Environment Yukon, Yukon Government Community Services, Yukon Government	December 31, 2024 December 31, 2028
<i>Forest Protection Act</i> Forest Protection Regulations	Burning Permit	Community Services, Yukon Government	Annual permit
<i>Highways Act</i> Bulk Commodity Haul Regulations Highways Regulations	Highways Hauling Permit	HPW, Yukon Government	
<i>Yukon Historic Resources Act</i>	Archaeological Sites Permit	Tourism and Culture, Yukon Government	
<i>Dangerous Goods Transport Act</i>	Permit – certificate for transport of dangerous goods	HPW, Yukon Government	
<i>Explosives Act</i> and Regulations	Blasting permit, Magazine License, Factory License, ANFO Certificate, Purchase and Possession Permit, Permit to Transport Explosives	Natural Resources Canada, Explosives Regulatory Division and Minerals and Metals Sector	
<i>Occupational Health and Safety Act</i> Occupational Health & Safety Regulations	Blaster’s Permit	Workers’ Compensation Health and Safety Board	
<i>Species at Risk Act</i>	N/A	Environment Canada	
<i>Wildlife Act</i>	N/A	Environment Yukon, Yukon Government	
<i>Canadian Environmental Protection Act</i>	N/A	Environment Canada and Health Canada	
<i>Migratory Birds Convention Act</i> Regulations Respecting the Protection of Migratory Birds	N/A	Environment Canada	

Applicable Legislation/Regulations	Permit – Approval	Responsible Agency	Expiry Date
<i>Fisheries Act</i> Metal and Diamond Mining Effluent Regulations	N/A	Environment Canada	
<i>Building Standards Act</i> Electrical Protection Act	Building Permit, Plumbing Permit	Community Services, Building Safety, Yukon Government	Granted for mine camp
<i>Gas Burning Devices Act</i>	Gas Installation Permit Gas Burning Devices Permit	Community Services, Building Safety, Yukon Government	Granted for mine camp
<i>Boiler and Pressure Vessel Act</i>	Pressure Vessel Boiler Permit	Community Services, Building Safety, Yukon Government	Granted for mine camp
<i>Yukon Public Health and Safety Act</i> Regulations Respecting Public Health	Compliance with Public Health Regulations	Health and Social Services, Environmental Health Services	

Source: VGC (2023)

## 20.2 Environmental and Socio-Economic Baseline Studies

From 2007 onwards, Victoria Gold and its predecessor, StrataGold has prepared (and now maintains) a comprehensive set of baseline studies for climate, hydrology, soils, surficial geology, vegetation, wildlife, groundwater, water quality, aquatic ecology, socio-economic conditions, historical, and paleontology resources. The baseline characterization included historical data sets collected from 1993 to 1996 and was supported by regional analyses. As the Eagle Gold Mine moved into construction in 2017 and more recently (July 2019) into mine operations, additional water and climate data are currently being collected. While some of this data is still indicative of baseline conditions, much of the data now collected is more reflective of an operating mine.

Data collection programs have covered various geographical extents, depending on the component under study. In general, each technical discipline defined local and regional study areas to frame the spatial scope of their assessment. Data collection was focused within the footprint and surrounding areas of the project for the local study areas; regional study areas were defined based on information such as species ranges, watershed boundaries, geologic units, and community administrative boundaries, depending on the component under study.

To support the assessment and licensing of components of the project related to the Olive Zone, it is anticipated that some additional work in the disciplines of hydrology, water quality, groundwater flow and groundwater quality will be required.

Victoria Gold commenced the additional data collection in 2016 to support the inclusion of the Olive Zone and associated facilities in future amendments to their existing permits.



## 20.2.1 Climate

The Dublin Gulch area is characterized by a “continental” type climate with moderate annual precipitation and a large temperature range. Summers are short and can be hot, while winters are long and cold with moderate snowfall. Rainstorm events can occur frequently during the summer and may contribute between 30 to 40% of the annual precipitation. Lower elevations are typically snow-free before May, while snow remains in higher elevations until mid-June. Frost action may occur at any time during the spring, summer or fall.

Regional climatic data are available from several stations in the area including Mayo, Keno Hill, Dawson, Klondike, and Elsa, as well as other relevant long-term data from other areas within Yukon (e.g., Whitehorse). Historical climatic information of the Project site was available from 1993 to 1996. Climate data collection was renewed in August 2007 at the Potato Hills climate station site (1,420 masl), and a second climate station (Camp station - 778 masl) was installed in August 2009 near the existing camp. Both stations remain active. Climate data from the Potato Hills and Camp climate stations are collected at 15-minute intervals.

### 20.2.1.1 Temperature

The recorded mean annual temperatures have ranged from -1.9 to -5.4°C for the Camp station and -2.7 to -5.1°C for the Potato Hills Station. July is typically the warmest month with mean July temperatures at the Camp station ranging from 12.2 to 15.2°C and from 8.1 to 13.6°C at the Potato Hills station during the period of record. The coldest temperatures are generally experienced in January and the Camp station recorded a range of monthly mean temperatures from -13.1 to -26.8°C and the Potato Hills station recorded a range of monthly mean temperatures of -9.2 to -19.8°C for the month of January (Lorax 2022).

During the period in which the Potato Hills and Camp stations have collected data simultaneously, the higher Potato Hills station has generally reported colder temperatures than the lower Camp station; however, autumn and winter temperature inversions do occur at the site as is common in mountainous regions, and the Camp station has a much larger range in recorded temperature. The maximum recorded 15-minute temperature on-site was 31.7°C at the Potato Hills station and the minimum recorded temperature was -46.4°C at the Camp station (Lorax 2022).

### 20.2.1.2 Precipitation

The estimated mean annual precipitation at the Project site ranges from 375 to 581 mm for the Camp and Potato Hills stations respectively. While mean annual rainfall totals are similar for the two stations (223 and 255 mm respectively), snow water equivalent values, calculated during site snow surveys, show significantly lower annual maximum values of 79 to 161 mm for the camp station compared to higher annual maximum values of 167 to 410 mm near the Potato Hills station. Rainfall, snowfall, and surface lying moisture and snow are natural dust suppressants and as such, the area is not prone to prolonged dusty periods (Lorax 2019).

Based on the regional and local data, monthly precipitation totals are highest in July and lowest in February. Snowfall typically begins in late September and continues until May.

### 20.2.1.3 Wind Speed and Direction

The predominant wind direction at the site climate stations is from the north, and west-northwest, for the Camp and Potato Hills stations, respectively. Wind speeds average 1.2 m/s at the Camp station, and 2.5 m/s at the Potato Hills station, on an annual basis. The maximum recorded gust speed at the Camp station was 23.5 m/s, and 23.9 m/s at the Potato Hills station (Lorax 2022).

## 20.2.2 Surficial Geology and Soils

### 20.2.2.1 Surficial Geology

The surficial geology of the project area has been substantially affected by historic glaciation over 200,000 years ago, including two major glaciation episodes in the Quaternary period; the pre-Reid (~2.5 Ma-400 ka BP) and the Reid (~200 ka BP) (Bond 1997; 1998a; b). In each case, ice likely originated from the Ogilvie and Wernecke Mountains, with glaciations being more extensive during the pre-Reid period.

Preservation of pre-Reid glacial deposits and landforms is rare. A few intact deposits and diorite erratics at high elevations are the only records left (Bond 1998a). Glacial deposits from the Reid glaciation are moderately preserved. Colluvium, alluvium, and small areas of shallow organics drape the Reid glacial sediments and the interglacial sediments throughout the area.

Dominant surficial materials within the project area are weathered bedrock and colluvium. Competent bedrock outcrops are rare, as sufficient geologic time has passed to allow extensive weathering of exposed rock.

### 20.2.2.2 Soils

The largest influence on soil development in the area of the project is climate, and the resulting permafrost which is discontinuous throughout the area. Despite over 200,000 years of soil development, pedogenic processes have been slow due to the cold climate and to the short growing season for vegetation, resulting in a predominance of ice-affected and relatively undeveloped soils (Cryosols and Brunisols).

Non-frozen soils encountered in the area of the Project include Brunisols, minor areas of Luvisols (on fine-textured till), and Gleysols (on poorly and imperfectly drained materials). The majority of the soil textures in the area are sandy silt to silty sand loam matrix with angular or tabular coarse fragments ranging from gravels to boulders.

Soil in the project area is limited for reclamation suitability primarily by high coarse-fragment content, due to development of soils from weathered bedrock. Rooting depths are on average 50 cm, but can reach depths of over 120 cm.

### 20.2.2.3 Permafrost

The project site is located in a region of widespread discontinuous permafrost (Brown, 1979). On the regional scale, permafrost distribution is typically controlled by mean annual temperature and precipitation, whereas on a local scale it is controlled by vegetation, surface sediments, soil moisture, slope aspect, and snow depth. Within the project area, frozen ground occurs typically on north- and east-facing slopes, and within poorly drained areas lower in the valleys. The distribution and thickness of frozen ground is highly variable across the site.

Frozen ground, when observed, is generally encountered immediately below the organic cover. Ground temperatures have been measured with thermistors installed on-site in 1995-1996, and 2009-2019. The measured ground temperatures showed the frozen ground to be relatively warm when observed, typically between 0°C and -1°C.

### 20.2.3 Hydrology

The hydrology of the region is generally characterized by large snowmelt runoffs during freshet in May, which quickly taper off to low summer stream flows interspersed with periodic increases in stream flow associated with intense rainfall events during July and August. The pattern of low stream flows punctuated by high stream flows associated with rain fall events continues throughout the summer to autumn when freeze up begins in October. In larger streams, base flows are maintained below river/creek ice throughout the winter by groundwater contributions. Smaller streams tend to dry up during the late summer or fall, as flow generally goes subsurface when the groundwater table drops to seasonally low levels. Aufeis (or overflow) ice may build in certain places in stream channels if groundwater emerges during winter.

### 20.2.4 Surface Water Quality and Aquatic Biota

The water quality study area includes the Haggart Creek, Dublin Gulch and Eagle Creek basins, which have been subject to placer mining in the past and the Lynx Creek basin, which has not been subject to placer mining. A total of 21 monitoring stations have been sampled within the study area during the StrataGold and Victoria Gold baseline data collections program. Additional monitoring sites were added as part of construction and operational monitoring programs. Sites within the Haggart Creek, Dublin Gulch, and Eagle Creek drainage basins were selected upstream and downstream of the project footprint, where possible. Lynx Creek drains a large catchment to the south of the project area that will be unaffected by development activities.

All sites, except those located in Dublin Gulch, had high acid buffering capacity, as indicated by high alkalinity, calcium, and hardness. Turbidity and total suspended solids levels tended to be low with some

exceptions noted at several sites depending on season and year. Nutrient levels tended to be low and suggestive of oligotrophic levels, with measurable amounts of nitrate, and low levels of phosphate and dissolved organic carbon.

Metals levels and naturally high arsenic concentrations in water and sediment, in addition to abundances and taxonomic compositions of periphyton and benthic invertebrates, are consistent with a mineralized area and reflect previous disturbance of substrates during placer mining.

Metals data for the fine (less than 63 µm) sediment fraction were similar to the water quality data in terms of high levels of arsenic at all sites as well as cadmium, chromium, copper, lead, mercury, and zinc at certain times. For periphyton, chlorophyll levels suggest oligotrophic conditions. The highest richness, diversity, and evenness indices were recorded in Haggart Creek, suggesting better water quality than in Dublin Gulch, Eagle Pup, or Lynx Creek.

## 20.2.5 Groundwater

### 20.2.5.1 Hydrogeologic Setting

There are two principal water-bearing units in the Project area: deeper relatively low-permeability bedrock and the near surface moderately permeable surficial deposits. Surficial material at the Project site consists of a thin veneer of organic soils underlain by colluvium (i.e., a loose heterogeneous mass of soil material), glaciofluvial (i.e., originating from rivers associated with glaciers) deposits, or till (a glacial deposit). Below these clastic (or transported broken fragments of rock) units are either metasedimentary or Granodiorite bedrock, which is deeply weathered in places. The elongated Granodiorite stock (ore bearing unit) has intruded the surrounding host metasediment. The surficial material thickness and physical properties varies significantly throughout the area. Recorded depths to bedrock in the project area range from 0 m to greater than 20 m.

The Dublin Gulch valley contains large amounts of fluvial (i.e., river deposited) materials that were considerably reworked by placer mining operations. Extensive stockpiles of placer deposits comprised of sub-rounded metasediment and Granodiorite clasts, ranging in size from sands to boulders, and fine-grained material (i.e., that are located in former placer settling ponds) are present adjacent to the Dublin Gulch and Eagle Creek watercourses. A till blanket covered with a colluvial veneer is located along the south valley wall in Dublin Gulch valley and extends southward in the Haggart Creek valley. A recent alluvial (i.e., a water-laid clastic deposit) fan is present where Dublin Gulch meets Haggart Creek.

Discontinuous permafrost is also present, especially on the north-facing slopes and affects the connectivity between the deep and shallow water-bearing zones in places.

### 20.2.5.2 Groundwater Occurrence

Generally, groundwater has been observed deeper (approximately >6 m below ground) at higher elevations and shallow to artesian in lower elevations and in valley bottoms. Springs and seeps have been

observed in a few locations where valley bottoms have narrowed. These are typically associated with the re-emergence of a stream from channel deposits (i.e., a gaining reach). In these instances (e.g., Eagle Pup, Stewart Gulch), thin alluvium overlying shallow bedrock is the likely cause of the emergence. Groundwater levels within the lower Dublin Gulch valley have been observed to have seasonally delayed trends due to higher groundwater levels during spring freshet and/or associated with rainstorms and lower groundwater levels during dry summer periods.

### 20.2.5.3 Groundwater Flow

Groundwater flow in the bedrock occurs in fractures and fault zones, while preferentially flowing through more permeable (and porous) sediments within the surficial deposits. General orientation of groundwater flow contours mimics the topography of the site as groundwater flows from the highest areas to lowest. Throughout most of the area the groundwater divides of each sub-basin approximately coincide with the surface water divides (i.e., groundwater from the Eagle Pup and Suttles Gulch drain to Eagle Creek, while groundwater from Ann and Stewart Gulch Basins drain to Dublin Gulch). In the lower Dublin Gulch valley, the groundwater divide between the Eagle Creek and Dublin Gulch basins in the placer tailings is not clearly defined.

Groundwater recharge occurs at higher elevations throughout the Dublin Gulch-Eagle Creek drainage basin and ultimately discharges to surface water (in some cases as seeps and springs) at lower elevations in the valley or directly to surface streams, or ultimately into Haggart Creek. The main groundwater flow in conjunction with the highest groundwater elevations is expected to occur during the snowmelt in late spring (e.g., May to June) after thawing of the active soil zones.

### 20.2.5.4 Surface Water - Groundwater Connectivity

Base flow values represent the groundwater contributions to streams. Groundwater contributes to stream flows where the groundwater table elevation intersects the ground surface, typically these intersections are located in stream channel invert (e.g., Eagle Pup appears in mid-channel where the valley is well confined by bedrock); however, they also appear as seepage from slopes within the placer deposits of the lower Dublin Gulch valley. Groundwater from the lower Dublin Gulch valley likely contributes a measurable portion of the baseflow to Haggart Creek. The baseflow contributions to the streams maintain flow in the larger creeks during the drier months of the year (including winter flows).

### 20.2.5.5 Groundwater Flow Properties

Hydraulic conductivities ranged from  $10^{-3}$  m/s to  $10^{-7}$  m/s in the surficial material, and from  $10^{-5}$  m/s to  $10^{-8}$  m/s in the bedrock. The hydraulic conductivity of the colluvial, alluvial, and till deposits was generally higher than that of the placer material, and the variable hydraulic conductivity seen in the bedrock is typical of fractured crystalline rock, which showed decreasing hydraulic conductivity with depth. The test data did not demonstrate a measurable difference in the hydraulic conductivities of Granodiorite and metasedimentary rock. This suggests that the flow properties of both rock types are similar.

## 20.2.6 Groundwater Quality

The groundwater quality data suggests that the chemical composition of groundwater depends on the local and up-gradient rock-types. The following parameters naturally exceeded the CCME and/or CSR guidance (used for reference only) in the project area: aluminum, arsenic, cadmium, copper, iron, lead, molybdenum, nickel, selenium, silver, and/or zinc. The CSR guideline values apply to both surface and groundwater, whereas the CCME guidelines only apply to surface water.

However, as groundwater ultimately discharges to surface water bodies, the CCME guideline values were considered for reference.

The groundwater samples were classified based on their major ion chemical composition, taking into account the major anions and cations. Calcium is the dominate cation in most groundwater samples from the site; however, for some sample locations magnesium concentrations exceeded calcium. Carbonate was the dominate anion in all samples and was particularly high in some samples.

The exceedances do not imply that the groundwater at the site is contaminated; only that background concentrations of these parameters are higher than typically found in other natural sites in Canada, and merely reflect the natural geologic and hydrogeologic conditions within these specific areas of the project area.

Comparison of the multiple years of groundwater data indicated that groundwater quality parameters were generally in the same range and that seasonal trends were not apparent over the years sampled.

## 20.2.7 Fisheries

Baseline fish and fish habitat information was gathered from existing consultant reports, government databases, and the results of field studies conducted for the project prior to StrataGold's claim ownership. Field studies were completed and continue to be conducted as required under the Fisheries Act, for watercourses located within the local project area to obtain biophysical habitat data, determine fish presence and abundance, and characterize fish populations (i.e., size, age, and tissue metal concentrations).

At least 11 fish species are known to occur in the South McQuesten River watershed, including Chinook salmon (*Oncorhynchus tshawytscha*), Arctic grayling (*Thymallus arcticus*), northern pike (*Esox lucius*), longnose sucker (*Catostomus catostomus*), Arctic lamprey (*Lampetra camtschatica*), burbot (*Lota lota*), slimy sculpin (*Cottus cognatus*), round whitefish (*Prosopium cylindraceum*), inconnu (*Stenodus leucichthys*), lake whitefish (*Coregonus clupeaformis*), and rainbow trout (*Oncorhynchus mykiss*) (DFO 2010). No freshwater fish species on Schedules 1 or 2 of the Federal *Species at Risk Act* (SARA) are present in the South McQuesten River watershed or the entire Yukon Territory (Government of Canada 2012). Haggart and Lynx creeks are both known to contain five fish species: Chinook salmon, Arctic grayling, round whitefish, burbot, and slimy sculpin (DFO 2010). Ironrust Creek, Dublin Gulch and Eagle Pup are known to be inhabited by Arctic grayling and slimy sculpin (Hallam Knight Piésold 1996b, DFO 2010).

Fish tissues (from both Arctic grayling and slimy sculpin) were tested for metal concentrations in three of the fish bearing water courses. Although metal concentrations in tissues were high, they did not, with the exception of selenium concentrations in Arctic grayling liver, exceed the lower limits set by BC Guidelines for the Protection of Aquatic Life.

## 20.2.8 Wildlife

The project site is located in the Mayo Lake-Ross River Ecoregion and contains two ecological zones, Subalpine and Forested. Both of these zones serve as habitat for wildlife. To characterize wildlife use of these areas, existing literature, field studies and discussions with wildlife biologists in the region and with the NND was conducted.

A total of 31 individual species were recorded using data from all sources. Mammals present include two ungulate species (moose, woodland caribou), two bear species (black bear, grizzly bear), and an assortment of small to medium size mammals including gray wolf, wolverine, red fox, American marten, snowshoe hare, and lemming. Moose was the most commonly detected mammal species. It was found across all survey types and a wide range of habitat types, indicating a relatively wide distribution in the area. Most detections were in lower-elevation forested habitat zones likely used all year long.

These areas contain riparian areas, marshes, and deciduous forest stands which contain preferred food sources and offer thermal protection in winter. The study's moose detections are consistent with the reports from the NND—the area provides winter habitat for moose and is important for moose hunting. Aerial and ground surveys and telemetry data suggest that while woodland caribou make some use of the study area, it does not represent core habitat for them.

Snowshoe hare, red squirrel, and ptarmigan were the most commonly detected mammal species after moose. This is of interest as all three species represent potential prey for a range of larger mammals (e.g., lynx, wolf, and red fox), and raptor species such as Golden Eagle. While formal bird surveys have not been carried out, eighteen bird species were detected in the study area including Golden Eagle, Gyrfalcon, Trumpeter Swan, Dusky Grouse, Common Raven, Ptarmigan, and Grey Jay.

## 20.2.9 Vegetation

Two ecological zones were delineated in the baseline study areas: the Subalpine zone and the Forested (Boreal) zone. The majority of project activities occur in the Forested zone. The Subalpine zone occurs on the ridge tops and high plateaus above approximately 1,225 masl. Tree cover is discontinuous or absent at this elevation, and the vegetation is dominated by dwarf birch, willows, ericaceous shrubs, herbs, mosses, and lichens. The highest points within the three study areas are 1,520 masl. These upper elevations are dominated by dwarf-shrub, heath, and lichen communities.

The Forested zone, which is part of the northern boreal forest (Boreal Cordillera Ecoregion), includes the valley bottoms, and the slopes of the mountains below the treeline. The elevation range of this zone in the three study areas is 600 masl up to the Subalpine zone, about 1,225 masl. Open canopy stands of black



spruce are generally present on moist sites and on the lower portions of north-facing slopes. However, coniferous dominated forests consisting of white and black spruce are found along creeks and rivers and on well drained sites. Ericaceous shrubs and feather mosses are most common in the understory of the coniferous forests. On the upper slopes, open subalpine fir stands are predominant with trees becoming smaller and more spread out with increasing elevation; the cover of willows, dwarf birch and ericaceous shrubs increase as the canopy opens. Mixed forests, consisting of white spruce, trembling aspen, and Alaska birch are also present on warm aspects or near-mesic sites that have been disturbed by forest fire. Small deciduous stands dominated by aspen (warm aspects) and Alaska birch are also occasionally present in the study area.

While no existing rare plants were found through queries of government databases past surveys, one rare plant, island purslane (*Koenigia islandica*), was found in the study area, a 2 m by 2 m patch of *Koenigia islandica* L. (island purslane). This plant is considered “imperiled” in Yukon. All foliar samples analyzed contained metal concentrations below levels considered toxic for cattle.

## 20.2.10 Social Environment

### 20.2.10.1 First Nation of Na-Cho Nyäk Dun

The FNNND (which translates as Big River People) represents the most northerly community of the Northern Tutchone language and culture group in the Yukon. In the Northern Tutchone language, the Stewart River is called Na-Cho Nyäk, meaning Big River. The FNNND is culturally affiliated with the Northern Tutchone people of the Pelly Selkirk, and the Carmacks Little Salmon First Nations; these three First Nations form the Northern Tutchone Tribal Council. The FNNND constitutes much of the community of Mayo, and their Traditional Territory covers 162,456 km<sup>2</sup> of land (131,599 km<sup>2</sup> in Yukon and 30,857 km<sup>2</sup> in Northwest Territories). Under the 1993 land claims agreement, the First Nation owns 4,739.68 km<sup>2</sup> of settlement lands.

Traditionally, FNNND citizens lived and trapped throughout the area surrounding Mayo.

As a self-governing First Nation (under the FNNND Final Agreement and Self-Government Agreements), the FNNND has the ability to make laws on behalf of their citizens and their lands. Under their Final Agreement, FNNND owns the minerals under all Category A Settlement Lands and receives royalties from any mining on this land. For mining activity elsewhere in the FNNND Traditional Territory, including on Category B Settlement Lands, the FNNND Government shares in a portion of any mineral royalties collected by the Yukon Government.

### 20.2.10.2 Comprehensive Cooperation and Benefits Agreement

VGC and the FNNND signed a comprehensive Cooperation and Benefits Agreement (CBA) on October 17, 2011. The CBA replaced an earlier Exploration Cooperation Agreement and applies to the Eagle Gold mine development and exploration activities conducted by VGC (including subsidiaries) anywhere in FNNND Traditional Territory located south of the Wernecke Mountains.

The objectives of the CBA are to:

- Promote effective and efficient communication between VGC and the FNNND in order to foster the development of a cooperative and respectful relationship and FNNND support of VGC's exploration activities and the project;
- Provide business and employment opportunities, related to the project, to the FNNND and its citizens and businesses in order to promote their economic self-reliance;
- Establish a role for the FNNND in the environmental monitoring of the project and the promotion of environmental stewardship;
- Set out financial provisions to enable the FNNND to participate in the opportunities and benefits related to the project; and
- Establish a forum for VGC and the FNNND to discuss matters related to the project and resolve issues related to implementation of the CBA.

### 20.2.10.3 Village of Mayo

The village of Mayo is located 407 km north of Whitehorse and 235 km east of Dawson City. Mayo is situated at the confluence of the Mayo and Stewart Rivers within the Traditional Territory of the FNNND. Historically, the site of Mayo was used as a traditional camp by the FNNND.

Prior to becoming a service centre for significant mining activity in the area, Mayo was established as a river settlement as it was the farthest navigable point up the Mayo and Stewart Rivers by steamboat. The permanent community of Mayo Landing was established in 1903 (Bleiler, et al. 2006), and was incorporated as a village in 1984.

The administration of the village of Mayo consists of a mayor, a Chief Administrative Officer, and four councilors. For planning purposes, the village of Mayo uses a population of 466 persons (although this figure includes those who live outside the village boundaries). This figure also includes both the Aboriginal population (FNNND citizens and other Aboriginal people) and the non-Aboriginal population. The village has seven full-time and two part-time staff. In the summer season, as many as 12 to 15 other individuals are employed by the village, including students.

Property taxes and grants in lieu provided by other levels of government comprise some of the municipal revenue of the village of Mayo.

### 20.2.10.4 Employment and Economic Opportunities

There are a number of quartz mining claims, exploration projects, and proposed mining projects in the region. Minerals of interest include gold, silver, zinc, lead, and copper. The mineral exploration, development and operation in the Mayo area includes Hecla Mining's Keno Hill Silver District interests;

ATAC Resources' Rau Gold project; Banyan Gold Corporation's AurMac project and the Elsa Reclamation and Redevelopment Company's (a subsidiary of Hecla Mining) reclamation and closure of historical mines in the district.

Placer mining continues to be a major contributor to the economy of the area. The majority of Mayo area placer mining operations are family-run, some for three or more generations. Following the mining downturn in the 1980s, it was realized that diversification to include tourism, outfitting, recreation, and other economic activities would reduce Mayo's reliance on a mineral-based economy.

Mayo's economy is beginning to focus on the provision of various services, including government services, to its residents and to individuals living in the surrounding area (village of Mayo 2006). Tourism is becoming a growing segment of the local economy.

#### 20.2.10.5 Traditional Activities and Culture

The FNNND prepared a 5-year strategic heritage development plan (FNNND 2007) that identified priorities relating to traditional knowledge, language, heritage sites and special places, a cultural centre, governance policy and guidelines development. An implementation plan was also prepared. While FNNND staff noted that the plan is somewhat dated, it is still used as a planning guide by FNNND.

At community meetings, FNNND citizens noted the importance of several areas in the vicinity of the project for traditional activities including hunting, fishing, trapping, and gathering. FNNND elders and staff indicated that citizens still rely on traditional foods—berries, fish, moose, deer, small game, and birds—as a significant portion of their diet. These traditional foods are shared with those who may not be able to obtain it directly (e.g., single mothers, elders).

Hunting, fishing, and harvesting are also very important aspects of Northern Tutchone culture and diet, and for continued monitoring of the land. Northern Tutchone people have always relied heavily on the foods of the forests and the rivers. Moose, caribou, sheep, grouse, and fish, as well as many types of plants and berries are harvested and preserved to last through the seasons.

The FNNND also offers a number of on the land programs, including daytrips for medicine gathering, fishing and hunting camps for youth, and an archaeological camp, as well as some longer trips. Programs for jigging, beading and other craft work are also offered.

Ongoing activities organized by the FNNND include:

- Traditional food lunches at the school;
- Teacher cultural orientation;
- Participation at other First Nation events (Moosehide Gathering, May Gathering);
- Traditional pursuits funding to assist people to get out on the land;

- Old Village Day, Aboriginal Day, Self-Government Day; and
- Elders in the school and daycare.

Recent initiatives include:

- Renewed linkages with Fort Good Hope (NWT) families;
- Hide tanning workshop;
- Knife making workshop; and
- Wind River canoe trip.

#### 20.2.10.6 Historic and Paleontological Resources

An archaeological and historic assessment was conducted in 1995 for the then-proposed Dublin Gulch Mine site (Greer 1995). The study included a field assessment on a large project area that encompassed the Eagle Gold Mine location. During the studies, no archaeological or historic period sites were identified; all areas favourable for pre-contact human occupation were deemed to have been destroyed by the extensive placer mining activity in the area, and all structures identified within the project area were all determined to be related to mining activities over the past 50 years.

Field surveys found that most of the valley fill at Dublin Gulch and Haggart Creek has been reworked by placer mining. There is no sign of any remaining source layer for the Dublin Gulch Pleistocene fossil locality, and no additional fossil vertebrate material was found.

Organic layers at the top of the surficial sequence in Dublin Gulch contain plant and arthropod material and yielded conventional (calibrated) radiocarbon ages of approximately 10,000 to 13,000 years before present. These late Pleistocene to early Holocene dates indicates the sediments were deposited during climatic warming following the McConnell Glaciation. A large piece of wood recovered from intact surficial deposits along the access road yielded a conventional (calibrated) radiocarbon age of approximately 2,700 years before present, which is late Holocene.

## 21 CAPITAL AND OPERATING COSTS

### 21.1 Capital Costs

#### 21.1.1 Summary

Capital costs on a year-by-year basis are presented in Table 21-1, and totals \$291.9 M, not including a \$65.3M provision for closure/reclamation. Capital expenditures at the Eagle Gold Mine are broken into the following group:

- Mining: Repurchasing retired equipment, major rebuilds of the production fleet, purchases of additional production equipment as required to achieve the LOM plan, and geotechnical infrastructure & investigations;
- Processing: Processing equipment rebuilds for crushers, screens, and stacking equipment. Small infrastructure upgrades and projects, general camp infrastructure & administrative; and
- Growth: Liner expansions for the HLPs, conveyor extensions, the second HLP and associated infrastructure (CIC building, pumps, solution collection system), second overland conveyor, and mobile crusher.

Capital projects at the Eagle Gold Mine are forecasted on an annual basis with an emphasis placed on the upcoming budgeting year. Capital cost assumptions in this report reflect the current life of mine assumptions and design criteria for the mine. Estimates are based off current actual costs, quotes and designed quantities.

Table 21-1: LOM Capital Expenditures

	LOM	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Mining Operations	<b>111.5</b>	15.1	11.0	19.7	15.2	10.6	11.7	12.7	7.4	8.0	-	-	-	-
Process Operations	<b>41.1</b>	10.1	7.0	4.0	4.0	4.0	3.0	3.0	3.0	2.0	1.0	-	-	-
Growth	<b>139.3</b>	13.1	4.2	18.9	9.1	20.5	58.1	15.4	-	-	-	-	-	-
<b>Total</b>	<b>291.9</b>	<b>38.3</b>	<b>22.2</b>	<b>42.6</b>	<b>28.4</b>	<b>35.1</b>	<b>72.8</b>	<b>31.2</b>	<b>10.4</b>	<b>10.0</b>	<b>1.0</b>	-	-	-
Reclamation	<b>65.3</b>	1.6	-	-	-	-	-	-	-	-	6.7	10.1	16.8	30.2

Source: VGC (2023)

### 21.1.2 Contingency & Labour Assumptions

All capital costs are based on recent pricing and operating data and no allocation for contingency is included in the estimates.

Labour requirements, where supplied by another party other than Victoria Gold is included in the capital estimate. Any labour costs incurred by Victoria in support of capital projects are included in operating costs.

## 21.2 Operating Costs

### 21.2.1 Basis of Estimate

Operating costs include all normal, recurring costs of production including:

- Open pit mining (labour, maintenance, fuel, explosives, technical services);
- Processing (process consumables, maintenance);
- Site services (camp, site infrastructure and maintenance);
- General & Administrative (Health & Safety, Environment, HR, supply chain, general admin, corporate support);
- Power generation; and
- Site labor.

Operating budgets are based on first principal calculations provided by each respective department as well as historical cost trending. Budgets are updated in detail annually to reflect changes in markets, consumable prices, and site-specific operating parameters. Annual budgets are scrutinized internally by department heads, senior management, and strategic business planners to ensure costs align with business objectives and sufficient detail is present.

The Eagle Gold Mine operating costs consist of both variable and fixed cost items. Variable costs have a linear correlation to cost drivers such as open pit production, equipment hours or process throughput, while fixed costs do not.

For the mineral reserves in this report and the schedule of mining and processing envisioned for them, Table 21-2 depicts modeled estimates of the associated operating costs for the remainder of Eagle Gold Mine's production schedule in Canadian dollars and in real terms.

Table 21-2: Operating Cost Summary

Category	LOM (M\$)	\$/t Leached <sup>(1)</sup>
Mining	817.7	3.31 <sup>(2)</sup>
Processing	1,122.1	9.03
Site Services	206.1	1.66
G&A	283.8	2.28
<b>TOTAL</b>	<b>2,429.7</b>	<b>19.55</b>

Notes:

(1)(2) Mining operating costs are represented as \$/t mined.

Source: VGC (2023)

## 21.2.2 Labour

The labour rates have been built up from current costs. The Eagle Gold Mine maintains strict records relating to salary and hourly information payable to each employee. Actual salary and hourly rates being incurred in operations have been applied to the identified positions in the financial model. The resulting burden costs were taken against Victoria Gold’s base labour amounts to determine a per-person average. This resulted in approximately 58%. This percentage has been applied to all labour costs across the model.

## 21.2.3 Mine Operating Cost

Mining costs have been updated based on the new planned material movement distribution from the updated mining schedule along with the associated personnel and equipment requirements. Actual costs and rates have been incorporated into this operating cost estimate for the following items: fuel consumption, explosives, tire replacement, Kal Tire, Finning, and other contractor maintenance costs.

The breakdown of mine operating costs estimates is summarized in Table 21-3.

Table 21-3: LOM Mine Operating Cost by Area

Description	LOM \$M	\$/t Mined
Drilling	62.7	0.25
Blasting	98.8	0.40
Loading	163.3	0.66
Hauling	170.8	0.69
Ancillary Support	105.9	0.43
Technical Services	49.9	0.20



Description	LOM \$M	\$/t Mined
Management, Admin & Other	167.0	0.68
<b>Total Mining</b>	<b>817.7</b>	<b>3.31</b>

Source: VGC (2023)

## 21.2.4 Process Operating Cost

Processing costs have been updated to reflect the actual costs for labour, liners, fabric belt wear, idler replacement, power consumption, screens, pumps, barren line and HDPE piping, compressor operation, and assay lab operations.

Unit prices for lime and cyanide were reviewed based on per kg costs from the latest billings and are costed as FOB mine site. These reagents are the largest cost drivers.

The breakdown of process operating costs estimates is summarized in Table 21-4.

Table 21-4: LOM Process Operating Cost by Area

Area	LOM \$M	\$/t Stacked
Crushing	226.2	1.82
Conveying	71.5	0.58
Stacking	32.6	0.26
HLF	217.6	1.75
ADR	187.4	1.51
Power	146.8	1.18
Assay Lab	29.1	0.23
E&I	51.8	0.42
Management & Admin	159.2	1.28
<b>Total Processing Costs</b>	<b>1,122.1</b>	<b>9.03</b>

Source: VGC (2023)

## 21.2.5 Site Services and G&A Operating Cost

Actual costs have been incorporated into the economic model for the following Site Services and G&A components: employee travel, camp and catering costs, freight, health, and safety, medical and security, light vehicle leasing, fuel consumption of site service vehicles, surface infrastructure power consumption, facilities maintenance, HR functions, legal and regulatory activities, bank fees, insurance, IT services, and site communications.

Actual costs were also incorporated for the operation of the site office, the Whitehorse office, and 50% of the Vancouver office. No costs were included for the operation of the Toronto office.

## 22 ECONOMIC ANALYSIS

An engineering economic model was developed to estimate annual cash flows and sensitivities. Pre-tax estimates of project values were prepared for comparative purposes, while after-tax estimates were developed to approximate the true investment value.

Sensitivity analyses were performed for variation in metal price, foreign exchange rate, head grades, operating costs, capital costs, and discount rates to determine their relative importance as project value drivers.

This Technical Report contains forward-looking information regarding projected mine production rates, construction schedules and forecasts of resulting cash flows as part of this study. The head grades are based on sufficient sampling that is reasonably expected to be representative of the realized grades from actual mining operations. Factors such as the ability to obtain permits, to construct and operate a mine, or to obtain major equipment or skilled labour on a timely basis, to achieve the assumed mine production rates at the assumed grades, may cause actual results to differ materially from those presented in this economic analysis.

The economic analysis is presented in 2023 Canadian dollars (C\$) and has been run with no inflation (constant dollar basis).

### 22.1 Assumptions

All costs and economic results are reported in Canadian dollars (C\$), unless otherwise noted. Gold pricing is reported in US dollars (US\$). Table 22-1 outlines the planned LOM tonnage and grade estimates.

Table 22-1: LOM Plan Summary

Parameter	Unit	Value
Mine Life (OP Only)	Years	10
Total Ore	Mt	124
Total Waste	Mt	123
Strip Ratio	w:o	0.99
Average Mining Rate	Mt/year	25.8 <sup>(1)</sup>
Mine Life (Processing & Leaching)	Years	12
Stacking Rate	Mt/year	11.5 <sup>(2)</sup>
Stacking Rate	kt/day	31.5 <sup>(3)</sup>
LOM Au Grade Stacked	g/t	0.65

Parameter	Unit	Value
LOM Recovery	%	76% <sup>(4)</sup>
Au Production	LOM k oz	2,048
	Average k oz/year	202.3 <sup>(5)</sup>

Notes:

(1) Excludes the final year of mining which is only a half year

(2)(3) Excluding 2023 & 2024

(4) From 2023 onwards to end of mine life

(5) First 8 years of production

Source: VGC (2023)

Other economic factors used in the economic analysis include the following:

- Discount rate of 5% (sensitivities using other discount rates have been calculated for each scenario);
- NPV calculated assuming a mid-year accounting period;
- Closure cost of \$65.3 M (net of salvage value);
- Nominal 2023 dollars;
- No inflation;
- Taxes (discussed in Section 22.4);
- Numbers are presented on a 100% ownership basis;
- Revenues, costs, taxes are calculated for each period in which they occur rather than actual outgoing/incoming payment;
- Exclusion of sunk costs (i.e., exploration and resource definition costs, engineering fieldwork and studies costs, environmental baseline studies costs, construction etc.) However, pre-development and sunk costs are utilized for tax deductions; and
- This economic model excludes any servicing of the debt incurred to finance the Project.

## 22.2 Royalties

Royalties included in the economic analysis are:

- Franco–Nevada: 1% NSR for material from the Eagle Deposit;
- Queenstake Mar Tungsten Royalty: 1% NSR for material from the Olive Deposit; and

- Osisko: 5% net smelter return, 3% after the delivery of 97,500 ounces.

Total royalties' payments amount to \$225.6M over the life of mine.

## 22.3 Revenues & NSR Parameters

Mine revenue is derived from the sale of gold doré into the international marketplace.

The market conditions for gold were re-assessed using a trailing average rate for 2023. Gold has been priced at US\$1,700/oz in the model. It is expected that there will be variability in the price of gold throughout the planned mine life. For the purposes of the model, this variability was not incorporated and has been disregarded.

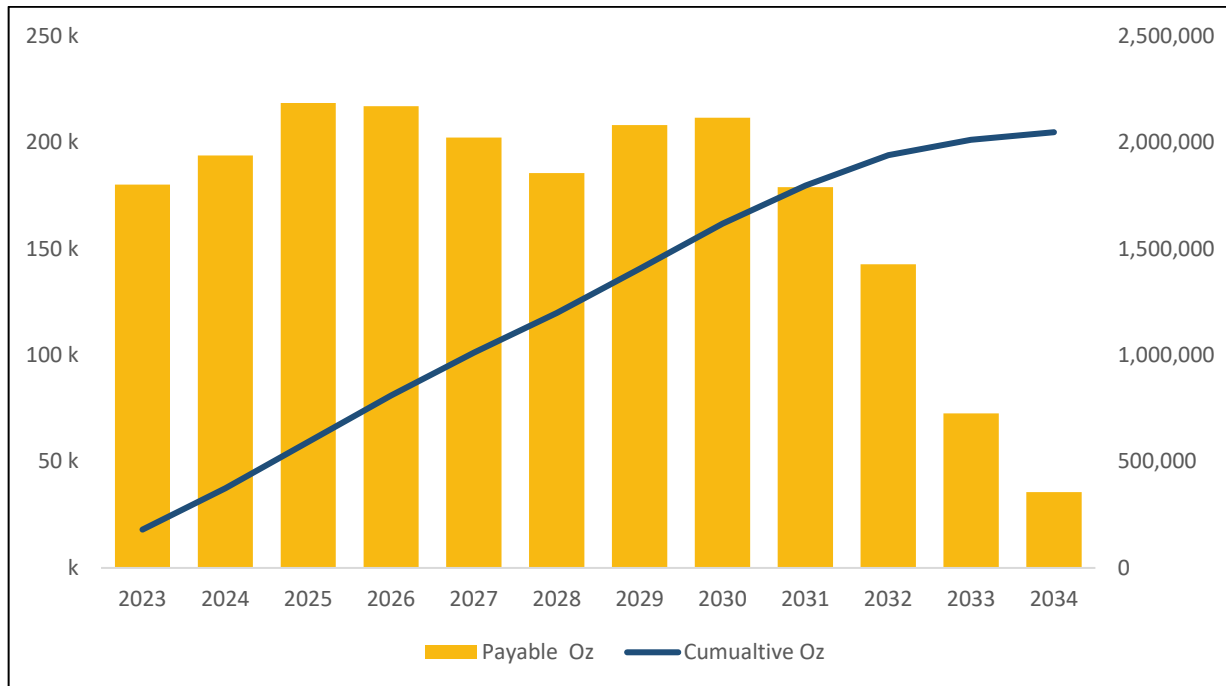
Table 22-2 outlines the market terms used in the economic analysis. Figure 22-1 illustrates the annual payable gold and cumulative payable gold by project year.

Table 22-2: Assumptions used in the Economic Analysis

Assumptions	Unit	Value
Au Payable	%	99.975
Au Refining Charge	US\$/oz	10.00

Source: VGC (2023)

Figure 22-1: Annual and Cumulative Payable Gold Production



Source: VGC (2023)

All costs and revenues are assumed to be paid and received in the period that they are incurred and produced. Cash from gold production is assumed to be received during the month it is produced. There is no working capital in the model.

## 22.4 Taxes

The Project has been evaluated on an after-tax basis in order to reflect a more indicative, but still approximate, value of the Project. Both Yukon Mining Quartz Tax and Federal and Territorial Income Tax were applied to the project. A detailed tax analysis was completed in order to derive the after-tax valuation of the Project. Specific assumptions and methodology in the analysis includes the following:

### 22.4.1 Yukon Mining Quartz Tax

- Yukon Mining Quartz Tax has been evaluated as part of the after-tax analysis. The Crown tax applies to all ore, minerals, or mineral bearing substances mined in the Yukon on a calendar year basis;
- The tax is calculated based on the value of the output mine which is the value of minerals produced exceeded by the various deductions allowable; and

- The tax rate ranges from 0% to 12% based on the taxable revenue from saleable gold minus deductions.

#### 22.4.2 Federal and Territorial Corporate Income Tax

Federal tax rate of 15% and a Yukon 12% rate were used to calculate income taxes.

#### 22.4.3 Mineral Property Tax Pools

Canadian Exploration Expense (CEE) and Canadian Development Expense (CDE) tax pools were used with appropriate opening balances to calculate income taxes.

#### 22.4.4 Capital Cost Allowance (CCA)

Specific capital cost class CCA rates were applied and used to calculate the appropriate CCA the company can claim during the entire life of the project.

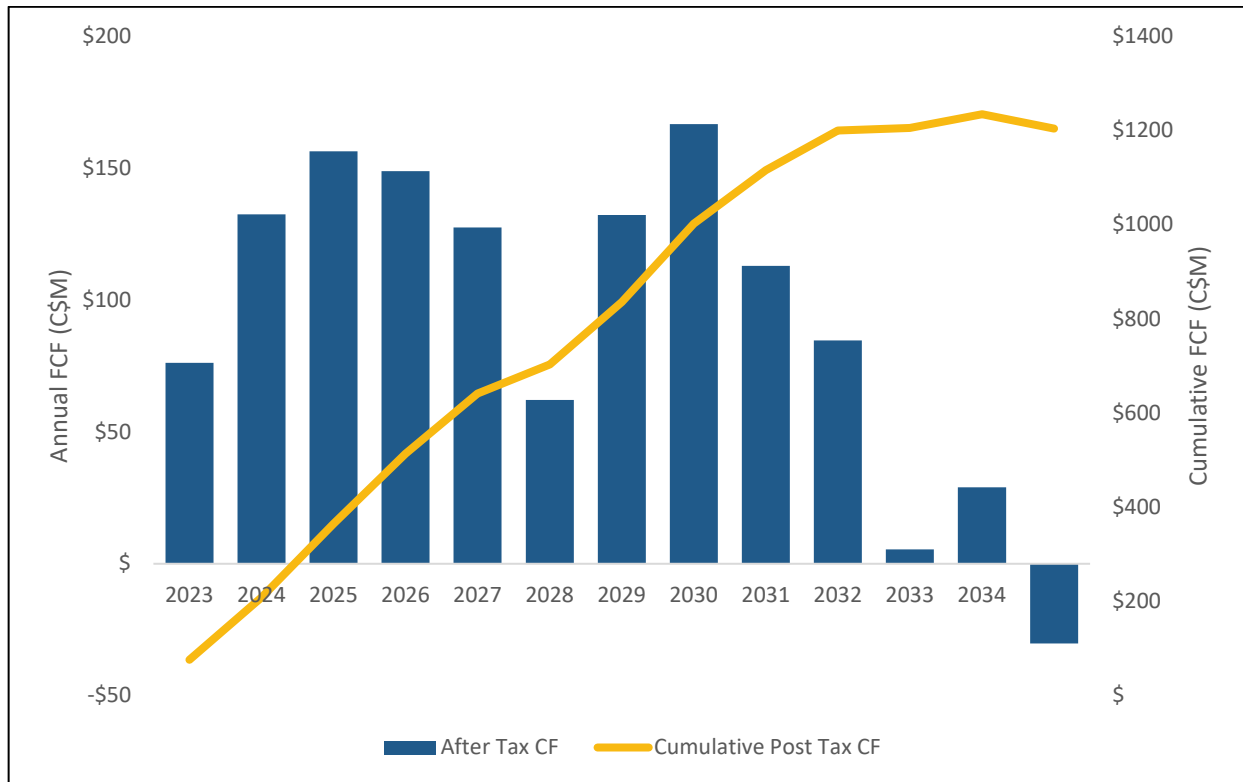
Total LOM taxes for the project amount to \$397.8 M.

### 22.5 Results

The Eagle Gold Mine has a pre-tax net present value at 5% (NPV5%) of C\$1,257 M and an after-tax net present value at 5% of C\$954 M. This analysis excludes debt repayment obligations. Figure 22-2 shows the projected cash flows used in the economic analysis. Table 22-3 shows the detailed results of this evaluation. In 2033 the operation generates positive operating cash flow, but it is all used for reclamation costs. The negative cash outflow in 2035 is due to reclamation liabilities.



Figure 22-2: Annual and Cumulative Free Cash Flows (after-tax)



Source: VGC (2023)

Table 22-3: Summary of Eagle Gold Mine Economic Results

Category	Unit	Value
Payable Au	M oz	2,047.8
Gross Revenue	M \$	4,641.7
Royalty & Refining Deductions	M \$	252.9
Net Revenues after Deductions	M \$	4,388.8
Operating Costs	M \$	2,429.7
Cash Flow from Operations	M \$	1,967.0
Capital Costs <sup>(1)</sup>	M \$	357.2
Operating Cash Cost <sup>(2)</sup>	US\$/oz	964
Net Pre-Tax Cash Flow	M \$	1,601.8
<b>Pre-Tax NPV <sub>5%</sub></b>	<b>M \$</b>	<b>1,256.6</b>
Total Taxes	M \$	397.8
<b>Net After-Tax NPV<sub>5%</sub></b>	<b>M \$</b>	<b>954.2</b>

Category	Unit	Value
<b>All-in Sustaining Cost <sup>(3)</sup></b>	<b>US\$/oz</b>	<b>\$1,114</b>

Notes:

(1) Includes Sustaining, closure, and reclamation capital costs, but excludes any pre-production costs; and

(2)(3) Cash costs and All-in sustaining costs are calculated separately due to costs and revenues associated with accounting for existing inventory in the HLP.

Source: VGC (2023)

## 22.6 Sensitivities

A sensitivity analysis was performed to test project value drivers on the project's NPV using a 5% discount rate. The results of this analysis are demonstrated in Table 22-4 and Table 22-5. The Project proved to be most sensitive to changes in gold price, foreign exchange rate, and head grade and operating costs. The project showed least sensitivity to capital costs. Where a given variable is analyzed, all other inputs are held constant at their expected values.

Table 22-4: After-Tax NPV5% Sensitivity Results (C\$ M)

Change	-15%	-10%	-5%	0%	5%	10%	15%
Gold Price	623	735	845	954	1,063	1,172	1,281
F/X Rate	1,275	1,168	1,061	954	847	739	630
Head Grade <sup>(1)</sup>	654	755	855	954	1,054	1,151	1,250
OPEX	1,144	1,080	1,017	954	891	828	764
CAPEX <sup>(2)</sup>	981	972	963	954	945	937	927

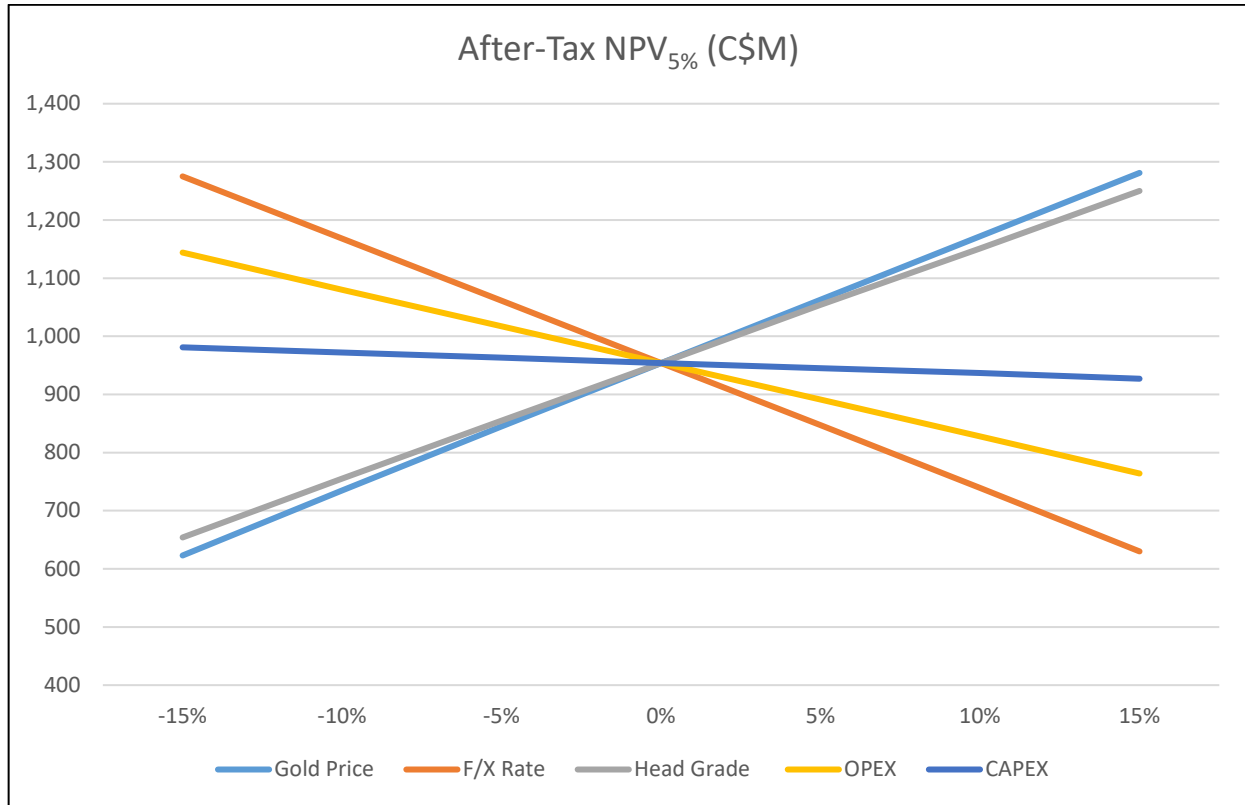
Notes:

(1) Head grade sensitivity is only a representation of direct grade increase/decrease, and does not reflect any other changes to the mine plan (i.e.; COGs or changes to operating costs)

(2) Capex sensitivity does not include reclamation capital

Source: VGC (2023)

Figure 22-3: After-Tax NPV<sub>5%</sub> Sensitivities



Source: VGC (2023)

After-tax NPV's were evaluated using a wider range of sensitivities to different combinations of gold price and exchange rate. The sensitivities were calculated between gold prices from \$1,550 to \$2,050/oz and exchange rates between 0.60 to 0.90 US\$:C\$. The results are presented in Table 22-5 in C\$ M.

Table 22-5: After-Tax NPV5% Sensitivity to Gold Price and FX Rate (C\$ M)

FX	Au Price (US\$/oz)										
	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
0.90	176	330	476	593	703	812	919	1,026	1,133	1,239	1,345
0.85	300	457	584	701	816	929	1,042	1,156	1,269	1,380	1,493
0.80	434	574	699	820	941	1,061	1,182	1,301	1,420	1,540	1,659
0.75	563	696	826	954	1,083	1,211	1,338	1,465	1,592	1,719	1,846
0.70	693	832	969	1,107	1,244	1,380	1,517	1,653	1,789	1,925	2,061
0.65	839	987	1,135	1,283	1,429	1,576	1,722	1,869	2,015	2,162	2,308
0.60	1,007	1,168	1,327	1,486	1,645	1,804	1,962	2,121	2,279	2,439	2,600

Source: VGC (2023)

A sensitivity analysis of the pre-tax and after-tax results was performed using various discount rates. The results of this analysis are demonstrated in Table 22-6. The cash flow model is shown in Table 22-7.

Table 22-6: Discount Rate Sensitivity Test Results on NPV

Discount Rate (%)	Pre-Tax NPV (M \$)	After-Tax NPV (M \$)
0	1,602	1,204
5	1,257	954
7	1,149	876
10	1,012	777

Source: VGC (2023)

Table 22-7: Cash Flow Model

	Units	LOM	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>ECONOMIC ASSUMPTIONS</b>															
Au	US\$/oz		\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700
FX	CAD/USD		0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
<b>MINE PRODUCTION SCHEDULE</b>															
Ore	k tonnes	124,272	9,500	12,693	14,568	14,305	14,505	14,155	14,864	11,494	11,494	6,695	0	0	0
Ore Grade	g/t	0.65	0.82	0.64	0.67	0.69	0.63	0.61	0.59	0.54	0.61	0.74	0.00	0.00	0.00
Au Contained	koz	2,584	249.1	263.0	313.9	317.8	296.0	277.9	282.6	199.3	225.3	159.4	0.0	0.0	0.0
Waste	ktonnes	122,895	16,688	20,632	15,142	8,694	5,989	10,925	13,066	10,916	12,994	7,848	0	0	0
Total Mined	ktonnes	247,167	26,188	33,324	29,710	23,000	20,494	25,080	27,930	22,410	24,488	14,543	0	0	0
Strip Ratio	w:o	0.99	1.76	1.63	1.04	0.61	0.41	0.77	0.88	0.95	1.13	1.17	0.00	0.00	0.00
<b>HEAP PRODUCTION SCHEDULE</b>															
Ore	k tonnes	124,256	9,500	10,494	11,494	11,494	11,494	11,494	11,494	11,494	11,494	11,490	11,483	831	0
Ore Grade	g/t	0.65	0.82	0.73	0.78	0.80	0.74	0.70	0.69	0.54	0.61	0.53	0.25	0.25	0.00
Au Contained	koz	2,584	249.1	246.1	289.4	295.3	272.1	256.9	256.0	199.3	225.3	197.2	90.5	6.6	0.0
Au Produced	koz	2,048	180.2	193.9	218.7	217.2	202.4	185.7	208.2	211.7	179.1	142.8	72.6	35.7	0.0
Au Inventory (EOP)	koz	0	105.3	109.3	118.1	127.4	134.0	141.9	129.8	68.6	48.4	34.3	30.7	0.0	0.0
<b>PAYABLE METALS</b>															
<b>Total Recovered Au</b>	<b>OZ</b>	<b>2,048,330</b>	<b>180,229</b>	<b>193,949</b>	<b>218,671</b>	<b>217,177</b>	<b>202,441</b>	<b>185,692</b>	<b>208,208</b>	<b>211,743</b>	<b>179,106</b>	<b>142,822</b>	<b>72,612</b>	<b>35,680</b>	<b>0</b>
Payable Au	Oz	2,047,818	180,184	193,901	218,616	217,123	202,390	185,646	208,156	211,690	179,061	142,787	72,594	35,671	0
<b>REVENUE</b>															
Gross Revenue	US\$	\$3,481,290,992	\$306,312,703	\$329,631,060	\$371,647,510	\$369,108,370	\$344,062,911	\$315,597,421	\$353,865,695	\$359,873,172	\$304,403,749	\$242,737,446	\$123,410,320	\$60,640,637	\$0
	C\$	\$4,641,721,323	\$408,416,937	\$439,508,080	\$495,530,013	\$492,144,493	\$458,750,547	\$420,796,561	\$471,820,926	\$479,830,896	\$405,871,666	\$323,649,928	\$164,547,093	\$80,854,183	\$0
Refining Costs	US\$	\$20,478,182	\$1,801,839	\$1,939,006	\$2,186,162	\$2,171,226	\$2,023,899	\$1,856,455	\$2,081,563	\$2,116,901	\$1,790,610	\$1,427,867	\$725,943	\$356,710	\$0
	C\$	\$27,304,243	\$2,402,453	\$2,585,342	\$2,914,882	\$2,894,968	\$2,698,533	\$2,475,274	\$2,775,417	\$2,822,535	\$2,387,480	\$1,903,823	\$967,924	\$475,613	\$0
Royalties	C\$	\$225,642,947	\$24,360,869	\$26,215,364	\$29,556,908	\$29,354,972	\$22,812,307	\$16,732,851	\$18,761,820	\$19,080,334	\$16,139,367	\$12,869,844	\$6,543,167	\$3,215,143	\$0
Silver Revenue	C\$	\$0													
<b>Net Revenue After Deductions</b>	<b>C\$</b>	<b>\$4,388,774,133</b>	<b>\$381,653,615</b>	<b>\$410,707,374</b>	<b>\$463,058,223</b>	<b>\$459,894,554</b>	<b>\$433,239,708</b>	<b>\$401,588,435</b>	<b>\$450,283,689</b>	<b>\$457,928,027</b>	<b>\$387,344,818</b>	<b>\$308,876,260</b>	<b>\$157,036,002</b>	<b>\$77,163,427</b>	<b>\$0</b>
<b>OPEX</b>															
Mining	C\$	\$817,704,980	\$98,036,148	\$95,302,589	\$86,796,374	\$75,513,727	\$70,715,910	\$79,697,200	\$83,668,962	\$76,834,005	\$76,974,337	\$53,100,933	\$19,074,515	\$1,990,280	\$0
	C\$/t mined	\$3.31	\$3.74	\$2.86	\$2.92	\$3.28	\$3.45	\$3.18	\$3.00	\$3.43	\$3.14	\$3.65	\$0.00	\$0.00	\$0.00
Processing	C\$	\$1,122,072,053	\$109,092,725	\$102,949,756	\$99,144,108	\$98,863,560	\$99,119,687	\$99,328,706	\$100,755,972	\$101,671,137	\$101,385,139	\$99,179,768	\$92,455,183	\$18,126,312	\$0
	C\$/t leached	\$9.03	\$11.48	\$9.81	\$8.63	\$8.60	\$8.62	\$8.64	\$8.77	\$8.85	\$8.82	\$8.63	\$8.05	\$21.82	\$0.00
Site Services	C\$	\$206,145,188	\$25,261,227	\$20,999,805	\$19,137,843	\$18,922,945	\$18,841,696	\$18,197,707	\$18,074,645	\$18,047,505	\$18,047,505	\$16,561,821	\$12,316,591	\$1,735,898	\$0
	C\$/t leached	\$1.66	\$2.66	\$2.00	\$1.67	\$1.65	\$1.64	\$1.58	\$1.57	\$1.57	\$1.57	\$1.44	\$1.07	\$2.09	\$0.00
G&A	C\$	\$283,822,272	\$28,185,521	\$27,210,024	\$26,632,414	\$26,637,429	\$26,701,867	\$26,698,159	\$26,698,159	\$26,112,714	\$26,112,714	\$22,665,356	\$17,675,164	\$2,492,751	\$0
	C\$/t leached	\$2.28	\$2.97	\$2.59	\$2.32	\$2.32	\$2.32	\$2.32	\$2.32	\$2.27	\$2.27	\$1.97	\$1.54	\$3.00	\$0.00

	Units	LOM	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total OPEX	C\$	\$2,429,744,492	\$260,575,621	\$246,462,174	\$231,710,739	\$219,937,660	\$215,379,160	\$223,921,772	\$229,197,738	\$222,665,360	\$222,519,695	\$191,507,878	\$141,521,453	\$24,345,242	\$0
	C\$/t leached	\$19.55	\$27.43	\$23.49	\$20.16	\$19.13	\$18.74	\$19.48	\$19.94	\$19.37	\$19.36	\$16.67	\$12.32	\$29.30	\$0.00
	C\$/pay oz	\$890	\$1,446	\$1,271	\$1,060	\$1,013	\$1,064	\$1,206	\$1,101	\$1,052	\$1,243	\$1,341	\$1,949	\$682	\$0
<b>Net Operating Cashflow</b>	<b>C\$</b>	<b>\$1,906,211,455</b>	<b>\$121,077,994</b>	<b>\$164,245,200</b>	<b>\$231,347,483</b>	<b>\$239,956,894</b>	<b>\$217,860,548</b>	<b>\$177,666,663</b>	<b>\$221,085,951</b>	<b>\$235,262,667</b>	<b>\$164,825,123</b>	<b>\$117,368,382</b>	<b>\$15,514,550</b>	<b>\$52,818,185</b>	<b>\$0</b>
<b>CAPEX</b>	<b>C\$</b>	<b>\$291,859,419</b>	<b>\$38,285,922</b>	<b>\$22,191,013</b>	<b>\$42,601,854</b>	<b>\$28,361,295</b>	<b>\$35,099,564</b>	<b>\$72,752,514</b>	<b>\$31,170,809</b>	<b>\$10,405,821</b>	<b>\$9,990,628</b>	<b>\$1,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>RECLAMATION &amp; CLOSURE COSTS</b>															
Reclamation & Closure Costs	C\$	\$65,311,210	\$1,640,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,702,180	\$10,053,270	\$16,755,450	\$30,159,810
<b>TAXES</b>															
Total Taxes	C\$	\$398,049,756	\$4,970,781	\$10,011,921	\$32,332,869	\$62,715,993	\$55,280,741	\$42,787,260	\$57,658,374	\$58,251,770	\$41,969,472	\$24,973,129	\$0	\$7,097,447	\$0
<b>PRE-TAX CASHFLOWS</b>															
Net Cashflow	C\$	\$1,601,859,011	\$81,151,572	\$142,054,188	\$188,745,629	\$211,595,599	\$182,760,985	\$104,914,150	\$189,915,142	\$224,856,846	\$154,834,495	\$109,666,202	\$5,461,280	\$36,062,735	-\$30,159,810
Cumulative Net Cashflow	C\$	\$1,601,859,011	\$81,151,572	\$223,205,759	\$411,951,388	\$623,546,987	\$806,307,972	\$911,222,121	\$1,101,137,263	\$1,325,994,109	\$1,480,828,604	\$1,590,494,806	\$1,595,956,086	\$1,632,018,821	\$1,601,859,011
<b>AFTER-TAX CASHFLOWS</b>															
Net Cashflow	C\$	\$1,203,809,255	\$76,180,791	\$132,042,267	\$156,412,760	\$148,879,606	\$127,480,244	\$62,126,890	\$132,256,768	\$166,605,076	\$112,865,023	\$84,693,073	\$5,461,280	\$28,965,288	-\$30,159,810
Cumulative Net Cashflow	C\$	\$1,203,809,255	\$76,180,791	\$208,223,058	\$364,635,818	\$513,515,424	\$640,995,668	\$703,122,558	\$835,379,325	\$1,001,984,401	\$1,114,849,424	\$1,199,542,497	\$1,205,003,777	\$1,233,969,065	\$1,203,809,255
<b>ECONOMIC INDICATORS</b>															
Discounting Period			0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	12.5
Pre-Tax Discounted Cash Flows	C\$	\$1,256,605,127	\$79,195,825	\$132,029,231	\$167,071,994	\$178,379,147	\$146,734,300	\$80,221,896	\$138,302,219	\$155,950,356	\$102,272,455	\$68,988,144	\$3,271,951	\$20,576,984	-\$16,389,374
Post-Tax Discounted Cash Flows	C\$	\$953,986,306	\$74,344,839	\$122,723,865	\$138,451,904	\$125,508,363	\$102,350,752	\$47,504,906	\$96,313,566	\$115,549,610	\$74,550,461	\$53,278,201	\$3,271,951	\$16,527,262	-\$16,389,374
Cumulative Discount Post-Tax Cash Flow	C\$	\$953,986,306	\$74,344,839	\$197,068,704	\$335,520,608	\$461,028,971	\$563,379,723	\$610,884,630	\$707,198,195	\$822,747,806	\$897,298,266	\$950,576,467	\$953,848,418	\$970,375,680	\$953,986,306

Source: VGC (2023)

## 23 ADJACENT PROPERTIES

There are no adjacent properties pertaining to the Mine.



## 24 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data and information to present in this Technical Report.

## 25 INTERPRETATIONS AND CONCLUSIONS

### 25.1 Introduction

The QPs are satisfied with the status of the mineral tenure, regulatory permits, environmental and social stewardship, and workplace quality. Results of this Technical Report demonstrate that the Project has positive economics and presents a positive outlook moving forward.

### 25.2 Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

Information from Victoria Gold's in-house experts indicate that the mineral tenure is valid, and sufficient to support Mineral Resources and Mineral Reserve estimations. Victoria Gold has a contiguous block of 1,914 quartz claims, 10 quartz leases, and one federal crown grant. The surface rights are sufficient for all planned infrastructure and mine operations.

Water rights are granted and sufficient for current operations.

The main royalties existing on the Mine include a 5% and 1% royalty payable to Osisko and Franco-Nevada respectively. The Franco-Nevada royalty only applies to the Eagle deposit. There is an additional 1% royalty on the Olive deposit. The 5% royalty payable to Osisko drops to 3% once 97,000 ounces have been delivered. Royalties are included in the cash flow analysis. The Project is not subject to any other back-in rights payments, agreements, or encumbrances that could materially impact the Project.

To the extent known, there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the Project that have not been discussed in this Report.

### 25.3 Geology and Mineralization

The Eagle deposit is considered to be an example of a Reduced Intrusion Related Gold System.

The geological understanding of the settings, lithologies, and structural and alteration controls on mineralization in the different zones is sufficient to support estimation of Mineral Resources and Mineral Reserves. The geological knowledge of the area is also considered sufficiently acceptable to reliably inform mine planning. The mineralization style and setting are well understood and can support declaration of Mineral Resources and Mineral Reserves.

## 25.4 Exploration, Drilling and Analytical Data Collection in Support of Mineral Resource Estimation

The exploration programs carried out on the Project have been deemed appropriate for the deposit style. The sampling methods used are acceptable for estimating both Mineral Resource and Mineral Reserve. The preparation, analysis, and security of the samples are in accordance with the best exploration practices and industry standards.

The quality and quantity of lithological, geotechnical, collar, and downhole survey data collected during the exploration and delineation drilling programs are adequate to support estimation of Mineral Resource and Mineral Reserve. The collected data adequately reflects the dimensions of the deposit, true widths of mineralization, and deposit style. The samples taken are representative of the gold grades found in the deposit.

Quality assurance and quality control (QA/QC) programs have been put in place to address precision, accuracy, and contamination issues. The drilling programs included blanks, duplicates, and standard reference material (SRM) samples. The submission rates for QA/QC meet the industry-accepted standards, and no material sample biases have been detected by these programs.

Data verification programs have been conducted to ensure the secure storage of data collected from the Project. It has been determined that the data is error-free and sufficient to support geological interpretations and Mineral Resource and Mineral Reserve estimation. Overall, all these findings demonstrate that the exploration programs completed on the Project have been thorough and meet industry standards.

## 25.5 Metallurgical Testwork

The metallurgical testwork conducted on the Project was appropriate for determining the optimal processing criteria for the mineralization type. The tests were performed on samples typical of the mineralization styles found within the deposit. Samples chosen for testing were representative of various types and styles of mineralization and were taken from a range of depths within the deposits. The quantity of samples selected was sufficient to ensure testing on adequate sample mass.

Recovery factors were estimated based on appropriate metallurgical testwork, backed by production data, and are suitable for the mineralization types and the chosen process route. There has been no effective change to the recovery estimates from the original project design criteria. The estimated overall gold extraction for the Project, is 76%.

No deleterious elements that could materially affect process activities or metallurgical recoveries are known to exist at this time.

## 25.6 Mineral Resource Estimates

The Mineral Resources for the Project have been reported in accordance with the 2014 CIM Definition Standards and are based on open pit mining methods.

Factors that may affect the Mineral Resource estimates include metal price and exchange rate assumptions, changes in the assumptions used to generate the gold grade cut-off grade, changes in the interpretations of mineralization geometry and continuity of mineralized zones, and variations to geotechnical, mining and processing recovery assumptions. Moreover, changes to input and design parameter assumptions related to the conceptual pit that constrains the estimates could also affect the Mineral Resource estimates. Assumptions regarding the continued access to the site, retention of mineral and surface rights titles, maintenance of environmental and regulatory permits, and the social license to operate also play a significant role.

## 25.7 Mineral Reserve Estimates

The Mineral Reserve estimation for the Project has been conducted in accordance with industry best practices and meets the requirements of the 2014 CIM Definition Standards. However, Mineral Reserves are based on forward-looking information, and actual results may vary. The risks associated with Mineral Reserves are summarized in Section 15 of the report, as well as in this sub-section. The assumptions used in the Mineral Reserve estimates can be found in the footnotes of the Mineral Reserve table, as well as in Sections 15 and 16 of the report.

The Mineral Reserves have been estimated for the Eagle and Olive deposits, utilizing open pit methods with conventional truck and shovel operations. The conversion of Mineral Resources to Mineral Reserves was supported by a detailed mine plan, an engineering analysis, and consideration of appropriate modifying factors. These factors included dilution, open pit mining methods, metallurgical recoveries, and infrastructure requirements.

However, there are areas of uncertainty that may materially impact the Mineral Reserve estimates. These include potential changes to long-term metal price assumptions, operating and capital assumptions used. Additionally, variations in geotechnical, mining, dilution, and processing recovery assumptions may have an impact, including changes to pit phase designs resulting from updates to geotechnical, hydrogeological, and engineering data used. Changes to the cut-off grades used to constrain the estimates, as well as environmental, permitting, and social license assumptions, may also impact the Mineral Reserve estimates. As a result, ongoing monitoring and review of these factors will be important to ensure the accuracy and reliability of the Mineral Reserve estimates.

## 25.8 Mine Plan

The proposed mining operation for the Project has been designed to be conducted year-round, with open pit mine plans developed to maximize efficiency based on current knowledge of geotechnical,

hydrological, mining, and processing information. The operation will use a standard drill-and-blast, truck-and-shovel open pit mining configuration, which is expected to be sufficient to achieve the predicted 10-year mine life (open pit mine operations only) until 2032. The last year of operations is a partial year.

The production forecasts for the mine are achievable with the existing equipment and plant, though there is a risk that dilution may be underestimated when mining in transition and fresh rock material. Another potential risk is related to pit wall dewatering, which could result in challenges related to slope depressurization, depending on ground water controls and alteration.

Potential risks and opportunities will be continuously assessed and addressed through ongoing review and consideration of alternative scenarios.

## 25.9 Recovery Plan

The process methods employed in the project are in line with conventional industry practices. The three-stage crush, heap leach and ADR recovery processes implemented are standard practices that have been widely used in the industry with no significant technological innovations. The design of the process plant flowsheet was developed based on testwork results, previous study designs, and industry-standard practices, ensuring that it is well-suited to the specific needs of the project's mineralization styles.

The process facilities currently in use are deemed appropriate for the project's requirements but will produce variations in recovery month-to-month due to day-to-day changes in ore type, and heap leach operating practices. These variations are anticipated to trend towards the forecast recovery value over the life of mine.

Project to date, the processing plant has achieved and exceed name plate capacity on a day-to-day basis. The LOM plan assumes that with ongoing optimization efforts and some small capital initiatives, the plant throughput will increase from 9.5 Mt/a in 2023 to 11.5 Mt/a in 2025 and thereafter.

Initiatives are ongoing to bring the plant's capacity beyond 11.5 Mt/a after 2025.

## 25.10 Infrastructure

The Project has all essential infrastructure in place and is currently operational. The infrastructure includes facilities for mine maintenance, reagents storage, administration offices, mill office, gate houses, warehouse and laydown areas, main camp, and assay laboratory. The electrical power supply for the operation is provided by a 43.5 km long 69 kV line. Three diesel generators act as backup power supply as required.

As the mine enters the later year operations a secondary heap leach pad and associated infrastructure is required to meet ore stacking requirements beyond 2029 Q1. The expansion area for SHLP is north of the PHLP and will be designed, constructed, and implemented in a similar manner. The SHLP is currently ongoing permitting and receipt of the permit is expected before construction is required.

All necessary infrastructure, including staff availability, power, water, communications, and transportation facilities, are well-established and can effectively support the estimation of Mineral Resources and Mineral Reserves.

## 25.11 Environmental, Permitting and Social Considerations

Victoria Gold concluded all three major steps required for the existing Mine operations and has received positive Decision Documents upon the completion of the assessment of the project under the *Yukon Environmental and Socio-Economic Assessment Act* (YESAA) in 2013. Victoria Gold also holds both a Quartz Mining License and a Type A Water Use License that collectively allow for the construction, operation, and closure of the Eagle Gold project.

As part of the permitting process Victoria Gold completed extensive baseline, environmental monitoring, and technical studies as per provincial and federal regulatory requirements. Victoria continues to conduct ongoing monitoring and annual reporting under the terms of its various permits and licenses.

Victoria Gold has undertaken ongoing consultation with its First Nation partners, the public, and the government regarding current ongoing operations and planned future activities. Victoria maintains strong relationships with all its stakeholders and will continue to engage with them throughout operations.

Prior to development of the SHLP, WRSA beyond Eagle Pup, and Olive facilities, several Provincial and Federal environmental approvals, or amendments to existing approvals will be required. The receipt of these approvals is expected before use of the facilities is required. Note that Eagle Pup has additional capacity and waste hauling to Stewart Gulch can be deferred, if necessary, with low impact to operations.

## 25.12 Markets and Contracts

The sales contracts for doré are in place and in line with standard industry practices. The metal prices are set by Victoria Gold corporate management. The current gold price for Mineral Resources is US\$1,700 per ounce of gold and for Mineral Reserves is US\$1,550 per ounce of gold. Both Mineral Resources and Mineral Reserves utilize an exchange rate of US\$:C\$ of 0.75.

There is a minor silver credit payable in the doré. This is not significant and has not been included in the cash flow analysis.

Victoria Gold has a variety of major contracts in place that typical of an open pit mining operation. Contracts are negotiated and renewed as applicable. Contract terms are considered standard with industry norms and typical of other operations.

## 25.13 Capital Cost Estimates

The Project is a steady-state operation. Capital cost estimates were developed by Victoria gold as part of yearly budgeting process and LOM planning. Capital costs consist largely of mining equipment (replacements, additions, component replacements, capitalized maintenance), construction of heap leach expansions (liner and conveyor extensions), and infrastructure associated with the second heap leach pad.

Capital cost estimates are acceptable to support declaration of Mineral Reserves. The LOM plan estimated total capital cost is \$291.9 million.

## 25.14 Operating Cost Estimates

Operating costs are based on a combination of historical actual cost and first principles projected through the LOM. Operating costs have been benchmarked against operations of similar type and size and are deemed to be conservative.

LOM operating costs are estimated at:

- LOM Operating Costs of \$2,430 million
- LOM Unit Costs of \$19.55/t stacked
- Mining Unit Cost of \$3.31/t mined
- Processing Unit Cost of \$9.03/t stacked
- Site Services Unit Cost of \$2.28/t stacked
- G&A Unit Cost of \$1.66/t stacked

## 25.15 Economic Analysis

The cumulative free cash flow before tax is estimated at \$1,602 M. The cumulative free cash flow after tax is \$1,204 M. At a 5% discount rate, the net present value of free cash flows before tax is \$1,257 M and of free cash flow after tax is \$954 M. Internal rate of return and payback period results are not relevant as the cumulative discounted after-tax free cash flows are never negative. This reflects the fact that the Project is already in operation and that operating cash flows are sufficient to cover future sustaining and growth capital requirements.

The Project is most sensitive to changes in the gold price, exchange rate, and operating cost changes, and least sensitive to changes in the capital cost assumptions.



## 25.16 Risks

Most mining projects are exposed to risks that might impact the economics of the project to varying degrees. Most risks are external and largely beyond the control of the project proponents. They can be difficult to anticipate and mitigate although, in many instances, some reduction in risk might be achieved by regular reviews and interventions over the life of the project.

External risks are things such as the political situation in the project region, metal prices, exchange rates and government legislation. These external risks are generally applicable to all mining projects.

The major risks to the Project, which are non-external, are associated with:

- Large negative variation to consumable prices, primarily diesel assumptions and other operating cost assumptions;
- Significant dilution beyond current assumed levels;
- Significant delays in assumed permitting timeline of the SHLP and WRSAs;
- Worse than assumed geotechnical considerations for the Pits, HLPs, and WRSAs; and
- Lower than expected overall metallurgical recoveries.

These risks are generally similar to those expected at other operations. To date these aspects have not posed impacts that would materially impact the economics moving forward. Measures to mitigate many of these issues have been identified and applied in the Technical Study. Ongoing risk identification and review of mitigations will continue to be a priority during operations.

## 25.17 Opportunities

Several opportunities have been identified and merit further investigation. The main opportunities are summarized below:

### 25.17.1 Resource Growth and Mine Life Extension

Victoria Gold has been successful in its recent drilling programs at growing and converting the existing resource of the Eagle deposit. Mineralization is currently open-ended along strike and down dip at Eagle and future drilling programs could continue to define and classify material along the main mineralization trends. There are also additional intrusion-related targets identified near to the main Eagle deposit that are not currently included in the Mineral Resource Estimate. Should exploration continue to be successful at expanding known mineralization on the property, sustained production beyond the current mine life is possible.

A large portion of the granodiorite within and along the extremities of the ultimate Eagle Reserve pit has minimal or a low density of drilling. This material is not currently classified in Mineral Resources; however, with infill drilling there is potential to define additional mineralization within and proximal to the Eagle Reserve pit.

The additional known mineralization along strike and at depth of the Eagle deposit currently classified as Mineral Resources but excluded from the Eagle Reserve pit represents significant project upside. Should economic factors justify a larger open pit at the project, the potential exists to redesign the ultimate pits to capture these Mineral Resources and convert them into Mineral Reserves. This could potentially increase the project's mine life, however, additional mining studies, permitting, and economic analysis are required to assess this potential.

### 25.17.2 Production Capacity

Since commissioning, the crushing circuit at the project has operated at and above the nameplate capacity of 39,200 t/d intermittently. The current LOM plan target throughput of 11.5 Mt/a represents an overall utilization of approximately 80% of the secondary and tertiary crushing circuit's nameplate capacity. With ongoing optimization initiatives and further work programs, the potential exists to achieve a higher utilization rate, which could result in throughput of beyond 12 Mt/a.

### 25.17.3 Mine Plan Optimization

The main constraint limiting mining equipment capacity is related to trucking and waste dump haul distances. The requirement to build the waste dumps in a bottom-up fashion can create oscillating periods of short and then long hauls. Shorter range planning work to date has managed to balance this out and optimize hauling requirements. This work has only been included to a limited extent in this report's mine plan. Continued optimization may result in significant cost savings.

### 25.17.4 Waste Stripping Requirements

The current mine plan has most of the waste stripping coming from Phase 3, in the metasedimentary rocks, typically along the western side of the pit. Minimal drilling was performed targeting this lithology as the metasedimentary unit was not a priority exploration target. Mining and grade control drilling in these areas to date have identified continuous stringers of mineralized material hosted in metasediments that were not classified in the Resource. This has resulted in a material reduction in stripping requirements to date. Currently these mineralized stringers are not captured in the updated Resource as there is insufficient drill density. Should these mineralized stringers continue as the Phase 3 stripping progresses, or if they expand as mining approaches the intrusive contact, the project's waste stripping requirement could be further reduced.

### 25.17.5 Metallurgical Recoveries

Initial metallurgical column leach testwork performed on the project was typically halted while leaching was still progressing. Recovery estimates were projected based off these results; however, the leach recoveries in this testwork were still showing slight increases at the end of the tests. There is potential with longer leach times that the ultimate recovery will exceed the current estimates.

### 25.17.6 Continuous Improvement Initiatives

Victoria Gold has established a continuous improvement department to identify and develop business improvement initiatives with the goals of improving productivity, increasing equipment availability and utilization, and lowering operating costs.

## 26 RECOMMENDATIONS

### 26.1 Eagle Exploration

In 2022, exploration proximal to the Eagle Pit culminated in 9,892 m of drilling from 22 holes in the Eagle extension zone. The holes targeted areas primarily to west at Eagle Extension as well as the Eagle Orebody to depth.

The majority of exploration drilling used to define the Eagle Gold deposit is captured within the currently defined ultimate reserve pit. However, mineralization has always been known to extend to depth beyond these bounds. The combination of the confirmation of higher-grade gold mineralization beneath the currently envisioned Eagle Reserve Pit and meaningful intervals of continuous Eagle-style gold mineralization along strike of the Eagle deposit from the 2022 drilling, has added over 500 m of mineralized strike length from the Eagle pit boundary and defined a vector for next step exploration focus.

The recommended exploration drilling for the Eagle Deposit consists of a 3,000 m – 10-hole diamond drill hole program. The program is estimated at \$1.55 million. This program would include six (6) holes along the southern mineralized zone of the Granodiorite contact, two (2) offset holes on the southeast contact near the strongly mineralized trench, and two (2) holes on the north contact dipping south towards platinum gulch, aiming to test the mineralized zone trending to the west.

### 26.2 Olive Exploration

In 2018, exploration completed 10 holes for 1,929 m, 8 trenches for 607 m. No work has been completed on Olive since 2018; and it is recommended that any future exploration at Olive concentrate on the localized contact zone on the northwest flank of the granodiorite intrusive. The intrusive-metasediment contact is sharp and steep to nearly vertical and has a general northeast trend.

The recommended exploration for the Olive deposit drilling consists of a 1,500 m – 5-hole diamond drill hole program. The program is estimated at \$1.14 million as shown in. This program would include five (5) holes expanding the deposit to the west and near Olive creek, aiming to test the contact and the unmineralized zone.

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## 28 UNITS OF MEASURE, ABBREVIATIONS AND ACRONYMS

Symbol/Abbreviation	Description
'	Minute (Plane Angle)
"	Second (Plane Angle) or Inches
°	Degree
°C	Degrees Celsius
3D	Three-Dimensions
A	Ampere
a	Annum (Year)
AA	Atomic Absorption
ac	Acre
ADR	Adsorption-Desorption-Recovery
AES	Atomic Emission Spectroscopy
amsl	Above Mean Sea Level
ANFO	Ammonium Nitrate/Fuel Oil
ARD	Acid Rock Drainage
Au	Gold
B20	Bottom 20 Samples
BD	Bulk Density
BFA	Bench Face Angles
BTU	British Thermal Unit
BV/h	Bed Volumes Per Hour
C\$	Dollar (Canadian)
Ca	Calcium
CBA	Cooperation and Benefits Agreement
CCA	Capital Cost Allowance
CDE	Canadian Development Expense
CDP	Cyanide Detoxification Plant
CEE	Canadian Exploration Expense
CF	Cumulative Frequency
cfm	Cubic Feet Per Minute
CHP	Combined Heat and Power Plant
CIC	Carbon-In-Column

Symbol/Abbreviation	Description
CIM	Canadian Institute of Mining and Metallurgy
CIM	Canadian Institute of Mining
cm	Centimetre
CM	Construction Management
cm <sup>2</sup>	Square Centimetre
cm <sup>3</sup>	Cubic Centimetre
COG	Cut-Off Grades
Cr	Chromium
CSA	Canadian Securities Administrators
Cu	Copper
CV	Coefficient of Variation
d	Day
d/a	Days per Year (Annum)
d/wk	Days per Week
dB	Decibel
dBa	Decibel Adjusted
DCS	Distributed Control System
DGPS	Differential Global Positioning System
dmt	Dry Metric Ton
EA	Environmental Assessment
EDA	Exploratory Data Analysis
EMR	Energy, Mines and Resources
EP	Engineering and Procurement
EPCM	Engineering, Procurement and Construction Management
FEL	Front-End Loader
FISS	Fisheries Information Summary System
FOB	Free on Board
FOC	Fisheries and Oceans Canada
FS	Feasibility Study
ft	Foot
ft <sup>2</sup>	Square Foot
ft <sup>3</sup>	Cubic Foot
ft <sup>3</sup> /s	Cubic Feet Per Second
g	Gram

Symbol/Abbreviation	Description
G&A	General and Administrative
g/cm <sup>3</sup>	Grams Per Cubic Metre
g/L	Grams Per Litre
g/t	Grams Per Tonne
gal	Gallon (Us)
GCL	Geosynthetic Clay Liner
GJ	Gigajoule
GPa	Gigapascal
gpm	Gallons Per Minute (US)
GSC	Geological Survey of Canada
GTZ	Glacial Terrain Zone
GW	Gigawatt
h	Hour
h/a	Hours Per Year
h/d	Hours Per Day
h/wk	Hours Per Week
ha	Hectare (10,000 m <sup>2</sup> )
HCR	Haggart Creek Road
HG	High Grade
HLP	Heap Leaching Pads
HMI	Human Machine Interface
hp	Horsepower
HPGR	High-Pressure Grinding Rolls
HPW	Highways and Public Works
HQ	Drill Core Diameter Of 63.5 Mm
HSE	Health, Safety and Environmental
HVAC	Heating, Ventilation, and Air Conditioning
Hz	Hertz
ICMC	International Cyanide Management Code
ICP	Inductively Coupled Plasma
ICP-MS	Inductively Coupled Plasma Mass Spectrometry
in	Inch
in <sup>2</sup>	Square Inch
in <sup>3</sup>	Cubic Inch

Symbol/Abbreviation	Description
IP	Internet Protocol
IRR	Internal Rate of Return
JDS	JDS Energy & Mining Inc.
K	Hydraulic Conductivity
k	Kilo (Thousand)
KCA	Kappes, Cassiday & Associates
KE	Kriging Efficiency
kg	Kilogram
kg	Kilogram
kg/h	Kilograms Per Hour
kg/m <sup>2</sup>	Kilograms Per Square Metre
kg/m <sup>3</sup>	Kilograms Per Cubic Metre
km	Kilometre
km/h	Kilometres Per Hour
km <sup>2</sup>	Square Kilometre
KNA	Kriging Neighbourhood Analysis
kPa	Kilopascal
kt	Kilotonne
kV	Kilovolt
KV	Kriging Variance
kVA	Kilovolt-Ampere
kW	Kilowatt
kWh	Kilowatt Hour
kWh/a	Kilowatt Hours Per Year
kWh/t	Kilowatt Hours Per Tonne
L	Litre
L/min	Litres Per Minute
L/s	Litres Per Second
LAN	Local Area Network
LDD	Large-Diameter Drill
LDRS	Leak Detection and Recovery System
LG	Low Grade
LG	Lerchs- Grossman
LOM	Life of Mine

Symbol/Abbreviation	Description
m	Metre
M	Million
m/min	Metres Per Minute
m/s	Metres Per Second
m <sup>2</sup>	Square Metre
m <sup>3</sup>	Cubic Metre
m <sup>3</sup> /h	Cubic Metres Per Hour
m <sup>3</sup> /s	Cubic Metres Per Second
Ma	Million Years
mamsl	Metres Above Mean Sea Level
MAP	Mean Annual Precipitation
masl	Metres Above Mean Sea Level
Mb/s	Megabytes Per Second
mbgs	Metres Below Ground Surface
mbs	Metres Below Surface
mbsl	Metres Below Sea Level
MCC	Motor Control Centres
mg	Milligram
mg/L	Milligrams Per Litre
min	Minute (Time)
mL	Millilitre
Mm <sup>3</sup>	Million Cubic Metres
MMER	Metal Mining Effluent Regulations
mo	Month
MPa	Megapascal
MRE	Mineral Resource Estimate
Mt	Million Metric Tonnes
Mt/a	Million Tonnes Per Year
MVA	Megavolt-Ampere
MW	Megawatt
MWMT	Meteoric Water Mobility Tests
MWTP	Mine Water Treatment Plant
NAD	North American Datum
NG	Normal Grade

Symbol/Abbreviation	Description
Ni	Nickel
NI 43-101	National Instrument 43-101
Nm <sup>3</sup> /h	Normal Cubic Metres Per Hour
NPVS	NPV Scheduler
NQ	Drill Core Diameter of 47.6 Mm
NRC	Natural Resources Canada
OIS	Operator Interface Stations
OP	Open Pit
ORE	Ore Research and Exploration
OREAS	Ore Research & Exploration Assay Standards
OSA	Overall Slope Angles
oz	Troy Ounce
P.Geo.	Professional Geoscientist
Pa	Pascal
PAG	Potentially Acid Generating
PEA	Preliminary Economic Assessment
PEP	Project Execution Plan
PFS	Preliminary Feasibility Study
PLC	Programmable Logic Controller
PLS	Pregnant Leach Solution
PMF	Probable Maximum Flood
ppb	Parts Per Billion
ppm	Parts Per Million
PSD	Particle Size Distribution
psi	Pounds Per Square Inch
QA/QC	Quality Assurance/Quality Control
QKNA	Qualitative Kriging Neighbourhood Analysis
QMA	Quartz Mining Act
QML	Quartz Mining License
QMS	Quality Management System
QP	Qualified Person
QQ	Quartile-Quartile
RC	Reverse Circulation
RMR	Rock Mass Rating

Symbol/Abbreviation	Description
ROM	Run-Of-Mine
rpm	Revolutions Per Minute
RQD	Rock Quality Designation
s	Second (Time)
S.G.	Specific Gravity
SARA	Species at Risk Act
Scfm	Standard Cubic Feet Per Minute
SEDEX	Sedimentary Exhalative
SG	Specific Gravity
SMR	South McQuesten Road
SRK	SRK Consulting Services Inc.
SVOL	Search Volume
t	Tonne (1,000 Kg) (Metric Ton)
T20	Top 20 Samples
t/a	Tonnes Per Year
t/d	Tonnes Per Day
t/h	Tonnes Per Hour
TBD	To be Determined
TCR	Total Core Recovery
t/h	Tonnes Per Hour
ts/hm <sup>3</sup>	Tonnes Seconds Per Hour Metre Cubed
TSS	Total Suspended Solids
US	United States
US\$	Dollar (American)
UTM	Universal Transverse Mercator
V	Volt
VEC	Valued Ecosystem Components
VoIP	Voice Over Internet Protocol
VSEC	Valued Socio-Economic Components
w/w	Weight/Weight
WAD	Weak-Acid-Dissociable
WBS	Work Breakdown Structure
wk	Week
wmt	Wet Metric Ton



Symbol/Abbreviation	Description
WRSA	Waste Rock Storage Area
WUL	Water Use License
YEC	Yukon Energy Corporation
YESAA	Yukon Environmental and Socio-Economic Assessment Act
YESAB	Yukon Environmental and Socio-Economic Assessment Board
YG	Yukon Government
µm	Microns
µm	Micrometre

Scientific Notation	Number Equivalent
1.0E+00	1
1.0E+01	10
1.0E+02	100
1.0E+03	1,000
1.0E+04	10,000
1.0E+05	100,000
1.0E+06	1,000,000
1.0E+07	10,000,000
1.0E+09	1,000,000,000
1.0E+10	10,000,000,000

# APPENDIX A

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## MINERAL TENURE INFORMATION

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Bob 1 -7, 52, 86	YA17729 - YA17735, YA17780, YA43014	1-Mar-34	106D04
Claim	Dave 1 - 8, 17, 18	YA17802 - YA17809, YA17818, YA17819	1-Mar-34	106D04
Lease	Dave 13 - 16, 25, 27, 28	YA17814 - YA17817, YA42970, YA42972, YA42973	31-Jan-36	106D04
Claim	Dave 26	YA42971	1-Oct-24	106D04
Claim	Dave 29, 30, 31	YA42974, YA42975, YA43015	1-Mar-34	106D04
Claim	DG 43 - 55, 82, 83, 85, 100 - 103	YA14986 - YA14998, YA43044, YA43045, YA43046, YA43061 - YA43064	1-Mar-34	106D04
Claim	Dub 1 - 3	YC11075 - YC11077	1-Mar-34	106D04
Claim	Dub 4	YC11078	1-Mar-33	106D04
Claim	Dub 5 - 8	YC11079 - YC11082	1-Mar-32	106D04
Claim	Dub 9, 10	YC11083, YC11084	1-Mar-34	106D04
Claim	Dub 11 - 16	YC11085 - YC11090	1-Mar-33	106D04
Claim	Dub 17 - 20	YC11091 - YC11094	1-Mar-32	106D04
Claim	Dub 21	YC11095	1-Mar-37	106D04
Claim	Dub 22	YC11096	1-Mar-33	106D04
Claim	Dub 23	YC11097	1-Mar-37	106D04
Claim	Dub 24	YC11098	1-Mar-32	106D04
Claim	Dub 25	YC11099	1-Mar-37	106D04
Claim	Dub 26	YC11100	1-Mar-32	106D04
Claim	Dub 27	YC11101	1-Mar-34	106D04
Claim	Dub 28	YC11102	1-Mar-32	106D04
Claim	Dub 29	YC11103	1-Mar-37	106D04
Claim	Dub 30	YC11104	1-Mar-32	106D04
Claim	Dub 31	YC11105	1-Mar-36	106D04
Claim	Dub 32	YC11106	1-Mar-32	106D04
Claim	Dub 33	YC11107	1-Mar-37	106D04
Claim	Dub 34	YC11108	1-Mar-32	106D04
Claim	Dub 35	YC11109	1-Mar-36	106D04
Claim	Dub 36	YC11110	1-Mar-34	106D04
Claim	Dub 37	YC11111	1-Mar-32	106D04

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Dub 38	YC11112	1-Mar-34	106D04
Claim	Dub 39	YC11113	1-Mar-32	106D04
Claim	Dub 40	YC11114	1-Mar-34	106D04
Claim	Dub 41	YC11115	1-Mar-32	106D04
Claim	Dub 42	YC11116	1-Mar-35	106D04
Claim	Dub 43, 44	YC11117, YC11118	1-Mar-32	106D04
Claim	Dub 45	YC11119	1-Mar-37	106D04
Claim	Dub 46	YC11120	1-Mar-32	106D04
Claim	Dub 47	YC11121	1-Mar-37	106D04
Claim	Dub 48	YC11122	1-Mar-32	106D04
Claim	Dub 49	YC11123	1-Mar-35	106D04
Claim	Dub 50	YC11124	1-Mar-32	106D04
Claim	Dub 51	YC11125	1-Mar-35	106D04
Claim	Dub 52	YC11126	1-Mar-32	106D04
Claim	Dub 53 - 56	YC11127 - YC11130	1-Mar-35	106D04
Claim	Dub 57 - 66	YC11131 - YC11140	1-Mar-37	106D04
Claim	Dub 67, 68	YC11141, YC11142	1-Mar-36	106D04
Claim	Dub 69	YC11143	1-Mar-37	106D04
Claim	Dub 70	YC11144	1-Mar-36	106D04
Claim	Dub 71	YC11145	1-Mar-37	106D04
Claim	Dub 72	YC11146	1-Mar-36	106D04
Claim	Dub 73 - 78	YC11147 - YC11152	1-Mar-32	106D04
Claim	Dub 79	YC11153	1-Mar-37	106D04
Claim	Dub 80	YC11154	1-Mar-32	106D04
Claim	Dub 81 - 85	YC11155 - YC11159	1-Mar-37	106D04
Claim	Dub 86	YC11160	1-Mar-35	106D04
Claim	Dub 87	YC11161	1-Mar-37	106D04
Claim	Dub 88	YC11162	1-Mar-35	106D04
Claim	Dub 89	YC11163	1-Mar-37	106D04
Claim	Dub 90	YC11164	1-Mar-35	106D04
Claim	Dub 91	YC11165	1-Mar-37	106D04
Claim	Dub 92	YC11166	1-Mar-35	106D04
Claim	Dub 93 - 102	YC11167 - YC11176	1-Mar-37	106D04
Claim	Dub 103, 104	YC11177, YC11178	1-Mar-36	106D04

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Dub 105	YC11179	1-Mar-37	106D04
Claim	Dub 106	YC11180	1-Mar-32	106D04
Claim	Dub 107 - 111	YC11181 - YC11185	1-Mar-37	106D04
Claim	Dub 112	YC11186	1-Mar-33	106D04
Claim	Dub 113 - 129	YC11187 - YC11203	1-Mar-37	106D04
Claim	Dub 130 - 135	YC11204 - YC11209	1-Mar-35	106d04
Claim	Dub 136, 137	YC11210, YC11211	1-Mar-32	106D04
Claim	Dub 138 - 141	YC11212 - YC11215	1-Mar-34	106D04
Claim	Dub 142	YC11216	1-Mar-33	106D04
Claim	Dub 143 - 152	YC11217 - YC11226	1-Mar-37	106D04
Claim	Dub 153 - 159	YC11227 - YC11233	1-Mar-34	106D04
Claim	Dub 160	YC11234	1-Mar-36	106D04
Claim	Dub 161 - 165	YC11235 - YC11239	1-Mar-37	106D04, 105M13
Claim	Dub 166 - 170	YC11240 - YC11244	1-Mar-35	105M13
Claim	Dub 171 - 180	YC11245 - YC11254	1-Mar-34	105M13
Claim	Dub 181 - 189	YC11255 - YC11263	1-Mar-37	105M13
Claim	Dub 190	YC11264	1-Mar-34	105M13
Claim	Dub 191	YC11265	1-Mar-37	105M13
Claim	Dub 192	YC11266	1-Mar-32	105M13
Claim	Dub 193 - 197	YC11267 - YC11271	1-Mar-34	106D04, 105M13
Claim	Dub 198	YC11272	1-Mar-37	105M13
Claim	Dub 199 - 207	YC11273 - 11281	1-Mar-34	106D04, 105M13
Claim	Dub 208	YC11282	1-Mar-33	106D04
Claim	Dub 209 - 216	YC11283 - YC11290	1-Mar-37	106D04
Claim	Dub 217	YC11291	1-Mar-34	106D04
Claim	Dub 218	YC11292	1-Mar-35	106D04
Claim	Dub 219	YC11293	1-Mar-34	106D04
Claim	Dub 220 - 222	YC11297 - YC11296	1-Mar-35	106D04
Claim	Dub 223	YC11297	1-Mar-34	106D04
Claim	Dub 224	YC11298	1-Mar-35	106D04
Claim	Dub 225	YC11299	1-Mar-34	106D04
Claim	Dub 226	YC11300	1-Mar-35	106D04

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Dub 227 - 229	YC11301 - YC11303	1-Mar-32	106D04
Claim	Dub 230 - 232	YC11304 - YC11306	1-Mar-34	106D04
Claim	Dub 233 - 240	YC11307 - YC11314	1-Mar-37	106D04
Claim	Dub 241 - 257	YC11315 - YC11331	1-Mar-35	106D04
Claim	Dub 258	YC11332	1-Mar-34	106D04
Claim	Dub 259, 260	YC11333, YC11334	1-Mar-35	106D04
Claim	Dub 261	YC11335	1-Mar-36	106D04
Claim	Dub 262 - 266	YC11336 - YC11340	1-Mar-33	106D04
Claim	Dub 267 - 272	YC11341 - YC11346	1-Mar-34	106D04
Claim	Dub 273 - 279	YC11347 - YC11353	1-Mar-35	106D04
Claim	Dub 280	YC11354	1-Mar-33	106D04
Claim	Dub 281 - 288	YC11355 - YC11362	1-Mar-34	106D04
Claim	Dub 289	YC11363	1-Mar-35	106D04
Claim	Dub 290	YC11364	1-Mar-34	106D04
Claim	Dub 291	YC11365	1-Mar-35	106D04
Claim	Dub 292, 293	YC11366, YC11367	1-Mar-34	106D04
Claim	Dub 294, 295	YC11368, YC11369	1-Mar-33	106D04
Claim	Dub 296	YC11370	1-Mar-34	106D04
Claim	Dub 297 - 299	YC11371 - YC11373	1-Mar-35	106D04
Claim	Dub 300 - 305	YC11374 - YC11379	1-Mar-34	106D04
Claim	Dub 306	YC11380	1-Mar-36	106D04
Claim	Dub 307 - 310	YC11381 - YC11384	1-Mar-34	106D04
Claim	Dub 311	YC11385	1-Mar-33	106D04
Claim	Dub 312	YC11386	1-Mar-34	106D04
Claim	Dub 313 - 324	YC11387 - YC11398	1-Mar-33	106D04
Claim	Dub 325 - 327	YC11399 - YC11401	1-Mar-34	106D04
Claim	Dub 328	YC11402	1-Mar-33	106D04
Claim	Dub 329	YC11403	1-Mar-34	106D04
Claim	Dub 330 - 338	YC11404 - YC11412	1-Mar-35	106D04
Claim	Dub 339	YC11413	1-Mar-36	106D04
Claim	Dub 340	YC11414	1-Mar-35	106D04
Claim	Dub 341	YC11415	1-Mar-37	106D04
Claim	Dub 342	YC11416	1-Mar-34	106D04
Claim	Dub 343	YC11417	1-Mar-36	106D04

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Dub 344	YC11418	1-Mar-34	106D04
Claim	Dub 345	YC11419	1-Mar-36	106D04
Claim	Dub 346	YC11420	1-Mar-34	106D04
Claim	Dub 347	YC11421	1-Mar-36	106D04
Claim	Dub 348	YC11422	1-Mar-34	106D04
Claim	Dub 349	YC11423	1-Mar-36	106D04
Claim	Dub 350	YC11424	1-Mar-33	106D04
Claim	Dub 351	YC11425	1-Mar-36	106D04
Claim	Dub 352	YC11426	1-Mar-34	106D04
Claim	Dub 353	YC11427	1-Mar-37	106D04
Claim	Dub 354	YC11428	1-Mar-34	106D04
Claim	Dub 355	YC11429	1-Mar-37	106D04
Claim	Dub 356	YC11430	1-Mar-33	106D04
Claim	Dub 357 - 359	YC11431 - YC11433	1-Mar-34	106D04
Claim	Dub 360	YC11434	1-Mar-33	106D04
Claim	Dub 361 - 364	YC11435 - YC11438	1-Mar-34	106D04
Claim	Dub 365 - 368	YC11439 - YC11442	1-Mar-35	106D04
Claim	Dub 369 - 372	YC11443 - YC11446	1-Mar-33	106D04
Claim	Dub 373, 374	YC11447, YC11448	1-Mar-34	106D04
Claim	Dub 375, 376	YC11449, YC11450	1-Mar-37	106D04
Claim	Dub 377 - 384	YC11451 - YC11458	1-Mar-36	106D04
Claim	Dub 385 - 390	YC11459 - YC11464	1-Mar-37	106D04
Claim	Dub 391 - 396	YC11465 - YC11470	1-Mar-34	106D04
Claim	Dub 397	YC11471	1-Mar-35	106D04
Claim	Dub 398	YC11472	1-Mar-34	106D04
Claim	Dub 399, 400	YC11473, YC11474	1-Mar-35	106D04
Claim	Dub 401	YC11475	1-Mar-34	106D04
Claim	Dub 402	YC11476	1-Mar-33	106D04
Claim	Dub 403	YC11477	1-Mar-34	106D04
Claim	Dub 404	YC11478	1-Mar-33	106D04
Claim	Dub 405	YC11479	1-Mar-34	106D04
Claim	Dub 406	YC11480	1-Mar-33	106D04
Claim	Dub 407	YC11481	1-Mar-34	106D04
Claim	Dub 408	YC11482	1-Mar-33	106D04



Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Dub 409	YC11483	1-Mar-36	106D04
Claim	Dub 410	YC11484	1-Mar-37	106D04
Claim	Dub 411	YC11485	1-Mar-35	106D04
Claim	Dub 412	YC11486	1-Mar-37	106D04
Claim	Dub 413	YC11487	1-Mar-35	106D04
Claim	Dub 414	YC11488	1-Mar-36	106D04
Claim	Dub 415	YC11489	1-Mar-35	106D04
Claim	Dub 416	YC11490	1-Mar-36	106D04
Claim	Dub 417	YC11491	1-Mar-35	106D04
Claim	Dub 418	YC11492	1-Mar-36	106D04
Claim	Dub 419	YC11493	1-Mar-35	106D04
Claim	Dub 420	YC11494	1-Mar-37	106D04
Claim	Dub 421	YC11495	1-Mar-35	106D04
Claim	Dub 422	YC11496	1-Mar-33	106D04
Claim	Dub 423	YC11497	1-Mar-36	106D04
Claim	Dub 424	YC11498	1-Mar-37	106D04
Claim	Dub 425	YC11499	1-Mar-32	106D04
Claim	Dub 426	YC11500	1-Mar-36	106D04
Claim	Dub 427	YC11501	1-Mar-32	106D04
Claim	Dub 428	YC11502	1-Mar-35	106D04
Claim	Dub 429	YC11503	1-Mar-32	106D04
Claim	Dub 430	YC11504	1-Mar-35	106D04
Claim	Dub 431	YC11505	1-Mar-32	106D04
Claim	Dub 432 - 436	YC1150 - YC11510	1-Mar-35	106D04
Claim	Dub 437 - 440	YC11511 - YC11514	1-Mar-36	106D04
Claim	Dub 441 - 449	YC11515 - YC11523	1-Mar-32	106D04
Claim	Dub 450	YC11524	1-Mar-35	106D04
Claim	Dub 451	YC11525	1-Mar-34	106D04
Claim	Dub 452, 453	YC11526, YC11527	1-Mar-35	106D04
Claim	Dub 454	YC11528	1-Mar-36	106D04
Claim	Dub 455	YC11529	1-Mar-35	106D04
Claim	Dub 456	YC11530	1-Mar-36	106D04
Claim	Dub 457 - 479	YC11531 - YC11553	1-Mar-32	106D04
Claim	Dub 480 - 484	YC11554, YC32478 - YC32481	1-Mar-34	106D04

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Dub 485 - 492	YC32482 - YC32489	1-Mar-32	105M13
Claim	Dub 493	YC32490	1-Mar-33	105M13
Claim	Dub 494 - 496	YC32491 - YC32493	1-Mar-32	105M13
Claim	Dub 497 - 516	YC32494 - YC32513	1-Mar-34	105M13
Claim	Dub 517	YC32514	1-Mar-33	105M13
Claim	Dub 518 - 544	YC32515 - YC32541	1-Mar-34	105M13
Claim	Dub 545 - 548	YC32542 - YC32545	1-Mar-32	105M13
Claim	Dub 567 - 581	YC32564 - YC32578	1-Mar-34	105M13
Claim	Dub 582 - 587	YC32579 - YC32584	1-Mar-32	105M13
Claim	Dub 588	YC32585	1-Mar-31	105M13
Claim	Dub 589	YC32586	1-Mar-32	105M13
Claim	Dub 590	YC32587	1-Mar-31	105M13
Claim	Dub 591	YC32588	1-Mar-32	105M13
Claim	Dub 592 - 603	YC32589 - YC32600	1-Mar-31	106D04, 105M13
Claim	Dub 604 - 662	YC32601 - YC32659	1-Mar-32	106D04, 105M13
Claim	Dub 663 - 678	YC32660 - YC32675	1-Mar-31	105M13, 105M14
Claim	Dub 679 - 682	YC32676 - YC32679	1-Mar-32	105M13
Claim	Dub 683 - 779	YC32680 - YC32700, YC38001 - YC38076	1-Mar-31	106D04, 105M13, 105M14
Claim	Dub 780	YC38077	1-Mar-32	106D04
Claim	Dub 781	YC38078	1-Mar-31	106D04
Claim	Dub 782	YC38079	1-Mar-32	106D04
Claim	Dub 783, 784	YC38080, YC38081	1-Mar-31	106D03
Claim	Dub 785 - 801	YC38082 - YC38098	1-Mar-32	106D03, 106D04
Claim	Dub 802 - 842	YC38099 - YC38139	1-Mar-31	106D03, 106D04
Claim	Dub 843 - 879	YC38140 - YC38176	1-Mar-32	106D04
Claim	Dub 880, 881	YC38177, YC38178	1-Mar-31	106D04
Claim	Dub 882	YC38179	1-Mar-32	106D04
Claim	Dub 883	YC38180	1-Mar-31	106D04
Claim	Dub 884, 885	YC38181, YC38182	1-Mar-32	106D04
Claim	Dub 886	YC38183	1-Mar-31	106D04

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Dub 887 - 907	YC38184 - YC38204	1-Mar-32	106D04
Claim	Dub 908 - 927	YC38205 - YC38224	1-Mar-31	106D03, 106D04
Claim	Dub 928 - 953	YC38225 - YC38250	1-Mar-32	106D03, 106D04
Claim	Dub 954 - 969	YC38251 - YC38266	1-Mar-31	106D03, 106D04
Claim	Dub 970	YC38267	1-Mar-32	106D04
Claim	Dub 971	YC38268	1-Mar-31	106D04
Claim	Dub 972 - 975	YC38269 - YC38272	1-Mar-32	106D04
Claim	Dub 976 - 979	YC38273 - YC38276	1-Mar-31	106D04
Claim	Dub 980	YC38277	1-Mar-32	106D04
Claim	Dub 981	YC38278	1-Mar-31	106D04
Claim	Dub 982 - 999	YC38279 - YC38296	1-Mar-32	106D04
Claim	Dub 1000 - 1017	YC38297 - YC38314	1-Mar-31	106D03, 106D04
Claim	Dub 1018 - 1026	YC38315 - YC38323	1-Mar-32	1064D04
Claim	Dub 1027 - 1029	YC38324 - YC38326	1-Mar-31	106D04
Claim	Dub 1030	YC38327	1-Mar-32	106D04
Claim	Dub 1031 - 1033	YC38328 - YC38330	1-Mar-31	106D04
Claim	Dub 1034 - 1045	YC38331 - YC38342	1-Mar-32	106D04
Claim	Dub 1046 - 1063	YC38343 - YC38360	1-Mar-31	106D03, 106D04
Claim	Dub 1064 - 1103	YC38361 - YC38400	1-Mar-32	106D04
Claim	Dub 1104	YC38401	1-Mar-33	106D04
Claim	Dub 1105	YC38402	1-Mar-32	106D04
Claim	Dub 1106 - 1117	YC38403 - YC38414	1-Mar-33	106D04
Claim	Dub 1118 - 1127	YC38415 - YC38424	1-Mar-32	106D04
Claim	Dub 1128 - 1146	YC38425 - YC38443	1-Mar-31	106D03, 106D04
Claim	Dub 1147, 1148	YC38444, YC38445	1-Mar-32	106D04
Claim	Dub 1149, 1150	YC38446, YC38447	1-Mar-31	106D04
Claim	Dub 1151	YC38448	1-Mar-32	106D04
Claim	Dub 1152	YC38449	1-Mar-31	106D04
Claim	Dub 1153	YC38450	1-Mar-32	106D04
Claim	Dub 1154	YC38451	1-Mar-31	106D04
Claim	Dub 1155	YC38452	1-Mar-32	106D04
Claim	Dub 1156, 1157	YC38453, YC38454	1-Mar-31	106D04
Claim	Dub 1158	YC38455	1-Mar-32	106D04
Claim	Dub 1159	YC38456	1-Mar-31	106D04

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Dub 1160	YC38457	1-Mar-32	106D04
Claim	Dub 1161	YC38458	1-Mar-31	106D04
Claim	Dub 1162 - 1190	YC38459 - YC38487	1-Mar-32	106D04
Claim	Dub 1191	YC38488	1-Mar-33	106D04
Claim	Dub 1192	YC38489	1-Mar-32	106D04
Claim	Dub 1193	YC38490	1-Mar-33	106D04
Claim	Dub 1194	YC38491	1-Mar-32	106D04
Claim	Dub 1195	YC38492	1-Mar-33	106D04
Claim	Dub 1196	YC38493	1-Mar-32	106D04
Claim	Dub 1197 - 1199	YC38494 - YC38496	1-Mar-33	106D04
Claim	Dub 1200 - 1209	YC38497 - YC38506	1-Mar-32	106D04
Claim	Dub 1210 - 1229	YC38507 - YC38526	1-Mar-31	106D03, 106D04
Claim	Dub 1230 - 1293	YC38527 - YC38590	1-Mar-32	106D04
Claim	Dub 1294	YC38591	1-Mar-31	106D04
Claim	Dub 1295	YC38592	1-Mar-32	106D04
Claim	Dub 1296	YC38593	1-Mar-31	106D04
Claim	Dub 1297	YC38594	1-Mar-32	106D04
Claim	Dub 1298	YC38595	1-Mar-31	106D04
Claim	Dub 1299	YC38596	1-Mar-32	106D04
Claim	Dub 1300	YC38597	1-Mar-31	106D04
Claim	Dub 1301	YC38598	1-Mar-32	106D04
Claim	Dub 1302	YC38599	1-Mar-31	106D04
Claim	Dub 1303	YC38600	1-Mar-32	106D04
Claim	Dub 1304	YC38601	1-Mar-31	106D04
Claim	Dub 1305	YC38602	1-Mar-33	106D04
Claim	Dub 1306 - 1310	YC38603 - YC38607	1-Mar-32	106D04
Claim	Dub 1311	YC38608	1-Mar-33	106D04
Claim	Dub 1312	YC38609	1-Mar-32	106D04
Claim	Dub 1313	YC38610	1-Mar-34	106D04
Claim	Dub 1314, 1315	YC38611, YC38612	1-Mar-32	106D04
Claim	Dub 1316	YC38613	1-Mar-31	106D04
Claim	Dub 1317	YC38614	1-Mar-32	106D04
Claim	Dub 1318	YC38615	1-Mar-31	106D04
Claim	Dub 1319 - 1321	YC38616 - YC38618	1-Mar-32	106D04

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Dub 1322	YC38619	1-Mar-31	106D04
Claim	Dub 1323	YC38620	1-Mar-32	106D04
Claim	Dub 1324	YC38621	1-Mar-31	106D04
Claim	Dub 1325, 1326	YC38622, YC38623	1-Mar-32	106D04, 116A01
Claim	Dub 1327	YC38624	1-Mar-31	116A01
Claim	Dub 1328 - 1344, 1345, 1346, 1347	YC38625 - YC38641, YC39876, YC38642, YC38643	1-Mar-32	106D04
Claim	Dub 1348, 1349	YC38644, YC38645	1-Mar-33	106D04
Claim	Dub 1350 - 1359	YC38646 - YC38655	1-Mar-32	106D04
Claim	Dub 1360 - 1363	YC38656 - YC38659	1-Mar-31	106D04, 116A01
Claim	Dub 1364, 1365	YC38660, YC38661	1-Mar-32	106D04
Claim	Dub 1366, 1367	YC38662, YC38663	1-Mar-33	106D04
Claim	Dub 1368 - 1371	YC38664 - YC38667	1-Mar-34	106D04
Claim	Dub 1372 - 1395	YC38668 - YC38691	1-Mar-32	106D04
Claim	Dub 1396 - 1399	YC38692 - YC38695	1-Mar-31	106D04, 116A01
Claim	Dub 1400 - 1403	YC38969 - YC38699	1-Mar-32	106D04
Claim	Dub 1404 - 1419	YC38700 - YC38715	1-Mar-34	106D04
Claim	Dub 1420 - 1423	YC38716 - YC38719	1-Mar-32	106D04
Claim	Dub 1424 - 1437	YC38720 - YC38733	1-Mar-34	106D04
Claim	Dub 1438	YC38734	1-Mar-32	106D04
Claim	Dub 1439	YC38735	1-Mar-34	106D04
Claim	Dub 1440 - 1443	YC38736 - YC38739	1-Mar-32	106D04
Claim	Dub 1444 - 1457	YC38740 - YC38753	1-Mar-34	106D04
Claim	Dub 1458 - 1463	YC38754 - YC38759	1-Mar-32	106D04
Claim	Dub 1464	YC38760	1-Mar-34	106D04
Claim	Dub 1465	YC38761	1-Mar-32	106D04
Claim	Dub 1466	YC38762	1-Mar-34	106D04
Claim	Dub 1467	YC38763	1-Mar-32	106D04
Claim	Dub 1468	YC38764	1-Mar-34	106D04
Claim	Dub 1469	YC38765	1-Mar-32	106D04
Claim	Dub 1470	YC38766	1-Mar-34	106D04
Claim	Dub 1471	YC38767	1-Mar-32	106D04
Claim	Dub 1472	YC38768	1-Mar-34	106D04
Claim	Dub 1473	YC38769	1-Mar-32	106D04

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Dub 1474	YC38770	1-Mar-34	106D04
Claim	Dub 1475 - 1499	YC38771 - YC38795	1-Mar-32	106D04, 116A01
Claim	Dub 1500	YC38795	1-Mar-31	116A01
Claim	Dub 1501	YC38796	1-Mar-32	116A01
Claim	Dub 1502	YC38797	1-Mar-31	116A01
Claim	Dub 1503	YC38798	1-Mar-32	116A01
Claim	Dub 1504 - 1512	YC38799 - YC38808	1-Mar-34	106D04
Claim	Dub 1513 - 1529	YC38809 - YC38825	1-Mar-32	106D04, 116A01
Claim	Dub 1530 - 1534	YC38826 - YC38830	1-Mar-34	106D04
Claim	Dub 1535	YC38831	1-Mar-32	106D04
Claim	Dub 1536 - 1538	YC38832 - YC38834	1-Mar-34	106D04
Claim	Dub 1539	YC38835	1-Mar-32	106D04
Claim	Dub 1540	YC38836	1-Mar-	106D04
Claim	Dub 1541 - 1581	YC38837 - YC38877	1-Mar-32	106D04, 116A01
Claim	Dub 1582	YC38878	1-Mar-34	106D04
Claim	Dub 1583	YC38879	1-Mar-32	106D04
Claim	Dub 1584 - 1589	YC38880 - YC39856	1-Mar-31	106D04
Claim	Dub 1590 – 1602, 1603 – 1608, 1609 - 1619	YC39857 - YC39875, YC39860 - YC39865, YC42226 - YC42236	1-Mar-32	106D04, 105M13
Claim	Dub Fr. 1620	YE55727	11-Feb-24	106D04
Claim	Fiji 1 - 6	YA63884, YB03409, YA63886, YA63888, YA63889	1-Mar-34	106D04
Claim	Hla 1 - 6, 7 - 14	YC10918 - YC10923, YC10828 - YC10835	1-Mar-29	106D04
Claim	Jan 1, 2	YB65585, YB65586	1-Mar-32	106D04
Claim	Jan 3	YB65587	16-Jan-24	106D04
Claim	Jan 4	YB65588	16-Jan-29	106D04
Claim	Jeff 17, 18, 33, 34, 113 - 115	YA17842, YA17843, YA17858, YA17859, YA42976 - YA142978	1-Mar-34	106D04
Claim	Jeff 116	YC39877	1-Mar-32	106D04
Claim	Jeff 117, 118, 120	YB03408, YA42981, YA42983	1-Mar-34	106D04
Claim	Len 1, 2	YC02730, YC02731	15-May-30	106D04
Claim	Len 3	YC02732	1-Mar-32	106D04
Claim	Len 4	YA30524	15-May-30	106D04

Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Len 5	YC02733	1-Mar-32	106D04
Claim	Len 6	YA30526	15-May-30	106D04
Claim	Len 7	YC02734	1-Mar-32	106D04
Claim	Len 8	YA30528	15-May-29	106D04
Claim	Len 9	YC02735	1-Mar-32	106D04
Claim	Len 10	YA30530	15-May-26	106D04
Claim	Len 11	YC02736	15-May-31	106D04
Claim	Len 12	YC02737	15-May-30	106D04
Claim	Len 13, 14	YC02738, YC02739	15-May-29	106D04
Claim	Len 15 - 18	YC02740 - YC02743	15-May-28	106D04
Claim	Len 19, 20	YC02744, YC02745	15-May-25	106D04
Claim	Len 21 - 23	YC02746 - YC02748	1-Mar-32	106D04
Claim	Len 24	YA30544	15-May-26	106D04
Claim	Len 25	YC02749	1-Mar-32	106D04
Claim	Len 26	YA30546	15-May-29	106D04
Claim	Len 27	YC02750	1-Mar-32	106D04
Claim	Len 28	YA30548	15-May-30	106D04
Claim	Len 29	YC02751	1-Mar-32	106D04
Claim	Len 30	YA30550	15-May-30	106D04
Claim	Len 31	YC02752	1-Mar-32	106D04
Claim	Len 32	YC02753	1-Mar-32	106D04
Claim	Lynx 1 - 18	YC10463 - YC10480	1-Mar-32	105M13
Claim	Lynx 19	YC10481	16-Jan-30	105M13
Claim	Lynx 20 - 23	YC10482 - YC10485	1-Mar-32	105M13
Claim	Lynx 24	YC10486	16-Jan-24	105M13
Claim	Lynx 25	YC10487	1-Mar-32	105M13
Claim	Lynx 26	YC10488	16-Jan-24	105M13
Claim	Lynx 27	YC10489	1-Mar-32	105M13
Claim	Lynx 28	YC10490	16-Jan-24	105M13
Claim	Lynx 29 - 32	YC10491 - YC10494	1-Mar-32	105M13
Claim	Lynx 33	YC10495	16-Jan-24	105M13
Claim	Lynx 34 - 40	YC10496 - YC10502	1-Mar-32	105M13
Claim	Lynx 41	YC10503	3-Mar-24	105M13



Regulation Type	Claim Name	Grant Number	Expiry Date	NTS Map Sheet
Claim	Lynx 42 - 57	YC10504 - YC11555	1-Mar-32	105M13, 106D04
Claim	Mar 1 - 12, 14 - 22, 24, 31, 33 - 40	YA14896 - YA14907, YA14909 - YA14917, YA14919, YA42984, YA43101 - YA43108	1-Mar-34	106D04
Claim	Mary 1 - 8	YA63876 - YA63883	1-Mar-34	106D04
Claim	Neera 1, 2	YC10822, YC10823	1-Mar-29	106D04
Grant	Olive Crown Grant	GR1054	N/A	106D04
Claim	R & D 1 - 8, 10, 12, 14 - 16	YA01393 - YA01400, YA01402, YA01404, YA01406 - YA01408	1-Mar-34	106D04
Lease	R & D No. 9, 11, 13	YA01401, YA01403, YA01405	31-Jan-36	106D04
Claim	Roni 1 - 14	YB64630 - YB64643	1-Mar-34	106D04
Claim	Smoky 1 - 10, 23, 25 - 30, 37 - 41, 44 - 47, 48, 49, 51 - 54, 56, 58, 62 - 65, 66 - 71, 74 - 77, 78, 80, 83 - 85, 91 - 100, 107 - 109	YA17930 - YA17939, YA17952, YA17954 - YA17959, YA17966 - YA17970, YA30072 - YA30075, YA17973, YA17974, YA30076 - YA30079, YA17977, YA17979, YA30080 - YA30083, YA17983 - YA17988, YA30084 - YA30087, YA17991, YA17993, YA43120 - YA43122, YA43128 - YA43137, YA43144 - YA43146	1-Mar-34	106D04
Claim	Smoky Fr. 55	YE55726	6-Dec-23	106D04
Claim	Tin Dome 1 - 4, 5 - 12	YC02842 - YC02845, YC02848 - YC02855	1-Mar-32	106D04
Claim	West 167 - 172, 174, 182, 184	YB18934 - YB18939, YB18941, YB18949, YB18951	1-Mar-34	106D04, 105M13

Source: VGC (2023)

# APPENDIX B

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## QUALIFIED PERSON CERTIFICATES



**CERTIFICATE OF QUALIFIED PERSON**

I, Nicolas Harvey, P.Eng., do hereby certify that:

1. I am a co-author for the items set out below in the report entitled "TECHNICAL REPORT FOR THE EAGLE GOLD MINE, YUKON TERRITORY, CANADA" dated April 10, 2023 and with an effective date of December 31, 2022 (the "Technical Report") prepared for Victoria Gold Corp.
2. I am currently employed as Senior Engineer, Projects & Evaluations with Victoria Gold Corporation and have an address at Suite 1000 – 1050 West Pender St, Vancouver, BC, V6E 3S7.
3. I am a registered Professional Engineer with the Association of Professional Engineers and Geoscientists of British Columbia (#54761) and the Association of Professional Engineers of Yukon (#3322). I graduated from the University of British Columbia with a B.A.Sc in Mining Engineering (2016). My relevant experience includes 9 years of experience working onsite operations in precious and base metals. I have been directly involved in the design, construction and operation of mines in the Yukon.
4. I have read the definition of "Qualified Person" set out in National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
5. I have most recently visited the property from March 15-19 2023 for a duration of 5 days. I regularly visit the property as part of my job responsibilities with Victoria Gold Corp.
6. I am responsible for sections 1, 2 to 6, 15 to 16 (excluding 16.3 and 16.8.2), 18 to 26 of the Technical Report.
7. I am not independent of the issuer, Victoria Gold Corp., as "independence" is described in Section 1.5 of NI 43-101.
8. I have been involved with the Eagle Gold Mine since starting employment with Victoria Gold Corp. in May of 2019. I have read NI 43-101 (including Form 43-101F1) and the Technical Report, and the sections of the Technical Report for which I am responsible have been prepared in compliance with the NI 43-101 (including Form 43-101F1).
9. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 10<sup>th</sup> day of April, 2023.

(Original signed and sealed) "Nicolas Harvey"

**Nicolas Harvey, P.Eng.,**

Senior Engineer, Projects & Evaluations

Suite 204 – 80 Richmond Street  
Toronto, ON M5H 2A4 CANADA

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FAX 416-866-8801

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**CERTIFICATE OF QUALIFIED PERSON**

I, Paul D. Gray, BSc. (Honours), P.Geo., do hereby certify that:

1. I am a co-author for the items set out below in the report entitled "TECHNICAL REPORT FOR THE EAGLE MINE, YUKON TERRITORY, CANADA" dated April 10, 2023 and with an effective date of December 31, 2022 (the "Technical Report") prepared for Victoria Gold Corp.
2. I am **VP Exploration** and have an address at 1000-1050 West Pender Street, Vancouver, B.C., Canada, V6E 3S7.
3. I am a member of the Association of Engineers and Geoscientists of British Columbia, Registered in the Province of British Columbia (APEGBC No. 29833).
4. I have read the definition of "Qualified Person" set out in National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
5. I visited the property on numerous occasions since July 2010.
6. I am responsible for Sections 7 – 12 of this Technical Report.
7. I am not independent of the issuer, Victoria Gold Corp., as "independence" is described in Section 1.5 of NI 43-101. I am employed by Victoria Gold Corp. in the capacity of V.P. Exploration and Officer of the Company.
8. I have had prior involvement with the Eagle Gold Project since July 2010
9. I have read NI 43-101 (including Form 43-101F1) and the Technical Report, and the sections of the Technical Report for which I am responsible have been prepared in compliance with the NI 43-101 (including Form 43-101F1).
10. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 10<sup>th</sup> day of April, 2023.

[ORIGINAL SIGNED AND SEALED]

**Paul D. Gray, P.Geo.,**  
**VP Exploration, Victoria Gold Corp.**

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**CERTIFICATE OF QUALIFIED PERSON**

I, Jeffrey Winterton, P.E., do hereby certify that:

1. I am a co-author for the items set out below in the report entitled "TECHNICAL REPORT FOR THE EAGLE MINE, YUKON TERRITORY, CANADA" dated April 10, 2023 and with an effective date of December 31, 2022 (the "Technical Report") prepared for Victoria Gold Corp.
2. I am Process Operations Manager and have an address at 2954 Race Street Denver, CO 80205.
3. I am a registered professional engineer in the state of Colorado (PE.0048398) and a registered member of The Society for Mining, Metallurgy & Exploration (4163987RM). I have degrees in Metallurgical Engineering and Materials Science and Engineering from the University of Utah and the University of California. I have worked in the mining industry since 2008 with roles ranging from site Metallurgist to Process Manager.
4. I have read the definition of "Qualified Person" set out in National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
5. I have visited the property for the first time in December 2019 and have returned several times per year since then. Most recently I am on a rotation schedule working two weeks onsite per month.
6. I am responsible for sections 13 and 17 of the Technical Report.
7. I am not independent of the issuer, Victoria Gold Corp., as "independence" is described in Section 1.5 of NI 43-101.
8. I am employed as the Process Operations Manager at the Eagle Gold Mine. I have read NI 43-101 (including Form 43-101F1) and the Technical Report, and the sections of the Technical Report for which I am responsible have been prepared in compliance with the NI 43-101 (including Form 43-101F1).
9. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 10<sup>th</sup> day of April, 2023.

*(Original signed and sealed)* \_\_\_\_\_

Jeffrey Winterton  
Process Operations Manager

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Toronto, ON M5H 2A4 CANADA

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**GINTO CONSULTING INC.**

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North Vancouver, B.C.  
Canada V7M 1V9  
(604) 374-1629

**AUTHOR'S CERTIFICATE**

I, Marc Jutras, P. Eng., M.A.Sc., do hereby certify that:

1. This certificate applies to the technical report entitled "TECHNICAL REPORT FOR THE EAGLE MINE, YUKON TERRITORY, CANADA" dated April 10, 2023 and with an effective date of December 31, 2022 (the "Technical Report") prepared for Victoria Gold Corp.;
2. I am currently employed as Principal, Mineral Resources with Ginto Consulting Inc. with an office at 333 West 17<sup>th</sup> Street, North Vancouver, British Columbia, V7M 1V9;
3. I am a graduate of the University of Quebec in Chicoutimi in 1983, and hold a Bachelor's degree in Geological Engineering. I am also a graduate of the Ecole Polytechnique of Montreal in 1989, and hold a Master's degree of Applied Sciences in Geostatistics;
4. Since 1984, I have worked continuously in the field of mineral resource estimation of numerous international exploration projects and mining operations. I have been involved in the evaluation of mineral resources at various levels: early to advanced exploration projects, preliminary studies, preliminary economic assessments, prefeasibility studies, feasibility studies and technical due diligence reviews;
5. I am a Registered Professional Engineer with the Engineers and Geoscientists British Columbia (license # 24598) and Engineers and Geoscientists Newfoundland and Labrador (license # 09029). I am also a Registered Engineer with the Quebec Order of Engineers (license # 38380);
6. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101;
7. I have visited the project site on November 3-5, 2022. During the site visit, the sampling procedures were reviewed, the exposed faces within the open pit were examined, and discussions with the geologic team at site were conducted;
8. I am responsible for Sections 1.7 and 14 of this Technical Report;
9. I am independent of the Issuer, Victoria Gold Corp., and related companies applying all of the tests in Section 1.5 of the NI 43-101;
10. I have had prior involvement with the property that is the subject of this Technical Report, as I was a co-author and Qualified Person of the previous technical report on the property, dated December 6, 2019;

11. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading;
12. I have read NI 43-101, and the Technical Report has been prepared in accordance with NI 43-101 and Form 43-101F1.

Dated this 10<sup>th</sup> day of April, 2023

*(Original signed and sealed)*

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Marc Jutras, P. Eng., M.A.Sc.  
Principal, Mineral Resources, Ginto Consulting Inc.





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VALUE

JDS Energy & Mining Inc.  
Suite 900 – 999 West Hastings Street  
Vancouver, BC V6C 2W2  
t 604.558.6300  
jdsmining.ca

#### CERTIFICATE OF AUTHOR

I, Michael E. Levy, P.Eng. do hereby certify that:

1. I am currently employed as Geotechnical Manager with JDS Energy & Mining Inc. with an office at Suite 900 - 999 West Hastings St, Vancouver, BC V6C 2W2.
2. This certificate applies to the Technical Report entitled "Technical Report for The Eagle Mine, Yukon Territory, Canada" dated April 10, 2023 and with an effective date of December 31, 2022 (the "Technical Report") prepared for Victoria Gold Corp.
3. I hold a bachelor's degree (B.Sc.) in Geology from the University of Iowa in 1998 and a Master of Science degree (M.Sc.) in Civil-Geotechnical Engineering from the University of Colorado in 2004. I have practiced my profession continuously since 1999 and have been involved in numerous mining and civil geotechnical projects around the world.
4. I am a registered Professional Engineer (P.E.) in the states of Colorado (#40268), California (#70578) and Arizona (#61372) and a registered Professional Geologist P.G.) in the state of Wyoming (#3550). I am also a registered Professional Engineer (P.Eng.) in the province of British Columbia (#216542) and Yukon Territory (#2692). I am a current member of the Society for Mining, Metallurgy & Exploration (SME) and the American Society of Civil Engineers (ASCE).
5. I personally visited the property that is the subject to the Technical Report on multiple occasions since 2016 with March 13 -17, 2023 being the most recent.
6. I am responsible for the preparation of Sections 16.3 and 16.8.2 of the Technical Report.
7. I have had prior involvement with the property that is the subject of the Technical Report. I was previously responsible for the following:
  - Sections 16.3 and 16.4 of the technical report titled "NI 43-101 Feasibility Study Technical Report for the Eagle Gold Project, Yukon Territory, Canada", with an effective date of September 12, 2016; and,
  - Sections 15.2.1.7 and 16.3.6.1 of the report titled "Technical Report Eagle Project, Yukon Territory, Canada" prepared for Victoria Gold Corp. with an effective date of 15 November 2019.
8. I am independent of the issuer, Victoria Gold Corp. as defined in Section 1.5 of National Instrument 43-101.
9. I have read the definition of "Qualified Person" set out in NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by reason of my education, affiliation with a professional association, and past relevant experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

10. I have read National Instrument 43-101, Standards for Disclosure of Mineral Properties and Form 43-101F1. This technical report has been prepared using the guidance of that instrument and form.
11. As of the effective date of the Report, 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 the Technical Report not misleading.

Effective Date: December 31, 2022  
Signing Date: April 10, 2023

*(Original signed and sealed) "Michael Levy, P. Eng."*

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Michael E Levy, P. Eng.