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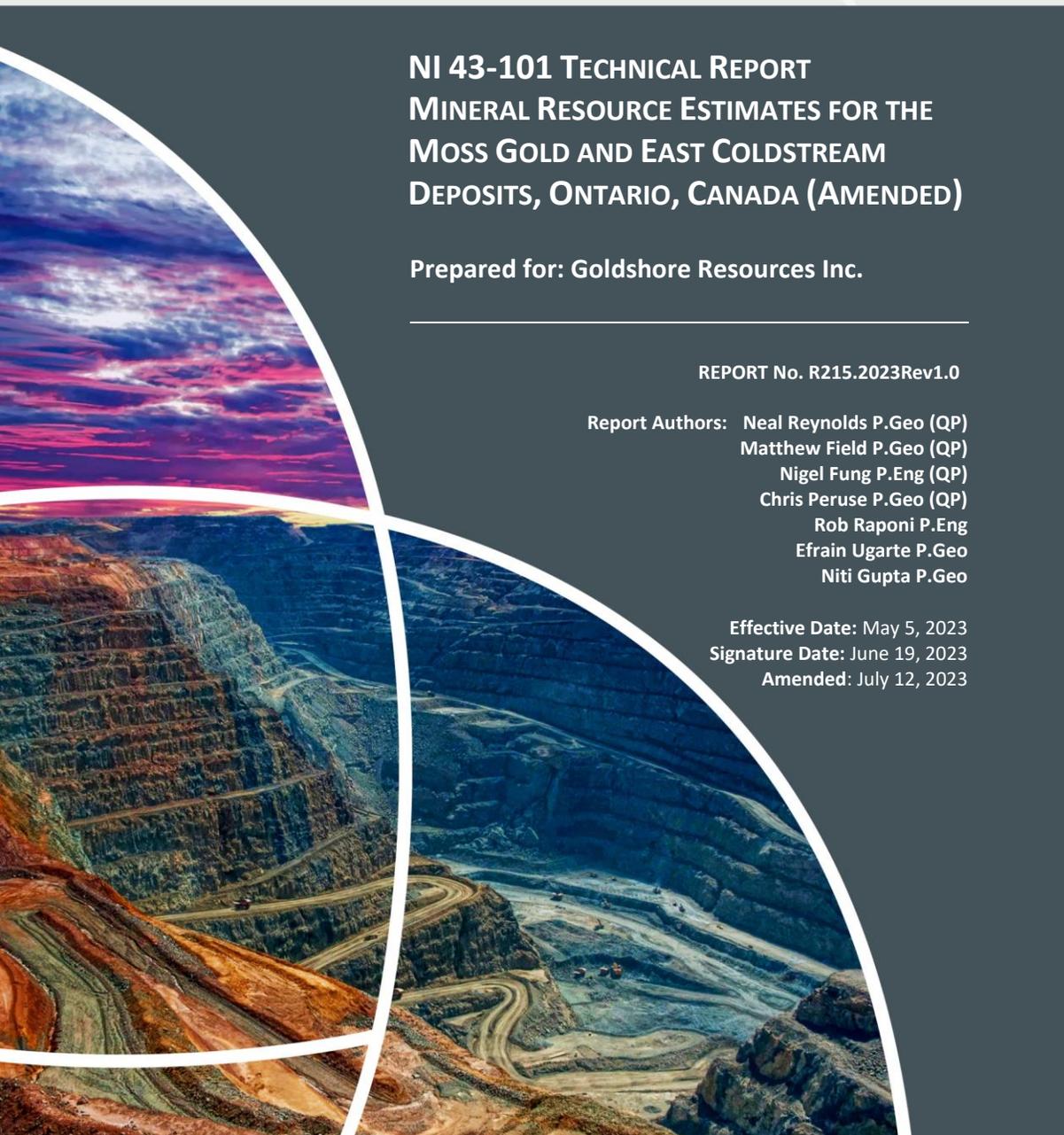
# NI 43-101 TECHNICAL REPORT MINERAL RESOURCE ESTIMATES FOR THE MOSS GOLD AND EAST COLDSTREAM DEPOSITS, ONTARIO, CANADA (AMENDED)

Prepared for: Goldshore Resources Inc.

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# 1 Summary

## 1.1 Introduction

Goldshore Resources Inc. (“Goldshore” or the “Company”) is a Canadian-based gold exploration company headquartered in Vancouver, BC, and its common shares trade on the TSX Venture Exchange (“TSX-V”) under the symbol “GSHR” and on the OTCQB under the symbol “GSHRF”. Goldshore owns 100% of the Moss Gold and East Coldstream Deposits located approximately 100 km west of the city of Thunder Bay, Ontario. The Moss Gold Deposit and East Coldstream Deposit are collectively referred to herein as the “Moss Project” or the “Project” unless specified otherwise.

On 10 February 2023, Goldshore commissioned CSA Global Consultants Canada (“CSA Global”), a division of ERM Consultants Canada Ltd., to complete an updated Mineral Resource estimate (“MRE”) for the Moss Gold and the East Coldstream Deposits and to prepare a Technical Report (the “Report”) summarizing the MRE results in accordance with National Instrument 43-101 – Standards for Disclosure for Mineral Projects (“NI 43-101”), Form 43-101F1, and Companion Policy 43-101CP requirements.

The current MRE has been prepared in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014) as referenced in NI 43-101. Only Mineral Resources have been estimated for the Project, and no Mineral Reserves are yet defined. This Report is intended to enable the Issuer and potential partners to reach informed decisions with respect to the Project.

The Qualified Person authors of this Report are Neal Reynolds, Ph.D., FAusIMM, MAIG (CSA Global Partner and Principal Geologist), Nigel Fung P.Eng (CSA Global Partner and Principal Mining Engineer), Matthew Field, Ph.D., Pr.Sci.Nat. (CSA Global Manager (UK) – Resources), and Chris Peruse P. Geo (CSL Ltd. President/Sr. Geoscientist). All report authors are independent Qualified Persons as defined in NI 43-101. Niti Gupta, Efrain Ugarte and Robert Raponi are contributing authors, but are not QPs for this report.

The Effective Date of this Report is May 5, 2023. The Report is based on scientific and technical information for the Project and known to the QP authors as of the effective date.

## 1.2 Property Description and Location

The Project is located approximately 100 km west of the city in Thunder Bay, Ontario, Canada and is accessed via Highway 11 (Trans-Canada Highway), which passes through the northern boundary of the Project. The small town of Atikokan is located 80 km to the west, on Highway 11. The city of Winnipeg, Manitoba, is also reachable via the Trans-Canada Highway 500 km to the west. From Highway 11, the Project is accessible using Highway 802 as well as a network of gravel logging roads which run south of Highway 11, mainly the Burchell Road and Swamp Road. The Moss site is accessed using Swamp Road before turning east onto Hermia Lake East Road, followed by Snodgrass Road.

Goldshore maintains an operational base at Kashabowie including a core logging and sampling facility with offices, and on-site accommodation for the exploration team.

The Project is comprised of 431 Mineral Claims (14,990 ha), two Mining Leases (215 ha), 48 Patents (836 ha), and five MLOs (534 ha) for a total project area of 165.80 km<sup>2</sup> in the Thunder Bay South Mining Division.

The Project is located within UTM NAD83 Zone 15U and NTS sheets 52B/10 and (at the southern extreme) 52B/07, and centred at UTM coordinates 668860 mE, 5379100 mW. The Project overlaps with Moss and Ames Townships and the unsurveyed areas of Powell Lake, Nelson Lake, Burchell Lake and Crayfish Lake. The majority

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of the Project is within the grounds of Crown Treaty 3 and in the traditional territories of the Lac des Mille Lacs First Nation, Lac La Croix First Nation, Fort William First Nation, Métis Nation of Ontario, and Red Sky Métis Independent Nation.

On January 25, 2021, Goldshore announced it was acquiring a 100% interest in the Project through an asset purchase agreement with Wesdome Gold Mines Ltd. (“Wesdome”). About 90% of the Project lies within provincial Crown Land while the remainder is Patented Claims (“Patents”). The Project consists of Multi-Cell, Single Cell, and Boundary Mining Claims (subsurface rights only leased from Crown) as well as Patents, Leases and Licenses of Mining Occupation (permanent subsurface and/or surface rights). The mining Claims and Patents are held in the name of Moss Lake Project Inc., a subsidiary of Goldshore.

### 1.3 Project History

Goldshore fully acquired the Moss Gold Project claims held by Wesdome Gold Mines Ltd. (“Wesdome”) in May 2021 as part of a corporate transaction leading to listing of the Company’s shares on the TSX. Wesdome had assembled the Moss, Coldstream and Hamlin blocks in the mid-2010s. Wesdome purchased all shares in Moss Gold Mines in 2014 by business combination agreement, which resulted in Wesdome acquiring a 100% ownership of the Moss claim block containing the Moss Gold Deposit. In a second transaction with Canoe Mining in 2016, Wesdome acquired the Coldstream and Hamlin claim blocks by issuing shares in Wesdome and providing cash payments. Goldshore acquired the Vanguard claim block separately from White Metal Resources in 2022. White Metal changed its name to Thunder Gold Corp. in 2022.

#### 1.3.1 Moss Claim Block

The gold occurrence which was later to become the Moss Gold Deposit was initially discovered in 1936. Limited work took place here and in the wider belt until the 1970s, notably with localized exploration around Kawawigamak (Fountain) lake where minor Au, Cu and Zn occurrences were found. Intensive exploration at Moss began in the 1970s when Falconbridge and later Camflo Mines revisited the historical showing at Snodgrass. Infill drilling and underground development took place under the Tandem Resources and Storimin Joint Venture (“JV”) throughout the 1980s. At that time the adjacent ground surrounding the Moss deposit to the east, south and west, including parts of the QES Zone, were held by the Tamavack/International Maple JV who likewise undertook numerous drill programs and thorough grid-based geochemical, geological and geophysical exploration. At the same time, Inco/Canico mapped and drilled the Span Lake gold prospect. Exploration slowed dramatically in the 1990s due to unfavourable market conditions. From the mid-1990s onwards Moss Lake Resources acquired both of the JV claim blocks and gradually intensified their exploration programs until their acquisition by Wesdome. Span Lake became part of Alto and later Foundation’s Coldstream claim block and was explored by those companies until the Wesdome acquisition.

#### 1.3.2 Coldstream Claim Block

The North Coldstream deposit was discovered in the 1870s. Scant records of mapping and prospecting exist for the areas peripheral to North Coldstream through to the early 20th century. The deposit saw four periods of production, first as the Tip-Top Mine from 1900-1908, two minor periods of production in the 1920s alongside underground development, and the most productive period under Noranda from 1957-1967. Very little work took place at North Coldstream following its last period of production. Sporadic exploration took place in other areas of the property throughout these periods. Gold-focused exploration picked up in the 1980s driven by Noranda Lacana who discovered the Goldie occurrence and later the East Coldstream deposit. Peripheral parts of this system were worked by prospector Todd Sanders. Lacana alongside Freeport also discovered the Iris prospect around this time. Exploration efforts at East Coldstream dwindled in the 1990s. The area west of Burchell Lake was worked by prospectors. Exploration at East Coldstream picked up with intensive geophysical

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and prospecting work by Also Ventures and Foundation Resources in the late 2000s. Wesdome acquired the former Foundation property from Canoe Mining in 2016.

### **1.3.3 Hamlin Claim Block**

Noranda and MacLeod-Cockshutt completed localised geophysically-targeted exploration in the 1950s. Prospector Ray Smith discovered the Hamlin Cu-Mo-Au occurrence around this time. Falconbridge explored a minor ultramafic belt east of Hamlin in the 1970s. Most work in the fervent 1980s period was focused on gold targets in the west of the claim block; most of these work programs were focused on gold occurrences outside the current Goldshore claim group in the Pearce Lake area. The Deaty Creek gold prospect was discovered and explored by Noranda in the early 1990s. Intensive exploration including modern geophysics and geochemistry began in the mid-2000s and was again initially focused on gold targets towards the west. The Hamlin occurrence itself attracted more attention in the late 2000s (including an Xstrata option) when its IOCG affinity was first theorized.

### **1.3.4 Vanguard Claim Block**

The Vanguard East and West prospects were first discovered in the 1920s. Few documents survive of the early exploration programs save for what is mentioned in ODM reports but in the 1940s-50s, drill programs were undertaken densely enough to calculate historical resource estimates. The Copper Island occurrence was drilled in this period. In the 1980s the western portion of this claim block fell within the Lacana/Freeport (and later Newmont) Iris property. Key targets in that period included sodium-depleted footprints in the volcanic sequence used as VMS proxies, as well as a stratigraphically interpreted “Storimin Horizon” representing a potential strike continuation of Moss. The original Vanguard stripped areas were mapped in detail by OGS geologists in the 1990s. Modern geophysics-driven exploration was done by several juniors from the early 2000s and led to the discovery of new Au occurrences.

### **1.3.5 Historical Estimates and Past Production**

Historical mineral resource estimates (“historical estimates”) were completed for mineralized zones found within the Moss and Coldstream claim blocks. Many of these historical estimates were completed prior to the introduction of CIM and NI 43-101 standards and guidelines and are no longer considered relevant or reliable. A QP has not completed sufficient work to classify these historical estimates as current Mineral Resources and Goldshore is not treating these historical estimates as current Mineral Resources. The current MRE disclosed in this Report supersedes all historical estimates for the Project, including the latest historical estimate completed in 2013 by InnovExplo for Moss Gold Mines.

There is no record of production from the Moss claim block. Copper was discovered at the Coldstream site during the 1870s. Between 1902 and 1917 the site was mined intermittently by the New York and Canadian Copper Company operating under the name of the Tip-Top Mine, producing approximately 1.3 million lbs of copper. The mine was operated intermittently from 1957 until 1959 and continuously from 1960 to 1967 by Canadian mining company Noranda. Production ceased in 1967 when reserves were depleted, and the mine was closed permanently. ProMin (2002) reported that 102 million pounds of copper, 440,000 ounces of silver, and 22,000 ounces of gold were produced from a total of 2.7 million tons of ore mined at Coldstream.

## **1.4 Geology and Mineralization**

### **1.4.1 Regional Geology**

The Project is located in the western portion of the Shebandowan Greenstone Belt (SGB), within the Wawa-Abitibi Terrane (Sub-province) of the Superior Province. All units are late Archean in age and are metamorphosed



to greenschist facies, tending towards amphibolite facies with proximity to the larger plutons. The northwest extremes of the Project area lie within the Quetico Sub-province, represented by greywackes with minor mafic-intermediate intrusions metamorphosed at greenschist facies. The contact with the Wawa Sub-province is marked by the major regional-scale Postans Fault, represented by a significant topographic low.

The SGB consists of three supracrustal assemblages that are distinguished by their age:

- Greenwater-Burchell Assemblage: tholeiitic mafic through to calc-alkaline intermediate-felsic volcanic cycles, including layered mafic-ultramafic intrusive complexes and chemical sediments (iron formations) (2720 Ma);
- Kashabowie Assemblage: calc-alkaline to alkali mafic-felsic volcanics and hypabyssal intrusions with "Timiskaming-type" clastic sediments (2695 Ma);
- Shebandowan Assemblage: "Timiskaming-type" trachytic and shoshonitic volcanic rocks and immature clastic sedimentary rocks (2690–2680 Ma).

The SGB is broadly understood to have had a tectonic history as an island arc type terrane which was accreted onto the Wabigoon Sub-province, compressing the intermediary Quetico back-arc basin or marine sedimentary package. The belt has been affected by polyphase deformation and metamorphism, with two principal penetrative deformation events recognized, D1 and D2. Continued tectonic stress after collision resulted in the D2 foliation as part of transpressive shear networks within all three sub-provinces, which were in turn exploited by "Timiskaming-type" alkalic intrusives, volcanics and narrow coarse clastic sedimentary basins.

There is some debate among authors regarding the Burchell Assemblage, whether it represents a distinct subset of the Greenwater Assemblage or is synonymous with the Kashabowie Assemblage. The Greenwater Assemblage consists of calc-alkaline basalts and Fe-tholeiite basalts with felsic volcanics. Nd isotope evidence suggests an intra-arc setting with input from a depleted mantle source. Goldshore surface samples from the Coldstream area exhibit characteristics of island-arc tholeiites and MORB.

The Kashabowie Assemblage represents renewed activity on the SGB arc after a long hiatus. It is contemporaneous with the D1 structural event, which caused thrust-stacking and interleaving of Kashabowie and Greenwater units, resulting in subvertical foliation and north/northwest younging directions.

The SGB and Wabigoon Sub-province are divided by the Quetico Sub-province, characterized by high-grade metamorphic turbidite sequences. The Quetico Sub-province is interpreted as a fore-arc accretionary prism formed along the southern edge of the Wabigoon. It transformed into a basin that received material from both the Wabigoon and Wawa-Abitibi as they converged. This explains why there is no reported faulted contact between certain sections of the Quetico and SGB in Ames Township. A porphyry dyke, presumed to have Kashabowie affiliation, is intruded into the Quetico sediments at the La Rose Shear at  $2693.45 \pm 0.81$  Ma and puts a time constraint on the closure of the Quetico basin. Based on seismic interpretations, the SGB is believed to be joined to the Wabigoon beneath the Quetico wedge. Variation in graded bedding way-up indicators in the Quetico suggests tight or isoclinal folding.

The Shebandowan Assemblage consists of coarse, immature clastic sedimentary rocks intermixed with hornblende-phyric, calc-alkalic to alkalic volcanic units. These were deposited in transtensional basins or on the flanks of transpressional uplifts during activity on "Timiskaming-aged" structures. Alkalic volcanism began around 2690 Ma with the Tower Stock emplacement in Conmee Township. The Knife Lake Group in Minnesota likely shares similarities as a "Timiskaming-type" sequence.

To the south, the SGB borders the NLPG (Northern Lights Perching Gull) complex, consisting of tonalite-trondhjemite-granodiorites and supracrustal-derived gneisses that serve as the SGB's basement. Sanukitoidal intrusions are found near large fault systems. Similarly, the emplacement of ultramafic bodies in the Quetico



Sub-province was influenced by movement along the Quetico Fault. Both events indicate a connection to an enriched mantle source.

Moving east and southeast, the SGB and NLPG are overlain by the Proterozoic sedimentary sequence of the Animikie Basin. Additionally, the Nipigon and Logan intrusion complexes of the Midcontinent Rift at 1100 Ma are present. The occurrence of Proterozoic chonolith intrusions along the Quetico Fault at Sunday Lake and Escape Lake suggests that Archean structures may have been partially reactivated or utilized during the activity of the Midcontinent Rift.

#### **1.4.2 Property Geology**

The majority of the Moss Block is underlain by rocks locally referred to as the Central Felsic Belt (CFB), part of the Kashabowie Assemblage, which is 2.5 km to 3.0 km wide and at least partly bounded by major regional Snodgrass and Knife Lake Faults. The CFB is comprised of andesitic, dacitic and rhyolitic flows, tuffs, lapilli tuffs and fragmental units, and minor chemical sediments in the form of iron formation. The CFB is flanked to the northwest and southeast the by Northern and Southern Mafic Belts (NMB and SMB), respectively, which are also partly included in the Moss Block.

From west to east, the Coldstream Block is underlain by a wedge of Quetico greywackes in faulted contact with the NMB. The NMB contains narrow iron formations and coarse clastic interflow sediments and is bifurcated by the Snodgrass Lake Fault. To the east, the NMB has an intricate, possibly unconformable, contact with CFB units similar to those in the Moss Block. Much of the CFB in this area lies beneath Burchell Lake but is well exposed west and north of Iris Lake where quartz-sericite schists are developed in higher-strain zones close to the Knife Lake Fault. East of Burchell Lake, the CFB is in sharp faulted contact (Knife Lake Fault) with the SMB which here incorporates a voluminous suite of mafic to ultramafic intrusions including gabbro, leucogabbro, quartz gabbro, pegmatitic gabbro, anorthosite, and greenschist-facies equivalents. The North Coldstream Fault runs broadly east-west along a mafic/ultramafic contact immediately south of the North Coldstream deposit and is truncated by the Knife Lake Fault.

The Hamlin occurrence lies in the centre of the Hamlin Block and is hosted by highly ductile-deformed, hematized intermediate-to-felsic volcanic units including shoshonite and possible immature volcanogenic clastic sediments, suggesting a "Timiskaming-type" (Kashabowie Assemblage) back-arc tectonic affiliation. A tongue extends to Hamlin Lake from larger granitoid bodies to the south. To the west, the claim group overlies an intricate mix of mafic and intermediate-felsic volcanics with presumed unconformable contacts. Sills and lenses of diorite and intermediate-felsic porphyry are common. Shear zones are evident in topography and magnetic data broadly following the same two shear fabrics as seen in the CFB in the Moss Block. The eastern half of the block is not well mapped but historical reports note mafic-to-ultramafic volcanics and intrusives and greywacke-type sedimentary packages of unknown affinity in the wedge between the Knife Lake Fault, the Hood Lake Stock and the large granitoids to the south.

The geology of the Vanguard block is similar to that of the eastern half of the Coldstream Block, dominated by mafic-ultramafic volcanics and a sill complex of the SMB with minor diorite and feldspar porphyry sills. Ultramafic rocks have been intersected in drilling beneath Shebandowan Lake. Minor interbeds of cherty felsic volcanics are present, including the horizon which hosts the mineralization at Vanguard East and West, within a broader package of silica, chlorite and sericite-altered mafic volcanics.



### 1.4.3 Mineralization

#### 1.4.3.1 Moss Gold Deposit

Gold mineralization in the Moss Gold Deposit occurs primarily within dioritic bodies intersected by anastomosing shear zones. These shear zones, along with other intrusive and volcanic rocks, host mineralization in the form of small-scale veins, breccias, and stockworks. The deposit is divided into three main zones: the Main Zone and QES Zone, where most of the mineralization is concentrated, and the SW Zone to the southwest, which appears offset to the south. Extensive alteration is observed throughout the deposit, with different periods of tectonic-hydrothermal activity identified.

The mineralized zones within the deposit show varying degrees of alteration, with stronger alteration characterized by carbonate, albite, and hematite dusting. Higher gold grades are generally associated with more intense veining and alteration, particularly in proximity to shear zones. The mineralization is believed to have developed during and after intense ductile deformation, with two tectonic-hydrothermal events identified. The deposition of sulphides, mainly pyrite, occurred in shear veins both within and outside shear zones, exhibiting different fabric orientations.

The Moss Gold Deposit demonstrates a strong correlation between gold mineralization and structural features, such as shear zones, suggesting their significant role in the formation of the deposit. The deposit's complexity and the limitations of historical logging necessitate ongoing drilling and modeling efforts to improve the understanding of the mineralized shear zones. In addition to pyrite, chalcopyrite and rare tellurides are present, with the latter showing a spatial correlation with high-grade gold. The presence of multiple sulphide stages and the overprinting of sulphidic structures indicate late emplacement of sulphides during the shearing event.

#### 1.4.3.2 East Coldstream Deposit

The East Coldstream deposit is a structurally controlled gold deposit located approximately 15 km NE of the Moss Gold Deposit. The East Coldstream mineralized zones are located on the south margin of an ultramafic shear zone which separates a gabbroic intrusion to the north from a mafic-intermediate volcanic suite to the south. Mineralization is related to a NE-trending shear zones carrying higher-grade gold mineralization. The lower-grade gold mineralization is associated with more brittle-style veining in the felsic to intermediate metavolcanic rocks, gabbros, and porphyries between the main shear zones. The main mineralized zones have been cut by a north-south-trending diabase dike.

Gold mineralization in the East Coldstream deposit is characterized by distinct cream-colored zones within a ductile deformation zone situated between a gabbroic intrusion to the north and a mafic-intermediate suite to the south. The deposit is divided into the North and South Zones, which have a true width of up to 60 m at the deposit's core. Mineralization occurs in sheared mafic to intermediate volcanic units near quartz and quartz-feldspar porphyry sills and distinctive brick-red syenites, potentially indicating a braided shear network on a scale of approximately 10 m, an area of active investigation.

Pyrite disseminations, accompanied by lesser amounts of chalcopyrite, can be observed throughout silica-hematite-altered shear zones. These minerals are also present as individual grains within quartz-carbonate veinlets and scattered bands that conform to the foliation. Hydrothermal fluids have infiltrated the quartz/quartz-feldspar porphyries and the adjacent gabbroic intrusions, but these areas lack the intense alteration and mineralization seen in the sheared volcanic units, suggesting different geological processes at play.

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## 1.5 Exploration and Drilling

Extensive historical exploration and drilling had been completed on the Moss Project. Since acquiring the project in 2021, Goldshore has mainly focused on drilling and related studies, and exploration has mainly consisted of geophysical surveys.

The historical drill hole database for the Project consists of 2,060 drill holes (278,273 m drilled) dating back to 1942 for the Coldstream, Moss, and Hamlin blocks. Detailed compilation and validation of historical drilling in the Vanguard block is still ongoing by Goldshore.

Between August 1, 2021, and January 20, 2023, Goldshore completed a total of 68,732.3 m (122 drill holes) of diamond drilling on the Moss Gold deposit, mostly on the Main and QES zones of the Moss Gold Deposit. No drilling has yet been conducted on the Hamlin or Vanguard blocks. A total of 5,470 m was drilled using HQ-size core diameter and the remainder of the drill holes were completed using NQ-size core diameter. All assay results have been received for drilling conducted by Goldshore Resources. Goldshore has also completed a total of 9,924.75 m (22 drill holes) of diamond drilling on the East Coldstream deposit during 2022. All of this drilling has been included for use in this report.

Total drilling on the project by Goldshore is 78,657.05 m (144 drill holes).

All drill holes were planned by a Goldshore geologist and assigned an alpha-numeric abbreviation defining the area, year, and sequential hole number. Upon completion of the drill hole, a downhole survey was conducted using a Reflex Sprint IQ tool with measurements taken every 3 m or 5 m. All cores were sampled with sample intervals marked onto the cores in wax crayon, and sample tags inserted at the beginning of each sample interval. All cores were cut using core saws, with cuts made 5 mm below the orientation mark, and the piece of core with the orientation mark retained in the core box. Quality assurance protocols included insertion of certified reference materials (CRM), blanks, and duplicates by Goldshore geologists.

The QP authors are not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the Goldshore drilling results up to the effective date of this Report and used in the current MRE for the Project.

## 1.6 Mineral Processing and Metallurgical Testing

Goldshore has recently completed metallurgical testwork on samples from the Project as follows:

In 2022, a program of leach tests was completed at ALS Metallurgy in Kamloops, BC (project KM6683) on a series of samples. A total of 22 samples were tested that were representative of 20 possible geological domains. The average Au leach extraction was 83%.

In 2023, Base Metallurgy Ltd. Kamloops, BC, Mineralogy, conducted testwork on comminution, gravity concentration, flotation, leaching, and cyanide detoxification (Program BL1194 in progress).

Recoveries for whole ore leach (WOL) and flotation leach (FL) are provided as a result of this program.

Estimated recoveries, including typical plant soluble and carbon losses are:

- For the Main/QES deposit:
  - Whole ore leach = 82% Au
  - Flotation/leach = 92%.
- For the East Coldstream deposit:
  - Whole ore leach = 88% Au
  - Flotation/leach = 96.5%.

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The average leach extraction for the variability samples was 82.4% Au, ranging from 78.8% au to 87.0% Au.

## 1.7 Mineral Resource Estimates

During the period March to May 2023, CSA Global (QP author Matthew Field) completed an update of the MRE for the then named Moss Gold Project. An MRE was also completed for the East Coldstream Deposit. The current MRE has an effective date of May 5, 2023, and was prepared in accordance with CIM Definitions and Standards on Mineral Resources and Mineral Reserves (10 May 2014) and reported in accordance with NI 43-101.

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### 1.7.1 MRE Methodology

#### 1.7.1.1 Moss Gold Deposit

The current MRE for Moss and East Coldstream were based on interpretations from assaying and geological and structural logging. All data and the geological model were provided by Goldshore. Apart from the initial sample data preparation and intermediate spreadsheet processing, all interpretations, modelling, estimation, and model validation was conducted using Leapfrog™, Micromine™ and Datamine Studio RM™ (DM) software. Snowden Supervisor™ was used for statistical analysis. The drilling database incorporated into the MRE was based on data available up to 17 March 2023.

For the Moss MRE, maps of gold value continuity were used to investigate the strike, dip, and pitch axes of gold mineralization trends. Maps were interrogated per high-grade shear (Main, QES and SW) and for the lower-grade intrusion domain. The grade variation between sample pairs orientated along each direction axis  $\pm 10^\circ$  was reviewed using variogram charts. Sample pairs are grouped by their separation distance, or “lag interval” on the X axis. The resulting variogram chart can show if there is a relationship that can be modelled between grade variance and distance along each axis.

A block model was constructed with cell dimensions of 9 m × 9 m × 3 m (XYZ). This block size was chosen after conducting kriging neighbourhood analysis (KNA) and was modified from the previous block model so that cell sizes could be used for assessing potential underground mining below the defined RPEEE open pit. The wireframes representing the mineralization boundaries were filled with cells to a minimum sub-cell size of 3 m × 3 m × 1 m to fill the volumes with blocks. The blocks were coded according to the appropriate estimation domains. Input wireframe volumes and block model volumes were compared to ensure that the volumes are comparable. Block models were built assuming that mining within both an open pit and potentially underground could be undertaken.

Mineralization domain shell contacts are interpreted as hard boundaries for grade interpolation, such that gold grades in one domain cannot inform blocks in another domain. The OK (ordinary kriging) interpolation method used the mineralization trends modelled using correlograms to weight composite assay values when estimating block grades. For validation purposes only, interpolation was also undertaken using inverse distance weighting to the power two (IDW2) and nearest neighbour (NN) of input samples. The NN method was estimated using bench composite equal to the block height (3 m) to calculate the declustered mean at every swath in the swath plot.

Estimation of the grade variables was carried out into parent cells using ordinary kriging. Hard boundaries between mineralization domains were used during grade estimation. The estimation was performed using a 3 × 3 × 3 discretization. For a block elevation size of 3 m, a maximum of 3 × 1 m samples per drill hole is appropriate. A minimum of 5 and a maximum of 20 composites were used.



Density determinations were conducted onsite using an Archimedes method. A total of 3,140 samples were collected from the drill holes. The density samples were coded according to estimation domains and mean values derived per domain. The mean densities were calculated after anomalous values were removed.

To satisfy the requirement of reasonable prospects for eventual economic extraction (RPEEE) by open pit mining, reporting pit shells were determined based on conceptual parameters and costs supplied by Goldshore Resources and reviewed for reasonableness by the QP. The depth, geometry, and grade of gold mineralization at the deposits make them amenable to exploitation by open pit mining methods. Selected cut-off values assume a gold price of US\$1,650/oz and the processing recoveries and costs are detailed in the table below. The resource is constrained by a conceptual pit shell derived using Datamine NPV Scheduler optimization software. Material falling outside of this shell is considered to not have reasonable prospects for eventual economic extraction.

Parameters used in the pit optimisation are shown in Table 1.1.

Table 1.1: Conceptual mining and cost parameters for the RPEEE conceptual pit shell

Item	Value
Gold price	US\$1,650/oz
Mining cost mineralization and waste	US\$2.70/t fresh
Processing cost	US\$12.50/t fresh
Processing gold recovery	92.5%
General and administration cost	US\$2.50/t
Pit slope angle	50°
Cut-off grade	0.35 g/t

Material falling below the open pit shell was considered using Datamine Mining Shape Optimiser (MSO) using parameters outlined in Table 1.2. These costs and parameters (Table 1.2) are based on Ontario-based benchmarks and are considered reasonable by Nigel Fung (QP) author who has qualified these blocks as meeting criteria for RPEEE. Being an underground mining scenario, the cut-off grades and the mining costs are higher than those for the open pit as would be expected in such scenarios.

Table 1.2: Conceptual mining and cost parameters for underground RPEEE stope assessment

Item	Value
Gold price	US\$1,650/oz
Underground Mining cost (Mineralisation and waste)	US\$86.25/t
Processing cost	US\$12.50/t
Processing gold recovery	92.5%
General and administration cost	US\$2.50/t
Minimum Drift and Fill Stope Dimensions	5 m × 5 m × 5-1000 m
Cut-off grade	2.07 g/t

#### 1.7.1.2 East Coldstream Deposit

For the East Coldstream MRE, an examination of the continuity of gold mineralization, both 3D and 2D views were utilized. Variography was employed to assess the grade variation between pairs of samples in different directions. The samples were grouped based on their separation distance, and experimental variograms of the primary domains were created using correlograms.

A block model was constructed with block dimensions of 6 m × 6 m × 6 m (XYZ) and sub-blocks measuring 3 m × 3 m × 3 m. This block size was chosen with consideration for the reasonable prospects of eventual economic



extraction (RPEEE) and the potential for both open pit and underground mining. The wireframes representing the boundaries of mineralization were filled with the defined blocks. The blocks were coded according to the appropriate estimation domains. Domain contacts were treated as strict boundaries for grade interpolation, meaning that gold grades in one domain could not affect blocks in another domain. Ordinary kriging (OK) method with locally varying anisotropy was used for grade interpolation, estimating the gold values within the parent block cells. Hard boundaries between mineralization domains were utilized during grade estimation. The estimation process involved a  $3 \times 3 \times 3$  discretization and four passes. In the first two passes, a minimum of 10 and a maximum of 30 composites were used. Inverse distance weighting to the power of two (IDW2) and nearest neighbour (NN) methods were employed solely for validation purposes on the input samples.

Onsite density determinations were conducted using the Archimedes method. The density samples were categorized and assigned based on the rock type, utilizing the available data.

To ensure the reasonable prospects of eventual economic extraction (RPEEE) through open pit and underground mining, reporting shapes were determined based on conceptual parameters and costs provided by Goldshore Resources. These shapes were reviewed for reasonableness by the Qualified Person (QP). The depth, geometry, and grade of gold mineralization in the deposits make them suitable for exploitation using both open pit and underground mining methods. The selected cut-off values assume a gold price of US\$1,650/oz, and the processing recoveries and costs are specified in the table below. The resource is constrained by a conceptual pit shell and stopes (MSO) derived using Datamine software.

Parameters used in the pit and stope optimisation are shown in Table 1.3.

Table 1.3: Conceptual mining and cost parameters for the RPEEE conceptual pit shell and underground

Item	Value open pit	Value Underground
Gold price	US\$1,650/oz	US\$1,650/oz
Mining cost mineralization and waste	US\$2.70/t fresh	US\$86.25/t fresh
Processing cost	US\$12.50/t fresh	US\$12.50/t fresh
Processing gold recovery	96.5%	96.5%
General and administration cost	US\$2.50/t	US\$2.50/t
Cut-off grade	0.35 g/t	2.00 g/t
Pit slope angle	50°	-

## 1.7.2 MRE Statement

### 1.7.2.1 Moss Gold Deposit

The MRE is reported above a cut-off grade of 0.35 g/t Au and comprises of 161.0 Mt of Inferred Open Pit Mineral Resources at a grade of 1.00 g/t Au (Table 1.4). In addition, shear-hosted mineralization below the RPEEE pit shell is also classified as an Inferred Mineral Resource that is potentially mineable by underground mining methods. This comprises 2.6 Mt at a grade of 2.90 g/t Au and is quoted at a cut-off grade of 2.07 g/t Au. The Mineral Resource has also been reported by domain as shown in Table 1.4.

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Table 1.4: Moss Gold Deposit Mineral Resource Statement by domain as at May 5, 2023

	Inferred Resources (Domains)	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)
Moss Lake Open Pit	Shear	56.5	1.84	3.35
	Intrusion	104.5	0.55	1.83
	<b>Total</b>	<b>161.0</b>	<b>1.00</b>	<b>5.18</b>
Moss Lake Underground	All	2.6	2.90	0.24
	<b>Total</b>	<b>2.6</b>	<b>2.90</b>	<b>0.24</b>
Moss Lake Open Pit	Shear	56.5	1.84	3.35
	Intrusion	104.5	0.55	1.83
	<b>Total</b>	<b>161.0</b>	<b>1.00</b>	<b>5.18</b>
Moss Lake Underground	All	2.6	2.90	0.24
	<b>Total</b>	<b>2.6</b>	<b>2.90</b>	<b>0.24</b>
Moss Lake Open Pit at cut-off grade of 0.35 g/t Au	Shear	56.5	1.84	3.35
	Intrusion	104.5	0.55	1.83
	<b>Total</b>	<b>161.0</b>	<b>1.00</b>	<b>5.18</b>
Moss Lake Underground at cut-off grade of 2.07 g/t Au	All	2.6	2.90	0.24
	<b>Total</b>	<b>2.6</b>	<b>2.90</b>	<b>0.24</b>

## Notes:

- Numbers have been rounded to reflect the precision of an Inferred MRE. Totals may vary due to rounding.
- Estimation has been completed within the two separate reported geological domains: a higher-grade shear domain which occurs within a larger lower-grade intrusive domain; modelling of domain boundaries has considered both geology and grade.
- Gold cut-off for open pit has been calculated based on a gold price of US\$1,650/oz, mining costs of US\$2.70/t, processing costs of US\$12.50/t, and mine-site administration costs of US\$2.50/t processed. Metallurgical recoveries of 92.5% are based on prior metallurgical testwork.
- Gold cut-off for underground MSO shapes have been calculated based on a gold price of US\$1,650/oz, mining costs of US\$86.25/t, processing costs of US\$12.50/t, and mine-site administration costs of US\$2.50/t processed. Metallurgical recoveries of 92.5% are based on prior metallurgical testwork.
- An economic cut-off grade of 0.35 g/t Au was applied to mineralized rock in the optimized open pit for processing determination.
- Mineral Resources conform to NI 43-101, and the 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves.
- The Qualified Person and Company are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that might materially affect the MRE.

Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in the MRE are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated and/or Measured Resources. The Company will continue exploration intended to upgrade the Inferred Mineral Resources to Indicated Mineral Resources

The QP authors note that the entire MRE has been classified as an Inferred Mineral Resource. This resource classification reflects the fact that the majority of the drill hole data used for the resource estimate is historical, and no QAQC data or reports exist for the majority of these drill holes. Statistical assessment of historical data and recent data provided some support for the historical data, but also included some inconsistencies. The majority of the historical drill holes did not have acceptable downhole surveys meaning that spatial location of the core samples remains uncertain especially beneath 200 m.

While the downhole surveys and QAQC methods utilized for the modern drill holes is of industry standard, these holes remain too sparsely distributed to permit confident mineral resource estimation on their own. Goldshore has already commenced an extensive program of relogging and resampling of historical drill core, together with



downhole surveying where possible. Goldshore’s program of infill and confirmatory drilling is also ongoing. The QP authors expect that this work will likely support a partial upgrade in classification to an Indicated Mineral Resource in any subsequent mineral resource estimate for the Project.

The shears are open at depth and along strike, beyond the modelled strike length of 3.5 km. Historical drilling intercepted gold mineralization over a total strike length of 8 km, which has been a focus of Goldshore’s summer soil geochemistry and structural mapping programs. Furthermore, the QP author is of the opinion that there remains potential for additional parallel shears with gold mineralization in historical drill holes 500 m to the southeast of the Moss deposit.

#### 1.7.2.2 East Coldstream Deposit

For East Coldstream, the MRE is reported above a cut-off grade of 0.35 g/t Au and comprises 19.8 Mt of Inferred Mineral Resources at 0.89 g/t Au within the optimized open pit. In addition, resources are reported above a cut-off grade of 2.00 g/t of 0.18 Mt of Inferred Mineral Resources at a grade of 2.24 g/t Au within the underground MSO shapes (Table 1.5).

Table 1.5: East Coldstream Deposit – Mineral Resource Estimate as at May 5, 2023

	Mineral Resource classification	Tonnage (Mt)	Au (g/t)	Contained metal (Moz Au)
Open Pit	Inferred	19.8	0.89	0.57
Underground	Inferred	0.18	2.24	0.01

#### Notes:

- Numbers have been rounded to reflect the precision of an Inferred MRE. Totals may vary due to rounding.
- Estimation has been completed within two geological zones: a strongly altered higher-grade shear zone surrounded by a lower-grade domain; modelling of domain boundaries has considered both geology and grade.
- Gold cut-off for the optimized open pit has been calculated based on a gold price of US\$1,650/oz, mining costs of US\$2.70/t, processing costs of US\$12.50/t, and mine-site administration costs of US\$2.50/t processed. Metallurgical recoveries of 96.5% are based on prior metallurgical testwork.
- Gold cut-off for underground MSO shapes have been calculated based on a gold price of US\$1,650/oz, mining costs of US\$86.25/t, processing costs of US\$12.50/t, and mine-site administration costs of US\$2.50/t processed. Metallurgical recoveries of 96.5% are based on prior metallurgical testwork.
- An economic cut-off grade of 0.35 g/t Au was applied to mineralized rock within the optimized open pit, and 2.00 g/t for East Coldstream underground for processing determination.
- Mineral Resources conform to NI 43-101, and the 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves.
- The Qualified Person and Company are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that might materially affect the MRE.
- Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in the MRE are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated and/or Measured Resources. The Company will continue exploration intended to upgrade the Inferred Mineral Resources to Indicated Mineral Resources

The QP authors indicate that the entire Mineral Resource Estimate (MRE) has been categorized as an Inferred Mineral Resource. This classification is based on the fact that some of the drill hole data used for the resource estimate are from historical sources, and there is limited availability of Quality Assurance/Quality Control (QAQC) data and reports for the majority of these historical drill holes.

While the downhole surveys and the existing QAQC methods employed for the recent drill holes meet industry standards, these holes are still insufficiently distributed. Therefore, it is necessary to conduct additional infill drilling using current QAQC practices to reduce reliance on historical drilling. Moreover, there is a need to re-survey the historical drill hole collars that exhibit issues and increase the number of bulk density samples to improve confidence in the estimation of the mineral resource.

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## 1.8 Conclusions

The Moss Project is an advanced exploration (resource-stage) project that contains four contiguous claims blocks known as the Coldstream block, Moss block, Hamlin block, and the recently acquired Vanguard block. Known gold deposits exist at the Coldstream and Moss blocks and are the main focus of Goldshore's recent drilling programs and the current MRE.

The historical and Goldshore drilling programs have successfully intersected significant gold values at both Moss and Coldstream blocks. The gold mineralization at the Moss Gold Deposit is considered to be an example of a structurally controlled, disseminated, intrusion-related Archean-aged, mesothermal gold deposit. The gold mineralization at the Coldstream claim block has been traced along a strike length of approximately 1,300 m and from surface to a depth of approximately 500 m. East Coldstream area is a structurally controlled gold deposit and also considered to be an example of an Archean-aged, mesothermal gold deposit.

At Moss, mineralization is localized where the major NE-trending Wawiag Fault Zone cuts a dioritic to granodioritic intrusive complex. The deposit is defined by a series of anastomosing centimeter- to meter-scale NE-trending shear zones carrying higher-grade gold mineralization (Shear Domain), and lower-grade gold mineralization associated with more brittle-style deformation and veining in the intrusive rock mass between the shear zones (Intrusive Domain). Mineralization is associated with pyritic sericitic and chloritic alteration and millimetre- to centimetre-scale irregular quartz-carbonate veinlets.

Detailed geological logging and multi-element geochemical analysis of drill core from the 2021-22 drilling has supported modelling of discrete shear domains within the larger altered and variably mineralized intrusive domain. The shear domains have a different higher-grade gold population to the low-grade intrusive domain and these domains have been estimated separately using different search parameters. Importantly, this allows a more accurate representation of the true variability within the deposit than has been achieved in previous historical estimates.

The current MRE indicates significant and clear expansion potential through strike and dip extensions to known shears, as well as parallel shears. The QP author has included 122 drill holes from Goldshore's 2021 and 2022 drilling campaign in the new MRE.

The current MRE defines an open pit-constrained Inferred Mineral Resource of 161.0 Mt at 1.0 g/t Au resulting in 5.18 Moz of contained gold based on a cut-off grade of 0.35 g/t Au. The higher-grade shear domain contains 56.5 Mt at 1.84 g/t Au resulting in 3.35 Moz of contained gold. In addition, some Mineral Resources were defined below the open pit comprising 2.6 Mt at a grade of 2.90 g/t Au for 0.24 Moz of contained gold. The Inferred Mineral Resource classification reflects the fact that most of the drill hole data used for the resource estimate is historical, and no QAQC data or reports exist for the majority of these drill holes. Statistical assessment of historical data and recent data provided some support for the historical data, but also included some inconsistencies. The majority of the historical drill holes did not have acceptable downhole surveys meaning that spatial location of the core samples remains uncertain especially beneath 200 m.

The current MRE indicates significant and clear expansion potential through strike and dip extensions to known shears, as well as parallel shears. The modelled shear-hosted domains extend at depth below the optimized open-pit constraining the reported MRE, but the drill hole data are too sparsely distributed to support underground mining optimization studies and reporting of an MRE at this time. The shears are also open along strike, beyond the modelled strike length of 3.5 km. Historical drilling intercepted gold mineralization over a total strike length of 8 km, and there remains potential for additional parallel shears with gold mineralization in historical drill holes 500 m to the southeast of the Moss Gold Deposit.



The East Coldstream mineralized zones are situated on the southern edge of an ultramafic shear zone, which acts as a dividing line between a gabbroic intrusion to the north and a mafic-intermediate volcanic suite to the south. The mineralization is associated with northeast-trending shear zones that contain higher-grade gold mineralization. These shear zones can be further categorized into two extensively altered domains (Z-2 and Z-4) and two satellite lenses (Z-1 and Z-3). Lower-grade gold mineralization is found in more brittle-style veining within the felsic to intermediate metavolcanic rocks, gabbro, and porphyries located between the main shear zones. The mineralization is observed in sheared volcanic units near quartz and quartz-feldspar porphyry sills, as well as distinctive brick-red syenites.

Detailed geological logging and multi-element geochemical analysis of the drill core from the 2021-22 drilling campaign have provided support for modeling several distinct shear domains within a low-grade zone. The mineralized zones exhibit alteration characterized by silica, carbonate, and hematite. The mineralization comprises fine disseminations of pyrite and lesser chalcopyrite within the silica-hematite zones, as well as quartz-carbonate veinlets. Iron carbonate is present in areas adjacent to strong silicification. The two primary mineralized zones have been intersected by a diabase dike trending in a north-south direction.

The shear domains exhibit a distinct higher-grade gold population compared to the low-grade domain, and these domains have been estimated separately using different search parameters. This approach enables a more accurate representation of the true variability within the deposit, surpassing previous historical estimates.

The current Mineral Resource Estimate (MRE) in East Coldstream suggests the potential for extensions of known shears through their dip. The QP author has incorporated sixteen new drill holes, totaling 7,973 m, from Goldshore's 2021 and 2022 drilling campaign into the updated MRE. The current MRE outlines an Inferred Mineral Resource of 19.8 million tonnes at a grade of 0.89 g/t Au within the optimized open pit, using a cut-off grade of 0.35 g/t Au. Additionally, resources are reported above a cut-off grade of 2.00 g/t, indicating 0.18 million tonnes of Inferred Mineral Resources at a grade of 2.24 g/t Au within the underground MSO shapes. The Inferred Mineral Resource classification is because some of the drill hole data used for the resource estimate are from historical sources, and there is limited availability of Quality Assurance/Quality Control (QAQC) data and reports for the majority of these historical drill holes.

The QP authors have not identified any significant risks or uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration and drilling information and current MRE presented in this Report. The QP authors conclude that the Project is an attractive resource-stage project that has the potential to contain economic gold deposits that will develop through additional confirmatory and infill drilling, metallurgical testwork, and mining and economic studies. The Project also has the potential to host other gold and polymetallic deposits that are still in the early stage of understanding and will require additional exploration and drilling to advance to the discovery and resource stages.

## 1.9 Recommendations

The QP authors present the following recommendations for the Moss Project:

- Goldshore should continue upgrading, verifying, and validating the historical exploration data to further increase the data confidence to eventually use this data to determine Indicated Mineral Resources for the Project. Validation activities can include such items as re-surveying available collar locations to confirm their locations, re-entering drill holes for down-hole surveying, re-logging and re-sampling of selected drill core as available using current QAQC protocols, and detailed reviews and audits of the drill hole databases. The QP authors are of the understanding that Goldshore has already commenced this work.
- Goldshore should also complete additional confirmatory drill holes to 'twin' historical holes to confirm the presence and approximate gold grades encountered in the historical drill holes.

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- Notwithstanding the above, a large proportion of the historical drill collars have not yet been located by Goldshore. Validation of collar location has been partly achieved through correlation with located drilling and re-establishment of historical local grids. However, the mineralized volumes defined by these historical drill holes should be prioritized for re-drilling, especially below 200 m considering the absence of downhole surveys.
- Goldshore should continue its infill drilling program to provide sufficient information to not only upgrade portions of the current MRE that were classified into the Inferred Mineral Resource category to the Indicated Mineral Resource category, but also to expand the existing resource along the strike and dip extensions to known shears and parallel shears. The QP authors are of the understanding that this Goldshore drill program is ongoing.
- Drilling should be at an optimized pattern based on confidence in historical data and incorporate a geostatistical drill-spacing study to guide spacing required to support Indicated classification.
- It is recommended that the drill program should continue to include a full suite of oriented core measurements and multi-element geochemistry analyses which has supported enhanced geological understanding from the drilling already completed by Goldshore.
- Pending successful outcomes from the confirmatory and infill drilling programs at the Moss Gold Deposit, Goldshore should update the MRE, commence metallurgical testwork, and begin to evaluate the technical, mining, and economic potential of the gold mineralization within the Project. The QP authors are of the understanding that metallurgical testwork is already underway and that Goldshore intends to complete the additional studies required to commence work on a Preliminary Economic Assessment (PEA) and advance the project towards a Pre-feasibility Study (PFS).
- For the next MRE update, the geological and mineralization models should be improved to better delineate mineralized shear zones of variable orientation within the mineralized envelope. Estimation wireframes should use a single set of grade shells to improve the high-grade shear zone model and better define the low-grade intrusion model. The accuracy of estimation wireframes should be improved by snapping to the appropriate samples.
- Goldshore should initiate environmental and social baseline studies in support of exploration, mine development, and permitting; and continue engaging with local stakeholders including First Nations and Métis communities, landowners, and government authorities. The QP authors are of the understanding that Goldshore has already commenced this work.
- Goldshore should continue additional geological and drilling evaluation of the other advanced prospects including North Coldstream and East Coldstream to advance these projects towards resource estimation.
- After completion of prospecting, soil surveys and geophysics programs on other earlier-stage targets on the Project, Goldshore should commence a scout drilling program to determine the gold potential on these targets.

The QP authors have reviewed Goldshore's proposed exploration, drilling and development plans and consider the proposed expenditures to be reasonable to advance the Project to the next stage in the mining cycle. The work program recommendations and cost estimates have been divided into two work phases (Phase I and Phase II), with completion of Phase II tasks contingent on the results from Phase I as shown in **Error! Reference source not found.**6 below.



Table 1.6: Recommended work program for the Moss Project

Task	Estimated Cost (C\$)
<b>Phase I</b>	
Preliminary Economic Assessment	800,000
Geological mapping prospecting, and soil geochemistry surveys on early-stage targets with discover potential	250,000
Scout drilling on early-stage targets	1,500,000
Confirmatory and infill diamond drilling to upgrade and expand resources to Indicated category (all-inclusive: staff, drilling contractors, and assaying, etc.)	21,000,000
MRE update based on new drilling data	150,000
Contingency	300,000
<b>Total - Phase I</b>	<b>24,000,000</b>
<b>Phase II</b>	
Geotechnical Drilling and related studies	800,000
Further infill drilling to expand mineral resources	4,500,000
Environmental and social baseline studies and mine permitting	150,000
Detailed metallurgical testwork	250,000
Prefeasibility Mining Study and technical report	1,000,000
Contingency	300,000
<b>Total - Phase II</b>	<b>7,000,000</b>

The QP authors also present the following recommendations for the East Coldstream Deposit:

- Re-assay historical drilling with proper QAQC practices to reclassify blocks to Indicated Mineral Resources.
- Conduct the re-survey of historical drill hole collars that exhibit issues.
- Perform additional infill drilling using current QAQC practices to reduce reliance on historical drilling.
- Increase the number of bulk density samples to improve confidence in tonnage calculations.
- Reconsider and standardize the geological database to support lithological and grade modelling, primarily for historical drill holes.



## 2 Introduction

### 2.1 Issuer

Goldshore Resources Inc. (“Goldshore” or the “Company”) is a Canadian-based gold exploration company headquartered in Vancouver, British Columbia, and its common shares trade on the TSX Venture Exchange (TSX-V) under the symbol “GSHR” and on the OTCQB under the symbol “GSHRF”.

Goldshore owns 100% of the Moss Gold and East Coldstream Deposits located approximately 100 km west of the city in Thunder Bay, Ontario.

### 2.2 Terms of Reference

On 10 February 2023, Goldshore commissioned CSA Global Consultants Canada Limited (“CSA Global”), a division of ERM Consultants Canada Ltd, to complete a Mineral Resource estimate (“MRE”) for the Moss Gold and East Coldstream Deposits and to prepare a Technical Report (the “Report”) summarizing the MRE results in accordance with National Instrument 43-101 – Standards for Disclosure for Mineral Projects (NI 43-101), Form 43-101F1, and Companion Policy 43-101CP requirements.

The current MRE has been prepared in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Definition Standards for Mineral Resources and Mineral Reserves (May 2014) as referenced in NI 43-101. Only Mineral Resources have been estimated for the two projects, and no Mineral Reserves are yet defined. This Report is intended to enable the Issuer and potential partners to reach informed decisions with respect to the Project.

The Qualified Person authors of this Report are Neal Reynolds, Ph.D., FAusIMM, MAIG (CSA Global Partner and Principal Geologist), Nigel Fung P.Eng (CSA Global Partner and Principal Mining Engineer), Matthew Field, Ph.D., Pr.Sci.Nat. (CSA Global Manager (UK) – Resources), and Chris Peruse P. Geo (CSL Ltd. President/Sr. Geoscientist). All report authors are independent Qualified Persons as defined in NI 43-101. Niti Gupta, Efrain Ugarte and Robert Raponi are contributing authors, but are not QPs for this report.

The Effective Date of this Report is May 5, 2023. The Report is based on scientific and technical information for the Project and known to the Qualified Person (“QP”) authors as of the effective date.

The Company reviewed draft copies of this Report for factual errors. Any changes made because of these reviews did not include alterations to the interpretations and conclusions made. Therefore, the statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading as of the effective date of this Report.

### 2.3 Principal Sources of Information

This Report is based on internal company report, technical reports, metallurgical testwork results, analytical results from accredited, independent assay laboratories, maps, published government reports and other public information as listed in Section 27 (References). The database cut-off date for drilling results to be included in the MRE is April 24, 2023. This Report discloses material changes to the two projects, in particular an updated MRE for the Moss Gold Deposit and an updated MRE for the East Coldstream Deposit.

The authors have not conducted detailed land status evaluations, and have relied upon previous reports, public documents, and statements by Goldshore regarding Property status and legal title to the Moss Gold and East Coldstream deposits.

**Commented [NG21]:** @Efrain Ugarte @Matthew Field Please confirm

**Commented [EU22R21]:** In the East Coldstream case, March 4 was the cutoff day. I'm not sure about Moslake.

**Commented [NG23R21]:** @Matthew Field Please confirm

**Commented [NR24R21]:** @Niti Gupta confirmed?

**Commented [NR25R21]:** @Niti Gupta section 14 says April 24

**Commented [NR26R21]:** @Niti Gupta and W Coldstream says March 4, were they different? @Efrain Ugarte @Matthew Field

**Commented [NR27R21]:** Add March 4 for E Coldstream if this is correct @Niti Gupta @Efrain Ugarte



The Qualified Person authors also had discussions with the management and consultants of the Company, including:

- Mr. Peter A. Flindell (Vice President for Exploration, Goldshore) regarding the tenure of the Property and metallurgy
- Mr. Jason Pattison (Exploration Manager, Goldshore) regarding the geology, drilling, sampling, and assays carried out on the Property, and the Project history.

This Report includes technical information that requires calculations to derive subtotals, totals and weighted averages, which inherently involve a degree of rounding and, consequently, introduce a margin of error. Where this occurs, the Qualified Person authors do not consider it to be material.

#### 2.4 Qualified Person Section Responsibility

This Report was prepared by the Qualified Persons listed in Table 2.1.

Table 2.1: Qualified Persons – report responsibilities

Qualified Person	Report section responsibility
Neal Reynolds, Ph.D., FAusIMM MAIG, Partner and Principal Geologist, CSA Global	6 to 11, 12.1
Matthew Field, Ph.D., Pr.Sci.Nat., Manager – Resources, CSA Global (UK)	12.2, 12.3.3.1, 14.1
Nigel Fung, P.Eng, Partner and Principal Engineer, CSA Global	1 to 5, 13, 12.3.3.2, 14.2, 23 to 27
Chris Perusse, P.Geo. (ON, BC, AB), President/Sr. Geoscientist, CSL Ltd	20

The report authors are Qualified Persons with the relevant experience, education, and professional standing for the portions of the Report for which they are responsible.

CSA Global conducted an internal check to confirm that there is no conflict of interest in relation to its engagement in this project or with Goldshore and that there is no circumstance that could interfere with the Qualified Persons' judgement regarding the preparation of this Report.

#### 2.5 Qualified Person Site Visit and Personal Inspection

A three-day visit to the Moss Project was completed by Neal Reynolds from 19 to 21 October 2022, as detailed in Section 12.1. This visit was during the drill program that supports the MRE reported in this Technical Report. Mr. Reynolds inspected the core logging facilities, sampling procedures, visited active drilling operations, and met with Goldshore technical staff. Neither Matthew Field, Nigel Fung, nor Efrain Ugarte have completed site visits to the Project.

Commented [NR25]: @Niti Gupta Efrain



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### 3 Reliance on Other Experts

The QP authors have relied on Goldshore and its management for information related to the Moss Gold and East Coldstream deposits' claim locations and current legal status, and any underlying legal contracts and royalty agreements pertaining to the Project. This information is referenced in Section 4.3 of this Report and applies to the Royalty and Option Agreement section. The QP authors have also relied on Goldshore with regards to any environmental liabilities on the Project and were provided with written documentation outlining past rehabilitation efforts by a previous operator of the Project. This information applies to Section 4.4 of this Report.

The property description presented in this Report is not intended to represent a legal, or any other opinion as to title to the Project. The report authors are not qualified to express any legal opinion with respect to the property titles and claims ownership.



## 4 Property Description and Location

### 4.1 Location of Project

The Project is located approximately 100 km west of the city of Thunder Bay, Ontario, Canada and is accessed via Highway 11, which passes through the northern boundary of the Project (Figure 4.1). Thunder Bay is a regional transportation hub with access to the Atlantic Ocean through Lake Superior and the St. Lawrence Waterway. It is also a rail and road hub, sitting on the Trans-Canada Highway (Highways 11 and 17).

The Project consists of four hundred and thirty-one (431) Mining Claims and fifty-five (55) blocks of private subsurface rights in the Thunder Bay South Mining Division. All tenement units are contiguous and have a total area of 166 km<sup>2</sup> (16,580 ha) allowing for overlap with third-party patents.

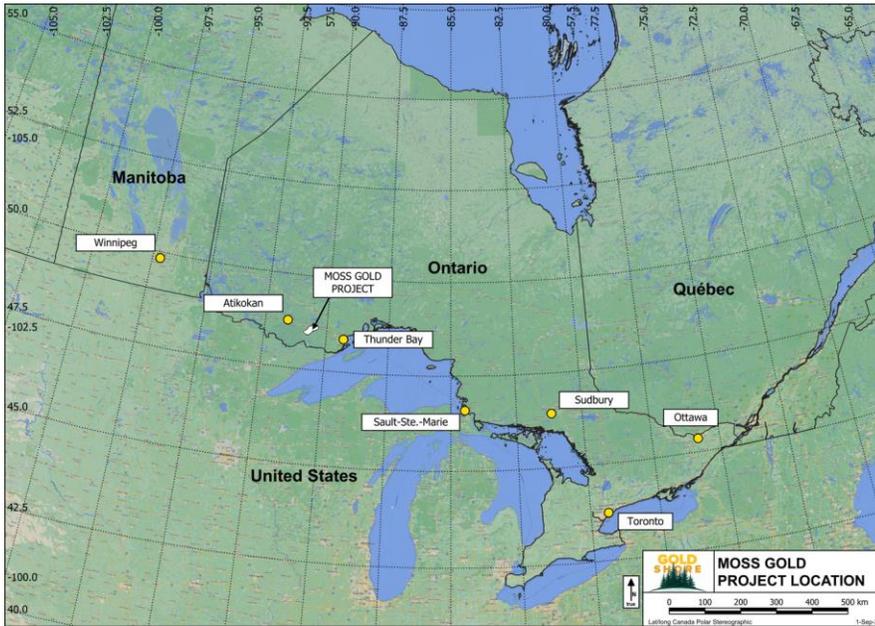


Figure 4.1: Moss Project Location

The Project is located within Universal Transverse Mercator (UTM) NAD83 Zone 15U and NTS sheets 52B/10 and at the southern and eastern extremes, 52B/07 and 52B/09 respectively. The project is centred at UTM coordinates 668860 mE, 5379100 mN. The Project overlaps with Moss and Ames townships and the un-surveyed areas of Powell Lake, Nelson Lake, Burchell Lake, Crayfish Lake, Greenwater Lake and Kashabowie Lake in the Thunder Bay District (Figure 4.2). The majority of the Project is within the grounds of Crown Treaty 3 and in the traditional territories of the Lac des Mille Lacs First Nation, Lac La Croix First Nation, Fort William First Nation, Métis Nation of Ontario, and Red Sky Métis Independent Nation.

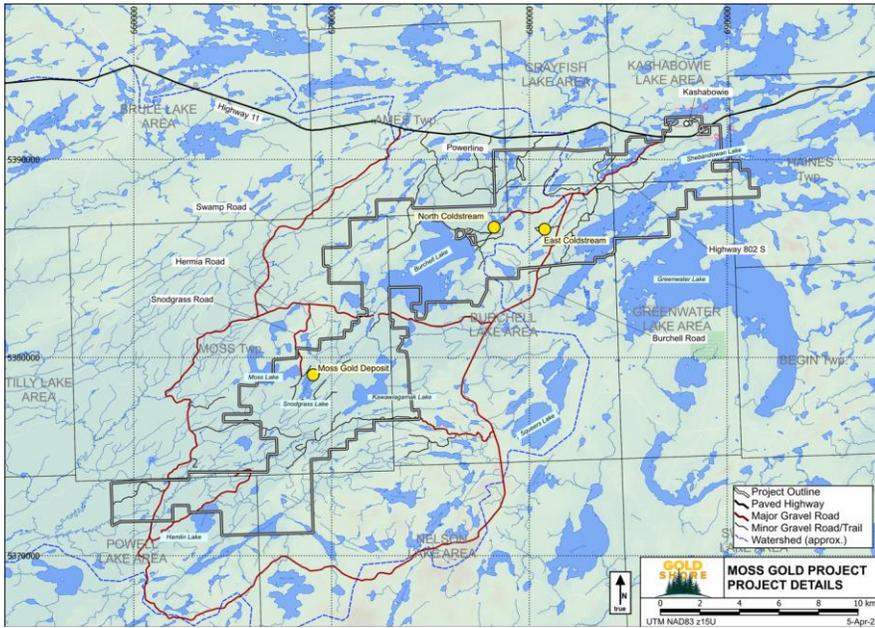


Figure 4.2: Property Summary

## 4.2 Mineral Tenure and Surface Rights

On January 25, 2021, Goldshore announced it was acquiring a 100% interest in the Project through an asset purchase agreement with Wesdome Gold Mines Ltd. (“Wesdome”).

About 90% of the Project lies within provincial Crown Land while the remainder is Patented Claims (“Patents”). The Project consists of Multi-Cell, Single Cell, and Boundary Mining Claims (subsurface rights only leased from Crown) as well as Patents, Leases and MLOs (permanent subsurface and/or surface rights). The Mining Claims and Patents are held in the name of Moss Gold Project Inc., a subsidiary of Goldshore. The Project is comprised of 431 Mineral Claims (14,990 ha), two Mining Leases (215 ha), 48 Patents (836 ha), and five MLOs (534 ha) for a total project area of 165.80 km<sup>2</sup>.

Goldshore holds both the surface and subsurface rights to Patents in the vicinity of the Moss Gold Deposit and the North Coldstream mine site (Figure 4.3). Goldshore holds the subsurface rights in the Patents around Burchell Lake while the surface rights are in private third-party hands. There are further small overlaps with private surface rights in the northwest, northeast and southeast of the Project area.

*Commented [NG29]:* Number to be confirmed by Jason. Won't need Table in Appendix A as it's included in this section (Table 4-1)

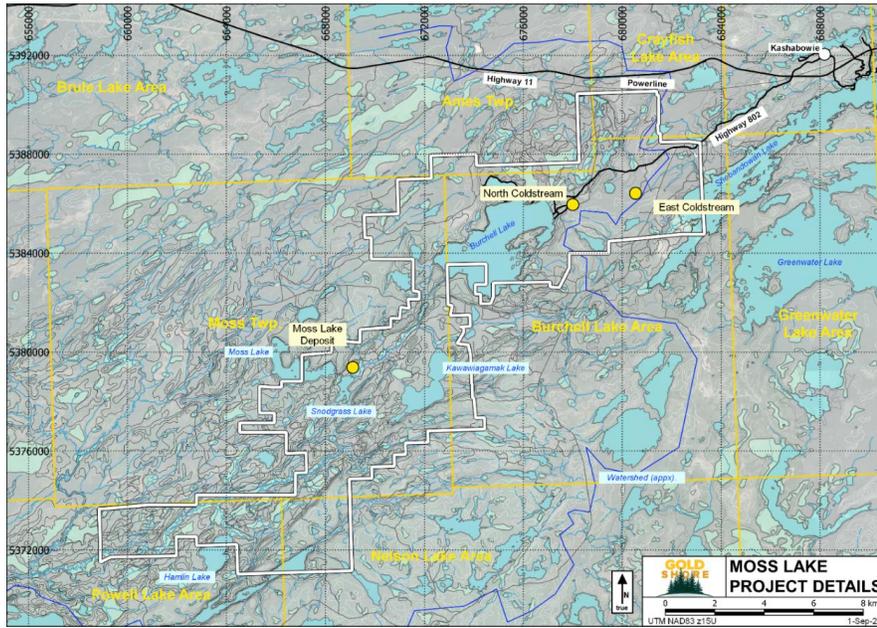


Figure 4.3: Property summary

Two hundred and sixty-five (265) claims are held 100% by Moss Gold Project Inc. on behalf of Goldshore, constituting the “Moss Block”, “Coldstream Block” and “Hamlin Block”. In the “Vanguard Block”, 116 claims are held 100% by Thunder Gold Corp. while 52 are held by White Metal Resources Corp. (White Metal) (Figure 4.4 to Figure 4.8).

Claims along the northern extremity of the Coldstream and Vanguard blocks partly overlap with Alienation WK 59/20 which forms an approximately 500 m buffer along the hydro line. Claims 262749 and 123443 (southeast of Kawawagamak Lake) overlap with Alienation WK 63/20 which itself covers a freehold block (Moss Twp Concession 2 Lot 1 northwest).

Several claims in the northeast end of the Vanguard Block overlap with the community of Kashabowie where a series of patents retain a combination of surface and subsurface rights. Similarly, claims 166445 and 316139 have limited overlap with private patents on the shore of Upper Shebandowan Lake, where subsurface rights are retained.

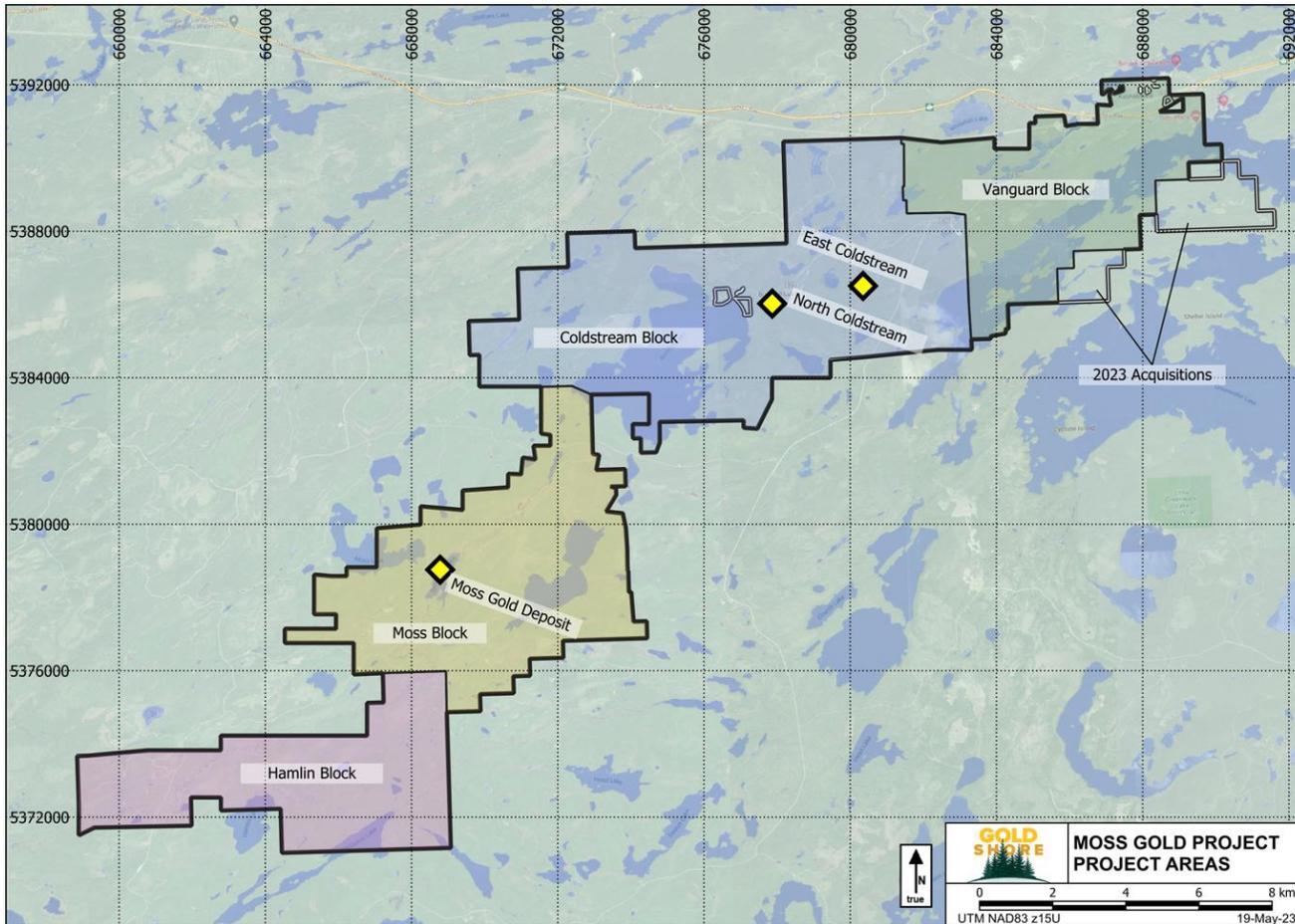


Figure 4.4: Division of Project into the four claim blocks – Hamlin, Moss, Coldstream and Vanguard

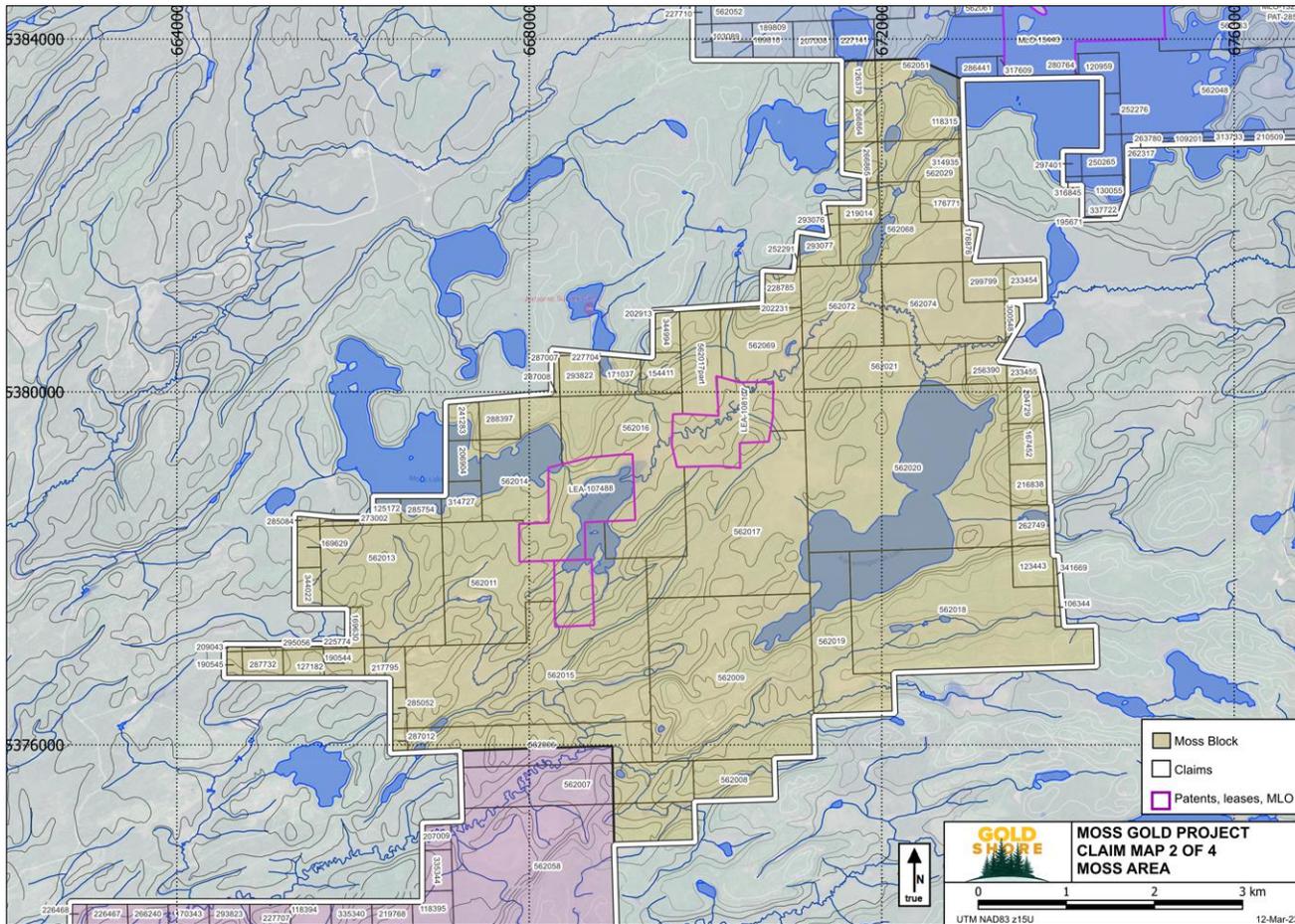


Figure 4.5: Landholdings within the Moss Block

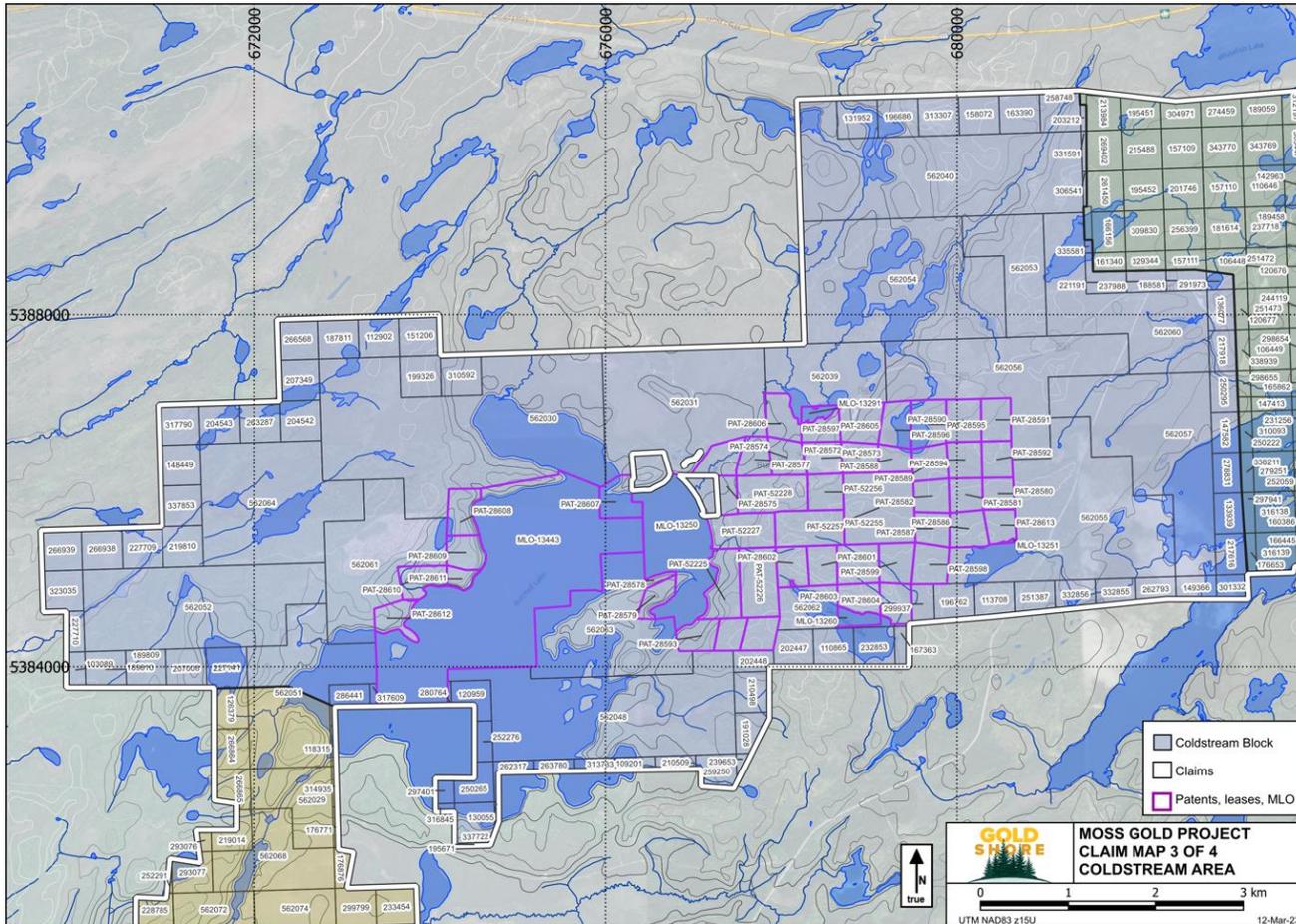


Figure 4.6: Landholdings within the Coldstream Block

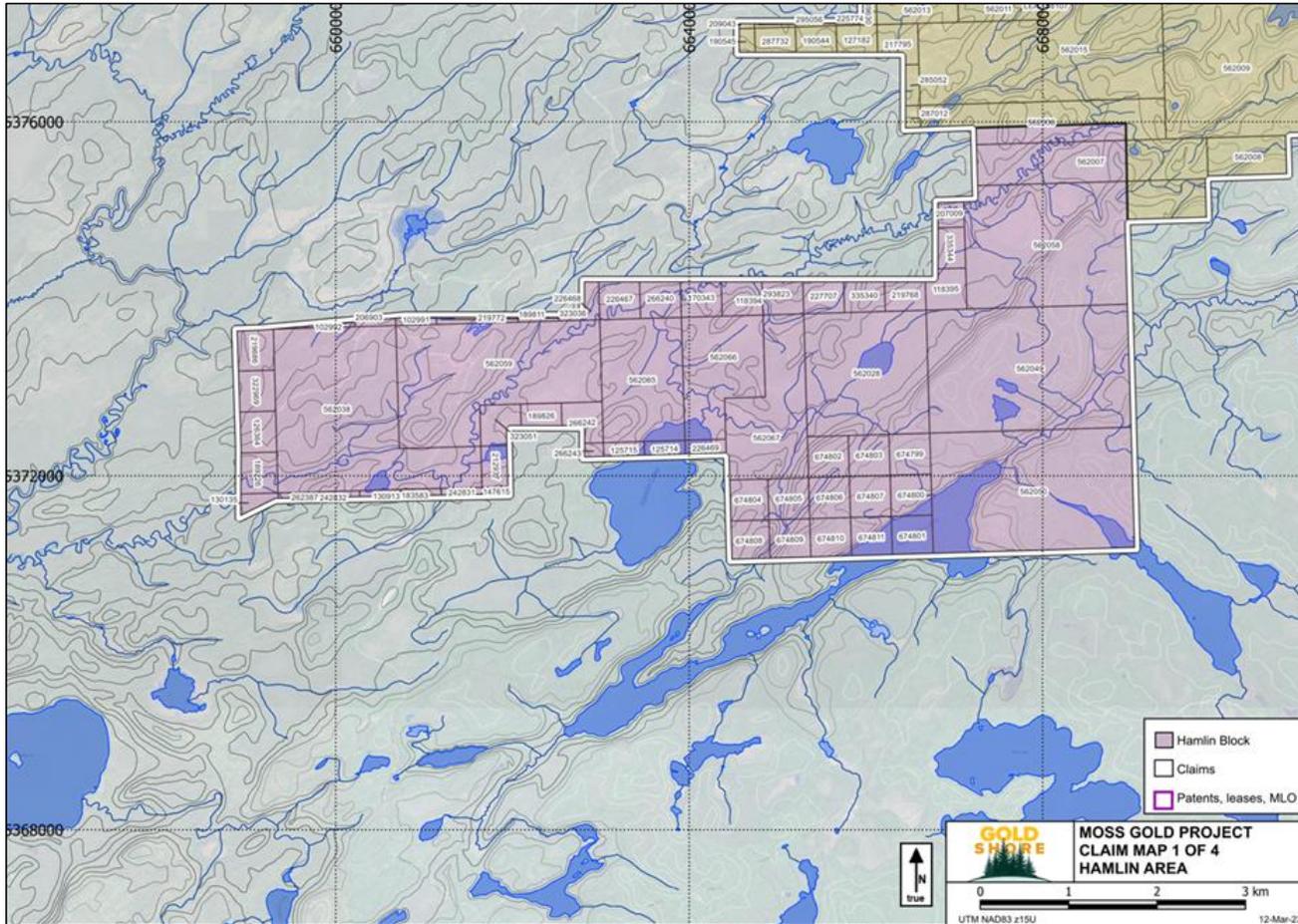


Figure 4.7: Landholdings within the Hamlin Block

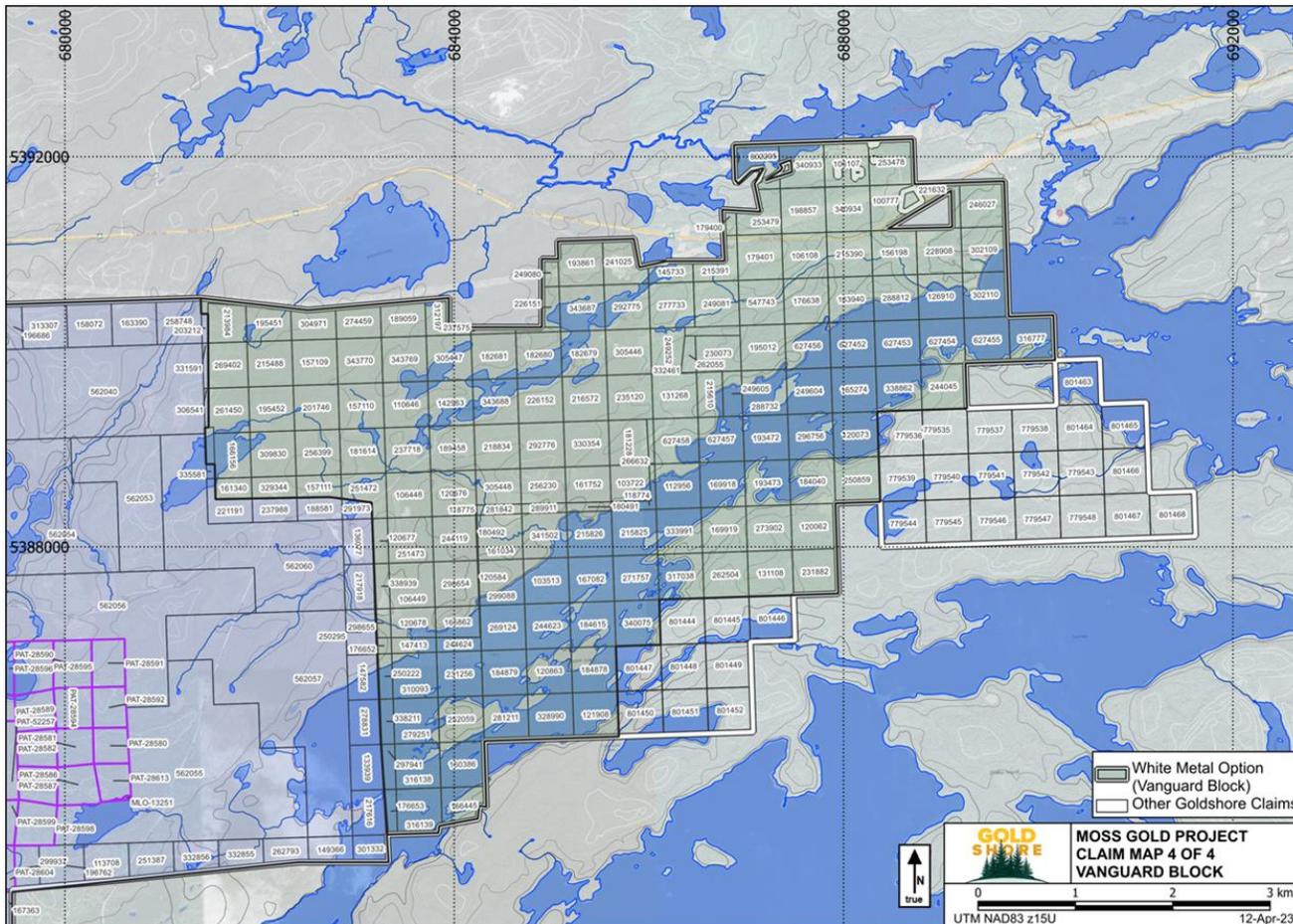


Figure 4.8: Landholdings within the Vanguard Block



#### 4.2.1 Nature of Tenure – Claims

The majority of the Moss Project consists of Mining Claims. In Ontario, Mining Claims can be acquired by any person or entity possessing a Prospector's Licence. Claims can be acquired on provincially owned Crown Land in addition to lands covered by third-party private surface rights, subject to limits outlined in the Ontario Mining Act and to the discretion of the Provincial Mining Recorder and Minister for Northern Development and Mines. The holder of a Mining Claim has the exclusive right to explore for all minerals, which are defined by the Ontario Mining Act as base and precious metals, coal, salt and "quarry and pit material". This definition of minerals does not include unconsolidated aggregate material, peat or oil and gas.

Ownership of a Mining Claim confers mineral rights and does not confer any surface rights. The holder of a Mining Claim is required to notify and consult with any surface rights holders and come to arrangements regarding such factors as access to complete exploration activities and any surface disturbance. To advance a project to development, the holder must apply for a Mining Lease.

Since 2018, Mining Claims in Ontario have been acquired by m55ap-staking using the online MLAS system. Claims are built from individual claim cells which are 16 ha in area and square in shape. Claims often consist of one single cell. The tenure over a claim lasts for two years and can be renewed by filing evidence of exploration expenditures through an assessment report with the Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNRF) which meets the required value for assessment credits. At the time of writing, this value is set at \$400 per claim.

Claims along the northern extremity of the Coldstream and Vanguard Blocks partly overlap with Alienation WK 59/20, which forms an approximately 500 m buffer along the Hydro One power line.

Claims 262749 and 123443, southeast of Kawawigamak Lake, overlap with Alienation WK 63/20, which itself covers a freehold block (Moss Twp Concession 2 Lot 1 northwest).

Four patents on the northeast shore of Burchell Lake retain third-party subsurface rights and are not part of the Moss Project, though they are surrounded by it. Several claims in the northeast end of the Vanguard Block overlap with the community of Kashabowie where a series of patents retain a combination of surface and subsurface rights. Similarly, claims 166445 and 316139 have limited overlap with private patents on the shore of Upper Shebandowan Lake, where subsurface rights are retained.

#### 4.2.2 Nature of Tenure – Other Tenure

Certain areas around Snodgrass Lake are covered by three Mining Leases, which allow for extraction of minerals and for related surface infrastructure to be established. These Mining Leases were inherited by Goldshore from the Tandem/Storimin development of the Moss and QES deposits in the 1980s. As of the effective date of this Report, no mining activities are occurring in the Moss project area.

A tract of land around the former North Coldstream mine is covered by Patents. These are historical grants of surface and/or subsurface rights for the purposes of mining only and were inherited by Goldshore from the former North Coldstream mine.

Certain areas underneath Burchell Lake are covered by MLOs, which allow for extraction of minerals located under water bodies; these are legacy licences inherited by Goldshore from the former North Coldstream mine. Table 4.1 lists all tenure entities for Moss Project.



Table 4.1: All tenure entities for Moss Project

Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
102991	BMC	2018-04-10	2023-08-01	2023-08-01	MLPI	
102992	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
103089	BMC	2018-04-10	2023-05-12	2023-05-12	MLPI	
106344	BMC	2018-04-10	2023-10-22	2023-10-22	MLPI	
109201	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
110865	BMC	2018-04-10	2023-08-07	2023-08-07	MLPI	
112902	BMC	2018-04-10	2023-02-19	2023-02-19	MLPI	
113708	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	
118315	BMC	2018-04-10	2023-04-14	2023-04-14	MLPI	
118394	BMC	2018-04-10	2023-07-10	2023-07-10	MLPI	
118395	BMC	2018-04-10	2023-05-23	2023-05-23	MLPI	
120959	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
123443	SCMC	2018-04-10	2023-10-22	2023-10-22	MLPI	3
125172	BMC	2018-04-10	2023-01-19	2023-01-19	MLPI	
125714	BMC	2018-04-10	2023-07-10	2023-07-10	MLPI	
125715	BMC	2018-04-10	2023-07-10	2023-07-10	MLPI	
126364	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
126379	BMC	2018-04-10	2023-04-14	2023-04-14	MLPI	
127182	BMC	2018-04-10	2023-01-19	2023-01-19	MLPI	
130055	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
130135	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
130913	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
131952	BMC	2018-04-10	2023-03-23	2023-03-23	MLPI	2
133939	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	
136077	BMC	2018-04-10	2023-08-02	2023-08-02	MLPI	
147582	BMC	2018-04-10	2023-06-18	2023-06-18	MLPI	
147615	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
148449	BMC	2018-04-10	2023-10-20	2023-10-20	MLPI	
149366	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	
151206	BMC	2018-04-10	2023-02-19	2023-02-19	MLPI	
154410	BMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
154411	BMC	2018-04-10	2023-06-10	2023-06-10	MLPI	
158072	BMC	2018-04-10	2023-03-23	2023-03-23	MLPI	2
163390	BMC	2018-04-10	2023-03-23	2023-03-23	MLPI	2
167363	BMC	2018-04-10	2023-08-07	2023-08-07	MLPI	
167452	BMC	2018-04-10	2023-10-22	2023-10-22	MLPI	
169629	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
169630	BMC	2018-04-10	2023-01-19	2023-01-19	MLPI	
170343	BMC	2018-04-10	2023-07-10	2023-07-10	MLPI	
171037	BMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
176771	BMC	2018-04-10	2023-02-15	2023-02-15	MLPI	
176876	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
183583	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
187811	BMC	2018-04-10	2023-02-19	2023-02-19	MLPI	
188581	BMC	2018-04-10	2023-08-02	2023-08-02	MLPI	
189224	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
189226	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
189809	BMC	2018-04-10	2023-05-12	2023-05-12	MLPI	
189810	BMC	2018-04-10	2023-05-12	2023-05-12	MLPI	
189811	BMC	2018-04-10	2023-08-01	2023-08-01	MLPI	
189826	BMC	2018-04-10	2023-08-01	2023-08-01	MLPI	
190544	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
190545	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
191028	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
195671	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
196686	BMC	2018-04-10	2023-03-23	2023-03-23	MLPI	2
196762	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	
199326	BMC	2018-04-10	2023-02-19	2023-02-19	MLPI	
202231	BMC	2018-04-10	2023-07-22	2023-07-22	MLPI	
202447	BMC	2018-04-10	2023-08-07	2023-08-07	MLPI	
202448	BMC	2018-04-10	2023-08-07	2023-08-07	MLPI	
202913	BMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
203212	BMC	2018-04-10	2023-03-23	2023-03-23	MLPI	2
204542	BMC	2018-04-10	2023-10-20	2023-10-20	MLPI	
204543	BMC	2018-04-10	2023-10-20	2023-10-20	MLPI	
204729	BMC	2018-04-10	2023-10-22	2023-10-22	MLPI	
206903	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
206904	BMC	2018-04-10	2023-03-27	2023-03-27	MLPI	
207008	BMC	2018-04-10	2023-05-12	2023-05-12	MLPI	
207009	BMC	2018-04-10	2023-05-23	2023-05-23	MLPI	
207349	BMC	2018-04-10	2023-02-19	2023-02-19	MLPI	
209043	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
210498	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
210509	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
212937	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
216838	BMC	2018-04-10	2023-10-22	2023-10-22	MLPI	
217616	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	
217795	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
217918	BMC	2018-04-10	2023-08-02	2023-08-02	MLPI	
219014	BMC	2018-04-10	2024-02-15	2024-02-15	MLPI	
219686	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
219768	BMC	2018-04-10	2023-02-08	2023-02-08	MLPI	
219772	BMC	2018-04-10	2023-08-01	2023-08-01	MLPI	
219810	BMC	2018-04-10	2023-10-20	2023-10-20	MLPI	
221191	BMC	2018-04-10	2023-09-09	2023-09-09	MLPI	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
225774	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
226467	BMC	2018-04-10	2023-07-10	2023-07-10	MLPI	
226468	BMC	2018-04-10	2023-08-01	2023-08-01	MLPI	
226469	BMC	2018-04-10	2023-07-10	2023-07-10	MLPI	
227141	BMC	2018-04-10	2023-05-12	2023-05-12	MLPI	
227704	BMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
227707	BMC	2018-04-10	2023-02-08	2023-02-08	MLPI	
227709	BMC	2018-04-10	2023-05-12	2023-05-12	MLPI	
227710	BMC	2018-04-10	2023-05-12	2023-05-12	MLPI	
228785	BMC	2018-04-10	2024-02-15	2024-02-15	MLPI	
232853	BMC	2018-04-10	2023-08-07	2023-08-07	MLPI	
233454	BMC	2018-04-10	2023-10-22	2023-10-22	MLPI	
233455	BMC	2018-04-10	2023-10-22	2023-10-22	MLPI	
237988	BMC	2018-04-10	2023-08-02	2023-08-02	MLPI	
239653	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
241283	BMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
242831	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
242832	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
250265	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
250295	BMC	2018-04-10	2023-06-18	2023-06-18	MLPI	
251387	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	
252276	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
252291	BMC	2018-04-10	2023-02-15	2023-02-15	MLPI	
256390	BMC	2018-04-10	2024-05-16	2024-05-16	MLPI	
258748	BMC	2018-04-10	2023-03-23	2023-03-23	MLPI	2
259250	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
262317	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
262387	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
262749	SCMC	2018-04-10	2023-10-22	2023-10-22	MLPI	3
262793	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	
263287	BMC	2018-04-10	2023-10-20	2023-10-20	MLPI	
263780	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
266240	BMC	2018-04-10	2023-07-10	2023-07-10	MLPI	
266242	BMC	2018-04-10	2023-08-01	2023-08-01	MLPI	
266243	BMC	2018-04-10	2023-07-10	2023-07-10	MLPI	
266568	BMC	2018-04-10	2023-02-19	2023-02-19	MLPI	
266864	BMC	2018-04-10	2023-04-14	2023-04-14	MLPI	
266865	BMC	2018-04-10	2023-02-15	2023-02-15	MLPI	
266938	BMC	2018-04-10	2023-05-12	2023-05-12	MLPI	
266939	BMC	2018-04-10	2023-05-12	2023-05-12	MLPI	
273002	BMC	2018-04-10	2023-01-19	2023-01-19	MLPI	
278831	BMC	2018-04-10	2023-06-18	2023-06-18	MLPI	
280764	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
285052	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
285084	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
285754	BMC	2018-04-10	2023-01-19	2023-01-19	MLPI	
286441	BMC	2018-04-10	2023-04-14	2023-04-14	MLPI	
287007	BMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
287008	BMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
287012	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
287732	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
288397	BMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
291973	BMC	2018-04-10	2023-08-02	2023-08-02	MLPI	
293076	BMC	2018-04-10	2023-02-15	2023-02-15	MLPI	
293077	BMC	2018-04-10	2023-02-15	2023-02-15	MLPI	
293420	BMC	2018-04-10	2023-07-22	2023-07-22	MLPI	
293822	SCMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
293823	BMC	2018-04-10	2023-07-10	2023-07-10	MLPI	
295056	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
295712	BMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
297401	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
297402	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
299799	BMC	2018-04-10	2024-05-16	2024-05-16	MLPI	
299937	BMC	2018-04-10	2023-08-07	2023-08-07	MLPI	
300548	BMC	2018-04-10	2023-10-22	2023-10-22	MLPI	
301332	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	
306541	BMC	2018-04-10	2023-03-23	2023-03-23	MLPI	
310592	BMC	2018-04-10	2023-02-19	2023-02-19	MLPI	
313307	BMC	2018-04-10	2023-03-23	2023-03-23	MLPI	2
313733	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
314727	BMC	2018-04-10	2023-03-27	2023-03-27	MLPI	
314935	BMC	2018-04-10	2023-02-15	2023-02-15	MLPI	
316845	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
317609	BMC	2018-04-10	2023-04-14	2023-04-14	MLPI	
317790	BMC	2018-04-10	2023-10-20	2023-10-20	MLPI	
322967	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
322969	BMC	2018-04-10	2023-03-03	2023-03-03	MLPI	
323035	BMC	2018-04-10	2023-05-12	2023-05-12	MLPI	
323036	BMC	2018-04-10	2023-08-01	2023-08-01	MLPI	
323051	BMC	2018-04-10	2023-08-01	2023-08-01	MLPI	
331591	BMC	2018-04-10	2023-03-23	2023-03-23	MLPI	
332855	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	
332856	BMC	2018-04-10	2023-05-15	2023-05-15	MLPI	
335340	BMC	2018-04-10	2023-02-08	2023-02-08	MLPI	
335344	BMC	2018-04-10	2023-05-23	2023-05-23	MLPI	
335581	BMC	2018-04-10	2023-09-09	2023-09-09	MLPI	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
337722	BMC	2018-04-10	2023-03-31	2023-03-31	MLPI	
337853	BMC	2018-04-10	2023-10-20	2023-10-20	MLPI	
341669	BMC	2018-04-10	2023-10-22	2023-10-22	MLPI	
344022	BMC	2018-04-10	2023-02-22	2023-02-22	MLPI	
344994	BMC	2018-04-10	2023-02-16	2023-02-16	MLPI	
562006	MCMC	2019-10-17	2023-02-07	2023-02-07	MLPI	
562007	MCMC	2019-10-17	2023-02-07	2023-02-07	MLPI	
562008	MCMC	2019-10-17	2023-05-23	2023-05-23	MLPI	
562009	MCMC	2019-10-17	2023-09-05	2023-09-05	MLPI	
562011	MCMC	2019-10-17	2024-02-22	2024-02-22	MLPI	
562013	MCMC	2019-10-17	2023-01-19	2023-01-19	MLPI	
562014	MCMC	2019-10-17	2023-09-14	2023-09-14	MLPI	
562015	MCMC	2019-10-17	2023-02-07	2023-02-07	MLPI	
562016	MCMC	2019-10-17	2023-10-30	2023-10-30	MLPI	
562017	MCMC	2019-10-17	2023-02-15	2023-02-15	MLPI	
562018	MCMC	2019-10-17	2023-10-22	2023-10-22	MLPI	
562019	MCMC	2019-10-17	2023-09-05	2023-09-05	MLPI	
562020	MCMC	2019-10-17	2024-01-19	2024-01-19	MLPI	
562021	MCMC	2019-10-17	2024-05-16	2024-05-16	MLPI	
562028	MCMC	2019-10-17	2023-02-08	2023-02-08	MLPI	
562029	MCMC	2019-10-17	2023-02-15	2023-02-15	MLPI	
562030	MCMC	2019-10-17	2023-02-19	2023-02-19	MLPI	
562031	MCMC	2019-10-17	2023-02-19	2023-02-19	MLPI	
562038	MCMC	2019-10-17	2023-03-03	2023-03-03	MLPI	
562039	MCMC	2019-10-17	2023-03-22	2023-03-22	MLPI	
562040	MCMC	2019-10-17	2023-03-23	2023-03-23	MLPI	2
562048	MCMC	2019-10-18	2023-03-31	2023-03-31	MLPI	
562049	MCMC	2019-10-18	2023-04-19	2023-04-19	MLPI	
562050	MCMC	2019-10-18	2023-04-19	2023-04-19	MLPI	
562051	MCMC	2019-10-18	2023-04-14	2023-04-14	MLPI	
562052	MCMC	2019-10-18	2023-05-12	2023-05-12	MLPI	
562053	MCMC	2019-10-18	2023-05-14	2023-05-14	MLPI	
562054	MCMC	2019-10-18	2023-05-14	2023-05-14	MLPI	
562055	MCMC	2019-10-18	2023-05-15	2023-05-15	MLPI	
562056	MCMC	2019-10-18	2023-05-14	2023-05-14	MLPI	
562057	MCMC	2019-10-18	2023-02-17	2023-02-17	MLPI	
562058	MCMC	2019-10-18	2023-05-23	2023-05-23	MLPI	
562059	MCMC	2019-10-18	2025-08-01	2025-08-01	MLPI	
562060	MCMC	2019-10-18	2023-08-02	2023-08-02	MLPI	
562061	MCMC	2019-10-18	2023-08-07	2023-08-07	MLPI	
562062	MCMC	2019-10-18	2023-08-07	2023-08-07	MLPI	
562063	MCMC	2019-10-18	2023-08-07	2023-08-07	MLPI	
562064	MCMC	2019-10-18	2023-10-20	2023-10-20	MLPI	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
562065	MCMC	2019-10-18	2025-07-10	2025-07-10	MLPI	
562066	MCMC	2019-10-18	2023-07-10	2023-07-10	MLPI	
562067	MCMC	2019-10-18	2023-07-10	2023-07-10	MLPI	
562068	MCMC	2019-10-18	2024-02-15	2024-02-15	MLPI	
562069	MCMC	2019-10-18	2024-02-15	2024-02-15	MLPI	
562072	MCMC	2019-10-18	2024-02-15	2024-02-15	MLPI	
562074	MCMC	2019-10-18	2024-05-16	2024-05-16	MLPI	
674799	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674800	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674801	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674802	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674803	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674804	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674805	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674806	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674807	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674808	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674809	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674810	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
674811	SCMC	2021-09-07	2023-09-07	2023-09-07	MLPI	
779535	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779536	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779537	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779538	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779539	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779540	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779541	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779542	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779543	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779544	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779545	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779546	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779547	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
779548	SCMC	2023-01-30	2025-01-30	2025-01-30	MLPI	
801444	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801445	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801446	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801447	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801448	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801449	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801450	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801451	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801452	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
801463	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801464	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801465	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801466	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801467	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
801468	SCMC	2023-02-28	2025-02-28	2025-02-28	MLPI	
LEA-107488	Lease	N/A	N/A	N/A	MLPI	4
LEA-108107	Lease	N/A	N/A	N/A	MLPI	
MLO-13250	MLO	N/A	N/A	N/A	MLPI	
MLO-13251	MLO	N/A	N/A	N/A	MLPI	
MLO-13260	MLO	N/A	N/A	N/A	MLPI	
MLO-13291	MLO	N/A	N/A	N/A	MLPI	
MLO-13443	MLO	N/A	N/A	N/A	MLPI	
PAT-28572	Patent	N/A	N/A	N/A	MLPI	
PAT-28573	Patent	N/A	N/A	N/A	MLPI	
PAT-28574	Patent	N/A	N/A	N/A	MLPI	
PAT-28575	Patent	N/A	N/A	N/A	MLPI	
PAT-28576	Patent	N/A	N/A	N/A	MLPI	
PAT-28577	Patent	N/A	N/A	N/A	MLPI	
PAT-28578	Patent	N/A	N/A	N/A	MLPI	
PAT-28579	Patent	N/A	N/A	N/A	MLPI	
PAT-28580	Patent	N/A	N/A	N/A	MLPI	
PAT-28581	Patent	N/A	N/A	N/A	MLPI	
PAT-28582	Patent	N/A	N/A	N/A	MLPI	
PAT-28583	Patent	N/A	N/A	N/A	MLPI	
PAT-28584	Patent	N/A	N/A	N/A	MLPI	
PAT-28586	Patent	N/A	N/A	N/A	MLPI	
PAT-28587	Patent	N/A	N/A	N/A	MLPI	
PAT-28588	Patent	N/A	N/A	N/A	MLPI	
PAT-28589	Patent	N/A	N/A	N/A	MLPI	
PAT-28590	Patent	N/A	N/A	N/A	MLPI	
PAT-28591	Patent	N/A	N/A	N/A	MLPI	
PAT-28592	Patent	N/A	N/A	N/A	MLPI	
PAT-28593	Patent	N/A	N/A	N/A	MLPI	
PAT-28594	Patent	N/A	N/A	N/A	MLPI	
PAT-28595	Patent	N/A	N/A	N/A	MLPI	
PAT-28596	Patent	N/A	N/A	N/A	MLPI	
PAT-28597	Patent	N/A	N/A	N/A	MLPI	
PAT-28598	Patent	N/A	N/A	N/A	MLPI	
PAT-28599	Patent	N/A	N/A	N/A	MLPI	
PAT-28600	Patent	N/A	N/A	N/A	MLPI	
PAT-28601	Patent	N/A	N/A	N/A	MLPI	
PAT-28602	Patent	N/A	N/A	N/A	MLPI	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
PAT-28603	Patent	N/A	N/A	N/A	MLPI	
PAT-28604	Patent	N/A	N/A	N/A	MLPI	
PAT-28605	Patent	N/A	N/A	N/A	MLPI	
PAT-28606	Patent	N/A	N/A	N/A	MLPI	
PAT-28607	Patent	N/A	N/A	N/A	MLPI	
PAT-28608	Patent	N/A	N/A	N/A	MLPI	
PAT-28609	Patent	N/A	N/A	N/A	MLPI	
PAT-28610	Patent	N/A	N/A	N/A	MLPI	
PAT-28611	Patent	N/A	N/A	N/A	MLPI	
PAT-28612	Patent	N/A	N/A	N/A	MLPI	
PAT-28613	Patent	N/A	N/A	N/A	MLPI	
PAT-52225	Patent	N/A	N/A	N/A	MLPI	
PAT-52226	Patent	N/A	N/A	N/A	MLPI	
PAT-52227	Patent	N/A	N/A	N/A	MLPI	
PAT-52228	Patent	N/A	N/A	N/A	MLPI	
PAT-52255	Patent	N/A	N/A	N/A	MLPI	4
PAT-52256	Patent	N/A	N/A	N/A	MLPI	4
PAT-52257	Patent	N/A	N/A	N/A	MLPI	4
100777	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	1,2
103513	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
106107	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	1,2
106108	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	2
106448	SCMC	2018-04-10	2023-08-06	2023-08-06	TGC	
106449	SCMC	2018-04-10	2023-07-27	2023-07-27	TGC	
110646	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
112956	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
120062	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
120073	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
120863	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
121908	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
126910	SCMC	2018-04-10	2023-06-01	2023-06-01	TGC	
131108	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
142963	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
145733	SCMC	2018-04-10	2023-08-11	2023-08-11	TGC	1,2
156198	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	
157109	SCMC	2018-04-10	2023-06-06	2023-06-06	TGC	
157110	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
160386	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
161034	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
163940	SCMC	2018-04-10	2022-12-19	2022-12-19	TGC	
165274	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
166445	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	1
167082	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
169918	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
169919	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
176638	SCMC	2018-04-10	2022-12-19	2022-12-19	TGC	
179400	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	1,2
179401	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	2
181614	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
182679	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
182680	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
182681	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
184040	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
184615	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
184878	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
184879	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
189458	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
193472	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
193473	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
193861	SCMC	2018-04-10	2023-08-11	2023-08-11	TGC	2
195012	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
195452	SCMC	2018-04-10	2023-06-06	2023-06-06	TGC	
198857	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	2
201746	SCMC	2018-04-10	2023-06-06	2023-06-06	TGC	
215390	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	
215391	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	1,2
215488	SCMC	2018-04-10	2023-06-06	2023-06-06	TGC	
215825	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
215826	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
216572	SCMC	2018-04-10	2023-08-07	2023-08-07	TGC	
218834	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
221632	SCMC	2018-04-10	2023-06-01	2023-06-01	TGC	1,2
226152	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
228908	SCMC	2018-04-10	2023-06-01	2023-06-01	TGC	
231256	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
231882	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
235120	SCMC	2018-04-10	2023-08-07	2023-08-07	TGC	
237718	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
241025	SCMC	2018-04-10	2023-08-11	2023-08-11	TGC	1,2
244045	SCMC	2018-04-10	2023-01-18	2023-01-18	TGC	
244623	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
246027	SCMC	2018-04-10	2023-05-02	2023-05-02	TGC	
249081	SCMC	2018-04-10	2023-08-11	2023-08-11	TGC	
249604	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
250859	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
251473	SCMC	2018-04-10	2023-07-27	2023-07-27	TGC	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
252059	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
253478	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	1,2
253479	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	1,2
256399	SCMC	2018-04-10	2023-06-06	2023-06-06	TGC	
262504	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
269124	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
271757	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
273902	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
277733	SCMC	2018-04-10	2023-08-11	2023-08-11	TGC	
279251	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
281211	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
288732	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
288812	SCMC	2018-04-10	2023-06-01	2023-06-01	TGC	
292775	SCMC	2018-04-10	2023-08-11	2023-08-11	TGC	
292776	SCMC	2018-04-10	2023-08-07	2023-08-07	TGC	
296756	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
299088	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
302109	SCMC	2018-04-10	2023-05-02	2023-05-02	TGC	
302110	SCMC	2018-04-10	2023-05-02	2023-05-02	TGC	
302205	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	1
305446	SCMC	2018-04-10	2022-12-18	2022-12-18	TGC	
305447	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
309830	SCMC	2018-04-10	2023-06-06	2023-06-06	TGC	
310093	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
316138	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
316139	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	1
316777	SCMC	2018-04-10	2023-01-18	2023-01-18	TGC	
317038	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
328990	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
330354	SCMC	2018-04-10	2023-08-07	2023-08-07	TGC	
333991	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
338862	SCMC	2018-04-10	2023-01-18	2023-01-18	TGC	
340075	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
340933	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	1
340934	SCMC	2018-04-10	2023-08-15	2023-08-15	TGC	2
341502	SCMC	2018-04-10	2022-09-10	2022-09-10	TGC	
343687	SCMC	2018-04-10	2023-08-11	2023-08-11	TGC	
343688	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
343769	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
343770	SCMC	2018-04-10	2022-12-06	2022-12-06	TGC	
547743	SCMC	2019-04-07	2023-04-07	2023-04-07	TGC	
627452	SCMC	2020-12-28	2022-12-19	2022-12-19	TGC	
627453	SCMC	2020-12-28	2023-01-18	2023-01-18	TGC	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
627454	SCMC	2020-12-28	2023-01-18	2023-01-18	TGC	
627455	SCMC	2020-12-28	2023-01-18	2023-01-18	TGC	
627456	SCMC	2020-12-28	2022-12-19	2022-12-19	TGC	
627457	SCMC	2020-12-28	2022-12-18	2022-12-18	TGC	
627458	SCMC	2020-12-28	2022-12-18	2022-12-18	TGC	
103722	BMC	2018-04-10	2022-12-19	2022-12-19	WMRC	
114308	BMC	2018-04-10	2022-12-18	2022-12-18	WMRC	
118774	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
118775	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
120584	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
120676	BMC	2018-04-10	2023-08-07	2023-08-07	WMRC	
120677	BMC	2018-04-10	2023-07-27	2023-07-27	WMRC	
120678	BMC	2018-04-10	2023-07-27	2023-07-27	WMRC	
131268	BMC	2018-04-10	2022-12-18	2022-12-18	WMRC	
147413	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
157111	BMC	2018-04-10	2023-08-06	2023-08-06	WMRC	
161340	BMC	2018-04-10	2023-06-06	2023-06-06	WMRC	
161752	BMC	2018-04-10	2023-08-07	2023-08-07	WMRC	
165862	BMC	2018-04-10	2023-07-27	2023-07-27	WMRC	
166156	BMC	2018-04-10	2023-06-06	2023-06-06	WMRC	
176652	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
176653	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
180491	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
180492	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
181228	BMC	2018-04-10	2022-12-19	2022-12-19	WMRC	
189059	BMC	2018-04-10	2022-12-06	2022-12-06	WMRC	2
195451	BMC	2018-04-10	2023-06-06	2023-06-06	WMRC	2
213984	BMC	2018-04-10	2023-06-06	2023-06-06	WMRC	2
215610	BMC	2018-04-10	2022-12-18	2022-12-18	WMRC	
226151	BMC	2018-04-10	2023-08-11	2023-08-11	WMRC	
230073	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
237575	BMC	2018-04-10	2022-12-06	2022-12-06	WMRC	
244119	BMC	2018-04-10	2023-07-27	2023-07-27	WMRC	
244624	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
249080	BMC	2018-04-10	2023-08-11	2023-08-11	WMRC	2
249252	BMC	2018-04-10	2022-12-18	2022-12-18	WMRC	
249605	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
250222	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
251472	BMC	2018-04-10	2023-08-06	2023-08-06	WMRC	
256230	BMC	2018-04-10	2023-08-07	2023-08-07	WMRC	
261450	BMC	2018-04-10	2023-06-06	2023-06-06	WMRC	
262055	BMC	2018-04-10	2023-01-18	2023-01-18	WMRC	
266632	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	



Tenure #	Type	Issue Date	Anniversary	Due date	Ownership	Notes
269402	BMC	2018-04-10	2023-06-06	2023-06-06	WMRC	
274459	BMC	2018-04-10	2022-12-06	2022-12-06	WMRC	2
281842	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
289911	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
297941	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
298654	BMC	2018-04-10	2023-07-27	2023-07-27	WMRC	
298655	BMC	2018-04-10	2023-07-27	2023-07-27	WMRC	
304971	BMC	2018-04-10	2023-06-06	2023-06-06	WMRC	2
305448	BMC	2018-04-10	2023-08-07	2023-08-07	WMRC	
312197	BMC	2018-04-10	2022-12-06	2022-12-06	WMRC	2
329344	BMC	2018-04-10	2023-06-06	2023-06-06	WMRC	
332461	BMC	2018-04-10	2023-01-18	2023-01-18	WMRC	
338211	BMC	2018-04-10	2022-09-10	2022-09-10	WMRC	
338939	BMC	2018-04-10	2023-07-27	2023-07-27	WMRC	

Ownership: MLPI – Moss Lake Project Inc.  
Ownership: TGC – Thunder Gold Corp.  
Ownership: WMRC – White Metal Resources Corp.  
Notes 1: Partial overlap with third-party patents at Kashabowie or Lower Shebandowan Lake  
Notes 2: Partial overlap with Highway 11/Hydro One alienation  
Notes 3: Overlap with other alienations  
Notes 4: Patent or lease which includes surface rights

### 4.3 Royalties, Back-In Rights, Option Agreements, and Other Encumbrances

#### 4.3.1 Option Agreements

The Vanguard Block claims are subject to an Earn-In Agreement executed between Goldshore and White Metal in which Goldshore can earn up to 75% into the subject claims upon meeting the following terms:

- 1) Total cash payments of \$110,000 to White Metal over three years, to be paid as follows:
  - a) \$10,000 within five days of 6 July 2022 (the “Anniversary Date”) – **Completed**
  - b) \$20,000 on or before 12 months from anniversary date
  - c) \$30,000 on or before 24 months from anniversary date
  - d) \$50,000 on or before 36 months from anniversary date.
- 2) Issuance of 1,500,000 common shares of the Company as follows:
  - a) 300,000 shares on 6 July 2022 – **Completed**
  - b) 300,000 shares on or before 12 months from anniversary date
  - c) 400,000 shares on or before 24 months from anniversary date
  - d) 500,000 shares on or before 36 months from anniversary date.
- 3) Total incurred expenditures on the claims of not less than \$1,650,000 over three years as follows:
  - a) \$100,000 on or before 6 months from anniversary date – **Completed**
  - b) \$200,000 on or before 12 months from anniversary date
  - c) \$600,000 on or before 24 months from anniversary date
  - d) \$750,000 on or before 36 months from anniversary date.

The Vanguard Earn-In agreement is in good standing with all commitments met as of the date of this report.



#### 4.3.2 Royalties

Parts of the Moss Project are also subject to the following historical royalty agreements:

- Option agreement for a 90% interest in the subject property dated 18 January 1980 between Stanley G. Hawkins, Donald J. Kemp, Belore Mines Limited, Huronian Mines Limited, Harry Lundmark, John Woynarski, and John E. Halonen, as amended, for the greater of \$25,000 per year or 10% of net profits of production. Purchasers have right of first refusal to purchase vendor's remaining 10% interest. Goldshore has been advised by Wesdome Gold Mines Ltd (Wesdome) that this royalty percentage and minimum quantum payment were subsequently contractually reduced by 12.5% to, respectively, 8.5% and \$21,875. Goldshore was also advised by Wesdome that the 10% option to purchase the remainder of the property that is subject to this agreement was exercised and that Moss Lake is the 100% registered owner of said property.
- Net smelter return (NSR) royalty agreement dated 20 September 1999 between Moss Lake Gold Mines Ltd and John Edward Ternowesky (1.25%), Eugene Omer Belisle (0.625%), and Noel Belisle (0.625%), for \$10.00. Owner retains right of first refusal to buy back 40% of the royalties.
- Property option agreement dated 20 January 2003 between Costy Bumbu (50% interest holder), James A. Martin (50% interest holder) and East West Resource Ltd, for a total of 100% interest in return for cash payments, the issuance of 100,000 common stock, and a 2.0% NSR. This included the right for the optionee to buyback 1.0% of NSR. The optionee would retain a right of refusal to purchase the remaining 1.0% NSR.
- Settlement agreement dated 7 October 2014 between Alto Ventures Ltd (Alto), Canoe Mining Ventures Corp. and Coldstream Mineral Ventures Corp. for the amount of \$768,942. Alto agrees to accept \$250,000 in common shares and a 1.5% NSR on the portion of the Coldstream Property that is not otherwise subject to any royalty as seen in Schedule A of that agreement, with the right to repurchase 1.0% for \$1,00,000. Secondly, a 0.5% NSR exists on the portion of the Coldstream Property that is otherwise subject to one or more royalties as set out in Schedule A of that agreement and does not include the right to repurchase.
- Property option agreement dated 3 May 2006 between Canadian Golden Dragon Resources Ltd and Alto, as amended, for 100% ownership interest, in return for a cash payment before the two-year anniversary, the issuance of shares and a 1% NSR that includes the right of first refusal.
- Assets purchase agreement dated 8 May 2006 between Dino D'Angelo (50% holder) and Peter G.F. Young (50% holder) and Alto, for a total of 100% ownership interest for a cash payment, the issuance of common shares and Alto holds the first right of refusal to purchase any portion of the NSR.
- Option to purchase agreement on the Kukkee Burchell Lake Property dated 20 July 2009 between Ken Kukkee and Alto for 100% ownership interest. Alto shall pay cash payments and a 2.0% NSR with the right to buy one-half of NSR (1.0%) at any time for \$1,000,000 and has a right of first refusal to purchase all or any part of the NSR.
- A historical royalty agreement referred to as "John Prochneau/New Hawk" appears not to have been located at the time of the acquisition of the related claims in 2016 by Wesdome.
- A historical royalty agreement referred to as "Larry Mealy" in Schedule "B" appears not to have been located at the time of the acquisition of the related claims in 2016 by Wesdome.
- Letter agreement dated 30 July 1998 and effective as of 30 September 1998, between Moss Lake Gold Mines Ltd, Benton Resources Corp. and Berland Resources Ltd, for a 1% NSR; if for any reason any of the claims are forfeited or cancelled, the said royalty shall apply to any claims re-staked on behalf of the purchaser within three years of such forfeiture or cancellation. The 1% NSR can be purchased outright for \$5,000 prior to 15 October 1998.
- Royalty agreement, in the amount of 1.0% NSR, dated 1 May 2014 between Glencore Canada Corporation, Mega Uranium Ltd, Rainy Mountain Royalty Corp. and Canoe Mining Ventures Corp. The purchaser grants to



Glencore Canada Corporation an offtake right of first refusal to purchase or toll process all or any portion of minerals. Several pages are missing including the terms of the NSR.

- Purchase agreement, for 100% interest, dated 6 April 2016 between Canoe Mining Ventures Corp. and Wesdome, for an amount of \$400,000. NSR royalties exist in varying percentages as depicted in the schedules in favour of Alto, Canadian Golden Dragon, D'Angilo and Young, John Prochneau, Patrick Sheridan, Larry Mealy, Ken Kukkee, Glencore, Bumbu and Martin, and Ken Kukkee.
- There are four patented claims (PAT-52225, PAT-52226, PAT-52227 and PAT-52228) that are held by Coldstream Mineral Ventures Corp. The Vendor and Vendor Parent have undertaken to take actions on a post-closing basis to transfer these properties to Goldshore.
- The Vanguard Block is covered by two royalty agreements whose extent are still being compiled by Goldshore.
- A 2% Net Smelter Return royalty granted to Costy Bumbu, James Martin, Mike N. Fogen and Mike Fogen Jr. pursuant to a property option agreement dated August 23, 2002.
- A 2% Net Smelter Return royalty granted to Benton Resources Inc. pursuant to a letter agreement dated December 14, 2016.

Goldshore and the Qualified Person authors are not aware of any other royalty agreements or encumbrances related to the Project.

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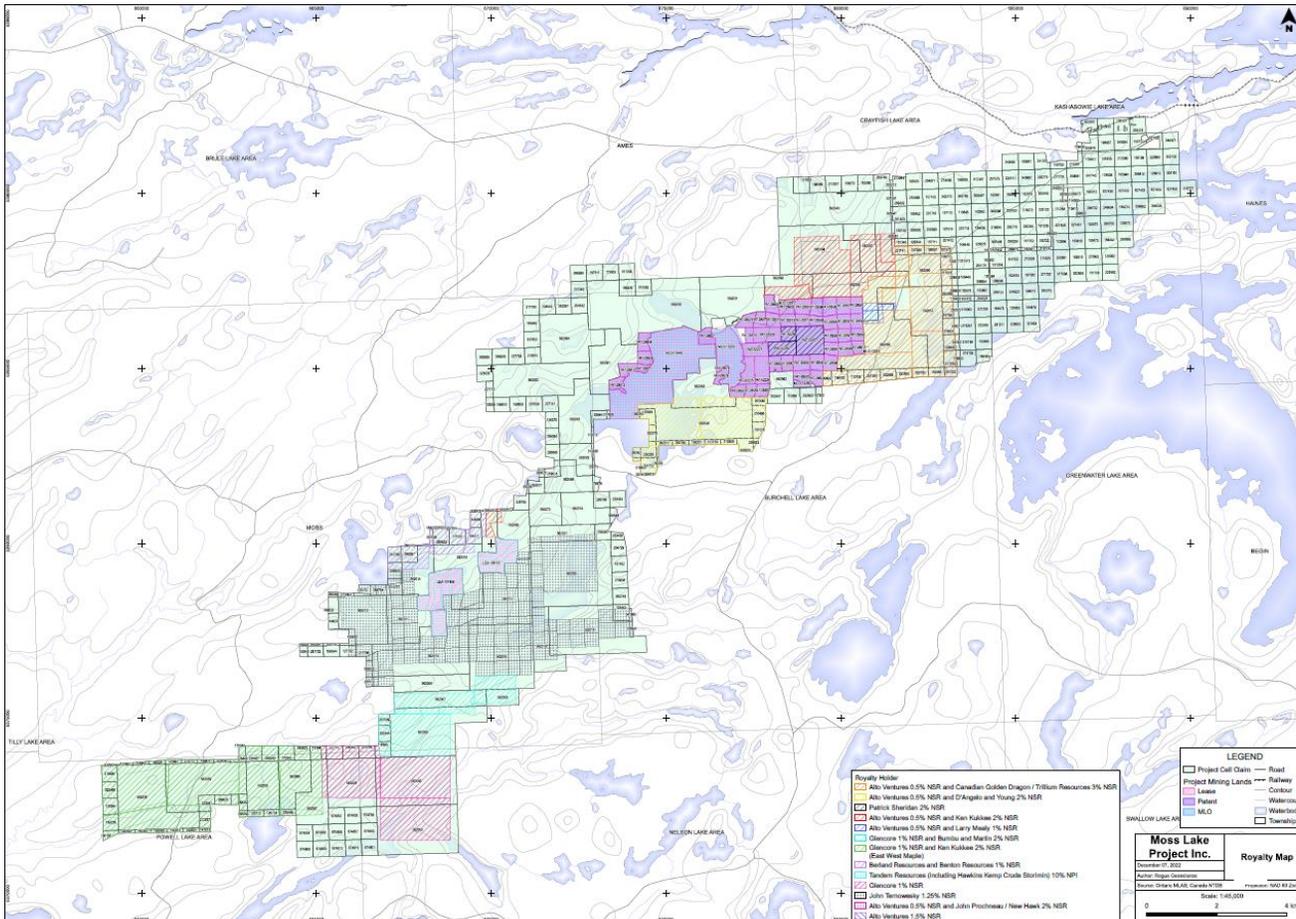


Figure 4.9: Map detailing the royalties for Moss Project

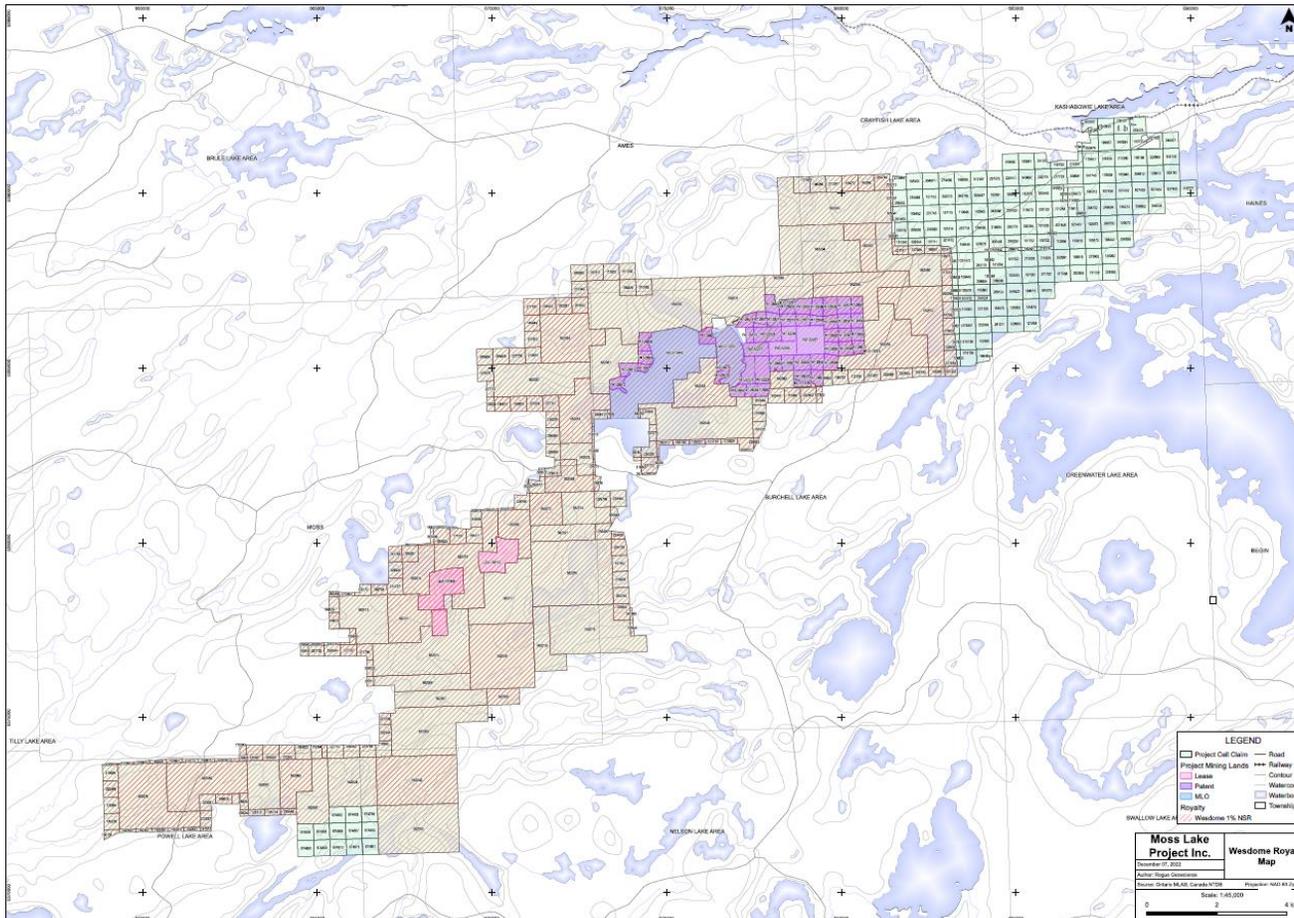


Figure 4.10: Map detailing the Wesdome royalty for Moss Project



#### 4.4 Environmental Liabilities

The historical North Coldstream mine closed in 1967 and is subject to rehabilitation work by EWL Management Ltd (EWL), a subsidiary of Encana Corporation whose predecessor company Conwest owned the original mining rights to the North Coldstream mine. The North Coldstream site has undergone significant rehabilitation including to historical tailings deposits and mine openings. In 2005, EWL completed environmental studies and mine workings/opening investigations to focus on problem areas including acidic discharge from the tailings and to determine solutions. In July 2017, the MNDMNRF inspected the site and agreed that it no longer presented a risk to the environment due to acidic discharge based on the rehabilitation work completed by EWL. A few minor outstanding items are present at the historical North Coldstream mine site that are the sole responsibility of EWL.

The Qualified Person authors and Goldshore are not aware of any other environmental liabilities on the Project as of the effective date of this Report. Goldshore is not responsible for any environmental liabilities related to any historical mining in the project area including the North Coldstream mine site. Any liabilities and remaining rehabilitation work do not affect Goldshore's ability to complete exploration and develop the Project.

#### 4.5 Permitting

##### 4.5.1 Permit to Take Water

On 1 February 2022, Goldshore received a permit from the Ontario Ministry of the Environment, Conservation and Parks (MECP) to take surface water (Permit number 3748-C9SPKM). The permit entitles Goldshore to draw up to 125,000 litres of water daily from the connected Waiwiag River and Snodgrass Lake water system provided certain flowrates and water levels are maintained as outlined within the permit. The permit is valid until 3 February 2024 or until such time Goldshore transitions beyond the exploration stage of the Project.

Goldshore notes that water takings are solely used for the purpose of drilling and, as such, the water is returned to the water table via drill holes. Consequently, there is no net taking of water from the Project. However, Goldshore sought to maximize recycling of water using drill sumps.

CSL Environmental & Geotechnical Ltd. submitted the 2022 Hydrological Monitoring Annual Report on behalf of Goldshore Resources on March 31, 2023 (report number CSL2023-389). The report noted that water takings generally did not exceed daily limits except for a few days in the summer of 2022 when Goldshore had seven drill rigs active on the project.

##### 4.5.2 Permit to Repair Roads

In November 2021, Goldshore received a permit from the MNDMNRF to complete road maintenance and repairs, and a 70 m road bypass installation on the Project effective from 9 November 2021 to 30 November 2023 (Permit number TB-2021-PLA-00062-WP-001). The permit covers work completed from Hermia Lake Road to Moss and Snodgrass Lakes, Moss Township, District of Thunder Bay.

##### 4.5.3 Exploration Permits

Goldshore has six active Ontario exploration permits from the MNDMNRF for mechanical drilling within the Moss Project (PR-21-000098, PR-21-000223, PR-21-000224, PR-22-000161, PR-22-000162 and PR-22-000163) (Table 4.2). The locations of the permits are outlined in Figure 4.11. Additional permits will be required as exploration activities advance for Moss Gold and Coldstream projects.



Additional permits are being prepared to cover planned mechanized drilling activities in the Vanguard Block in 2024.

The Qualified Person authors recommend that Goldshore obtain an additional mechanized drilling exploration permit to cover the more recently acquired White Metal claims.

Table 4.2: Active exploration permits for the Moss Project

Permit No.	Project name	Issue date	Expiry date	Permitted activities
PR-21-000098	Moss	15 Jun 2021	14 Jun 2024	Mechanized drilling
PR-21-000223	Hamlin	13 Sep 2021	12 Sep 2024	Mechanized drilling
PR-21-000224	East Coldstream	13 Sep 2021	12 Sep 2024	Mechanized drilling
PR-22-000161	Coldstream Extension	12 Oct 2022	11 Oct 2025	Mechanized drilling
PR-22-000162	Hamlin Extension	19 Oct 2022	18 Oct 2025	Mechanized drilling
PR-22-000163	Kawawagamak Moss Extension	12 Oct 2022	11 Oct 2022	Mechanized drilling

Claim List
<b>PR-21-000098</b>
154410, 154411, 171037, 176771, 176876, 202231, 202913, 206904, 219014, 227704, 228785, 233454, 241283, 252291, 266865, 287007, 287008, 288397, 293076, 293077, 293420, 293822, 295712, 299799, 300548, 314727, 314935, 344994, 562011, 562013, 562014, 562015, 562016, 562017, 562020, 562021, 565029, 562068, 562069, 562072, 562074
<b>PR-21-000223</b>
102991, 118394, 125714, 125715, 170343, 189224, 189811, 189826, 219768, 219772, 226467, 226468, 226469, 227707, 266240, 266242, 266243, 293823, 323036, 323051, 335340, 562028, 562059, 562065, 562066, 562067
<b>PR-21-000224</b>
188581, 221191, 237988, 335581, 562053, 562054, 562055, 562056, 562057, 562060
<b>PR-21-000161</b>
136077, 188581, 217918, 221191, 237988, 291973, 335581, 562053, 562054, 562056, 562057, 562060
<b>PR-22-000162</b>
226469, 562028, 562059, 562065, 562066, 562067, 674802, 674804, 674805
<b>PR-22-000163</b>
154411, 171037, 202231, 207009, 228785, 252291, 293077, 293420, 293822, 335344, 344994, 562006, 562007, 562009, 562014, 562015, 562016, 562017, 562018, 562019, 562020, 562021, 562058, 562069, 562072, 562074

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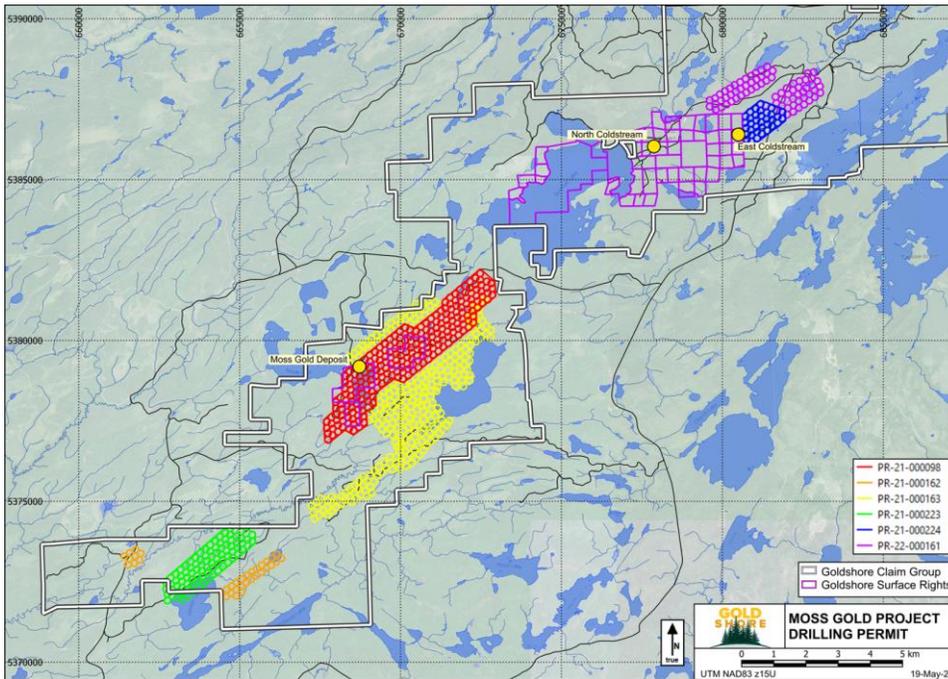


Figure 4.11: Areas covered for mechanical drilling under exploration permits PR-21-000098, PR-21-000223, PR-21-000224, PR-22-000161, PR-22-000162 and PR-22-000163

The Qualified Person authors are not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform work on the Project.

#### 4.6 Indigenous Communities

The Moss Project lies within the traditional territories of the Lac des Mille Lacs First Nation, Lac La Croix First Nation, Fort William First Nation, Métis Nation of Ontario, and Red Sky Métis Independent Nation. Goldshore has a responsibility to engage with all First Nations and Métis communities prior to and during any exploration and development activities in the project area. The QP authors understand that Goldshore is continuously engaging with the various First Nations and Métis communities in the area and other stakeholders as it develops the Project.



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

The Moss Project is located about 100 km west of Thunder Bay, within the Thunder Bay Mining District near the unincorporated community of Kashabowie in Northern Ontario. Provincial Highway 11 (also designated as the Trans-Canada Highway) runs east-west within the northern part of the Project. The small town of Atikokan is located 80 km to the west, on Highway 11. The city of Winnipeg, Manitoba, is also reachable via the Trans-Canada Highway 500 km to the west.

Goldshore maintains an operational base at Kashabowie including a core logging and sampling facility with offices, and on-site accommodation for the exploration team.

From Highway 11, the Project is accessible using Highway 802 as well as a network of gravel logging roads which run south of Highway 11, mainly the Burchell Road and Swamp Road (Figure 5.1). The Moss site is accessed using Swamp Road before turning east onto Hermia Lake East Road, followed by Snodgrass Road. The East Coldstream Gold Deposit is accessed using Burchell Lake Road.

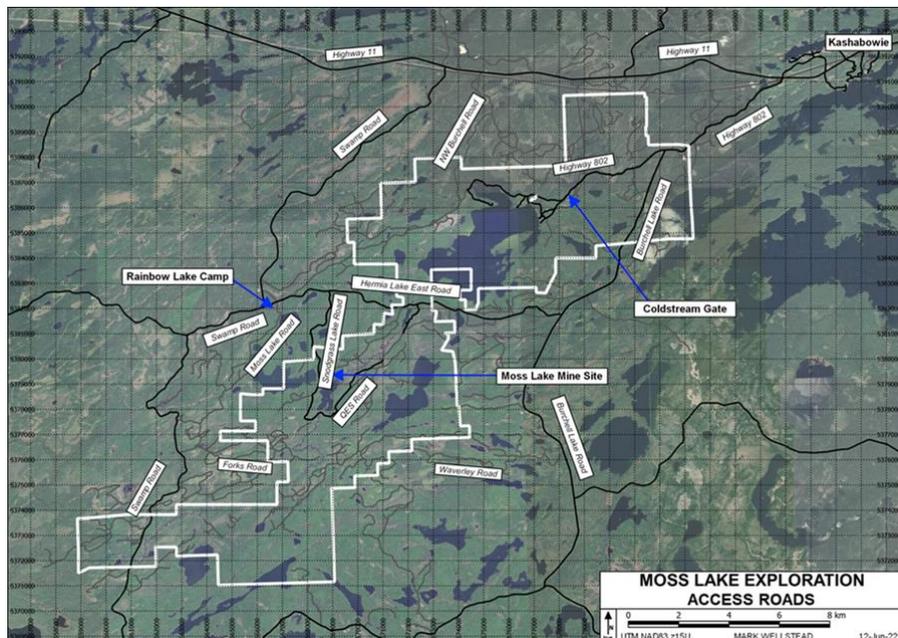


Figure 5.1: Access to Moss Property via Highway 11 and logging roads

### 5.1 Climate and Physiography

The Project region is under the influence of a continental climate marked by cold, dry winters and hot, humid summers. The Project has a Köppen Dfb climate (Humid continental) with typical summer highs and winter lows of +30°C and -30°C respectively. Annual precipitation is approximately 700–750 mm of which 550–

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600 mm is rainfall. Rainfall is broadly consistent from June to September while snowfall is likewise consistent from November to January.

Predominant land uses in the area include forestry and resource-based tourism. The area has a history of mining, notably the now-reclaimed Coldstream mine that operated for several decades until its closure in the 1967. There are no protected areas within the three claim groups; the nearest are Quetico Provincial Park, located approximately 20 km to the west, and Little Greenwater Lake Provincial Nature Reserve, located approximately 20 km to the east. The Matawin River Provincial Nature Reserve and La Verendrye Provincial Park are located to the southeast, at distances of approximately 40 km and 80 km respectively.

The Project terrain is characterized with ridges that generally run northeastwards to east-northeastwards. Most areas are at an elevation of 430–450 m above mean sea level. The highest hills reach about 500 m to the immediate south of the Coldstream mine site and in the southeast in the Hood Lake granitoid.

The ridges separate a series of shallow lakes and areas of muskeg swamp surrounding streams. The main lakes in the area are Burchell Lake and Shebandowan Lake in the north and Hamlin Lake and McGinnis Lake in the south. Moss Lake and Kawawigamak Lake occur to the west and east of the Moss Gold Deposit, respectively. Bathymetric surveys show these to average 6.0 m and 3.4 m, respectively, with maximum depths of 15 m and 16 m, respectively. The Wawig River runs along the axis of the Moss Gold Deposit and widens over the Main Zone to form Snodgrass Lake, which averages 1.7 m deep and reaches a maximum depth of 4 m.

Higher ground typically has poplar, birch and white/red pine coverage while spruce, fir and alder cover the lower ground. Wetland types include black spruce muskeg as well as cedar and alder swamps, particularly close to large lakes. Jackpine is common in sandy terrain, typically as plantations. The area has a long history of forestry activity up to the present, and most areas are at some stage of regrowth.

Wildlife studies, conducted in 2021 and 2022, identified the occurrence of 129 bird and seven mammal species in the study area. These records include species common in the Lake Nipigon and Pigeon River Ecoregions of Ontario, such as bald eagle (*Haliaeetus leucocephalus*), Canada warbler (*Cardellina canadensis*), moose (*Alces alces*), and red fox (*Vulpes vulpes*). However, additional efforts could increase the records by documenting other regional common species, such as the American black bear (*Ursus americanus*) and Canada lynx (*Lynx canadensis*).

## 5.2 Local Resources and Infrastructure

Thunder Bay has a population of approximately 120,000 with a full-service regional airport and a deep water port on Lake Superior. The local economy and workforce are accustomed to mining and mineral exploration work. Equipment and fieldwork contractors are also available in the unincorporated rural communities close to the Project such as Kashabowie and Shebandowan. Contractors, workforce, a hospital, and other essential government services are also available in Atikokan which has a population of approximately 3,000. Drilling activities can be undertaken year-round on the Project.

Forestry is overwhelmingly the main land use within the bounds of the Project. There are recreational cottages on the shores of Burchell Lake and Upper Shebandowan Lake. Historical infrastructure at the Coldstream mine included a company town and this area has been reclaimed alongside the historical mine workings by the Ontario Ministry of Environment.

There is some surface infrastructure at the Moss Gold deposit, including an exploration drive developed by Noranda in the mid 1980s and an associated historical waste pile with approximately 50,000 tonnes of ore. Goldshore conducted a site clean-up to remove all plastic and building waste in July 2021. The old laboratory



cement pad is now used as a secure pad for banded fuel storage. A weather station is installed on a nearby hill.

A 115 kV electrical transmission line runs east-west close to the highway and passes through the extreme northern edge of the Project. Hydro One maintains a backup diesel generator at Kashabowie to service the community in the event of power outages. Highway 802 runs southwest from Kashabowie onto the Project area towards the former Coldstream mine and town site. There are plans to upgrade the transmission line from Thunder Bay to Atikokan to a 230 kV line in 2024 to better serve mining activity in the region. A CN rail line runs east-west through the area about 4 km north of the Project, with a rail siding at Kashabowie.

There are ample water supplies on the Project site. The Wawiyag River runs southwest through the Project from Burchell Lake, through Snodgrass Lake and ultimately draining into the Hudson Bay watershed. A drainage divide runs through the northeast portion of the Project, and some areas round Iris Lake ultimately drain into the Great Lakes via Shebandowan Lake. The largest lake in the Project area is Burchell lake at about 1,000 ha, about 90% of which is within the Project confines.

Goldshore uses a converted garage building in Kashabowie as a core logging facility and administrative building for the project. Accommodation is available at fishing lodges in the Kashabowie area. Fladgate Exploration, an exploration contractor, operates a camp at Rainbow Lake, about 4 km northwest of Snodgrass Lake, which can also be used for accommodation, core logging and other exploration activities.

Although the Project is still in the early stages of development (pre-mining stage), there appears to be sufficient availability of power, water, mining personnel, potential areas for future tailings storage areas and waste disposal, and potential sites for a processing plant. However, this will be confirmed during any future mining studies for the Project.



## 6 History

### 6.1 Project and Exploration History

Goldshore fully acquired the Moss Project claims held by Wesdome Gold Mines Ltd. (“Wesdome”) in May 2021 as part of a corporate transaction leading to listing of the Company’s shares on the TSX. Wesdome had assembled the Moss, Coldstream and Hamlin blocks in the mid-2010s. Wesdome purchased all shares in Moss Lake Gold Mines in 2014 by business combination agreement (Wesdome, 2014), which resulted in Wesdome acquiring a 100% ownership of the Moss claim block containing the Moss Gold Deposit. In a second transaction with Canoe Mining in 2016, Wesdome acquired the Coldstream and Hamlin claim blocks by issuing shares in Wesdome and providing cash payments (Wesdome, 2016). Goldshore acquired the Vanguard claim block separately from White Metal Resources in 2022. White Metal changed its name to Thunder Gold Corp. in 2022.

#### 6.1.1 Moss Claim Block

The gold occurrence which was later to become the Moss Gold Deposit was initially discovered in 1936. Limited work took place here and in the wider belt until the 1970s, notably with localized exploration around Kawawigamak (Fountain) lake where minor Au, Cu and Zn occurrences were found. Intensive exploration at Moss began in the 1970s when Falconbridge and later Camflo Mines revisited the historical showing at Snodgrass. Infill drilling and underground development took place under the Tandem Resources and Storimin Joint Venture (“JV”) throughout the 1980s. From 1986 to 1989, the Tandem/Storimin JV completed 204 surface holes totalling 164,743 ft (50,213.6 m) in length. The objective of these drilling campaigns was to define the Main Zone as it was traced along strike and down-dip from the original showing. In 1987 and 1988, the JV carried out an underground exploration program via a decline and drifts. The underground development included 2,217 ft (675.7 m) of decline, 183 ft (55.8 m) of cross cuts, and 904 ft (275.5 m) of drifting on the Main Zone. This development reached a vertical depth of 316 ft (96.3 m). The JV drilled 32 underground holes totalling 4,967 ft (1,513.9 m) and carried out extensive muck, face, and back sampling.

In 1987, Tamavack Resources Inc. (Tamavack) and International Maple Leaf Resource Corp. were granted an option to acquire a 100% interest in the southwest extension of the Moss Gold Deposit (Goldshore’s Southwest Zone, at the time termed the Corner Zone) and satellite prospects to the southeast including the Boundary Zone and Fountain prospects at Kawawigamak Lake. They subsequently carried out various exploration surveys and completed a total of 25,038 ft (7,632 m) of core drilling in 41 drill holes that tested gold targets near Fountain Lake and targets located just south of the Moss Gold Deposit.

At the same time, Inco/Canico mapped and drilled the Span Lake gold prospect. They completed 6,764 m of drilling.

In September 1990, Central Crude Limited (CCL) and Noranda optioned the 42-claim Moss deposit, consolidating the Tandem/Storimin and Tamavack holdings. An intensive surface exploration program began in January 1990 following the signing of a letter of intent. Sixty-nine holes totalling 80,399 ft (24,506 m) in length were completed by June 1991, largely on the QES Zone found by Noranda while testing for an east-northeast extension of the Main Zone. In late 1992, an additional seven holes totalling 14,380 ft (4,383.0 m) were drilled at depth on the QES Zone.

Exploration slowed dramatically in the 1990s due to unfavourable market conditions. From the mid-1990s onwards Moss Lake Resources acquired the CCL option, while Inco’s Span Lake claims became part of Alto and later Foundation’s Coldstream claim block.



Beginning in 2000, Moss Lake Gold Mines carried out exploration activities consisting of airborne and ground-based geophysical surveying, geological mapping, and diamond drilling programs. This work led to the preparation of a Mineral Resource estimate by Watts, Griffis, and McOuat (WGM) in 2010, the results of which are summarized in Risto and Breed (2010).

Moss Lake Gold Mines engaged InnovExplo to complete an updated Mineral Resource estimate and a Preliminary Economic Assessment (PEA) in 2013 (InnovExplo, 2013). The scope of the PEA included excavation of the mineralized material by means of open pit mining methods and recovery of the gold using conventional cyanidation processing technologies. The study scope considered all necessary infrastructure items such as power, access roads, worker accommodation camp, shops, administration building, a tailings storage facility (TSF), water treatment plants, and waste rock and overburden storage areas.

Following Wesdome's acquisition, Moss Lake Gold Mines completed additional geophysical surveying and diamond drilling programs in 2016 and 2017. The geophysical surveys consisted of IP surveys carried out along the northeastern strike extension of the Moss Deposit toward Span Lake, and the southwestern strike extension (known as the South grid). The drilling programs were carried out to test selected targets identified by the IP surveys for their potential of hosting gold mineralization.

The Moss claim block was left dormant until Goldshore's acquisition of Wesdome's position. The Company contracted TechnoImaging LLC to conduct a heliborne Versatile Time-Domain Electromagnetic (VTEM™ Plus) and Horizontal Magnetic Gradiometer geophysical survey with Geotech Ltd over the entire land package, including the Moss, Coldstream and Hamlin claim blocks. Prior to the commencement of an infill drilling program at Moss, Goldshore commenced an environmental baseline study over the Moss claim block. Table 6.1 details the history of the Moss Block.



Table 6.1: Moss Block History

Target	Year	Company	Work Done	Total DDH m	Details	Reference
Moss Main	1936	Mining Corporation	Prospecting		Discovery of Moss Gold deposit	MDC013
Moss Main	1945-50	Lobanor Gold Mines	Trenching, 12 DDH	1,431		MDC013, R085
Kawa	1947	Chas Emery	Prospecting		Initial discovery of occurrences on Fountain Lake	52B10SE0237
Kawa	1953-57	Great Lakes Copper Mines	EM, 15 DDH	1,669.4	Minor Cu, Zn occurrences drill-tested (logs not located)	52B10SE0237
Kawa	1954	Newkirk Mining Corp	EM			52B10SE0156
Kawa, Waverly	1957	Mining Corporation	DDH program partly overlapping with Fountain Lake portion of Moss Gold Project			52B10SE0258, 52B10SE0259, 52B10SE0262, 52B10SE0263
Span	1957	Teck Exploration, Martin-McNeely Mines	EM, 2 "packsack" DDH	15.9	Very short DDH to test bedrock close to conductors	52B10SE0256, 52B10SE0257
Moss Main, QES, Kawa	1963-66	Inco	Airborne EM, numerous small DDH programs			52B10SE0166
QES	1964	Mining Corporation	EM, Mag			52B10SE0245
Kawa, Waverly	1966	Cominco	7 DDH	205.7	Part of regional reconnaissance program. Several DDH inadvertently drilled into Hermia Lake Stock	52B10SE0247, 52B10SE0248, 52B10SE0249, 52B10SE0251, 52B10SE0252, 52B10SE0253
Moss Nose	1972	Conwest Exploration	VLF, mag			52B10SE0241
Moss Main	1972-76	Falconbridge	Mapping, EM, mag, 9 DDH	1,493.5		52B10SE0242, 52B10SE0260, 52B10SE0266
Moss Main	1979	Camflo Mines	4 DDH	581		52B10SE0240
Kawa	1979-82	Mountainview Exploration	DDH		Small DDH programs, poorly documented	52B10SE0235, 52B10SE0238, 52B10SE0239
Moss Main	1982-89	Tandem Resources, Storimin	Mag, VLF, 204 surface DDH, 32 UG DDH, underground development	50,213.6 surface, 1,513.9 UG	Most intensive stage of development at Moss Main. Limited work at QES	52B10SE0198, 52B10SE0201, 52B10SE0203, 52B10SE0223, 52B10SE0230



Target	Year	Company	Work Done	Total DDH m	Details	Reference
Span, Burchell	1982-87	Inco, Canico	VLF, airborne mag, EM, radiometrics, mapping, DDH		Detailed mapping at Span Lake	52B10SE0215, 52B10SE0233, 52B10SE0117
Kawa, Waverly	1987-88	Ternowesky/Belisle	9 DDH	1,348		52B10SE0220, 52B10SE0206, 20000005146
Boundary Zone, SW Zone, Kawa	1987-88	Tamavack Resources, International Maple Leaf Resource Corp	21 DDH, mag, VLF, IP, trenching, soil surveys	3,660	Detailed exploration contemporaneous to Tandem/Storimin work at Moss Main. Exploration hampered by positioning of Boundary Zone relative to tenure	52B10SE0047, 52B10SE0049, 52B10SE0207
Span	1987-89	Inco	39 DDH, VLF, mag, channel sampling	6,764	482 m of channel sampling at Span Lake	52B10SE0175
Span, Kawa, QES, Moss Nose	1988	Jet Mining Exploration	Airborne EM, VLF, mag			52B10SE0226, 52B10SE0054
Kawa	1988	ELE Energy	Airborne mag, VLF, IP, soil, mapping		Limited overlap with claim group	52B10SE0091, 20000005389
Span	1988-89	Newmont	VLF, 14 DDH	635 m 5 DDH entirely within Property	Partial overlap with claim group	52B10SE0074, 52B10SE0212, 52B10SE0057
Moss Main, SW Zone, Span, QES	1990-91	Noranda, Central Crude Ltd	69 DDH	24,505.7	First advanced drill program at QES Zone	52B10SE0170, 52B10SE0174, 52B10SE0183, 52B10SE0185
Moss Nose	1990-91	Noranda	IP, HLEM, Mag, prospecting, 3 DDH	879	Partial overlap with claim group	52B10SW0892, 52B07NE0037, 20000005141
Moss Nose	1993	Akiko Gold Resources	5 DDH	845	Thinly sampled, DDH are not well located	52B10SE8605
Moss Nose, Deaty Creek	1993	Costy Bumbu	Prospecting, Trenching		First detailed exploration at Deaty Creek	52B10SE0020
Kawa	1993-95	Ternowesky/Belisle	VLF, mag, mapping			52B10SE0006, 52B10SE0007
Moss Main	1995	Kukkee	Thesis: study of Moss Lake Stock		Rock magnetic and structural investigation of the Moss Lake stock and local area: western Shebandowan belt	Kukkee 1995



Target	Year	Company	Work Done	Total DDH m	Details	Reference
Moss Main, QES, Moss Nose, Kawa	1995-2010	Moss Lake Resources, Moss Lake Gold Mines	Compilation work, IP, mapping, 39 DDH	9,443.5	Twinning, infill and exploratory drilling. Good quality geologic mapping in Moss Nose area	52B10SE2009, 20000000054, 52B10SE2016, 52B10SE2020, 20000001085, 20000003849
QES, Kawa	1998	Ternowesky	Mapping, compilation			52B10SE2005
Boundary Zone, Kawa	1998-99	Landis Mining	4 DDH	506.1	DDH have same name system as older Cominco program	52B10SE2004, 52B10SE2006, 52B10SE2007
Span	2004	Maple Minerals	Prospecting			52B10SE2024
Waverly	2005	East-West Resources, Mega Uranium Ltd	Airborne EM, mag		Limited overlap with claim group	20000001377
East Coldstream, Sanders, Span, Burchell	2006-07	Alto Ventures	Some prospecting and petrographic coverage at Span Lake			20000002602
Span	2010-13	Foundation Resources	16 DDH	3,692.7	Poorly documented drill program. Core is available. Detailed channel sampling. Part of larger programs based around Coldstream	Foundation files, 20000006200, 20000013648
Moss Main	2013	Moss Lake Gold Mines	PEA			InnovExplo 2013
Moss Main, QES, Moss Nose, Span, Kawa	2016-17	Moss Lake Gold Mines, Wesdome Gold Mines	IP, EM, 32 DDH	18,697.3	DDH focused at Moss SW Zone and Span Lake	20000015777, 20000015778, 20000017161
Moss Main	2021	Goldshore Resources	Metallurgical work			



### 6.1.2 Coldstream Claim Block

The North Coldstream deposit was discovered in the 1870s. Scant records of mapping and prospecting exist for the areas peripheral to North Coldstream through to the early 20th century. The deposit saw four periods of production, first as the Tip-Top Mine 1900-1908, two minor periods of production in the 1920s alongside underground development, and the most productive period under Noranda 1957-1967. Very little work took place at North Coldstream following its last period of production. Sporadic exploration took place in other areas of the property throughout these periods. Gold-focused exploration picked up in the 1980s driven by Noranda who discovered the Goldie occurrence and later the East Coldstream deposit. Peripheral parts of this system were worked by prospector Todd Sanders. Lacana alongside Freeport also discovered the Iris prospect around this time. Exploration efforts at East Coldstream dwindled in the 1990s. The area west of Burchell Lake was worked by prospectors. Exploration at East Coldstream picked up with intensive geophysical and prospecting work by Also Ventures and Foundation Resources in the late 2000s. Wesdome acquired the former Foundation property from Canoe Mining in 2016. Table 6.2 details the history of the Coldstream Block.



Table 6.2: Coldstream Block History

Target	Year	Company	Work Done	Total DDH m	Details	Reference
N Coldstream	1870s	Unk.	Discovery			Shklanka 1969 (MDC012)
Skimpole	Early 20th Century	Galloway Chibougamau Mines	Mapping			Presacco et al 2021
N Coldstream	1900-08	NY & Can. Cu Co.	Operations		1,312,000lb Cu produced	Shklanka 1969 (MDC012)
N Coldstream	1916-19	NY & Can. Cu Co.	Underground development, operations		Limited production	Shklanka 1969 (MDC012)
N Coldstream	1928-29	Shield Dev. Co.	Underground development, operations		Limited production	Shklanka 1969 (MDC012)
N Coldstream	1942	Frobisher Ltd	17 DDH	872.6		Shklanka 1969 (MDC012)
Iris	1950s	Rio Canada	Mapping, VLEM, SP, 3 DDH	Unk.	Drill-testing of widely spaced SP targets	52B10NE0027
N Coldstream, Burchell	1952-53	Coldstream Copper Mines	Mapping, mag, EM		Detailed geologic maps of former Coldstream property available to Goldshore	52B10SE0150, 52B10SE0151, 52B10SE0157, original maps
E Coldstream, Goldie	1952-55	Coldstream Copper Mines	5 DDH	978		52B10SE0143, 52B10SE0145, Farrow 1994
Burchell	1954	Newkirk Mining Corp	EM			52B10SE0149
Broadhurst	1956	Burchell Lake Mines	6 DDH	1637.39		52B10SE0130
Burchell	1956-57	New Alger Mines	EM, SP, mapping			52B10SE0158, 52B10NE0324
Burchell, Broadhurst	1956	Goldora Mines	EM			52B10SE0152
Burchell, Quetico	1957	Arcadia Nickel Corp	EM, mag, 4 DDH	405.08	Drill-tested Postans Fault (Wawa/Quetico contact). Poorly located and some DDH possibly outside Project area	52B10SE0264, 52B10SE0265
Iris	1957	New Jack Lake Uranium Mines	11 DDH	2052.37	Minimal sampling of core	52B10NE0020, 52B10SE0146
N Coldstream	1957-67	Noranda	Operations		103Mlb Cu, 22kOz Au, 440kOz Ag produced	Shklanka 1969 (MDC012)



Target	Year	Company	Work Done	Total DDH m	Details	Reference
Skimpole, Goldie, Broadhurst, Lacombe	1960s	Coldstream Copper Mines	6 DDH, mapping, VLEM, mag	227.74	Minor Cu, Ni, Au occurrences identified	52B10SE0014, 52B10SE0140, 52B10SE0141, 52B10SE0144, 52B10SE0160, 52B10SE0165
N Coldstream, Vanguard	1969	MNDM	Property/deposit summaries		Copper, Nickel, Lead and Zinc Deposits of Ontario	Shklanka 1969 (MDC012)
Anvil, Iris	1970	Cominco	EM, 2 DDH	62.5	Aimed at conductive targets. Partial overlap with property	52B10NE0023
Iris	1980s	Lacana, Freeport McMoran	Mag, VLF, 2 DDH, mapping	651		52B10NE0010
Kawa, Span, Burchell	1982	Canico, Inco	Airborne mag, EM, radiometrics			52B10SE0117
Burchell, Broadhurst	1983	Tenajon Silver Corp	Historic compilation, EM, soil			52B10SE0108, 52B10SE0115
Goldie	1985	Noranda	Soil, trenching		Discovery of Goldie zone	52B10SE0095
Burchell	1985-91	Todd Sanders	Geophysics, VLF, mapping, prospecting, DDH		Discovery of numerous Au occurrences west of Burchell Lake. Few notable DDH intervals	52B10SE0001, 52B10SE0022, 52B10SE0025, 52B10SE0033, 53B10SE0077, 52B10SE0040, 52B10SE0112, 20000005143, 20000005144, 52B10SE0096
Burchell	1986	Jurate Lukosius-Sanders	VLF			52B10SE0101
E Coldstream, Goldie	1987-91	Noranda, Lacana	Detailed drill program, soil, mapping, trenching, IP, VLF, mag	6138.5	Discovery of East Coldstream/Osmani deposit	52B10SE0093, 52B10SE0100, 52B10SE0019, 52B10NE0007, 53B10SE0080
Schoor	1987-88	Noranda	Mapping, trenching, soil, airborne VLF, mag		Thorough exploration program on Quetico contact leads to discovery of Schoor Au occurrence	52B10SE0184, 52B10SE0188, 52B10SE0197, 52B10SE0053



Target	Year	Company	Work Done	Total DDH m	Details	Reference
Burchell	1988	Discovery West	13 DDH	2118		52B10SE0073, 52B10SE0210
Shebandowan	1988	Golden Myra Resources	Airborne mag, VLF			52B09SW0005
Skimpole	1988	Grey Owl Resources	VLF			52B10SE0064
Burchell, Quetico, Schoor	1988	McChristie	Airborne VLF, mag			52B10SE0083
Burchell, Quetico, Schoor	1988	Jet Mining Exploration	Airborne VLF			52B10NE0011
Sanders, Goldie	1989-92	Todd Sanders, Corona Corporation	Prospecting, 7 DDH	1116.49	Discovery and drill-testing of Sanders occurrence (subparallel to E Coldstream)	52B10SE0360, 52B10SE8105, 52B10SE0010, 52B10SE8111, 52B10SE0059, 52B10SE0043
Skimpole, Shebandowan, Lacombe	1990-91	Todd Sanders	Prospecting, airborne EM		Discovered minor Au showings east of Skimpole	52B10NE0004, 52B09SW0002, 52B10SE8606, 52B09SW0315
Iris	1990	Independence Mining Co	Soil			52B10NE0005
Iris, Lacombe	1991	Jurate Lukosius-Sanders	Prospecting			52B10SE0035
N Coldstream	1997-98	Newhawk Gold Mines	Vertical Boreholes			52B10SE2002, 52B10SE2003
E Coldstream	2002	Alto Ventures, Kinross Gold	7 DDH	1668	Property acquired from Noranda	20000002602
Lacombe	2003	Ken Kukkee	Prospecting			52B10SE2018
Quetico	2005	East-West Resources, Maple Minerals Corp	IP, airborne mag, EM		Limited overlap with property	20000000830, 20000000849
Iris, Shebandowan	2005-07	Trillium North	IP, 18 DDH	1257.6	Program mostly targets same anomalies as New Jack Lake program (east of Iris). No assays available	20000003401
Anvil, Lacombe, Iris	2005-07	Canadian Golden Dragon Resources	IP, VLF, 2 DDH	363.5		20001678, 20000001328, 20000001947, 20000001836



Target	Year	Company	Work Done	Total DDH m	Details	Reference
E Coldstream, Skimpole, Broadhurst, Goldie, Sanders, Span, Burchell	2004-08	Alto Ventures	IP, 13 DDH, prospecting, mapping, airborne TDEM, petrographic study	2062		20000001255, 20000002602, 20000003754, 20000003195, 52B10SE2023
Shebandowan	2009	Trillium North	Prospecting			20000004233
E Coldstream, Burchell, Iris, Span, Goldie, Skimpole	2010-13	Foundation Resources	DDH, mapping, channel sampling, IP, soil, metallurgy, Resource Estimate	12173	Property acquired from Alto. Successful East Coldstream and Iris drill programs. Detailed channel sampling at Goldie. Broad prospecting coverage across much of Coldstream block	20000006200, 20000013648
E Coldstream, N Coldstream	2016-17	Wesdome Gold Mines	Mapping, IP, EM, 9 DDH	5101.95	Wesdome acquire Coldstream and Moss properties	20000015779, 20000017146



### 6.1.3 Hamlin Claim Block

Noranda and MacLeod-Cockshutt completed localised geophysics-targeted exploration in the 1950s. Prospector Ray Smith discovered the Hamlin Cu-Mo-Au occurrence around this time. Falconbridge explored a minor ultramafic belt east of Hamlin in the 1970s. Most work in the fervent 1980s period was focused on gold targets in the west of the claim block; most of these work programs were on gold occurrences in the Pearce Lake area outside the current Goldshore claim group. The Deaty Creek gold prospect was discovered and explored by Noranda in the early 1990s. Intensive exploration including modern geophysics and geochemistry began in the mid-2000s and was again initially focused on gold targets towards the west. The Hamlin occurrence itself attracted more attention in the late 2000s (including an Xstrata option) when its IOCG affinity was first theorized. Table 6.3 details the history of the Hamlin Block.

Table 6.3: Hamlin Block History

Target	Year	Company	Work Done	Total DDH m	Details	Reference
Hamlin	1956	Noranda	EM, mapping, trenching, 7 DDH	716.68		52B07NW0071, 52B07NW0057
Hamlin, Deaty Creek	1956	MacLeod-Cockshutt Gold Mines	EM, mag, 2 DDH			R085
Hamlin	1956-57	Ray Smith	Prospecting, 2 DDH	265.18		52B07NW0070
Hamlin	1965-66	Cominco	Airborne EM, 1 DDH	Unk.		52B10SE0166, 52B07NW0005
Hamlin, Deaty Creek, McGinnis	1970-73	Falconbridge	Mag, 15 DDH (3 on Project area)	448.06 on the Project	Drilling ultramafic units along flank of Hood Stock. Mostly outside Project	52B07NW0072, 52B07NE0008, 52B07NE0005
Hamlin	1984	Grand Portage Resources	Compilation report			52B07NW0035
Hamlin, Deaty Creek, Junction	1984-85	Kenngo Explorations	Mag, VLF, soil, mapping		Partial overlap with claim group. Good quality geologic maps	52B07NW0042, 52B10SE0229
Powell	1986	Gunflint Resources	Soil, mapping, VLF, IP, mag		Partial overlap with claim group	52B07NW0032, 52B07NW0033
McGinnis	1984-87	Wolf River Resources	IP, soil, mapping, compilation		Partial overlap with claim group	52B07NW8281, 52B07NW0034
Junction, Hamlin	1987-90	Grand Portage Resources	IP, mapping, trenching, soil, 17 DDH (2 in Project area)	284.07	Limited overlap with claim group	52B07NW0031, 52B07NW0012
Powell	1988	Great Fortress Resources Inc.	Mag, VLF, IP, mapping, 8 DDH	1160.67	Limited overlap with claim group	52B10SW0011, 52B10SW0893
Hamlin, Powell	1988-89	Mingold Resources	Mapping, VLF, IP, mag, 12 DDH	1361	Partial overlap with claim group	52B07NW0015, 52B07NW0016, 52B07NW0017, 52B07NW0020, 52B07NW0022



Target	Year	Company	Work Done	Total DDH m	Details	Reference
Hamlin, Powell	1990-91	Noranda	Mapping, 3 DDH, IP, EM, mag	879		52B07NW0003, 52B10SE0004, 52B07NW0005
Moss Nose, Deaty Creek	1991-92	Noranda	IP, 7 DDH	929	First substantial drill program at Deaty Creek	52B10SW8106, 52B10SE0026, 52B10SE0177, 20000005147
McGinnis	1992	Martin	Prospecting		Partial overlap with claim group	52B07NE0002
McGinnis	1992	Poirier	Mapping, Trenching		Partial overlap with claim group	52B07NE0003
Moss Nose, Deaty Creek	1993	Costy Bumbu	Prospecting, Trenching		First detailed exploration at Deaty Creek	52B10SE0020
Powell	1996	Ken Kukkee, Kwiatowski	Prospecting, Trenching		Discovery of new Au occurrences close to Nelson Road	52B07NW0007
Deaty Creek, Hamlin, Powell	2003-06	East-West Resources, Mega Uranium Ltd, Maple Minerals Corp	Airborne mag, VLF, IP, EM, gravity, 50 DDH	9306.92	Intensive, geophysics-heavy exploration initially focused west of Hamlin and at Deaty Creek before moving to Hamlin. Numerous modestly elevated Au, Cu, Zn intervals	20000001527, 20000001488, 20000000664, 20000001531, 20000000875, 20000000752, 52B07NW2013, 20000002415, 20000001115, 20000001032, 20000001021, 52B10SW2016
Hamlin	2006	Freewest	Prospecting		Limited overlap. Focused on areas to south	20000001951
Hamlin, Deaty Creek, McGinnis	2007-11	Xstrata Copper	Soil, mapping, channel sampling, 26 DDH	9531.5	Option from East-West. Detailed Hamlin exploration based on IOCG interpretation	20000007598, 20000013643, 20000006351
Hamlin	2008	Shute	Masters thesis			Shute 2008
Hamlin, Deaty Creek, McGinnis	2012	Forslund	Masters thesis			Forslund 2012

#### 6.1.4 Vanguard Block

The Vanguard East and West prospects were first discovered in the 1920s. Few documents survive of the early exploration programs save for what is mentioned in ODM reports but in the 1940s-50s, drill programs were undertaken densely enough to calculate historical resource estimates. The Copper Island occurrence was drilled in this time period. In the 1980s the western portion of this claim block fell within the Lacana/Freeport (and later Newmont) Iris property. Key targets in that period included sodium-depleted



footprints in the volcanic sequence used as VMS proxies, as well as a stratigraphically interpreted “Storimin Horizon” representing a potential strike continuation of Moss. The original Vanguard stripped areas were mapped in detail by OGS geologists in the 1990s. Modern geophysics-driven exploration was undertaken by a number of juniors from the early 2000s and led to the discovery of new Au occurrences. Table 6.4 details the history of the Vanguard Block.

Table 6.4: Vanguard Block History

Target	Year	Company	Work Done	Total DDH m	Details	Reference
Vanguard	1923		Discovery			OFR5938
Vanguard	1943	Alderman Copper Corp	Trenching, SP, Mag survey			OFR5938
Vanguard	1946	Andowan Mines Ltd	33 DDH	3000	Property summary	52G03SE0028
Vanguard	1949-56	Northpick Gold Mines	DDH, geophysics		Historic Resource calculation	OFR5938
Vanguard	1952-56	Frank Anderson	Stripping			Referred to in 20000007391
Iris	1955-56	Rio Can. Expl.	EM, 4 DDH			52B10NE0027
Vanguard	1956	Bandowan Mines Ltd	39 DDH	7529		Referred to in 20000007391
Vanguard	1956-57	Montco Copper Corp	Geophysics, DDH		Poorly documented. Historic Resource possibly updated	OFR5938
Copper Island	1957	Jellicoe Mines Ltd	DDH			52B09SW0307, 52B10SE0129
Vanguard	1966	Tinex Development	Mapping, EM, DDH			Referred to in 20000007391
N Coldstream, Vanguard	1969	MNDM	Property/deposit summaries		Copper, Nickel, Lead and Zinc Deposits of Ontario	Shklanka 1969 (MDC012)
Vanguard	1970	Cominco	Mapping, HLEM, 2 DDH			52B10NE0022
Iris, Lacombe	1987-91	Lacana, Freeport McMoran	Airborne mag, EM, VLF, mapping, 17 DDH	4000		52B10SE0042, 52B10NE0010, 52B10NE0308, 52B09NW0069
Vanguard, Iris	1988-89	Newmont	Mapping, 10 DDH			52B09NW0003, 52B10NE0006, 52B10NE0008, 52B10SE0055, 20000005140
Vanguard	1988-90	Minnova	Airborne and ground EM, mag, mapping, 14 DDH	4868		52B09NW0002, 52B09NW0006
Shebandowan	1988	Golden Myra Resources	Airborne mag, VLF			52B09SW0005
Shebandowan	1990	Todd Sanders	Prospecting			52B10NE0004
Vanguard	1992	Noranda	2 DDH, HLEM	1006		52B09NW8102



Target	Year	Company	Work Done	Total DDH m	Details	Reference
Vanguard, Shebandowan	1994-96	Petrunka	Mapping, mag			52B09NW0046, 52B09NW0072
Vanguard	1996	OGS	Mapping		Detailed mapping of main Vanguard stripped areas	P3358, P3359
Vanguard	1997-98	Allegheny Mines Corp	EM, mag, IP, DDH			52B09NW2002, 52B09NW2007
Vanguard	1999	Martin & Fogen	Trenching			52B09NW2009
Vanguard	2003-06	Canadian Golden Dragon Resources	Mapping, IP, airborne VTEM, 20 DDH			52B09NW2024, 52B09NW2025
Vanguard, Iris	2005-07	Everett Resources Ltd	IP, 20 DDH	1258		20000000666, 20000000667, 20000003401
Vanguard, Iris, Shebandowan, Copper Island	2010-12	Benton Resources	Mapping, soil, IP, mag, 7 DDH	1280	Comprehensive program identified new geophysical and soil anomalies across claim group. Discovery of "Benton" Au showing and minor PGE occurrences	20000007772
Vanguard	2012	Trillium North	4 DDH	501		20000007391
Vanguard	2015	1401385 Ontario	VLF			20000008449
Shebandowan	2017-18	White Metal Resources	Prospecting, soil, 3 DDH	494		20000015500, 20000015497, White Metal Resources datasets

## 6.2 Historical Mineral Resource Estimates

Historical estimates were completed for mineralized zones found within the Moss and Coldstream claim blocks. Many of these historical estimates were completed prior to the introduction of CIM and NI 43-101 standards and guidelines and are no longer considered relevant or reliable. A QP has not completed sufficient work to classify these historical estimates as current Mineral Resources and Goldshore is not treating these historical estimates as current Mineral Resources. The current MRE disclosed in this Report supersedes all historical estimates for the Moss Gold Deposit.

### 6.2.1 Moss Claim Block

Prior to the current MRE for the Project discussed in Section 14 of this Report, the most recent historical estimate for the Moss Gold Deposit was prepared for Goldshore in 2022 and was disclosed in a Technical Report with an effective date of November 14, 2022. A previous NI 43-101 compliant Mineral Resource estimate for the Moss Gold Deposit was disclosed in a Technical Report with an effective date of May 31, 2013 (InnovExplo, 2013). Previous estimates are presented in Table 6.5.



Table 6.5: Previous resource estimates, non-compliant with NI 43-101 before 2013

Company	Year	43-101 Compliant	Cut-off grade (g/t Au)	Cutting value (g/t Au)	Mining method	Category	Tonnes	Grade (g/t Au)	Contained Au (oz)
Martan Exploreres Ltd.	1988	No	3.43	Unknown	Open Pit	Unclassified	338,722	5.35	58,262
Noranda (Bidwell)	1991	No	None	None	Open Pit	Unclassified	60,637,758	1.06	2,064,000
Noranda (Reedman)	1991	No	0.47	None	Open Pit	Unclassified	83,746,585	0.91	2,443,000
Central Canada Potash	1991	No	0.47	None	Open Pit	Unclassified	77,994,332	0.93	2,341,000
Noranada (Jarvi)	1992	No	0.47	31.1	Open Pit	Unclassified	60,433,584	1.03	2,087,000
WGM (Sullivan et al.)	2006	Yes	0.48	9.33	Open Pit	Inferred	50,920,000	0.93	1,515,000
WGM (Breed)	2010	Yes	0.3	9.33	Open Pit	Indicated	36,569,769	0.93	1,107,000
					Open Pit	Inferred	18,783,976	0.86	525,000
InnovExplo	2013	Yes	0.5	35	Open Pit	Indicated	39,795,000	1.1	1,377,300
			0.5	35	Open Pit	Inferred	48,904,000	1	1,616,300
			5	35	Underground	Inferred	1,461,000	2.9	135,400
CSA Global	2022	Yes	0.4	20-60	Open Pit	Inferred	121,700,000	1.1	4,170,000

The 2013 InnovX estimate was prepared using three-dimensional (3D) block modelling and the inverse distance squared (ID<sup>2</sup>) interpolation method for a corridor of the Moss Project with a strike length of 3.2 km and a width of approximately 1.2 km, down to a vertical depth of 750 m below surface. Eighteen mineralized zones were interpreted in transverse sections spaced 50 ft (approximately 15 m) apart and confirmed/adjusted in plan views spaced 100 ft (approximately 30 m) apart. The Geovia GEMS software package was used to prepare the historical estimate from a drill hole database containing a total of 352 drill holes.

The estimate contained mineralization located within a potential open pit operating scenario as well as mineralization that is located within an underground mining scenario. A pit surface was created as a criterion in preparing the estimate using the following parameters:

- Gold price: US\$1,500/oz
- Exchange rate: 1.00 US\$: 1.00 C\$
- Overall slope angle: 50°
- Mining cost (rock): C\$2.28/t moved
- Mining recovery: 95%
- Mining dilution: 5%
- Processing cost: C\$9.55/t milled
- Mill recovery: 80% to 85%.

The underground-scenario InnovX estimate (Table 6.6) was completed using different gold cut-off grades and a minimum width of 5.0 m (true width). The selected underground cut-off grade of 2.0 g/t Au allowed the



mineral potential of the deposit to be outlined for the underground mining option, outside the Whittle-optimized pit shell.

Table 6.6: Historical 2013 InnovX Resource Estimates for Moss Gold Deposit

Location	Tonnes (t)	Grade (g/t Au)	Contained Au (oz)
<b>Indicated Mineral Resources</b>			
Open Pit	39,795,000	1.1	1377300
Underground	0	0	0
<b>Sub-Total, Indicated</b>	<b>39,795,000</b>	<b>1.1</b>	<b>1,377,300</b>
<b>Inferred Mineral Resources</b>			
Open Pit	48,904,000	1	1,616,300
Underground	1,461,000	2.9	135,400
<b>Sub-Total, Inferred</b>	<b>50,365,000</b>	<b>1.1</b>	<b>1,751,700</b>

A Qualified Person has not completed sufficient work to classify this historical estimate as current Mineral Resources and Goldshore is not treating this historical estimate as current Mineral Resources. The current MRE disclosed in this Report supersedes all historical estimates for the Project.

The most recent NI 43-101 compliant Mineral Resource estimate was prepared by CSA Global in 2022. The Mineral Resource estimate was prepared using 3D block modelling and ordinary kriging interpolation for a corridor of the Moss Project with a strike length of 3.2 km and a width of approximately 1.2 km, down to a vertical depth of 700 m below surface. Three mineralized zones were interpreted representing higher grade shear domains in plan view sections spaced 25 m apart encompassed by a lower grade intrusion domain interpreted using indicator interpolation with a structural trend based on the afore mentioned shear domains. Leapfrog™, Micromine™, Datamine Studio RM™, and Snowden Supervisor™ software packages were jointly used to prepare the Mineral Resource estimate from a drill hole database containing a total of 583 drill holes.

The Mineral Resource statement contains mineralization located within a potential open pit operating scenario.

A pit surface was created as a criterion in preparing the Mineral Resource statement using the following parameters:

- Gold price: US\$1,500/oz
- Overall slope angle: 50°
- Mining cost (rock): US\$2.50/t fresh
- Processing cost: US\$12.50/t fresh
- Mill recovery: 85%
- G&A cost US\$2.50/t
- Cut-off grade 0.37 g/t Au.

### 6.2.2 Coldstream Claim Block

A historical estimate for the East Coldstream gold deposit was prepared for Foundation Resources in 2011 and was disclosed in a Technical Report with an effective date of 12 December 2011 (Tetra Tech, 2011). The East Coldstream deposit is located approximately 2 km east of the past producing Coldstream mine (Table 6.7).

**Commented [NR38]:** @Niti Gupta I would omit all this, it has been superseded and was reported previously

**Commented [NR39]:** @Matthew Field @Niti Gupta Only three shear domains? Is this all correct? Why is Micromine not TM?

**Commented [MF40R39]:** Yes in the Moss deposit this is true, namely Main, QES and SW.



Table 6.7: Historical estimate for the East Coldstream gold deposit (Tetra Tech, 2011)

Class	Zone	Tonnes (t)	Au (g/t)	Gold (oz)
Indicated	EC-1	1,371,900	0.89	39,376
	EC-2	2,144,800	0.83	57,024
	<b>Total</b>	<b>3,516,700</b>	<b>0.85</b>	<b>96,400</b>
Inferred	EC-1	20,732,000	0.77	515,454
	EC-2	9,801,000	0.79	247,822
	<b>Total</b>	<b>30,533,000</b>	<b>0.78</b>	<b>763,276</b>

The historical estimate was prepared using available drill hole and assay information as of 5 April 2011. Wireframe interpretations were prepared of the mineralization using a threshold grade of 0.2 g/t Au and a minimum horizontal width of 2 m. Gold grades were estimated with the Datamine Studio software package and using the nearest neighbour (NN), ID<sup>2</sup> and ordinary kriging (OK) interpolation algorithms. The historical estimate used a cut-off grade of 0.4 g/t Au and the following parameters:

- Stripping ratio: 4:1
- Operating cost: \$15.00/t at 5,000 tpd
- Gold price: US\$1,139/troy oz
- US\$ to C\$ conversion: 1.00
- Gold recovery: 95%.
- Overall slope angle: 50°.

Commented [NR41]: @Efrain Ugarte I thought the previous resource was not pit constrained?

A Qualified Person has not completed sufficient work to classify this historical estimate as current Mineral Resources and Goldshore is not treating this historical estimate as current Mineral Resources. The current MRE disclosed in this Report supersedes all historical estimates for the Project.

### 6.2.3 Hamlin Claim Block

No historical MREs have been prepared for the mineralization that has been discovered at the Hamlin Lake prospect.

### 6.2.4 Vanguard Claim Block

No historical MREs have been prepared for the mineralization that has been discovered at the Vanguard prospect.

## 6.3 Historical Production

### 6.3.1 Moss Claim Block

There is no record of any production from the Moss claim block.

### 6.3.2 Coldstream Claim Block

Copper was discovered at the site during the 1870s. Between 1902 and 1917, the site was mined intermittently by the New York and Canadian Copper Company operating under the name of the Tip-Top mine, producing approximately 1.3 Mlb of copper (ENDM, 2019). The mine was operated intermittently from 1957 until 1959 and continuously from 1960 to 1967 by Canadian mining company Noranda. Production ceased in 1967 when reserves were depleted, and the mine was closed permanently. ProMin (2002) reported



that 102 Mlb of copper, 440,000 ounces of silver, and 22,000 ounces of gold were produced from a total of 2.7 Mt of ore mined.

The mine and adjacent town of Burchell Lake were abandoned when mine operations ceased. Then owner Conwest undertook rehabilitation work in the mid-1990s in response to an order from the Ontario Mining and Lands Commissioner. This included the removal of most surface infrastructure including the headframe and mill buildings. Subsequent owner EWL, a subsidiary of Encana Corporation, has undertaken additional reclamation work since 2005, mainly to address acid rock drainage (ARD) from tailings that had been deposited outside the main tailings management area and to seal mine openings. These tailings are referred to as the orphan tailings.

In 2011, EWL excavated the orphan tailings and put them into the tailings relocation area that sits on top of and within the tailings management area. The relocated tailings were covered with an engineered soil structure to minimize ARD. A few residual concerns by the Ontario Ministry of Environment (MOE) required further site investigations into 2013. According to EWL, MNM concluded after a 2017 site inspection that the site no longer presents an environmental risk due to ARD (EWL, 2017).

Work on mine openings continued into 2018 (EWL, 2018). It is unclear whether MNM has confirmed that this rehabilitation work conforms with their requirements.

### **6.3.3 Hamlin Lake and Vanguard Claim Block**

There is no record of any production from the Hamlin Lake and Vanguard claim blocks.



## 7 Geological Setting and Mineralization

### 7.1 Regional Geology

#### 7.1.1 Stratigraphy and Tectonic Setting

The Moss Property is located in the western portion of the Shebandowan Greenstone Belt within the Wawa-Abitibi Terrane (Sub-province) of the Superior Province (Figure 7.1). All units are late Archean in age and are metamorphosed to greenschist facies, tending towards amphibolite facies with proximity to the larger plutons.

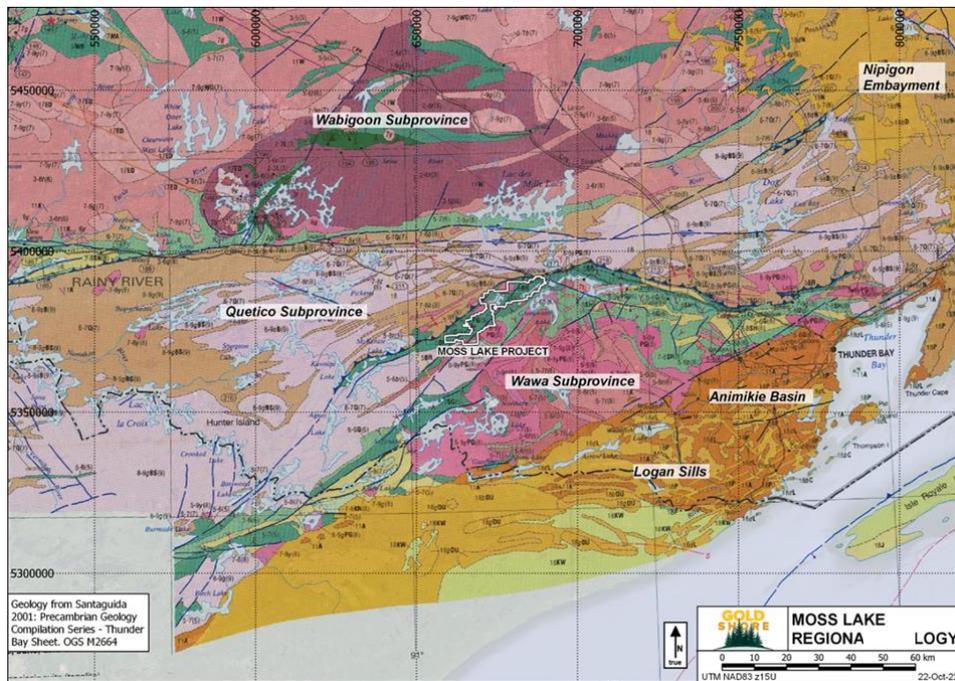


Figure 7.1: Regional geology of the Moss Project area showing the Wawa and adjacent sub-provinces

The northwest extremes of the Project area lie within the Quetico Sub-province, represented by greywackes with minor mafic-intermediate intrusions metamorphosed at greenschist facies. The contact with the Wawa Sub-province is marked by the major regional-scale Postans Fault, represented by a significant topographic low.



The Shebandowan Greenstone Belt (SGB) consists of three supracrustal assemblages that are distinguished by their age (Figure 7.2):

- Greenwater-Burchell Assemblage: Tholeiitic mafic through to calc-alkaline intermediate-felsic volcanic cycles, including layered mafic-ultramafic intrusive complexes and chemical sediments (iron formations) (2720 Ma).
- Kashabowie Assemblage: Calc-alkaline to alkali mafic-felsic volcanics and hypabyssal intrusions with “Timiskaming-type” clastic sediments (2695 Ma).
- Shebandowan Assemblage: “Timiskaming-type” trachytic and shoshonitic volcanic rocks and immature clastic sedimentary rocks (2690-2680 Ma).

The Shebandowan Greenstone Belt is broadly understood to have had a tectonic history as an island arc type terrane which was accreted onto the Wabigoon Sub-province, compressing the intermediary Quetico back-arc basin or marine sedimentary package (Figure 7.2). The belt has been affected by polyphase deformation and metamorphism, with two principal penetrative deformation events recognized, D1 and D2. Beakhouse et al. (1996) theorize that the D1 foliation is the result of thrust stacking during subduction. Continued tectonic stress after collision resulted in the D2 foliation as part of transpressive shear networks within all three sub-provinces, which in turn were exploited by “Timiskaming-type” alkaline intrusives, volcanics and narrow coarse clastic sedimentary basins.

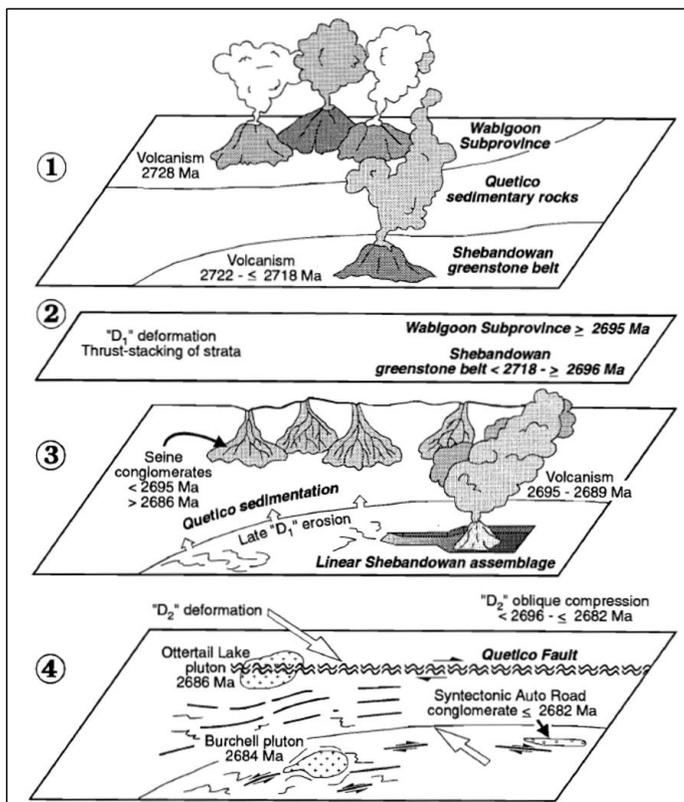


Figure 7.2: Model for tectonic evolution of the Shebandowan Greenstone Belt from Beakhouse et al., 1996

Some earlier authors invoked a Burchell Assemblage. There is some uncertainty as to whether this referred to a structurally distinct subset of the Greenwater Assemblage based on younging directions (as described by Lodge et al., 2013) or as a synonym for the Kashabowie Assemblage (e.g. Sotiriou et al 2018). Lodge (2015) resurrected the term "Burchell Assemblage" for an intermediate package of late Greenwater age.

The Greenwater Assemblage consists of northern and southern fringes of calc-alkaline basalts and a core consisting of Fe-tholeiite basalts and Fe-tholeiite komatibasalts, with minor felsic volcanics (Lodge & Chartrand 2013). The different geochemical assemblages are all broadly the same age. Nd isotope evidence from the Haines gabbroic complex and the gabbro-anorthosite suites around Upper Shebandowan Lake implies incipient spreading in an intra-arc setting with at least some input from a depleted mantle source (Sotiriou et al 2018). This diversity in tectonic setting is supported by Goldshore surface samples from the Coldstream area which plot on a continuous trend through island-arc tholeiites and MORB on most discrimination plots.

Sotiriou et al. suggest a subduction polarity to the south, but this is difficult to reconcile with the wealth of evidence from the Wabigoon Terrane that suggests the opposite. This may instead represent slab rollback on a second northward subduction zone on the southern limb of the Shebandowan Belt – now buried by



Proterozoic rocks – cognate with the subduction scenario theorized for the Abitibi/Pontiac sub-provinces. Lodge et al., (2014) note that felsic lenses close to the Vanguard and Wye Lake VMS prospects have FII-type REE profiles with LREE enrichment (based on the method of Lesher et al. (1985), which is shared by some VMS-fertile camps such as Sturgeon Lake.

The calc-alkaline, andesitic-to-rhyolitic Kashabowie Assemblage represents renewed, more evolved activity on the SGB arc after a hiatus of tens of millions of years. Field relationships suggest that the Kashabowie units are partly contemporaneous with the D1 structural event (see next section), the first major compressive event which thrust-stacked and interleaved panels of Kashabowie and Greenwater units (Beakhouse et al., 1996). This imparted a subvertical foliation and gently westward/southwestward-plunging lineations throughout the entire SGB. Younging directions in Kashabowie and Greenwater units vary across the belt but are predominantly to the north/northwest, suggesting a combination of tight folding and northward thrusting.

Dacitic Kashabowie units in Moss drill core have strongly adakitic Sr/Y signatures, which suggests that relatively young oceanic crust was subducted. Calc-alkaline, adakitic andesitic volcanic packages are rare in the Wawa-Abitibi Terrane and their local prevalence suggests a different, more continental, tectonostratigraphic setting for the SGB in comparison to the more oceanic arc-like Abitibi. Using REE and HFSE data, Lodge et al. (2013) classify most Kashabowie felsics as FI or FII which supports a predominantly compressional tectonic regime. The Shebandowan Pluton granodiorite was emplaced contemporaneously with the Kashabowie Assemblage, after the peak of the D1 event (see next section, Corfu & Stott, 1998).

The SGB is separated from the Wabigoon Sub-province by the Quetico Sub-province, consisting of turbidite sequences at high metamorphic grade. The Quetico is interpreted as a fore-arc accretionary prism developed along the southern margin of the Wabigoon which developed into a basin receiving material from both the Wabigoon and Wawa-Abitibi as the two approached (Percival 1988). This explains the reported absence of a faulted contact between parts of the Quetico and SGB in Ames Township (Chorlton, 1987). A porphyry dyke, presumed to have Kashabowie affiliation, is intruded into the Quetico sediments at the La Rose Shear at  $2693.45 \pm 0.81$  Ma (Hart, 2007) and puts a time constraint on the closure of the Quetico basin. Based on seismic interpretations, the SGB is believed to be joined to the Wabigoon beneath the Quetico wedge (Percival et al., 2006). Variation in graded bedding way-up indicators in the Quetico suggests tight or isoclinal folding (Kukkee 1995).

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The Shebandowan Assemblage consists of coarse, immature clastic sedimentary rocks interfingering with hornblende-phyric, calc-alkalic to alkalic volcanic units, deposited in transtensional basins or on the flanks of transpressional uplifts during activity on the “Timiskaming-aged” structures. Alkalic volcanism began around 2690 Ma when the Tower Stock was emplaced in Conmee Township (Corfu & Stott, 1998). The sedimentary Knife Lake Group, exposed in Minnesota, is probably a similar “Timiskaming-type” sequence.

More mature, distal greywacke sequences are present in the Gold Creek area in the centre-east of the SGB (known by some authors as the Duckworth Group). These form relatively shallow drapes across older Greenwater terrain, highly unlike the classic “Timiskaming-type” basin setting and suggest a move towards a more mature lower-energy depositional environment. These derive at least some clastic material from Wabigoon terranes.

To the south, the SGB abuts the Northern Lights Perching Gull (NLPG) complex of tonalite-trondhjemite-granodiorites and supracrustal-derived gneisses, representing the basement of the SGB. Strings of sanukitoid intrusions are emplaced close to crustal-scale faults. Similarly, the emplacement of Alaska-type ultramafic bodies within the Quetico Sub-province was driven at this time by movement on the Quetico Fault (Pettigrew & Hattori, 2006). Both demonstrate connectivity to an enriched mantle source.



Towards the east and southeast, the SGB and NLPG are covered by the Proterozoic sedimentary sequence of the Animikie Basin as well as the Nipigon and Logan intrusion complexes of the Midcontinent Rift at 1100 Ma. Based on the association of Proterozoic chonolith intrusions along the Quetico Fault at Sunday Lake and Escape Lake (north of Thunder Bay), it is possible that Archean structures were partly reactivated or utilized during Midcontinent Rift activity.

### 7.1.2 Deformation Events

Two deformation events are visible in rocks in the western SGB. The D1 event affects Greenwater and Kashabowie units in the SGB but does not pass into younger Shebandowan units nor adjacent terranes. It represents a northwest-southeast compressional event that took place prior to collision with the Wabigoon Sub-province, and manifests as a gently westward-dipping lineation.

The D2 event is the manifestation of the collision between the Wawa-Abitibi and Wabigoon Belts. Major east-west, crustal-scale deformation zones were active at this time, driven by oblique tectonic stress along a roughly northwest-to-southeast axis. Present throughout the northern limb of the SGB, parts of the Wabigoon and all of the Quetico, the D2 fabric is a gently eastward-dipping lineation and is the only tectonic event recorded by the Shebandowan Assemblage.

D2 strain was domained around two blocks in the centre of the SGB: the Haines Gabbro/Shebandowan Pluton block to the north and the Greenwater mafic-ultramafic-iron formation terrane in Begin Township. The D2 fabric is particularly notable in areas closer to the northern margin of the SGB, along the eastern half of the Crayfish Fault in the centre of the SGB, and close to the Northern Lights Perching Gull Complex (Stott & Schneiders, 1983).

Stott & Schwerdtner (1981) use magnetic susceptibility anisotropy to infer that the D1 event was noticeably more prolate than D2, that is the D1 event had a greater transpressional-transensional component and D2 was comparatively more compressive.

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Shebandowan Assemblage units (including the Knife Lake Group) are distinctly more common in the eastern and southwestern “wings” of the SGB. Goldshore’s working hypothesis is that, towards the wings of the belt, fault-bounded blocks were downthrown during “Timiskaming-aged” activity, in more dilatory environments away from the suspected zone of maximum compressive stress in the Burchell Lake to Kashabowie area. It has been observed by many authors (e.g. Brown, 1985) that gold-bearing systems in the eastern SGB have an overwhelmingly brittle structural setting, in contrast with the highly ductile deformation style in the Moss Township area. Consequently, it is assumed that the effective erosional level is shallower to the east and southwest of Moss Township/Burchell Lake area.

The western half of the Crayfish Fault joins the Quetico Fault near the centre of the Shebandowan Belt and exhibits a dextral offset of approximately 2km, bisecting the Vanguard VMS occurrence and truncating the Snodgrass Fault. The absence of any “Timiskaming-type” basin along this portion of the Crayfish Fault, and clear offset of D2 structures such as the Snodgrass Fault may suggest latest-stage D2 or D3 activity. Most of the major intrusions in the SGB date to the latest periods of D2 “Timiskaming-type” activity or are post-tectonic. The alkalic Burchell Stock and Moss Stock are unfoliated. Kukkee (1995) studied magnetic susceptibility anisotropy throughout the Moss Stock, concluding that magnetite close to the intrusion margin exhibits an alignment with the regional foliation (presumed D2) supporting an age of intrusion in the closing stages of D2 activity. Both D1 and D2 are rotated by, and do not penetrate, the Burchell Stock, giving a minimum age for D2 of 2684 +6/-3 Ma (Corfu & Stott, 1998).



Many authors mention a D3 event which produced S and Z kink folds in northern parts of the belt, attributed to east-west compression (Forslund, 2012); this event has been given little attention to date. The Crayfish Fault reactivation may have been a D3 event.

Evidence for belt-scale folding is inconclusive. A review of way-up indicators in the literature suggests that the influence of kilometre-scale isoclinal folding is dominant. The spatial distribution of the Kashabowie Assemblage may offer a clue. It is possible that the centre and west of the SGB outline an outer syncline and inner anticline, with the Kashabowie Assemblage occupying the core of the outer syncline, and the Greenwater Lake Granodiorite intruded into a pre-existing anticline with an easterly plunge as suggested by Schwerdtner et al. (1983).

Figure 7.3 shows the assumption of late Archean tectonic scenario for the Shebandowan Greenstone Belt. Figure 7.4 is a schematic section through the western Shebandowan Greenstone Belt. Figure 7.5 shows the stratigraphy of the western Shebandowan Greenstone Belt.

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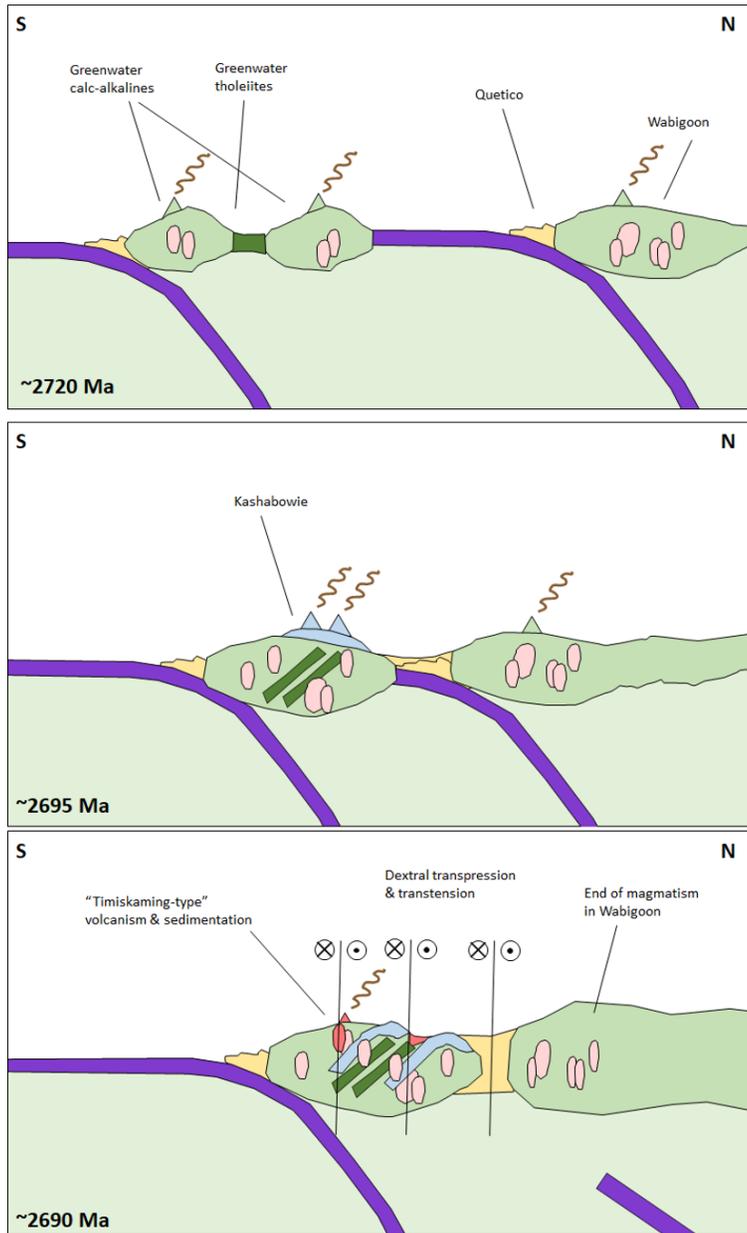


Figure 7.3: Postulated late Archean tectonic scenario for the Shebandowan Greenstone Belt

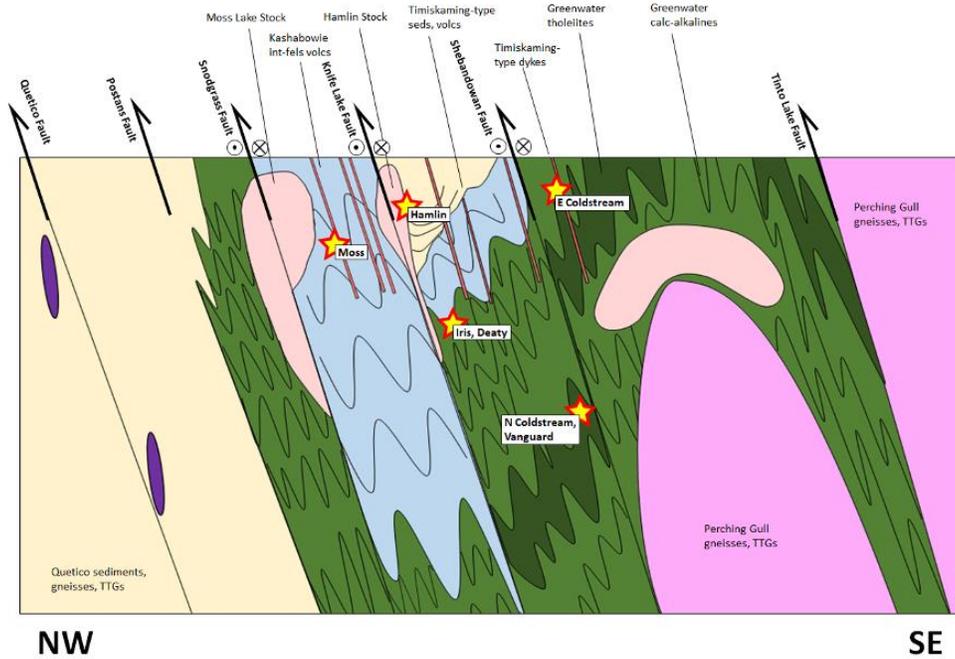


Figure 7.4: Schematic section through the western Shebandowan Greenstone Belt

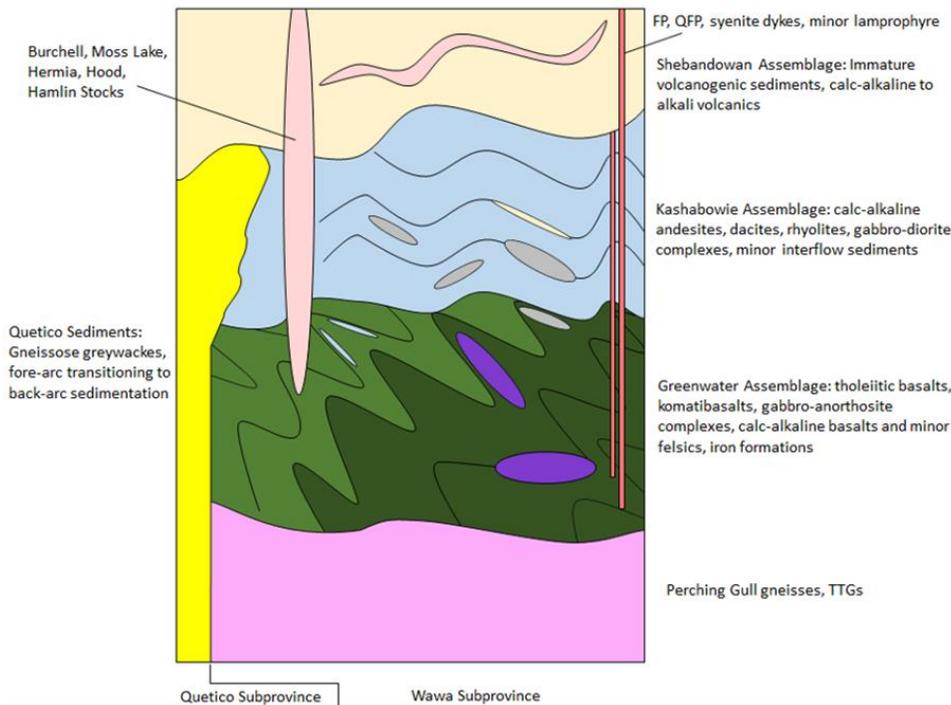


Figure 7.5: Stratigraphy of the western Shebandowan Greenstone Belt

## 7.2 Property Geology

### 7.2.1 General

In the immediate Project area, the supracrustal rocks of the SGB strike southwesterly and consist of a central folded sequence of intermediate-felsic volcanics and related sedimentary rocks of the Kashabowie Assemblage intruded by elongated dioritic stocks (here termed the Central Felsic Belt or “CFB”). The CFB is flanked by Greenwater Assemblage mafic-intermediate volcanics to the southeast and northwest (here termed the Northern and Southern Mafic Belts or “NMB” and “SMB”). The Greenwater units include basaltic-to-andesitic flows, amygdaloidal and variolitic basalts, pillows and minor magnetite-bearing cherts and gabbroic intrusions. In the NMB, these are largely calc-alkaline, but the SMB includes tholeiitic mafic to ultramafic volcanics and a gabbro-anorthosite suite. These “belts” are theorized to trace out a syncline, with kilometre-scale parasitic isoclinal folds, with the CFB in the centre.

The CFB is 2.5 km to 3.0 km wide. The package is at least partly bounded by major regional faults (the Snodgrass and Knife Lake Faults). However, to the immediate west of the Moss Gold Deposit, while there is a sudden foliation change and a magnetic break, there is no indication of any major discrete fault or shear in drill core.

Pillow morphologies in the NMB have been used to infer a younging direction to the northwest. Diorite and feldspar porphyry sills are also present within the mafic belts though to a lesser degree to within the CFB.

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The main intrusions in the area are all late-tectonic and alkalic. These include the monzonitic-syenitic Burchell Lake, Moss and Hermia Lake Stocks, and the microcline-megaphyric shonkinite-syenite Hood Lake Stock.

In the SMB, south of North and East Coldstream, anorthosites and certain other mafic intrusions appear to have acted as rigid bodies around which strain was dominated. Consequently, they have highly sheared margins.

Major faults in the Project area include the Snodgrass Fault and the Knife Lake Fault, which form part of the boundaries of the CFB. These strike approximately north north-east through the Project area and can be traced in geophysics datasets, which show ~2km sinistral offsets to the stratigraphy. A review of Moss drill data suggests a possible downthrow of several hundred meters on the western side of the Snodgrass Fault, as evidenced by the form of narrow subhorizontal gabbro and diorite porphyry dykes. This agrees with Goldshore's tentative belt-wide interpretation of erosional levels. The Knife Lake Fault cuts the Hermia Lake Stock (2684 +6/-4 Ma) suggesting that these faults were active at a relatively late stage of the D2 event. The Knife Lake Fault is associated with sedimentary wedges in Minnesota and, tentatively, in two locations on the Moss Project.

The D2 event manifests in the CFB units as a shear zone-bounded to penetrative foliation with shallow southwesterly plunge, illustrated by sericite and chlorite lineations. Deformation is dominated around larger intrusion bodies within the CFB such as the Snodgrass diorite and constrained to relatively well-defined shear zones within it, but in dacitic units such as at the QES Zone, the shearing is penetrative. The earlier phases of D2 in the CFB resulted in intense, dominantly sinistral shearing which utilized reactivated D1 structures and destroyed deposit-scale folds to create a lenticular fabric on the property-scale, striking broadly northeast, which is visible in magnetic data. Dextral, east-northeast structures are conjugate to the sinistral northeast-striking fabric and are probably mostly a later D2 phenomenon.

Most units dip subvertically to steeply southward and, especially in the volcanic units of the CFB, exhibit strong ductile foliation along two azimuths approximately 20° apart. This has been interpreted variously as an overlap of the D1 and D2 fabrics and/or as a property-scale C-S shear fabric system resulting from reactivation of D1 shears during the D2 event (Figure 7.7). There is little convincing evidence for isoclinal folding, except in geophysics datasets, and it is anticipated that extensive transposition would have destroyed fold noses on the ~10-100 m scale. Anastomosing bands of stronger foliation and alteration have been identified in drill core in the CFB.

The more highly foliated units in the CFB are typically the strongest altered and are represented by silica-ferrodolomite-sericite schists. Locally pervasive hematite alteration is occasionally present in these units. Weak epidote alteration is frequently present in the larger porphyritic diorite intrusions. Very fine biotite alteration with as-yet unknown controls has been identified in several units in drill core in the Moss area.

A reanalysis of "Moss Lake Gold Mines" drill core by Goldshore has identified a fault-bounded wedge of mudstone beneath Kawawigamak Lake. The assemblage affinity is yet to be determined.

The northwest extremes of the Property lie atop the Quetico Sub-province which here is represented by greywackes with minor mafic-intermediate intrusions metamorphosed to greenschist facies. The metamorphic grade increases rapidly towards the west and north, developing into quartz-feldspar-biotite paragneisses and migmatites within a few kilometres of the Project. To the east of the Crayfish Fault, the contact with the Wawa Sub-province is marked by a major regional-scale fault (the Postans Fault) and a significant topographic low. To the west of the Crayfish Fault, the Wawa/Quetico contact is interleaved.



### 7.2.2 Moss Claim Block

The majority of the Moss Block is underlain by CFB andesitic, dacitic and rhyolitic flows, tuffs, lapilli tuffs and fragmental units, and minor chemical sediments (including magnetite-bearing cherts) and are presumed to be of the Kashabowie Assemblage. The fragmental volcanic units have been interpreted by some historic explorationists as sedimentary (e.g. on Noranda maps).

These units are intruded by numerous lenticular sills of diorite to gabbro, and generally narrower and more elongate sills of intermediate-felsic feldspar and quartz-feldspar porphyry and minor syenite and lamprophyres. The latter two plot as shoshonitic on a Th-Co plot (from Hastie et al., 2007) and trachytic on Winchester-Floyd plots. They are believed to be younger and affiliated with the “Timiskaming-type” Shebandowan Assemblage. The largest single body is a gabbro-diorite-granodiorite body that runs northeastward from Snodgrass Lake to Span Lake and was referred to as the Wawiag Sill by Tandem/Storimin.

The affinity of the intermediate units at Moss, and the relationship of the dioritic intrusions to their host andesite-dacite volcanics is not entirely clear. No absolute age data is available at present. Generally, they are all assumed to be part of the Kashabowie Assemblage and thus the intrusions are closely related to the volcanic package into which they are intruded. However, this may be oversimplified. A review of drill hole data trace element ratios suggests that two distinct clades are present in the Moss area: dacite and some of the granodiorite intrusions have distinctly lower Th values than the andesite and other intrusions, which plot as arc tholeiites on a Hastie plot. They may represent an earlier stage in the development of Kashabowie arc activity and/or a “Burchell Assemblage” sequence that was thrust-interleaved with superficially similar Kashabowie units.

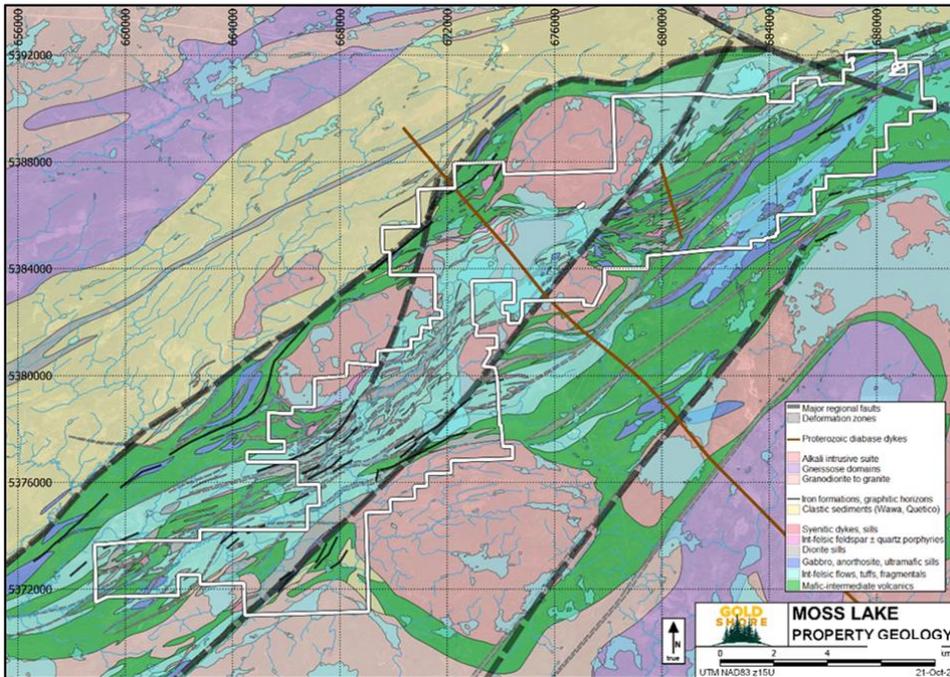


Figure 7.6: *Geology of the Moss Project claim block and adjacent areas*

Geochemically, most units in the vicinity of the Moss Gold Deposit plot as sub-alkalic but calc-alkaline. Most of the diorite and gabbro phases (IDM, IDP, IGD) form overlapping but largely distinct geochemical clusters, though on a Winchester-Floyd plot the coarse diorite (IDC) has a distinct cluster but covers a broad swath encompassing mafic-intermediate to intermediate-felsic subphases. On the same axes, the intrusives overlap with andesites (VAN) but units logged as dacites in core (VDA) form a very distinct cluster. All units occupy a classic calc-alkaline trend on a Jensen plot (Figure 7.7).





brecciation noted along the curvature axis. A similar change is expected at the western end of the QES Zone in accordance with a second regional bend, but no oriented core has been drilled in the area to confirm this.

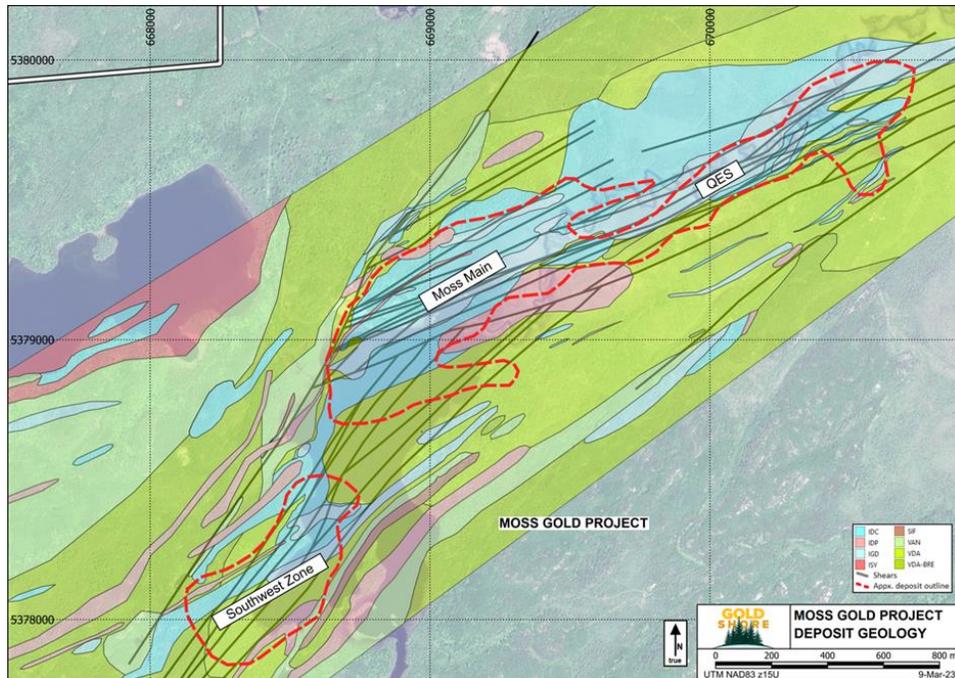


Figure 7.8: Shear zone network modelled for Moss utilizing orientated core measurements

Davis (2022) has inferred two major periods of fluid ingress via structurally focused permeability networks from the geological history and denoted as the light orange columns in the geological history chart (Figure 7.9). The first period lacked precious metal mineralization and was associated with tectonic-hydrothermal brecciation that was overprinted by intense coeval ductile deformation. A major coeval period of igneous intrusions is envisaged. Similarly, the fluid budget, deformation style, and development of structural architecture used in subsequent events were likely intimately linked to a second major stage of intrusive igneous activity.

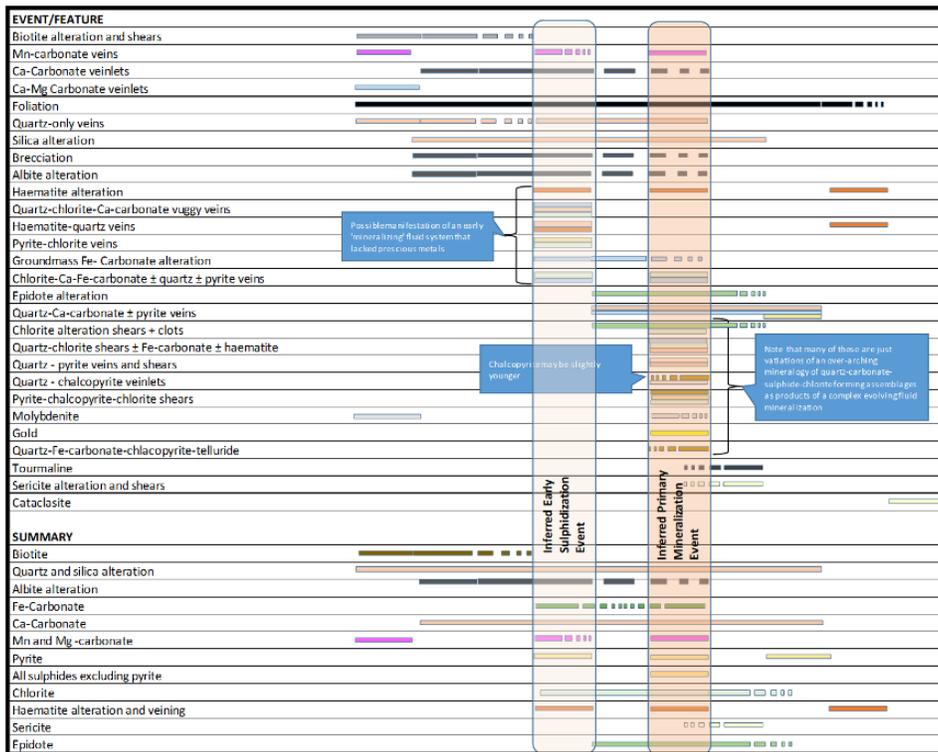


Figure 7.9: Proposed paragenesis for the Moss Gold Deposit (Davis, 2022, modified)

Iron carbonates (ferrodolomite, ferrocaltite or ankerite) are near-ubiquitous in the CFB, often overlapping with sericite and hematite alteration, and their role as a chemical trap for gold-bearing hydrothermal fluids is actively being explored by Goldshore. Ongoing work with carbonate stain solutions on Moss drill core has illustrated a complex relationship between low iron and high iron carbonates in groundmass and in veins. There appears to be numerous carbonate events which fluctuate between low-iron and high-iron and some level of ongoing metamorphism altering the iron content of earlier carbonates. High-iron carbonates are the primary carbonate in the presumed gold-rich sulphide veining (pyrite, chalcopyrite, telluride bearing) but have frequently been partially replaced by later low Fe carbonate events.

Rocks at Moss commonly exhibit pink to red colouration which is presumed to be hematite inclusions in pervasive albite alteration or hematite selvages to carbonate veinlets. The exact nature of and the timing of the hematite alteration, and its potential relationship to the iron carbonate, is a topic of active investigation.

Several generations of chlorite alteration appear to cluster tightly around the two major fluid events, occurring as ground mass alteration, vein selvages, strain shadows, replacement of phenocrysts, and fracture infill in volumes of crackle brecciation. Sericite is a later, nearly ubiquitous phase, is interpreted to mostly derive from alteration of chlorite due to significant potassic input during the second hydrothermal event (see Mineralization section). Biotite appears to be largely an early-stage alteration or metamorphic product dating from prior to the first hydrothermal event, later overprinted by chlorite and sericite.



### 7.2.3 Coldstream Claim Block

From west to east, the Coldstream Block is underlain by a wedge of Quetico greywackes, in faulted contact with the NMB. The NMB contains narrow iron formations and coarse clastic interflow sediments and is bifurcated by the Snodgrass Lake Fault, which can be seen to drag-fold the mafic stratigraphy in magnetic data. To the east, the NMB has an intricate, possibly unconformable, contact with CFB units, similar to those in the Moss Block. Much of the CFB in this area lies beneath Burchell Lake but is well exposed west and north of Iris Lake where quartz-sericite schists are developed in higher-strain zones close to the Knife Lake Fault. Near North Coldstream, the CFB is in sharp faulted contact (Knife Lake Fault) with the SMB, which in this area incorporates a voluminous suite of tholeiitic mafic-to-ultramafic intrusions including gabbro, leucogabbro, quartz gabbro, pegmatitic gabbro, anorthosite, and greenschist-metamorphosed equivalents of pyroxenite and peridotite. The voluminous Haines Gabbro, to the east of the Project, may have been the locus of this regional-scale intrusion complex. Possible magnetite cumulate phases have been mapped near Skimpole Lake. Deformation zones are developed in the ultramafic bodies, notably at East Coldstream and beneath Shebandowan Lake. Historic drilling at Iris has tentatively mapped subhorizontal, meter-scale bodies of peridotite. The North Coldstream Fault runs broadly east-west along a mafic/ultramafic contact immediately south of the North Coldstream deposit and is truncated by the Knife Lake Fault.

Narrow horizons of felsic volcanics shown on historical North Coldstream property maps may be outliers of the “Timiskaming-type” Kashabowie Assemblage, noted to the east by Corfu and Stott (1998). In the East Coldstream drill core, these units may be present but not adequately identified; geochemically the “VAN” (andesite) lithocode plots as two distinct clusters, one of which is actually rhyolitic on a Winchester-Floyd plot.

Some intermediate-felsic intrusives are present throughout the Coldstream Block, notably meter-scale syenite and quartz porphyry dykes from the SMB around the East Coldstream deposit. Diorites similar to those at Snodgrass Lake are largely restricted to the CFB. Most intrusive and volcanic lithologies in East Coldstream drill core plot on a komatiitic and tholeiitic trend, clearly distinct from those in the CFB.

As in the Moss Block, all units dip sub-vertically and exhibit two foliations about 20° apart, particularly in the CFB. Jutras & Osmani (2010) note that the south-southwest-trending foliation has a more brittle expression or is overprinted by a later brittle deformation event. D2 lineations in the SMB in the East Coldstream area show a shallow northeast plunge, as do mineralized zones at North Coldstream (Osmani, 1997).

The Snodgrass and Knife Lake faults bifurcate the Moss and Hermia Lake stocks respectively. Both have sinistral displacements in the order of 1,500 m and 3,000 m. The circular Burchell Stock covers the northern fringe of the Coldstream Block. Burchell Lake may obscure another sizeable granitoid, based on inferences from lakeshore outcrops and magnetic signatures.

A rare example of a Proterozoic diabase dike cuts through the East Coldstream deposit with a north-northwesterly strike.

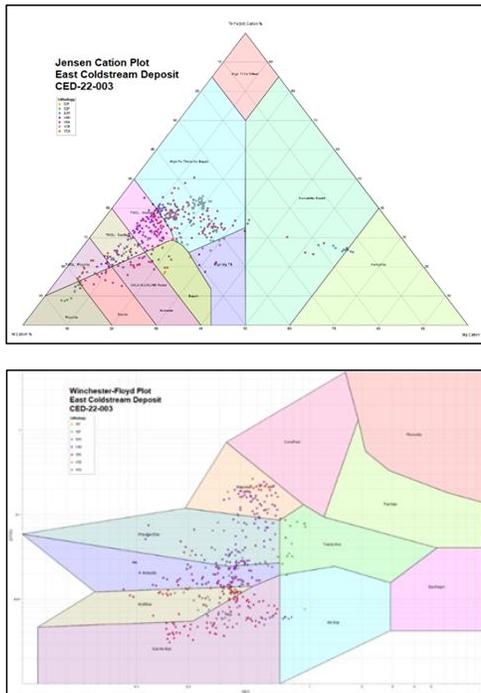


Figure 7.10: Geochemical signature of the Coldstream igneous rock types

Goldshore has put considerable and ongoing effort into ascertaining the timing of the gold mineralization event and its relationship to the structural and alteration events that preceded, were coeval with, and post-dated it. A geological paragenesis was proposed by Davis (2022) based on overprinting relationships in diamond drill core, and from petrology and geochemical signatures (Figure 7.11). The paragenesis is in constant evolution as more data is gathered.

The mineralized zones tightly correlate with silica, carbonate and hematite alteration. They are visually obvious given their paler pink colour as well as the destruction of the otherwise ubiquitous cleavage in the volcanic host units. Strong iron carbonate alteration is present proximal to at least some mineralized zones, and some of the pyrite in the mineralized zones may be a sulphidised alteration product. Goldshore is actively investigating the role of carbonate at East Coldstream.

Both silica and hematite were active over longer periods before the mineralizing event – evidence from core hints at a pre-mineralization hematite event as well as multiple pulses of silica alteration and quartz vein stockworking of previously silicified material.

The mineralizing event is overprinted by tightly fracture/joint-controlled chlorite alteration which cross-cuts the foliation. Davis (2022) notes rare kink-like micro-offsets along some of these joint structures, perhaps related to the D3 event of Forslund (2012) and others. Rare meter-scale brittle faults and drag folds post-date the chlorite episode. As described under Item 7.2, the deposit is bisected by a Proterozoic diabase dyke.

Goldshore is investigating the potential presence of pre-existing structures which the dyke may have exploited.

A set of extensional, brittle-ductile quartz-chlorite-carbonate veins is present within the zones, as well as a boudinaged, foliation-subparallel quartz-only vein set. Both pre-date the mineralization. These veins may have imparted a more brittle rheology on the packages that were later mineralized. Formation-parallel semi-massive pyrite bands also predate the gold mineralization and may represent a volcanogenic exhalate-type formation.

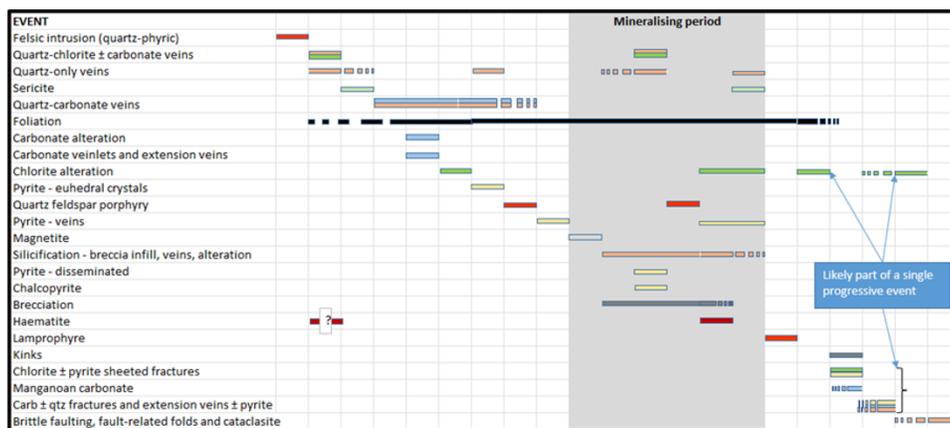


Figure 7.11: Geological history for East Coldstream (Davis, 2022)

#### 7.2.4 Hamlin Claim Block

The Hamlin occurrence lies in the centre of the Hamlin Block and is hosted by highly ductile-deformed, hematized intermediate-to-felsic volcanic units. These include at least some units with shoshonitic chemistry (Hart and Metsaranta, 2009) as well as possible immature volcanogenic clastic sediments perhaps suggesting a “Timiskaming-type” (Shebandowan Assemblage) back-arc tectonic affiliation. Conversely, Forslund (2012) suggests that the “shoshonitic” geochemical signature represents sodic-altered Greenwater or Kashabowie Assemblage units, while Shute (2006) found only calc-alkaline signatures in the country volcanic units.

Work by Brett Davis and Goldshore personnel has identified a dextral chloritic shear set which predates the conjugate sinistral/dextral brittle-ductile structures and might represent a regional, early D2 phase (or early D1, depending on timing) where the principal stress acted on an ESE-WNW axis.

In the area of the Hamlin Cu-Au-Mo occurrence, the ductile deformation of the volcanosedimentary package is overprinted by multiple episodes of brecciation and jointing with distinctive emplacement of magnetite±chalcopyrite as breccia infill and along displaced joints. Southeast of, and beneath, Hamlin Lake, a tongue of granodiorite-granite extends from larger granitoid bodies to the southwest. Fragments of this granite are incorporated into the Hamlin breccias in places (Forslund, 2012). The breccia zone is approximately 1,200 m × 200 m aligned with regional foliation, extends subvertically to at least 350 m depth (as traced in drilling), and has highly gradational contacts with its surroundings, grading into a “crackle breccia”. The age of this granite is yet to be established but is crucial to the relative and absolute dating of the Hamlin mineralized system.



To the west, the claim group overlies an intricate, presumed-thrust-stacked mix of Greenwater and Kashabowie mafic and intermediate-felsic volcanics with tholeiitic and calc-alkaline examples of each assemblage. Sills and lenses of diorite and intermediate-felsic porphyry are common particularly in the western third of the claim block. Shear zones are evident in topography and magnetic data broadly following the same two shear fabrics as are seen in the CFB in the Moss Block. Sericite and hematite alteration is common in the intermediate-felsic units.

The eastern half of the Hamlin Block is not well mapped but historical authors and explorationists note serpentinised mafic-to-ultramafic volcanics and intrusions which form a northeasterly belt running close to the Knife Lake Fault and traceable in magnetic data (Chataway & Manchuk, 1973). These may be related to the intrusion complexes at Lower Shebandowan Lake and around Coldstream. Hornblende syenites mapped along the margins of the Hood Lake Stock may in turn represent contaminated, higher-grade alteration products of this suite. Alternatively, these units may have a late-tectonic affinity similar to the Alaska-type ultramafic plugs along the Quetico Fault. Additionally, some maps (e.g. Harris et al., 1967; M2204) show significant greywacke-type sedimentary packages in the wedge between the Knife Lake Fault, the Hood Lake Stock and the large granitoid masses to the south. The sedimentary rocks may belong to the “Knife Lake Assemblage” which is better studied in the Saganaga area and may be cognate with the Shebandowan Assemblage (Lodge et al., 2012).



Figure 7.12: Tentative deformed “Timiskaming-type” clastics northwest of Hamlin Lake

### 7.2.5 Vanguard Claim Block

The geology of the Vanguard block is similar to that of the eastern half of the Coldstream Block. It is dominated by the tholeiitic mafic-ultramafic sill complex of the SMB with minor sills of diorite, quartz diorite, feldspar porphyry and aplite. Significant ultramafic units, often strongly sheared and schisted, have been outlined by drilling beneath Shebandowan Lake. Minor interbeds of cherty felsic volcanics are present, including the horizon which hosts the mineralization at Vanguard East and West, within a broader package of silica, chlorite and sericite-altered mafics (Osmani, 1996). The overwhelmingly tholeiitic signature of the volcanics in OGS data for the Vanguard area supports an extensional regime, as does the presence of the VMS system at Vanguard. Mafic flows are variously massive, pillowed, autobrecciated, hyaloclastic, variolitic and quartz-amygdoloidal. Felsic units of the CFB are present in the northwest of the Vanguard Block near Iris Lake, where the contact takes the form of a ~400 m wide zone of shearing.

Formation-parallel shearing is common in all units and may represent a lower-intensity continuation of the strong, foliation-subparallel ductile deformation which marks the Upper Shebandowan Shear system beneath Upper Shebandowan Lake. Chlorite schists beneath and on the shores of Upper Shebandowan Lake appear to be derived from the gabbros (Giblin, 1964); anastomosed shear-gabbro textures represent strain-domaining and not shearing around pre-existing gabbro lenses.

The Crayfish Creek Fault runs west-northwest through the Vanguard Block. A short distance north of the Property this fault clearly offsets the Postans Fault dextrally by about 2 km. This fault and its anastomosed splays are relatively well mapped in the Kashabowie area and bisect the Vanguard prospect into its East and West portions.



### 7.3 Mineralization

#### 7.3.1 Moss Gold Deposit

Gold mineralization in the Moss Gold Deposit occurs largely within intrusive dioritic bodies where they are transected by a series of anastomosing east-northeast to northeast trending shear zones. While most mineralization occurs in diorite, other intrusive and volcanic rocks also host mineralization. Mineralization has developed both within shear zones and within the intervening less deformed host rock where it is associated with irregular small-scale veins, breccias and stockworks.

The Moss Gold Deposit is separated into three zones (Figure 7.13). The bulk of the deposit occurs within the Main Zone and the QES Zone to the east-northeast. The gap between the zones is sparsely drilled due to difficult access, and mineralization is probably continuous with a slight left step and rotation. The SW Zone to the southwest appears to be offset to the south. The geometry of the zones suggests a left-stepping shear array within a sinistral shear zone.

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**Commented [DK47R46]:** Where do these observations come from? Might make sense to cite those sources clearly. Never seen tellurides mentioned anywhere before, but I suspected them to be present from the whole-rock geochem data. I also haven't seen the Bourassa report.

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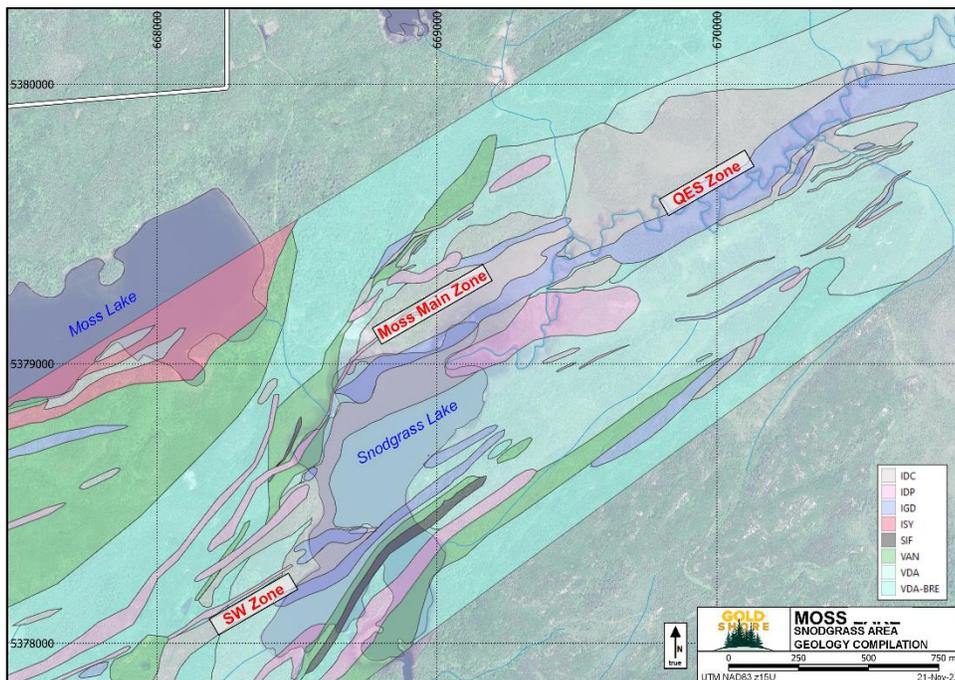


Figure 7.13: Geology of the Moss Gold Deposit

The entire rock mass within the mineralized volume shows extensive and complex alteration. A recent review by Davis (2022) distinguished two major periods of alteration associated with fluid ingress via structurally focused permeability networks. The first period lacked precious metal mineralization and was associated with tectonic-hydrothermal brecciation that may have been related to an intrusive event. This was overprinted by intense ductile deformation. Mineralization was associated with a second tectonic-



hydrothermal event with associated brittle-ductile deformation which may be related to a second major stage of intrusive igneous activity.

Typically, within the deposit area, the less deformed intrusive rocks are green and chloritic with variably intense fabric, and variable sericitic alteration. Stronger alteration is characterized by carbonate, albite and reddening associated with hematite dusting, generally associated with small-scale irregular quartz-carbonate-chlorite veining and vein and disseminated pyrite. Higher gold grades generally are associated with areas of more intense veining and alteration, often proximal to shear zones. Highest and most consistent gold grades are associated with centimeter-to meter scale shear zones with quartz-sericite-pyrite alteration and quartz-carbonate-chlorite veining, occurring as shear veins and later crosscutting irregular veins. Minor chalcopyrite is associated with quartz-carbonate veins with chloritic alteration selvages. Carbonate in alteration and veins includes early ankerite and late calcite. The sulphide-bearing veins inside and outside shear zones vary from fabric-parallel shear-veins to crosscutting and locally vuggy.

The earliest stages of alteration probably pre-dated ductile deformation. Ductile D1 and D2 deformation resulted in the development of penetrative fabrics and throughgoing shear zones within the more massive and rheologically competent intrusive bodies. Mineralization probably developed late in the deformation history accompanying and postdating D2 shearing, as represented by quartz-carbonate-chlorite-pyrite-chalcopyrite veins cutting mineralized shear zone fabrics in one location, and mineralized sericite-pyrite shear zones with fabric-parallel shear veins in another. Mineralization associated with strong alteration and veining in less deformed rock mass between shear zones developed in a brittle deformation environment with development of small-scale veining and brecciation and associated alteration.

Goldshore logging of intensity and orientation of shear fabrics (in oriented drill core) has supported interpretation of continuous discrete mineralized shear zones that can be modelled between drill holes. However, not all logged shear zones have been modelled and it is expected that additional smaller zones of shearing will parallel and obliquely link broader shear zones. Limitations to historical logging have made modelling more challenging where Goldshore infill drilling is limited. Improved models will be supported by ongoing drilling.

Pyrite is the most common sulphide, and several stages have been recognised. Chalcopyrite is a small part of the sulphide inventory and is possibly slightly younger than pyrite in the principal mineralizing period. Molybdenite is rare. The age of gold is inferred, based on the assumption it was introduced with sulphides during the main mineralizing event, although free gold was observed in this setting.

Gold has been observed as rare yellow nuggets up to 2 mm in diameter in close association with complex sulphides, including pyrite, chalcopyrite and tellurides, in quartz-carbonate veins within shear zones.

Sulphides are most commonly deposited in areas of low mean stress within highly sheared zones, such as in the necks and strain shadows of quartz-carbonate boudins, but also occur in dilatory fractures at high angles to foliation and vein margins. Sulphide and coeval chlorite show lineations, interpreted to be syn-mineralization, with a low to subhorizontal plunge, both to the southwest and northeast.

Sulphidic structures at Moss frequently overprint earlier brittle and ductile structures and suggest that sulphides were emplaced structurally late, as part of the shearing event. In Goldshore's deposit models these are represented by higher-grade shear domains. This is distinct from the less sheared and sulphide-poor wall rocks with commensurately lower gold grades. The distinction of the two gold domains is reflected in the metallurgy.

Tellurides, where present, are found in quartz-ferrocalcite veins and have a strong spatial correlation with Au grades above 30 g/t Au. Two distinct species, as-yet-unidentified, can be distinguished visually – a gold-



coloured phase and a silver-coloured phase which is observed to partially replace pyrite (*Figure 7.14*). Geochemistry suggests three species: Te-Bi, Te-Au-Ag and Te-Au-Ag-Cu. PGEs have not been included in the assay suite at Moss, so the potential for PGE tellurides is not known. The telluride-bearing veins are seen cross cutting earlier phases of sulphide emplacement implying the gold mineralization was associated a second later sulphidation event. Chalcopyrite may be slightly younger than pyrite and often correlates with higher Au assays, as does rare molybdenite. Spatial zones of chalcopyrite mineralization do not contain elevated gold values suggesting either a spatial zonation or a continuation of chalcopyrite mineralization beyond the gold event.

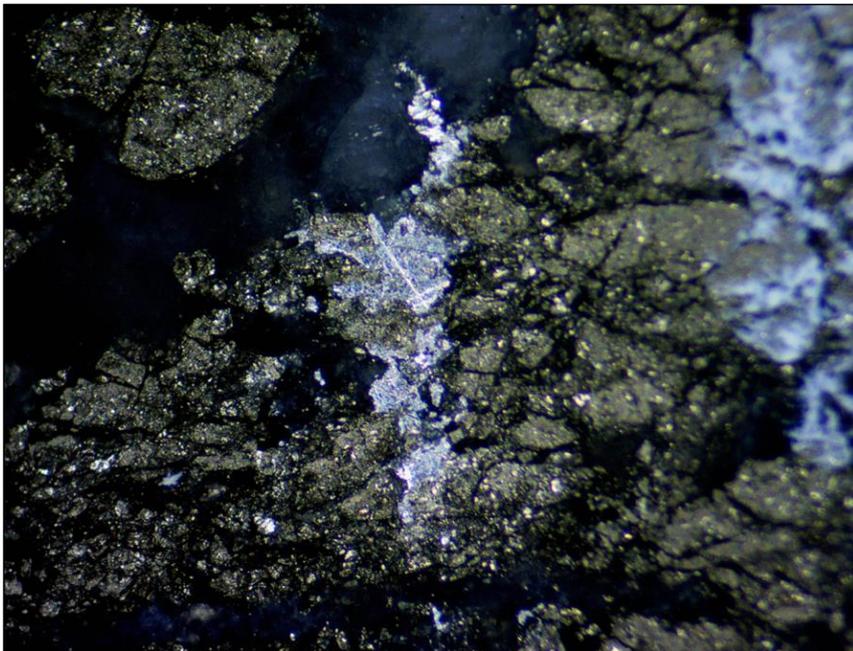


Figure 7.14: Silver-coloured telluride in MMD-22-032 (673.3-673.5 m)

Bourassa (2023) showed that Moss core samples plot tightly along the albite-muscovite line on a Na/Al vs K/Al plot (*Figure 7.15*). Higher Au grades trend towards the muscovite pole, suggesting a close spatial link between elevated Au and later sericite alteration. Furthermore, there is a minor cluster of mineralized samples at the albite pole. In core this corresponds with hematite-dusted, pink granodiorite units (e.g. MMD-22-025).

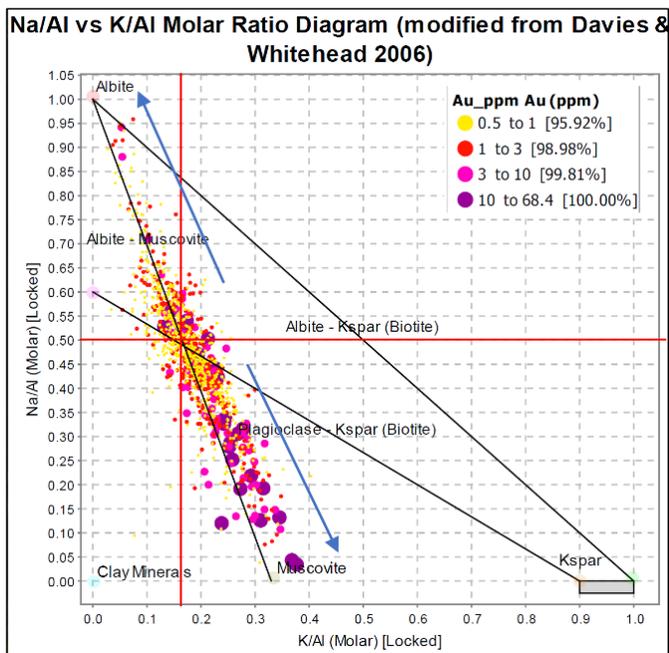


Figure 7.15: Na/Al-K/Al plot with Moss core samples, coloured by Au grade, from Bourassa (2023)

### 7.3.2 East Coldstream

The East Coldstream gold mineralization is found as distinct cream-coloured zones within a ductile deformation zone along the margin between a gabbroic intrusion to the north and a mafic-intermediate suite to the south. Mineralization at East Coldstream is subdivided into the North and South Zones which reach up to 60 m in true width at the centre of the deposit.

Mineralization is found within sheared mafic to intermediate volcanic units, proximal to sills of quartz and quartz-feldspar porphyries and distinctive, brick-red (hematite?) syenites. The alteration-mineralization zones may map out a braided shear network on the ~10 m scale; this is being actively being investigated.

Fine disseminations of pyrite and lesser chalcopyrite throughout silica-hematite altered shear zones as well as individual grains within quartz-carbonate veinlets and lenticular clots and disseminated bands conforming with foliation. Hydrothermal fluids have infiltrated into the quartz/quartz feldspar porphyries and the proximal gabbroic intrusions but these lack the intensity and textural destructive alteration and mineralization seen in the sheared volcanic units.

### 7.3.3 North Coldstream

The North Coldstream mineralization is situated on the south side of a gabbro-to-anorthosite sill which itself follows the CFB/SMB contact. The southern contact of the gabbro is sheared (the North Coldstream Shear) and is in contact with a magnetite-bearing cherty unit approximately 120 m thick. The southern contact is marked by sheared mafic and felsic volcanics. Dykes of diorite, lamprophyre and intermediate-felsic feldspar porphyry cut the mineralized zones clearly indicating that this deposit is considerably older than the Moss

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and East Coldstream Gold Deposits. The mineralized zones themselves are lenticular and consist of massive, disseminated and stringer chalcopyrite, pyrite and lesser pyrrhotite (Shklanka, 1969). Farrow (1994) (Figure 7.16) considers the cherty unit to be a “silicalite” or siliceous alteration product of the gabbro. Another possibility is that it is an alteration product of an already quartz-rich, differentiated phase of a larger mafic-ultramafic complex.

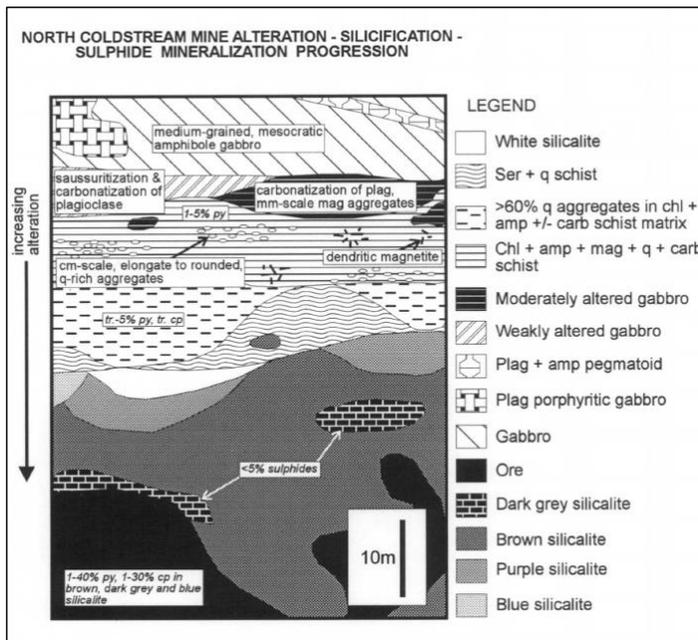


Figure 7.16: Interpreted stratigraphy at North Coldstream (from Farrow, 1994)

The North Coldstream deposit does not easily match any deposit type. Lodge (2012) considered North Coldstream to be a magmatic deposit similar to the Shebandowan Ni-Cu deposit east of the Property, or perhaps a highly deformed magmatic system similar to the Thierry Cu-Ni deposit at Pickle Lake. Lodge et al. (2014) noted highly divergent lead isotope ratios when compared to other magmatic systems and considered that this model is not a good fit for North Coldstream. Some workers consider North Coldstream to be an IOCG deposit, citing the association of copper mineralization and magnetite, which they consider to be metasomatic rather than exhalative. Others have considered North Coldstream to have more of a VMS affinity. Goldshore provisionally considers North Coldstream to represent a sheared VMS system based on a halo of elevated Zn values around the main mineralized zone and the interpretation of magnetite as an exhalative component of the chert unit. Figure 7.17 is a mineralized interval from a North Coldstream drill hole.

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Figure 7.17: Mineralized interval, North Coldstream, Goldshore DDH CND-22-006

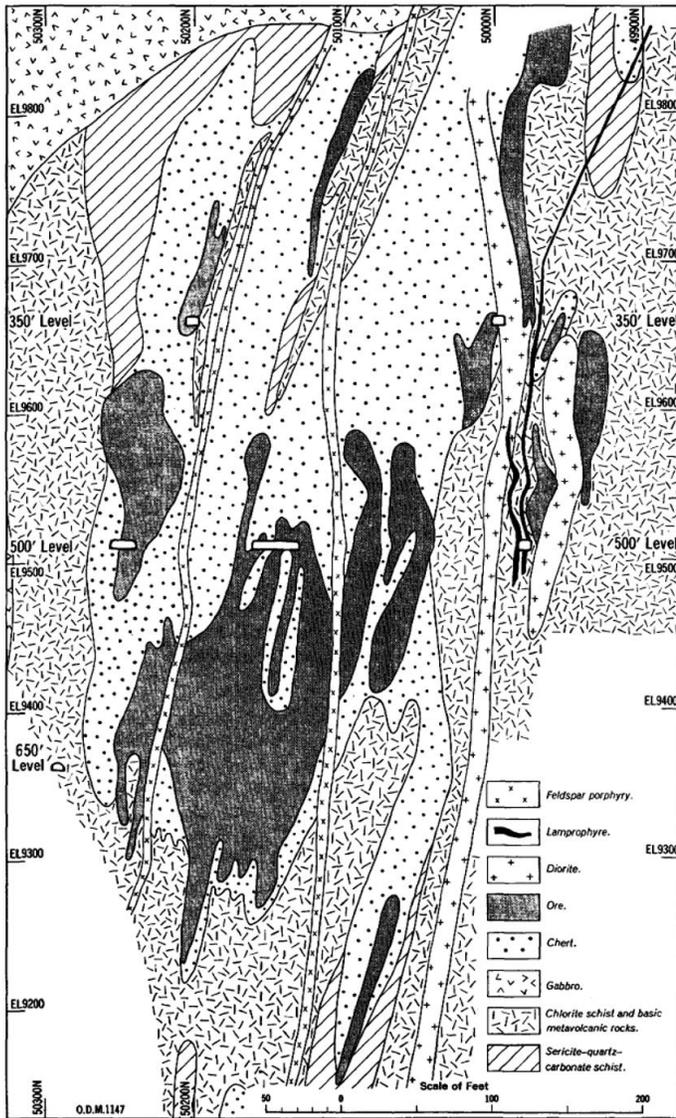


Figure 7.18: Vertical section through the North Coldstream workings (from Giblin, 1964)



## 7.4 Other Prospects

Historical exploration has defined numerous additional prospects in the Moss property claim block (Figure 7.19). These include gold prospects with similar characteristics to Moss-QES, hosted within mainly felsic rocks, as well as the historical North Coldstream copper mine where copper and gold mineralization are associated with mafic volcanic and intrusive rocks.

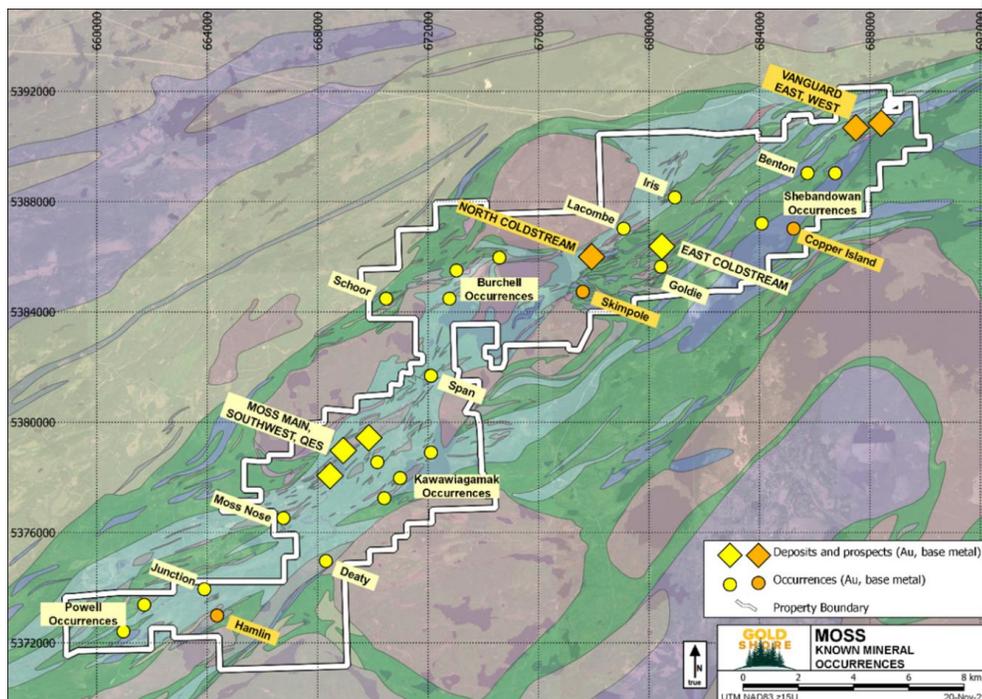


Figure 7.19: Gold and base metal prospects and occurrences in the Moss project area

### 7.4.1 Hamlin

Mineralization at the Hamlin prospect has a distinctive style and geochemical signature which shows features of IOCG mineralized systems. Gold mineralization is associated with magnetite, chlorite and epidote matrix breccia and within D2 shears, with associated copper, molybdenum and bismuth sulphides and tellurides of silver and bismuth. Halos of sodic (albite-epidote), potassic-iron (biotite-chlorite-magnetite), calcic-iron (epidote-chlorite-apatite-magnetite-sphene) and late potassic alteration are centred on the breccia system (Forslund, 2012). Mineralization was emplaced during the late potassic alteration phase and the later part of the calcic-iron phase, coinciding with D2 shearing.



Figure 7.20: *Chalcopyrite-chalcopyrite mineralization at Hamlin in DDH HAM-11-75 as part of a chlorite-carbonate-epidote breccia overprinting hematite alteration*

#### 7.4.2 Vanguard

The Vanguard (historically Andowan) prospect is a copper-zinc-gold-silver polymetallic target with a clear stratigraphic control, interpreted as a VMS-type system. The prospect is divided into two zones (East and West) by the Crayfish Lake Fault and post-mineralization intrusions of anorthosite. Mineralization consists of a subvertical 3-15 m wide zone of disseminated to semi-massive pyrite, pyrrhotite, chalcopyrite and sphalerite in silicified mafic volcanic flows (Hodgkinson, 1968). To the north (inferred stratigraphic “up”), the capping felsic volcanic breccias are strongly chlorite-quartz-sericite-iron carbonate altered (Henderson and Escarraga, 2012). MacDougall (1992) notes a zone of sodium depletion in the volcanic package, frequently interpreted as an indicator of “VMS-type” hydrothermal systems.

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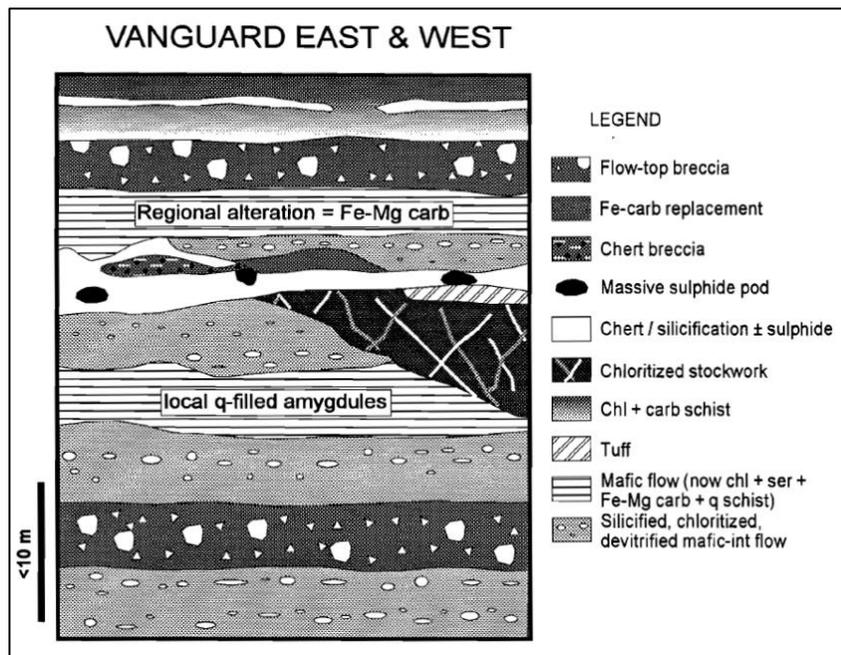


Figure 7.21: Stratigraphic section of the Vanguard area (from Beakhouse et al., 1996)

#### 7.4.3 Span Lake

The overall setting of the Span Lake mineralization is similar to Moss and is hosted by CFB dacite-to-rhyolite flows and intrusives with the same silica-sericite-carbonate-hematite alteration package. Debicki (1992) also notes chlorite and albite alteration as well as blades of tourmaline hosted by rhyolite units close to the zones. Nine mineralized zones were identified by Inco; these consist of stringer pyrite with minor chalcopyrite, malachite and azurite and are tightly controlled by anastomosing shear fabrics. Unlike at Moss, the mineralization appears to strongly favour the volcanic units over the diorites.

#### 7.4.4 Boundary Zone and Kawawigamak Lake

A number of gold occurrences were explored historically around Kawawigamak Lake, the most notable of which are Tamavack/International Maple's A, B and C zones on the southwest shore, as well as the Boundary Zone between Snodgrass and Kawawigamak Lakes. Cavey et al., (1988) describe the Boundary Zone as a sheared, silicified and sericitized felsic package which hosts pyrite in association with narrow chlorite-chalcopyrite veins. Drilling at the A, B and C zones outlined a broadly similar pattern of narrow gold intervals within or close to diorite contacts where all units are silica-sericite altered. Recent Goldshore grab sampling in the vicinity of the A, B and C zones show isolated high-grade gold values from strongly foliated mafic and felsic volcanics with highly variable disseminated and stringer pyrite mineralization, proximal to a body of diorite which itself hosts disseminated pyrite.



#### **7.4.5 Northwest Burchell (Sanders)**

Northwest of Burchell Lake there are a series of poorly characterized gold occurrences. The structural, lithologic and mineralogic setting is superficially similar to Moss with abundant outcrops of silicified, hematized and/or sericitized andesites to dacites, diorites and feldspar porphyries with higher gold values (in the 10 g/t Au range in grab samples) often associated with carbonate-chlorite-chalcopyrite shears. This area was prospected and drilled by prospector Todd Sanders in the 1980-90s. While drilling failed to repeat surface grab assays, it did reveal that elevated gold values (50-100 ppb Au) are common across a considerable area and in most lithologies (Sanders 1988). Foundation Resources replicated the surface grab sample results and noted that the surface mineralization and Sanders' elevated gold zones coincide with a sinuous IP chargeability anomaly which runs broadly west-southwest from the peninsula on the northern shore of Burchell Lake (Osmani & Zulinski, 2013).

#### **7.4.6 Goldie**

Gold mineralization at Goldie is associated with disseminated pyrite within strongly silicified zones in a predominantly mafic package of volcanics, gabbros and feldspar-phyric gabbros with minor lamprophyres, broadly similar to East Coldstream. The "Altered Horizon" mapped by Foundation hosts the majority of the mineralization and consists of a silicified and intermittently hematized and sericitized sheared mafic volcanics and gabbros, bounded by zones of stronger shearing.

#### **7.4.7 Iris**

Gold mineralization at Iris is spatially associated with the northeast-striking sheared contact between CFB andesites to rhyolites and SMB mafic units. This contact may be a secondary splay of the Knife Lake Fault which runs within CFB units about 600 m to the northwest. Foundation referred to this contact zone as the Iris Lake Deformation Zone and noted that it consists of variably schistose to sheared mafic and felsic volcanics with lenses of porphyry with silica, chlorite, sericite, albite, iron carbonate, potassic, magnetite and hematite alteration (Osmani and Zulinski, 2013). Exploration has been limited and the structural controls and associated alteration are not well understood.



## 8 Deposit Types

The styles of mineralization at the various deposits present on the Project and discovered to date are considered to fall into three main categories. The mineralization observed at the Moss Gold Deposit, East Coldstream and other prospects is considered to represent examples of Archean-aged mesothermal gold deposits, also referred to as greenstone or orogenic gold deposits. The mineralization observed at the Hamlin Deposit is considered to be analogous to an IOCG style of mineralization. Previous explorers also considered mineralization observed at the Hamlin Deposit analogous to a VMS style of mineralization. Mineralization at North Coldstream may also be of VMS affinity.

### 8.1 Greenstone Mesothermal Gold Deposits

Greenstone-hosted mesothermal gold deposits are mainly associated with Paleoproterozoic and Archean domains and typically have a close spatial relationship with regional-scale, brittle-ductile transpressional shear zones or corridors, and are often hosted by second and third-order splays within the structural corridors. The deposits usually consist of a system of gold-bearing quartz-carbonate veins with halos of silica, carbonate, micaceous and/or tourmaline alteration, though deposits also exist that are predominantly within sheared host rock with limited veining, such as Moss.

The following general description of Archean-aged mesothermal gold deposits is synthesised from Dubé and Gosselin (2007).

Greenstone-hosted quartz-carbonate vein deposits typically occur in deformed greenstone belts of all ages, especially those with variolitic tholeiitic basalts and ultramafic komatiitic flows intruded by intermediate to felsic porphyry intrusions, and sometimes with swarms of albitite or lamprophyre dikes (Figure 8.1). They are distributed along major compressional to trans-tensional crustal-scale fault zones in deformed greenstone terranes commonly marking the convergent margins between major lithological boundaries, such as volcano-plutonic and sedimentary domains. The large greenstone hosted quartz-carbonate vein deposits are commonly spatially associated with fluvio-alluvial conglomerate (e.g. Timiskaming conglomerate) distributed along major crustal fault zones (e.g. Destor Porcupine Fault). This association suggests an empirical time and space relationship between large-scale deposits and regional unconformities.

These types of deposits are most abundant and significant in terms of total gold content in Archean-aged greenstone terranes. However, a significant number of world-class gold deposits are also found within Proterozoic and Paleozoic greenstone terranes. In Canada, these types of deposits represent the main source of gold and are mainly located in the Archean greenstone belts of the Superior and Slave provinces. They also occur in the Paleozoic greenstone terranes of the Appalachian orogen (i.e. Central Newfoundland Gold Belt) and in the oceanic terranes of the Cordillera in western North America.

These greenstone-hosted quartz-carbonate vein deposits correspond to structurally controlled complex epigenetic deposits characterized by simple to complex networks of gold bearing, laminated quartz-carbonate fault-fill veins. These veins are hosted by moderately- to steeply-dipping, compressional brittle-ductile shear zones and faults with locally associated shallow dipping extensional veins and hydrothermal breccias. These deposits are hosted by greenschist to locally amphibolite facies metamorphic rocks of dominantly mafic composition and formed at intermediate depth (5–10 km). The mineralization is syn- to late-deformation and typically post-peak greenschist facies or syn-peak amphibolite facies metamorphism. These deposits are typically associated with iron-carbonate alteration. Gold is largely confined to the quartz-carbonate vein network but may also be present in significant amounts within iron rich sulphidised wall-rock selvages or within silicified and arsenopyrite-rich replacement zones.

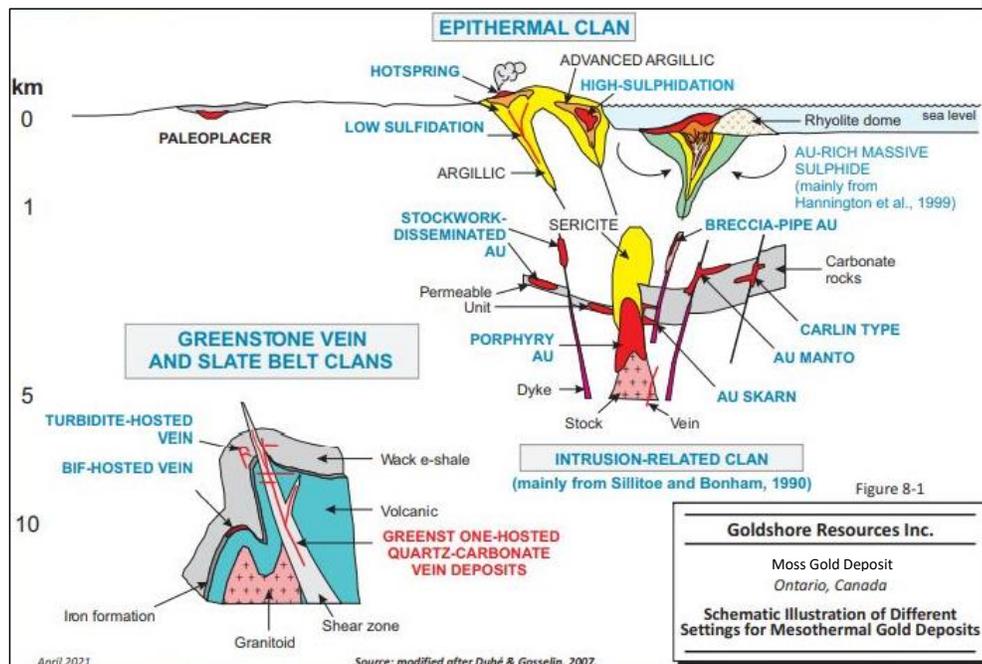


Figure 8.1: Schematic illustration of settings for mesothermal gold deposits (after Dubé and Gosselin, 2007)

There is a general consensus that the greenstone-hosted quartz-carbonate vein deposits are related to metamorphic fluids from accretionary processes and generated by prograde metamorphism and thermal re-equilibration of subducted volcano-sedimentary terranes. The deep seated, gold transporting metamorphic fluid has been channelled to higher crustal levels through major crustal faults or deformation zones. Along its pathway, the fluid has dissolved various components – notably gold – from the volcano-sedimentary packages, including a potential gold-rich precursor. The fluid then precipitated as vein material or wall-rock replacement in second and third order structures at higher crustal levels through fluid-pressure cycling processes and temperature, pH, and other physio-chemical variations.

## 8.2 Iron Oxide Copper-Gold Deposits

A number of similarities between the Hamlin Lake mineralization and IOCG deposits have been noted, for example, by Bennett (2007) and Forslund (2012). Zoned alteration in and around the breccia host rock is very similar to that seen in many IOCG deposits in South America.

IOCG deposits exhibit an extreme diversity of deposit styles, including age, host rocks, mineralogy, geochemical signatures and even geological setting (Williams et al., 2005). Despite such a broad definition, some common characteristics between IOCG deposits still make them worthy of their own classification. The most notable feature that is common to these deposits is the association of iron oxides with copper and gold mineralization. Other elements that are commonly enriched in these deposits include silver, uranium, barium, fluorine and light rare earth elements (LREE). Other common features include a strong spatial and temporal relationship with regional I-type to A-type granitic suites, and proximity to crustal scale faults or



shear zones (Williams et al., 2005). Respectively, these are responsible for driving and channelling the fluids involved, and they produce extensive alteration signatures, brecciation, and ore systems. In rare cases, syn-mineralization intrusive suites have not been noted, and it is thought that fluid flow may have been triggered by magmatic events in the mantle or lower crust. For this reason, the exposure of coeval, regional-scale intrusive bodies are not regarded as an essential characteristic for IOCG deposits.

Magnetite dominant IOCG deposits, of which Hamlin may be an example, are thought to form in deeper crustal environments and at higher temperatures than hematite dominant IOCGs (Williams, 2010). The alteration seen in the magnetite class of IOCG deposits can be zoned with respect to fluid pathways and heat sources, but often display complex overprinting alteration. Figure 8.2 illustrates alteration in IOCG systems. Regional sodic to calcic halos, typically pervasive albitisation, are the most widespread alteration and these can extend tens to hundreds of kilometres and forms early in the mineralization history in moderate to high temperature environments (Oliver et al., 2004). As IOCG systems retrogress, the fluids concentrate along fault zones or breccias and the alteration transitions to calcic and iron enrichment with iron oxides and calc-silicate minerals (pyroxenes, amphiboles and epidote). These systems can evolve into the polymetallic magnetite-rich IOCG deposits where copper and gold mineralization is associated with potassium silicates (K-feldspar, biotite, sericite) which usually overprints the earlier stages of iron oxide alteration.



Figure 8.2: Progression of alteration in typical IOCG deposits (after Corriveau et al., 2010)

### 8.3 Volcanic-Associated Massive Sulphide (VMS) Deposits

VMS deposits are syn- volcanic accumulations of sulphide that occur in geological domains characterized by submarine volcanic rocks. The associated volcanic rocks are commonly relatively primitive (tholeiitic to transitional in composition) and bimodal (Galley et al., 2007). The spatial relationship of VMS deposits to syn-volcanic faults, rhyolite domes, or paleo-topographic depressions, caldera rims, or subvolcanic intrusions suggests that the deposits were closely related to particular and coincident hydrologic, topographic, and geothermal features on the ocean floor (Lydon, 1990).

In many cases, it can be demonstrated that the sub-seafloor fluid convection system was driven by a large, 15 km to 25 km long, mafic to composite, high level subvolcanic intrusion. The distribution of syn-volcanic faults relative to the underlying intrusion determines the size and areal morphology of the camp alteration



system and ultimately the size and distribution of the VMS deposit cluster. The idealized, un-deformed and un-metamorphosed Archean VMS deposit typically consists of a concordant lens of massive sulphides, composed of 60% or more sulphide minerals stratigraphically underlain by a discordant stockwork or stringer zone of vein-type sulphide mineralization. The upper contact of the massive sulphide lens with hanging wall rocks is usually extremely sharp while the lower contact is gradational into the stringer zone. It is thought that the stockwork zone represents the near-surface channel ways of a submarine hydrothermal system. The morphology of a single massive sulphide lens can vary from a steep-sided cone to that of a tabular sheet. The majority of cone-shaped deposits appear to have accumulated on the top or flanks of a positive topographic feature, such as a rhyolite dome, whereas the majority of sheet-like deposits appear to have accumulated in topographic depressions (Lydon, 1990).

In Canada, VMS deposits (Figure 8.3) are commonly found in Precambrian volcano-sedimentary greenstone belts in extensional arc environments. Archean VMS deposits are typically grouped according to their Cu-Zn or Zn-Cu content, and usually have modest gold and/or silver values and little or no lead content.

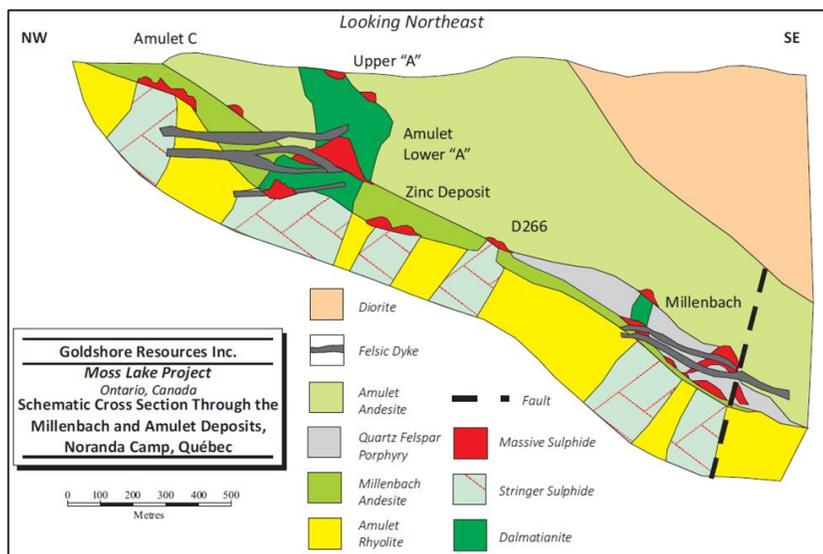


Figure 8.3: VMS example – Amulet Deposit, Noranda Camp, Quebec (SLR, 2021)



## 9 Exploration

Extensive historical exploration had been completed on the Moss Project as documented in Section 6 (History). Since acquiring the project in 2021, Goldshore has mainly focused on drilling and related studies, and exploration has mainly consisted of geophysical surveys.

### 9.1 Geophysical Survey – Moss, Coldstream and Hamlin Blocks

#### 9.1.1 General

Between May and June 2021, Goldshore commissioned Geotech Ltd (“Geotech”) of Aurora, Ontario to complete a heliborne total magnetic intensity and versatile time domain electromagnetic (VTEM) survey. The geophysical survey was flown on a grid with 50–100 m line spacing, with 1 km tie-lines with a total length of 2,149 line-km completed. Gridlines were oriented at 135° to cut perpendicularly across the general structural trend. The grid was flown at a mean altitude of 107 m and a speed of 94 kph. This flight altitude gave mean terrain clearances of 55 m and 65 m for the VTEM receiver loop and magnetometer, respectively. Elevation was controlled by a radar altimeter affixed to the helicopter. A global positioning system (GPS) antenna was mounted to the helicopter tail while a second GPS antenna and inclinometer were installed on the leading edge of the magnetic loop to measure tilt in the apparatus (Figure 9.1).

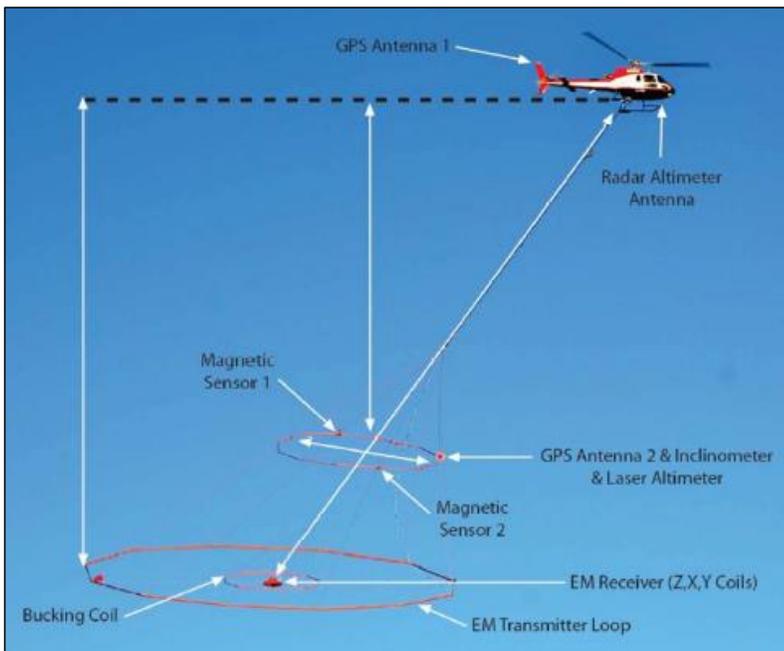


Figure 9.1: Heliborne magnetic and VTEM survey setup layout

The 50 m line spacing was employed over priority targets, namely the Moss Gold and Coldstream deposits and their surrounding areas, and the Hamlin area.



Following the survey, Geotech produced 1:35,000 scale maps in Geosoft MAP format and Adobe PDF showing:

- B-field Z component (total vertical magnetic field), time gate 1.760 ms
- Fraser filtered dB/dt X component (horizontal magnetic gradient), time gate 1.760 ms
- dB/dt Z component at time gates 0.440 ms, 1.760 ms, 7.036 ms
- dB/dt and B-field Z component, calculated time constant (response decay rates)
- Total magnetic intensity
- Calculated vertical magnetic gradient
- In-line (flightline), cross-line and total horizontal magnetic gradients
- Magnetic tilt derivative (tangent of vertical and horizontal magnetic gradients)
- Digital elevation model
- Measured presence of 60 Hz power line activity.

#### **9.1.2 VTEM Survey and QAQC**

The VTEM system was a Geotech Time Domain EM VTEM Plus system consisting of a horizontal transmitter loop and three receiver coils, which measure magnetic field gradient (dB/dt) as horizontal (flightpath) and vertical vector components (Figure 9.1).

The VTEM system utilized 43 time gates ranging from 0.021 ms to 8.083 ms (numbered 4-46). The vertical (Z) component was measured during all time gates while the horizontal (X) component was measured from time gate 20 to 46. The off-time sampling scheme was defined based on the time at which the current gradient over time falls to half of its peak value. Results of the VTEM survey are indicated in Figure 9.2.

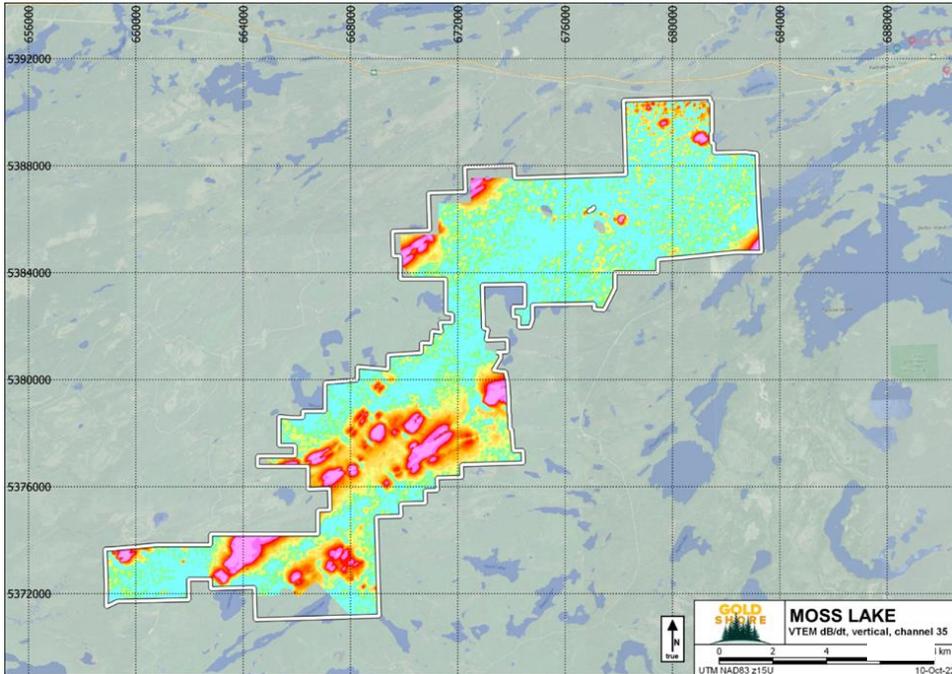


Figure 9.2: VTEM results – 2021 Geotech survey

TechnoImaging LLC (TechnoImaging) of Salt Lake City, Utah, USA undertook quality control on the VTEM data, using an automated process to establish noise levels in each data channel. The X component data was considered to be overly noisy away from conductors, potentially because of electrical storm activity, and requested that Geotech re-fly a number of lines to improve the dataset.

### 9.1.3 Magnetism Survey and QAQC

The magnetic system consisted of two Geometrics split-beam total field magnetic sensors affixed orthogonally on a loop, 12.5 m apart, allowing for horizontal magnetic gradients to be measured as inline (flightpath) and cross-line vector components. The sampling interval is 0.1 seconds (100 ms). Results of the magnetism survey are indicated in Figure 9.3.

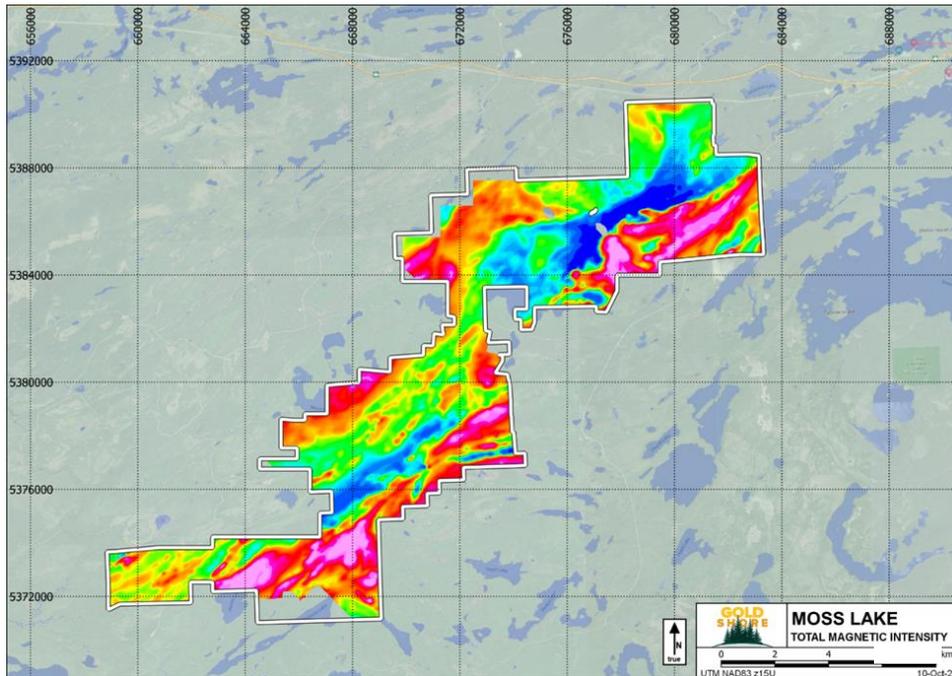


Figure 9.3: Total magnetic intensity results – 2021 Geotech survey

TechnoImaging used a second-degree polynomial to highlight and remove outlying high anomalies as well as regional-scale trends. TechnoImaging considered the data to be of high quality and no other processing was deemed necessary.

#### 9.1.4 Core Geophysical Review

Twenty-five samples of drill core from the Moss Gold Deposit were provided to TechnoImaging for measurement of magnetic susceptibility and conductivity with a KT-10 handheld meter at a 10 kHz frequency. Thirteen of these pieces were also used in time-domain induced polarisation (IP) tests using a core IP tester manufactured by Instrumentation GDD Inc. This data was used to guide the inversion and interpretation.

#### 9.1.5 Inversion Modelling

TechnoImaging inverse-modelled the magnetic and electromagnetic data using their Glass Earth and EMVision software. Both 1D and 3D inversions were created; the 1D inversion was used as a quality control procedure and to guide the 3D inversion.

For the VTEM data, a lower conductivity floor of 10,000  $\Omega\text{m}$  was used. Conductivity, chargeability and time constant were modelled.

Each datapoint was weighted according to the inverse of two errors; an absolute error calculated from the survey noise and a relative error calculated from altitude and tilt variations.



### 9.1.6 Exploration Target Selection and Geophysical Interpretations

TechnoImaging selected 11 exploration targets based on the combined magnetic-electromagnetic signatures of the known mineral occurrences on the Project. Targets were evaluated with respect to their lithological and structural setting.

The VTEM inversion revealed several broad areas of shallow conductivity and chargeability which are interpreted as lake and wetland sediments.

Numerous narrow subvertical conductors were revealed in the centre and south of the Property and can be interpreted as sulphidic zones and/or graphitic horizons. More substantial conductors are present in the north of the Project including one which clearly corresponds to the North Coldstream deposit. The North Coldstream anomaly fits well with the known mineralized envelope in three dimensions and represents an excellent confirmatory test for the inversion.

The magnetics data indicates a series of elongated high and low features, which for the most part follow regional structural trends. Two sub-parallel trends are present in most areas creating a lozenge visual effect. The contrast between high and low magnetic anomalies is far higher in the mafic-dominated domains, which is easily distinguished from the central intermediate-felsic belt.

In the inversion model, the Moss Gold Deposit sits at the contact of a broad, elongate magnetic low and a narrower, subvertical magnetic high, interpreted as the diorite stock and iron formation sequence interbedded in the andesitic-dacitic volcanic sequence. The “QES” Zone continues to the northeast on the north flank of the magnetic high.

The “Moss-style” geophysical signature, with broad magnetic lows adjacent to narrow magnetic highs, is repeated throughout the central intermediate-felsic belt. This may represent repetition from folding or may be a primary stratigraphic phenomenon.

The shear-hosted mineralization at East Coldstream lies on the north flank of a broad magnetic high zone corresponding to a highly magnetic package in the mafic volcanic-plutonic belt. The magnetic contrast across the mineralized shears may suggest some lithological contrast within the mafic units which developed into a shear during regional deformation.

The geophysical target selection exercise identified 11 targets in total as shown in Figure 9.4 and partially modeled as shown in Figure 9.5.

The targets include:

- Coincident magnetic and conductive anomalies in mafic terrain, interpreted as potential VMS or sulphidised iron formation targets
- Iron formations with folding obvious from their magnetic signatures, interpreted as possible gold targets
- Magnetic and conductive strike extensions of the main Moss Gold and Coldstream deposits
- Folded conductors in magnetic low terrain.

The interpreted data and selected targets will be used by Goldshore to drive surface exploration programs and exploratory drill programs in the future.

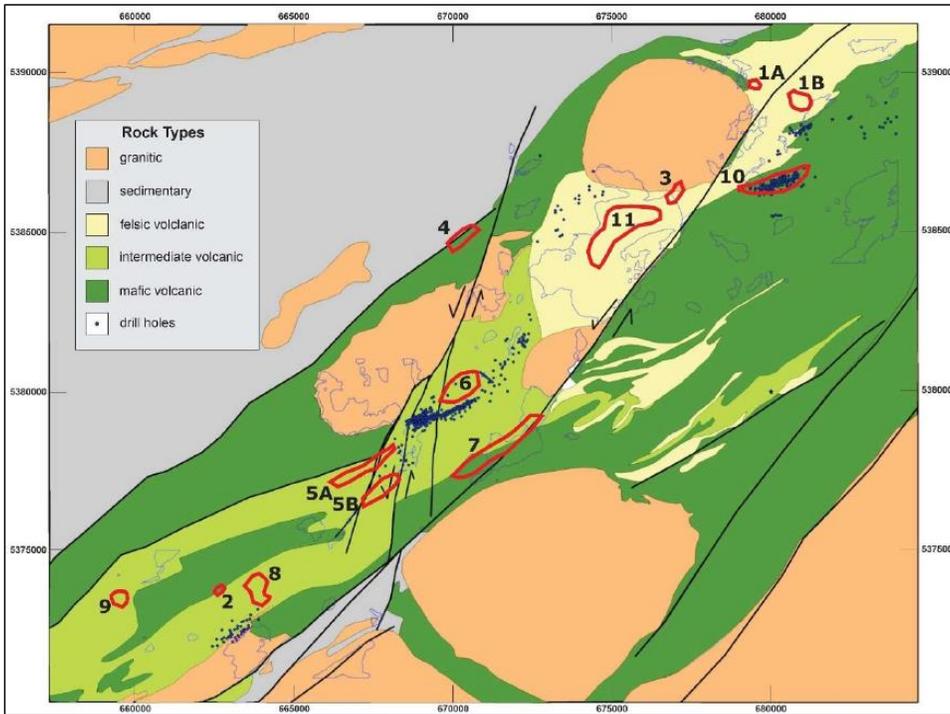


Figure 9.4: Interpreted geophysical exploration targets

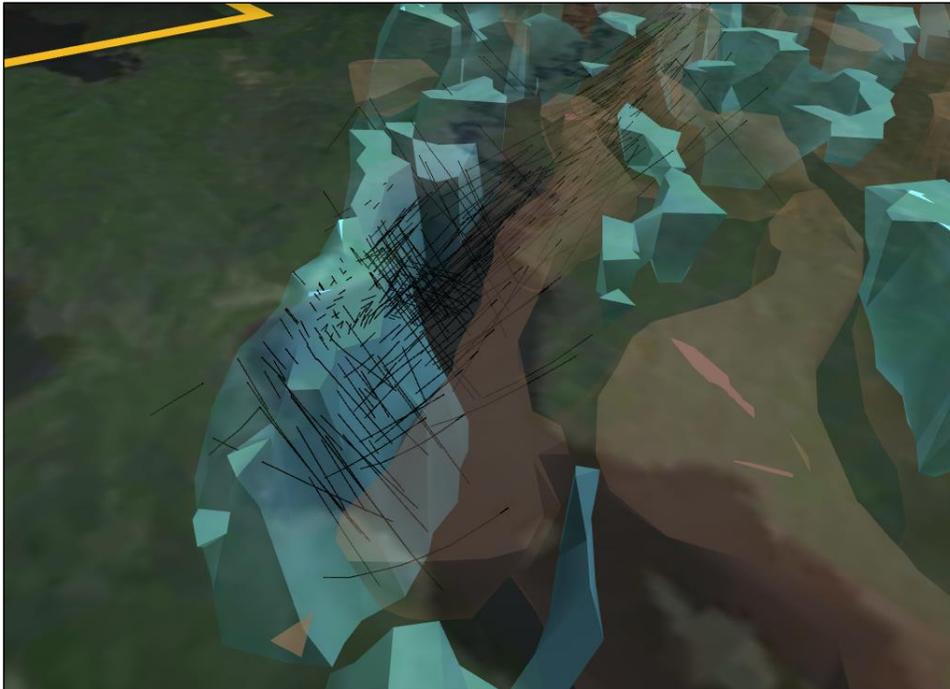


Figure 9.5: 3D view of the Technomaging inverted magnetic data, looking along the main Moss Gold Deposit towards the northeast (blue and red volumes are picked magnetic low and high anomalies, respectively)

## 9.2 Geophysical Survey – Vanguard Block

In September 2021, Geotech expanded the VTEM and magnetic survey to cover the Vanguard Block following its acquisition by Goldshore. The survey was flown by Nuvia Dynamics between the 1st and 11th September 2022, utilizing a NuTEM system and covering 396 line-km at Vanguard and 106 line-km at Hamlin (Killin 2023) (Figure 9.6). Technomaging planned the grid and the flight and data specifications to enable meshing with the preexisting dataset. Lines were flown at a mean altitude of 100 m with a mean speed of 90 km/h with terrain clearances for all instruments comparable to the Geotech flight.

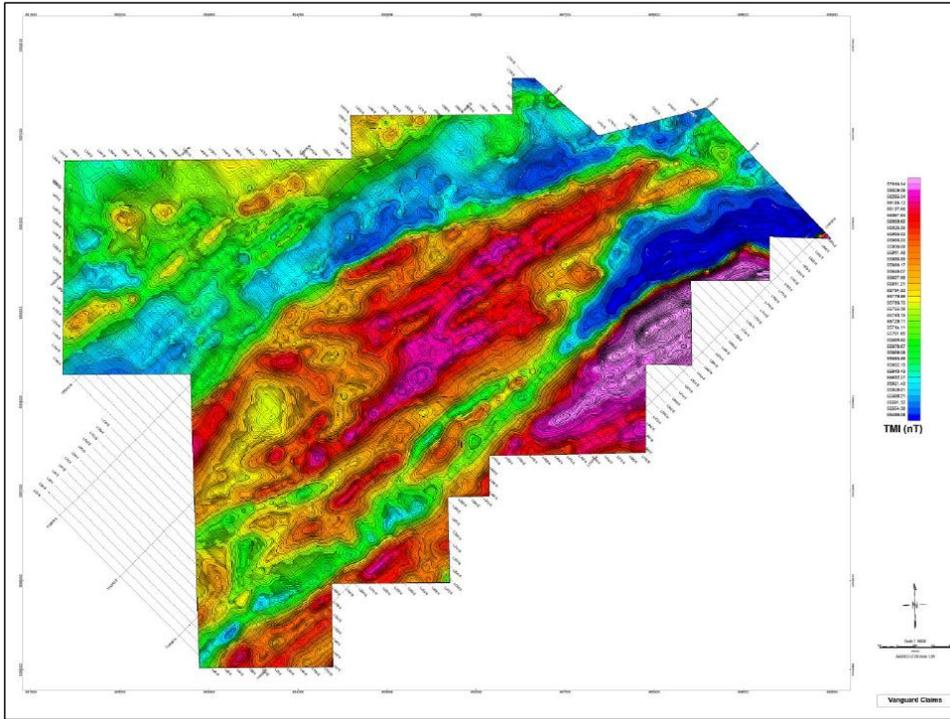


Figure 9.6: Total Magnetic Intensity, Vanguard claim block (Killin, 2023)

Survey results were presented in the same format as the Geotech data to facilitate interpretation of the two survey datasets in combination. Technoimaging performed an updated inversion of the combined dataset and produced a series of depth slices for chargeability, conductivity, in-line and cross-line magnetic gradient, and magnetic susceptibility (Zhdanov, 2023) (Figure 9.7).

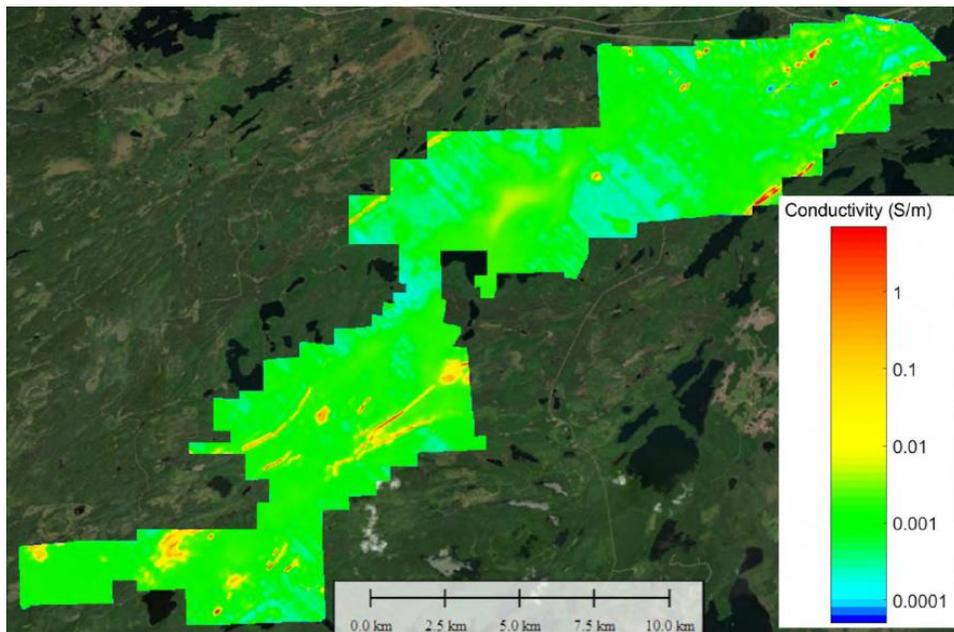


Figure 9.7: Conductivity slice, 100 m depth (Zhdanov, 2023)

### 9.3 Reconnaissance Exploration Program

In July 2022, Goldshore commenced a multifaceted property-wide reconnaissance exploration program. The exploration program has involved:

- Reconnaissance prospecting and preliminary geological mapping of geophysical targets discussed above in Section 9.1.6.
- Grid-based prospecting of key areas peripheral to Moss Gold and East Coldstream deposits.
- Dense soil sampling on grids (200 m line separation, 25 m sample stations) covering key areas along and across strike of Moss Gold and East Coldstream deposits. Parallel sample sets are collected at each point; a fixed depth augered sample for Ionic Leach assay and a “conventional” humus sample.
- Vegetation samples along the soil sampling grids. Spruce, fir and alder were trialled on the initial grid and alder was used on subsequent grids.
- Detailed mapping and channel sampling around high assays or first-pass interpretation soil samples as assays are received.

The Vanguard Block was acquired after commencing the exploration program which was later expanded to cover this new claim block.

#### 9.3.1 Ionic Leach Soil Sampling

A total of 2,504 soil samples were taken on five GPS-controlled grids, of which 150 (6%) were field duplicates. The field methodology, described above, was devised by Russell Birrell of Globex Solutions Pty Ltd specifically for muskeg terrain. Four grids were planned to surround the Moss Gold Deposit to capture parallel systems

*Commented [NR54]:* @Niti Gupta @Nigel Fung Holy moly this is long winded!!! We are not, or should not, just accept Goldshore text, this is our report and we need to edit it to be summary at an appropriate level. I cannot do this at this late stage, it should already have been done. I think we should delete and replace with the previous report version.

and strike extensions, while testing for the signature of the deposit itself at QES. The fifth grid tested for eastward strike extensions of East Coldstream. Coverage of the QES zone proved poor but the surveys did cover known Au occurrences at Span Lake and Kawawigamak Lake enabling known Au-mineralized signatures to be identified.

A parallel set of humus samples was collected from the same grid stations; these are yet to be assayed and have been archived at the Goldshore field office.

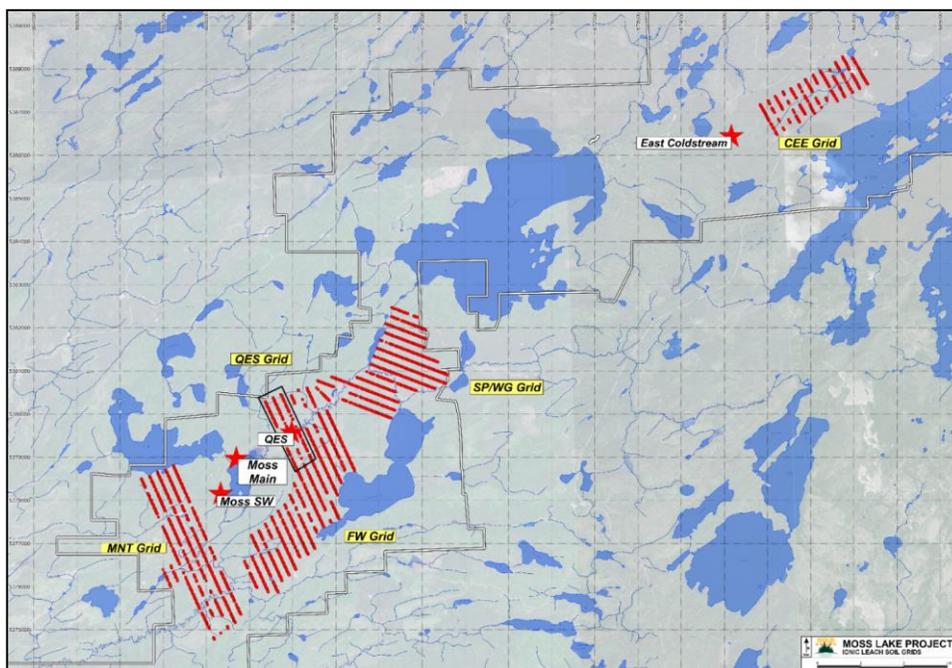


Figure 9.8: Soil grids for the 2022 program

The soil data was interpreted by Russell Birrell alongside Goldshore staff. Due to the highly variable topography, drainage and cover sequences, raw assay plots were not used. Analyte values were normalized against standard deviation by a standard “Z-score” statistical method according to both assay batch and terrain type. Several secondary datasets were created by cross-referencing the normalized soil dataset with nearby surface rock samples and testing for soil-rock correlations, summing normalized values for key indicator analytes, and deriving further factors to improve anomaly clarity through thicker cover. Other elements, particularly alkali metals, demonstrated good rock-to-soil take-up but correlated negatively with Au in both soil and rock, and so could be used to trace unmineralized zones or flanking anomalies. Individual analytes were also compared spatially and qualitatively against known Au occurrences, lithologies and structures.

Some elements correlated relatively well with both soil and bedrock Au, notably tellurium, while others were surprisingly discordant, such as bismuth and lead. The use of summed indices of known indicator metals improved correlation.



Prominent intercorrelations in the soil data included Li-Ca-Mg-Ni, the REEs+Sn and a “peraluminous suite” of Nb-Ta-Th-W. Gold and some other key analytes returned below-detection values in certain muskeg areas, which reduced the effectiveness of statistical methods to “boost the signal” through muskeg cover and raising questions around the effectiveness of the Ionic Leach method to detect bedrock signatures through thick muskeg cover.

No anomalies of note are evidence in the CEE grid at East Coldstream.

Table 9.1: Correlation table between soil analytes and available proximal rock values (<12.5 m) (Significant correlations >0.3) are in bold)

Soil Analyte	Soil-to-soil-Au	Soil-to-rock Analyte-to-Analyte	Soil-to-rock Au	Soil-to-"Rock Au Index" (Σnzd AuAgTeCdCu rock values)	# Rock Datapoints
Au	<b>1</b>	0.16	0.16	<b>0.58</b>	111
Cu	<b>0.46</b>	0.03	0.18	<b>0.57</b>	47
Ag	<b>0.407</b>	-0.06	-0.06	-0.15	47
pH	<b>0.37</b>		0.01	-0.05	
Pd	<b>0.3</b>				
Te	0.28	<b>0.57</b>	0.15	<b>0.42</b>	41
Eu	0.26				
Gd	0.25				
Tb	0.24				
Sm	0.24				
Ce	0.23	0.17	-0.03	-0.27	42
I	0.23				
Br	0.22				
Dy	0.21				
Ba	0.2	0.18	0.04	<b>0.48</b>	44
Hf	0.2	0.11	-0.05	-0.24	41
Se	0.2	0.28	0.11	0.27	41
Th	0.2	0.01	0.02	-0.02	42
Ni	0.19	0.09	0.00	0.05	44
Zr	0.19	0.09	-0.04	-0.19	41
Nd	0.19				
Ho	0.19				
Y	0.18	0.13	-0.06	-0.23	41
La	0.17	0.11	-0.05	<b>-0.32</b>	44
Hg	0.17				
Pr	0.17				
Er	0.17				
Ca	0.15	0.12	0.04	0.29	44
Tm	0.15				
Ge	0.14	0.05	-0.02	-0.13	41
Mg	0.14	<b>0.41</b>	0.03	0.23	43



Soil Analyte	Soil-to-soil-Au	Soil-to-rock Analyte-to-Analyte	Soil-to-rock Au	Soil-to-"Rock Au Index" (Σnz d AuAgTeCdCu rock values)	# Rock Datapoints
Sc	0.14	0.22	-0.01	-0.12	42
As	0.13	0.11	0.04	0.20	46
Co	0.13	<b>0.33</b>	0.08	<b>0.34</b>	47
Yb	0.13				
Lu	0.13				
Cr	0.12	-0.16	-0.06	-0.23	44
Sr	0.11	<b>0.46</b>	0.09	<b>0.38</b>	44
Cs	0.1	<b>0.35</b>	-0.08	-0.23	42
Mo	0.1	<b>0.30</b>	0.09	<b>0.45</b>	44
Pt	0.1				
Rb	0.09	<b>0.70</b>	-0.03	-0.05	41
Sb	0.09	0.03	-0.10	<b>-0.33</b>	43
W	0.09	0.03	-0.05	-0.19	43
Ti	0.08	0.03	-0.03	-0.10	44
U	0.08	0.14	-0.01	0.03	43
Be	0.07	0.14	0.00	-0.12	44
Li	0.07	0.23	-0.06	-0.21	41
Nb	0.06	0.10	-0.06	-0.26	41
Pb	0.06	-0.15	-0.07	-0.27	44
Ta	0.06	0.23	-0.06	-0.24	41
Tl	0.06	0.01	-0.11	<b>-0.37</b>	43
Ga	0.04	0.28	-0.09	<b>-0.36</b>	43
Re	0.04				
V	0.03	0.03	-0.01	-0.09	44
Bi	0.02	0.21	0.00	0.13	43
Cd	0.02	-0.06	-0.06	-0.18	44
Sn	0.02	-0.04	-0.06	-0.24	41
In	0.01	-0.08	-0.10	<b>-0.31</b>	41
Fe		0.14	0.12	<b>0.37</b>	44
Mn		0.27	0.00	0.13	44
Zn		-0.02	-0.04	-0.09	47

The field duplicate samples showed a variable reproducibility depending on mean analyte value, with a general trend of high variance for lower values (up to 190% for values approaching background) with precision increasing for higher values (generally <40% for analyte values >+2σ) (Figure 9.9).

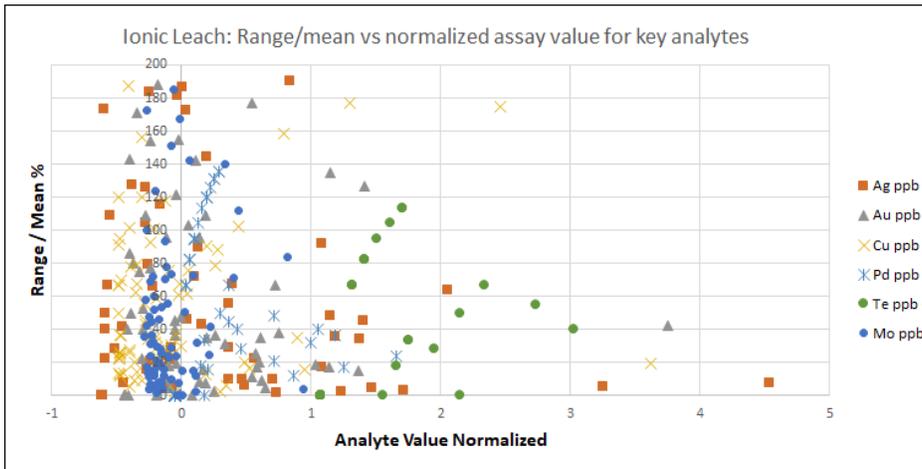


Figure 9.9: Ionic Leach: Range/mean vs normalized assay value for key analytes

The final soil anomaly picks are based on both soil-to-soil-Au and soil-to-rock-Au correlations and are presented below. Obvious correlations with known Au showings such as the Boundary Zone are noted.

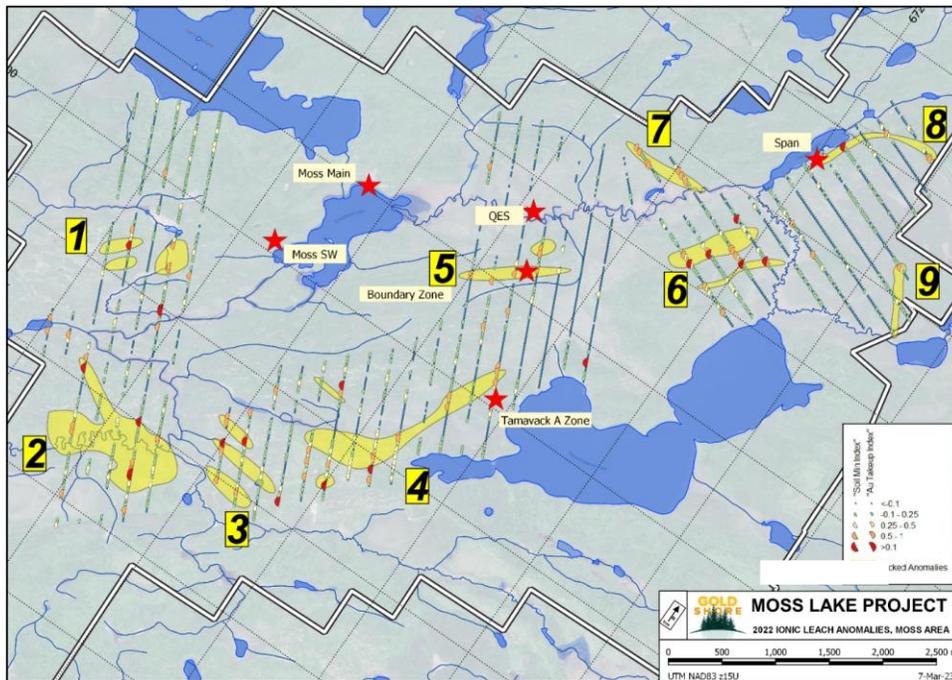


Figure 9.10: Soil Anomalies from the 2022 Ionic Leach Survey, Moss Area



#### 1: Moss Nose

This cluster of localised highs is along-strike of the Southwest Zone. The ovoid high lies at the confluence of two interpreted fault trends, one of which is parallel to the Snodgrass Fault. All four cluster around a linear IP trend visible in Wesdome data. The setting is favourable for a potential sinistrally-offset extension of the Southwest Zone, or a zone with an en-echelon relationship to it.

#### 2: Confluence

This anomaly appears to be robust despite apparent signs in some more mobile elements (e.g. U) of a creek-controlled anomaly. This is proximal to the Knife Lake Fault and potential east-west structures interpreted from a review of historic Deaty Creek drilling. A further structure may lie beneath the creek, hinted at by mentions of chlorite—fuchsite schists in Noranda work (Gingerich 1991). A Greenwater/Kashabowie contact should run through this area, providing a rheologic contrast.

#### 3: Kawa-Deaty Gap

A stack of east-west-oriented lenses are interpreted here. Similarly to anomaly 2 there may be a close relationship to both the Knife Lake Fault and east-west structures.

#### 4: Kawawiagamak

A distended string of anomalies tracks from the Tamavack “A” Zone to the southwest end of Kawawiagamak Lake. A contact-controlled, shear-hosted Au occurrence was later discovered in this area, validating this anomaly.

#### 5: Boundary Zone

This anomaly accurately maps the Boundary Zone and coincides with historic humus and B-horizon soil anomalies from Tandem/Storimin.

#### 6: Wawiag

Two strong, parallel anomalies strike northeast through presumed Kashabowie units. There is some evidence from the inverted magnetic data for an as-yet unidentified intrusive, cut by an east-west structure, which may provide a rheologic/structural control for mineralization here.

#### 7: Superior

A strong east-west structural control is evident in this anomaly, comparable to narrow vein-type mineralization seen in the SL DDH series to the southwest.

#### 8: Span Extension

An elongated, curved anomaly may track the Span mineralization northwards under cover, perhaps following the margin of a magnetic diorite body seen in some outcrops in the area.

#### 9: Hermia Stock

At present this anomaly is totally unexplained since this area is believed to overlie Hermia Stock alkali granites.

### 9.3.2 Vegetation Sampling

A total of 353 alder twig samples were taken, where possible, using the same grid as the soil survey. Samples were taken from fresh growth after removing catkins or buds. The variety of vegetation cover made it difficult



to capture an even distribution of samples, as did the requirement to collect 100 g samples from what were often relatively small bushes. Alder samples were not collected on the Coldstream (CEE) grid.

Inter-analyte correlations with Au were weak for all elements (coefficient <0.20) except tantalum (0.64). Alder-to-rock correlations were also completed albeit with a smaller dataset than for the soil (just 11 suitable rock samples for many analytes). The “peraluminous suite” proved to have the most effective takeup from bedrock to alder, with a tungsten coefficient of 0.88 and Cs, Zr, Hf Al and Sn having coefficients from 0.42 to 0.65. Tungsten is the only gold indicator with any realistic use. There were no meaningful correlations with bedrock Au nor any other established Au indicators.

Analytes were compared spatially to the soil anomaly grids. The spatial responses for most analytes were strongly kurtotic, with low numbers of highly anomalous, non-contiguous datapoints. A rare exception is palladium which returns a multi-sample anomaly in a fault-bounded basin on the Moss Nose grid.

Alder test samples were taken at the Snodgrass Lake adit (Moss Main zone) and above the East Coldstream mineralization. These were reviewed for “Moss signature” and “Coldstream signature” analyte patterns which were then applied to the whole alder dataset. Three tight sample clusters returned “Moss signature” anomalies, two in the Moss Nose grid (at the Pd anomaly) and one in the Kawa-Deaty Gap area. At first glance, these corroborate some of the Ionic Leach soil anomalies, but given the poor rock-to-alder correlations described previously, these anomalies are unlikely to be reliable.

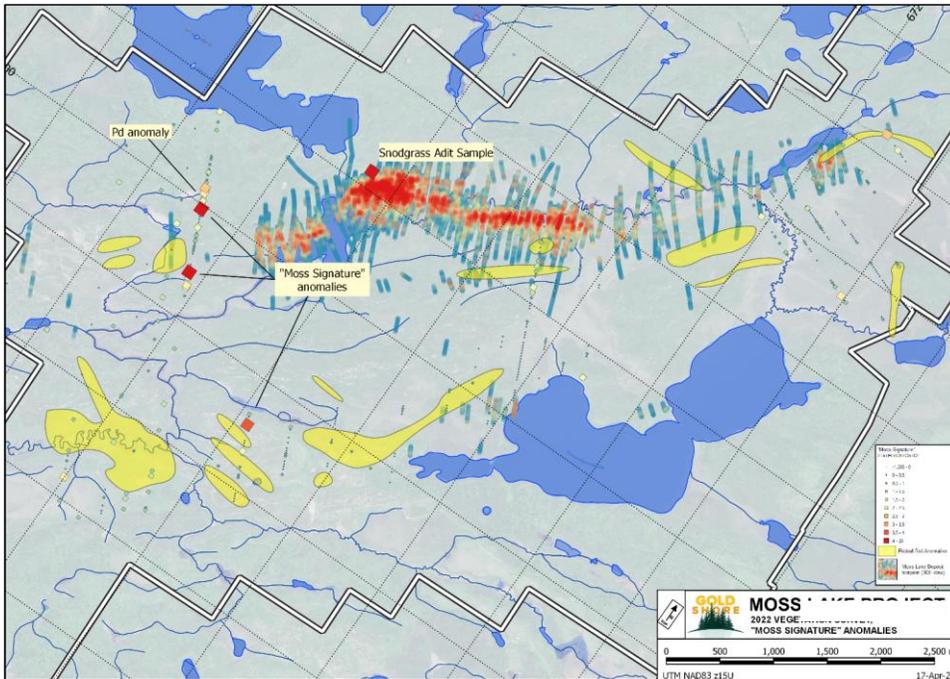


Figure 9.11: Alder data, “Moss signature” anomalies

### 9.3.3 Reconnaissance Mapping and Prospecting

A total of 1,828 samples, including 50 QAQC samples, were taken as part of a reconnaissance mapping and prospecting program across the entire Moss Project area. Samples were taken by trained prospectors or geologist-assistant teams in order to follow up on areas of note from compiled historic data, improve mapping and geochemical data coverage in priority areas, and provide basic coverage in thinly explored areas. Field samples were described in detail at the Goldshore site office in addition to field investigation. Mapping and geochemical data were used to refine the property geology map and, alongside a compilation of historic data, were used to map zones of alteration. Limited hand-stripping and channel sampling program on the SW Kawawagamak target were completed towards the end of the program. Highlights from the program are in the following sections.

#### 9.3.3.1 East Snodgrass

A grab sample on the periphery of the Moss deposit drilling returned 24.9g/t Au and 9.99g/t Ag from “pink” (K/hem) altered sericitic lapilli tuffs with nodular/erratic tight disseminations of pyrite, immediately southeast of Snodgrass Lake (F780933). Another sample 25 m to the southwest returned 1.31g/t Au from a pyritic, silica-dolomitised (“bleached”) dacite (F786768).



### 9.3.3.2 Southwest Zone Extension

A mapping exercise targeted a ridge about 500 m southwest of the Southwest Zone along strike, towards the “MNT” soil grid. Highlights include a 2.97g/t Au in sheared and silicified andesites on an IDP contact (F780253) and 1.06 g/t Au from a meter-scale hematite-sericite-altered syenite dyke (F780894).

### 9.3.3.3 SW Kawawagamak

A new mineralized system was discovered off the SW tip of Kawawagamak Lake. Mineralization is controlled by a highly sheared quartz-phyric diorite contact with mafic volcanics or gabbro, exhibiting chlorite-sericite-iron carbonate alteration, proximal to the regional-scale Knife Lake Fault. Grab samples returned up to 33.7 g/t Au alongside 46.6 ppm Mo (F782292) and 2.79 g/t Au alongside 11.3 ppm Te (F781711). Iron carbonates appear to be partly altered to actinolite-tremolite, perhaps a manifestation of contact metamorphism from the Hood Lake Stock (600 m distant).

Three areas were hand-stripped and channel-sampled, with 33 samples in 3 channels. In the channel data, elevated Au correlates very strongly with Ag, Bi, Mo and Te. The channelling returned an interval of 1.59 g/t Au over 1.7 m (F781625-26). The highest assaying samples had 5% shear-controlled pyrite stringers.

### 9.3.3.4 Powell

The main target in this area was a prominent, isolated conductive body west of the Hamlin prospect, as well as poorly documented historic gold occurrences in the wider area. No obvious cause for the conductor was identified. Nevertheless, Au mineralization was uncovered at scattered sites through the andesite-dacite sequence along the Nelson Road in this area:

- 4.31 g/t Au from pyrite-carbonate veinlets in andesite (F781586)
- 1.11 g/t Au from chlorite-sericite-pyrite-altered diorite (F782389)
- 2.82 g/t Au from sheared, pyritic andesite (F781055)
- 3.76 g/t Au from a quartz veined andesite (F781049).

### 9.3.3.5 Benton Au and Lone Hill VMS Occurrences

An Au occurrence previously reported by Benton Resources was revisited. Anastomosed chlorite-carbonate-pyrite shearing of unknown width was identified on a gabbro contact. Grab samples returned values up to 9.79 g/t Au from these veins (F780984). The magnetic response of this gabbro will allow this sheared contact to be tracked in future programs.

About 400 m east of this, a gossanized chert-sericite-pyrite zone was mapped amongst a mafic volcanic sequence. This may be the “Lone Hill” occurrence reported by previous holders of the Vanguard property. A grab sample from sheared mafics south of this horizon returned 0.8g/t Au (F780997).

### 9.3.3.6 Skimpole

Mapping was undertaken west of Skimpole Lake in an area of mixed mafic-ultramafic intrusives which were historically test-pitted for Cu-Ni by Coldstream Mines in the 1950s. Sampling returned values up to 0.34 g/t Au (F782274), 996 ppm Cu (F780354) and 1345 ppm Ni (F780352) from pyrite-pyrrhotite disseminations and stringers in variably deformed gabbros, pyroxenites, amphibolites, and possible magnetite cumulates. The structural or otherwise control on the distribution of the various mafic-ultramafic phases in this area remains to be ascertained.



9.3.3.7 Lacombe

The Lacombe area was mapped in a limited, reconnaissance capacity to confirm the presence of broad sericitized alteration zones and shear-hosted mineralization reported in this wedge of Kashabowie units between the North Coldstream shear and the Knife Lake Fault. A sericitized quartz-eyed dacite with 5% disseminated pyrite was sampled, returning 1.07 g/t Au (F781693).

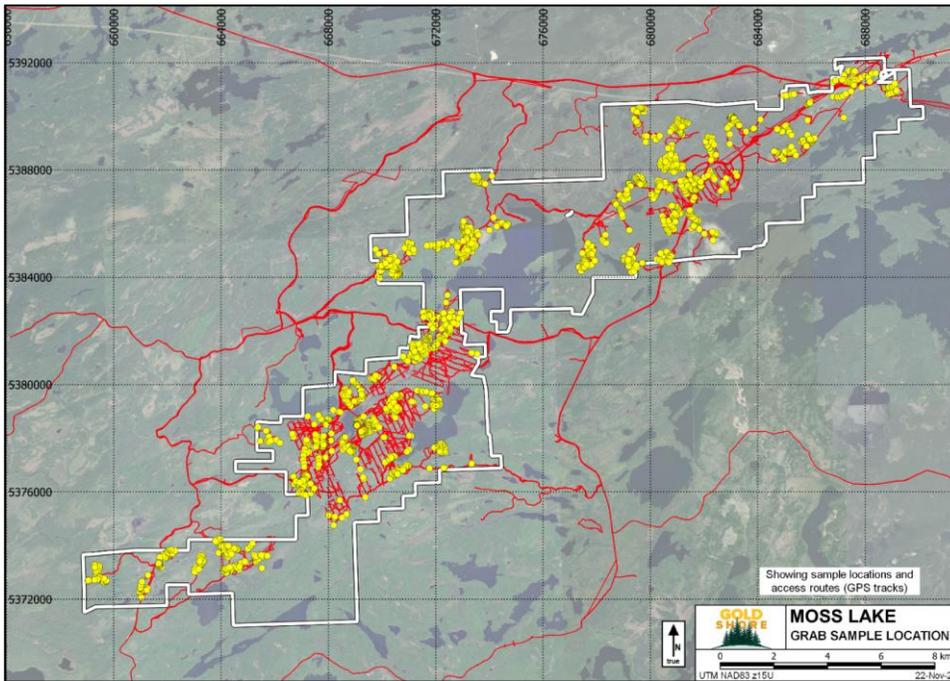


Figure 9.12: Locations of grab samples



## 10 Drilling

### 10.1 Historical Drilling

#### 10.1.1 General

The historical drill hole database for the Project consists of 2,060 drill holes (278,273 m drilled) dating back to 1942. A breakdown of historical drilling completed on the Coldstream, Moss and Hamlin blocks is presented in the tables below. Detailed compilation of historical drilling in the Vanguard Block is still ongoing by Goldshore and is therefore not covered in this section. Additional details are described in Section 6 (History).

All historical drilling contributing to the Project database has been assigned risk factors to reflect the reliability of the data. Risk factors for assay data are based on the availability of original assay certificates, while risk factors for surveys are based on the survey method originally recorded.

#### 10.1.2 Coldstream Block

The current Project database contains details for 1,449 historical drill holes totalling 121,690 m of drilling within the Coldstream Block (Table 10.1). Much of this work was completed in the 1950s and 1960s and contributed to the development of the North Coldstream mine. Following the closure of North Coldstream, the area saw minimal drilling until the discovery of the East Coldstream occurrence in the 1980s. East Coldstream was drilled and abandoned in the late 1980s and early 1990s by Noranda. The bulk of the drilling contributing to the historical mineral resource at East Coldstream was conducted between 2010 and 2017 by Foundation, and Wesdome.

Table 10.1: Coldstream Block historical drill hole summary

Year	Company	Area	Core size	No. of holes	Total (m)	Total samples (m)	% Sampled
1942	Frobisher	NCS	-	17	872	-	-
1946	CS Copper Mines	NCS	-	16	2,048	746	36.43%
1948	CS Copper Mines	NCS	-	12	2,601	330	12.69%
1951	CS Copper Mines	NCS	-	9	722	39	5.40%
1952	CS Copper Mines	NCS	-	25	1,359	391	28.77%
1953	CS Copper Mines	NCS	-	47	3,352	1,602	47.79%
	Moneta Porcupine	NCS	-	-	1,524	-	-
1954	CS Copper Mines	NCS	-	6	478	196	41.00%
1955	CS Copper Mines	NCS	-	63	3,653	1,664	45.55%
		ECS	-	5	978	-	-
1956	CS Copper Mines	NCS	-	162	11,345	4,998	44.05%
	Riocanex	Iris	-	7	1,064	13	1.22%
	Burchell Lake Mines	Broadhurst	-	6	1,637	-	-
1957	CS Copper Mines	NCS	-	78	3,551	1,873	52.75%
	Arcadia Nickel Corp.	Burchell, Quetico	-	4	405	-	-
	Iris	NJL Uranium Mines	-	11	2,052	-	-
1958	CS Copper Mines	NCS	-	31	3,004	349	11.62%
1959	CS Copper Mines	NCS	-	23	1,515	617	40.73%



Year	Company	Area	Core size	No. of holes	Total (m)	Total samples (m)	% Sampled
1960	CS Copper Mines	NCS	-	94	4,500	2,349	52.20%
			-	1	98	-	-
1961	CS Copper Mines	NCS	-	330	13,101	7,417	56.61%
1962	CS Copper Mines	NCS	-	141	6,670	3,187	47.78%
			-	2	153	-	-
1963	CS Copper Mines	NCS	-	34	2,593	600	23.14%
			-	2	88	-	-
1964	CS Copper Mines	NCS	-	57	2,700	664	24.59%
1966	CS Copper Mines	NCS	-	5	86	56	65.12%
1965	CS Copper Mines	NCS	-	20	577	197	34.14%
1966	NC Mines	Burchell	-	2	75	-	-
1988	Noranda	ECS	NQ	16	1,206	365	30.27%
	Todd Sanders	Burchell	-	1	161	-	-
			NQ	13	2,118	1,094	51.65%
1989	Noranda	ECS	NQ	6	922	385	41.76%
	Todd Sanders	Burchell/ECS	-	9	1,117	237	21.22%
1990	Lacana	Crayfish	-	6	2,292	614	26.79%
	Noranda	ECS	NQ	4	1,241	752	60.60%
	Freeport McMoran	Crayfish	-	2	651	-	-
1991	Noranda	ECS	NQ	12	2,618	1,669	63.75%
1997	Todd Sanders	NCS	HQ	7	154	22	14.29%
2002	Kinross	ECS	NQ	7	1,669	649	38.89%
2005	Can Golden Dragon	Vanguard	NQ	5	732	150	20.49%
2006	Alto Ventures	ECS	NQ	13	2,060	1,284	62.33%
2007	Trillium North	Iris	NQ	18	1,258	433	34.42%
2010	Foundation	ECS	NQ	36	9,741	9,028	92.68%
			NQ	7	718	590	82.17%
			NQ	35	8,327	7,724	92.76%
			NQ	20	3,850	3,776	98.08%
2016	Wesdome	ECS	NQ	8	3,319	2,320	69.90%
2017	Wesdome	ECS	NQ	23	7,398	3,937	53.22%
<b>Total</b>				<b>1,458</b>	<b>124,353</b>	<b>62,317</b>	

### 10.1.3 Moss Block

The current Project database contains details for 485 historical drill holes totalling 128,437 m of drilling within the Moss Block (Table 10.2). The large majority of this is focused in the area of Snodgrass Lake and the Wawag River where it enters Snodgrass, and defines the historical mineral resource reported as the Moss Gold Deposit as discussed in Section 6 of this Report. This drilling occurred in two main phases by Storimin and Noranda in the late 1980s and early 1990s, then by Moss Lake Resources in the 2000s. The remainder of the exploration drilling in the Moss Block targeted the gold occurrences at Span Lake, Fountain Lake and the “Boundary Zone” between Snodgrass and Fountain Lake’s.



Table 10.2: Moss Block historical drill hole summary

Year	Company	Area	Core size	No. of holes	Total (m)	Total samples (m)	% Sampled
1976	Falconbridge	Snodgrass	AQ	5	1,016	417	41.04%
1983	Storimin	Snodgrass	BQ	5	661	580	87.75%
1985	Inco	Span	AQ	2	183	-	-
1986	Storimin	Snodgrass	BQ	30	4,543	3,833	84.37%
1987	TML	QES/Fountain	BQ	14	2,605	2,488	95.51%
	Storimin	Snodgrass	BQ	105	24,685	21,515	87.16%
	Inco	Span	BQ	8	1348	768	56.97%
1988	TML	QES/Fountain	BQ	8	1,226.3	1,158	94.43%
	Storimin	Snodgrass	BQ	63	19,399	17,300	89.18%
	Inco	Span	BQ	18	3,407	3,061	89.84%
1989	Storimin	Snodgrass UG	BQ	32	1,514	1,512	99.87%
		Snodgrass/QES	BQ	6	2,059	1,927	93.59%
	Inco	Span	BQ	13	2,133	1,743	81.72%
1990	Noranda	Snodgrass/QES	NQ	70	2,4534	21,776	88.76%
1992	Noranda	QES	NQ	7	4,375	1,822	41.65%
1993	Akiko Gold	Moss Nose	NQ	5	845	-	-
1996	Moss Lake Resources	Snodgrass/QES	NQ	17	4,835	4,606	95.26%
1999	Landis Mining	Boundary	NQ	3	379	238	62.80%
2002	Moss Lake Resources	Snodgrass	NQ	7	1,951	652	33.42%
2003	Moss Lake Resources	Snodgrass	NQ	7	1,506	574	38.11%
2004	Pele Mnt Resources	Pearce	NQ	1	500	267	53.40%
	Moss Lake Resources	Snodgrass	NQ	9	1,601	958	59.84%
2005	East West Resources	Pearce	NQ	1	184	8	4.35%
2008	Moss Lake Resources	Snodgrass	NQ	15	3,878	3,156	81.38%
2010	Alto	Span	NQ	2	373	357	95.71%
2017	Moss Lake Resources	Snodgrass/Span	NQ	32	18,697	16,859	90.17%
<b>Total</b>				<b>485</b>	<b>128,437</b>	<b>107,575</b>	

#### 10.1.4 Hamlin Block

The current Project database contains details for 141 historical drill holes totalling 29,854 m of drilling within the Hamlin Block (Table 10.3). The most significant drill campaigns in the area were directed at the main Hamlin copper occurrence in the 2000s by first East West Resources, and later Xstrata.

Table 10.3: Hamlin Block historical drill hole summary

Year	Company	Area	Core size	No. of holes	Total (m)	Total samples (m)	% Sampled
1956	Noranda	Hamlin	-	7	708	-	-
1957	Noranda	Hamlin	-	2	265	-	-
1966	Cominco	Hamlin	-	1	81	-	-
1972	Falconbridge	Hamlin/Deaty	-	2	244	-	-
1988	Grand Portage	Hamlin/Junction	-	4	518	-	-
1990	Mingold	Powell Lake	-	6	671	91	13.56%



Year	Company	Area	Core size	No. of holes	Total (m)	Total samples (m)	% Sampled
1991	Noranda	Powell Lake	-	2	544	73	13.42%
		Deaty Creek	-	2	1,198	399	33.31%
2004	East West Resources	West Hamlin	NQ	3	499	216	43.29%
2005	East West Resources	Hamlin	NQ	35	5,661	2,394	42.29%
		Ardeen	NQ	4	459	32	6.97%
2006	East West Resources	Hamlin	NQ	15	3,279	2,102	64.10%
		Deaty Creek	NQ	19	2,925	984	33.64%
2008	Xstrata	Hamlin	NQ	3	1,403	1,202	85.67%
2009	Xstrata	Hamlin	NQ	2	732	585	79.92%
2010	Xstrata	Hamlin	NQ	4	1,461	967	66.19%
2011	Xstrata	Hamlin	NQ	13	4,664	3,911	83.86%
		Deaty Creek	NQ	2	546	304	55.68%
		Sungold	NQ	15	3,996	2,249	56.28%
<b>Total</b>				<b>141</b>	<b>29,854</b>	<b>15,509</b>	

### 10.1.5 Vanguard Block

The current project database contains details for 129 holes totalling 14,725 m of drilling within the Vanguard Block (Table 10.4). Most of the drilling consisted of minor campaigns via numerous companies targeting the Vanguard VMS showings and the Iris East gold showing. First recorded drilling was from Norpick in 1950 who discovered the Vanguard showings, but very limited information is available for these holes.

Table 10.4: Vanguard Block historical drill hole summary

Year	Company	Area	Size	#holes	Total (m)	Total m samples	% sampled
1950	Norpick Gold Mines	Vanguard	-	22	-	-	-
1955	Bandowan Mines Limited	Vanguard	-	11	-	-	-
1956	Jack Lake Mines Limited	Crayfish Lake	-	5	742	-	-
1957	Jack Lake Mines Limited	Iris East	-	4	977	-	-
1970	Cominco Exploration	Crayfish Lake	-	2	62	-	-
1988	Newmont	Iris East	NQ	6	1361	770	56.58%
1989	Minova/Deak Resources	Vanguard	BQ	6	2562	16	0.62%
1989	Newmont	Iris East	NQ	8	2121.5	853.73	40.24%
1990	Lacana Ex Inc	Iris East	NQ	2	1112	291.9	26.25%
1992	Noranda	Iris East	-	2	-	-	-
1993	Shear Gold	Iris East	-	6	-	-	-
1997	Allegheny Mines Corp	Vanguard	-	10	292	87.9	30.10%
2002	Canadian Golden Dragon	Vanguard	-	2	-	-	-
2003	Canadian Golden Dragon	Vanguard West	NQ	11	1872.64	822.73	43.93%
2004	Canadian Golden Dragon	Vanguard East	NQ	2	343.36	67.81	19.75%
2005	Canadian Golden Dragon	Crayfish Lake	BQ	1	224.3	21.92	9.77%
2007	Everett Resources Ltd	Vanguard	NQ	18	1258	432.5	34.38%
2011	Benton Resources	Shebandewan	NQ	7	1296.08	347.04	26.78%
2012	Trillium Gold Mines	Vanguard East	NQ	4	501	130.28	26.00%
				<b>Total</b>	<b>129</b>	<b>14,725</b>	<b>3,842</b>



## 10.2 Goldshore Drilling (2021 to 2023)

Between August 1, 2021, and January 20, 2023, Goldshore completed a total of 68,732.3 m (122 drill holes) of diamond drilling on the Moss Gold deposit, mostly on the Main and QES zones of the Moss Gold Deposit. No drilling has yet been conducted on the Hamlin or Vanguard blocks. A total of 5,470 m was drilled using HQ-size core diameter and the remainder of the drill holes were completed using NQ-size core diameter. All assay results have been received for drilling conducted by Goldshore Resources. Goldshore has also completed a total of 9,924.75 m (22 drill holes) of diamond drilling on the East Coldstream deposit during 2022. All of this drilling has been included for use in this report.

Total drilling on the project by Goldshore is 78,657.05 m (144 drill holes) Drilling has been completed on the Moss and Coldstream blocks. No drilling has yet been conducted on the Hamlin Block. Drilling was completed by Missinaibi Drilling Services, an aboriginally owned and operated drilling services contractor based in Timmins, Ontario (Figure 10.1) and by Laframboise Drilling Inc. based in Earlton, Ontario. Further details on the 2021 and 2022 Goldshore drilling programs are described below.

Section 14 (Mineral Resource Estimates) of this Report includes representative drill sections and 3D geological models through the Moss Gold Deposit that characterize the gold mineralization including grades and thicknesses of each zone.



Figure 10.1: Goldshore diamond drilling setup for the Project



### 10.2.1 Moss Block

Between August 2021 and January 2023, 68,732.3 m (122 drill holes) of diamond drilling were completed within the Moss Block of the Moss Gold Property targeting the Moss Main, QES, and Southwest zones (Table 10.5 and Figure 10.2). Drill holes were designed to verify historical drilling data and expand areas of known gold mineralization for the purpose of Mineral Resource estimation described in Section 14 (Mineral Resource Estimates) of this Report.

Moss Main drilling consisted of 38,551.4 m (69 drill holes). Historical drilling had a variable density with drill centres as close as 10 m in some shallower sections of the zone and as distant as 100 m in some of the deeper sections. The location of the mineralized body in relation to Snodgrass Lake results in the top of the mineralized body only being accessible via drilling from ice platforms in winter.

A total of four HQ diameter drill holes completed by Goldshore were direct twins of historical drill holes with the purpose of verifying the historical database results and assessing the increased sample size from larger diameter core on the potential gold grade. The remaining 65 holes were drilled within and below the main envelope of known mineralization, and included 4 holes drilled from on top of the frozen lake in winter.

Southwest zone drilling consisted of 13,767.25 m in 28 holes. Historical drilling in the areas was focused on the western side of the zone as loosely spaced 60 m × 100 m grid. No twin holes were conducted in the Southwest zone. The GSHR campaign comprised 4 irregularly spaced initial exploration holes, 14 holes on a 80 m × 30 m grid on the eastern portion of the zone and 8 holes in a 80 m × 60 m grid on the western portion.

QES drilling consisted of 16,413.65 m in 25 holes. Historic drilling in the area provides a grid of 60 m × 60 m coverage above the 250RL but is significantly coarser below this level. Of the current GSHR campaign 1 hole was a direct twin of historic DDH, drilled in HQ with the purpose of verifying the validity of the historic work, and assessing the potential impact on grade of increased sample size. The remaining 24 holes were drilled within and below the historically defined zone of mineralization.

All core was sampled, and all results have been received.

Table 10.5: 2021, 2022 and 2023 drill hole collar summary – Moss Block

Hole number	End Depth (m)	Azimuth	Dip	Core Size	Survey	East	North	Elevation	Samples (m)
MMD-21-001	653	155	-43.9	HQ	DGPS	668736	5379143	431	635
MMD-21-002	978	156	-63.3	HQ	DGPS	668737	5379142	431	958
MMD-21-003	660.6	155	-46.0	HQ	DGPS	668854	5379121	434	659
MMD-21-004	831	154	-64.3	HQ	DGPS	668853	5379122	433	830
MMD-21-005	480.2	154	-49.1	HQ	DGPS	668928	5379142	430	455
MMD-21-006	535.75	155	-50.4	HQ	DGPS	668659	5379089	428	510
MMD-21-007	810	158	-62.4	NQ	DGPS	668928	5379142	430	789
MMD-21-008	588	154	-54.1	NQ	DGPS	668948	5379326	438	580
MMD-21-010	501	133	-49.4	NQ	DGPS	668401	5378841	430	490
MMD-22-011	840	154	-64.7	NQ	DGPS	668659	5379089	428	824
MMD-22-012	102	135	-45.0	NQ	DGPS	668456	5378936	429	89
MMD-22-012A	497	134	-45.8	NQ	DGPS	668456	5378935	429	485
MMD-22-013	513	156	-45.0	NQ	DGPS	669016	5379175	427	483
MMD-22-015	551.95	156	-44.9	NQ	DGPS	669126	5379245	426	521
MMD-22-016	245	332	-52.6	NQ	DGPS	668883	5378964	426	197

**Commented [NG55]:** Is the drilling meterage correct? In 2022, the meterage: Moss Lake Main drilling consisted of 44,989 m (81 drillholes). It is less in the 2023 document provided for Section 10.



Hole number	End Depth (m)	Azimuth	Dip	Core Size	Survey	East	North	Elevation	Samples (m)
MMD-22-017	130	340	-52.4	NQ	DGPS	668974	5379001	426	82
MMD-22-018	749	155	-60.0	NQ	DGPS	668582	5378994	427	724
MMD-22-020	251	336	-54.2	NQ	DGPS	669074	5378904	426	214
MMD-22-021	251	333	-58.0	NQ	DGPS	668986	5378864	426	200
MMD-22-022	644	136	-50.2	NQ	DGPS	668365	5378754	433	624
MMD-22-023	643.8	134	-50.6	NQ	DGPS	668319	5378665	431	636
MMD-22-024	611	147	-61.7	NQ	DGPS	669411	5379551	427	584
MMD-22-025	542	136	-51.9	NQ	DGPS	668207	5378600	449	537
MMD-22-026	677	158	-45.8	NQ	DGPS	669411	5379551	427	630
MMD-22-027	494	149	-51.9	NQ	DGPS	668469	5378288	436	490
MMD-22-028	819	153	-69.0	NQ	DGPS	668950	5379328	438	815
MMD-22-029	620	155	-45.7	NQ	DGPS	669349	5379505	427	577
MMD-22-030	661.95	156	-59.2	NQ	DGPS	669092	5379372	428	657
MMD-22-031	521	119	-49.3	NQ	DGPS	668469	5378288	436	513
MMD-22-032	862	155	-61.4	NQ	DGPS	668669	5379157	431	793
MMD-22-033	675.25	152	-61.9	NQ	DGPS	669348	5379506	427	653
MMD-22-034	236.9	155	-55.8	NQ	DGPS	668868	5379279	441	232
MMD-22-035	623.05	150	-50.9	NQ	DGPS	668416	5378382	441	616
MMD-22-036	690	154	-71.3	NQ	DGPS	668868	5379279	441	684
MMD-22-037	654	154	-59.4	NQ	DGPS	668587	5379078	430	642
MMD-22-038	602	154	-58.9	NQ	DGPS	669160	5379417	428	598
MMD-22-039	605	155	-60.0	NQ	DGPS	669256	5379456	429	598
MMD-22-040	609	153	-69.7	NQ	DGPS	668790	5379260	438	606
MMD-22-041	606	154	-60.7	NQ	DGPS	668784	5379185	436	604
MMD-22-042	516	158	-50.2	NQ	DGPS	668520	5378529	436	511
MMD-22-043	22	155	-55.0	NQ	DGPS	668791	5379259	438	21
MMD-22-044	623	156	-45.1	NQ	DGPS	669256	5379456	429	615
MMD-22-045	717	165	-54.4	NQ	DGPS	668821	5379281	438	709
MMD-22-046	609.1	156	-61.2	NQ	DGPS	668864	5379215	433	601
MMD-22-047	602.05	153	-47.3	NQ	DGPS	669160	5379418	428	594
MMD-22-048	690	155	-52.3	NQ	DGPS	668705	5379209	435	663
MMD-22-049	666.05	155	-60.2	NQ	DGPS	668953	5379245	428	657
MMD-22-050	464	110	-50.1	NQ	DGPS	668517	5378529	437	459
MMD-22-051	293	154	-45.3	NQ	DGPS	668704	5379104	434	266
MMD-22-052	597.3	155	-60.3	NQ	DGPS	668994	5379542	438	596
MMD-22-053	605.85	154	-61.3	NQ	DGPS	669014	5379307	427	590
MMD-22-054	576	150	-70.4	NQ	DGPS	668705	5379209	435	553
MMD-22-055	618	154	-59.3	NQ	DGPS	668721	5379279	443	608
MMD-22-056	600	151	-61.3	NQ	DGPS	668801	5379340	438	589
MMD-22-057	603	154	-70.0	NQ	DGPS	668887	5379368	437	596
MMD-22-058	645	153	-60.1	NQ	DGPS	668743	5379407	454	643



Hole number	End Depth (m)	Azimuth	Dip	Core Size	Survey	East	North	Elevation	Samples (m)
MMD-22-059	648	154	-50.5	NQ	DGPS	668819	5379436	439	636
MMD-22-060	600.05	155	-60.1	NQ	DGPS	668909	5379474	436	588
MMD-22-061	600	155	-60.1	NQ	DGPS	669091	5379558	448	598
MMD-22-063	563	148	-50.5	NQ	DGPS	668481	5378460	439	551
MMD-22-064	407.15	109	-50.8	NQ	DGPS	668481	5378460	439	403
MMD-22-065	485	269	-44.9	NQ	DGPS	668367	5378762	433	467
MMD-22-066	654.3	290	-50.1	NQ	DGPS	669077	5378242	432	653
MMD-22-067	503.05	315	-45.0	NQ	DGPS	668497	5379163	451	498
MMD-22-068	699.1	154	-60.1	NQ	DGPS	669177	5379614	455	698
MMD-22-069	600	151	-58.8	NQ	DGPS	669254	5379629	445	597
MMD-22-071	648	335	-50.8	NQ	DGPS	669077	5378242	432	646
MMD-22-073	660.15	336	-50.3	NQ	DGPS	669157	5378291	429	650
MMD-22-074	660.85	335	-51.2	NQ	DGPS	669241	5378339	430	647
MMD-22-077	12	335	-60.0	NQ	DGPS	669659	5379054	432	8
MMD-22-078	603	337	-49.6	NQ	DGPS	669659	5379055	432	598
MMD-22-079	333	336	-49.7	NQ	DGPS	669573	5379011	437	325
MMD-22-081	375	334	-48.3	NQ	DGPS	669469	5378982	428	369
MMD-22-082	347.85	335	-45.7	NQ	DGPS	669248	5378768	437	342
MMD-22-084	414.15	337	-45.4	NQ	DGPS	668973	5378574	428	412
MMD-22-086	600	290	-50.7	NQ	DGPS	668968	5378559	428	591
MMD-22-088	498	336	45.3	NQ	DGPS	669031	5378642	431	494
MMD-22-089	497.9	314	-51.4	NQ	DGPS	668972	5378560	428	488
MMD-22-091	494.3	332	-49.3	NQ	DGPS	669172	5378762	431	490
MMD-22-093	651	289	-49.9	NQ	DGPS	669018	5378463	430	649
MMD-22-095	420	345	-45.4	NQ	DGPS	669090	5378690	428	409
MMD-22-105	249	110	-40.6	HQ	DGPS	668498	5378484	438	243
MMD-22-106	450	126	50.4	NQ	DGPS	668438	5378379	440	447
MMD-22-107	450	127	-50.1	NQ	DGPS	668208	5378030	442	445
MMD-22-108	450	125	-49.8	NQ	DGPS	668524	5378519	437	448
MMD-22-109	501	125	-50.9	NQ	DGPS	668466	5378591	427	490
MMD-22-110	402	126	-50.2	NQ	DGPS	668166	5378056	448	401
MMD-22-111	552	143	-49.7	NQ	DGPS	668147	5378114	445	551
MMD-23-112	600	125	-50.2	NQ	DGPS	668172	5378186	443	593
MMD-23-113	450	126	-49.5	NQ	DGPS	668494	5378469	438	449
MMD-23-114	402	123	-44.0	NQ	DGPS	668533	5378424	428	394
MMD-23-115	324	125	-44.8	NQ	DGPS	668388	5378145	429	313
MMD-23-116	525	124	-49.2	NQ	DGPS	668387	5378392	446	524
MMD-23-117	450	124	-49.3	NQ	DGPS	668334	5378203	435	443
MMD-23-118A	552	126	-54.2	NQ	DGPS	668375	5378401	444	549
MMD-23-119	525	126	-49.9	NQ	DGPS	668277	5378239	447	514
MMD-23-120	450	125	-49.5	NQ	GPS	668255	5378123	436	439



Hole number	End Depth (m)	Azimuth	Dip	Core Size	Survey	East	North	Elevation	Samples (m)
MQD-21-009	1008.1	335	-46.7	NQ	DGPS	670216	5379509	428	956
MQD-22-014	686	335	-48.4	NQ	DGPS	670104	5379469	428	647
MQD-22-019	751	334	-46.2	NQ	DGPS	670016	5379422	428	721
MQD-22-062	651.1	335	-50.0	NQ	DGPS	669803	5378938	429	625
MQD-22-070	651.1	333	-48.9	NQ	DGPS	670122	5379148	433	645
MQD-22-072	651.1	336	-50.3	NQ	DGPS	670206	5379205	441	647
MQD-22-075	675.1	336	-47.4	NQ	DGPS	670308	5379250	443	673
MQD-22-076	651	338	-47.2	NQ	DGPS	670379	5379296	442	649
MQD-22-080	675.05	335	-50.1	NQ	DGPS	670462	5379398	450	670
MQD-22-083	630.1	156	-50.0	NQ	DGPS	670667	5379431	433	626
MQD-22-085	675	336	-48.9	NQ	DGPS	670636	5379537	441	671
MQD-22-087	675	336	-49.1	NQ	DGPS	670546	5379463	449	672
MQD-22-090	117	355	-50.0	NQ	DGPS	670654	5379625	429	110
MQD-22-090A	606	346	-60.0	NQ	DGPS	670654	5379625	429	601
MQD-22-092	734.9	337	-50.0	NQ	DGPS	670059	5379068	439	731
MQD-22-094	750	337	-49.5	NQ	DGPS	669984	5379010	441	748
MQD-22-096	651	336	-50.4	NQ	DGPS	669733	5379076	433	641
MQD-22-097	750	335	-50.4	NQ	DGPS	669894	5378952	446	748
MQD-22-098	651.1	337	-49.3	NQ	DGPS	669829	5379161	431	646
MQD-22-099	750	336	-50.3	NQ	DGPS	670664	5379431	433	746
MQD-22-100	525	335	-54.9	NQ	DGPS	670477	5379624	428	513
MQD-22-101	750	337	-50.6	NQ	DGPS	670606	5379384	441	748
MQD-22-102	396	336	-45.1	NQ	DGPS	670398	5379573	428	391
MQD-22-103	552	336	-50.2	NQ	DGPS	670162	5379469	428	514
MQD-22-104	801	339	-50.4	NQ	DGPS	670528	5379315	441	799
<b>Total</b>	<b>68,732</b>								<b>67,268</b>

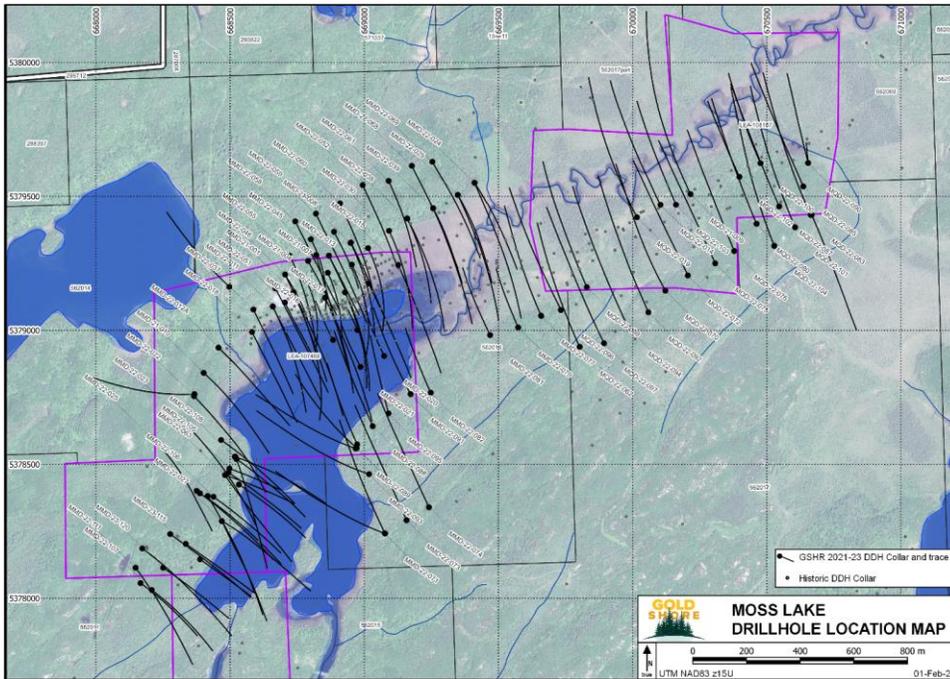


Figure 10.2: 2021, 2022 and 2023 drill hole locations – Moss Block

### 10.2.2 Coldstream Block

Between May and July 2022, 9,924.75 m (22 drill holes) of drilling was completed within the Coldstream Block of the Project targeting the East Coldstream and North Coldstream targets (Table 10.6 and Figure 10.3). Drill holes were designed to verify historical drilling data and expand areas of known gold mineralization. All drill hole collars were either surveyed using differential GPS survey equipment or handheld GPS and are reported in UTM NAD83 Zone 16 coordinate system.

North Coldstream drilling consisted of 1,951 m (six drill holes) and had the dual purpose of testing the potential for cobalt and gold mineralization within, and at the periphery of the historical North Coldstream mine. All core has been sampled, and all results have been received.

East Coldstream drilling consisted of 7,957.75 m (16 drill holes) designed to verify the historical drilling data, and test for extensions to the mineralized body both along strike and down dip. All core has been sampled by Goldshore and all results have been received.



Table 10.6: 2022 drill hole collar summary – Coldstream Block

Hole number	End Depth (m)	Azimuth	Dip	Size	Survey	East	North	Elevation	Samples (m)
CED-22-001	483	337	- 50.5	NQ	DGPS	681114	5386561	477	481
CED-22-002	494.85	335	- 49.8	NQ	DGPS	681432	5386626	484	494
CED-22-003	360	336	- 50.0	NQ	DGPS	680510	5386471	481	359
CED-22-004	302.8	155	- 59.9	NQ	DGPS	680012	5386428	476	300
CED-22-005	810.1	342	- 60.4	NQ	DGPS	680563	5386330	484	809
CED-22-006	600	140	60.0	NQ	DGPS	680015	5386586	476	599
CED-22-007	657.05	138	- 58.8	NQ	DGPS	680088	5386592	474	656
CED-22-008	603	340	- 50.0	NQ	DGPS	680563	5386330	484	579
CED-22-009	599.95	340	50.0	NQ	DGPS	680767	5386281	484	598
CED-22-010	315	161	- 52.7	NQ	GPS	679898	5386424	475	313
CED-22-011	642	155	- 56.8	NQ	GPS	679945	5386526	475	641
CED-22-012	600	180	- 50.0	NQ	GPS	679945	5386526	475	599
CED-22-013	300	340	- 50.0	NQ	DGPS	680560	5386569	485	298
CED-22-014	450	340	- 65.0	HQ	DGPS	680561	5386569	485	449
CED-22-015	300	340	- 50.1	NQ	DGPS	680598	5386576	486	297
CED-22-017	456	341	- 49.1	NQ	DGPS	680641	5386434	478	451
CND-22-001	257.9	1	- 59.8	NQ	DGPS	678042	5385960	460	256
CND-22-002	390.15	3	- 59.4	NQ	DGPS	678325	5385898	470	387
CND-22-003	549.25	2	- 59.8	NQ	DGPS	678405	5385881	477	548
CND-22-004	397.58	185	- 49.8	NQ	DGPS	678079	5386088	459	396
CND-22-005	56	180	- 49.5	NQ	DGPS	678059	5385971	460	54
CND-22-006	300.2	180	- 55.0	NQ	DGPS	678060	5385953	461	298
<b>Total</b>	<b>9,925</b>								<b>9,862</b>

Note: Collar coordinates in UTM NAD83 Zone 16. All holes surveyed using differential GPS.

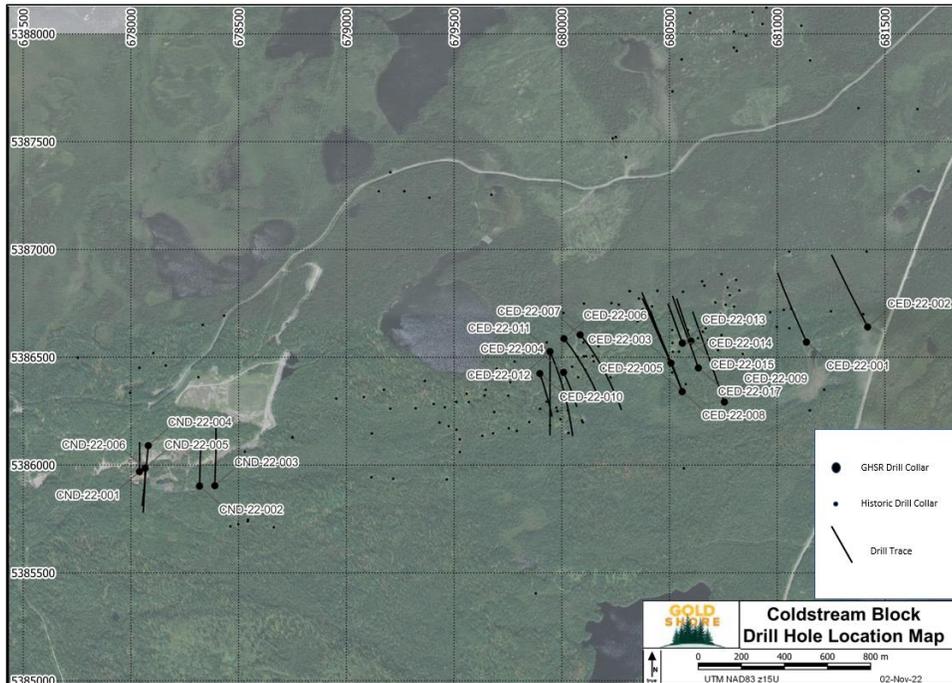


Figure 10.3: 2022 drill hole locations – Coldstream Block

### 10.2.3 Drill hole Planning and Procedures

All drill holes were planned by a Goldshore geologist and assigned an alpha-numeric abbreviation defining the area, year, and sequential hole number.

Drill pads were spotted in the field by Goldshore personnel, marked with a collar stake, fore sight and back sight, and approved with the drilling foreman. Drilling rigs were aligned at the specified azimuth and dip by the drilling contractor using a Reflex, or equivalent, DGPS based APS or TN-14.

Drill core was oriented at the drill using a Reflex Act III orientation tool with the bottom mark indicated at the end of the core run by a red wax crayon line. The drill core was then sealed in a core box and transported by the drilling contractor to a specified location to be picked up by Goldshore personnel and transported to the core shack.

Upon completion of the drill hole, a downhole survey was conducted using a Reflex Sprint IQ tool with measurements taken every 3 m or 5 m. The survey data was collected by a Goldshore geologist directly from the survey tablet.

Upon completion of the hole, casing was left in the hole, the hole marked with numbered cap, and the site inspected by Goldshore personnel. The drill hole collars were later surveyed by an accredited surveying contractor using a differential GPS.



#### **10.2.4 Core Logging and Sampling Procedures**

Cores were unpacked at the core shack, meterage checked and reconciled, and 1 m marks written onto the cores using a marker. Cores were oriented and orientation lines marked on the bottom of the core in wax crayon using a three-tiered orientation quality assignment. Rock quality designation, recovery, and geological data were collected. Bulk density data was collected every 20 m, with an oven used to dry samples, and then sealed with wax.

All cores were sampled with sample intervals marked onto the cores in wax crayon, and sample tags inserted at the beginning of each sample interval. All cores were cut using Husqvarna core saws, with cuts made 5 mm below the orientation mark, and the piece of core with the orientation mark retained in the core box. QAQC materials such as certified reference materials (CRM), blanks, and duplicates were inserted into the sample stream by Goldshore geologists and is discussed further in Section 11 (Sample Preparation, Analyses and Security) of this Report.

The Qualified Person authors are not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the Goldshore drilling results up to the effective date of this Report and used in the current MRE for the Project.



## 11 Sample Preparation, Analyses and Security

### 11.1 Sample Preparation and Analysis

#### 11.1.1 Moss Claim Block

While historical drilling programs have been carried out on the Moss claim block, few details are available from publicly available sources regarding the sample preparation and analysis procedures and practices followed for any historical drilling programs. Similarly, little information is available regarding the sample preparation and analysis procedures and practices carried out in relation to any historical geological mapping activities or any historical geochemical sampling programs. Table 11.1 details the laboratory and analytical methods used by each program where available. Select historical programs are highlighted below in greater detail.

Table 11.1: Detailed breakdown of available laboratory and analytical method utilized for each drilling program in the Moss Block

Year	Company	Area	Laboratory	Analysis
1976	Falconbridge	Snodgrass	Unknown	-
1983	Storimin	Snodgrass	Assayers Limited	AA/FA
1985	Inco	Span	C.C. Exploration Geochem Lab	AA/FA
1986	Storimin	Snodgrass	Bell-White Analytical Laboratories Ltd	AA/FA
1987	TML	QES/Fountain	Technical Service Laboratories	AA/FA
	Storimin	Snodgrass	Bell-White Analytical Laboratories Ltd	AA/FA
	Inco	Span	C.C. Exploration Geochem Lab	AA/FA
1988	TML	QES/Fountain	Technical Service Laboratories	AA/FA
	Storimin	Snodgrass	Bell-White Analytical Laboratories Ltd	AA/FA
	Inco	Span	C.C. Exploration Geochem Lab	AA/FA
1989	Storimin	Snodgrass UG	C.C. Exploration Geochem Lab	AA/FA
1989	Storimin	Snodgrass/QES	Warnock Hersey Laboratories	AA/FA
1989	Inco	Span	C.C. Exploration Geochem Lab	AA/FA
1990	Noranda	Snodgrass/QES	Warnock Hersey Laboratories	AA/FA
1992	Noranda	QES	Warnock Hersey Laboratories	AA/FA
1993	Akiko Gold	Moss Nose	Accurassay	AA/FA
1996	Moss Lake Gold Mines	Snodgrass/QES	Accurassay	-
1999	Landis Mining	Boundary	Accurassay	AA/FA
2002	Moss Lake Gold Mines	Snodgrass	Accurassay	AA/FA
2003	Moss Lake Gold Mines	Snodgrass	Accurassay	AA/FA
2005	East West Resources	Pearce	Accurassay	AA/FA
2004	Pele Mnt Resources	Pearce	Accurassay	AA/FA
2004	Moss Lake Gold Mines	Snodgrass	Accurassay	AA/FA
2008	Moss Lake Gold Mines	Snodgrass	Accurassay	AA/FA
2010	Foundation resources	Span	ALS	ICP/FA & 4A/ME
2011	Foundation resources	Span	ALS	ICP/FA & 4A/ME
2017	Moss Lake Gold Mines	Snodgrass/Span	ALS	ICP/FA & 4A/ME



#### 11.1.1.1 1986 to 1989 Drilling Program – Tandem-Storimin

Few records exist detailing the sampling and analytical methods conducted by Tandem-Storimin. Evaluation of available records and historical core suggest that all core was logged and sampled through use of mechanical splitting. Sample interval placement was largely performed without regards to the logged information, frequently sampling across recorded lithological and mineralization boundaries. All samples were sent to an onsite laboratory. It is not stated what if any QAQC protocols were in place during sample collection or sample analysis.

#### 11.1.1.2 1990 to 1991 Drilling Program – Noranda

Few records exist detailing the sampling and analytical methods conducted by Noranda. Evaluation of the limited available records and historical core suggest that all core was logged and sampled through use of mechanical splitting. Sample interval placement was largely performed without regards to the logged information, frequently sampling across recorded lithological and mineralization boundaries. All samples were sent to an onsite laboratory. It is not stated what if any QAQC protocols were in place during sample collection or sample analysis. Minor resampling of the historical and current core was conducted to locally validate analytical results. It was recorded that check assays of the 1986–1989 drilling were sent off to a third-party laboratory to validate the results and to explore alternative assaying methods and a two-hole twinning program was conducted to verify the earlier results from Tandem-Storimin and to test the comparison of NQ vs BQ core. A summary of these results from Central Crude concluded that the reanalysis of the Tandem-Storimin results show no overall improvement in grade.

#### 11.1.1.3 2017 Drilling Program – Moss Lake Gold Mines (Wesdome)

All samples (except those rush samples sent to Wawa as described below) were sent to an ALS preparation laboratory in Thunder Bay, Ontario. These were crushed to 70% passing a 2 mm sieve and pulverized to a further 85% passing 75 µm sieve. The pulps were sent to ALS Minerals in North Vancouver, British Columbia for gold and multi-element analysis. ALS Minerals is independent of Wesdome. All samples underwent a fire assay with inductively coupled plasma-atomic emission spectroscopy (ICP-AES) finish (ALS code Au-ICP21) and multi-element analysis by aqua regia digestion and inductively coupled plasma-mass spectrometry (ICP-MS) finish. Those samples that returned gold values greater than 3.0 g/t were subject to fire assay and atomic absorption finish (ALS code Au-AA23), and samples that returned gold values greater than 10.0 g/t were subject to re-assay by fire assay with gravimetric finish (ALS code Au-GRA21). Results from ALS Minerals were often delayed by a three-week turnaround period. The dynamic drill program often required results much faster than this to prioritize targets. In such cases, samples were sent to Wesdome's internal laboratory (Wawa Lab) in Wawa, Ontario for analysis by fire assay with gravimetric finish. Turnaround times at this laboratory were in the order of one or two days, however, the laboratory was not accredited. Therefore, pulps from one in 20 samples were sent to ALS Minerals in North Vancouver, British Columbia for an external gold check by the methods described above.

No check assays were performed by a second laboratory.

A total of 1,054 diabase blanks sourced from an outcrop near the Terry Fox Monument on Highway 11/17 were submitted at a rate of one blank per 20 samples. Of the 1,054 blanks, 146 were sent to Wawa Lab and the remaining 908 were analyzed at ALS Minerals. Of the 146 samples sent to Wawa, 145 samples returned gold values below 0.01 g/t Au. Of the 908 samples sent to ALS Minerals, 901 returned gold values below 0.01 g/t Au. A total of 1,051 standards submitted were from CDN. Standards were sent to the two different laboratories (ALS Minerals and Wawa Lab). Standards sent to ALS Minerals generally passed at a higher rate than those sent to Wawa Lab, although sample population was much larger for ALS Minerals. Primary



standards used in the Moss drilling were CDN-GS-1P5P and CDN-GS-P4F. Of the 414 samples of CDNGS-1P5P sent to ALS Minerals, 374 passed within the reported error range, or approximately a 90% pass rate. The standards analyzed at Wawa Lab returned 53 of 75 samples within the acceptance range, or approximately a 71% pass rate. Of 436 samples of CDN-GS-P4F sent to ALS Minerals, 312 passed, or a rate of 72%. Only 19 of 73 samples of CDN-GS-P4F fall within the range of error at Wawa Lab (approximately 26%). A total of 1,045 sample pulps were re-analyzed at ALS Minerals and a further 156 pulps were re-analyzed internally at Wawa Lab. Both sets of internal duplicates (ALS Minerals and Wawa Lab) correlate well with the original data. R2 values were 0.9973 and 0.9868 respectively. External duplicates were also completed for the holes originally sent only to Wawa Lab for the reasons discussed above. Drill holes MLS-17-09, MLS-17-10, MLS-17-16, MLS-17-18 and MLS-17-20 were originally assayed at Wawa Lab, so 149 pulps were sent to an external laboratory (ALS Minerals) for testing.

#### 11.1.1.4 2021 and 2022 Drilling Program – Goldshore

##### *Sampling Procedures*

All drill core was transported to the Goldshore core logging facility in Kashabowie Ontario for geological review and sampling. The logging personnel identified the core to sample and marked the limits of the sample directly on the core with a grease pen. The sample lengths are greater than 0.3 m and less than 2.0 m. All samples are assigned a unique sample number and should account for the insertion of quality control samples in the sample number sequence. The sample numbers for the quality control samples are integrated with the core samples and therefore are unique and in-sequence. For reference material samples, the logging personnel will insert the reference material according to the planned insertion rate. The logging personnel will select the type of reference material to use based on the expected grade of neighboring samples and the need to rotate reference material sample type. All CRMs were sourced through ORE Research and Exploration of Australia (OREAS) with CRMs OREAS 230, OREAS 233 and OREAS 240 in use during the 2021 and 2022 drilling program. Any labels on the reference material packaging are erased before the reference material is put in a sample bag.

For blank samples, the logging personnel inserts the blank according to the planned insertion rate or directly following a mineralized zone. The logging personnel put 0.5–1.2 kg of certified blank material sourced through OREAS into a sample bag labelled with the sample number. One sample tag marked with “blank” will be stapled with the tag of the previous core sample. For field duplicates (also known as quarter-core duplicates in this Report), the logging personnel will insert the quarter-core duplicate according to the planned insertion rate. Mark on the sample tag that would remain in the box as a quarter-core duplicate to inform of the core cutters that they will need to further split one half of the core into two. The quarter core will be sent to the laboratory in addition to the primary half-core sample. This labelled sample tag should be stapled with the tag of the primary sample. Do not indicate it is quarter core duplicate on the sample tag that will be sent to the laboratory.

No check assays were performed by a second laboratory.

##### *Core Cutting*

Drill core cutting was primarily performed at Goldshore’s Kashabowie core logging facility with overflow core cutting being sent to DP Blades in Thunder Bay, Ontario. Both facilities operated under the same procedures as outlined below. Core technicians cut the core in half, approximately 2 cm clockwise (when looking down the hole) from the orientation line. The right-hand side of the core (when looking down the hole), goes into the labeled sample bag and the bag is sealed. The left-hand side of the core is returned to the core box in the original position and orientation. For quarter-core duplicates, further halve the core that remains in the core



box and place the right-hand side of the quarter core (when looking down the hole) into the labelled quarter-core duplicate sample bag and sealed the bag. Return the left-hand side quarter core to the core box in the original position.

#### Laboratory Sample Preparation

Drill core is prepared at ALS Thunder Bay as outlined in the certificate of analysis (COA) and ALS's 2022 Schedule of Services and Fees: Geochemistry (Table 11.2). Samples were delivered to the ALS Minerals Thunder Bay preparation laboratory where they were crushed to 70% passing a 2 mm sieve and a 1 kg riffle split sample was pulverized to a further 85% passing 75 µm sieve. The pulps were sent to ALS Minerals in North Vancouver, British Columbia, for gold and multi-element analysis.

Table 11.2: List of sample preparation procedures conducted by ALS

Laboratory code	Description
LOG-21	Samples received with barcode labels attached to sample bag
LOG-23	Pulp received with barcode labels attached to sample bag
WEI-21	Weigh received sample
CRU-31	Fine crushing of rock chip and drill samples to 70% passing 2 mm
SPL-21	Split sample using a riffle splitter
PUL-32	Pulverize a 1,000 g split to 85% passing 75 µm

#### 11.1.1.5 Laboratory Assay Procedures

The sample pulp is analyzed at ALS Vancouver as outlined in the COA and ALS's 2022 Schedule of Services and Fees: Geochemistry (Table 11.3). All samples underwent a fire assay and atomic absorption finish (ALS code Au-AA23) and multi-element analysis by four-acid digestion and ICP-MS finish. Samples that returned gold values greater than 10.0 g/t were subject to re-assay by fire assay with gravimetric finish (ALS code Au-GRA21).

Table 11.3: List of analytical procedure conducted by ALS

Laboratory code	Analyte	Detection limit	Description
Au-AA23	Gold	0.005–10 ppm	Fire assay and AAS – 30 g sample
Au-GRA21	Gold	0.05–10,000 ppm	Fire assay and gravimetric finish – 30 g sample
ME-MS61	Multi-element*	Ag: 0.01–100 ppm	Four acid digestion with ICP-MS finish – 0.25 g sample
		Cu: 0.2–10,000 ppm	
		Mo: 0.05–10,000 ppm	
ME-OG62	Multi-element*	Ag: 1–1,500 ppm	Four acid overlimit methods for multi-elements – 0.4 g sample
		Cu: 0.001–50%	
		Mo: 0.001–10%	
Zn-OG62	Zinc	0.001–30%	Four acid overlimit method – 0.4 g sample

\*Out of the 48 elements analysis only silver, copper and molybdenum are reviewed for pass/fail of reference materials.

#### 11.1.2 Coldstream Claim Block

While historical drilling programs have been carried out on the Coldstream claim block, other than the drilling completed in 2010, 2011 and 2017, few details are available from publicly available sources regarding the sample preparation and analysis procedures and practices followed for any drilling completed prior to 2010. Similarly, little information is available regarding the sample preparation and analysis procedures and practices carried out in relation to any historical geological mapping activities or any historical geochemical



sampling programs. Table 11.4 details the laboratory and analytical methods used by each program where available. Select historical programs are highlighted below in greater detail.

*Table 11.4: Detailed breakdown of available laboratory and analytical method utilized for each drilling program in the Coldstream Block*

Year	Company	Area	Laboratory	Analysis
1942	Frobisher	NCS	-	-
1946	CS Copper Mines	NCS	-	-
1948	CS Copper Mines	NCS	-	-
1951	CS Copper Mines	NCS	-	-
1952	CS Copper Mines	NCS	-	-
1953	CS Copper Mines	NCS	-	-
1953	Moneta Porcupine	NCS	-	-
1954	CS Copper Mines	NCS	-	-
1955	CS Copper Mines	NCS	-	-
1955	CS Copper Mines	ECS	-	-
1956	CS Copper Mines	NCS	-	-
1956	Riocanex	Iris	-	-
1956	Burchell Lake Mines	Broadhurst	-	-
1957	CS Copper Mines	NCS	-	-
1957	Arcadia Nickel Corp	Burchell, Quetico	-	-
1957	Iris	NJL Uranium Mines	-	-
1958	CS Copper Mines	NCS	-	-
1959	CS Copper Mines	NCS	-	-
1960	CS Copper Mines	NCS	-	-
1960	CS Copper Mines	NCS	-	-
1961	CS Copper Mines	NCS	-	-
1962	CS Copper Mines	NCS	-	-
1962	CS Copper Mines	NCS	-	-
1963	CS Copper Mines	NCS	-	-
1963	CS Copper Mines	NCS	-	-
1964	CS Copper Mines	NCS	-	-
1966	CS Copper Mines	NCS	-	-
1965	CS Copper Mines	NCS	-	-
1966	NC Mines	Burchell	-	-
1988	Noranda	ECS	-	-
1988	Todd Sanders	Burchell	-	-
1988	Todd Sanders	Burchell	-	-
1989	Noranda	ECS	-	-
1989	Todd Sanders	Burchell/ECS	-	-
1990	Lacana	Crayfish	-	-
1990	Noranda	ECS	-	-
1990	Freeport McMoran	Crayfish	-	-
1991	Noranda	ECS	-	-



Year	Company	Area	Laboratory	Analysis
1997	Todd Sanders	NCS	Accurassay	-
2002	Kinross	ECS	-	-
2005	Can Golden Dragon	Vanguard	-	-
2006	Alto Ventures	ECS	Accurassay	FA
2007	Trillium North	Iris	ALS	-
2010	Foundation Resources	ECS	ALS	ICP/FA & 4A/ME
2011	Foundation Resources	Goldie	ALS	ICP/FA & 4A/ME
2011	Foundation Resources	ECS	ALS	ICP/FA & 4A/ME
2011	Foundation Resources	Iris	ALS	ICP/FA & 4A/ME
2016	Wesdome Gold Mines	ECS	ALS	ICP/FA & 4A/ME
2017	Wesdome Gold Mines	ECS	ALS	ICP/FA & 4A/ME

#### 11.1.2.1 2010 and 2011 Drilling Programs – Foundation and Alto

Drill core from the 2010 and 2011 historical drilling programs carried out by Foundation and Alto on the Coldstream claim block was sampled by cutting the core into two equal halves using a stationary rock saw at the field camp in Kashabowie, Ontario. One half of the core was placed in a sample bag with the corresponding numbered sample tag, while the other half was retained in the core box for future reference. Samples were submitted directly to the ALS Laboratory in Thunder Bay, Ontario by employees of Coast Mountain. Multi-element ICP analysis was carried out on all samples using four-acid near total digestion with ICP-AES determination for 33 elements. Fire assay for gold was completed with an ICP-AES finish. Any samples exceeding the upper detection limit of 10 ppm Au were re-analyzed by fire assay with a gravimetric finish. Core was stored at the residence of Joe Hackl. At the end of the drill programs, all core remained at the Hackl residence for the long-term storage (Tetratex, 2011). As of 2011, ALS Chemex laboratories in North America were registered to ISO 9001:2000 for the “provision of assay and geochemical analytical services” by QMI Management Systems Registrars. In addition to ISO 9001:2000 registration, ALS Chemex is accredited to ISO 17025. ALS Chemex is independent of Foundation and Alto.

A QAQC program was put in place for the sampling and analysis of the drill core from the 2010 and 2011 drilling programs carried out on the Coldstream claim block. Sampling intervals were determined by changes in lithology, mineralization, and alteration. Sample length typically varied between 1.0 m and 2.0 m, with samples up to 3 m, and as short as 0.5 m used sparingly. The QAQC program for the winter 2010 drilling program included the insertion of one standard, one blank, one coarse reject duplicate, and one pulp duplicate in each batch of 20 samples. The QAQC programs for the summer 2010 and winter 2011 drilling programs included the insertion of one standard and one blank in each batch of 20 samples. One coarse reject duplicate and one pulp duplicate were inserted in each batch of 40 samples. CRMs (standards) were randomly inserted within each batch of 20 samples. The standards comprised sachets of 100 g. Between four and ten standards were employed, with gold values ranging between 0.29 g/t and 4.75 g/t. The standards were sourced from WCM Minerals, of Burnaby, British Columbia. The standards used were PM 197, PM 404, PM 410, PM 427, PM 428, PM 431, PM 434, PM 438, PM 439, PM 441, and PM 443. Coarse duplicate samples are best selected from within mineralized zones. The sample material for coarse reject duplicates comprised preparing a second pulp from the coarse reject. This was done after crushing of entire drill core sample to better than 90% -2 mm. For most samples at this stage, a 250 g split from the coarse reject was selected for preparation of the pulp sample. This sample was assigned a separate sample number and assayed in a separate batch (fire assay + ICP). Pulp duplicates comprised a second 30 g sample split-off from the 250 g pulp for fire assay. The sample was assigned a separate sample number and was fire assayed in a separate



batch (different furnace load). Blank samples were inserted before, within, or immediately after a mineralized zone. The blanks comprised 750 g of white marble. Five percent of the pulps from the 2010 winter drill program were submitted to the Acme Analytical Labs Ltd (Acme) for check assays. These pulps were selected randomly from results over 0.15 g/t Au.

#### 11.1.2.2 2017 Drilling Program – Gold Mines (Wesdome)

All samples were sent to an ALS preparation laboratory in Thunder Bay, Ontario (Forslund and Laarman, 2017a). These were crushed to 70% passing a 2 mm sieve and pulverized to a further 85% passing 75 µm sieve. The pulps were sent to ALS Minerals in North Vancouver, British Columbia for gold and multielement analysis. All samples underwent a fire assay with ICP-AES finish (ALS code Au-ICP21) and multielement analysis by aqua regia digestion and ICP-MS finish. Those samples that returned gold values greater than 3.0 g/t were subject to fire assay and atomic absorption finish (ALS code Au-AA23), and samples that returned gold values greater than 10.0 g/t were subject to re-assay by fire assay with gravimetric finish (ALS code Au-GRA21). ALS Minerals is independent of Moss Lake Gold Mines.

A total of 340 diabase blanks sourced from an outcrop near the Terry Fox Monument on Highway 11/17 were submitted at a rate of one blank per 20 samples (Forslund and Laarman, 2017a). A total of 340 standards submitted were from CDN Resource Laboratories Ltd (CDN). Standards were sent to ALS Minerals as part of the regular sample stream. Primary standards used in the Coldstream drilling were CDN-CM-26 and CDN-CM-39. Of 197 samples of CDN-CM-26, 182 (92%) passed within the reported error range for gold and 194 (98%) passed within the reported error range for copper. Of 129 samples of CDN-CM-39, 113 (88%) passed within the reported error range for gold and 101 (78%) passed within the reported error range for copper.

#### 11.1.2.3 2022 Drilling Program – Goldshore

##### Sampling Procedures

All drill core was transported to the Goldshore core logging facility in Kashabowie Ontario for geological review and sampling. The logging personnel identified the core to sample and marked the limits of the sample directly on the core with a grease pen. The sample lengths are greater than 0.3 m and less than 2.0 m. All samples are assigned a unique sample number and should account for the insertion of quality control samples in the sample number sequence. The sample numbers for the quality control samples are integrated with the core samples and therefore are unique and in-sequence. For reference material samples, the logging personnel will insert the reference material according to the planned insertion rate. The logging personnel will select the type of reference material to use based on the expected grade of neighboring samples and the need to rotate reference material sample type. All CRMs were sourced through OREAS with CRMs OREAS 230, OREAS 233, OREAS 240, OREAS 503d and OREAS 522 in use during the 2022 drilling program. Any labels on the reference material packaging are erased before the reference material is put in a sample bag. For blank samples, the logging personnel inserts the blank according to the planned insertion rate or directly following a mineralized zone. The logging personnel put 0.5–1.2 kg of certified blank material sourced through OREAS into a sample bag labelled with the sample number. One sample tag marked with “blank” will be stapled with the tag of the previous core sample. For field duplicates (also known as quarter-core duplicates in this Report), the logging personnel will insert the quarter-core duplicate according to the planned insertion rate. Mark on the sample tag that would remain in the box as a quarter-core duplicate to inform of the core cutters that they will need to further split one half of the core into two. The quarter core will be sent to the laboratory in addition to the primary half-core sample. This labelled sample tag should be stapled with the tag of the primary sample. Do not indicate it is quarter-core duplicate on the sample tag that will be sent to the laboratory. No check assays were performed by a second laboratory.

**Commented [NR56]:** @Efrain Ugarte is the QC data assessed under 11.3? It should be. @Matthew Field

**Commented [MF57R56]:** Yes it should be, so who is doing this? I have not seen any QAQC data or reports for East Coldstream



### Core Cutting

Drill core cutting was primarily performed at Goldshore's Kashabowie core logging facility with overflow core cutting being sent to DP Blades in Thunder Bay, Ontario. Both facilities operated under the same procedures as outlined below. Core technicians cut the core in half, approximately 2 cm clockwise (when looking down the hole) from the orientation line. The right-hand side of the core (when looking down the hole), goes into the labeled sample bag and the bag is sealed. The left-hand side of the core is returned to the core box in the original position and orientation. For quarter-core duplicates, further halve the core that remains in the core box and place the right-hand side of the quarter core (when looking down the hole) into the labelled quarter-core duplicate sample bag and sealed the bag. Return the left-hand side quarter core to the core box in the original position.

### Laboratory Sample Preparation

Drill core is prepared at ALS Thunder Bay as outlined in the COA and ALS's 2022 Schedule of Services and Fees: Geochemistry (Table 11.5). Samples were delivered to ALS Minerals Thunder Bay preparation laboratory where they were crushed to 70% passing a 2 mm sieve and a 1 kg riffle split sample was pulverized to a further 85% passing 75 µm sieve. The pulps were sent to ALS Minerals in North Vancouver, British Columbia, for gold and multi-element analysis. ALS Minerals is accredited by the SCC for specific tests listed in its Scope of Accreditation No. 579. This accreditation is based on ISO 17025:2005 international standards and involves extensive site audits and performance evaluations. ALS Minerals is independent of Goldshore.

Table 11.5: List of sample preparation procedures conducted by ALS

Laboratory code	Description
LOG-21	Samples received with barcode labels attached to sample bag
LOG-23	Pulp received with barcode labels attached to sample bag
WEI-21	Weigh received sample
CRU-31	Fine crushing of rock chip and drill samples to 70% passing 2 mm
SPL-21	Split sample using a riffle splitter
PUL-32	Pulverize a 1,000 g split to 85% passing 75 µm

### Laboratory Assay Procedures

The sample pulp is analyzed at ALS Vancouver as outlined in the COA and ALS's 2022 Schedule of Services and Fees: Geochemistry (Table 11.6). All samples underwent a fire assay and atomic absorption finish (ALS code Au-AA23) and multi-element analysis by four acid digestion and ICP-MS finish. Samples that returned gold values greater than 10.0 g/t were subject to re-assay by fire assay with gravimetric finish (ALS code Au-GRA21).

Table 11.6: List of analytical procedures conducted by ALS

Laboratory code	Analyte	Detection limit	Description
Au-AA23	Gold	0.005–10 ppm	Fire assay and AAS – 30 g sample
Au-GRA21	Gold	0.05–10,000 ppm	Fire assay and gravimetric finish – 30 g sample
ME-MS61	Multi-element*	Ag: 0.01–100 ppm	Four acid digestion with ICP-MS finish – 0.25 g sample
		Cu: 0.2–10,000 ppm	
		Mo: 0.05–10,000 ppm	
ME-OG62	Multi-element*	Ag: 1–1,500 ppm	Four acid overlimit methods for multi-elements – 0.4 g sample
		Cu: 0.001–50%	
		Mo: 0.001–10%	
Zn-OG62	Zinc	0.001–30%	Four acid overlimit method – 0.4 g sample

\*Out of the 48 elements analysis only silver, copper and molybdenum are reviewed for pass/fail of reference materials.



### 11.1.3 Hamlin Lake Claim Block

A summary of the sample preparation, analysis, and security procedures employed for exploration programs carried out on the Hamlin Lake claim block has been provided in Clark and Forslund (2014).

#### 11.1.3.1 Soils

During the 2008 soil sampling program, samples were dug using a shovel or garden tool to access the first 10 cm of the B-horizon soil layer. Samples were then labelled, bagged and a brief description of the sample was recorded including a GPS coordinate. Locations were marked in the field using flagging tape.

The samples were dried with precautions taken to avoid cross contamination, and then delivered to Accurassay in Thunder Bay, Ontario for 32-element ICP analysis by aqua regia digestion. Accurassay is accredited by the SCC for specific tests listed in its Scope of Accreditation No. 434. This accreditation is based on ISO 17025:2005 international standards and involves extensive site audits and performance evaluations. The mobile metal ion (MMI) samples were collected using procedures recommended by SGS Laboratories (SGS) for MMI sampling in boreal climates. This was performed by first cleaning the sampling equipment before taking each sample to avoid contamination, then scraping away extensive organic material surrounding the sample area, followed by digging a hole deep enough to expose the soil horizons (approximately 50 cm deep). The samples were collected 10 cm to 25 cm below the A horizon. The focus was put on sampling from a consistent depth rather than a particular soil horizon. The 300–400 g samples were collected using a plastic scoop and deposited into labelled Ziploc bags ensuring no organic material was included in the sample. The samples were then dried separately to avoid cross contamination and shipped to SGS for MMI analysis. SGS is accredited by the SCC for specific tests listed in its Scope of Accreditation No. 184. This accreditation is based on ISO 17025:2005 international standards and involves extensive site audits and performance evaluations.

#### 11.1.3.2 Rock Samples

A total of 112 rock samples were taken from the field between June and October 2009, of which 111 (including 10 standards) were sent for analysis to ALS Chemex in Thunder Bay, Ontario for preparation and then to North Vancouver, British Columbia for analyses. The samples were analyzed for gold by fire assay with AES finish (50 g) and for copper via a 48-element ICP with rare earth package for a total of 59 elements.

#### 11.1.3.3 Drill Core

All core was logged for lithology, alteration, structure, and mineralization prior to sampling. Sample intervals were selected by the logging personnel in approximately 1.0–1.5 m intervals. Samples were selected based on visual estimates of favourable sulphides, alteration, and brecciation. Each sample was given a sample tag, which was placed in a plastic bag. A duplicate tag was also stapled to the core box to mark the sample location. No samples were taken across lithology contacts. The whole core was cut into halves using a diamond blade core saw at a core processing facility in Thunder Bay, Ontario. One half was placed in the sample bag with the corresponding tag, while the other half was placed back in the core box. In each year of drilling by Glencore, samples were shipped to different laboratories, and different analytical techniques were used.

In 2008–2009, a total of 1,185 samples were sent to Accurassay in Thunder Bay, Ontario for ICP-aqua regia digestion as well as fire assay for gold. All core samples were dried and crushed until 90% of the sample passed through a -8 mesh screen. The crushed samples were then further crushed using a Jones Riffler into two 250 g to 450 g subsamples. The subsamples were then pulverized to 90% passing through a 150 mesh sieve using a ring and puck pulveriser and then homogenized. Silica and air cleaning was performed on the



preparation equipment between each batch of samples to prevent cross contamination. The 30 g samples were selected from the homogenized subsamples for fire assay, and 1 g samples for ICP.

Following the 2009 drilling program, Robert Bannville of R/Exploration Ltd was hired to review Glencore's data collection procedures. The study reviewed assays from the 2008–2009 program. The study compared results of the aqua regia digestion with that of a four-acid method and showed that aqua regia digestion imparted two to three standard deviation (SD) error (20–30% for gold and 8–12% for copper) due to the magnetite-rich nature of the samples. For this reason, the assays reported from the 2008–2009 drill program were not considered to be reliable by Clark and Forslund (2014). In 2010, a total of 715 samples were sent to ALS Chemex by the four-acid technique ME-ICP61 with an Au-AA23 finish on gold assays greater than 1 ppm.

In 2011, a total of 2,606 samples were sent to Activation Laboratories Ltd (ActLabs) for analysis by fire assay with total digestion (ActLabs code 1A2-50, prep code 1F2). ActLabs is accredited by the SCC for specific tests listed in its Scope of Accreditation No. 266. This accreditation is based on ISO 17025:2005 international standards and involves extensive site audits and performance evaluations.

No description of any QAQC results obtained from surface sampling and drilling programs carried out on the Hamlin Lake claim block were provided in Clark and Forslund (2014). In the Qualified Person's opinion, the sample preparation, analysis, and security procedures at the Moss Project are generally adequate for use in the planning and execution of exploration programs. Table 11.7 details the laboratory and analytical methods used by each program where available.

Table 11.7: Detailed breakdown of available laboratory and analytical method utilized for each drilling program in the Hamlin Block

Year	Company	Area	Laboratory	Analysis
1956	Noranda	Hamlin	-	-
1957	Noranda	Hamlin	-	-
1966	Cominco	Hamlin	-	-
1972	Falconbridge	Hamlin/Deaty	-	-
1988	Grand Portage	Hamlin/Junction	-	-
1990	Mingold	Powell Lake	-	-
1991	Noranda	Powell Lake	Accurassay	-
		Deaty Creek	-	-
2004	East West Resources	West Hamlin	ALS	ICP/AA
2005	East West Resources	Hamlin	ALS	ICP/AA
		Ardeen	ALS	ICP/AA
2006	East West Resources	Hamlin	ALS	ICP/AA
	East West Resources	Deaty Creek	ALS	ICP/AA
2008	Xstrata	Hamlin	ACT	ICP/FA
2009	Xstrata	Hamlin	ACT	ICP/FA
2010	Xstrata	Hamlin	ACT	ICP/FA
2011	Xstrata	Hamlin	ACT	ICP/FA
		Deaty Creek	ACT	ICP/FA
		Sungold	ACT	ICP/FA



#### 11.1.4 Vanguard Claim Block

Various historical drilling programs have been carried out on the Vanguard claim block with few details from publicly available sources regarding the sample preparation and analysis procedures and practices followed for any drilling completed prior to 2003. Similarly, little information is available regarding the sample preparation and analysis procedures and practices carried out in relation to any historical geological mapping activities or any historical geochemical sampling programs. Table 11.11 details the laboratory and analytical methods used by each program where available. Select historical programs targeting the Vanguard prospect are highlighted below in greater detail.

Table 11.8: Detailed breakdown of available laboratory and analytical method utilized for each drilling program in the Hamlin Block

Year	Company	Area	Laboratory	Analysis
1950	Norpick Gold Mines	Vanguard	-	-
1955	Bandowan Mines Limited	Vanguard	-	-
1956	Jack Lake Mines Limited	Crayfish Lake	-	-
1957	Jack Lake Mines Limited	Iris East	-	-
1970	Cominco Exploration	Crayfish Lake	-	-
1988	Newmont	Iris East	-	-
1989	Minova/Deak Resources	Vanguard	-	-
1989	Newmont	Iris East	-	-
1990	Lacana Ex Inc	Iris East	-	-
1992	Noranda	Vanguard	-	-
1993	Shear Gold	Iris East	-	-
1997	Allegheny Mines Corp	Vanguard	-	-
2003	Canadian Golden Dragon	Vanguard West	ALS	ICP/AA
2004	Canadian Golden Dragon	Vanguard East	ALS	ICP/AA
2005	Canadian Golden Dragon	Crayfish Lake	ALS	ICP/AA
2007	Everett Resources Ltd	Vanguard	ALS	ICP/AA
2011	Benton Resources	Shebandewan	Accurassay	ICP/FA
2012	Trillium Gold Mines	Vanguard East	Accurassay	ICP/FA

##### 11.1.4.1 2008 Drilling Program

###### Sampling Procedures

All core was transported from the drill site by Fladgate Exploration personnel to Trillium North Minerals' secure core facility in Thunder Bay, Ontario. Cores were then split by diamond saw in preparation for logging and sampling. Drill core samples ranged from 0.8 m to 1.2 m of core length. All samples were cut by diamond saw, and a sample tag was left in the core box at the start of the sample interval. All core boxes were labeled with metal Dymo tape tags. At the time of writing this report, all drill core is stored in racks at the Trillium North Minerals Ltd. Core Shack in Thunder Bay, Ontario.

###### Sample Preparation and Analytical Methods

Quality assurance/quality control (QAQC) samples consisting of certified reference materials and blanks were inserted as each 25th sample in the same numbering sequence as the drill core samples. The insertion of the



standards and blanks were rotated. This ensured that one QAQC sample was present in every 25-sample lot and avoided a different numbering sequence for the QAQC samples. The certified reference material was obtained from Ore Research in Australia. One standard was used OREAS 51P with Au 430 ppb +/- 13 ppb and Cu 0.728% +/- 0.012%. The blank samples (barren granite) were obtained from the Nelson Granite quarry, near Vermillion Bay, Ontario. All core samples were analyzed for gold using 30 g pulverized samples in an Au Fire Analysis with ICP Finish; and 35 elements using Aqua Regia digestion ICP. All samples were submitted to ALS Chemex's laboratories in Thunder Bay, Ontario by Fladgate personnel (Thompson, 2008).

#### *11.1.4.2 2012 Drilling Program*

##### *Sampling Procedures*

Drill core was sampled on site immediately following core logging. Samples were chosen based on economic and mineralogical potential. Trillium North Minerals has implemented the following QAQC procedures for the drill program in the Vanguard property: NQ diameter drill core is logged then cut in half onsite, with one side bagged and labelled; the remaining half is placed in core boxes to serve as a permanent record and stored on site. Blanks, standards (one high-grade, one mid-grade, and one low-grade), and field duplicates are inserted Trillium North Minerals sequentially at least every 20th sample or at any interval where it appears economically viable into the drill core samples before shipment. The samples were taken by the Geologist on site and driven to the Accurassay Laboratories' facility in Thunder Bay, Ontario, for crushing, pulverization and further analysis.

##### *Sample Preparation and Analytical Methods*

All samples sent for analyses are dried and prepared using a jaw crusher, which is cleaned with a silica abrasive between samples, resulting in 70% of the sample passing through an 8 mesh screen. A 500 g split of the crushed sample is then pulverized with 90% passing through a 150 mesh screen (Procedure code ALP1, Accurassay Laboratories). A geochemical package of 30 elements is given by multi-acid (HNO<sub>3</sub>, HCl, HF, HClO<sub>4</sub>) digestion that liberates most metals from the host rocks finishing with an ICP-OES analysis (Procedure code ALMA1, Accurassay Laboratories). For the analysis of gold, fire assays are performed using 50 g of sample and an ICP finish with the lower detection limit of 2 ppb (Procedure code ALFA4, Accurassay Laboratories) (Henderson, 2012).

#### *11.1.4.3 2018 Soil Program*

A grid was digitally designed using MapInfo software and coordinates calculated in Universal Transverse Mercator NAD83 Zone 15 projection. Stations were calculated at 25 m intervals and 200 m line separation at an azimuth of 320 degrees. In the field position control was attained using Garmin 60CX GPS units. Samples were collected using a soil auger penetrating to a depth of 15–20 cm of the clastic B horizon avoiding the upper humus layer. Samples were collected in clean brown paper bags specifically designed for this type of material and dried on racks before shipment to the laboratory.

Samples were submitted to Actlabs in Thunder Bay for analyses using their 1A2 Fire Assay AA package for gold and 1E3 Aqua Regia ICP package for 40 other elements.

#### **11.1.5 Goldshore 2022 Surface Programs**

##### *11.1.5.1 Ionic Leach Soil*

Samples were collected using hand augers from two auger depths below the organic layer, i.e. the sample represents a column covering 15–30 cm depth. This material was typically humus although the methodology calls for sampling at a fixed depth irrespective of soil medium. Rock particles and significant undecomposed



organic material were carefully removed by hand and/or with the aid of a plastic sieve. A sample size of 200–250 g was desired. After augering and removing contaminant material, the samples were double bagged in sandwich bags alongside a unique sample tag identifier. All tools were wiped clean and washed with demineralized water between samples. Samples were delivered to ALS Laboratories in Thunder Bay, Ontario by Goldshore personnel, and were internally forwarded to ALS Laboratories in Loughrea, Ireland for ME-MS23 Ionic Leach analysis.

#### 11.1.5.2 Humus

Samples were collected by hand, using trowels or using hand augers depending on the terrain type. The organic layer was removed or augered through, and a humus sample of 200–250 g was obtained from as shallow a depth as possible. In muskeg terrain, this usually meant that, after augering through sphagnum moss, the first auger full of soil was used for the humus sample and the second auger was used for the ionic leach sample. Undecomposed organic material and rock particles were removed. Samples were double bagged in sandwich bags alongside a unique sample tag identifier. All tools were wiped clean and washed with demineralized water between samples. At the effective date of this Report, the humus samples remain in storage at the Kashabowie project site.

#### 11.1.5.3 Vegetation

Alder twigs from fresh growth were collected using a knife from as high up as possible on the plant. Leaves and buds were retained whereas catkins were removed. Sample sizes of approximately 100 g were desired. Twigs and branches greater than 1 cm in diameter were avoided. Samples were double bagged in sandwich bags alongside a unique sample tag identifier. Samples were delivered to ALS Laboratories in Thunder Bay, Ontario by Goldshore personnel and washed before being assayed by ME-VEG41a aqua regia digestion with ICP-MS analysis.

#### 11.1.5.4 Grab and Channel Samples

Samples were selected based on known or anticipated mineralization or for other known or suspected geochemical features of interest. Samples were removed from outcrop using hammers and chisels or by cutting with a channel saw. Channel samples were removed after cutting with chisels. Samples were placed in plastic sample bags alongside unique sample identifier tags and sealed while still in the field. Samples were delivered to ALS Laboratories in Thunder Bay, Ontario by Goldshore personnel. Most samples were assayed by Au-AA23 gold fire assay and ME-MS61 four-acid digestion with ICP-MS analysis. Select samples were assayed by PGM-MS23 gold and platinum group element (PGE) fire assay.

## 11.2 Sample Security

Few details are known regarding the sample security procedures for any historical samples collected on the Moss Project. All drill core from the 2017 drilling campaigns completed on the Coldstream and Moss claim blocks is stored within a fenced off area on the Coldstream property located at approximately 678000 mE, 5386000 mN (NAD83, UTM Zone 15). Core from historical drill holes from the Moss Gold Deposit is stored in unsecured core racks and cross piles located at approximately UTM coordinate 668860 mE, 5379100 mW (NAD83, UTM Zone 15). All drill core and pulps from the Hamlin property are stored at AGAT Laboratories in Rosslyn, Ontario. Drill core from the Xstrata drilling programs was stored at the core processing facility in Thunder Bay, Ontario (Keogh, 2011).

For the 2021 and 2022 Goldshore drilling program, the following security procedures were in place. All the entrances to the core shack are secured with locks and can only be accessed by Goldshore employees and



approved contractors. The core shack contains a loading area to receive core from the drillers, a core logging area, a core cutting room, a storage room for core and a room to process shipment for cut samples.

The following sample shipment procedures have been implemented on site. Samples are packed and sealed in numerical sequence in a rice bag. The rice bags were labelled with the shipment number and "Bag XX of XX". The sample numbers within each rice bag are recorded. The rice bags were sealed with a zip tie. A printed out copy of the sample submission form was placed in the first rice bag and sealed. Goldshore transported the samples directly to laboratory. Two copies of the sample submittal form were given to the laboratory with one signed by the laboratory upon receipt of the samples and returned to Goldshore.

There has been no reported tampering of the rice bags or samples in 2021 or 2022. Any discrepancies between samples received and sample submittals are reported to Goldshore. Discrepancies are reviewed by Goldshore, and corrective measures are given to the laboratory.

### 11.3 Quality Assurance and Quality Control

#### 11.3.1 Methodology

##### 11.3.1.1 2021, 2022 and 2023 Blanks

Blanks were inserted by Goldshore at an approximate rate of 1-in-50. The blank chosen for the QAQC program is a commercial certified blank by OREAS. The coarse silica blank material is sourced from Cassidy Lake, New Brunswick, Canada.

The recommended individual blank samples weight is between 0.5 kg and 1.2 kg (Qualitica Consulting Inc., June 2021). For the 2021 samples, Goldshore has submitted blanks weighing from 0.44 kg to 1.44 kg.

The certified coarse silica blank material has a recommended value of <0.005 ppm Au. However, typical industry practice is to set the maximum upper limit for blanks at 10 times the lower detection limit of the analytical method. The lower detection limit of Au-AA23 is 0.005 ppm and therefore the maximum accepted gold threshold is 0.050 ppm. The certified coarse silica blank material does not have recommended values for four-acid digestion for silver, copper and molybdenum. The certificate only has recommended values for aqua regia digest.

Upon discussion with Goldshore, the main purpose of conducting multi-element analysis is for internal lithological and alteration studies. Therefore, blank analytical results for silver, copper and molybdenum are not reviewed as part of the QAQC process and will not be included in this Report.

##### 11.3.1.2 Q1 and Q2 2022 Certified Reference Materials

Certified Reference Materials (CRMs) were inserted at an approximate rate of 1-in-20 samples to assess the performance of the laboratory and a total of 373 reference materials were inserted into the sample stream during this reporting period. Of the 373 reference material samples, all were analyzed for gold and 296 were analyzed for silver, copper and molybdenum. The reference materials used are 60 g pre-packaged commercial CRMs by ORE Research and Exploration of Australia. Three different CRMs were used for this reporting period, OREAS 230, OREAS 233 and OREAS 240. The CRMs were chosen by Goldshore with the recommendation from Qualitica based on low, moderate, and high certified gold values and similar geological setting of the source rock.

OREAS 230, OREAS 233 and OREAS 240 consist of a blend of gold bearing ore and barren greenstone. The ore is sourced from Frog Leg Gold Mine, 19 km west of Kalgoorlie, Western Australia. The barren Cambrian Greenstone is sourced from a quarry 145 km north of Melbourne, Australia.

**Commented [NR58]:** @Niti Gupta @Matthew Field @Efrain Ugarte @Nigel Fung please confirm this has been updated and specifically addresses East Coldstream. I see lost of figs saying Moss Lake which are from previous version?

**Commented [MF59R58]:** As per my last comment - I have not seen any East Coldstream QAQC data or reports



### 11.3.2 Blanks

#### 11.3.2.1 Moss 2021 Blanks

During the reporting period, 166 blanks were included in the sample stream. No blank QAQC samples failed for gold (Table 11.9). One sample (D568030) returned a slightly elevated gold value of 0.018 ppm. Three core samples before the blank contain anomalous values between 5.81 ppm and 9.76 ppm Au. This suggests potential minor contamination but because D568030 remains under the maximum acceptable gold threshold of 0.050 ppm, a re-assay was not requested, and the sample was passed.

Table 11.9: Summary of blank statistics for gold (2021 program)

Blank	Number	Failures	Maximum Au ppm	Observed Au ppm	% of maximum	Re-assayed
BLANK	166	0	0.050	0.003	5.8%	0

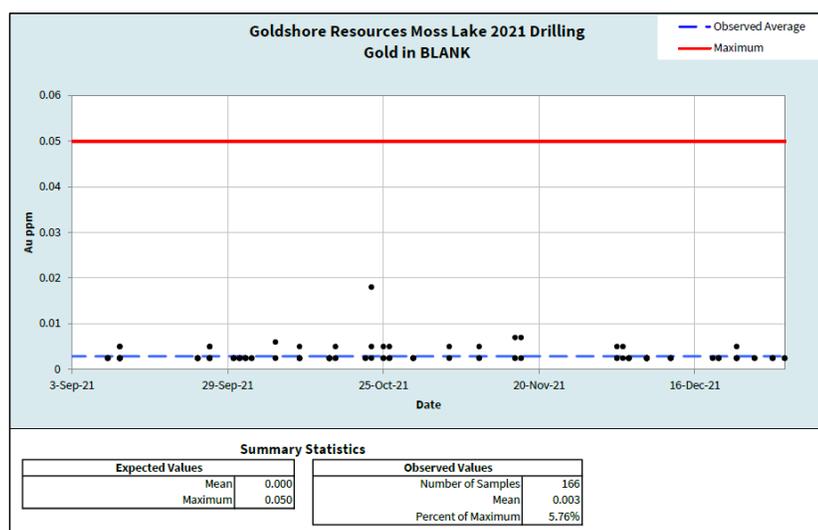


Figure 11.1 : Gold concentrations in Blanks for Moss 2021 drilling

#### 11.3.2.2 Moss Q1 and Q2 2022 Blanks

During the reporting period, 385 blanks were included in the sample stream for gold analysis. No blank QAQC samples failed for gold (Table 11.10). Four samples (E920110, E911180, D574070 and E928180) returned slightly elevated gold values of 0.016 ppm, 0.021 ppm, 0.025 ppm and 0.034 ppm respectively. E920110, D574070 and E928180 have core samples with anomalous values before the blanks. This suggests potential contamination but because they remain under the maximum acceptable gold threshold of 0.050 ppm, re-assays were not requested, and the samples were passed.

Table 11.10: Summary of blank statistics for gold (Q1-Q2 2022 program)

Blank	Number	Failures	Maximum Au ppm	Observed Au ppm	% of maximum	Re-assayed
BLANK	385	0	0.050	0.003	6.32%	0

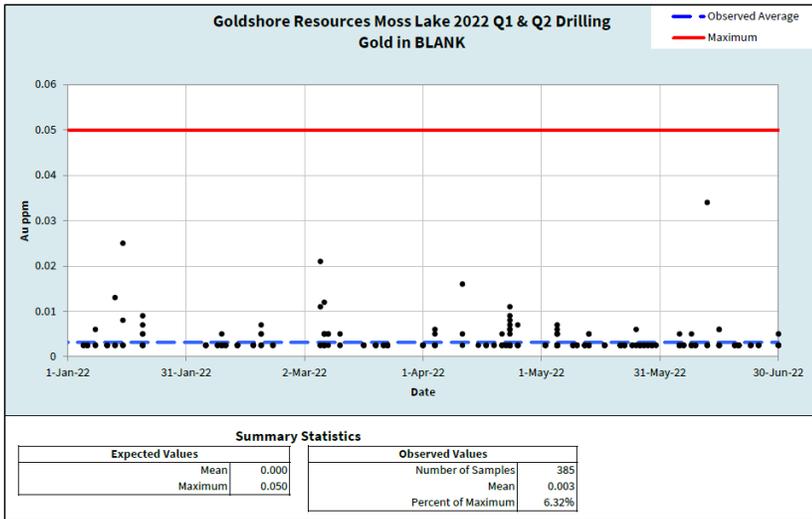


Figure 11.2: Gold concentrations in Blanks for Moss Q1 and Q2 2022 drilling

### 11.3.2.3 Moss Q3 2022 Blanks

During the reporting period, 317 blanks were included in the sample stream for gold analysis. No blank samples failed for gold (Table 11.11). One sample, F235670, returned slightly elevated gold values of 0.02 ppm. Five core samples before F235670 are not anomalous and therefore do not suggest potential contamination.

Table 11.11: Summary of blank statistics for gold (Q3 2022 program)

Blank	Number	Failures	Maximum Au ppm	Observed Au ppm	% of maximum	Re-assayed
BLANK	317	0	0.050	0.003	5.63%	0

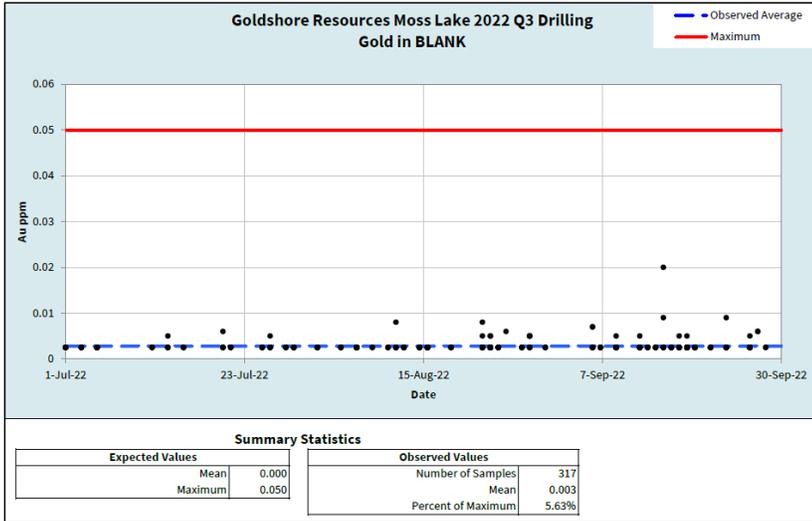


Figure 11.3: Gold concentrations in Blanks for Moss Q3 2022 drilling

#### 11.3.2.4 Moss Q4 2022 Blanks

During the reporting period, 554 blanks were included in the sample stream for gold analysis. No blank samples failed for gold (Table 11.12). One sample, F242250, returned slightly elevated gold values of 0.03 ppm. Five core samples before F242250 contained up to 19.4 ppm gold which suggest potential minor contamination. However, since F242250 gold result is below the maximum accepted threshold, a re-assay was not requested.

Table 11.12: Summary of blank statistics for gold (Q4 2022 program)

Blank	Number	Failures	Expected maximum (Au ppm)	% of maximum	Re-assayed
BLANK	554	0	0.003	5.57%	0

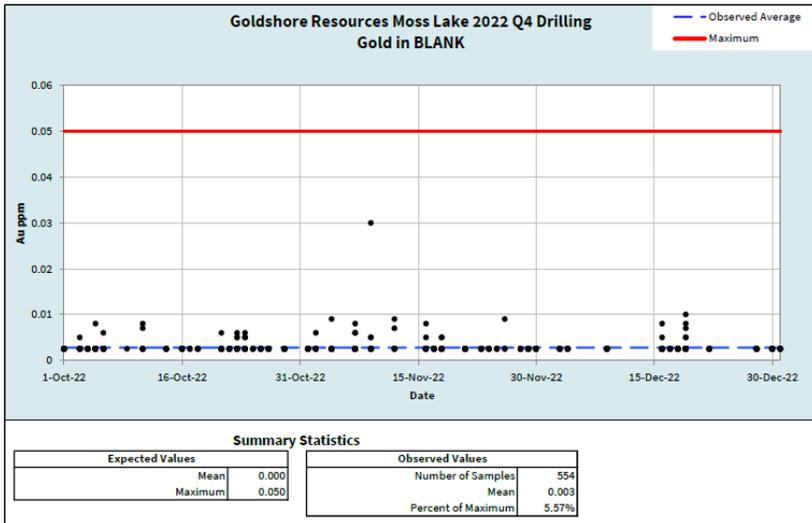


Figure 11.4: Gold concentrations in Blanks for Moss Q4 2022 drilling

#### 11.3.2.5 East Coldstream 2022 Blanks

During the reporting period, 170 blanks were included in the sample stream for gold analysis. No blank samples failed for gold (Table 11.13) or returned anomalous values.

Table 11.13: Summary of blank statistics for gold (Coldstream 2022 program)

Blank	Number	Failures	Expected maximum (Au ppm)	Observed average (Au ppm)	% of maximum	Re-assayed
BLANK	170	0	0.05	0.003	5.11%	0

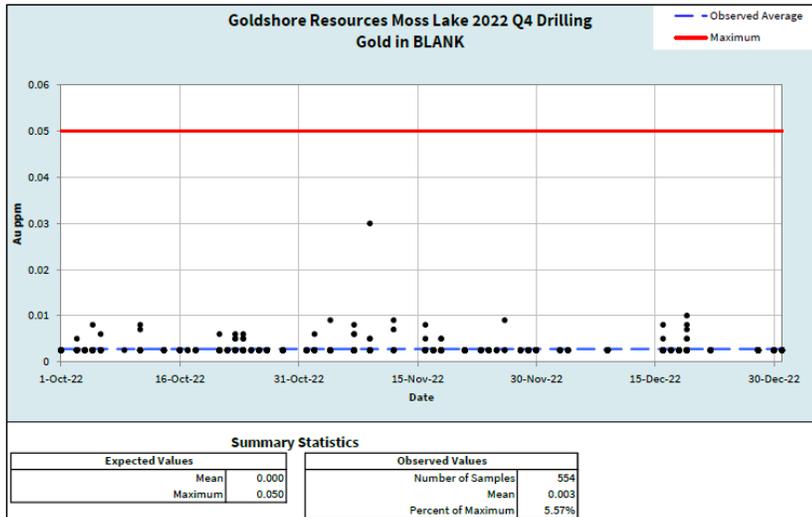


Figure 11.5: Gold concentrations in Blanks for Coldstream 2022 drilling

### 11.3.3 Certified Reference Materials

#### 11.3.3.1 Moss 2021 Certified Reference Materials

The average observed gold values for OREAS 230 and OREAS 233 are slightly above the corresponding certified values, suggesting a slight high bias. The average observed gold value for OREAS 240 is slightly below the corresponding certified value, suggesting a slight low bias. However, the percentage of accepted for all three standards are between 98% and 102% which is within the range recommended by Qualitica. The observed coefficient of variation (CV) values for all OREAS reference materials are below the corresponding certified values, which suggests the variation of the reference material analyzed is lower than the CRM (Table 11.14)

Table 11.14: Summary of reference material statistics for gold (2021 program)

QC		OREAS 230	OREAS 233	OREAS 240	Total
Number		220	126	27	373
Outlier excluded		0	0	0	0
Failure excluded		0	0	0	0
Re-assayed		1	1	0	2
CRM Au (ppm)	Certified value	0.337	1.050	5.510	-
	SD	0.013	0.029	0.139	-
	CV	3.86%	2.76%	2.52%	-
Observed Au (ppm)	Average	0.339	1.061	5.479	-
	SD	0.008	0.025	0.098	-
	CV	2.28%	2.38%	1.58%	-
Percent of accepted		100.56%	101.06%	99.44%	-
Weighted average of percent of accepted		100.65%			-

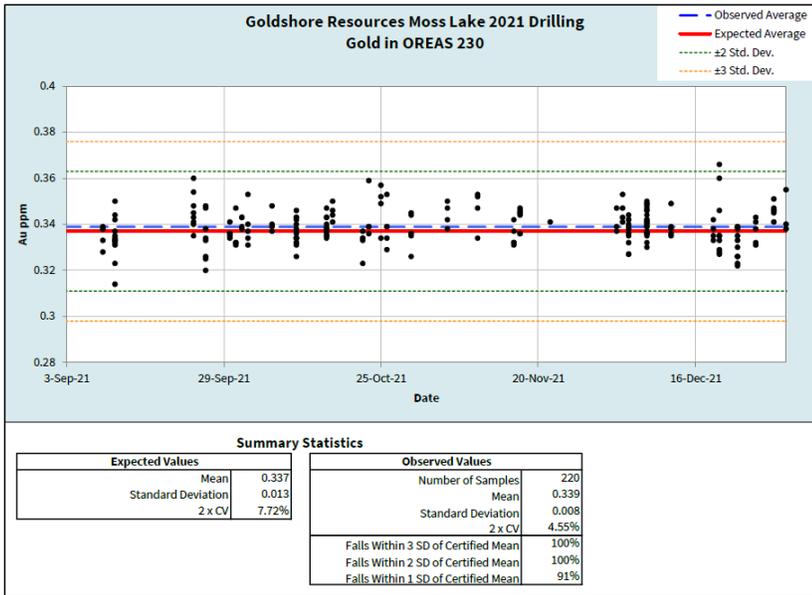


Figure 11.6: Gold concentrations in CRM OREAS 230 for Moss 2021 drilling

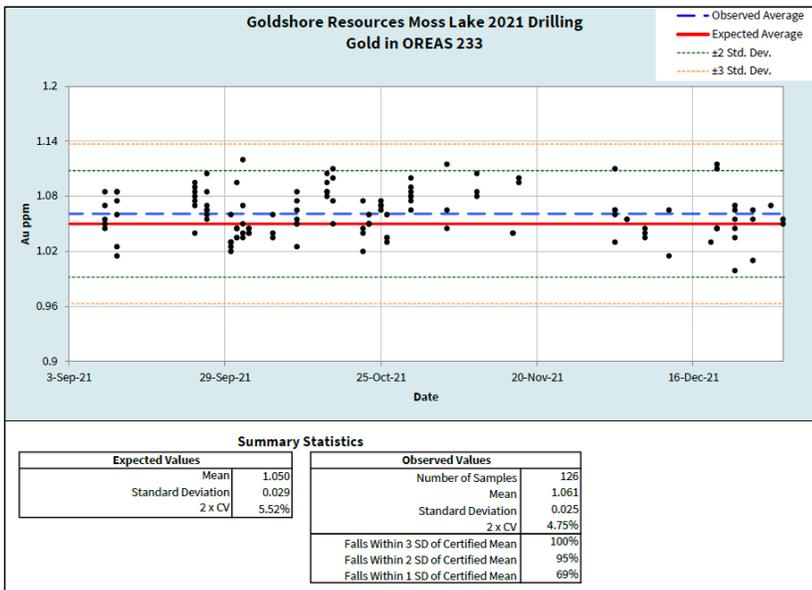


Figure 11.7: Gold concentrations in CRM OREAS 233 for Moss 2021 drilling

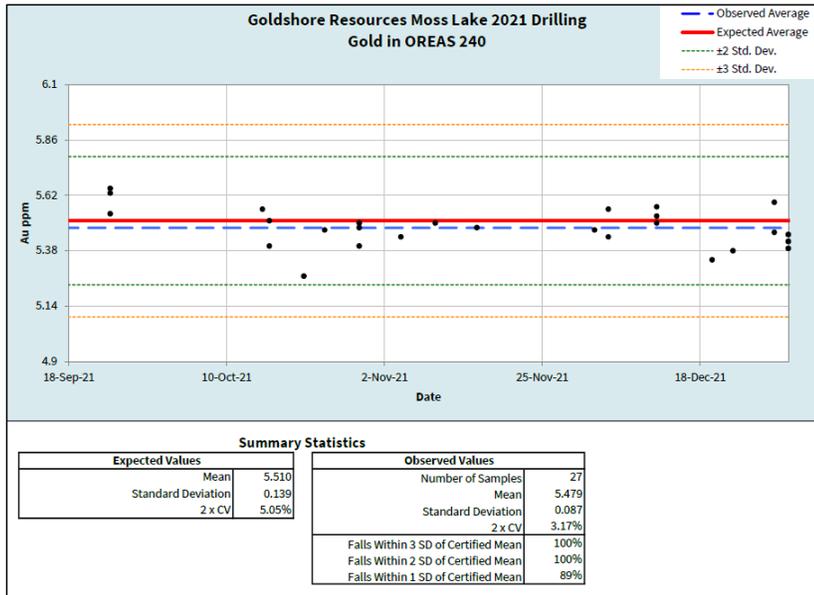


Figure 11.8: Gold concentrations in CRM OREAS 240 for Moss 2021 drilling

11.3.3.2 Moss Q1 and Q2 2022 Certified Reference Materials

The average observed gold values for OREAS 230 and OREAS 233 are slightly above the corresponding certified values, suggesting a slight high bias. The average observed gold value for OREAS 240 is slightly below the corresponding certified value, suggesting a slight low bias. However, the percentage of accepted for all three standards are between 98% and 102% which is within the range recommended by Qualitica. The observed CV values for all OREAS reference materials are below the corresponding certified values, which suggest the variation of the reference material analyzed is lower than the CRM (Table 11.15). Overall, the summary statistics of the gold results in 2022 Q1 and Q2 are comparable to the results in 2021.



Table 11.15: Summary of reference material statistics for gold (Q1-Q2 2022 program)

QC		OREAS 230	OREAS 233	OREAS 240	Total
Number		604	276	55	935
Outlier excluded		0	1	0	1
Failure excluded		0	0	0	0
Re-assayed		5	9 <sup>A</sup>	3 <sup>B</sup>	17
CRM Au (ppm)	Certified value	0.337	1.050	5.510	-
	SD	0.013	0.029	0.139	-
	CV	3.86%	2.76%	2.52%	-
Observed Au (ppm)	Average	0.339	1.061	5.550	-
	SD	0.009	0.026	0.096	-
	CV	2.66%	2.43%	1.74%	-
Percent of accepted		100.68%	101.09%	99.81%	-
Weighted average of percent of accepted		100.75%			-

<sup>A</sup> Nine reference material were re-assayed for OREAS 233, seven of which exceeded three SD and two of which are within three SD but required further confirmation via re-assay.

<sup>B</sup> Three reference material were re-assayed for OREAS 240, one of which exceeded three SD and two of which are within three SD but required further confirmation via re-assays.

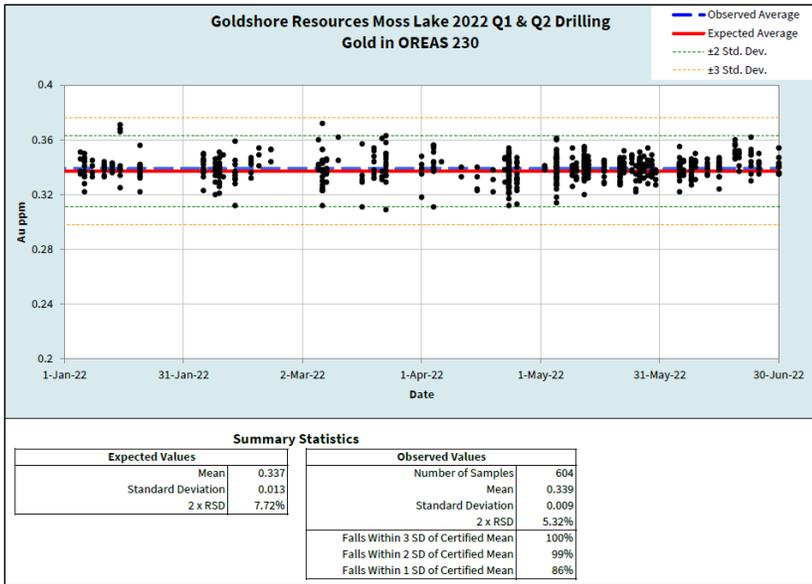


Figure 11.9: Gold concentrations in CRM OREAS 230 for Moss Q1 and Q2 drilling

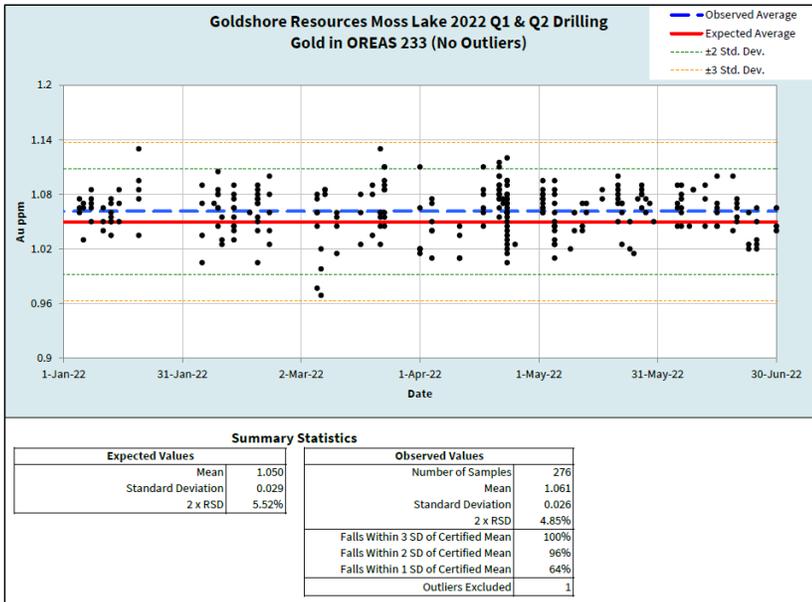


Figure 11.10: Gold concentrations in CRM OREAS 233 for Moss Q1 and Q2 drilling

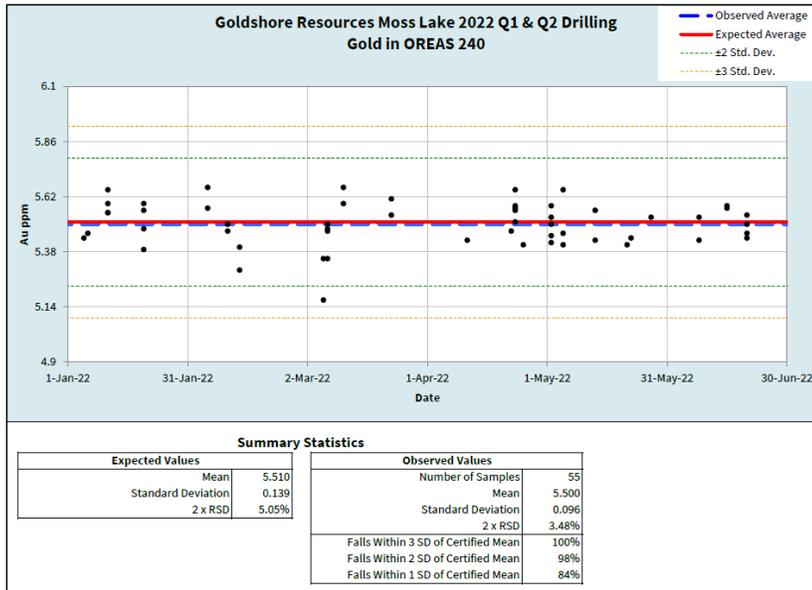


Figure 11.11: Gold concentrations in CRM OREAS 240 for Moss Q1 and Q2 drilling

### 11.3.3.3 Moss Q3 2022 CRMs

The average observed gold values for OREAS 230 and OREAS 240 are slightly below the corresponding certified values, suggesting a slight low bias. The average observed gold value for OREAS 233 is slightly above the corresponding certified value, suggesting a slight high bias. However, the percent of accepted for all three standards are between 98% and 102% which is within the range recommended by Qualitica. The observed CV values for all OREAS reference materials are below the corresponding certified values, which suggest the variation of the reference material analyzed is lower than the CRM (Table 11.16). Overall, the summary statistics of the gold results in 2022 Q3 are comparable to the results in 2022 Q1 and Q2.

Table 11.16: Summary of CRMs for gold (Q3 2022 program)

QC		OREAS 230	OREAS 233	OREAS 240	Total
Number		525	228	32	785
Outlier excluded		0	0	0	0
Failure excluded		0	0	0	0
Re-assayed		4	6	1	11
CRM Au (ppm)	Certified value	0.337	1.050	5.510	-
	SD	0.013	0.029	0.139	-
	CV	3.86%	2.76%	2.52%	-
Observed Au (ppm)	Average	0.336	1.054	5.438	-
	SD	0.008	0.023	0.100	-
	CV	2.36%	2.14%	1.84%	-
Percent of accepted		99.79%	100.39%	98.70%	-
Weighted average of percent of accepted		99.92%			-

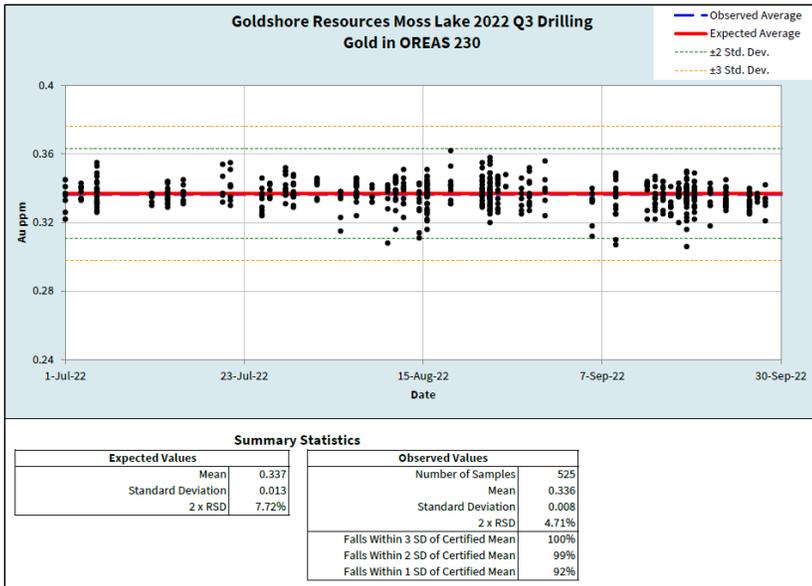


Figure 11.12: Gold concentrations in CRM OREAS 230 for Moss Q3 drilling

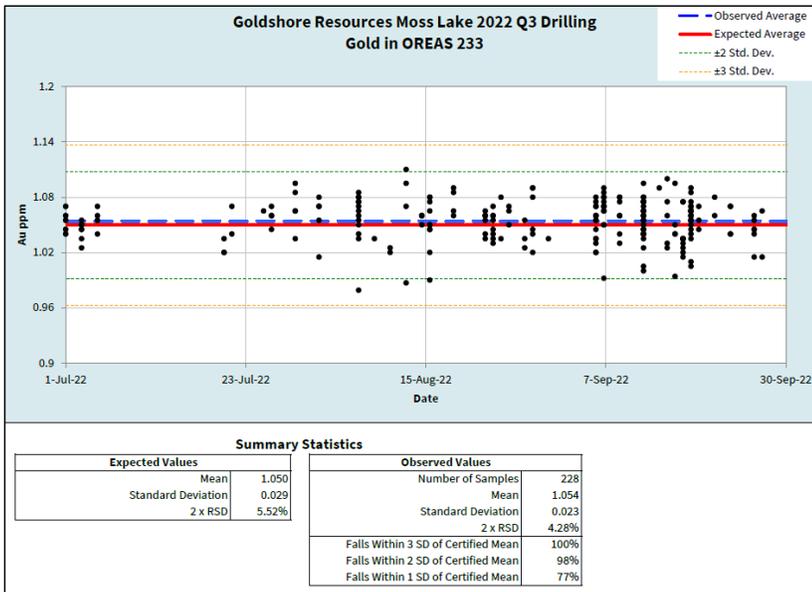


Figure 11.13: Gold concentrations in CRM OREAS 233 for Moss Q3 drilling

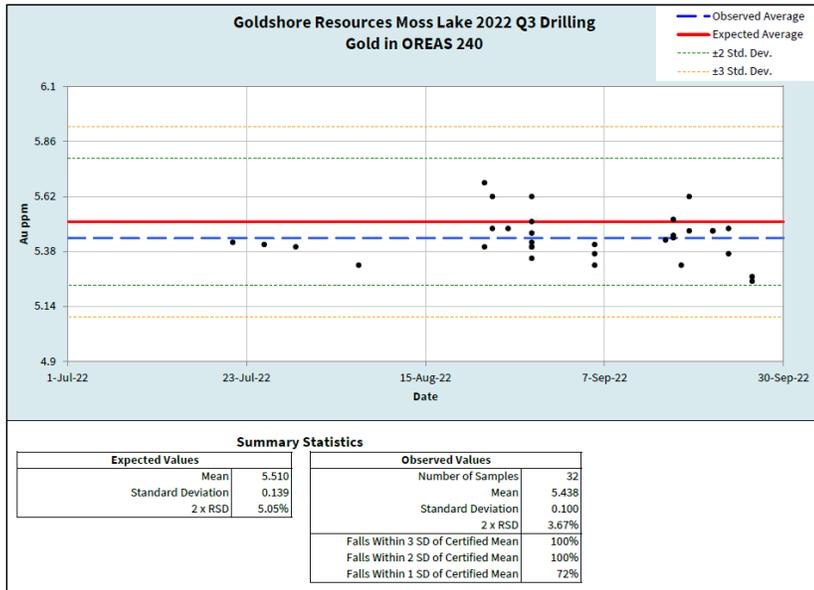


Figure 11.14: Gold concentrations in CRM OREAS 240 for Moss Q3 drilling

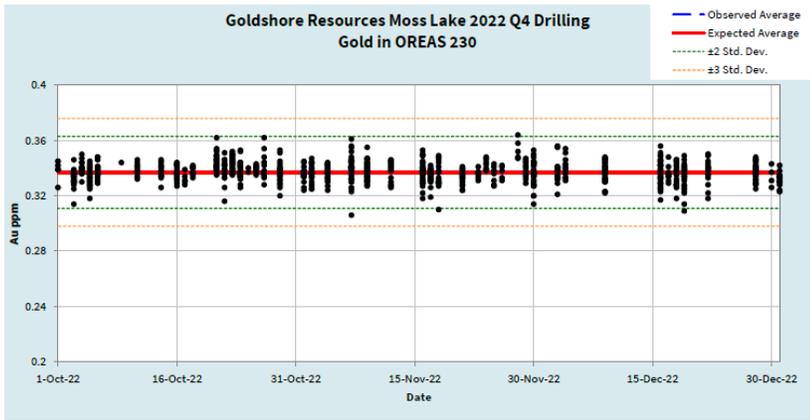
11.3.3.4 Moss Q4 2022 CRMs

The average observed gold value for OREAS 233 is slightly above the corresponding certified value, suggesting a slight high bias. The average observed gold value for OREAS 240 is slightly below the corresponding certified values, suggesting a slight low bias. The averaged observed gold value for OREAS 230 is the same as the corresponding certified value, suggesting there is no bias. The percent of accepted for all three standards are between 98 and 102% which is within the range recommended by Qualitica. The observed coefficient of variation values for all OREAS reference materials are below the corresponding certified values, which suggest the variation of the reference material analyzed is lower than the certified reference material (Table 11.17). Overall, the summary statistics of the gold results in 2022 Q4 are comparable to the results in 2022 Q1 to Q3.



Table 11.17: Summary of CRMs for gold (Q4 2022 program)

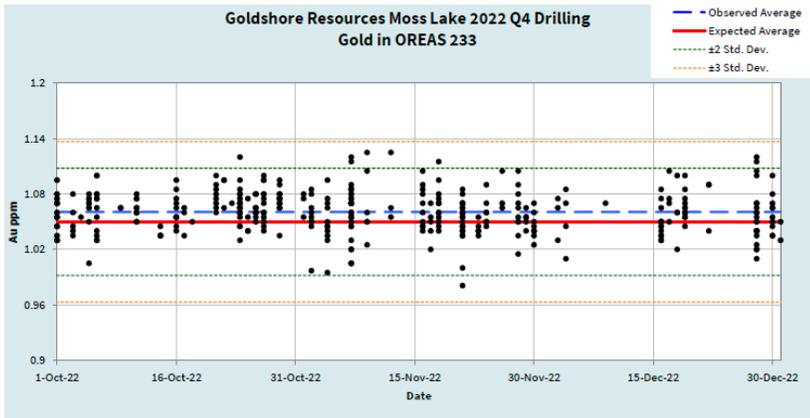
QC		OREAS 230	OREAS 233	OREAS 240	Total
Number		903	368	87	1,358
Outlier Excluded		0	0	0	0
Failure Excluded		0	0	0	0
Re-assayed		2	3	1	6
CRM Au (ppm)	Certified Value	0.337	1.05	5.51	-
	Standard Deviation	0.013	0.029	0.139	-
	Coefficient of Variation	3.86%	2.76%	2.52%	-
Observed Au (ppm)	Average	0.337	1.061	5.5	-
	Standard Deviation	0.007	0.023	0.113	-
	Coefficient of Variation	2.16%	2.15%	2.05%	-
Percent of Accepted		100.08%	101.02%	99.82%	-
Weighted Average of Percent of Accepted		100.32%			-



Summary Statistics

Expected Values		Observed Values	
Mean	0.337	Number of Samples	903
Standard Deviation	0.013	Mean	0.337
2 x RSD	7.72%	Standard Deviation	0.007
		2 x RSD	4.31%
		Falls Within 3 SD of Certified Mean	100%
		Falls Within 2 SD of Certified Mean	100%
		Falls Within 1 SD of Certified Mean	94%

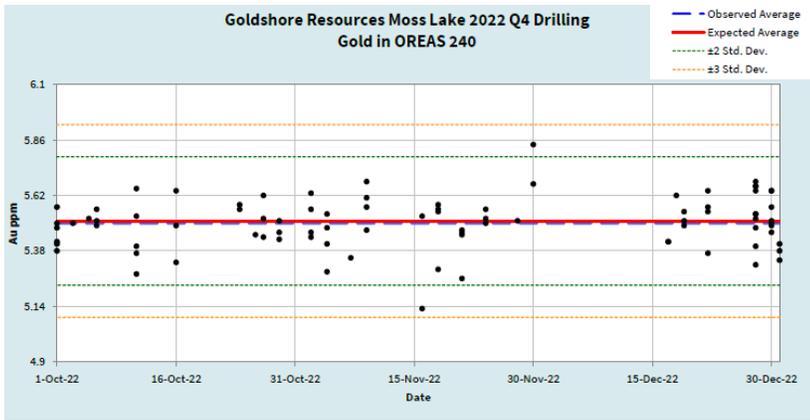
Figure 11.15: Gold concentrations in CRM OREAS 230 for Moss Q4 2022 drilling



Summary Statistics

Expected Values		Observed Values	
Mean	1.050	Number of Samples	368
Standard Deviation	0.029	Mean	1.061
2 x RSD	5.52%	Standard Deviation	0.023
		2 x RSD	4.31%
		Falls Within 3 SD of Certified Mean	100%
		Falls Within 2 SD of Certified Mean	98%
		Falls Within 1 SD of Certified Mean	74%

Figure 11.16: Gold concentrations in CRM OREAS 233 for Moss Q4 2022 drilling



Summary Statistics

Expected Values		Observed Values	
Mean	5.510	Number of Samples	87
Standard Deviation	0.139	Mean	5.500
2 x RSD	5.05%	Standard Deviation	0.113
		2 x RSD	4.10%
		Falls Within 3 SD of Certified Mean	100%
		Falls Within 2 SD of Certified Mean	98%
		Falls Within 1 SD of Certified Mean	79%

Figure 11.17: Gold concentrations in CRM OREAS 240 for Moss Q4 2022 drilling

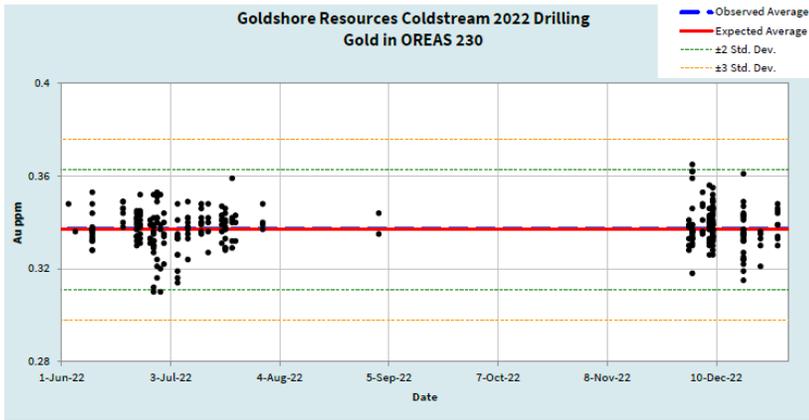


### 11.3.3.5 East Coldstream 2022 Certified Reference Materials

The average observed gold value for OREAS 230, 233 and 240 are slightly above the corresponding certified value, suggesting a slight high bias. The average observed gold value for OREAS 503d is slightly below the corresponding certified values, suggesting a slight low bias. The averaged observed gold value for OREAS 522 is the same as the corresponding certified value, suggesting there is no bias. The percents of accepted for all five standards are between 98% and 102% which are within the range recommended by Qualitica. The observed coefficient of variation values for all OREAS reference materials are below the corresponding certified values, which suggest the variation of the reference material analyzed is lower than the certified reference material (Table 11.18).

Table 11.18: Summary of CRMs for gold (2022 program)

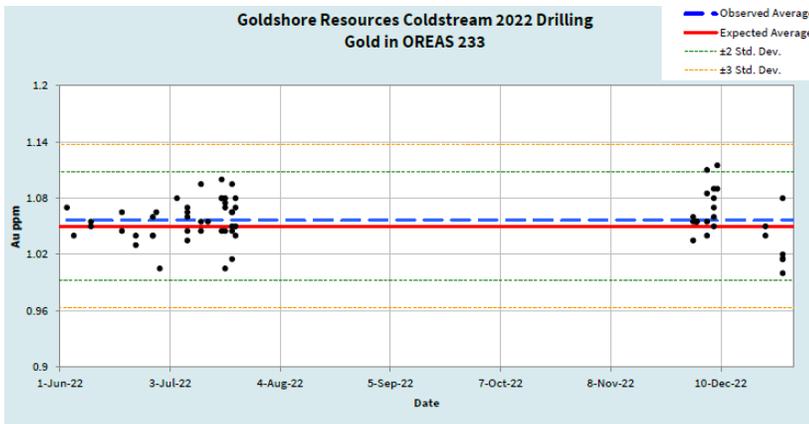
QC	OREAS 230	OREAS 233	OREAS 240	OREAS 503d	OREAS 522	Total
Number	289	66	18	20	13	1,358
Outlier Excluded	0	0	0	0	0	0
Failure Excluded	0	0	0	0	0	0
Re-assayed	2	0	0	0	0	2
CRM Au (ppm)	Certified Value	0.337	1.05	5.51	0.666	0.574
	Standard Deviation	0.013	0.029	0.139	0.015	0.018
	Coefficient of Variation	3.86%	2.76%	2.52%	2.25%	3.14%
Observed Au (ppm)	Average	0.338	1.057	5.517	0.661	0.574
	Standard Deviation	0.009	0.025	0.102	0.013	0.015
	Coefficient of Variation	2.16%	2.15%	2.05%	1.91%	2.69%
Percent of Accepted	100.15%	100.64%	100.12%	9.24%	100.08%	-
Weighted Average of	100.18%					-



**Summary Statistics**

Expected Values		Observed Values	
Mean	0.337	Number of Samples	289
Standard Deviation	0.013	Mean	0.338
2 x RSD	7.72%	Standard Deviation	0.009
		2 x RSD	5.09%
		Falls Within 3 SD of Certified Mean	100%
		Falls Within 2 SD of Certified Mean	99%
		Falls Within 1 SD of Certified Mean	89%

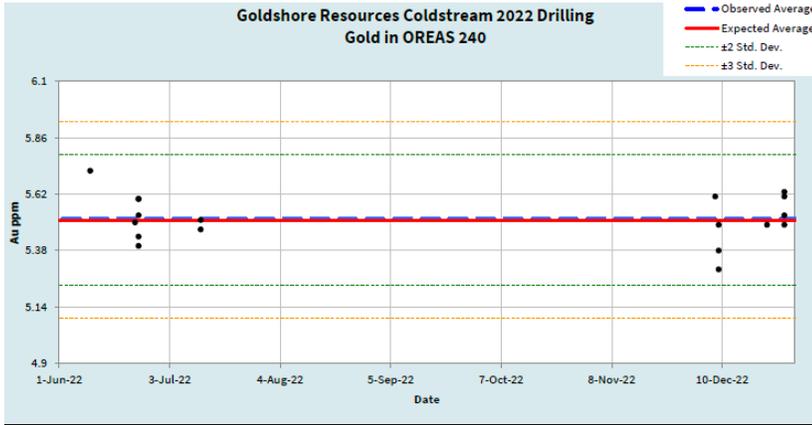
Figure 11.18: Gold concentrations in CRM OREAS 230 for Coldstream 2022 drilling



**Summary Statistics**

Expected Values		Observed Values	
Mean	1.050	Number of Samples	66
Standard Deviation	0.029	Mean	1.057
2 x RSD	5.52%	Standard Deviation	0.025
		2 x RSD	4.65%
		Falls Within 3 SD of Certified Mean	100%
		Falls Within 2 SD of Certified Mean	97%
		Falls Within 1 SD of Certified Mean	67%

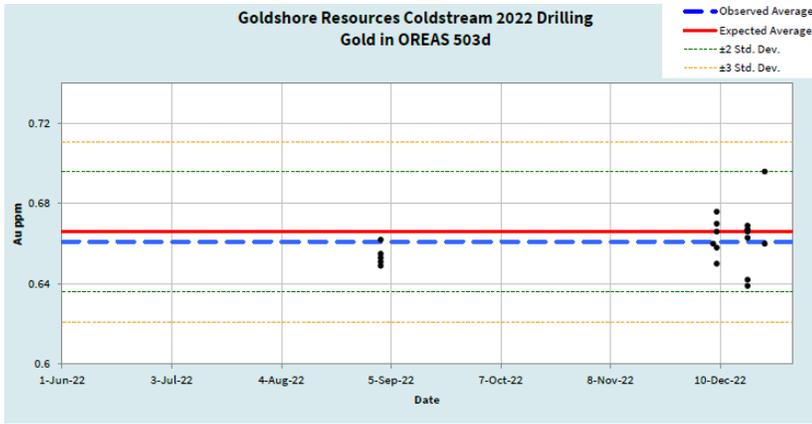
Figure 11.19: Gold concentrations in CRM OREAS 233 for Coldstream 2022 drilling



**Summary Statistics**

Expected Values		Observed Values	
Mean	5.510	Number of Samples	18
Standard Deviation	0.139	Mean	5.517
2 x RSD	5.05%	Standard Deviation	0.102
		2 x RSD	3.68%
		Falls Within 3 SD of Certified Mean	100%
		Falls Within 2 SD of Certified Mean	100%
		Falls Within 1 SD of Certified Mean	89%

Figure 11.20: Gold concentrations in CRM OREAS 240 for Coldstream 2022 drilling



**Summary Statistics**

Expected Values		Observed Values	
Mean	0.666	Number of Samples	20
Standard Deviation	0.015	Mean	0.661
2 x RSD	4.50%	Standard Deviation	0.013
		2 x RSD	3.83%
		Falls Within 3 SD of Certified Mean	100%
		Falls Within 2 SD of Certified Mean	100%
		Falls Within 1 SD of Certified Mean	75%

Figure 11.21: Gold concentrations in CRM OREAS 503d for Coldstream 2022 drilling

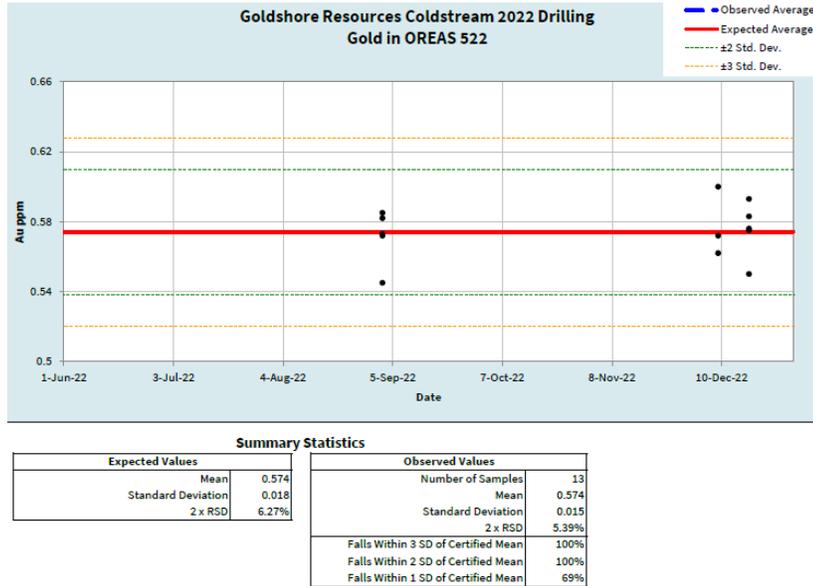


Figure 11.22: Gold concentrations in CRM OREAS 522 for Coldstream 2022 drilling

### 11.3.4 Duplicates

#### 11.3.4.1 2021 Duplicates

In 2021, 164 samples were analyzed as quarter core duplicates for gold, and 115 samples for multi-elements (silver, copper and molybdenum). The percentages stated below are not a true representation of core duplicate repeatability because the original sample analyzed is half core, whilst the duplicate sample analyzed is quarter core. 80.90% of the gold quarter-core duplicate pairs that are greater than 10 times the lower detection limit reported between ±50% of each other (Table 11.19).

Table 11.19: Summary of quarter-core duplicate statistics for gold (2021 program)

Analyte	No. of sample pairs	No. of sample pairs >10x detection limit	% of sample pairs >10x detection limit, within			
			±5%	±10%	±25%	±50%
Au	164	89	12.36%	29.21%	53.93%	80.90%

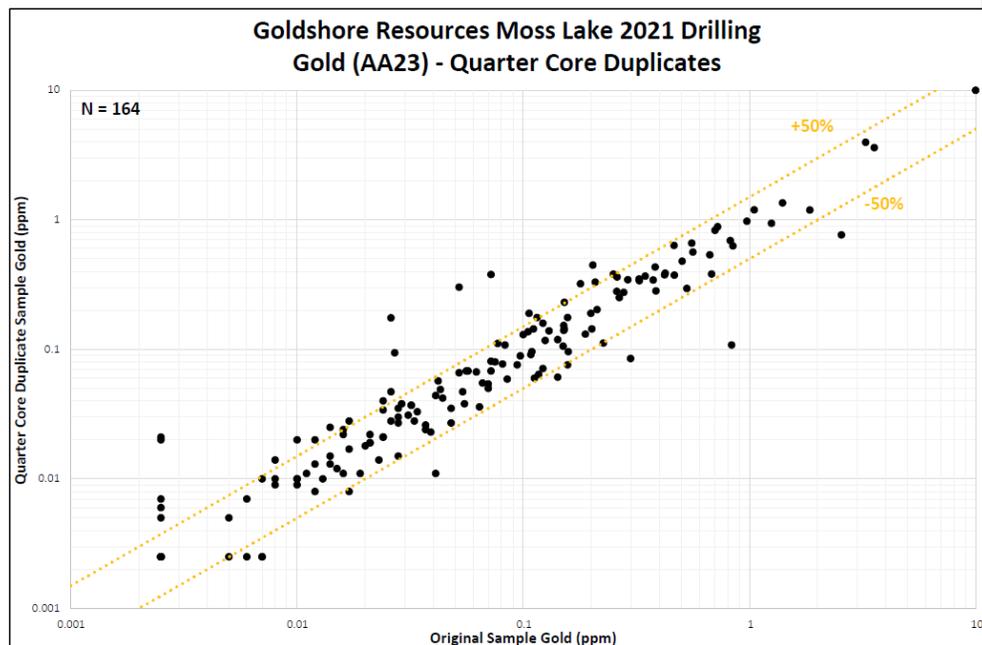


Figure 11.23: Gold concentrations in quarter-core duplicates for Moss 2021 drilling

11.3.4.2 Moss Q1 and Q2 2022 Duplicates

In 2022 Q1 and Q2, 560 samples were analyzed as quarter-core duplicates for gold, and 608 samples for multi-elements (silver, copper and molybdenum). The percentages stated below are not a true representation of core duplicate repeatability because the original sample analyzed is half core, whilst the duplicate sample analyzed is quarter core. 79.35% of the gold quarter-core duplicate pairs that are greater than 10 times the lower detection limit reported between ±50% of each other (Table 11.20), which is comparable to the 2021 data of 80.90%. For silver, copper and molybdenum, 81.19–82.94% of quarter-core duplicate pairs that are greater than 10 times the lower detection limit reported between ±50% of each other. There are 3.69% more samples within ±50% of each other for silver and 3.77% more samples within ±50% of each other for molybdenum respectively, when compared to the 2021 data. The percentage of copper samples within ±50% of each other for 2022 Q1 and Q2 is comparable to the 2021 data (81.58%). Overall, these percentages suggest that the gold, silver, copper and molybdenum in the core samples are quite sporadic and experience nugget effect.

Table 11.20: Summary of quarter-core duplicate statistics for gold (Q1-Q2 2022 program)

Analyte	No. of sample pairs	No. of sample pairs >10x detection limit	% of sample pairs >10x detection limit, within			
			±5%	±10%	±25%	±50%
Au	560	276	17.39%	31.16%	59.42%	79.35%

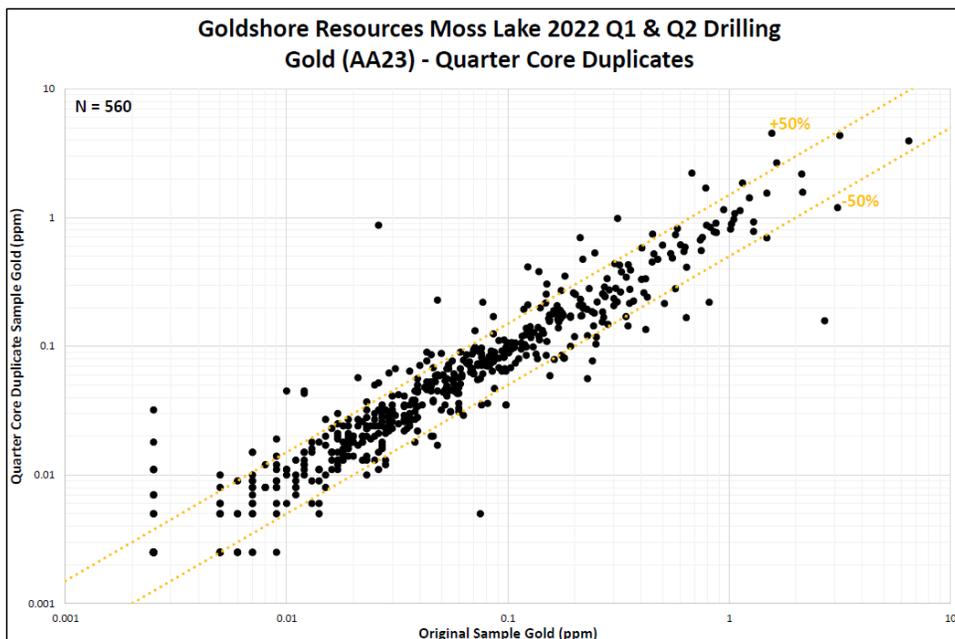


Figure 11.24: Gold concentrations in quarter-core duplicates for Moss Q1 and Q2 2022 drilling

11.3.4.3 Moss Q3 2022 Duplicates

In 2022 Q3, 486 samples were analyzed as quarter-core duplicates for gold, silver, copper, and molybdenum. The percentages stated below are not a true representation of core duplicate repeatability because the original sample analyzed is half core, whilst the duplicate sample analyzed is quarter core. 86.47% of the gold quarter-core duplicate pairs that are greater than 10 times the lower detection limit reported between  $\pm 50\%$  of each other (Table 11.19), which is a higher percentage than 2022 Q1 and Q2 data of 79.35%. For silver, copper, and molybdenum, 85.26–87.76% of quarter-core duplicate pairs that are greater than 10 times the lower detection limit reported between  $\pm 50\%$  of each other (Table 11.21). For these three analytes, more samples are within  $\pm 50\%$  of each other when compared to the 2022 Q1 and Q2 data of 81.19% (silver), 82.15% (copper) and 82.94% (molybdenum) respectively. Overall, even though more samples are within 50% of each other, these percentages suggest that the gold, silver, copper and molybdenum in the core samples are quite sporadic and experience nugget effect.

Table 11.21: Summary of quarter-core duplicate statistics for gold (Q3 2022 program)

Analyte	No. of sample pairs	No. of sample pairs >10x detection limit	% of sample pairs >10x detection limit, within			
			$\pm 5\%$	$\pm 10\%$	$\pm 25\%$	$\pm 50\%$
Au	486	266	221.18%	34.21%	62.41%	86.47%

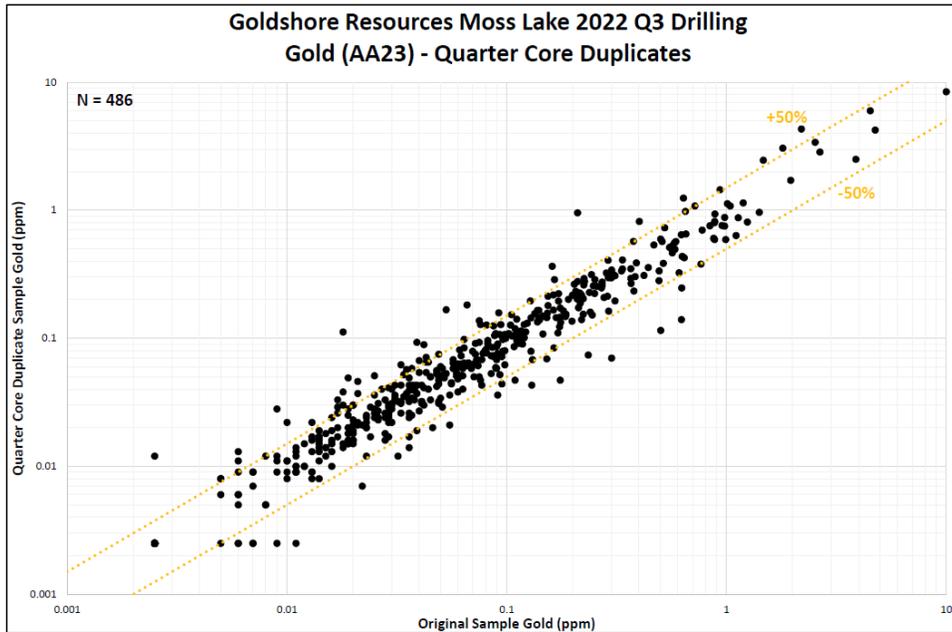


Figure 11.25: Gold concentrations in quarter-core duplicates for Moss Q3 2022 drilling

11.3.4.4 Moss Q4 2022 Duplicates

In 2022 Q4, 829 samples were analyzed as quarter core duplicates for gold. The percentages stated below are not a true representation of core duplicate repeatability because the original sample analyzed is half core, whilst the duplicate sample analyzed is quarter core. 84.65% of the gold quarter core duplicate pairs that are greater than 10 times the lower detection limit reported between  $\pm 50\%$  of each other (Table 11.22), which is a lower percentage than 2022 Q3 data of 86.47%. Overall, these percentages suggest that the gold in the core samples is quite sporadic and experience nugget effects.

Table 11.22: Summary of quarter-core duplicate statistics for gold (Q4 2022 program)

Analyte	# of Sample Pairs	# of Sample Pairs >10x Detection	% of Sample Pairs >10x Detection Limit, within			
			$\pm 5\%$	$\pm 10\%$	$\pm 25\%$	$\pm 50\%$
Au	829	391	16.88%	32.99%	63.68%	84.65%

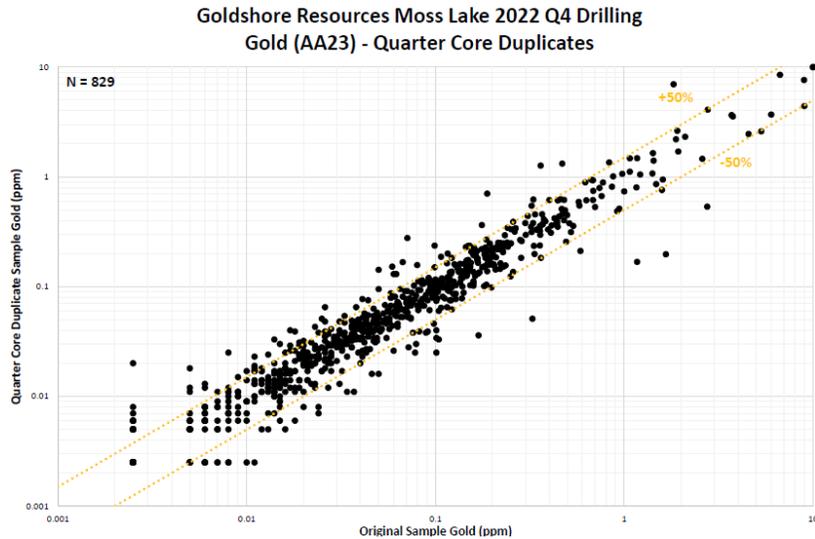


Figure 11.26: Gold concentrations in quarter-core duplicates for Moss Q4 2022 drilling

11.3.4.5 Coldstream 2022 Duplicates

In 2022, 251 samples were analyzed as quarter core duplicates for gold. The percentages stated below are not a true representation of core duplicate repeatability because the original sample analyzed is half core, whilst the duplicate sample analyzed is quarter core. 67.44% of the gold quarter core duplicate pairs that are greater than 10 times the lower detection limit reported between ±50% of each other (Table 11.23). This percentage is quite low when compared to the Moss Drilling quarterly values which are in the 80% range. Overall, the percentage for gold suggests that gold in the core samples are quite sporadic and experiences nugget effect.

Table 11.23: Summary of quarter-core duplicate statistics for gold (2022 program)

Analyte	# of Sample Pairs	# of Sample Pairs >10x Detection	% of Sample Pairs >10x Detection Limit, within			
			±5%	±10%	±25%	±50%
Au	251	43	16.28%	27.91%	48.84%	67.44%

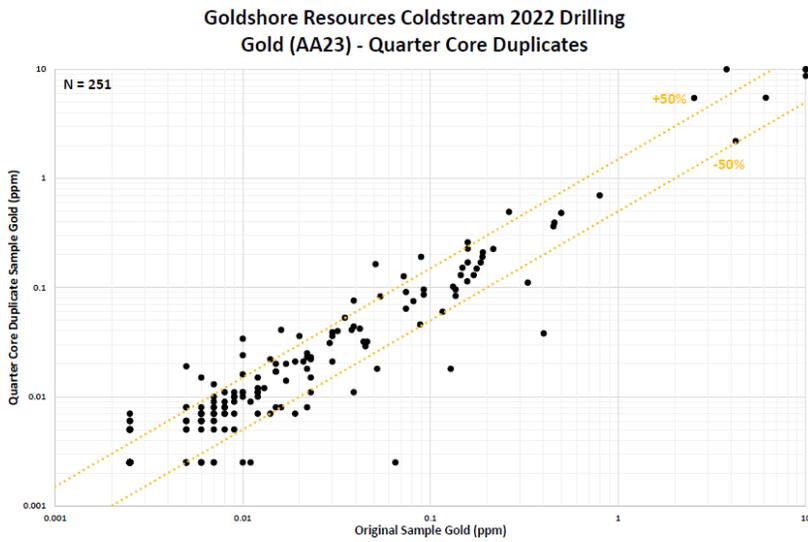


Figure 11.27: Gold concentrations in quarter-core duplicates for Coldstream 2022 drilling

#### 11.4 Summary Opinion of Qualified Person

The Qualified Person authors are of the opinion that the sample preparation, security and analytical procedures used by Goldshore are adequate for the purposes of using the drilling assay data in the current MRE for the Project.



## 12 Data Verification

### 12.1 Site Visit

The Project was visited by Neal Reynolds of CSA Global between 19 and 21 October, 2022. This visit was completed during the drill program that supports the Moss and East Coldstream MREs reported in this Technical Report. Dr. Reynolds is a co-author of this Report and an independent Qualified Person as defined in NI 43-101. The purpose of his site visit was to conduct a QP inspection of the Project, familiarize with the deposit and its geology as the basis for the MRE, and assess systems and procedures related to acquisition of data used in the current MRE.

During his site visit, drill core was examined from a number of drill holes at the core facility Kashabowie, and geology interpretations and models were reviewed with the Goldshore geological and technical team. The available drill core for review was from the 2021-2022 drilling program covering the Main and QES zones at Moss. Drill core was visually compared with assay results, and visual indication of alteration and mineralization was observed to correlate well with reported assay results.

Procedures for core handling, orientation, logging, density determination, sample designation, insertion of quality control samples, core-cutting, sampling, and secure sample shipment were reviewed with the Goldshore team and found to be of good industry standard. Procedures used by the team to evaluate risk related to historical drilling were also reviewed and considered to be appropriate, or conservative.

The Main, QES and North Coldstream deposit areas were visited to observe outcropping mineralization and drilling. A number of drill collars from the 2021-2022 drilling programs were visited and collar coordinates checked with a hand-held GPS. Coordinates correlated well with those recorded in the drill hole database. Two active drill sites were also visited, and drilling and core handling procedures were observed.

Mr. Reynolds considers that the data and models provided by Goldshore, as supported by the site visit and prior data validation, are appropriate to support the current MRE presented in this Report.

### 12.2 Database Verification and Validation

All drill hole data were imported into Leapfrog software and interrogated via Leapfrog validation functions prior to constructing a drill hole database for the deposit. Key fields within these critical drill hole database data files are validated for potential numeric and alpha-numeric errors. Data validation cross referencing collar, survey, assay, and geology files was performed to confirm drill hole depths, inconsistent or missing sample/logging intervals, and survey data. The data was validated – checked for logical or transcription errors, such as overlapping intervals. There were a few, minor errors that were corrected. Collar elevations were compared with the digital elevation model, and the sample distribution was reviewed to make sure they represent the mineralization and are appropriate for spatial interpolation.

### 12.3 Verification of Sampling and Assaying

The databases provided by Goldshore were split between “historical” and “new” drilling data. The new drilling was completed by Goldshore, and the historical drilling were completed before Goldshore owned the Project.

Goldshore used a ranking system to manage the confidence in the data. The ranking was completed for collars, survey and assay separately. Table 12.1 summarises the definition used for the risk rating. Risk rating 1 has the highest confidence and 3 the lowest confidence in the data.

Commented [NR60]: @Niti Gupta can I assume updated?



Table 12.1: Risk rating definition table

Area	Risk rating	Definition
Collar	1	Accuracy ±1cm (DGPS)
	2	Accuracy ±1 m (historical total station survey)
	3	Accuracy ±5 m or greater (handheld GPS, mine grid survey, etc.); unknown origin UTM coordinates; latitude/departure coordinates
Survey	1	Advanced equipment (Flexit*, gyro) (multi-shot downhole surveys)
	2	Tropari**, Pajari***, Ranger (single shot downhole surveys)
	3	Acid test, compass (for collar azimuth/dip)
Assay	1	Recognized independent commercial laboratory with documented QAQC
	2	Recognized independent commercial laboratory with no documented QAQC
	3	On-site laboratory with no documented QAQC

\*Flexit: downhole multi-shot survey; azimuth accurate to ±0.3°, inclination from horizontal accurate to 0.2°.

\*\*Tropari: Single-shot, micro-mechanical borehole surveying instrument operated by a timing device (no accuracy could be found).

\*\*\*Pajari: Single-shot, micro-mechanical borehole surveying instrument operated by a timing device. Borehole direction is measured from the Earth's magnetic field, accurate to ±0.5°.

### 12.3.1 Collar Data

Collar positions for Moss Project were inspected by the Neal Reynolds (Qualified Person) during the site visit. He concluded that the re-survey of historical collars (that were found in the field) was close to the original collar pick-ups and the collar data were valid to use in the MRE. Additional checks in Leapfrog showed that visually the collars plotted correctly. Collar elevations were compared with the digital elevation model provided by Goldshore. The database contained one collar that plotted far outside of the Project area and is probably a typographic error that was made during data capturing. The hole was ignored for the MRE.

The collar positions for East Coldstream Deposit were not physically examined by Mr. Reynolds. However, a thorough verification process was carried out using Leapfrog software to ensure the accuracy of the collar data. Collar elevations were cross-referenced with the digital elevation model supplied by Goldshore. Some minor discrepancies were identified in the collar data, which Goldshore rectified prior to commencing the MRE.

### 12.3.2 Survey Data

The downhole survey data were validated by using the risk 1 holes (new drilling). The holes were viewed in section and in 3D to evaluate the planned versus actual trace of the holes. Most holes showed minimal deviation from surface to between 150 m and 200 m downhole (Figure 12.1). It is important to note that the deviation is variable from hole to hole.

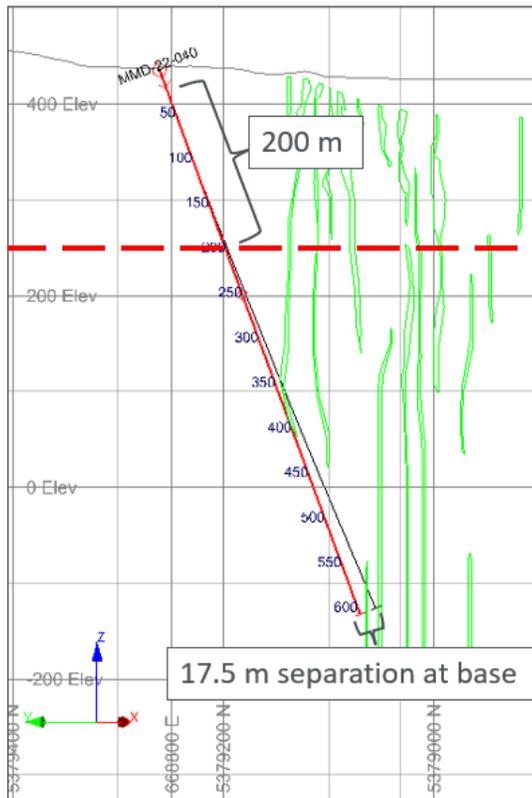


Figure 12.1: Example of natural deviation for drill hole MMD22-040

### 12.3.3 Assay Data

#### 12.3.3.1 Moss Gold Deposit

Since the previous estimate, Goldshore have conducted resampling of several old cores in an attempt to evaluate the assaying quality of historical data. This involved removing quarter core samples from two hole in the QES zone (90-206 and 90-202) and four in the Main Zone (88-130, 88-141, 88-151 and 88-157).

CSA Global examined these results and has drawn the following conclusions:

- The results have poor repeatability. This is influenced by the different sample support (quarter versus half core), the nuggety nature of the deposit, but also possible analytical reasons.
- Data from the 1990 drill hole in the QES zone look better than the 1988 data from the Main zone (Figure 12.2 and Figure 12.3).
- Historic high Au values in 1988 holes are possibly over estimated.
- Too few repeat samples have been assayed to assess the quality of historical drilling.

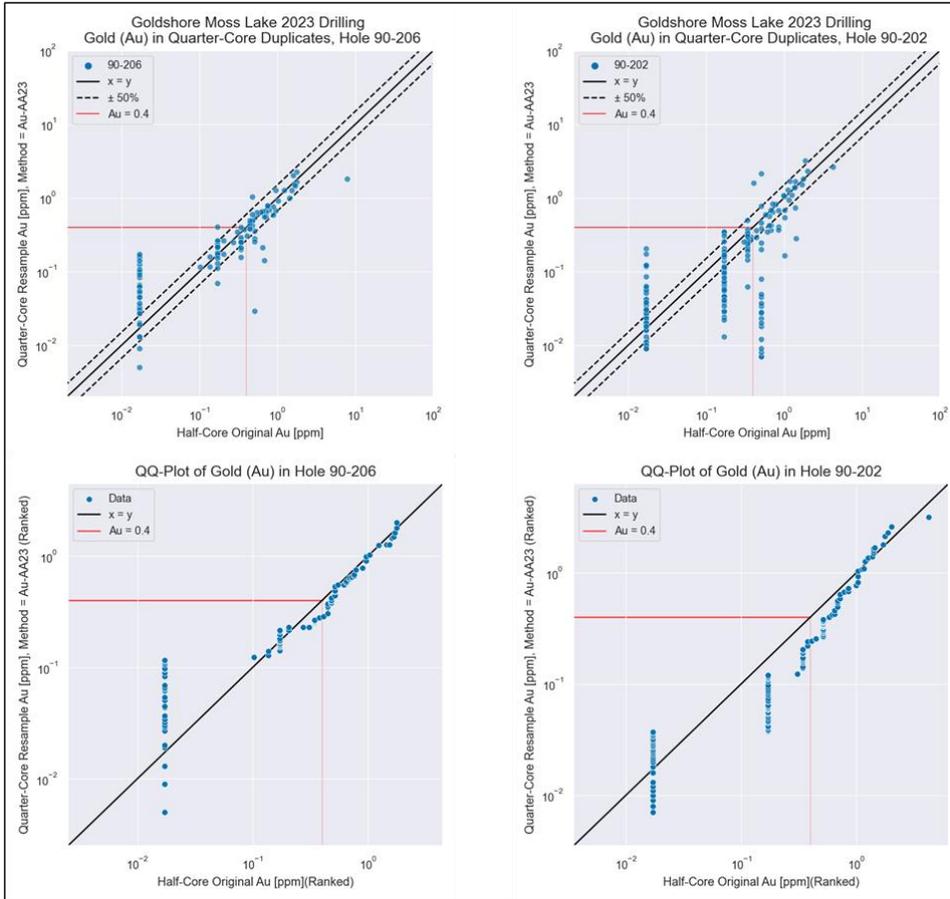


Figure 12.2: Plots of original and repeat samples from the QES zone

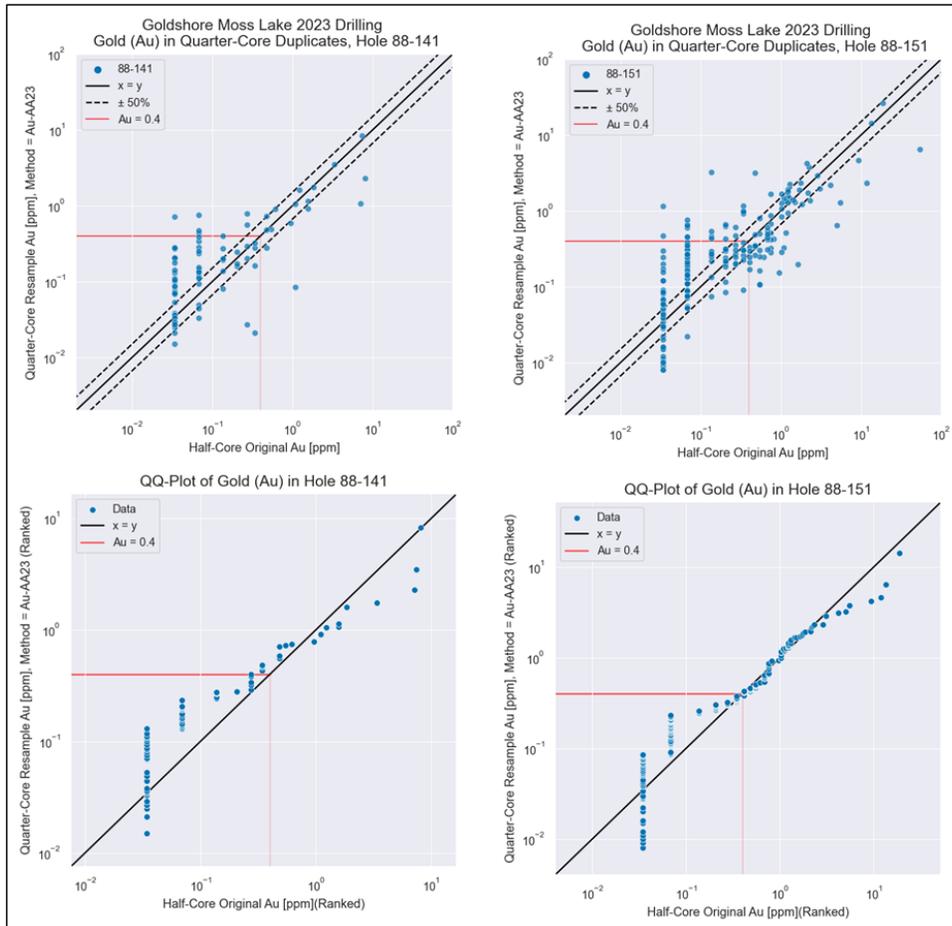


Figure 12.3: Plots of original and repeat samples from the Main zone

CSA Global also re-examined hole that Goldshore had drilled as “twin holes” close to existing historical holes. This comprised one set in the QES zone (90-209 and MQD-21-009) and three set in the Main zone (90-223 and MMD-21-006; ML-08-14 and MMD-21-005; 96-257, ML-08-03 and MMD-21-001). Summary results are presented in Table 12.2.

From this study CSA Global concluded the following:

- The recent holes are frequently too distant from the originals to be considered true twins.
- Considering the nature of the deposits and deviations of the collar surveys, qualitatively there is reasonable agreement between historical and recent drilling.
- For the purposes of validating the historical assay results an improvement in the placement of twin holes closer to the originals is required.



Table 12.2: Comparative statistics from twinned holes at Mass Lake

Zone	Original	Recent Twin	Weighted Mean Au ppm original	Weighted Mean Au ppm twin	Downhole metres - original	Downhole metres - twin
QES	90-209	MQD-21-009	0.5373	0.3554	51-223 m	52-232 m
Main	90-223	MMD-21-006	0.3928	0.3288	26-225 m	26-226 m
Main	ML-08-14	MMD-21-005	0.5645	0.4931	27-230 m	27.5-232 m
Main	96-257	MMD-21-001	0.4623	0.5315	17-231 m	15-231 m
Main	87-71	ML-21-007	0.7569	0.4026	17-37 m	17-37 m
Main	ML-08-15	ML-21-007	0.9759	0.4026	15-37 m	17-37 m
Main	87-71	ML-21-007	1.7175	0.8196	41-69 m	40-68 m
Main	ML-08-15	ML-21-007	0.4866	0.8196	40-69 m	40-68 m

Based on the assay drill hole, the Qualified Person accepts the historical data for use in Mineral Resource estimation and reporting (but only as Inferred Mineral Resources).

#### 12.3.3.2 East Coldstream Deposit

The assay data, comprising both recent and historical records, was cross-referenced with the assay data found on the available certificates to ensure the accuracy and reliability of the provided information. The following checks and validations were performed:

- 7639 non historic (taken in 2022) samples in database-992 samples checked (12.9%): 100% pass rate
- 56 drill holes from 2010 & 2011- 16 randomly selected drill holes to be validated: 100% pass rate
- 57 COAs within this document containing 7571 samples-1521 (20%) samples checked: 100% pass rate
- 6/15 COAs checked or about 40% of samples checked (790 samples): 100% pass rate
- 16 surveys provided – 5 validated (31%): 100% pass rate.

Based on the thorough examination of the database using assay certificates, the Qualified Person acknowledges that both the historical and new drilling data are suitable for utilization in estimating Mineral Resources and reporting, but only at the level of Inferred Mineral Resources.

### 12.3.4 Lithology and Structural Data

#### 12.3.4.1 Moss Gold Deposit

Goldshore provided lithology and structural data. A high-level validation was completed on this data. There are collars (historical) without lithology and structural data and some overlapping intervals. The data was not used for the MRE and CSA Global did not validate the data in detail.

#### 12.3.4.2 East Coldstream Deposit

Goldshore supplied lithology and structural data, which underwent a preliminary validation process at a high level. As a result, CSA Global did not conduct a detailed validation of the data. However, the lithology information was utilized as a point of reference for density calculations during the Mineral Resource Estimation.



### **12.3.5 Density Data**

The density data were determined using two methods. A pure Archimedes Principal approach was used as method one and does not allow the internal pores to be filled by using a wax coating on the core. The second method allowed for the pore space by weighing the wet sample again in air. For Moss Gold Deposit, to determine the quality of the density determinations, the difference between the two methods were calculated and a 15% difference threshold was used to determine if the density value is valid. The threshold will filter out samples with sample loss or any other problem during the measurements. Only density determinations within the threshold were used to calculate the mean density for use in the MRE. For the East Coldstream Deposit, Goldshore supplied lithology and structural data, which underwent a preliminary validation process at a high level. As a result, CSA Global did not conduct a detailed validation of the data. However, the lithology information was utilized as a point of reference for density calculations during the Mineral Resource Estimation.

### **12.4 QP Authors Opinion on Data Verification**

The QP authors are of the opinion that respective results of their data validation and verification program components discussed above indicate that industry standard levels of technical documentation and detail are evident in the drilling results for the Project that support the current MRE. The QP authors conclude that the associated validated drill hole database is considered adequate for use in the current MRE and confirm that the database used has been generated with proper procedures and has been accurately transcribed from the original source material.



## 13 Mineral Processing and Metallurgical Testing

The mineral processing and metallurgical testing section of this report was authored by Robert Raponi P.Eng and reviewed by Richard Wagner P.Eng of CSA Global. Nigel Fung P. Eng is the QP of this section.

This report references two metallurgical testing programs. The initial program was concluded in 2022, while the second program does not have any available results as of the effective date of this report. These programs are summarized in Table 13.1.

Table 13.1: Metallurgical testwork summary

Year	Laboratory/Location	Testwork performed
2022	ALS Metallurgy Kamloops, BC	Program KM6683 Leach tests.
2023	Base Metallurgy Ltd. Kamloops, BC	Mineralogy, comminution, gravity concentration, flotation, leaching, cyanide detoxification (Program BL1194 in progress)

### 13.1 Metallurgical Testwork

#### 13.1.1 Historical Testwork

In the November 2022 NI 43-101 Technical Report, the following paragraphs summarized historical metallurgical testwork for the Moss deposit:

*“Historical metallurgical testwork carried out by previous operators was completed on samples from the Moss Gold Deposit by SGS Canada, four samples from the Main Zone and four from the QES zone. Work completed included comminution tests, mineralogy, cyanide leaching, and acid-base accounting. The mineralogy study showed that the major mineral for the samples was quartz and the moderate mineral was plagioclase with chlorite. The samples were also categorized from “medium hard” to “hard” based on various comminution tests. Bottle roll cyanidation tests were conducted on 1 kg charges at three P80s; 150 µm, 106 µm, and 53 µm for each composite. The cyanidation was completed with 40 wt.% solids at pH maintained between 10.5 and 11.0 with hydrated lime (Ca(OH)<sub>2</sub>) for 48 hours. The free cyanide concentration (NaCN) was maintained at 0.5 g/L. For the Main Zone samples, the 48-hour gold extractions ranged from 79% to 84% for all the grind sizes tested, while for the QES Zone samples, gold extractions ranged from 79% to 93% for all grind sizes. In addition, modified acid base accounting (ABA) test was carried out to quantify the total sulphur, sulphide sulphur, and sulphate concentrations, and the potential acid generation (AP) as a result of the oxidation of sulphide sulphur. The modified ABA results show a low potential for acid generation.*

*Scoping-level historical testwork was also completed on a master composite from the East Coldstream (or Osmani) deposit on the Coldstream claim block, including two gravity separation tests, three rougher kinetics flotation tests, one open circuit flotation test, one gravity tails rougher flotation test, one gravity tails leaching test, four variability rougher kinetics flotation tests, and four variability leaching tests. Results suggest that the best gold recovery of 96.1% is achieved by a combination of gravity and leaching.”*

**Commented [NR61]:** @Niti Gupta @Nahid Molaei @Nigel Fung this is way too long winded, it needs to be edited down to the key points and tables. I cannot. A Ni 43-101 is a SUMMARY report, it is also an advertisement for us as individuals and a company

**Commented [NR62]:** What about East Coldstream??? @Nahid Molaei @Niti Gupta @Nigel Fung

**Commented [NR63]:** @Nahid Molaei @Niti Gupta @Nigel Fung Has someone edited this section? The paragraph was not in the 2022 MRE, it was in the 2022 NI 43-101 technical report - this concerns me that this section has not been checked and edited???



### 13.1.2 Recent Testwork

In 2022, a program was completed at ALS Metallurgy in Kamloops, BC (project KM6683) on a series of samples. A total of 22 samples were tested that were representative of 20 possible geological domains.

The following criteria were used to define the detailed geometallurgical types:

- Lithology – Intrusive or Volcanic (other rock types have insufficient mineralized sample)
- Alteration – Sericite, Silica, Albite/Carbonate and Chlorite/Epidote in Low (weak) and High (moderate to intense) amounts
- Gold grade – Low (0.3 to 1.0 g/t Au) and High ( $\geq 1.0$  g/t Au)
- Sulphur – Low (< 2%) and High ( $\geq 2.5\%$ )
- Copper – Low (< 1000 g/t) and High ( $\geq 1,000$  g/t).

The scope of work included leach cyanidation bottle roll testing at a grind size  $k_{80}$  of 106  $\mu\text{m}$  at 40 percent by weight solids, pH 11, and maintaining a sodium cyanide concentration of 0.5 g/L NaCN for 48 hours. Oxygen was sparged into the bottle headspace prior to each leaching stage.

The results of the program are summarized in Table 13.2.

Table 13.2: Summary of 2022 Moss Gold Leach Test Program

Item	Calc. Au (g/t)	Assay Au (g/t)	Cu (%)	Te (g/t)	S (%)	Leach Residue Au (g/t)	Au Leach Extraction (%)
Average	1.64	1.31	0.030	2.68	1.02	0.31	83.2
Minimum	0.42	0.28	0.013	0.79	0.55	0.04	73.8
Maximum	4.23	3.38	0.104	8.34	2.32	0.89	92.4

The average leach extraction of 83% Au is close to the limit typically considered the definition of free milling of 80%. There is a minor trend between Au extraction trending with tellurium (Te).

### 13.1.3 Current Goldshore Testwork

#### 13.1.3.1 Overview

The PEA metallurgical testing program was completed at Base Metallurgical Laboratories Ltd. (BaseMet) under project BL1194.

The scope of work included the following items:

- Sample characterization including assaying, screened metallics assaying and bulk mineralogy with QEMSCAN
- Comminution testing
- Extended gravity gold testing
- Flotation
- Leach testing
- Cyanide detoxification
- Solids liquids separation testing.

**Commented [NR64]:** @Nahid Molaei @Niti Gupta @Nigel Fung what is the difference between recent and current? 2022 is recent if not reported in our past report



### 13.1.3.2 PEA Metallurgical Samples

The PEA metallurgical samples were selected with the following criteria:

- The Main QES pit was sampled both spatially and samples from the higher-grade shear zones and the lower grade host rocks.
- The Southwest Zone and East Coldstream pits were sampled as variability samples.
- Comminution samples from the Main QES pit on a spatial distribution.

The sample list with estimated head grades is shown in Table 13.3

Zone	Composite Sample ID	Grade (Au g/t)	Description	Testing
Main QES	MCOM1	-	Main QES West End of Pit	Comminution
	MCOM2	-	Main QES Central Pit	Comminution
	MCOM3	-	Main QES East End of Pit	Comminution
	MWS	2.67	Main QES West End of Pit Shear Zones Intervals	Variability, Mineralogy
	MCS	1.13	Main QES Central Pit Shear Zones Intervals	Variability, Mineralogy
	MES	1.66	Main QES East End of Pit Shear Zones Intervals	Variability, Mineralogy
	MWLGH	0.48	Main QES West End of Pit Low Grade Host Zone Intervals	Variability, Mineralogy, Coarse Leach
	MCLGH	0.45	Main QES Central Pit Low Grade Host Zone Intervals	Variability, Mineralogy, Coarse Leach
	MELGH	0.39	Main QES East End of Pit Low Grade Host Zone Intervals	Variability, Mineralogy, Coarse Leach
	MWPC	1.31	Main QES West Pit Composite	Variability, Mineralogy, Coarse Leach, Flotation
	MCPC	0.39	Main QES Central Pit Composite	Variability, Mineralogy, Coarse Leach, Flotation
	MEPC	1.56	Main QES East Pit Composite	Variability, Mineralogy, Coarse Leach, Flotation
	MQC	1.00	Main QES Pit Composite	All except comminution
SW Zone	SWS	0.61	South-West Pit Shear Zone Intervals	Variability, Mineralogy
	SWLGH	0.34	South-West Pit Low Grade Host Zone Intervals	Variability, Mineralogy
	SWC	0.61	South-West Pit Composite	Variability, Mineralogy, Coarse Leach, Flotation
Cold Stream	CES	2.69	Coldstream East Shear	Variability, Mineralogy
	CWS	2.07	Coldstream West Shear	Variability, Mineralogy
	CSC	2.51	Coldstream Shear Composite	Variability, Mineralogy, Coarse Leach, Flotation

. Head assays are based on screened metallics assays. The MQC sample was used as the primary development composite for leach and flotation optimization, bulk flotation and cyanide detoxification (combined concentrate and flotation tailings leach).

Table 13.3: Moss PEA metallurgical testing program sample list

Zone	Composite Sample ID	Grade (Au g/t)	Description	Testing
Main QES	MCOM1	-	Main QES West End of Pit	Comminution
	MCOM2	-	Main QES Central Pit	Comminution



	MCOM3	-	Main QES East End of Pit	Comminution
	MWS	2.67	Main QES West End of Pit Shear Zones Intervals	Variability, Mineralogy
	MCS	1.13	Main QES Central Pit Shear Zones Intervals	Variability, Mineralogy
	MES	1.66	Main QES East End of Pit Shear Zones Intervals	Variability, Mineralogy
	MWLGH	0.48	Main QES West End of Pit Low Grade Host Zone Intervals	Variability, Mineralogy, Coarse Leach
	MCLGH	0.45	Main QES Central Pit Low Grade Host Zone Intervals	Variability, Mineralogy, Coarse Leach
	MELGH	0.39	Main QES East End of Pit Low Grade Host Zone Intervals	Variability, Mineralogy, Coarse Leach
	MWPC	1.31	Main QES West Pit Composite	Variability, Mineralogy, Coarse Leach, Flotation
	MCPC	0.39	Main QES Central Pit Composite	Variability, Mineralogy, Coarse Leach, Flotation
	MEPC	1.56	Main QES East Pit Composite	Variability, Mineralogy, Coarse Leach, Flotation
	MQC	1.00	Main QES Pit Composite	All except comminution
SW Zone	SWS	0.61	South-West Pit Shear Zone Intervals	Variability, Mineralogy
	SWLGH	0.34	South-West Pit Low Grade Host Zone Intervals	Variability, Mineralogy
	SWC	0.61	South-West Pit Composite	Variability, Mineralogy, Coarse Leach, Flotation
Cold Stream	CES	2.69	Coldstream East Shear	Variability, Mineralogy
	CWS	2.07	Coldstream West Shear	Variability, Mineralogy
	CSC	2.51	Coldstream Shear Composite	Variability, Mineralogy, Coarse Leach, Flotation

### 13.1.3.3 Sample Characterization

Screened metallics gold assays were conducted on 12 composites. Aliquots of 0.5 kg from each composite were pulverized and then screened at 106  $\mu\text{m}$  with the oversize and undersize fractions assayed separately. The head grade was calculated from the weighted assays from the two fractions. The results are shown in Table 13.4. Generally, the results do not show gold concentration in the coarse size fraction. The samples are not likely amenable to gravity concentration.

Table 13.4: Moss sample screen metallics assays

Sample	+106 $\mu\text{m}$ Fraction		-106 $\mu\text{m}$ Fraction	Calc. Grade (g/t Au)
	Au (g/t)	Au Dist. (%)	Au (g/t)	
MWS	3.84	8.46	2.60	2.67
MCS	1.36	7.10	1.12	1.13
MES	1.97	6.21	1.64	1.66
MWLGH	0.38	2.06	0.49	0.48
MCLGH	0.34	4.38	0.46	0.45
MELGH	0.39	5.10	0.39	0.39
MWPC	1.08	4.48	1.32	1.31
MCPC	0.36	5.41	0.40	0.39
MEPC	1.44	4.35	1.57	1.56
MQC	0.56	2.82	1.03	1.00
SWS	2.61	5.16	2.70	2.69
SWLGH	0.32	5.57	0.35	0.34



SWC	0.68	5.96	0.61	0.61
CES	2.26	5.00	2.72	2.69
CWS	0.78	1.29	2.12	2.07

Samples were submitted to characterise the sample with a full suite of assays which included:

- Gold and silver on all samples by direct assay
- Sulphur (total S<sub>T</sub>, sulphide sulphur S<sup>2-</sup>)
- Copper (Cu) and iron (Fe).

The head analysis of the samples is shown in Table 13.5. The samples tested had gold assays ranging from 0.34 to 2.69 g/t. Sulphur occurs primarily as sulphide sulphur and is associated predominantly with pyrite. Copper concentrations are below the level when excess cyanide consumption typically becomes an issue.

Table 13.5: Moss samples head analysis

Sample	Au(g/t)	Ag (g/t)	Cu (g/t)	Fe (%)	ST (%)	SO42- (%)	S (%)
MCOM1	-	0.7	137	1.53	0.64	0.02	0.62
MCOM2	-	0.4	154	2.00	0.98	0.01	0.96
MCOM3	-	1.5	109	1.64	1.24	0.01	1.23
MWS	2.67	1.4	205	2.27	1.65	0.03	1.62
MCS	1.13	1.0	44	1.91	1.21	0.03	1.18
MES	1.66	4.4	469	2.10	2.13	0.04	2.09
MWLGH	0.48	0.6	127	2.6	0.72	<0.01	0.72
MCLGH	0.45	0.8	192	1.36	0.96	0.02	0.94
MELGH	0.39	0.4	118	0.94	0.46	0.03	0.43
MWPC	1.31	1.4	213	2.76	1.21	0.01	1.20
MCPC	0.39	1.2	718	1.16	0.59	0.02	0.57
MEPC	1.56	2.4	248	1.75	1.50	<0.01	1.50
MQC	1.00	1.1	206	1.77	0.86	<0.01	0.86
SWS	0.61	2.8	372	1.72	1.38	0.01	1.37
SWLGH	0.34	0.4	370	2.98	0.41	0.02	0.39
SWC	0.61	0.9	300	2.02	0.59	<0.01	0.59
CES	2.69	0.6	70	3.75	1.82	0.02	1.80
CWS	2.07	1.4	40	5.14	1.48	0.02	1.46

#### 13.1.3.4 Mineralogy

All Composites underwent QEMSCAN rapid mineral scan to identify the composition of minerals, as presented in Table 13.6 and in Figure 13.1.

Key observations are as follows:

- Quartz, plagioclase and chlorite make up the majority of non-sulphide gangue
- Carbonate content ranges from <3% to 20% in the CSC sample.

The main sulphide mineral is pyrite, ranging from 0.76% to 4.45%, averaging 2.28%. Minor amounts of chalcopyrite are present, averaging 0.08%. Pyrite accounts for an average of 96.2% of the sulphur present.

Table 13.6: Moss samples bulk mineralogy analysis

Sample	MWLGH	MCLGH	MELGH	MWPC	MEPC	MQC	SWC	MCPC	CWS	MCS	CES	MES	MWS	SWS	SWLGH	CSC
Pyrite	1.12	1.34	0.76	2.16	3.11	1.35	1.26	1.40	2.80	2.49	4.44	4.45	3.77	2.80	0.76	2.49
Chalcopyrite	0.06	0.08	0.04	0.07	0.07	0.10	0.13	0.22	0.01	0.01	0.03	0.08	0.07	0.11	0.11	0.03
Other Sulphides	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.01	0.01	0.01	0.09	0.00	0.00	0.00	0.01
Quartz	12.2	24.0	26.4	19.4	31.9	22.3	21.7	23.2	29.1	37.6	41.4	40.5	27.2	24.7	12.1	17.1
Plagioclase	32.5	41.1	37.4	25.2	22.9	36.3	27.2	39.7	41.6	20.2	29.1	15.9	18.3	25.6	24.7	36.4



K-Feldspar	2.71	2.15	3.93	4.17	3.91	3.59	5.42	3.78	0.72	3.05	1.08	3.54	4.39	4.50	9.59	1.12
Epidote	17.6	4.19	7.52	8.19	0.23	4.59	5.28	4.80	0.43	0.02	0.01	0.28	0.11	15.0	0.16	
Amphibole	6.65	0.51	0.21	2.10	0.12	1.06	2.79	0.62	1.83	0.33	1.27	0.18	0.49	0.60	3.93	3.07
Sericite/Muscovite	1.53	11.4	14.3	11.7	26.1	11.4	11.3	11.7	2.56	22.2	5.99	27.4	24.2	21.7	1.43	6.61
Chlorite	15.0	7.59	4.13	12.5	2.66	7.84	13.1	6.81	1.65	4.29	0.30	0.77	8.28	7.62	22.0	3.17
Clays	0.42	0.65	0.72	0.70	1.16	1.14	1.13	0.92	1.45	1.21	0.74	1.52	0.90	1.06	1.01	1.43
Other Silicates	4.84	1.86	1.21	6.79	1.44	3.69	2.40	2.34	0.96	0.91	1.00	0.97	2.45	1.48	3.46	1.43
Oxides	0.11	0.15	0.16	0.14	0.17	0.21	0.16	0.15	7.01	0.35	2.20	0.18	0.14	0.24	0.04	6.20
Calcite	4.81	4.60	2.89	6.37	5.60	6.01	7.53	3.97	1.48	5.81	1.59	3.27	8.74	8.87	5.26	3.05
Other Carbonates	0.03	0.08	0.02	0.02	0.24	0.03	0.20	0.02	7.76	0.71	10.3	0.87	0.08	0.09	0.06	16.9
Apatite	0.43	0.32	0.30	0.42	0.35	0.31	0.31	0.33	0.64	0.34	0.34	0.22	0.48	0.40	0.39	0.50
Other	0.06	0.04	0.04	0.06	0.04	0.06	0.05	0.04	0.39	0.07	0.20	0.07	0.15	0.07	0.06	0.39
<b>Total</b>	<b>100</b>															

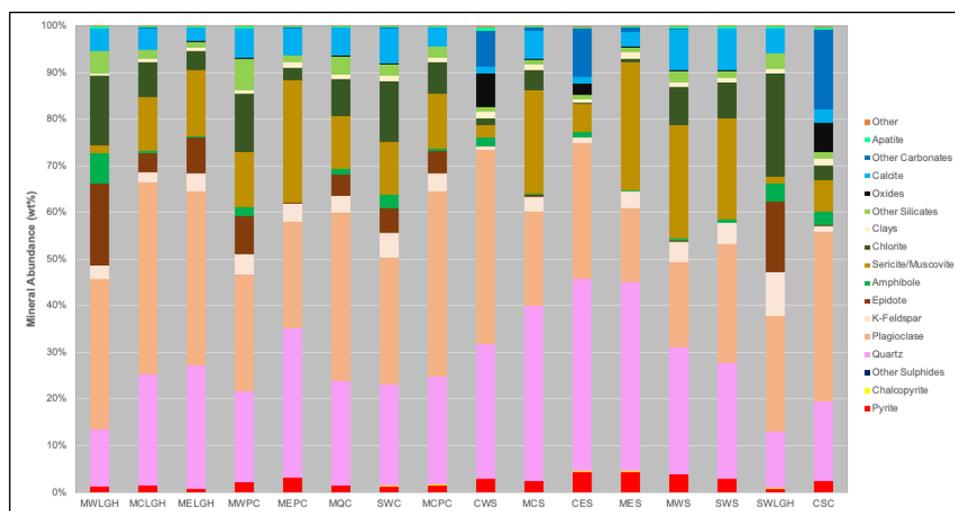


Figure 13.1: Moss samples bulk mineralogy analysis (BaseMet, 2023)

13.1.3.5 Comminution Testing

The objective of the comminution testing was to characterise the sample competency and hardness/grindability the deposit.

Testing was completed on three samples. The program comprised Steve Morrell mill comminution (SMC) testing, Bond crushing work index (CWi) Bond rod mill work index (RWi), Bond ball mill (BWi) work index tests, and Bond abrasion index (Ai) testing. Bond rod mill work index tests were conducted using a 1,180 µm closing screen size. Bond ball mill work index tests were conducted using a 150 µm closing screen size, aiming to achieve a grind size of P80 of 100 µm.

The results of all these tests are presented in Table 13.7.

Table 13.7: Summary of Moss comminution test results

ID	Ai (g)	RWi (metric)	BWi (metric)	Axb (SMC)
Average	0.175	18.4	19.5	34.7
75th percentile	0.198	19.7	21.8	40.0
90th percentile	0.235	20.7	23.3	44.4



The SMC Axb average value is 34.7, which indicates the samples are competent. The average RWI and BWI values of 18.4 and 19.5 (metric) respectively, are considered hard to very hard range of hardness. The average Ai value of 0.175 g, which is classified as low abrasivity.

### 13.1.3.6 Extended Gravity Recovery Gold (E-GRG) Testing

An E-GRG test was conducted on the MQC composite. 20 kg of the sample was crushed to produce a k80 of approximately 1.2 mm. The crushed sample was passed through a Knelson concentrator, from which the concentrate is retained and sized for assay and the tailings are sized, reground to a grind target, k80 of 250 µm, and passed through the concentrator for a second pass. Again, the concentrate is retained and sized, whereas the tailings are reground to a k80 of 75 µm and passed through the third concentrator for a third pass. Final tailings are sampled, sized, and assayed. A summary of the results is presented in Table 13.8.

Table 13.8: Moss E-GRG test results

Composite	Product	Feed Size (K80) per Stage (µm)	Mass (%)	Assay (g/t Au)	Au Distribution (%)
MQC	Stage 1 Conc.	1302	0.45	14.2	5.3
	Stage 2 Conc.	308	0.48	19.4	7.7
	Stage 3 Conc.	124	0.52	61.2	26.6
	Tailing	-	98.5	0.73	60.3
	Combined Concentrate	-	1.45	3.28	39.7
	Calc. Head Grade	-	-	1.20	-

The E-GRG test results show the MQC composite minimal amounts of coarse gold in the stages 1 and 2 concentrates and overall low amenability to gravity gold recovery with recovery of 40%.

### 13.1.3.7 Leach Testing

#### 13.1.3.7.1 Coarse Leach Tests

Intermittent bottle rolls leach tests were conducted on the samples at crush sizes of -6.25 mm and -2 mm to evaluate potential for heap leaching. Tests were run over 8 days with bottles rolled for 1 minute per hour. Tests were run with 1 g/L free sodium cyanide (NaCN) maintained over the test duration at a pH range of 10.5 – 11.0. The results are summarized in Table 6. Average leach extraction for the -6.25 mm crush size samples is 52.6% Au and for -2 mm crush size samples is 64.2% Au. The low extractions for both fine crush sizes indicate heap leaching will result in low recoveries, which commercially are at coarser crush sizes. The results are summarized in Table 13.9.

Table 13.9: Moss coarse leach test results

Sample ID	Crush Size (mm)	Consumption (kg/t)		Au Grade (g/t Au)			Leach Extraction (% Au)				
		NaCN	CaO	Assay Head	Calc. Head	Leach Residue	Days				
							1	2	4	6	8
MWLGH	-6.25	0.16	0.36	0.00	0.61	0.30	38.1	40.0	46.8	50.4	50.6
MCLGH	-6.25	0.17	0.27	0.45	0.64	0.36	32.9	36.3	42.7	44.5	44.7
MELGH	-6.25	0.29	0.30	0.39	0.40	0.19	47.1	47.4	50.1	52.8	53.1
MWPC	-6.25	0.22	0.29	1.31	1.69	0.75	40.8	45.8	50.8	54.0	55.5
MCPC	-6.25	0.23	0.31	0.39	0.42	0.19	38.4	43.4	48.4	48.6	56.1
MEPC	-6.25	0.24	0.32	1.56	1.46	0.56	53.3	61.1	60.1	61.7	62.0
MQC	-6.25	0.19	0.29	1.00	1.08	0.54	36.4	41.3	46.1	48.2	50.3



Sample ID	Crush Size (mm)	Consumption (kg/t)		Au Grade (g/t Au)			Leach Extraction (% Au)				
		NaCN	CaO	Assay Head	Calc. Head	Leach Residue	Days				
							1	2	4	6	8
SWS	-6.25	0.23	0.35	0.61	0.55	0.29	36.6	42.3	48.0	48.2	48.4
CSC	-6.25	0.32	0.36	2.51	2.37	1.13	29.3	37.6	45.8	49.5	52.3
MWLGH	-2	0.16	0.30	0.00	0.54	0.23	49.8	52.2	56.4	58.8	57.5
MCLGH	-2	0.16	0.23	0.45	0.48	0.20	50.5	55.2	57.9	58.4	59.0
MELGH	-2	0.15	0.22	0.39	0.43	0.14	60.3	63.3	66.2	66.9	67.5
MWPC	-2	0.23	0.29	1.31	1.51	0.53	55.0	59.5	62.8	64.0	65.3
MCPC	-2	0.24	0.29	0.39	0.55	0.19	53.0	57.2	63.2	63.8	66.3
MEPC	-2	0.18	0.24	1.56	1.91	0.44	66.2	71.1	74.9	75.7	76.9
MQC	-2	0.26	0.24	1.00	0.93	0.39	46.3	50.0	56.9	57.5	58.0
SWS	-2	0.31	0.23	0.61	0.74	0.32	46.3	50.8	54.0	55.9	56.5
CSC	-2	0.47	0.49	2.51	2.25	0.66	47.2	57.9	65.6	68.4	70.9

### 13.1.3.7.2 Leach Grind Series

Baseline leach tests were conducted at varying target grind k80 sizes ranging from 60 µm to 100 µm, on samples MWPC, MCPC and MEPC. The tests were run for 48 hours (with kinetic solution samples) with 0.5 g/L NaCN maintained at pH 10.5–11.0. Tests included natural aeration. Based on the results of the E-GRG test, gravity concentration was not included.

Average leach extractions included:

- $k_{80} = 60 \mu\text{m}$ , 84.3% Au
- $k_{80} = 80 \mu\text{m}$ , 83.6% Au
- $k_{80} = 100 \mu\text{m}$ , 83.4% Au.

The results show no correlation between grind and leach extraction. Extraction curves showed the full 48 hours was required to achieve maximum extractions. A grind size k80 of 100 µm was nominated for a second set of tests (CN45, CN46 and CN47) that included telluride leach conditions (6 hours pre – aeration at pH 12, 48 hours leaching at pH 12). Telluride leach conditions increased overall average leach extractions by 1.2% Au (83.4% to 84.6%). With the limited sample set, standard leach conditions were adopted for the variability leach tests. Calculated head grades generally showed a positive reconciliation to the sample assays (1.33 g/t Au vs 1.09 g/t Au). The average leach residue was 0.20 g/t Au. The results are summarized in Table 13.10.

Table 13.10: Moss baseline leach test results

Sample ID	Test No.	Grind Size (k80, µm)	Consumption (kg/t)		Au Grade (g/t Au)			Leach Extraction (% Au)				
			NaCN	CaO	Assay Head	Calc. Head	Leach Residue	Hours				
								2	12	24	32	48
MWPC	CN20	60	0.16	0.36	1.31	1.55	0.22	66.3	75.9	83.6	84.7	85.8
MWPC	CN21	80	0.17	0.27	1.31	1.52	0.21	72.6	77.4	81.4	85.4	86.5
MWPC	CN22	100	0.29	0.30	1.31	1.49	0.24	72.1	77.1	80.1	81.2	84.2
MWPC	CN45	100	0.22	0.29	1.31	1.39	0.23	73.2	75.3	81.7	82.7	83.8
MCPC	CN23	60	0.23	0.31	0.39	0.56	0.11	53.1	61.8	73.2	76.8	80.4
MCPC	CN24	80	0.24	0.32	0.39	0.50	0.11	57.2	64.0	73.9	74.8	78.8



MCPC	CN25	100	0.19	0.29	0.39	0.53	0.11	70.6	71.6	75.3	76.3	80.1
MCPC	CN46	100	0.23	0.35	0.39	0.47	0.08	72.7	80.0	81.0	82.1	83.1
MEPC	CN26	60	0.32	0.36	1.56	1.96	0.26	69.5	74.3	83.8	84.9	86.7
MEPC	CN27	80	0.16	0.30	1.56	2.12	0.31	66.5	72.4	82.5	83.6	85.4
MEPC	CN28	100	0.16	0.23	1.56	2.14	0.31	66.4	70.8	80.8	82.6	85.7
MEPC	CN47	100	0.15	0.22	1.56	1.77	0.23	78.0	80.4	85.6	85.9	87.0

### 13.1.3.1 Variability Sample Leach Tests

Variability leach test results are summarized in Table 8. The average leach extraction for the variability samples was 82.4% Au, ranging from 78.8% au to 87.0% Au. Calculated head grades generally showed a positive reconciliation to the sample assays (1.41 g/t Au vs 1.30 g/t Au). The average leach residue was 0.21 g/t Au. The results from these align with the results of the 2022 program. The results are summarized in Table 13.11.

Table 13.11: Moss variability leach test results

Sample ID	Grind Size (k80, $\mu\text{m}$ )	Consumption (kg/t)		Au Grade (g/t Au)			Leach Extraction (% Au)				
		NaCN	CaO	Assay Head	Calc. Head	Leach Residue	Hours				
							2	12	24	32	48
MWS	100	0.17	1.35	2.67	3.06	0.32	67.6	77.8	87.3	88.9	89.5
MCS	100	0.71	1.03	1.13	1.29	0.25	36.9	67.4	77.5	77.4	80.7
MES	100	0.67	0.93	1.66	1.55	0.28	66.6	77.2	80.1	79.3	82.2
MWLGH	100	0.45	0.90	0.48	0.62	0.16	63.1	68.8	74.6	75.6	74.1
MCLGH	100	0.62	0.82	0.45	0.57	0.13	57.8	69.0	72.6	73.5	77.1
MELGH	100	0.39	0.92	0.39	0.44	0.08	64.3	78.7	83.1	80.8	81.8
SWS	100	0.18	1.03	0.61	2.03	0.29	70.6	77.5	83.7	86.3	85.9
SWLGH	100	0.46	1.12	0.34	0.40	0.10	56.3	64.6	72.9	73.9	74.8
SWC	100	0.44	1.14	0.61	0.80	0.19	56.0	66.0	72.5	73.5	76.3
CES	100	0.16	1.06	2.69	2.10	0.32	59.5	68.9	80.5	81.6	84.8
CWS	100	0.64	1.08	2.07	1.78	0.20	50.9	72.5	86.0	86.3	89.1
CSC	100	0.51	1.25	2.51	2.33	0.17	53.7	71.7	90.6	90.5	92.9

### 13.1.4 Flotation Flowsheet Testing

Testing was completed to evaluate the flotation flowsheet which includes flotation, flotation concentrate regrind and leach, flotation tailings leach.

#### 13.1.4.1 Flotation Testing

Initial flotation tests were completed on the MEPC, MWPC and MCPC composites using standard pyrite flotation conditions using potassium amyl xanthate (PAX) as a collector and methyl isobutyl carbinol (MIBC) as the collector with a grind of k80 = 100  $\mu\text{m}$ . The results are summarized in Table 13.12.

Table 13.12: Moss initial flotation test results

Composite	Rougher Concentrate			Overall Recovery (%)



	Mass (%)	Au (g/t)	Ag (g/t)	S (%)	Flotation Tail (Au g/t)	Calc. Head Grade (Au g/t)	Au	Ag
MWPC	7.5	13.0	12.0	16.4	0.39	1.34	73.1	71.2
MCPC	5.8	7.24	16.5	10.6	0.13	0.54	77.3	83.5
MEPC	10.0	15.9	21.8	15.4	0.36	1.92	83.1	85.8

Results were mixed with mass recoveries from 5.8% to 10%, which align with the S head grades but lower than expected gold recoveries ranging from 73.1% to 83.1%. The concentrate grades are below levels for sale as a pyrite concentrate.

#### 13.1.4.2 Flotation – Leach Testing

A follow up set of flotation tests on all primary composites was completed which also included flotation concentrate leach and flotation tailings leach tests. Flotation concentrate and tailings leach test conditions included:

- Concentrate leach:
  - Regrind to  $k_{80} = 15 \mu\text{m}$
  - Leach at 33% solids with oxygen
  - 2 g/L NaCN, pH 10.5–11
  - 48 hours leach residence time.
- Flotation tailings leach:
  - Leach at 40% solids with air
  - 0.5 g/L NaCN, pH 10.5–11
  - 48 hours leach residence time.

The results are summarized in Table 13.13. Flotation concentrate mass recoveries averaged 11.1% and gold recovery to concentrate averaged 82.6%. Concentrate leach extractions after regrind averaged 96.4% Au and from flotation tailings averaged 76.1% Au. Overall combined leach extractions averaged 92.6% Au.



Table 13.13: Moss flotation and concentrate and flotation tailings leach test results

Sample	Rougher Concentrate			Leach Extractions (% Au)			Calc. Head Grade (g/t Au)	Reagent Consumptions (kg/t)	
	Mass (%)	Au (g/t)	Au (Recovery %)	Conc.	Tailings	Overall		NaCN	Ca(OH) <sub>2</sub>
MWPC	6.4	16.5	74.0	96.2	69.8	89.3	1.44	0.61	1.51
MCPC	5.3	8.78	77.9	92.0	68.9	86.9	0.60	0.89	1.30
MEPC	10.9	14.5	82.7	98.2	84.6	95.9	1.91	0.85	1.90
MQC	13.6	7.30	83.9	97.2	72.7	93.3	1.18	0.98	1.62
SWC	19.3	3.77	84.9	96.1	73.5	92.7	0.86	1.02	1.97
CSC	10.9	23.4	92.0	98.4	87.2	97.5	2.77	0.56	1.84

Overall, the flotation leach flowsheet produced higher extractions than the whole ore leach flowsheet. A comparison of the results is shown in Table 13.14. The average whole ore leach extraction is 83.6% Au while the flotation-leach average extraction is 92.6% Au.

Table 13.14: Comparison of Moss Whole Ore Leach and Flotation Leach Recoveries

Sample	Recovery (%)	
	Whole Ore Leach	Flotation Leach
MWPC	84.2	89.3
MCPC	80.1	86.9
MEPC	85.7	95.9
MQC	82.1	93.3
SWC	76.3	92.7
CSC	92.9	97.5

### 13.1.5 Cyanide Detoxification

The chemical reaction for the oxidation of weak-acid dissociable cyanide (CNWAD) using sodium metabisulphite ( $\text{Na}_2\text{S}_2\text{O}_5$  as a source of  $\text{SO}_2$ ) is widely used throughout the industry. The technology is proven and capable of achieving low CNWAD concentrations. The process does not effectively remove total cyanide (CNT) and thiocyanides (SCN)

Process development testing for the  $\text{SO}_2$ /air process is completed in two stages. The first stage is batch testing, followed by second stage continuous testing. The batch reactor is first filled with feed slurry and the required copper sulphate is added. The reactor content is then treated in batch mode with sodium metabisulphite ( $\text{Na}_2\text{S}_2\text{O}_5$  or SMBS) as the  $\text{SO}_2$  source and air to reduce the CNWAD concentrations to low levels. The oxidation reduction potential (ORP) of the pulp is monitored with a Pt/Ag/AgCl combination electrode, while the residual CNWAD concentration in the solution phase is analyzed during the test determined using the Modified Potentiometric Titration method. Initial target batch retention times are between 30 and 60 minutes. The batch test serves to produce treated material with low residual CNWAD, the product is used as starting feed material for the initial continuous test. Final solutions are submitted for analysis at the completion of each test or run.

A 0.9-L reactor (0.5 L for the concentrate detox) was used for both batch and continuous tests. For the continuous tests, an overflow nozzle on the reactor transferred treated slurry to a storage tank. Concentrate



and flotation tailings bulk leach tests were completed to provide feed slurry for cyanide detox testing on both samples.

#### 13.1.5.1 Flotation Concentrate Cyanide Destruction Testing

The results of the flotation concentrate cyanide destruction testing are presented in Table 13.15.

All tests were conducted at a pulp density of 30% solids by weight. Oxygen was added to maintain a minimum dissolved concentration of 8.0 mg/L. Target  $CN_{WAD}$  concentration was <1 mg/L.

Table 13.15: Moss flotation concentrate cyanide destruction testing results

Test	Retention Time	Reactor Chemistry (Solution)					Reagent Addition (g/g $CN_{WAD}$ )		
		pH	CNT (mg/L)	$CN_{WAD}$ (mg/L)	Cu (mg/L)	Fe (mg/L)	$SO_2$ equiv.	Lime	Cu (mg/L)
Feed	-	-	363	305	24.4	20.7	-	-	-
C1	120	8.1	2.11	1.10	0.55	0.36	10.0	15.9	50
C2	60	8.1	1.49	0.65	0.55	0.30	10.0	7.6	50

The target  $CN_{WAD}$  concentration of <1 mg/L was nearly achieved at the initial test conditions of 120 minutes and achieved at 60 minutes retention time.  $SO_2$ :  $CN_{WAD}$  ratio of 10.0:1 and a copper addition rate of 50 mg/L  $Cu^{2+}$  was used for both tests. The tests were limited due to the limited amount of leached slurry available.

#### 13.1.5.2 Flotation Tailings Cyanide Destruction Testing

The results of the flotation tailings cyanide destruction testing are presented in Table 13.16.

All tests were conducted at a pulp density of 40% solids by weight. Oxygen was added to maintain a minimum dissolved concentration of 8.0 mg/L. Target  $CN_{WAD}$  concentration was <1 mg/L.

Table 13.16: Moss flotation tailings cyanide destruction testing results

Test	Retention Time	Reactor Chemistry (Solution)					Reagent Addition (g/g $CN_{WAD}$ )		
		pH	CNT (mg/L)	$CN_{WAD}$ (mg/L)	Cu (mg/L)	Fe (mg/L)	$SO_2$ equiv.	Lime	Cu (mg/L)
Feed	-	-	444	266	3.3	64.0	-	-	-
C1	60	8.0	106.1	0.22	0.29	37.9	5.0	9.2	25
C2	30	8.0	112.9	0.25	0.29	40.3	5.0	10.4	25
C3	30	8.3	111.5	0.52	0.97	39.7	3.0	6.7	25
C4	30	8.2	120.2	0.54	0.66	42.8	3.0	2.2	15
C5	30	8.1	152.2	11.3	12.7	50.4	2.0	1.0	15

The target  $CN_{WAD}$  concentration of <1 mg/L was nearly achieved at all test conditions except for test C5 at very low  $SO_2$  addition. The best case conditions include  $SO_2$ :  $CN_{WAD}$  ratio of 3.0:1 and a copper addition rate of 15 mg/L  $Cu^{2+}$  at 30 minutes retention time. The low sulphide content of this sample facilitated rapid cyanide detoxification for  $CN_{WAD}$  although  $CN_T$  was not effectively reduced. The high iron content of the treated solutions is directly tied to the high  $CN_T$  concentrations.



### 13.2 Metallurgical Variability

The PEA metallurgical samples were selected based on current geological modeling and interpretations of the Moss Project.

The following criteria were used to select the PEA samples:

- The Main QES pit was sampled both spatially and samples from the higher-grade shear zones and the lower grade host rocks.
- The Southwest Zone and East Coldstream pits were sampled as variability samples.
- Comminution samples from the Main QES pit on a spatial distribution.

#### 13.2.1 Deleterious Elements

Sample assays completed to date have not identified deleterious elements which may affect doré bullion quality.

### 13.3 Recovery Estimates

A preferred flowsheet has not been determined. Recoveries for whole ore leach (WOL) and flotation leach (FL) are provide as a result.

Estimated recoveries, including typical plant soluble and carbon losses are:

- For the Main/QES Deposit:
  - Whole ore leach = 82% Au.
  - Flotation/leach = 92%.
- For the East deposit:
  - Whole ore leach = 88% Au.
  - Flotation/leach = 96.5%.



## 14 Mineral Resource Estimates

### 14.1 Moss Gold Deposit

#### 14.1.1 Introduction

Matthew Field (Principal Resource Consultant) is the QP author responsible for completing the current MRE and is responsible for this section of the Report. During the period April to May 2023, the QP author carried out an MRE update study for the Project. In the opinion of the QP author, the Mineral Resource reported herein is a reasonable representation of the gold Mineral Resources at the deposit based on the available information.

The current MRE has an effective date of May 5, 2023, and was prepared in accordance with CIM Definitions and Standards on Mineral Resources and Mineral Reserves (10 May 2014) and reported in accordance with NI 43-101, Companion Policy NI 43-101CP, and Form 43-101F1 technical disclosure requirements.

The current MRE was based on interpretations from assaying and geological and structural logging. All data and the geological model were provided by Goldshore. Apart from the initial sample data preparation and intermediate spreadsheet processing, all interpretations, modelling, estimation, and model validation was conducted using Leapfrog™, Micromine, and Datamine Studio RM™ software. Snowden Supervisor™ was used for statistical analysis.

The MRE workflow is broadly summarised as follows:

- Data validation and preparation
- Interpretation of the geology and mineralization domains
- Coding, compositing, and capping of sample data
- Exploratory data analysis and statistical analysis
- Variogram analysis
- Block model construction
- Grade interpolation
- Block model validation
- Density assignment
- Mineral Resource classification and Mineral Resource reporting.

Reported Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no guarantee that all or any part, of a Mineral Resource will be converted into a Mineral Reserve.

#### 14.1.2 Data

The database is currently in a Microsoft Excel spreadsheet and was compiled by Goldshore. The data were exported in comma separated values (CSV) format and imported into Leapfrog. The drilling database was prepared using data available up to 24 April 2023.

The following data were available:

- Collar
- Survey
- Assays

Commented [NR65]: @Matthew Field @Efrain Ugarte @M...  
@M... OK I see that Matthew is also QP for E Coldstream

Commented [MF66R65]: No, I have done nothing on East Coldstream, this is news to me! I asked this question some time ago and never received an answer, so assumed Samer was going to be the QP



- Lithology
- Density
- Mineral descriptions
- Structural data.

The following reports were provided for context of previous studies:

- An update to a technical review of the Moss Lake Gold Property, including an updated Mineral Resource Estimate, Moss Township, Northwestern Ontario for Moss Lake Gold Mine LTD. Prepared by Richard W Risto and Kurt Breede, 2010.
- Moss Lake Geology mapping.
- Moss Lake Geological History and structural controls, Internal presentation, prepared by Brett Davis, 2022.
- Petrographic Description of 11 Core Samples, Moss Lake Project, Paul Klipfel, Mineral Resources Services, 2021.
- REVIEW OF THE TECHNICAL REPORT AND PRELIMINARY ECONOMIC ASSESSMENT FOR THE MOSS LAKE PROJECT, Angus Christie, 2020.
- TECHNICAL REPORT AND PRELIMINARY ECONOMIC ASSESSMENT FOR THE MOSS LAKE PROJECT (compliant with Regulation 43-101/NI 43-101 and Form 43-101F1), InnovExplo – Consulting Firm Mines & Exploration, 2013.
- Technical Report on the Moss Lake Project, Ontario, Canada Report for NI 43-101, SLR Consulting (Canada) Ltd., 2021.
- NI 43-101 Technical Report Mineral Resource Estimate for the Moss Lake Project, Ontario, Canada prepared by CSA Global 9 December 2022.

Goldshore provided the QP author with a drill hole database and wireframes representing topography, overburden, Diorite, IQP, IDP, IGD, and the surrounding volcanics. The geological wireframes were based on the lithological logging data. Goldshore also included 13 mapped and digitise shear planes. Figure 14.1 shows the modelled geology and the insert shows the area where the overburden covers.

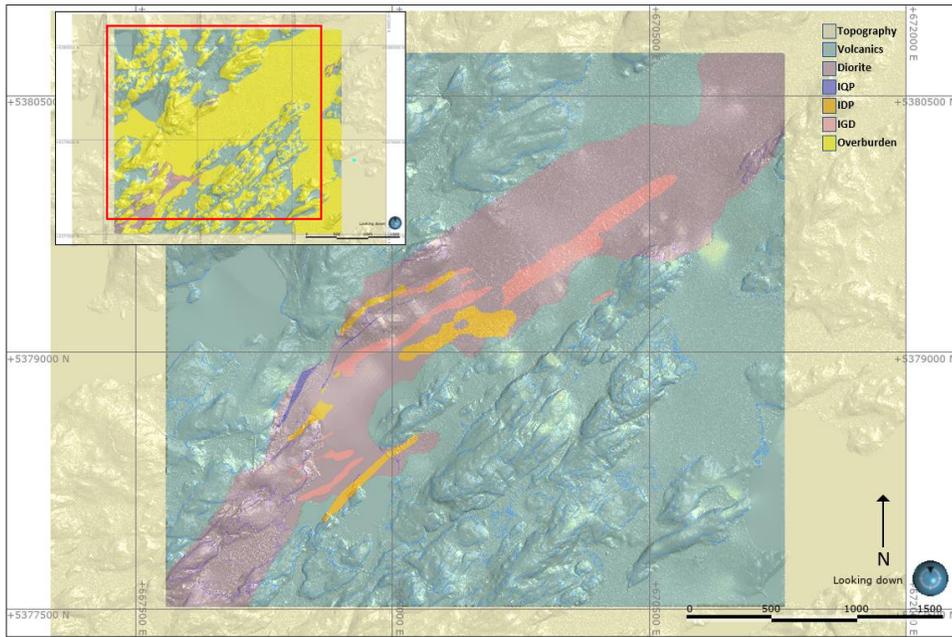


Figure 14.1: Plan view of the geological zones and insert of the area the overburden covers

Goldshore also constructed the shear-hosted mineralization domain models for the Moss Gold Deposit based on geological parameters and a grade cut-off of 1.0 g/t Au (Figure 14.2). The QP author provided feedback and recommendations to update the wireframes. The QP author reviewed all informing data and considered that the quality and quantity of the information is appropriate for Mineral Resource estimation.

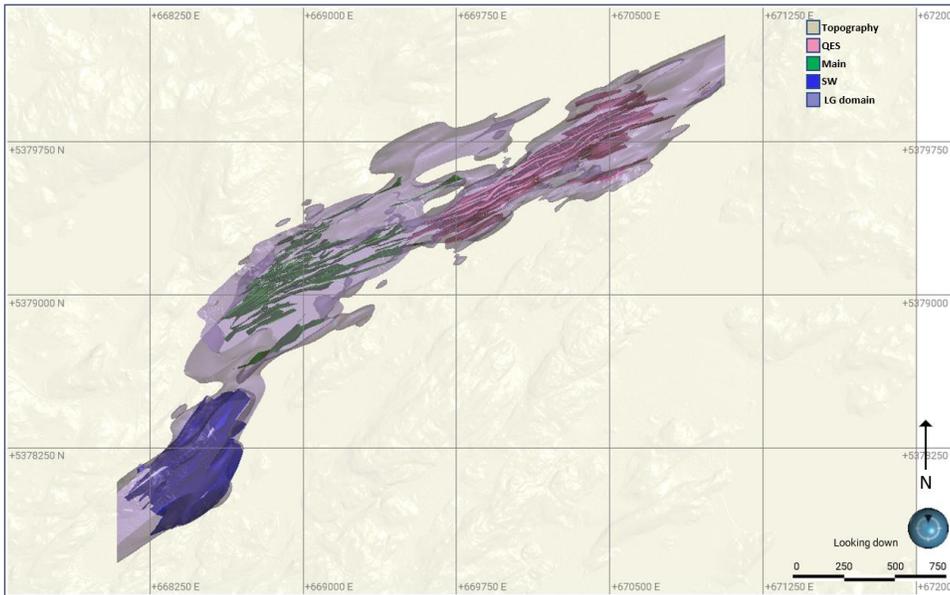


Figure 14.2: Plan view of mineralized domains

14.1.2.1 Drill hole Data

The drill hole data used in this study is derived from a data export provided by Goldshore with a total of 736 drill holes. Of these, 503 are historical drill holes and 233 are new drill holes. The drill hole data was provided as a set of Microsoft Excel CSV files. Drill collar locations (historical and new) are shown in Figure 14.3. The new drilling is considered the drilling completed during the Goldshore drilling campaign conducted during 2021 and 2022 and additional data added to the current MRE during 2022 and 2023.

The assay data for the new drilling included assays for 50 elements. The historical data only have gold assays available. Goldshore requested that only gold should be estimated.

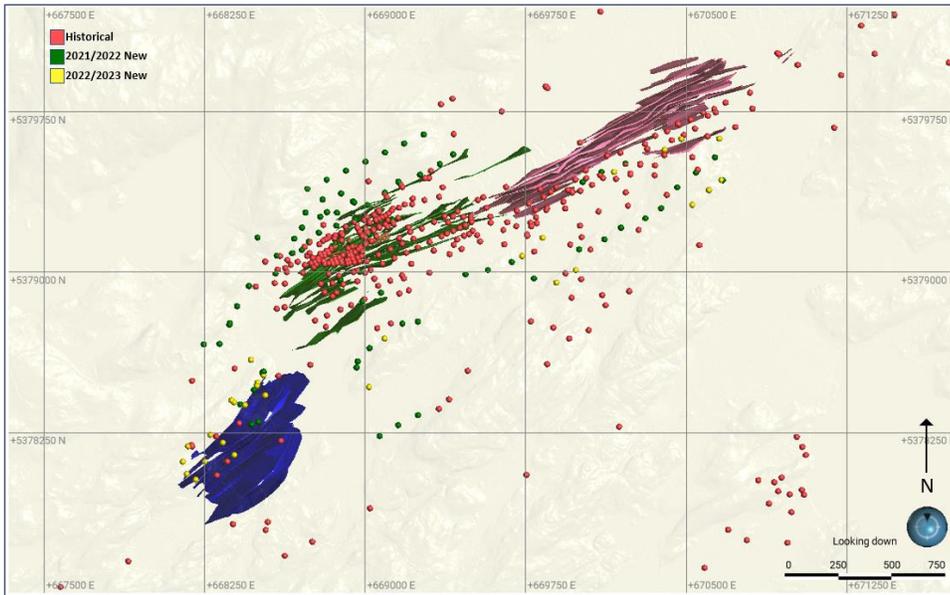


Figure 14.3: Plan view of drill hole collars

All drill hole data was imported into Leapfrog software and interrogated via Leapfrog validation functions prior to constructing a drill hole database for the deposit. Key fields within these critical drill hole database data files are validated for potential numeric and alpha-numeric errors. Data validation cross referencing collar, survey, assay, and geology files was performed to confirm drill hole depths, inconsistent or missing sample/logging intervals, and survey data. The data was validated – checked for logical or transcription errors, such as overlapping intervals. There were a few, minor errors that were corrected. Collar elevations were compared with the digital elevation model, and the sample distribution was reviewed to make sure they represent the mineralization and are appropriate for spatial interpolation.

14.1.2.2 Drill hole Data Editing

Unsampled intervals are encountered throughout the deposit especially within the historical dataset. It was assumed that the unsampled intersections within the mineralization wireframes have been interpreted as waste, based on visual interpretation of the drill core. To ensure blocks are estimated using representative values for un-sampled intervals, a grade of 0.001 g/t were assigned to the unsampled intervals. Table 14.1 summarises the influence of assigning the 0.001 g/t Au.

Table 14.1: Summary of the influence of assigning the 0.001 g/t Au to unsampled intervals

Domain	No. of samples in domain	No. of samples updated with the 0.001 g/t Au	Mean before	Mean after
Main	6647	139	2.25	2.21
QES	3373	11	1.95	1.94
SW	724	1	2.61	2.61
LG	85029	6470	0.26	0.24



### 14.1.2.3 Topography

Goldshore has provided a topography surface constructed from LiDAR data at 2 m spacing.

### 14.1.3 Preparation of Wireframes for the Estimation Domains

Geological modelling was undertaken by Goldshore, and the 3D wireframes were provided to the QP author for review and verification, and Mineral Resource estimation purposes. The high-grade estimation wireframes (shear zones) were manually constructed in Micromine, and the low-grade intrusion zone was constructed in Leapfrog.

Three high-grade shear domains supplied by Goldshore (named Main, QES, and SW) were constructed manually in Micromine software (Figure 14.4). The wireframes were constructed from strings created on a section-by-section basis and connected to form a 3D solid. The strings were manually digitized on a 1 g/t Au cut-off within a 2 m composite. Samples below 1 g/t were included when surrounded by samples greater than 1 g/t Au. As far as possible the structural/shear data were incorporated to help define these domains. The wireframes were constructed to select the samples within the wireframe. The wireframes are extrapolated up to 200 m beyond supporting data (especially at depth). It should be noted that each domain contains many individual thin shears that were each modelled individually.

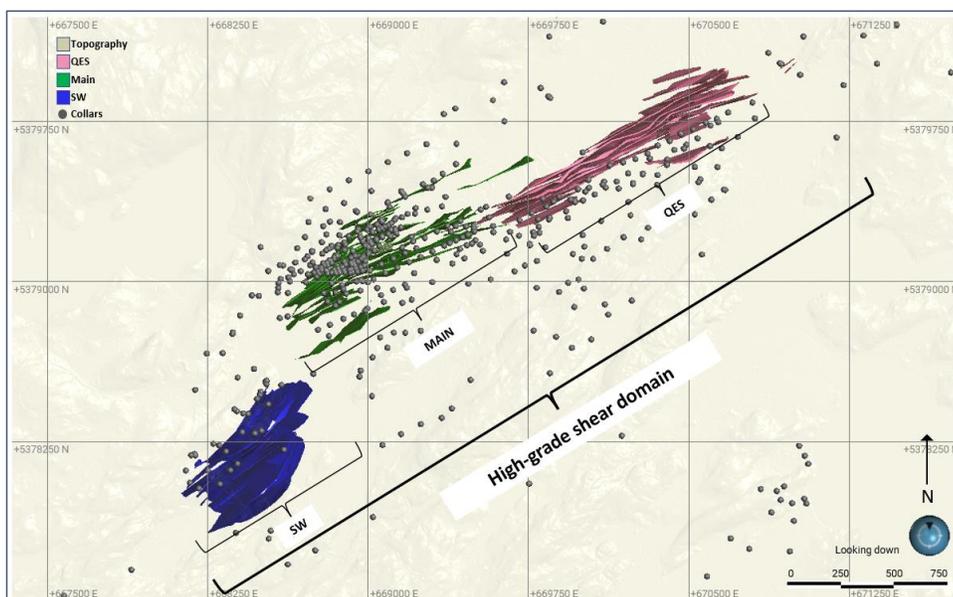


Figure 14.4: Plan view of high-grade shear domain

The lower grade or low-grade intrusion (diorite/LG) zone wireframe is a large volume enclosing the higher-grade shear zones. The zone was modelled using an economic cut-off above 0.20 g/t Au with a minimum composite length of 3 m and includes up to 50 m of waste. The composite length and the inclusion of the waste samples were used to construct a continuous zone surrounding the high-grade shear zones. The zone was modelled using the intrusion type model method in Leapfrog with a structural trend. The structural trend was constructed from surfaces that parallels the shear directions.

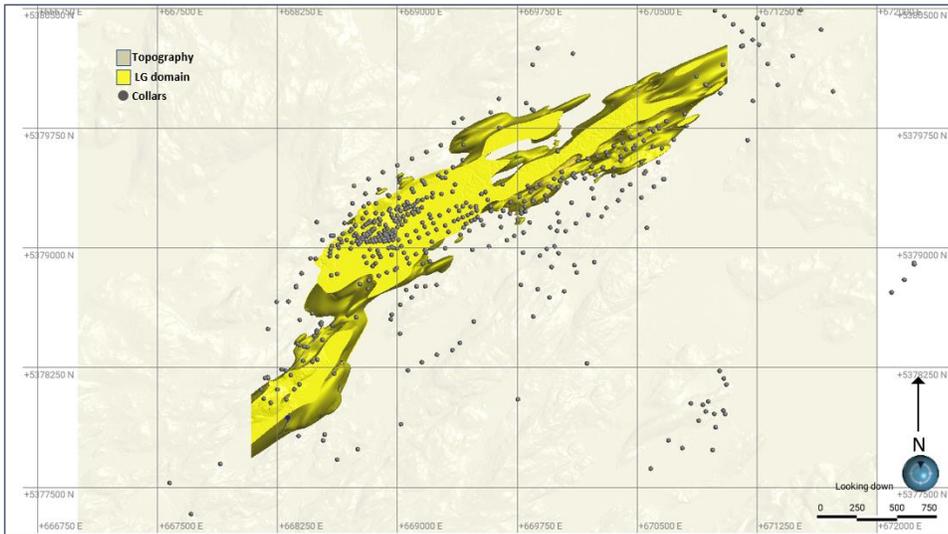


Figure 14.5: Plan view of low-grade intrusion domain

#### 14.1.3.1 Structures

Geology and mineralization wireframes were supplied by Goldshore. Goldshore modelled these wireframes zones based on mapped and interpreted shear-zones. The structural logging and mapping were incorporated during the construction of the high-grade zones.

#### 14.1.4 Sample Coding and Compositing

To ensure equal sample support and to avoid splitting assay intervals, a composite interval length of 1 m, equal to the dominant sample length of the raw assays, was selected. The mineralisation domains were used as a key field such that composite intervals honoured geological boundaries. Table 14.2 shows the raw versus composite statistical summary.

Table 14.2: Lake Moss deposit raw vs composite summary

Domain	Raw						Composite					
	Count	Min. Au g/t	Max. Au g/t	Mean	SD	CV	Count	Mean	Min. Au g/t	Max. Au g/t	SD	CV
Main	6786	0.001	255.00	2.21	6.34	2.87	7357	1.94	0.001	127.08	4.27	2.20
QES	3384	0.001	578.67	1.94	10.45	5.39	3523	1.84	0.001	196.21	4.19	2.40
SW	725	0.001	231.00	2.61	10.19	3.91	588	1.99	0.001	79.90	5.17	2.33
LG	91499	0.001	106.00	0.24	0.73	3.04	95256	0.23	0.001	54.44	0.55	2.40

During the compositing process in Datamine, the MODE parameter was set to 1. This allows the process to force all samples to be included in one of the composites by adjusting the composite length, while keeping it as close as possible to the interval (1 m). The maximum possible composite length will then be 1.5\*INTERVAL (1.5 m). The MODE parameter reduces the proportion of residual samples that would have been excluded from the estimate if forced to a single continuous interval composite length.



**14.1.5 Statistical Analysis**

Estimation domains have similar skewed distributions with high CV values above 1.5 associated with a high-grade gold tail containing extremely high gold values (as shown in the histogram in Figure 14.6). Treatment of very high grades is required to avoid excessive spreading or smearing of unrealistic high grades during estimation.

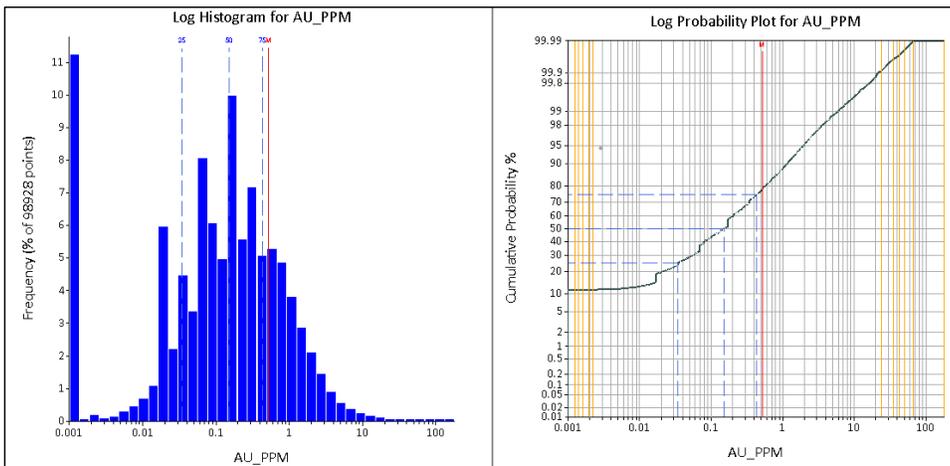


Figure 14.6: Gold grade histogram and CDF all domained composites

A contact analyses was completed between the higher-grade shear domains and the lower-grade diorite and showed that a hard boundary will be suitable to use in the estimate (Figure 14.7).

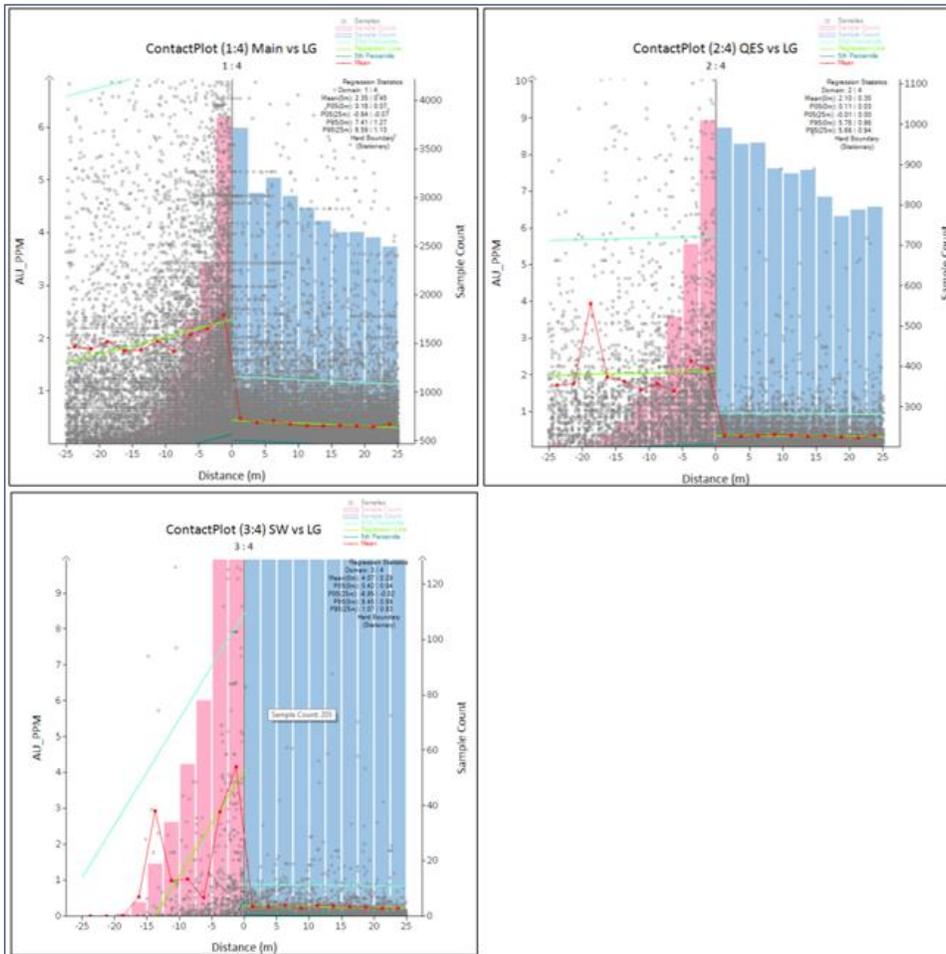


Figure 14.7: Contact plots between the high-grade shear domains (Main, QES, SW) and the surrounding low-grade domain

#### 14.1.5.1 Top Cuts

Capping (or top cutting) was applied after compositing. In general, very high grades are located within the high-grade shear portions of the deposit. Most very high-grade samples are well constrained by surrounding drill holes. Log normal cumulative probability plots for each of the domains were reviewed to identify inflection points at the upper end of the distribution and derive a capping value. Only extreme high grades were capped. Figure 14.8 shows the graphs used for establishing the top cut values for the main zones. Summary composite statistics by resource domain and the impact of top cuts are shown in Table 14.3.

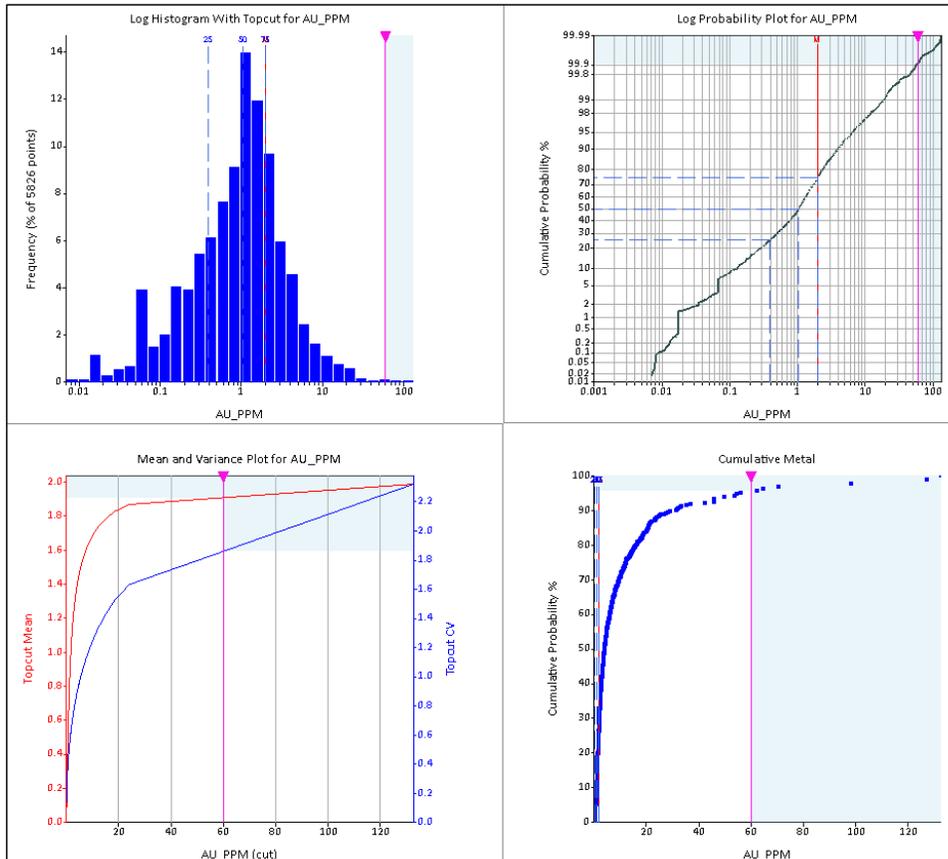


Figure 14.8: Top cut analyses for the Main shear zone

Table 14.3: Lake Moss deposit composite summary with top cuts

Domain	Count	Mean	Minimum	Maximum	SD	Uncut CV	Capping value	No. capped	Capped mean	Capped SD	CV
Main	7357	1.94	0.001	127.08	4.27	2.20	60	7	1.86	3.32	1.79
QES	3523	1.84	0.001	196.21	4.19	2.40	40	2	1.68	2.53	1.50
SW	588	1.99	0.001	79.90	5.17	2.33	30	2	1.99	3.33	1.67
LG	95256	0.23	0.001	54.44	0.55	2.40	20	8	0.23	0.43	1.90

#### 14.1.5.2 Variography

Maps of gold value continuity were used to investigate the strike, dip, and pitch direction axes of gold mineralization trends. Maps were interrogated per high-grade shear domain (Main, QES and SW) and for the lower-grade intrusion domain. The grade variation between sample pairs orientated along each direction axis  $\pm 10^\circ$  was reviewed using variogram charts. Sample pairs are grouped by their separation distance, or “lag



interval” on the X axis. The resulting variogram chart can show if there is a relationship that can be modelled between grade variance and distance along each axis.

The variograms that were created initially were noisy and difficult to model. Normal-score transformations and correlograms were investigated. The correlograms gave the best results and motivated the use of the correlogram which minimize the effect of the nuggety behaviour of the deposit. The correlograms constructed for the higher-grade zones showed search ellipses not suited for the narrow shear trends. The individual shears within the shear zones were then isolated and data used to derive stable and representative correlograms.

The individual shear with the most data was used to determine the best correlograms. The correlogram model was used to estimate all the high-grade shear zones individually.

Nugget (i.e. intrinsic sample variance) was determined by modelling of the downhole correlogram. Ellipses were visualized in Datamine and to confirm alignment with mineralization trends.

Correlogram charts for gold were modelled using two spherical functions. Correlogram models are presented in Table 14.4, Figure 14.9 and Figure 14.10.

Table 14.4: Modelled correlogram parameters

Domain	DM rotation angles			Model			Range		
	Z	X	Y	Nugget	Structure	Sill	Major	Semi-major	Minor
Main	170	80	-170	0.10	1. Sph 2. Sph	0.87 0.03	24 60	5 30	4 10
QES	170	80	-170	0.10	1. Sph 2. Sph	0.87 0.03	24 60	5 30	4 10
SW	170	80	-170	0.10	1. Sph 2. Sph	0.87 0.03	24 60	5 30	4 10
LG	160	80	-170	0.40	1. Sph 2. Sph	0.58 0.02	13 60	17 60	10 40

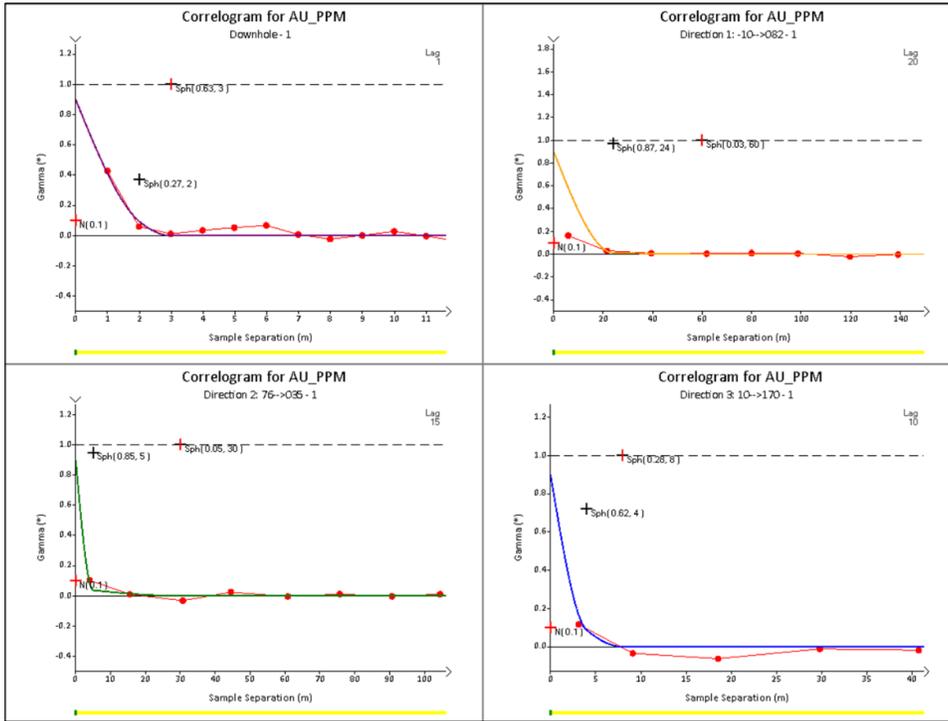


Figure 14.9: Correlogram with fitted model (red) used to estimate the high-grade shear zones

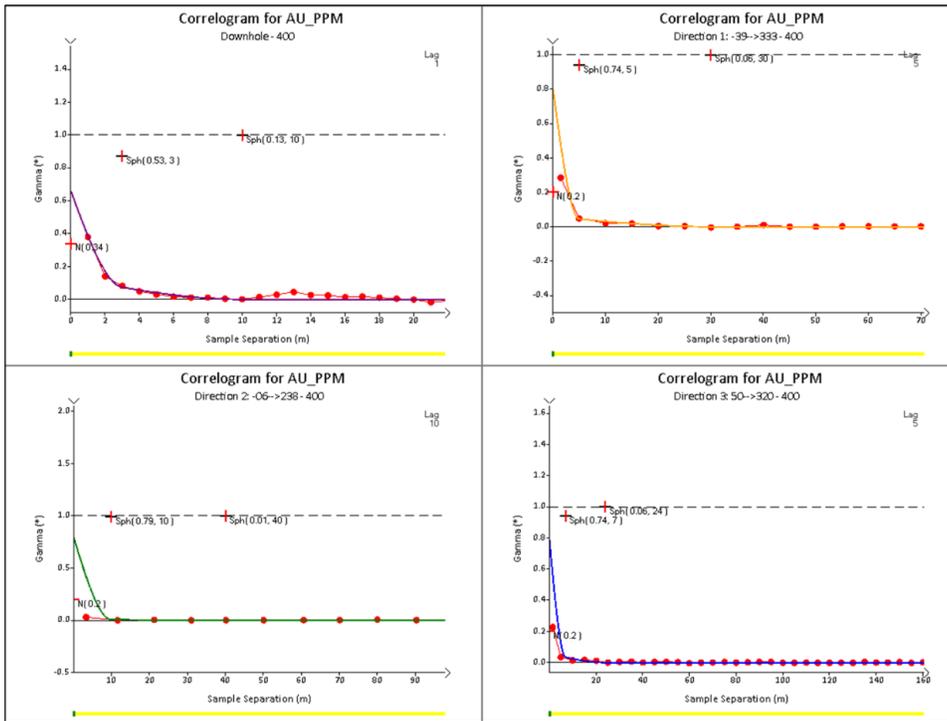


Figure 14.10: Correlogram with fitted model (red) used to estimate the low-grade intrusion zone

#### 14.1.6 Block Modelling

A block model was constructed with cell dimensions of 9 m × 9 m × 3 m (XYZ). This block size was chosen after conducting kriging neighbourhood analysis, but also to meet the dual requirement for both open pit and potential underground mining. The wireframes representing the mineralization boundaries were filled with cells to a sub-cell size of 3 m × 3 m × 1 m to fill the volumes with blocks. The block model made use of smaller blocks in the Z to fit the wireframes better. The blocks were coded according to the appropriate estimation domains. Input wireframe volumes and block model volumes were compared to ensure that the volumes are comparable.

Block models were built assuming that mining within an open pit will be undertaken. The block model is non-rotated and uses sub-cells. Estimation cell size is 9 m × 9 m × 3 m (XYZ). The block model parameters are summarized in Table 14.5.



Table 14.5: Block model definition

Model definition parameter	Value
Parent block X size (m)	9
Parent block Y size (m)	9
Parent block Z size (m)	3
Lower left corner, east coordinate	667035
Lower left corner, north coordinate	5377020
Lower left corner, RL coordinate	-200
Number of panels along east direction	549
Number of panels along north direction	440
Number of panels along RL direction	285

#### 14.1.6.1 Dynamic Anisotropy

The block model is coded with strike and dip data derived from mineralization model wireframes. This orientation data determines search ellipse orientation during subsequent grade estimation.

From mineralization triangles, true strike and dip values were extracted and filtered to remove artifacts such as vertical triangles at wireframe edges. Within an 80 m distance from each block, a maximum of four triangle orientation points was used to assign dip and dip directions to the block model using the inverse distance weighting of angles method in Datamine.

#### 14.1.7 Grade Interpolation

Mineralization domain shell contacts are interpreted as hard boundaries for grade interpolation, such that gold grades in one domain cannot inform blocks in another domain.

The OK interpolation method used the mineralization trends modelled using the correlograms to weight composite assay values when estimating block grades.

For validation purposes only, interpolation was also undertaken using inverse distance weighting to the power two (IDW2) and nearest neighbour (NN) of input samples. The NN method was estimated using bench composite equal to the vertical block dimension (3 m) to calculate the de-clustered mean at every swath in the swath plot.

##### 14.1.7.1 Kriging Parameters

Estimation of the grade variables was carried out into parent cells using ordinary kriging (OK). Hard boundaries between mineralization domains were used during grade estimation. The estimation was performed using a  $3 \times 3 \times 3$  discretization.

A maximum of  $5 \times 1$  m samples per drill hole was used. A minimum of five and a maximum of 20 composites were used. A three-phased search pass was applied. This process involves the estimation being performed three times, where two expansion factors are used. During each individual estimation run this factor increases the size of the search ellipse used to select samples. The search parameter for search 1 was half the variogram range, search 2 was the variogram range and search 3 two and a half times the variogram range. This method ensures that blocks which were not estimated and populated with a grade value in the first run, were populated during one of the subsequent runs. Search parameters are summarised in Table 14.6. Blocks that were not estimated within the three runs were initially assigned a zero grade. After the RPEEE exercise it was decided to assign the mean grade of the shear domains to the un-estimated blocks



in the shears located inside the RPEEE pit (see further discussion in section 14.1.11) as a large number of the blocks in the shear domains did not meet the tight sampling criteria imposed for their estimation.

Table 14.6: Search parameters used for estimation.

Search parameter	Value
Minimum number of composites	5
Maximum number of composites	20
Maximum number of composites per drill hole	5
Size factor for second pass	1
Size factor for third pass	2.5
Search ranges for higher grade domains (X, Y, Z)	60, 30, 10
Search ranges for low grade domain (X, Y, Z)	60, 60, 40

#### 14.1.8 Estimation Validation

Estimated grades were validated per domain and were validated by:

- Global statistics
- Swath analyses to identify local over and under estimation and smoothing.
- Localised visual validation on sections.

##### 14.1.8.1 Global Statistics

Global mean values were calculated for the input composites and output estimates. The comparison was completed for the Mineral Resource area. The composite and block grades were compared by estimation domain. The block mean grades are comparable with the input composites. As an additional measure of validation, a IDW2 and NN estimate were completed and compared. The global mean between the two estimation comparisons is comparable.

Table 14.7: Mean composite grades vs the block model grades.

Grade variable	Composite mean grade	Block mean grade (OK)	Block mean grade (IDW2)	Block mean grade (NN)
Main	1.86	1.85	1.91	2.00
QES	1.68	1.75	1.77	1.78
SW	1.99	2.04	1.85	1.82
LG	0.23	0.22	0.22	0.22

##### 14.1.8.2 Visual Validation

Block grades correlate well with input sample grades. The distribution and tenor of grades in the composites are honoured by the block model and are appropriate considering known levels of grade continuity. Poorly informed deposit areas with widely spaced samples are more smoothed which is expected. Cross-section views of the block model coloured by gold are shown in Figure 14.11. Cross sections were visually reviewed section by section and in 3D to compare the assay data against the estimated block model. This process validated the model on a local scale when comparing the estimated blocks in the vicinity of the input composites.

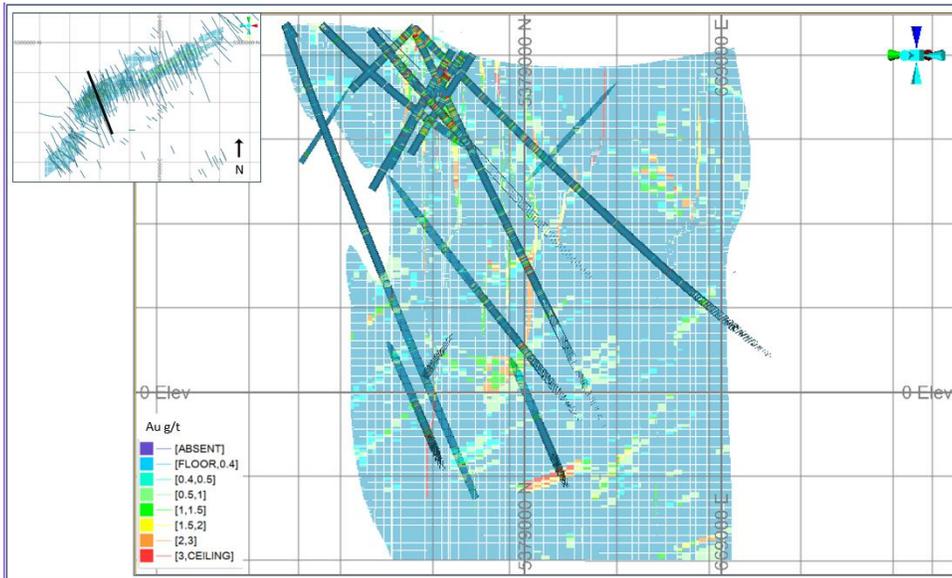


Figure 14.11: Example cross section shown validation view plot for gold

#### 14.1.8.3 Swath Plots

Swath plots were generated for the estimation domains which compare the grades of composites and block grade estimates that fall within 30 m easting and northing slices and 15 m elevation slices. Plots will identify slices that contain high-grade samples and low-grade blocks, or vice versa, which might indicate a problem with the estimation technique.

For all domains, block grades estimated by OK and NN have a smoother profile relative to input samples. Where there are more samples, good agreement is seen between the trends of input composites and block grades estimated by each technique. Both models reflect drill hole data on a local basis. Figure 14.12 to Figure 14.14 show the Main zone as an example.

*Commented [NR67]:* @Matthew Field block model orientations look weird, are there hg domains with different orientations?

*Commented [MF68R67]:* This is the result of some high-grade samples being left in the LG zone and then being interpolated by the LG variography and search ellipses, and harks back to the inadequacy of the HG modelling process forced on us by the client. The geological model is poor - how many more times do I need to say this!! This is one of the main reasons why this resource remains Inferred.

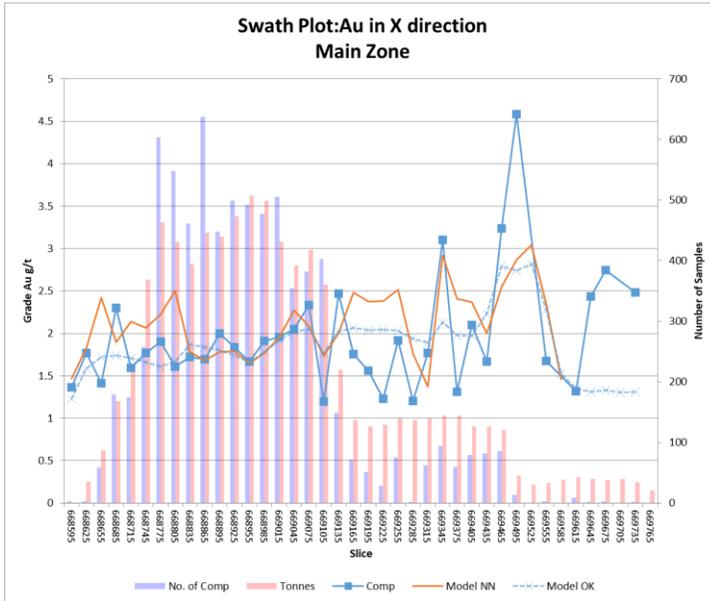


Figure 14.12: Example swath plot for gold, X direction, Main zone

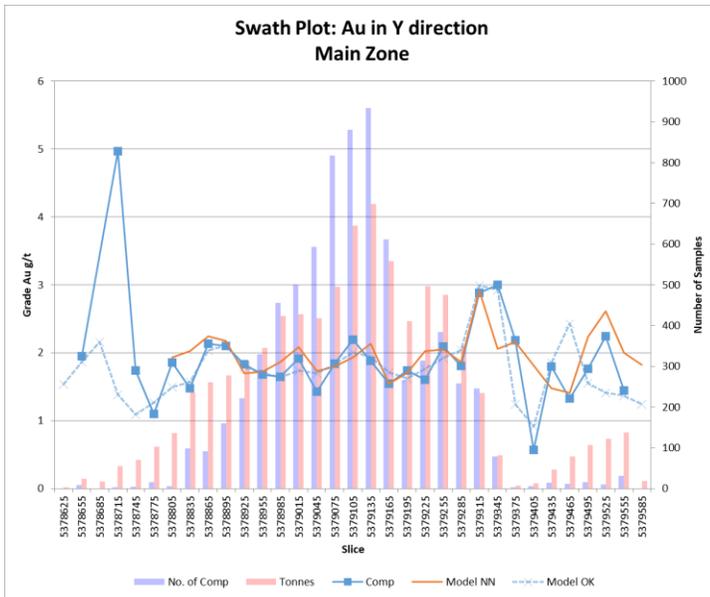


Figure 14.13: Example swath plot for gold, Y direction, Main zone

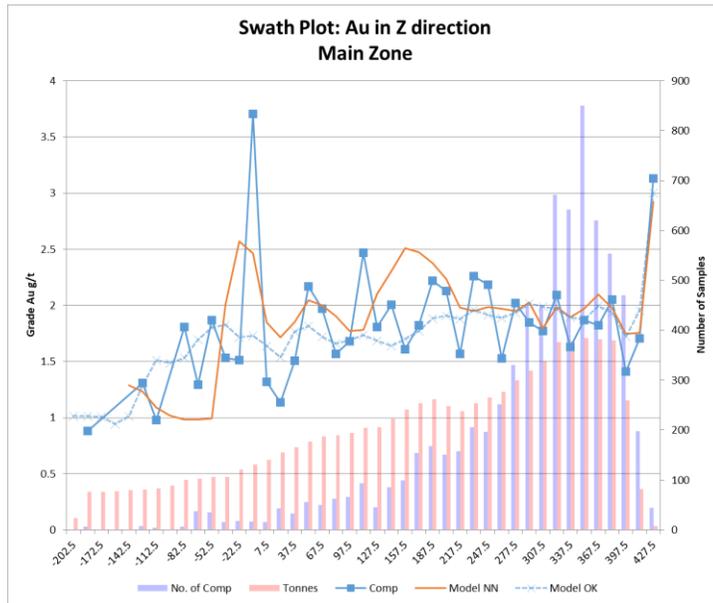


Figure 14.14: Example swath plot for gold, elevation direction, Main zone

**14.1.9 Bulk Density**

Density determinations were conducted onsite using an Archimedes method. A total of 3,140 samples were collected from the drill holes. The density samples were coded according to estimation domains and mean values derived per domain. The mean densities were calculated after anomalous values were removed and are report in Table 14.8.

Due to the lack of density determinations in the overburden, a density of 2.00 (g/cm<sup>3</sup>) was applied to this zone. The density for the overburden is assumed to be reasonable.

Table 14.8: Mean density value assigned per domain.

Domain	Mean Density (g/cm <sup>3</sup> )
Main zone	2.70
QES zone	2.72
SW zone	2.71
LG zone/Diorite	2.71
Overburden	2.00

**14.1.10 Reasonable Prospects for Economic Extraction**

CIM Definition Standards require that Mineral Resources have “reasonable prospects for eventual economic extraction” (RPEEE). This generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade considering possible



extraction scenarios and processing recoveries. For this study the main consideration is for initial open pit extraction and after that to consider potential underground extraction of high-grade deposits.

To satisfy the requirement of RPEEE by open pit mining, reporting pit shells were determined based on conceptual parameters and costs supplied by Goldshore and reviewed for reasonableness by the QP author. The depth, geometry, and grade of gold mineralization at the deposits make them amenable to exploitation by open-pit mining methods. Selected cut-off values assume a gold price of US\$1,650/oz and the processing recoveries and costs are detailed in Table 14.9. Figure 14.15 and Figure 14.16 show the block model within the constraining pit shell. The current MRE is constrained by a conceptual pit shell derived using Datamine NPV Scheduler optimization software.

Table 14.9: Conceptual mining and cost parameters for the RPEEE conceptual open pit shell

Item	Value
Gold price	US\$1,650/oz
Mining cost mineralization and waste	US\$2.70/t fresh
Processing cost	US\$12.50/t fresh
Processing gold recovery	92.5%
General and administration cost	US\$2.50/t
Pit slope angle	50°
Cut-off grade	0.35 g/t

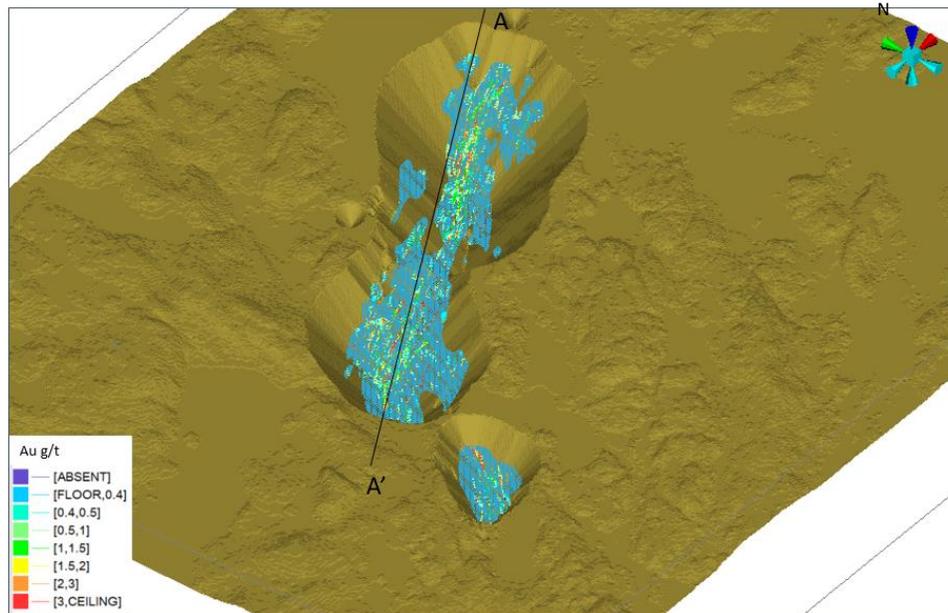


Figure 14.15: 2023 Lake Moss block model (in section) coloured by gold grade with resource constraining shell – bird’s eye view to northeast (A-A’ cross section shown in Figure 14.16)

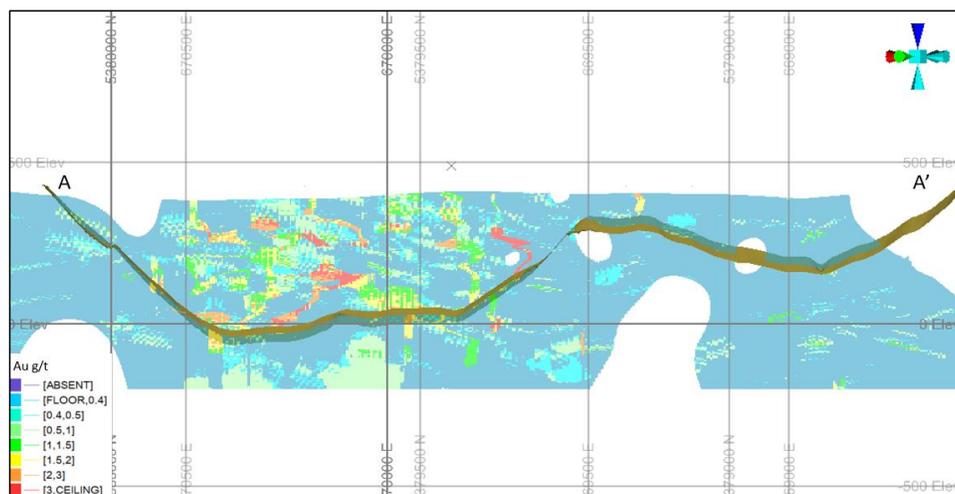


Figure 14.16: 2023 block model coloured by gold grade with resource constraining shell (cross-section view) and showing the underground potential under the pit shell.

Material falling below the open pit shell was considered using Datamine Mining Shape Optimiser (MSO) using parameters outlined in Table 14.10. These costs and parameters are based on Ontario-based benchmarks and are considered reasonable by Nigel Fung (QP) author whom has qualified these blocks as meeting criteria for RPEEE. Being an underground mining scenario, the cut-off grades and the mining costs are higher than those for the open pit as would be expected in such scenarios. The placement of the selected stopes based on current information are displayed in Figure 14.17. Since the selection of these potential stopes do not require and have not been subjected to any consideration of capital expenditure or detailed mine planning, they are fairly scattered across the sub-pit volume. It is conceivable that over the course of a mining operation that the discovery of additional mineralisation and the development of infrastructure could bring stope shapes into a n operational mine plan at some point in time. This means that they are very conceptual in nature, and they do not in any way represent mineral reserves as may be expected at a higher level of feasibility study.

Most of these stopes are developed in shear-hosted mineralisation, that there are some in the north that are located in the low-grade intrusion zone where higher grades have been modelled. In future work this higher-grade zone could be reconsidered to establish whether it does not represent a shear zone.

Table 14.10: Conceptual mining and cost parameters for underground RPEEE stope assessment

Item	Value
Gold price	US\$1,650/oz
Underground Mining cost (Mineralisation and waste)	US\$86.25/t
Processing cost	US\$12.50/t
Processing gold recovery	92.5%
General and administration cost	US\$2.50/t
Minimum Drift and Fill Stope Dimensions	5 m × 5 m × 5-1000 m
Cut-off grade	2.07 g/t

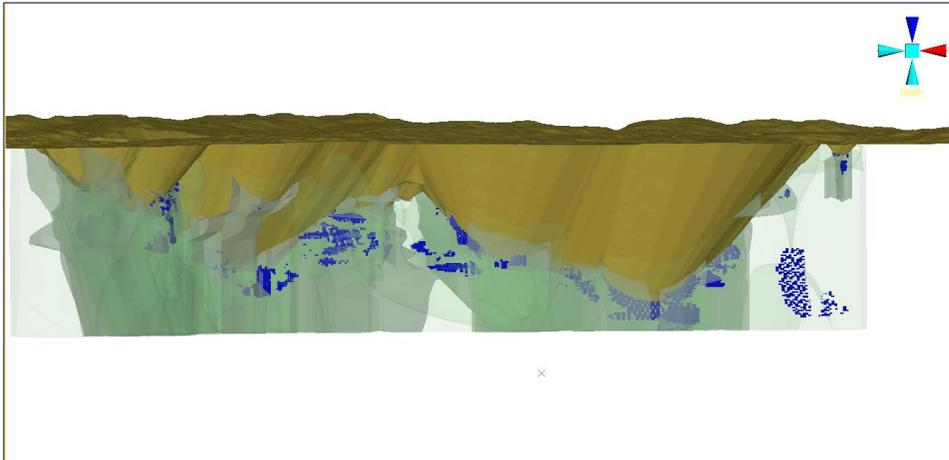


Figure 14.17: 3D image showing the stopes (in blue) selected below the RPEEE pit (brown)

**14.1.11 Absent values in the RPEEE pit**

After the completion of Mineral Resource estimate and determination of the RPEEE pit it became evident that many blocks in the narrow shear zones were being assigned zero grade values because of the criteria (numbers of drill holes, minimum and maximum sample numbers and falling with the search ellipses) and being used to permit estimation were not being met. Following practices used elsewhere, it was decided to assign average values to these blocks as blocks as described in the next paragraph. This was only considered appropriate if the block remain classified as Inferred Mineral Resources, i.e., the grade continuity is implied and not confirmed in any reliable manner.

Absent values in the block model in the RPEEE pit areas was assigned with a mean block value. The mean value was derived from the blocks in the RPEEE pit area per domain. Table 14.11 summarises the mean values used.

Table 14.11: Mean values assigned in the RPEEE pit area.

Domain	Mean Au g/t
Main	1.88
QES	1.76
SW	2.01
LG	0.24

**14.1.12 Mineral Resource Classification**

The MRE is classified in accordance with CIM Definition Standards (May 2014). The current MRE has been classified as Inferred Mineral Resources only. The classification level is primarily based upon an assessment of the validity and robustness of input data and the QP author’s judgment with respect to the proximity of resource blocks to sample locations and confidence with respect to the geological continuity of the domain interpretations and grade estimates. Geological and grade continuity can be implied in the Inferred Mineral Resource area.

The following criteria were considered for the assignment of the Inferred Mineral Resource classification by the QP author:

- The high-grade shear zone wireframes are too inconsistent and affect assessment of continuity.
- There is too great a dependence on historical data for which QAQC data have not been found.
- Twin holes show sporadic results, some with and others without bias.
- Greater consistency is required to provide confidence in historical data.
- Supporting data is poor and estimation quality is poor:
  - The downhole survey data is unavailable for most historical holes and the deviation is variable.
  - Kriging variance, the slope of regression and the kriging efficiency were all considered and found to be outside the limits for higher confidence classification categories associated with similar deposits that have been estimated elsewhere.
  - The search volume runs used to estimate each block were considered.

The QP author is of the opinion that some of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued infill drilling or re-sampling of the historical drill core. The block model contains unclassified material where the three subsequent estimation runs failed to estimate the block. Figure 14.18 shows the classified block model within the constraining pit.

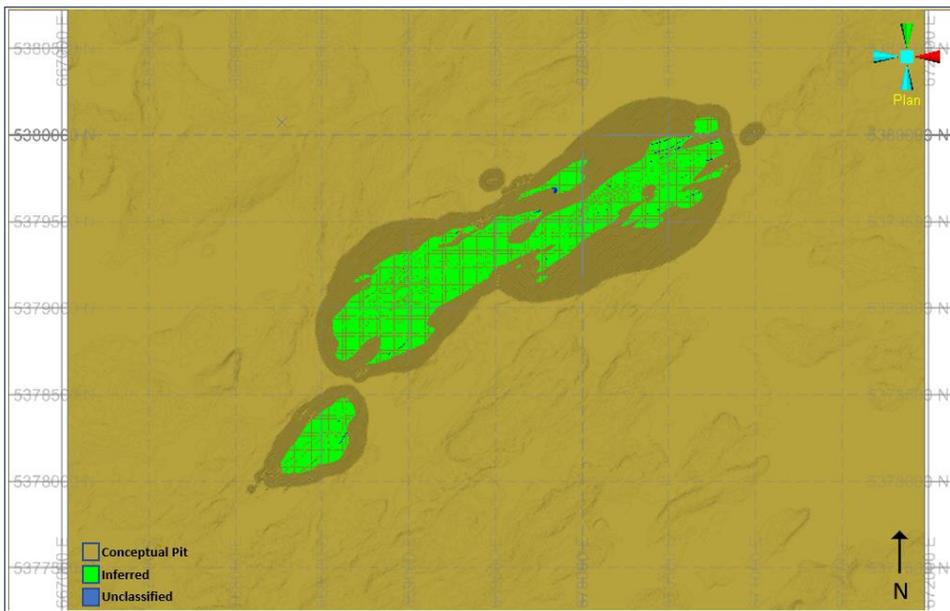


Figure 14.18: Plan view of 2023 Lake Moss block model coloured by class with resource constraining shell



#### 14.1.13 Mineral Resource Statement

The MRE is reported above a cut-off grade of 0.35 g/t Au and comprises of 161.0 Mt of Inferred Open Pit Mineral Resources at a grade of 1.00 g/t Au (Table 14.12). In addition, shear-hosted mineralization below the RPEEE pit shell is also classified as an Inferred Mineral Resource that is potentially mineable by underground mining methods. This comprises 2.6 Mt at 2.90 g/t Au and is quoted at a cut-off grade of 2.07 g/t Au.

Table 14.12: Moss Gold Deposit - Mineral Resource Estimate at a 0.35 g/t Au cut-off as at May 5, 2023

	Inferred Resources (Domains)	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)
Moss Open Pit	Shear	56.5	1.84	3.35
	Intrusion	104.5	0.55	1.83
	<b>Total</b>	<b>161.0</b>	<b>1.00</b>	<b>5.18</b>
Moss Underground	All	2.6	2.90	0.24
	<b>Total</b>	<b>2.6</b>	<b>2.90</b>	<b>0.24</b>

Notes:

- Numbers have been rounded to reflect the precision of an Inferred MRE. Totals may vary due to rounding.
- Estimation has been completed within the two separate reported geological domains: a higher-grade shear domain which occurs within a larger lower-grade intrusive domain; modelling of domain boundaries has considered both geology and grade.
- Gold cut-off for open pit has been calculated based on a gold price of US\$1,650/oz, mining costs of US\$2.70/t, processing costs of US\$12.50/t, and mine-site administration costs of US\$2.50/t processed. Metallurgical recoveries of 92.5% are based on prior metallurgical testwork.
- Gold cut-off for underground MSO shapes have been calculated based on a gold price of US\$1,650/oz, mining costs of US\$86.25/t, processing costs of US\$12.50/t, and mine-site administration costs of US\$2.50/t processed. Metallurgical recoveries of 92.5% are based on prior metallurgical testwork.
- An economic cut-off grade of 0.35 g/t Au was applied to mineralized rock in the optimized open pit for processing determination.
- Mineral Resources conform to NI 43-101, and the 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves.
- The Qualified Person and Company are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that might materially affect the MRE.
- Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in the MRE are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated and/or Measured Resources. The Company will continue exploration intended to upgrade the Inferred Mineral Resources to Indicated Mineral Resources

The estimated block model was tabulated at various cut-off grades (Table 14.13). This tabulation does not represent a Mineral Resource and only serves to illustrate the sensitivity to various cut-offs.

Table 14.13: Grade-tonnage scenarios at various cut-offs within the RPEEE pit shell

Cut-off Au (g/t)	Tonnage (Mt)	Au (g/t)	Contained metal (Moz Au)
0.3	200.2	0.87	5.59
0.35	161.1	1.00	5.18
0.4	131.8	1.14	4.83
0.45	111.2	1.27	4.55
0.5	96.7	1.39	4.33
0.55	85.7	1.50	4.14
0.6	78.1	1.59	4.00
0.65	72.3	1.67	3.89
0.7	68.2	1.73	3.80
0.75	64.2	1.79	3.71
0.8	61.3	1.84	3.63



**14.1.14 Additional Exploration Potential**

The shears are open at depth and along strike, beyond the modelled strike length of 3.5 km. Historical drilling intercepted gold mineralization over a total strike length of 8 km, which has been a focus of Goldshore’s summer soil geochemistry and structural mapping programs. Furthermore, the QP author is of the opinion that there remains potential for additional parallel shears with gold mineralization in historical drill holes 500 m to the southeast of the Moss Gold deposit.

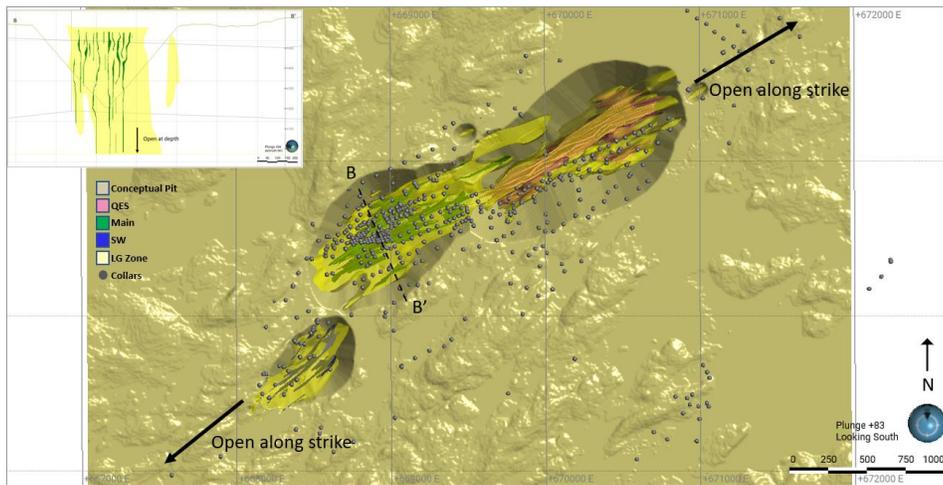


Figure 14.19: Plan view of 2022 Lake Moss Project showing the potential at depth and along strike

**14.1.15 Comparison with Previous Estimate**

In November 2022 CSA Global completed the most recent mineral resource estimate. Table 14.14 summarises the comparison between the November 2022 MRE and May 2023. The 2023 MRE includes both open and underground Inferred Mineral Resources.

Table 14.14: Comparison between the 2022 Estimate and 2023 MRE Update

Mineral Resource classification	2022 MRE			2023 MRE		
	Tonnage (Mt)	Au (g/t)	Contained metal (Moz Au)	Tonnage (Mt)	Au (g/t)	Contained metal (Moz Au)
Indicated	-	-	-	-	-	-
Inferred	121.7	1.10	4.17	163.4	1.03	5.40
<b>Total Resource</b>	<b>121.7</b>	<b>1.10</b>	<b>4.17</b>	<b>163.4</b>	<b>1.03</b>	<b>5.40</b>

Major differences:

- Infill and step-out drilling, drilled by Goldshore, has resulted in remodelling of the mineralisation wireframes and better structural understanding of the deposit.
- The geological interpretation continues to change as more drilling, assaying and geological interpretation is completed. Figure 14.20 shows the 2022 and 2023 interpretations.
- The addition of the drilling data has resulted in more stable variograms and the use of correlogram models with OK. In 2013, the inverse distance raised to the second power was used.



- In 2013, a mean density of 2.78 was applied to all mineralised zones. In 2022, the density value was applied per estimation zone between 2.70 and 2.71. The 2022 mean density was determined from on-site density measurements from the drill core and in 2013 a bulk density from historical measurements was applied.
- A block size of 9 m × 9 m × 3 m was used to support the underground potential in 2023. In 2022 block sizes of 15 m × 15 m × 5 m was used.
- The input parameters for the conceptual pit shell are compared in Table 14.15. There are only minor differences in cost and input assumptions between 2013 and 2022.
- In 2013 Indicated Resources were reported based on the assumptions that the input data was accepted as correct. The 2022 Inferred classification incorporated the confidence in data and estimation quality.

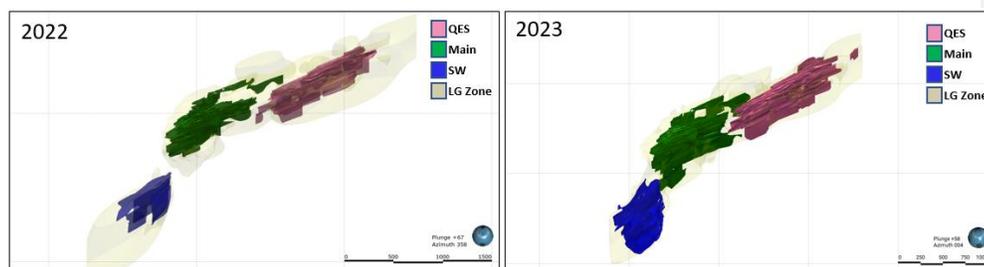


Figure 14.20: 2013 mineralized interpretation and the 2022 mineralized interpretation

Table 14.15: Conceptual pit input parameters and assumptions for 2022 and 2023

Item	2022 values	2023 values
Gold price	US\$1,500/oz	US\$1,650/oz
Mining cost mineralization and waste	US\$2.50/t fresh	US\$2.70/t fresh
Mining recovery	100 %	100 %
Processing cost	US\$12.50/t fresh	US\$12.50/t fresh
Processing gold recovery	85%	92.5%
General and administration cost	US\$2.500/t	US\$2.500/t
Pit slope angle	50°	50°
Cut-off grade	0.37g/t	0.35 g/t

**14.1.16 Risk and Recommendations**

The following recommendations for additional work are made with respect to the current MRE:

- Ongoing re-assay (with QAQC) of historical drilling, especially in the upper 200 m to reclassify blocks in the early pit to Indicated Mineral Resources to support a mine plan.
- Attempt to re-survey the downhole surveys for historical drill holes where possible.
- Carry out additional infill drilling with current QAQC practices to reduce the reliance on historical drilling.
- Re-consider and standardize the geological database to support lithological and grade modelling. This applies especially to historical drill holes.
- Update the mineralization model to delineate mineralized structures of variable orientation within the shears.
- Improve the accuracy of the wireframes by snapping to the appropriate samples.



- Remodel the wireframes using a single set of grade shells to improve the high-grade shear zones and better define the low-grade intrusion zone.
- It is reasonable to expect that some of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued infill drilling.
- Conduct a drill hole-spacing optimisation study to determine the spacing needed to upgrade the Mineral Resources to Indicated and Measured categories.
- A geological model/block model can be updated incorporating relevant elements such as arsenic and sulphur and any other element that highlights alternation features associated with the shears.

#### 14.1.17 Audits and Reviews

The 2013 MRE was reviewed in 2020 by Angus Christie for Goldshore. No major findings were identified for the MRE.

The following notes were made on the 2013 MRE:

- The MRE is based on a pit shell with an overall slope angle of 50° and this is carried through to the mineable resources pit shell on which the mine plan is based.
- The MRE utilises a “mill” or “marginal” cut-off grade of 0.5 g/t Au which is different to the cut-off grade used in the estimation of mineable resources at 0.38 g/t and 0.32 g/t Au (for the northern and southern portions of the deposit respectively). The relevance of this is discussed in the mining section.

## 14.2 East Coldstream Deposit

### 14.2.1 Introduction

Efrain Ugarte, Senior Resource Consultant, is responsible for completing the MRE and this specific section of the Report for the East Coldstream Deposit. Nigel Fung, Partner and QP for the project, supervised this section. According to the QP's assessment, the reported Mineral Resource for gold at the deposit is considered a reasonable representation based on the available information.

The effective date of the current MRE is May 5, 2023. It was prepared following the CIM Definitions and Standards on Mineral Resources and Mineral Reserves (May 10, 2014) and reported in accordance with NI 43-101, Companion Policy NI 43-101CP, and Form 43-101F1 technical disclosure requirements.

The current MRE was developed using interpretations derived from assaying and geological and structural logging. Goldshore provided all the data and the geological model. The initial sample data preparation and intermediate spreadsheet processing were the only tasks not performed using Leapfrog™ and Datamine Studio RM™ software, which were used for interpretations, modelling, estimation, and model validation. The statistical analysis was conducted using Snowden Supervisor™.

The MRE workflow can broadly be summarised:

- Data validation and preparation
- Validation of the provided geological and mineralization wireframes
- Domaining, coding, compositing, and capping
- Exploratory data analysis
- Variography
- Block model construction
- Grade interpolation



- Block model validation
- Density assignment
- Mineral Resource classification and tabulation.

Reported Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into a Mineral Reserve.

#### **14.2.2 Data**

The database is currently in a Microsoft Excel spreadsheet and was compiled by Goldshore. The data were exported in comma separated values (CSV) format and imported into Leapfrog. The drilling database was prepared using data available up to April 24, 2023.

The following data were available:

- Collar
- Survey
- Assays
- Lithology
- Density
- Mineral descriptions
- Structural data.

The following reports were provided for context of previous studies:

- Technical Report and Resource Estimate on the Osmani Gold Deposit, Coldstream Property, Northwestern Ontario, Tetra Tech, 2011.
- Technical Report on the Moss Lake Project, Ontario, Canada Report for NI 43-101, SLR Consulting (Canada) Ltd., 2021.

#### **14.2.3 Geological Model and Wireframing**

Besides the drill hole database, Goldshore provided the author with wireframes representing topography, overburden, and geological interpretation of Diabase, Gabbro (IGC), and Quartz Feldspar Porphyry (IQP). The geological wireframes were based on the lithological logging data. Figure 14.21 shows a 3D representation of the modelled geology at East Coldstream.

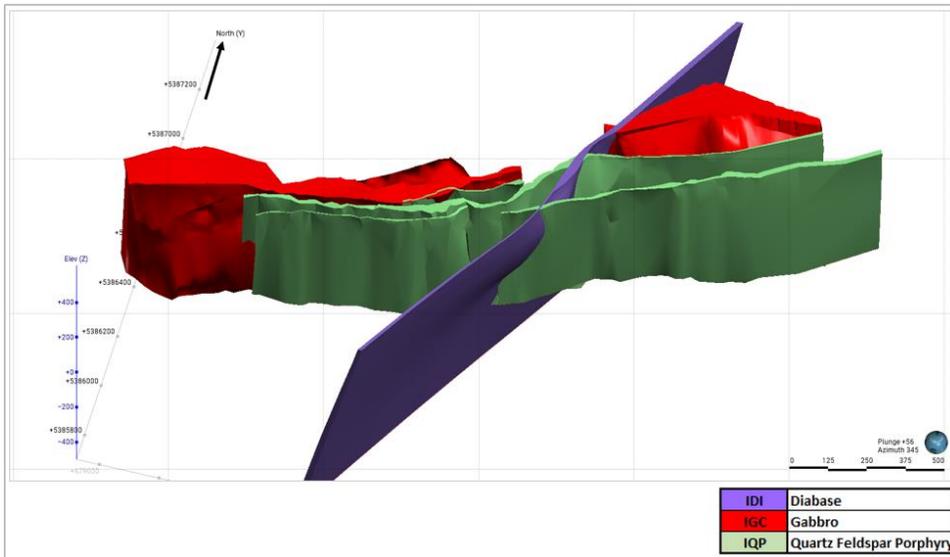


Figure 14.21: 3D view of the interpretation of the lithological units at East Coldstream

Goldshore also included a set of digitized shear planes merged as one mineralized shear zone that was made based on the grade and logging of the strongly altered zones (VCB). The construction of these mineralization zones at the East Coldstream deposit was based on geological parameters, including structures, alteration, and a grade cut-off of 0.3 g/t Au (Figure 14.22). The author provided feedback and recommendations to update the wireframes when needed.

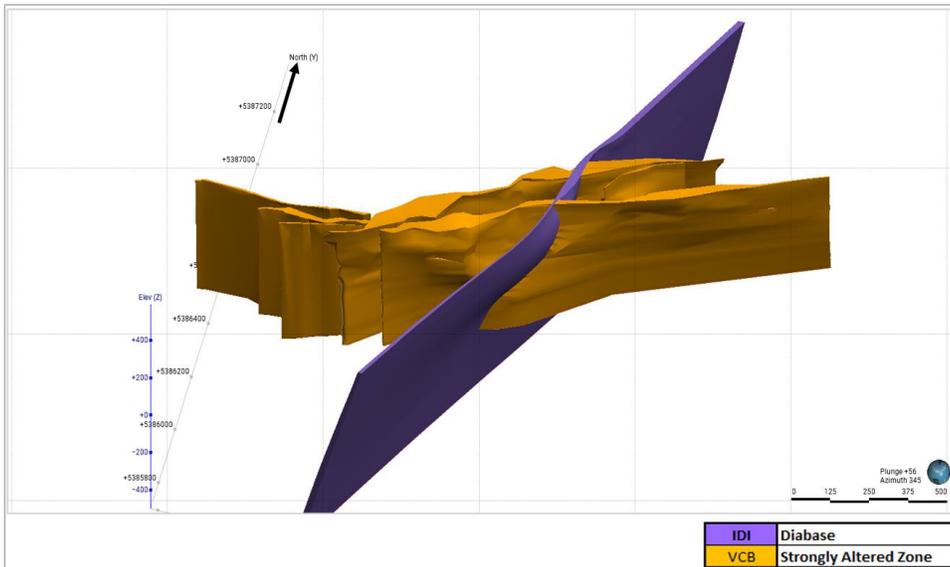


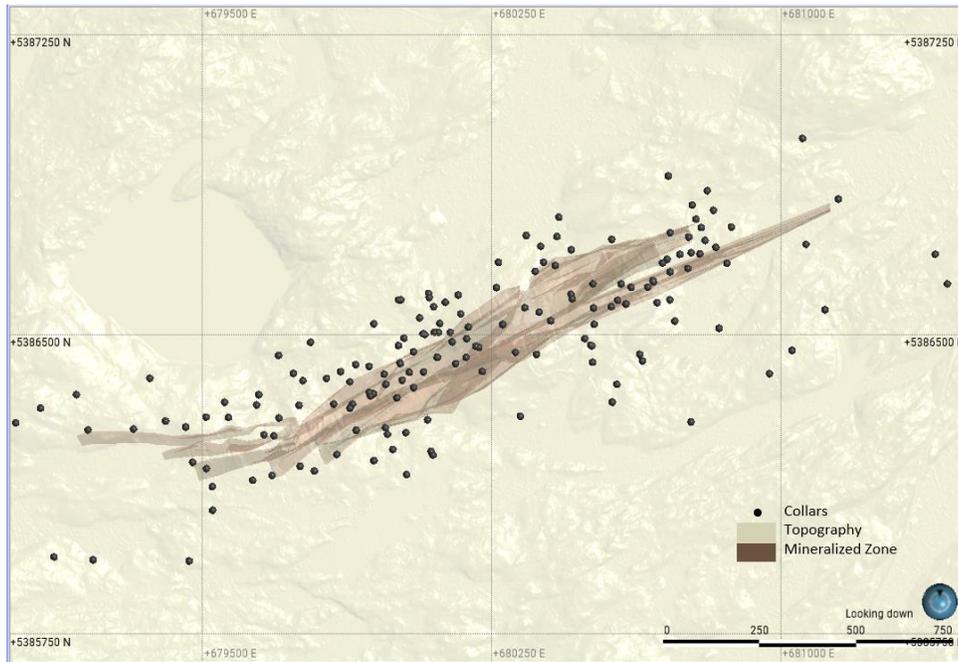
Figure 14.22: 3D view of the altered and mineralized zones, cut by a late diabase intrusion

The author reviewed all informing wireframes and considered that the quality and quantity of the information are appropriate for Mineral Resource Estimation and are consistent with the geology recorded in drilling and mapping.

**14.2.4 Drill hole Data**

The drill hole data used in this study is derived from a data export provided by Goldshore with a total of 183 drill holes. However, three drill holes have been discarded because their assay information was missing. Of the remaining 180 drill holes (47,044 m), 13 are part of the new drilling completed during the Goldshore drilling campaign conducted during 2021 and 2022.

The drill hole data was provided as a set of Microsoft Excel CSV files. Drill collar locations are shown in Figure 14.23. Goldshore requested that only gold must be estimated for East Coldstream.



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Figure 14.23: Plan view of drill hole collars (black dots) with the altered and mineralized zone (brown shape)

All drill hole data was imported into Leapfrog software and interrogated via Leapfrog validation functions before constructing a drill hole database for the deposit. Key fields within these critical drill hole database files are validated for potential numeric and alpha-numeric errors. Data validation cross-referencing collar, survey, assay, and geology files was performed to confirm drill hole depths, inconsistent or missing sample/logging intervals, and survey data. The data was validated and checked for logical or transcription errors, such as overlapping intervals. Collar elevations were compared with the digital elevation model, and the sample distribution was reviewed to ensure they represented the mineralization and was appropriate for spatial interpolation. There were a few minor errors in the collar data that Goldshore corrected.

#### 14.2.4.1 Treatment of Missing Values

Unsampled intervals are encountered throughout the deposit, especially within the historical dataset. It was assumed that the unsampled intersections within the mineralization wireframes had been interpreted as waste based on visual interpretation of the gold grade. Half of the detection limits are used to ensure blocks are estimated using representative values for un-sampled intervals. A grade of 0.0025 g/t was assigned to the unsampled intervals before any further work. Comparison of statistical analysis of the original and assigned database ( $\frac{1}{2}$  of detection limit for missing values) is shown in Table 14.16.



Table 14.16: Comparison of statistical analysis of the original and assigned database of the East Coldstream deposit

Domain	Original Raw Data						Assigned Raw Data (½ detection limit)					
	Count	Min. Au g/t	Max. Au g/t	Mean	SD	CV	Count	Min. Au g/t	Max. Au g/t	Mean	SD	CV
Z_1	145	0.001	1.5	0.21	0.34	1.63	146	0.001	1.5	0.15	0.31	2.07
Z_2	3700	0.000	37.7	0.49	1.39	2.82	3733	0.003	37.7	0.46	1.34	2.94
Z_3	147	0.001	5.8	0.36	0.79	2.18	147	0.001	5.8	0.36	0.79	2.18
Z_4	3233	0.001	34.5	0.63	1.74	2.74	3290	0.001	34.5	0.60	1.70	2.83
Z_5	5095	0.000	6.5	0.07	0.24	3.58	5245	0.003	6.5	0.06	0.22	3.92

14.2.4.2 Topography

Goldshore has provided a topography surface constructed from LiDAR data at 2 m spacing, as shown in Figure 14.24.

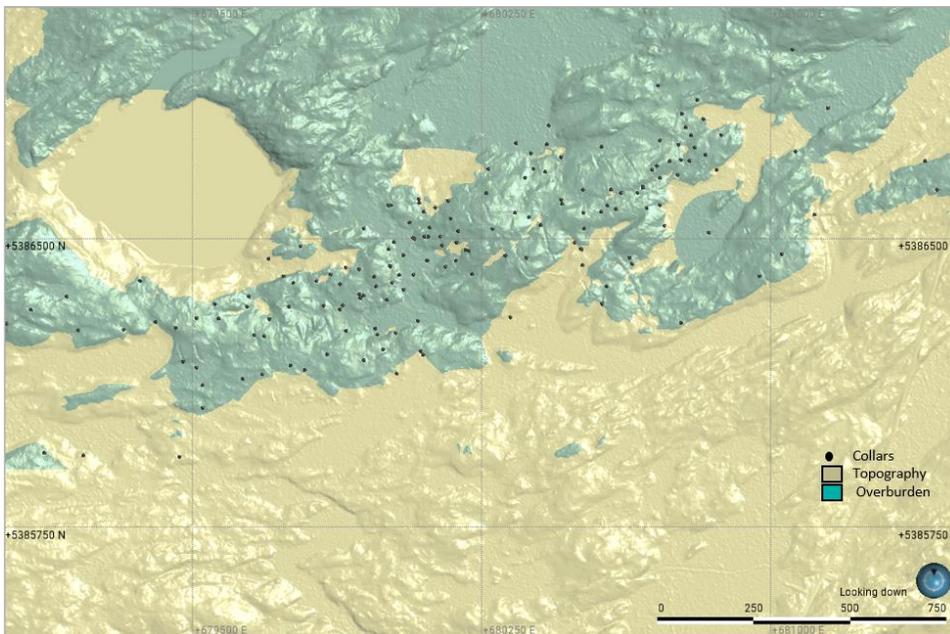


Figure 14.24: 3D view of the topography and overburden (green) at East Coldstream

14.2.4 Preparation of Estimation Domains

Goldshore undertook geological modelling, and the 3D wireframes were provided to the author for review and verification and Mineral Resource estimation purposes.

The mineralized wireframe (shear zone) domains were manually constructed in Micromine software. Each was developed by forming connections between strings generated on a section-by-section basis, resulting in a cohesive 3D solid. The manual digitization followed the highly altered rock (VCB) and utilized a 0.3 g/t Au



cut-off within a 2 m composite. Whenever possible, structural and shear data were integrated to assist in defining the wireframe. The provided solid was divided into the four distinct mineralized domains to facilitate Mineral Resource estimation. A plan view of these four mineralized shear domains can be observed in Figure 14.25.

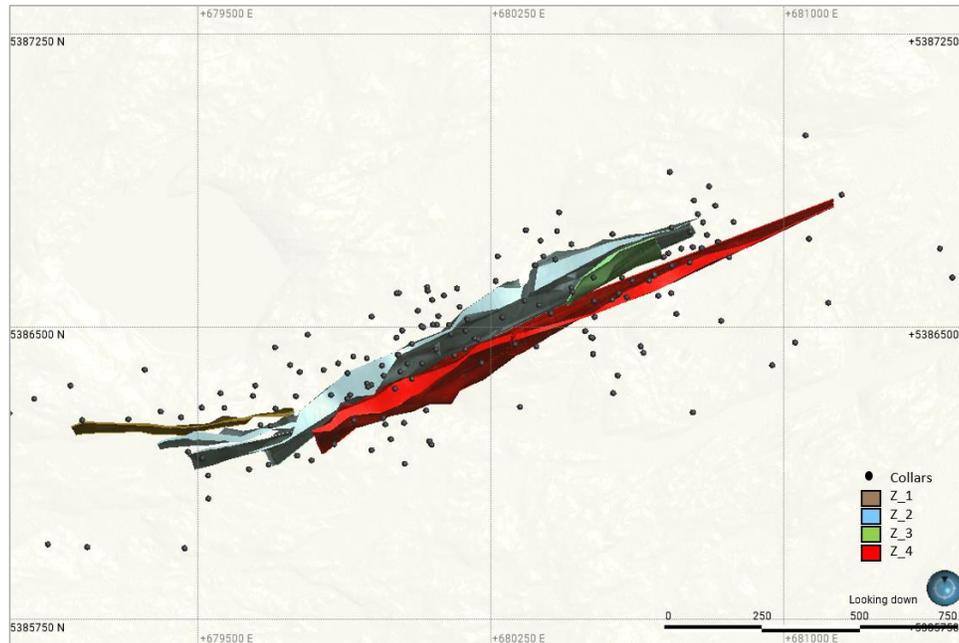


Figure 14.25: Plan view of mineralized shear domains

The author was responsible for constructing the low-grade zone using the Leapfrog software. The low-grade solid is a body enclosing the mineralized shear zone (Figure 14-26). The area was modelled using a 0.12 g/t Au cut-off within a 2 m composite. The composite length and the inclusion of the waste samples were used to construct a continuous zone surrounding the high-grade zone. The low-grade solid was modelled using a structural trend of the deposit. The structural trend was created from surfaces that are parallel to the shear directions.

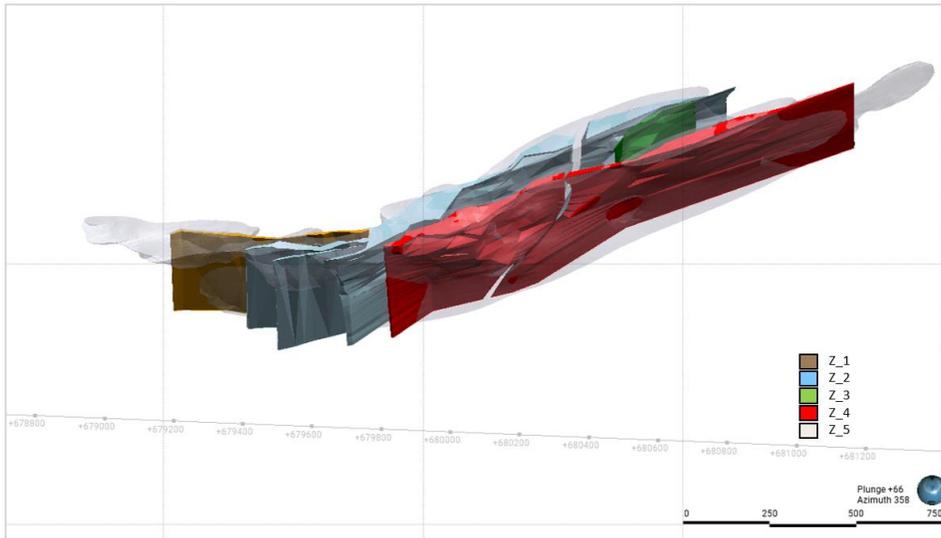


Figure 14.26: 3D view of low-grade wireframe (Z\_5) enclosing the high-grade domains (Z\_1, Z\_2, Z\_3, and Z\_4)

#### 14.2.4.1 Structures

Goldshore supplied geology and mineralization wireframes. Goldshore modelled these wireframe zones based on mapped and interpreted shear zones and other structures.

#### 14.2.5 Sample Compositing

A 1 m composite interval equal to the dominant sample length of the raw assays was selected to ensure equal sample support. During the compositing process, the residual samples were added equally to all composites while keeping it as close as possible to the interval (1 m). Table 14.17 shows the composite statistical summary.

Table 14.17: East Coldstream deposit composite summary

Zone	Count	Min. Au g/t	Max. Au g/t	Mean Au g/t	SD	CV
Z_1	149	0.001	1.51	0.19	0.32	1.86
Z_2	4956	0.001	37.71	0.46	1.29	2.80
Z_3	177	0.001	5.28	0.34	0.70	2.06
Z_4	4394	0.001	31.09	0.60	1.60	2.67
Z_5	5097	0.000	6.53	0.08	0.29	3.50

#### 14.2.5.1 Exploratory Data Analysis

An exploratory data analysis of composites was conducted in the mineralized domains. Estimation domains have similar skewed distributions with high CV values above 2.0 associated with a high-grade gold tail containing extremely high gold values (as shown in the histogram in Figure 14.27). Treatment of very high



grades is required in two domains (Zone 2 and Zone 4) to avoid excessive spreading or smearing of unrealistic high grades during estimation.

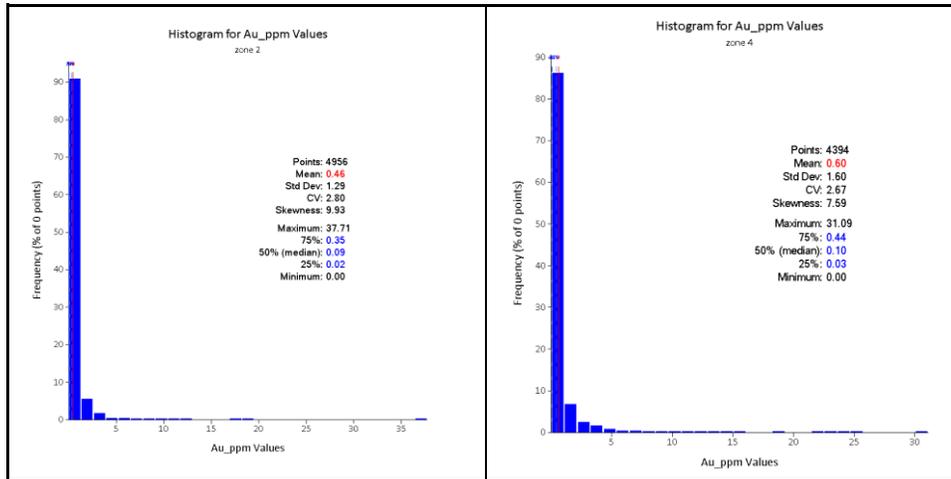


Figure 14.27: Gold grade histograms of two mineralized zones (Zone 2, and Zone 4)

A contact analysis was completed between the higher-grade shear domains and the lower-grade domain and showed that a hard boundary would be suitable for the estimate (Figure 14.28).

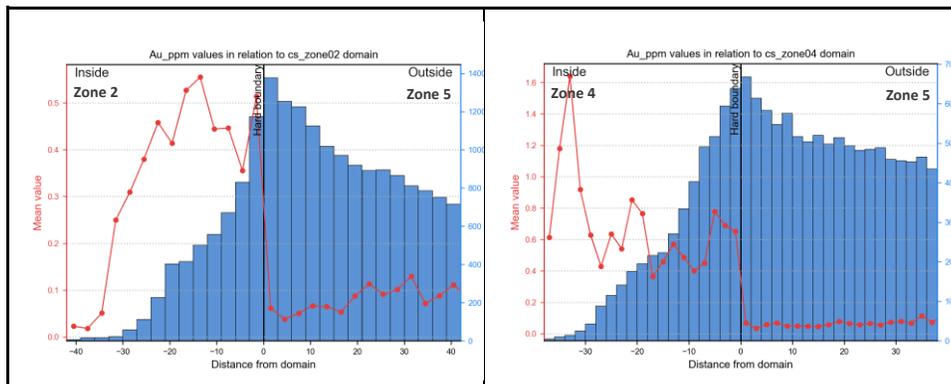


Figure 14.28: Contact plots between the high-grade shear domains (Zone 2, and Zone 4) and the surrounding low-grade domain (Zone 5)

#### 14.2.5.2 Top Cuts

Capping (or top cutting) was applied after compositing. Generally, very high grades are located within the high-grade shear portions of the deposit. Most very high-grade samples are well constrained by surrounding drill holes. Log normal cumulative probability plots for each domain were reviewed to identify inflection points at the upper end of the distribution and derive a capping value. The percentage of metal loss is used



in the capping decision. Based on statistics and spatial locations, only extremely high grades were capped in two mineralized zones (Zone 2 and Zone 4). Figure 14.29 shows the graphs for establishing the top cut values for zone 2. Summary composite statistics by domain and the impact of top cuts in the mineralized zones are shown in Table 14.18.

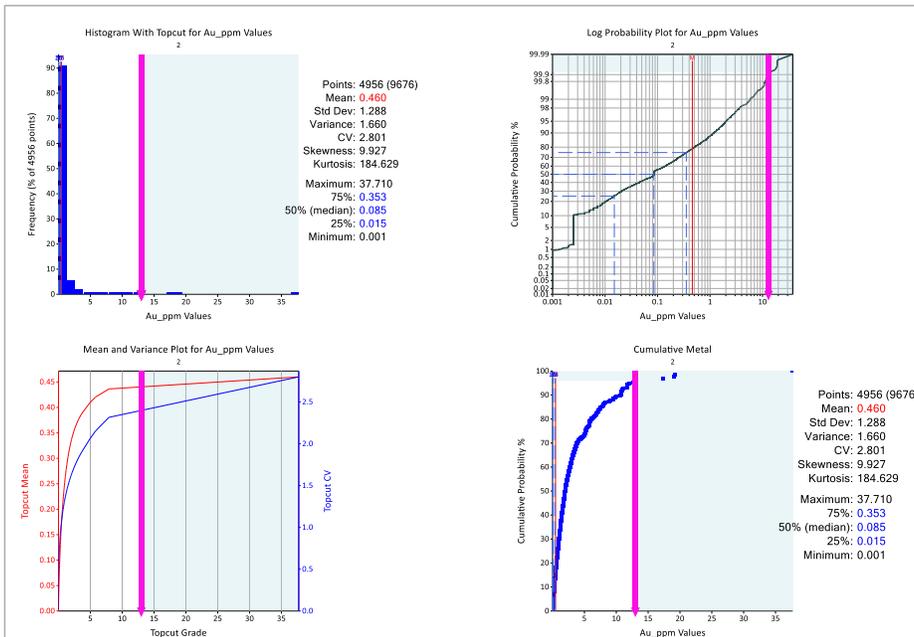


Figure 14.29: Top cut analyses for the Main shear zone(Z\_2)

Table 14.18: East Coldstream deposit composite summary with top cuts within mineralized locations

Domain	Count	Minimum	Maximum	Mean	SD	Uncut CV	Capping value	No. capped	Capped mean	Capped SD	Capped CV
Z_1	149	0.001	1.51	0.19	0.32	1.66	-	0	-	-	-
Z_2	4956	0.001	37.71	0.46	1.29	2.80	13.0	4	0.45	1.14	2.53
Z_3	177	0.001	5.28	0.34	0.70	2.06	-	0	-	-	-
Z_4	4394	0.001	31.09	0.60	1.60	2.67	15.0	9	0.59	1.43	2.45
Z_5	5097	0.000	6.53	0.083	0.29	3.50	-	0	-	-	-

#### 14.2.5.3 Spatial Continuity

Variography is a standard tool used to measure the spatial variability within a domain, and it is a required input for running any geostatistical estimation. The variograms that were created initially were noisy and difficult to model. Normal-score transformations and correlograms were investigated. The correlograms gave the best results and motivated the use of the correlogram, which minimized the effect of the nuggety behaviour of the deposit. The individual shear zones were used to derive stable and representative correlograms. However, the separate shears with the most data were used to determine the best



correlograms. These correlogram models were used to individually estimate all the high-grade shear zones and the lower-grade zone, as shown in Figure 14.30 and Figure 14.31.

Nugget (i.e., intrinsic sample variance) was determined by modelling the downhole correlogram. Ellipses were visualized in Leapfrog to confirm alignment with mineralization trends.

Correlogram charts for gold were modelled using two spherical functions. Table 14.19 summarizes the correlogram models used in estimating the domains.

Table 14.19: Modelled correlogram parameters

Domain	Direction			Model			Range		
	Dip	Dip Azimuth	Pitch	Nugget	Structure	Sill	Major	Semi-major	Minor
Z_1	86	155	0	0.3	1. Sph	0.55	9.5	10	10
					2. Sph	0.12	80	60	20
Z_2	86	155	0	0.3	1. Sph	0.55	9.5	10	10
					2. Sph	0.12	80	60	20
Z_3	90	158	90	0.32	1. Sph	0.60	11.4	20	10
					2. Sph	0.08	70	50	25
Z_4	90	158	90	0.32	1. Sph	0.60	11.4	20	10
					2. Sph	0.08	70	50	25
Z_5	90	158	90	0.32	1. Sph	0.60	11.4	20	10
					2. Sph	0.08	70	50	25

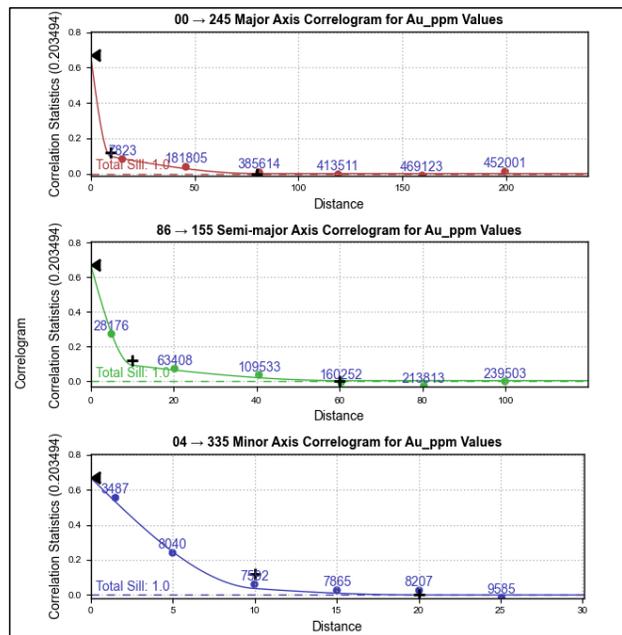


Figure 14.30: Correlogram with fitted model used to estimate the Zone 1, Zone 2

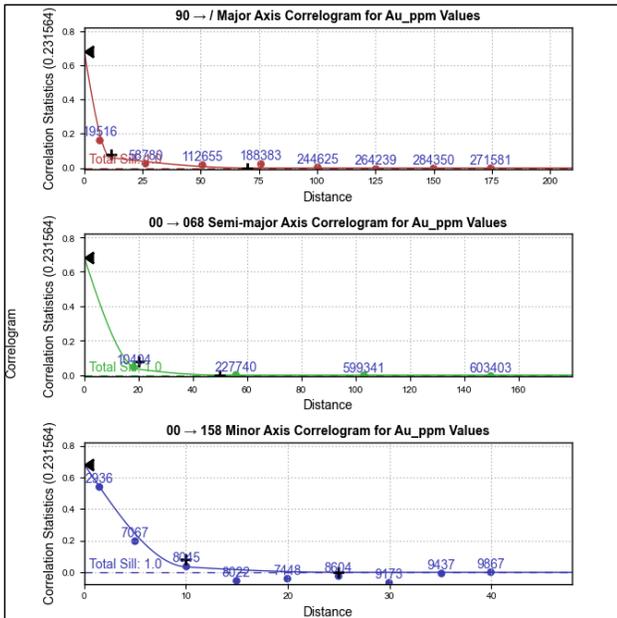


Figure 14.31: Correlogram with fitted model used to estimate the Zone 3, Zone 4 and Zone 5

#### 14.2.6 Block Modelling

A block model was constructed with cell dimensions of 6 m × 6 m × 6 m (XYZ) and a minimum sub-cell size of 3 m × 3 m × 3 m. All the wireframes representing the mineralization boundaries were filled with blocks. The blocks were coded according to the appropriate estimation domains.

Block models were built assuming that mining within an open pit would be undertaken. The block model is non-rotated and uses sub-cells. The block model parameters are summarized in Table 14.20

Table 14.20: Block model definition

Model definition parameter	Value
Parent block X size (m)	6
Parent block Y size (m)	6
Parent block Z size (m)	6
Lower left corner, east coordinate	678710
Lower left corner, north coordinate	5385900
Lower left corner, RL coordinate	-53
Number of blocks along X direction	467
Number of blocks along Y direction	200
Number of blocks along Z direction	98



#### 14.2.7 Grade Interpolation

Mineralization domain contacts are interpreted as hard boundaries for grade interpolation, so gold grades in one domain cannot inform blocks in another.

The Ordinary Kriging (OK) method used the correlograms to weight composite assay values when estimating block grades. For validation purposes only, other interpolation methods were also undertaken, inverse distance weighting to the power two (IDW2) and NN of input samples.

##### 14.2.7.1 Locally Varying Anisotropy (LVA)

A set of surfaces were generated using the mineralized wireframes and structural information. These surfaces were used to calculate internally the strike and dip of the structures to address the variation of anisotropy. Locally Varying Anisotropy (LVA) was used to estimate within the curvilinear zones. The LVA determined the search orientation changes during the grade interpolation.

##### 14.2.7.2 Estimation Parameters

Estimation of the grade variables was carried out into parent cells using OK. Hard boundaries between mineralization domains were used during grade estimation. It was performed using a  $3 \times 3 \times 3$  discretization.

A four-phased search pass was applied. This process involves the estimation being performed four times, where three expansion factors and one arbitrary search distance are used. During each estimation run, this factor increases the size of the search ellipse used to select samples. The search parameter for pass one was half the variogram range, search pass two was the variogram range, search pass three was two and a half times the variogram range and pass four used a 500-m search to estimate some potential grades inside the wireframes. This method ensures that blocks not estimated and populated with a grade value in the first run were populated during one of the subsequent runs. Search parameters are summarised in Table 14.22. Blocks not estimated within the four search runs were assigned a zero grade.

Table 14.21: Search parameters used for estimation.

ZONE	Pass	Var Range Factor	Search Ellipsoid			Number of Composites		Maximum Comp/DH
			Major	Semi major	Minor	Minimum	Maximum	
Z_1	1	0.5	40	30	6	10	30	3
	2	1	80	60	6	10	30	3
	3	2.5	200	150	15	8	15	3
	4	-	500	500	15	8	15	3
Z_2	1	0.5	40	30	6	10	30	3
	2	1	80	60	6	10	30	3
	3	2.5	200	150	15	8	15	3
	4	-	500	500	15	8	15	3
Z_3	1	0.5	35	25	6	10	30	3
	2	1	70	50	6	10	30	3
	3	2.5	175	125	15	8	15	3
	4	-	500	500	15	8	15	3
Z_4	1	0.5	35	25	6	10	30	3
	2	1	70	50	6	10	30	3
	3	2.5	175	125	15	8	15	3
	4	-	500	500	15	8	15	3
Z_5	1	0.5	40	30	6	10	30	3
	2	1	80	60	6	10	30	3
	3	2.5	200	150	15	8	15	3
	4	-	500	500	15	8	15	3



**14.2.8 Estimation Validation**

Estimated grades were validated per domain and were validated by:

- Global statistics
- Visual validation on sections.
- Swath plots

*14.2.8.1 Global Statistics*

Global mean values were calculated for the input composites and output estimates. The comparison was completed for the Mineral Resource area. The composite and block grades were compared by estimation domain. The mean grades of the blocks are comparable with the input composites. As an additional measure of validation, IDW2 and NN estimates were completed. The global mean between these two methods is similar. However, OK estimation presents globally better performance with respect to the composites (Table 14.22).

Table 14.22: Mean composite grades vs the block model grades.

Grade variable	Composite mean grade	Block mean grade (OK)	Block mean grade (IDW2)	Block mean grade (NN)
Z_1	0.19	0.22	0.28	0.33
Z_2	0.46	0.44	0.37	0.36
Z_3	0.34	0.44	0.40	0.34
Z_4	0.60	0.53	0.51	0.52
Z_5	0.08	0.05	0.05	0.05

*14.2.8.2 Visual Validation*

The block grades demonstrate a strong correlation with the grades of the input samples. The block model accurately reflects the distribution and quality of grades in the composites, considering the known degree of grade continuity. In areas of the deposit with limited sample information, where knowledge is lacking, the block model exhibits a smoother representation, which is expected under such circumstances. Figure 14.32 displays a across-sectional view of the block model, with gold colouring indicating the presence of gold. Cross sections were visually examined to validate the model section by section and in a three-dimensional context. This comparison between the assay data and the estimated block model confirmed the local accuracy of the model, particularly close to the input composites.

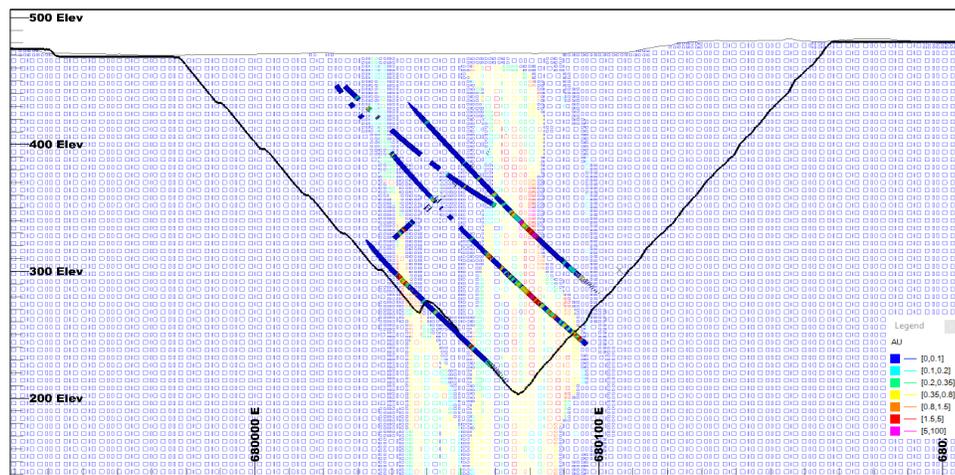


Figure 14.32: Example cross section looking to the north east shown validation view plot for gold

#### 14.2.8.3 Swath Plots

Swath plots were generated for the estimation domains, which compare the grades of composites and block grade estimates in easting and northing slices. Plots will identify slices that contain high-grade samples and low-grade blocks, or vice versa, which might indicate a problem with the estimation technique.

Block grades estimated by OK, ID, and NN have a smoother profile relative to input composites for all domains. Where there are more samples, good agreement is seen between the trends of input composites and block grades estimated by each technique. Figure 14.33 to Figure 14.35 show the swath plot of all zones.

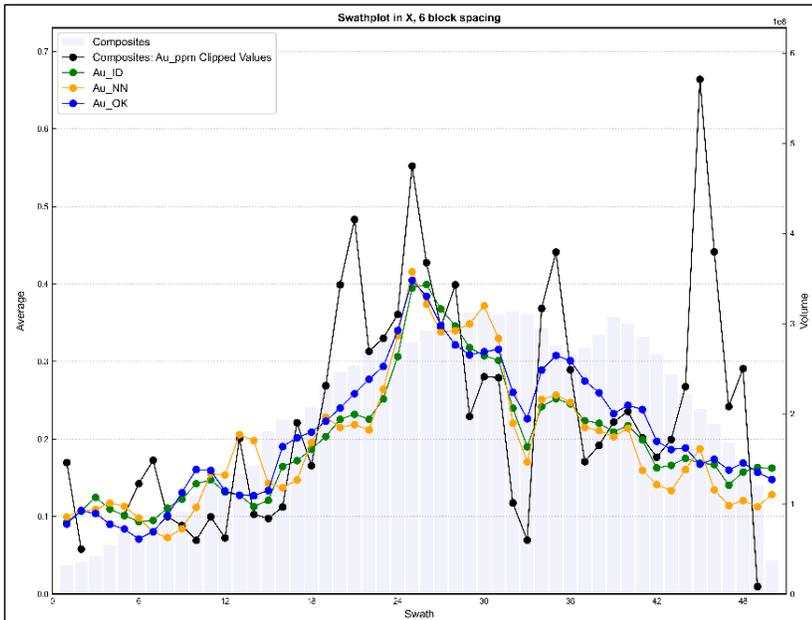


Figure 14.33: Example swath plot for gold, X direction, all zones

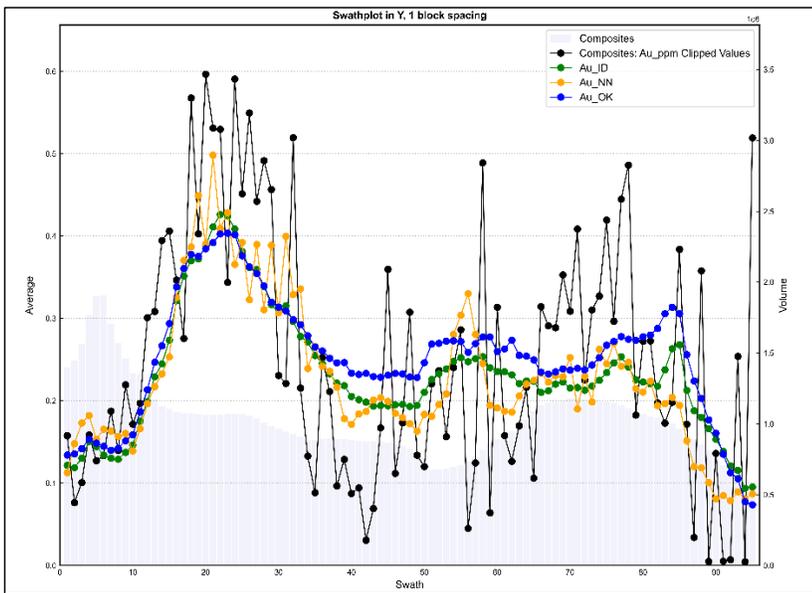


Figure 14.34: Example swath plot for gold, Y direction, all zones

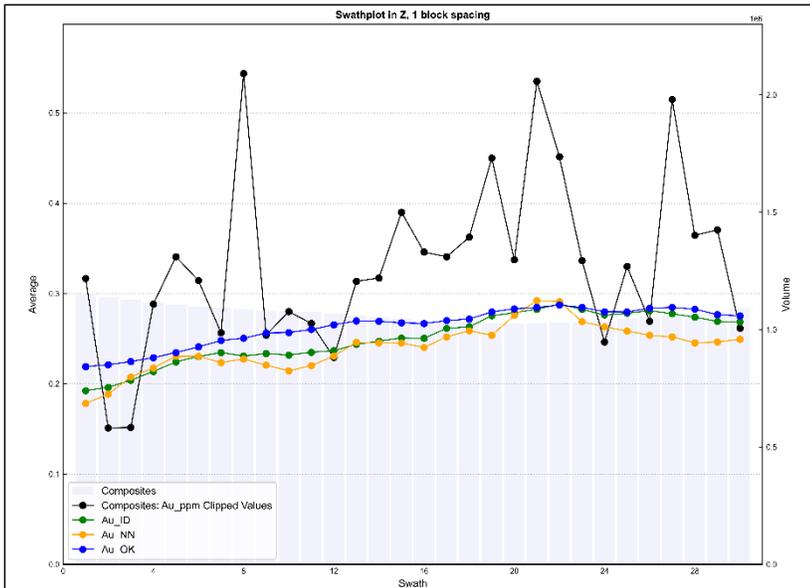


Figure 14.35: Example swath plot for gold, Z direction, all zones

#### 14.2.9 Bulk Density

Goldshore, and they provided a density database from measurements undertaken on-site. A total of 361 samples were collected from the drill holes, which were categorized based on rock type and mean values. Since density determinations were not conducted for the overburden and metavolcanic rocks, a density value of 2.00 was assigned to the overburden zone, and a density of 2.78 was assigned to the metavolcanic rocks. The assumed densities for the overburden and metavolcanic are considered reasonable. The density values are summarized in Table 14.23.

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Table 14.23: Mean density value assigned per rock type

Domain		Mean
Strongly Altered Zone	VCB	2.81
Quartz Feldspar Porphyry	IQP	2.68
Gabbro	IGC	2.89
Diabase	IDI	2.94
Metavolcanic rocks	-	2.78
Overburden	-	2.00

#### 14.2.10 Reasonable Prospects for Economic Extraction

CIM Definition Standards require that Mineral Resources have “reasonable prospects for eventual economic extraction” (RPEEE). This implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade considering possible extraction scenarios and processing recoveries.



To satisfy the requirement of RPEEE by open pit mining, reporting pit shells were determined based on conceptual parameters and costs supplied by Goldshore and reviewed for reasonableness by the QP author. The depth, geometry, and grade of gold mineralization at the deposits make them amenable to exploitation by open-pit mining methods. Selected cut-off values assume a gold price of US\$1,650/oz, and the processing recoveries and costs are detailed in Table 14.24.

Table 14.24: Conceptual mining and cost parameters for the RPEEE conceptual pit shell

Item	Value
Gold price	US\$1,650/oz
Mining cost mineralization and waste	US\$2.70/t fresh
Processing cost	US\$12.50/t fresh
Processing gold recovery	96.5%
General and administration cost	US\$2.50/t
Pit slope angle	50°
Cut-off grade	0.35g/t

The current MRE is constrained by a conceptual pit shell derived using Datamine NPV Scheduler optimization software. Figure 14.36 and Figure 14.37 show the block model within the constraining pit shell.

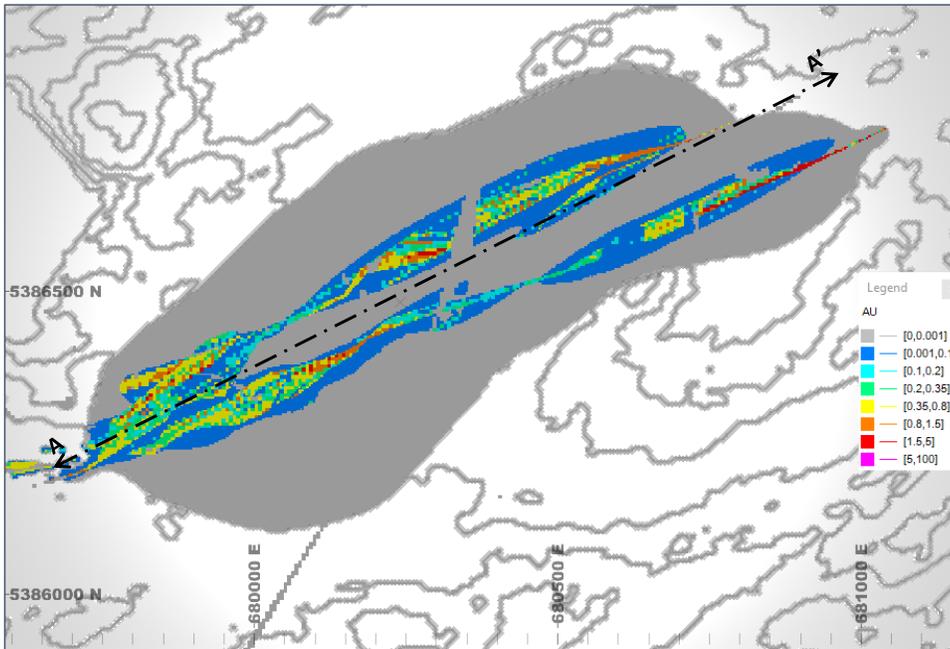


Figure 14.36: Plan view of 2023 East Coldstream block model coloured by gold grade with resource constraining (A-A' cross section shown in Figure 14.37).

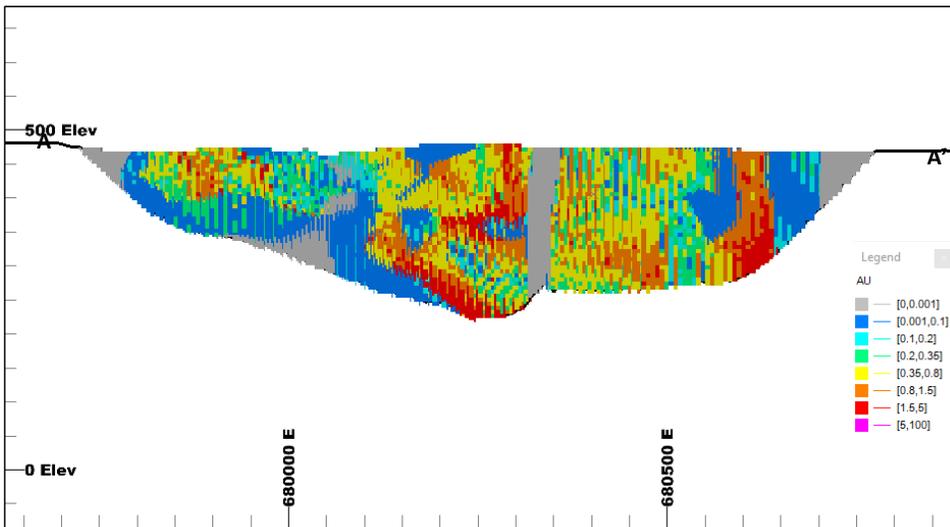


Figure 14.37: 2023 block model coloured by gold grade with resource constraining shell (longitudinal section view)



### 14.2.11 Mineral Resource Classification

The MRE is classified following CIM Definition Standards (May 2014). The current MRE has been classified as Inferred Mineral Resources only. The classification level is primarily based upon assessing the validity and robustness of input data and the QP author’s judgment regarding the quality of the data, proximity of resource blocks to sample locations and confidence regarding the geological continuity of the domain interpretations and grade estimates. Geological and grade continuity can be implied in the Inferred Mineral Resource area.

The following criteria were considered for the assignment of the Inferred Mineral Resource classification by the QP author:

- There is too great dependence on historical data for which QAQC data have not been found.
- Supporting data and better consistency is required to provide confidence in historical data.

The QP author is of the opinion that some of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued infill drilling or re-sampling of the historical drill core. The block model contains unclassified and potential material that can be only used to target further exploration.

### 14.2.12 Mineral Resource Statement

The MRE is reported above a cut-off grade of 0.35 g/t Au and comprises 19.8 Mt of Inferred Mineral Resources at 0.89 g/t Au within the optimized open pit. In addition, resources are reported above a cut-off grade of 2.00 g/t of 0.18 Mt of Inferred Mineral Resources at a grade of 2.24 g/t Au within the underground MSO shapes (Table 14.25).

Table 14.25: East Coldstream Deposit - Mineral Resource Estimate as of May 5, 2023

	Mineral Resource classification	Tonnage (Mt)	Au (g/t)	Contained metal (Moz Au)
Open Pit	Inferred	19.8	0.89	0.57
Underground	Inferred	0.18	2.24	0.01

Notes:

- Numbers have been rounded to reflect the precision of an Inferred MRE. Totals may vary due to rounding.
- Estimation has been completed within two geological zones: a strongly altered higher-grade shear zone surrounded by a lower-grade domain; modelling of domain boundaries has considered both geology and grade.
- Gold cut-off for the optimized open pit has been calculated based on a gold price of US\$1,650/oz, mining costs of US\$2.70/t, processing costs of US\$12.50/t, and mine-site administration costs of US\$2.50/t processed. Metallurgical recoveries of 96.5% are based on prior metallurgical testwork.
- Gold cut-off for underground MSO shapes have been calculated based on a gold price of US\$1,650/oz, mining costs of US\$86.25/t, processing costs of US\$12.50/t, and mine-site administration costs of US\$2.50/t processed. Metallurgical recoveries of 96.5% are based on prior metallurgical testwork.
- An economic cut-off grade of 0.35 g/t Au was applied to mineralized rock within the optimized open pit, and 2.00 g/t for East Coldstream underground for processing determination.
- Mineral Resources conform to NI 43-101, and the 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves.
- The Qualified Person and Company are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that might materially affect the MRE.
- Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in the MRE are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated and/or Measured Resources. The Company will continue exploration intended to upgrade the Inferred Mineral Resources to Indicated Mineral Resources

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Commented [NR72]: Quantify! @Efrain Ugarte @Matthew Field

Commented [NR73]: @Efrain Ugarte what percentage of data have QAQC, i.e. since 2010? What was the outcome of the assessment of the QAQC for 2010 and 2011? @Matthew Field @Niti Gupta



The estimated block model was tabulated at various cut-off grades, constrained within the optimized open pit (Table 14.26). This tabulation does not represent a Mineral Resource and only serves to illustrate the sensitivity to multiple cut-offs.

Table 14.26: Grade-tonnage scenarios at various cut-offs within the RPEEE pit shell

Cut-off Au (g/t)	Tonnage (Mt)	Au (g/t)	Contained metal (Moz Au)
0.25	24.2	0.79	0.61
0.30	21.9	0.84	0.59
0.35	19.8	0.89	0.57
0.40	17.8	0.95	0.55
0.45	16.1	1.01	0.52
0.50	14.5	1.07	0.50
0.55	13.1	1.13	0.47
0.60	11.8	1.19	0.45
0.65	10.8	1.24	0.43
0.70	9.9	1.29	0.41
0.75	9.0	1.35	0.39
0.80	8.2	1.40	0.37
0.85	7.5	1.46	0.35
0.90	6.9	1.51	0.34

#### 14.2.13 Risk and Recommendations

The following recommendations are provided for additional work related to the current MRE:

- Continuously re-assay historical drilling with proper QAQC practices to reclassify blocks to Indicated Mineral Resources.
- Attempt to re-survey historical drill hole collars that exhibit issues.
- Conduct additional infill drilling using current QAQC practices to reduce reliance on historical drilling.
- Increase the number of bulk density samples to improve confidence in tonnage calculations.
- Reconsider and standardize the geological database to support lithological and grade modelling, primarily for historical drill holes.



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## 15 Mineral Reserve Estimates

This section is not applicable.



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## 16 Mining Methods

This section is not applicable.



## 17 Recovery Methods

This section is not applicable.



## 18 Project Infrastructure

This section is not applicable.



## 19 Market Studies and Contracts

This section is not applicable.



## 20 Environmental Studies, Permitting and Social or Community Impact

CSA Global was not responsible for conducting the environmental studies, permitting and social or community impact assessment. The work was conducted by CSL Environmental & Geotechnical Ltd. and their report (CSL Ltd., 2022) has been referenced verbatim for this section. Chris Perusse P.Geo is the QP for this section of the report.

*Commented [NR74]: @Niti Gupta @Nigel Fung I assume that we have at least reviewed and ideally edited?*

### 20.1 Environmental Studies

Environmental studies for the Moss Project are currently being undertaken. In 2021, Goldshore Resources Inc. retained CSL Environmental and Geotechnical Ltd. (CSL) to assist in the development of an environmental baseline program to support future, applicable federal and provincial approvals required for this project. Details of the environmental baseline studies are provided in the sections below.

#### 20.1.1 Environmental Setting

The Moss property is located in Moss Township, approximately 100 km west of the city of Thunder Bay, in the province of Ontario, Canada. The nearest settlement is Kashabowie, located approximately 24 km to the northeast on provincial Highway 11 (part of the TransCanada highway system).

The property comprises three named lake systems, Moss Lake, Snodgrass Lake and Kawawigamak Lake, and several smaller open water bodies. Drainage is south into Quetico Provincial Park through a series of stream/creek and lake systems. The lakes and watercourses in the Moss Project area are shown Figure 20.1.

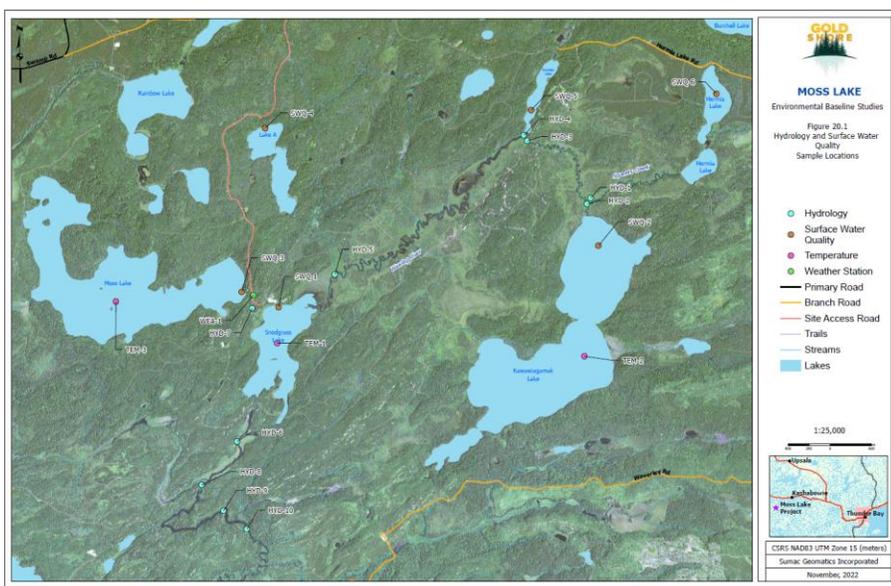


Figure 20.1: Lakes and watercourses within the Moss Gold Project area



There are no Protected Areas within the environmental study area, the nearest Protected Area is the Quetico Provincial Park located 20 km west of the property. The property is predominantly covered by wooded areas and lakes. Several low-lying areas have been mapped as wetlands around Snodgrass and Kawawagamak Lakes.

### **20.1.2 Environmental Baseline Studies**

#### **20.1.3 Hydrology**

A baseline hydrology assessment for the Moss Project Site commenced in June 2021. The baseline includes ten (10) locations in the Wawiag River watershed upstream and downstream of the Moss Project Site, which are labelled HYD1 to HYD10. The hydrology station locations are shown on Figure 20.1. The sample locations were chosen to assess for seasonal flow variations and to assist with anticipated future site planning, engineering and related permitting.

The hydrology program involved installing data logging pressure transducers that record water levels from each location on a daily basis, as well as collection of manual flow measurements from each hydrology location on a monthly basis. The manual discharge measurements and the associated data loggers will be used to generate stage discharge curves at each location.

In keeping with industry standards and best practices, a minimum of two years of applicable hydrology data will be developed prior to completion of a baseline hydrology report. Hydrology data collection will continue in 2023 on a monthly basis during the open water period (i.e., April to November). Two years of data collection is the minimum; however, Goldshore plans to continue to collect appropriate data throughout future engineering and permitting. The hydrology baseline report will be utilized throughout the development process to support any applicable design and permitting requirements.

#### **20.1.4 Surface Water Quality**

A baseline surface water quality assessment for the Moss Project Site commenced in June 2021. A total of sixteen (16) surface water locations (10 streams and 6 lakes) were selected to assess the water quality for the baseline assessment.

The sample locations are shown on Figure 20.1, and are outlined below:

- 10 stream sample locations: HYD1 to HYD10. Surface Water Quality samples were collected adjacent to Hydrology stations within the Wawiag River watershed.
- 6 lake sample locations, which included Moss Lake, Kawawagamak Lake, Snodgrass Lake, Hermia Lake, Fountain Lake, and an unnamed lake north of the Project Site (labelled Lake A).

Surface water samples were collected quarterly from June 2021 to November 2022 and will continue in the Spring of 2023 to provide seasonal baseline data for two consecutive years.

Surface water samples were collected following industry standards and were sent to a Canadian Association of Laboratory Accreditation (CALA) certified laboratory for chemical analysis. Field data collected at each sampling location included temperature, dissolved oxygen (DO), pH and conductivity. Table 20.1 outlines the analytical program completed as part of the baseline assessment.



Table 20.1: Surface water quality analytical program

Surface Water Quality Analytical Program		
Sampling Frequency	Sampling Locations	Analytical Parameters
Winter (Q1), Spring (Q2), Summer (Q3) and Fall (Q4)	HYD1 to HYD10, Moss, Snodgrass, Hermitia, Kawawigamak, Fountain and Lake A	<p><u>General Chemistry</u>: colour, hardness (as CaCO<sub>3</sub>), total suspended solids (TSS), total dissolved solids (TDS), turbidity, chemical oxygen demand (COD), dissolved organic carbon (DOC), tannins &amp; lignins.</p> <p><u>Anions and Nutrients</u>: total alkalinity (as CaCO<sub>3</sub>), total and un-ionized ammonia, chloride, nitrate, nitrite, total kjeldahl nitrogen (TKN), total phosphorus and sulphate</p> <p><u>Total Metals</u>: antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, calcium, chromium III, chromium VI, cobalt, copper, iron, lead, lithium, magnesium, manganese, molybdenum, nickel, potassium, selenium, silicon, silver, sodium, strontium, thallium, tin, titanium, tungsten, uranium, vanadium, zinc, and zirconium</p> <p><u>Dissolved Metals</u>: aluminum and mercury</p> <p><u>Organic Parameters</u>: Chlorophyll A</p>

Similar to the hydrology assessment, a minimum of two years of applicable data will be used prior to completion of a surface water quality baseline report. Surface water quality sampling will continue on a seasonal/quarterly basis in 2023.

**20.1.5 Hydrogeology and Groundwater Quality**

Goldshore has not commenced any hydrogeological or groundwater quality studies at time of writing.

**20.1.6 Air Quality and Climate**

Goldshore has not commenced any air quality and climate studies at time of writing. However, a weather station was installed at the Moss Project Site November 2021 to collect baseline data for future air quality and climate studies. The weather station location is shown on Figure 20.1.

**20.1.7 Noise and Vibration**

Goldshore has not commenced any noise and vibration studies at time of writing.

**20.1.8 Geochemical Assessment of Mined Materials**

Goldshore has not commenced any geochemical assessment of mined material studies at time of writing.

**20.1.9 Terrain and Soils**

Goldshore has not commenced any terrain and soils studies at time of writing.

**20.1.10 Ecosystem Mapping and Vegetation**

Vegetation surveys were conducted in 63 forested stands in and around the Moss Project area with the goal of compiling a comprehensive species list. A total of 219 vegetation species were identified, including 14 trees, 49 shrubs, 73 forbs, 15 graminoids, 19 ferns and allies, 32 bryophytes and lichens, and 17 aquatic species. This list includes Black Ash (*Fraxinus nigra*) which is listed as Endangered in Ontario, Northern Bluebell (*Mertensia paniculata*) listed as Vulnerable by NatureServe Canada, and the invasive Common Reed



(*Phragmites spp.*). No analysis on these surveys has been undertaken at time of writing. Survey locations are shown in Figure 20.2.

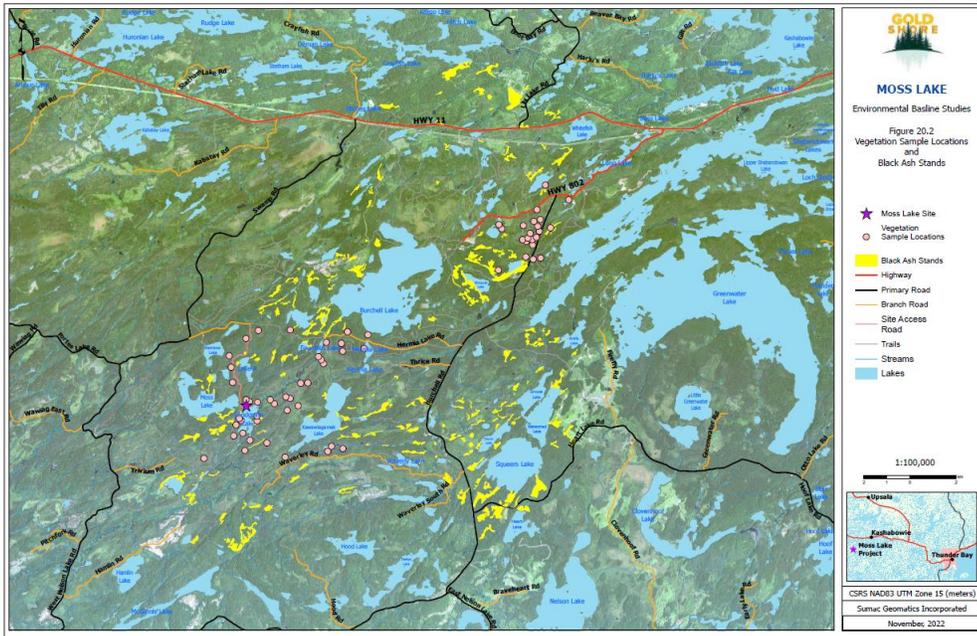


Figure 20.2: Vegetation survey locations

**20.1.11 Aquatic Environment**

A fish community and habitat investigation was conducted in August of 2021, in Moss Lake, Snodgrass Lake, Kawawigamak Lake, and connected waterways. A total of 19 species were collected from these lakes and streams, but Northern Pike, Yellow Perch, Walleye, White Sucker and Bluntnose Minnow were the only species found in all three lakes. No species at risk were detected during this initial fish community investigation.

It is proposed for the 2023 spring season to continue stream assessments in the inlets and outlets of Moss Lake, Snodgrass Lake and Kawawigamak Lake, including electrofishing surveys and walleye spawning habitat assessments. Survey locations are shown in Figure 20.3.

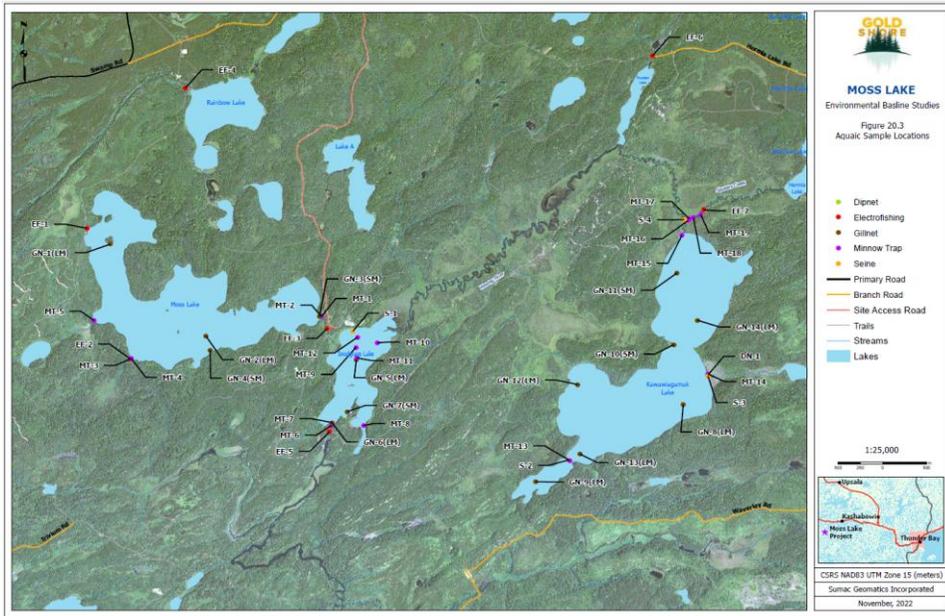


Figure 20.3: Aquatic habitats survey locations

### 20.1.12 Terrestrial Environment

A baseline terrestrial environment field program was initiated in 2021 and is expected to continue into 2023. To date, targeted surveys have been conducted for songbirds, marsh birds, nightjars, owls and bats in and surrounding the Moss Project area. A total of 74 bird species have been identified in the Project area to date, including Canada Warbler (*Cardellina canadensis*) listed as Special Concern in Ontario, Common Nighthawk (*Chordeiles minor*) listed as Special Concern, and Eastern Whip-poor-will (*Antrastomus vociferus*) listed as Threatened. Survey locations are shown in Figure 20.4.

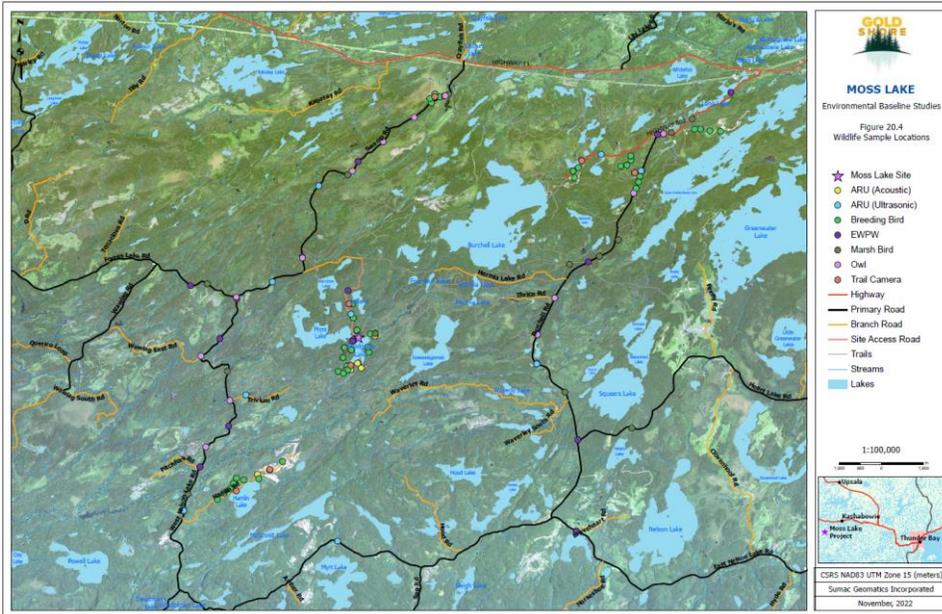


Figure 20.4: Terrestrial survey locations

There are 887 ha of potential maternal bat roosting habitat is present in the Moss Project area. Further, there is an abandoned mine shaft on site that may serve as a hibernaculum for bats. To date five species of bats have been observed in the study area, including Little Brown Myotis (*Myotis lucifugus*) and Northern Myotis (*Myotis septentrionalis*), both of which are listed as Endangered in Ontario due to widespread declines from White Nose Syndrome (Figure 20.5).

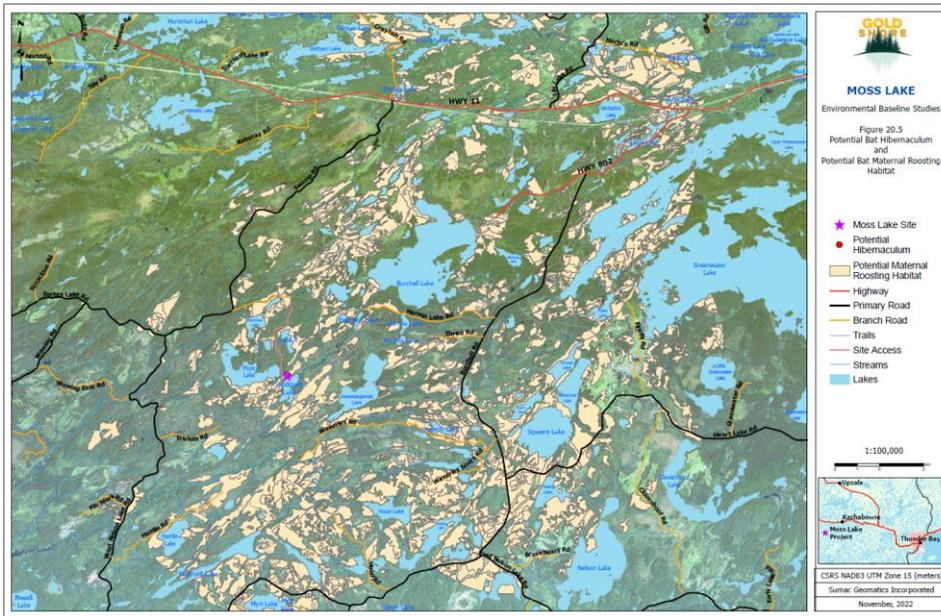


Figure 20.5: Study area of bat habitats

A wildlife camera monitoring program was also initiated in 2022, with eight (8) cameras deployed in and around the Moss Project area. Although these data are not currently available for summary, the intent of the monitoring program is to document ungulate and furbearer activity across an entire year.

### 20.1.13 Species at Risk

Below is a list of species at risk that either have been encountered during field surveys, or with records in historical databases for the Project area.

- Bald Eagle (*Haliaeetus leucocephalus*); Special Concern. Historical records for the Project area from the eBird, iNaturalist and Ontario Breeding Bird Atlas (OBBA) databases.
- Black Ash (*Fraxinus nigra*); Endangered. Stands with  $\geq 10\%$  Black Ash in the overstory are widespread throughout the Project Area (Forest Resource Inventory mapping). One stand was identified incidentally during the 2021 pilot field program, and a further 10 stands were encountered during the 2022 vegetation surveys.
- Canada Warbler (*Cardellina canadensis*); Special Concern. Observed during the songbird surveys. There were also OBBA and eBird records within the Project area.
- Common Nighthawk (*Chordeiles minor*); Special Concern. Several individuals were identified from acoustic recorder unit (ARU) recordings in 2021 and during the 2022 nightjar survey.
- Eastern Whip-poor-will (*Antrostomus vociferus*); Threatened. Identified from ARU recordings in 2021 and during the 2022 nightjar survey.
- Eastern Wood-pewee (*Contopus virens*); Special Concern. eBird records.
- Evening Grosbeak (*Coccothraustes vespertinus*); Special Concern. eBird records.



- Little Brown Bat (*Myotis lucifugus*); Endangered. Recorded in 2021 and 2022 at bat survey locations.
- Northern long-eared Bat (*Myotis septentrionalis*); Endangered. Records from mine monitoring ARU in fall 2021.
- Olive-sided Flycatcher (*Contopus cooperi*); Special Concern. eBird records.
- Rusty Blackbird (*Euphagus carolinus*); Special Concern. eBird records.

#### **20.1.14 Land and Resource Use**

Goldshore has not commenced any Land and Resource Use studies at time of writing.

#### **20.1.15 Human Health and Ecological Risk Assessment**

Goldshore has not commenced any Human Health and Ecological Risk Assessment studies at time of writing.

#### **20.1.16 Use of Lands and Resources for Traditional Purposes**

Goldshore has not commenced any Use of Lands and Resources for Traditional Purposes studies at time of writing. These would be conducted with local indigenous communities.

#### **20.1.17 Visual Quality**

Goldshore has not commenced a visual quality study at time of writing.

#### **20.1.18 Socioeconomics**

Goldshore has not commenced a socioeconomic study at time of writing.

#### **20.1.19 Archaeological and Cultural Heritage Resources**

A stage 1 Archaeological Assessment for the Moss Project was completed in 2021 and filed in early 2022 in accordance with the Ontario Mining Act, Heritage Act and the Standards and Guidelines for Consulting for Consulting Archaeologists. In the Stage 1 Archaeological Assessment, the entire property area was examined for features indicating archaeological potential.

Currently there are no recorded or known archaeological sites within the proposed development study area, nor are there any within at least 1 km radius of the property. Due to the diverse cultural and historical background of northern Ontario, there is the possibility that unknown archaeological sites may be discovered. This would be investigated in Stage 2 physical inspection, which has been recommended.

Should previously undocumented archaeological resources be discovered, exploration activities would cease and Goldshore would engage a licensed consultant archaeologist to carry out farther fieldwork.

### **20.2 Environmental Regulations and Permitting**

The federal Impact Assessment and provincial Environmental Assessment (IA/EA) processes and permitting framework for metal mining in Canada are well established. Following these federal and provincial approvals, the Project will enter a permitting phase which will regulate the Project through all phases – construction, operation, closure, and post-closure. Prior to and throughout all of these processes, engagement and consultation with, and advice from, local First Nations and Métis and local communities are considered essential.



### **20.2.1 Project Environmental Assessment**

An Impact Assessment is required for the Project under the Canadian Impact Assessment Act (“IAA Act”). It is understood that this will be coordinated with the Ontario Environmental Assessment process under the Ontario Environmental Assessment Act (“OEA Act”) that will also be required.

### **20.2.2 Federal Environmental Assessment**

In 2019, the Canadian IAA was updated to replace the previous Canadian Environmental Assessment Act (CEAA 2012).

The IAA outlines a process for how the Government of Canada goes about assessing the impacts of designated projects and projects carried out on federal lands.

The purposes of the IAA are:

- To foster sustainability, ensure respect of Government’s commitments with respect to the rights of Indigenous peoples;
- To include environmental, social, health and economic factors within the scope of assessments;
- To establish a fair, predictable, and efficient impact assessment process that enhances Canada’s competitiveness and promotes innovation;
- To consider positive and adverse effects;
- To include early, inclusive, and meaningful public engagement;
- To promote nation-to-nation, Inuit-Crown, and government-to-government partnerships with Indigenous peoples;
- To ensure decisions are based on science, Indigenous knowledge and other sources of evidence; and
- To assess cumulative effects within a region.

Consultation with federal agencies such as Fisheries and Oceans Canada (“DFO”), Transport Canada (“TC”) and Natural Resources Canada (“NRCan”) will be required to issue permits, approvals, authorizations and/or licenses pursuant to the Fisheries Act, the Navigable Waters Protection Act, and the Explosives Act, respectively.

### **20.2.3 Provincial Environmental Assessment**

The Ontario EA process is administered by the Ministry of Environment, Conservation and Parks (MECP). In addition to promoting responsible environmental management, interested third parties, e.g., members of the public, can comment on a mining project and request the MECP minister call for an EA.

Ontario mining projects are not often subject to the provincial EA Act (OEA) because many mine development activities are not specified in the relevant Act. However, certain activities that may be subject to the OEA include:

- Transfer of Crown resources including land,
- Building electric power generation facilities or transmission lines,
- Constructing new roads and transport facilities, and
- Establishing a tailings management facility.



#### 20.2.4 Permit Requirements

A number of permits and licenses will likely be required for the project, which may include the following:

- Air and Noise Environmental Compliance Approval (ECA);
- Industrial Sewage ECA;
- Municipal and Private Sewage Works ECA;
- Permit to Take Water (open pit and surface water);
- Waste Disposal Site ECA;
- Land Use Permit;
- Work Permit under the Lakes and Rivers Improvement Act;
- Authorization for any Harmful Alteration, Disruption or Destruction of fish habitat (HADD) under the Fisheries Act;
- Fish Habitat Compensation Agreement under the Fisheries Act;
- Forest Resource Inventory License under the Crown Forest Sustainability Act;
- Transportation of Dangerous Goods Permit under the Transportation of Dangerous Goods Act;
- Stream Crossing Authorization under the Navigable Waters Protection Act;
- License for Explosives Factory (and Magazine) under the Explosives Act; and
- Registration for a Generator Registration Number.

#### 20.3 Social and Community Initiatives

Goldshore Resources is committed to ensuring appropriate engagement with indigenous communities that may be affected by Goldshore's early exploration activities.

The goal of meeting and engagement is to provide indigenous communities with information and to gather feedback about:

- Potential impacts and mitigation of current and proposed exploration activities
- Regular corporate updates about Goldshore's activities
- Circulation of opportunities for economic benefits, including service contracts, employment, etc.
- Permit applications

The Moss Project site sits in an area of interest to five indigenous communities, in accordance with guidance from the Province of Ontario.

The five communities include:

- Fort William First Nation
- Lac des Mille Lacs First Nation
- Lac La Croix First Nation
- Métis Nation of Ontario (Thunder Bay Métis Council)
- Red Sky Métis Independent Nation

The locations of the five communities are shown on Figure 20.6.

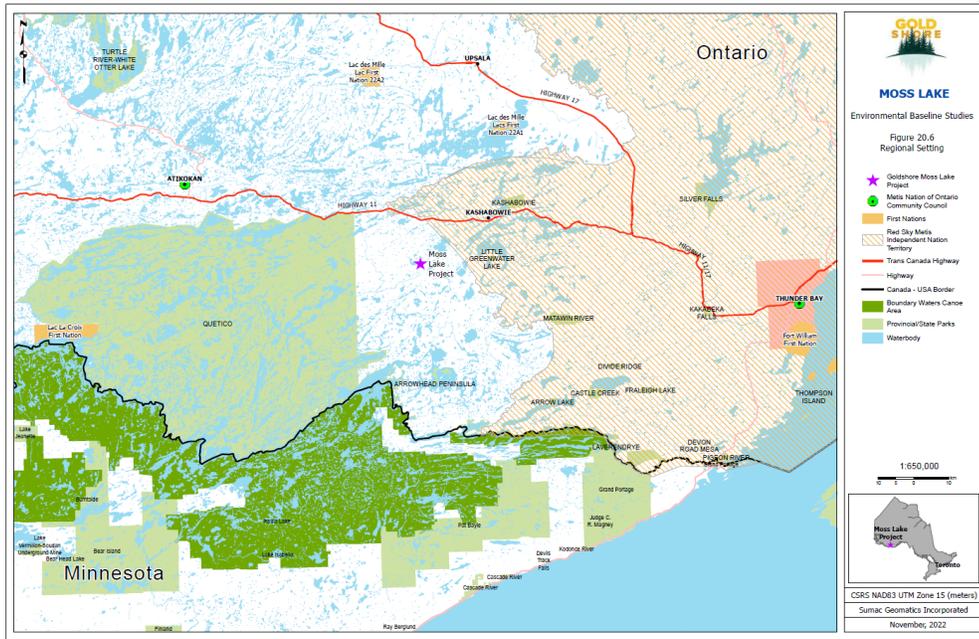


Figure 20.6: Locations of five indigenous communities

Goldshore regularly interacts with these communities in various ways depending on the community, ranging from in person meetings, phone calls, e-mail, information sessions, presentations focused on specific activities (for example, permit applications), communications and updates regarding ongoing environmental monitoring, discussions around potential business opportunities, and the regular dissemination of information relating to employment and training opportunities at the site.

Goldshore has committed internal resources to community liaison/relations activities. The goal is to ensure all required engagements are addressed and that communities have a point of contact to ensure open and frequent communication, and that any concerns be addressed in a timely fashion. Goldshore has established and continues to maintain cooperative relationships with its local indigenous communities to ensure that meaningful engagement is carried out in a transparent and timely fashion.

**20.4 Mine Closure**

In Ontario, a mining company cannot commence mining operations until a certified Closure Plan and associated Financial Assurance are in place. A Closure Plan and Financial Assurance have not been completed at the time of writing but will be completed prior to the start of mining operations and will be developed to meet the regulatory requirements under the Ontario Mining Act.

The requirements for a Closure Plan, including Financial Assurance, are set out in Part VII of the Mining Act, and elaborated in Ontario Regulation 240/00 (Amended to Ontario Regulation 282/03) – Mine Development and Closure under Part VII of the Act.



General reclamation and closure activities are expected to include:

- Decommissioning of site infrastructure;
- Resloping/contouring of waste disposal areas;
- Establishment of habitat compensation areas and post-mine watercourses, including re-establishing diverted watercourses to their original water flow where possible;
- Establishing long-term physical and chemical stability for all discharges (which may include post-closure water management);
- General site preparation for and revegetation of disturbed areas; and
- Development of a monitoring plan to address geotechnical, re-vegetation, sedimentation and other long-term project risks.



## 21 Capital and Operating Costs

This section is not applicable.



## 22 Economic Analysis

This section is not applicable.



## 23 Adjacent Properties

The information outlined in this section relates to adjacent properties to the Project (Figure 23.1). The Qualified Person authors have extracted this information from public sources (company websites, news releases, and technical reports), but have been unable to verify the information. This information is presented for regional context only and is not necessarily indicative of the mineralization on the Project that is subject of this Report.

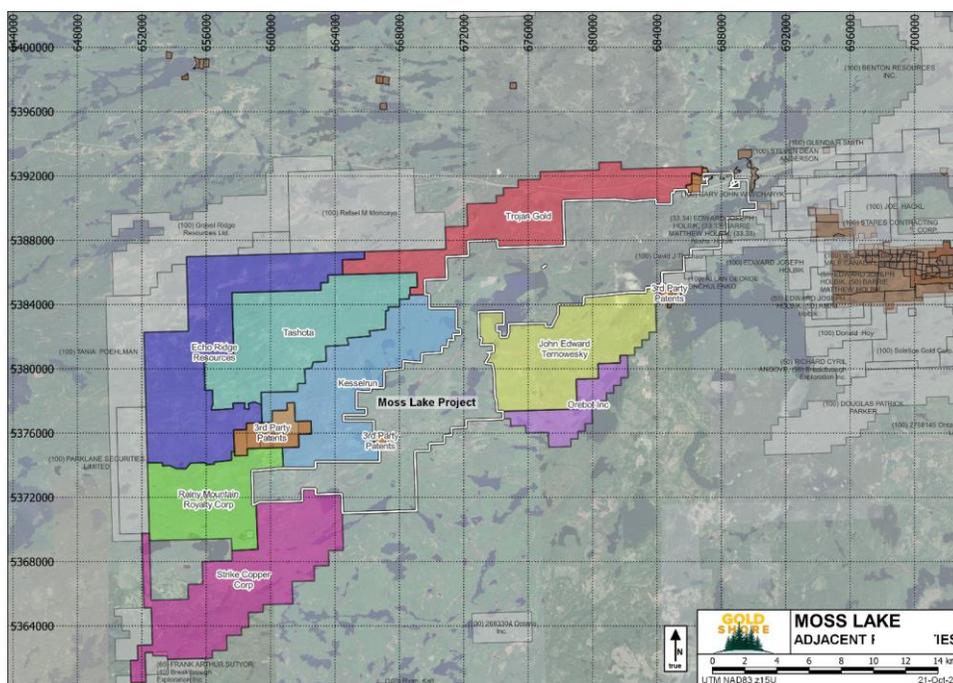


Figure 23.1: Adjacent properties to Moss Project

### 23.1 Huronian Project – Kesselrun Resources Ltd

The Huronian project (4,600 ha), owned by Kesselrun Resources Ltd (Kesselrun), is the most advanced adjacent property located immediately west and contiguous with the Project area. The Huronian project covers a swath of the NMB and adjacent Quetico sediments and the NMB in this area hosts horizons of felsic tuffs, conglomerate and iron formations. Gold mineralization is found within veins with an en-echelon relationship to foliation-parallel shearing close to the contacts of the above units as well as the contacts of gabbro, syenite and feldspar porphyry sills, and zones of silicification and brecciation within the iron formation. Structurally, the vein system falls within the strain shadow of the Moss Stock where the CMB units are dilated close to the contact with the intrusive unit.

Mineralization takes the form of vein-hosted chalcopyrite, galena, sphalerite, auriferous pyrite, auriferous tellurides and minor native gold. The veins are of a composite, possibly multigenerational form with stringers



separated by bands of chlorite schist, and the entire vein package varies “from a few inches to 8 feet wide” (Harris, 1968). An earlier generation of quartz-pyrite veins forms a tension-gash ladder within a feldspar porphyry sill in the Ardeen workings. Published drill hole intervals clearly highlight the narrow high-grade vein-hosted nature of the mineralization and are typically in the realm of 5–40 g/t Au over 1–2 m (core widths; Clapp, 2020). Kesselrun describe a central “Huronian zone” which is traced over about 1 km of strike. The attendant McKellar and Fisher Zones have a splay relationship to the Huronian zone. The Huronian vein system saw limited production from 1883 to 1885 and 1932 to 1936 at the Ardeen mine in the centre of the property, with three shafts and workings reaching a depth of about 1,000 ft, and a head grade of 0.21 oz/ton (Ferguson et al., 1971). Following those periods of production, there have been numerous drill programs exploring the vein systems, notably by Pele Mountain Resources in the 1990s and recently Kesselrun from the 2010s to present day.

The southern portion of the Huronian project covers CFB sheared intermediate-felsic volcanic units in the vicinity of Pearce Lake. Recent trenching by Kesselrun has outlined centimetric multi-sulphide shear veins within the CFB units returning channel assays up to 3.61 g/t Au (Clapp, 2020).

Kesselrun has recently advanced the Huronian project through magnetic-electromagnetic geophysics programs and diamond drilling programs in 2021 and 2022 (~36,000 as of fall 2022). The 2022 exploration program consisted of drilling as well as geophysics over selected target areas. Drilling continues to target the Fisher, Fisher North, McKellar and Huronian zones, all in close proximity along an approximate 1,500 m strike length in the area of the historical Huronian mine. According to Kesselrun, drilling has intersected significant gold mineralization in these zones during both infill and expansion drilling programs. Additional information can be found on Kesselrun’s website and news releases.

### 23.2 Sungold Project – Strike Copper Corp.

The Sungold project owned by Strike Copper Corp. (Strike Copper) is located to the south of the Project adjacent to the Hamlin Block and tracks a 1–2 km wide swath of Shebandowan volcanics towards the southwest, wedged between granitoids and attaining amphibolite metamorphic grade. The best explored area is around Redfox and Wye Lakes where historical drilling by Cominco and Freewest delineated shallowly southwest-plunging horizons of disseminated and stringer pyrrhotite-sphalerite-chalcocopyrite. Drill hole intervals include 2.09% Zn and 0.62% Cu over 9.6 m (core width; WL-05-06, MacLean, 2006). The presence of cherty felsic horizons may suggest a VMS-type mineralization system. The mineralized system is partly overprinted by an ultramafic sill. The present owner, Strike Copper, highlights the property’s potential to host strike continuations of the Hamlin mineralization.

The Sungold gold occurrence lies in the centre of the property and is hosted by sheared, hematized felsic volcanics reminiscent of the Hamlin host units. Grab samples taken during a 2020 prospecting program returned grab sample assays up to 109 g/t Au from quartz-chalcocopyrite veining in a silicified porphyry dike (Ronacher, 2021).

### 23.3 Powell-Clay Lake Property – Rainy Mountain Royalties

The Powell-Clay Lake property owned by Rainy Mountain Royalties is comprised of two claim groups that are west-adjacent to the Hamlin Block and are underlain by strike continuations of the CFB and NMB, separated by a fault running underneath the course of the Obadinaw River. The northwestern corner of the property overlaps with Quetico greywackes-to-paragneisses and the granodiorites of the Obadinaw River stock. In the 2000s, the area was prospected and drilled by East-West Resources and Mega Uranium as part of their programs which also covered the Hamlin area. Prospecting and mapping in 2006 revealed a familiar suite of quartz-feldspar porphyry sills, felsic autobreccias and mafic sequences with minor iron formations. Foliation



strike northeasterly with shallow southwestward plunges. Heggie and Laarman (2006) note that elevated gold values (mostly in the NMB) correlated with quartz veining with a broad spatial association with linear magnetic highs, perhaps suggesting an “Ardeen-type” shear vein type mineralized system.

#### **23.4 Andover-Trudev Copper Property – John Ternowesky**

The Andover-Trudev property includes a splay of intermediate-felsic volcanics and intrusives strikes eastward from Kawawiagamak Lake on the east side of the Knife Lake Fault. Just east of Hermia Lake these units host a chalcopyrite-pyrite stringer zone which is listed in the mineral deposit inventory as the Andover-Trudev prospect. Copper intervals including 0.61% Cu over 6.7 m (DDH M9, core width; Hunt, 2010) from drilling of this stringer zone.

The claim group also hosts poorly characterized vein-hosted gold showings due east of Kawawiagamak Lake which reportedly returned a 0.61 m chip channel assay of 42.2 g/t Au and drill hole intervals of 7.2 g/t Au over 0.4 m (DDH BU-08-07; Hunt, 2010). This claim group was recently held by Mengold Resources, Tanager Energy and Paleo Resources. The claims are currently registered to John Ternowesky.

#### **23.5 Watershed Property – Trojan Gold**

The Watershed property owned by Trojan Gold covers the northwestern swath of the Shebandowan Belt north, adjacent to Moss. Thus far it has seen limited historical exploration mostly based on localized, targeted follow-up of minor geophysical conductors within felsic volcanics northeast of the Burchell Stock. In 2022, Trojan Gold completed an initial reconnaissance prospecting program on the Watershed property (Elbourne, 2022).



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## 24 Other Relevant Data and Information

No other information or explanation is necessary to make the technical report understandable and not misleading.



## 25 Interpretation and Conclusions

The Moss Project is an advanced resource-stage exploration project that contains four contiguous claims blocks, known as Moss, Coldstream, Hamlin, and the recently acquired Vanguard block. Known gold deposits on the Moss block are the main focus of Goldshore's recent drilling programs while the Coldstream block has also been subject to recent drilling. The current report documents updated MREs for the Moss and East Coldstream deposits based on this and historical drilling.

Between August 1, 2021, and March 17, 2023, Goldshore completed a total of 78,657.05 m (144 drill holes) of diamond drilling on the Moss Gold block and the Coldstream block. As of the effective date of this Report, 67,268 m of the drill core has been sampled for which all results have been received.

### 25.1 Moss Gold Deposit

Since acquiring the Project in early 2021, Goldshore has completed a significant amount of exploration (prospecting, soil geochemistry surveys, and VTEM-Mag geophysical survey) and diamond drilling on the Project.

Data from the 2021-2022 drilling programs and the historical drill hole database have been validated by the QP authors and form the basis of the MRE presented in this Report.

The historical and Goldshore drilling programs have successfully intersected significant gold values at both Moss and Coldstream blocks. Goldshore's main focus has been the gold mineralization at the Moss Gold Deposit which is considered to be an example of a structurally controlled Archean greenstone-hosted mesothermal gold deposit, largely disseminated within shear zones and small-scale veins. The East Coldstream prospect is also interpreted to be of mesothermal style, together with a number of other less advanced prospects in the Project area. The copper-gold mineralization at the historical North Coldstream mine is considered most likely to be of VMS style. The Hamlin prospect may be of IOCG affinity.

At Moss Gold, mineralization is localized where the major NE-trending Wawiag Fault Zone cuts a dioritic to granodioritic intrusive complex emplaced with felsic volcanics. The deposit is defined by a series of anastomosing centimeter- to meter-scale NE-trending shear zones carrying higher-grade gold mineralization (Shear Domain), and lower-grade gold mineralization associated with more brittle-style deformation and veining in the intrusive rock mass between the shear zones (Intrusive Domain). Mineralization is associated with pyritic sericitic and chloritic alteration and millimetre- to centimetre-scale irregular quartz-carbonate veinlets.

Detailed geological logging and multi-element geochemical analysis of drill core from the 2021-22 drilling has supported modelling of discrete shear domains within the larger altered and variably mineralized intrusive domain. The shear domains have a different higher-grade gold population to the low-grade intrusive domain and these domains have been estimated separately using different search parameters. Importantly, this allows a more accurate representation of the true variability within the deposit than has been achieved in previous historical estimates.

The QP author has included 122 drill holes from Goldshore's 2021 and 2022 drilling programs in the new MRE that Goldshore has drilled.

The current MRE defines an open pit-constrained Inferred Mineral Resource of 161.0 Mt at 1.00 g/t Au resulting in 5.18 Moz of contained gold based on a cut-off grade of 0.35 g/t Au. The higher-grade shear domain contains 56.5 Mt at 1.84 g/t Au resulting in 3.35 Moz of contained gold. The current MRE represents

**Commented [MF75]:** We require a separate statement about East Coldstream, should this be a split a heading level 2?

**Commented [NG76R75]:** @Efrain Ugarte Please review and provide information for Coldstream for this section. Thank you.

**Commented [EU77R75]:** I added The Coldstream part at the bottom since no split of headings has been done. Not sure who will integrate this section??

**Commented [NG78R75]:** Done

**Commented [NF79R75]:** Thank you Efrain ! @Efrain Ugarte

**Commented [MF80]:** Not by me. The assay file we received contains a total of 155, 874 samples whose combined length is 181,771.32 m, of these 53,832 samples are from recent MMD holes totaling 51,040.15m - very different to the number quoted here previously

**Commented [NR81R80]:** @Matthew Field you are QP please resolve/correct @Nigel Fung

**Commented [MF82R80]:** Now that it is only Moss I can validate it



an expansion over the 2022 estimate with 3.5% additional resource tonnes and 29% additional contained gold ounces for the Project.

The QP authors note that the entire MRE has been classified as an Inferred Mineral Resource. This resource classification reflects the fact that most of the drill hole data used for the current MRE is historical, and no QAQC data or reports exist for many of these drill holes. Statistical assessment of historical data and recent data provided some support for the historical data, but also included some inconsistencies. The majority of the historical drill holes did not have acceptable downhole surveys meaning that spatial location of the core samples remains uncertain especially beneath 200 m below surface.

While the downhole surveys and QAQC methods utilized for the modern drill holes is of industry standard, these holes remain too sparsely distributed to permit confident Mineral Resource estimation on their own. Goldshore is has began a program of relogging and resampling of historical drill core, together with downhole surveying where possible. Goldshore's program of infill and confirmatory drilling is also ongoing. The QP authors expect that this work will support a partial upgrade in classification to an Indicated Mineral Resource in any subsequent Mineral Resource updates by Goldshore. Incorporated in this MRE are six drill holes have been re-sampled, which in the QP author's opinion is too few to draw confident conclusions about validation of the historical data.

The current MRE indicates significant and clear expansion potential through strike and dip extensions to known shears, as well as parallel shears. The modelled shear-hosted domains extend at depth below the optimized open-pit constraining the reported MRE. In this update an underground mining optimization study has been undertaken below a define optimised open pit. This has demonstrated that 2.6 Mt and 0.24 Moz has reasonable prospects of eventual economic extraction and have thus been included in the Mineral Resource reported in this report. The shears are also open along strike, beyond the modelled strike length of 3.5 km. Historical drilling intercepted gold mineralization over a total strike length of 8 km, which has been a focus of Goldshore's 2022 summer soil geochemistry and structural mapping programs. Furthermore, there remains potential for additional parallel shears with gold mineralization in historical drill holes 500 m to the southeast of the Moss Gold Deposit.

The QP authors have not identified any significant risk or uncertainty that could reasonably be expected to affect the reliability or confidence in the exploration and drilling information and current MRE presented in this Report.

The QP authors conclude that the Project is an attractive resource-stage project that has the potential to contain economic gold deposits that will develop through additional confirmatory and infill drilling, metallurgical testing, and mining studies. The Project also has the potential to host other gold and polymetallic deposits that are still in the early stage of understanding and will require additional exploration and drilling to advance to the discovery and resource stage.

## 25.2 East Coldstream Deposit

The East Coldstream gold deposit has undergone multiple diamond drill programs since 1987. In 1991, additional drilling was conducted after the Noranda resource estimate to verify and expand the historical resources. A drilling and re-sampling program of the historical drill core was carried out in 2006, but there is no available information regarding the quality control and quality assurance (QCQA) program.

In 2022, after acquiring the East Coldstream gold deposit, Goldshore completed a drill program to improve an understanding of the geological factors influencing gold mineralization. Twenty-two drill holes were drilled, totalling 9,924.75 m, within the East Coldstream deposit. Goldshore contracted Orix Geoscience to independently verify the analytical QCQA for the 2021-2022 drill program.



The mineralized zones at East Coldstream are located on the southern edge of an ultramafic shear zone, acting as a boundary between a gabbroic intrusion to the north and a mafic-intermediate volcanic suite to the south. The mineralization is associated with northeast-trending shear zones that contain higher-grade gold. These shear zones can be further divided into two extensively altered domains (Z-2 and Z-4) and two satellite lenses (Z-1 and Z-3). Lower-grade gold mineralization is found in more brittle-style veining within the felsic to intermediate metavolcanic rocks, gabbro, and porphyries located between the main shear zones. The mineralization is observed in sheared volcanic units near quartz and quartz-feldspar porphyry sills, as well as distinctive brick-red syenites.

Detailed geological logging and multi-element geochemical analysis of the drill core from the 2021-22 drilling campaign support modelling of several distinct shear domains within a low-grade zone. The zones show alteration characterized by silica, carbonate, and hematite. The mineralization consists of fine disseminations of pyrite and some chalcopyrite within the silica-hematite zones, along with quartz-carbonate veinlets. Iron carbonate is present in areas adjacent to strong silicification. A north-south trending diabase dike intersects the two primary mineralized zones.

The shear domains exhibit a higher-grade gold population compared to the low-grade domain, and they were estimated separately using different search parameters. This approach allows for a more accurate representation of the deposit's true variability, surpassing previous historical estimates.

The current Mineral Resource estimate (MRE) for East Coldstream indicates the potential for extensions of known shears in their dip. The Qualified Person (QP) responsible for the report has incorporated the data from Goldshore's 2021-2022 drilling campaign, including sixteen new drill holes totalling 7,973 m, into the updated MRE. The current MRE outlines an Inferred Mineral Resource of 19.8 million tonnes with a grade of 0.89 g/t Au within the optimized open pit, using a cut-off grade of 0.35 g/t Au. Additionally, resources are reported above a cut-off grade of 2.0 g/t, showing 0.18 million tonnes of Inferred Mineral Resources with a grade of 2.24 g/t Au within the underground MSO shapes. The Inferred Mineral Resource classification is because some drill hole data from historical sources are used in the MRE, where limited QCQA data and reports are available.

The QP authors conclude that the East Coldstream Deposit is an attractive deposit and have not identified any significant risks or uncertainties that could reasonably affect the reliability or confidence in the exploration and drilling information and the current MRE presented in the report.

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**Commented [EU84R83]:** @Nigel Fung please review it

**Commented [NF85R83]:** Goldshore has also completed a total of **9,924.75 m (22 drill holes)** of diamond drilling on the East Coldstream deposit during 2022.



## 26 Recommendations

The Qualified Person authors present the following recommendations for the Moss Project:

- Goldshore should continue upgrading, verifying, and validating the historical exploration data to further increase the data confidence to eventually use this data to determine Indicated Mineral Resources for the Project. Validation activities can include such items as re-surveying available collar locations to confirm their locations, detailed reviews and audits of the drill hole databases, re-logging and re-sampling of selected drill core as available using current QAQC samples, and completion of several confirmatory twinned drill holes to confirm the presence and approximate gold grades encountered in the historical drill holes.
- Notwithstanding the above, a large proportion of the historical drill collars have not yet been located by Goldshore. The mineralized volumes defined by these historical drill holes should be re-drilled in an optimized pattern to accurately define the shear-hosted and intrusive domain mineralization. This should include a full suite of oriented core measurements and multi-element geochemistry analyses. The QP authors are of the understanding that Goldshore has already commenced this work.
- Goldshore should continue its infill drilling program to provide sufficient information to not only upgrade portions of the current MRE that were classified into the Inferred Mineral Resource category to the Indicated Mineral Resource category, but also to expand the existing resource along the strike and dip extensions to known shears and parallel shears.
- After completion of prospecting, soil surveys and geophysics programs on other earlier-stage targets on the Project (i.e. Vanguard and Hamblin blocks), Goldshore should commence a scout drilling program to determine the gold potential on these targets.
- Goldshore should commission a drill hole optimisation study to determine the drill hole spacing required to convert Inferred Mineral Resources to Indicated and Measured Mineral Resources.
- Update the mineralization model to delineate mineralized structures of variable orientation within the shears.
- Improve the accuracy of the wireframes by snapping to the appropriate samples.
- Remodel the wireframes using a single set of grade shells to improve the high-grade shear zones and better define the low-grade intrusion zone.
- Pending successful outcomes from the confirmatory and infill drilling programs at the Moss Gold Deposit, Goldshore should update the MRE as appropriate and complete all metallurgical testwork underway, and begin to evaluate the technical, mining, and economic potential of the gold mineralization within the Project. Results of the new metallurgical testwork have been received and included in this report; these results should be incorporated the additional studies required to commence work on a Preliminary Economic Assessment (PEA) and advance the project towards a Pre-feasibility Study (PFS).
- Goldshore should initiate environmental and social baseline studies in support of exploration, mine development, and permitting; and continue engaging with local stakeholders including First Nations and Métis communities, landowners, and government authorities. This work along with detailed metallurgical testing should advance the Project to a pre-feasibility level of study.



Recommendations by the QP specific to the East Coldstream Deposit include:

The Qualified Person authors present the following recommendations for the East Coldstream deposit:

- Continuously re-evaluate past drilling data using reliable quality assurance and quality control (QAQC) methods in order to determine if blocks can be upgraded to Indicated Mineral Resource class.
- Make efforts to re-examine the locations of historical drill holes that have encountered problems.
- Carry out additional drilling in targeted areas using up to date QAQC practices to reduce reliance on historical drilling.
- Increase the number of samples taken for bulk density measurements to enhance confidence in calculations of tonnage
- Review and standardize the geological database to better support the modeling of lithology and grade, especially for historical drill holes.

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The QP authors have reviewed Goldshore's proposed exploration, drilling and development plans and consider the proposed expenditures shown in Table 26.1 to be reasonable to advance the Project to the next stage in the mining cycle. The work program recommendations and cost estimates have been divided into two work phases (Phase I and Phase II), with completion of Phase II tasks contingent on the results from Phase I.

Table 26.1: Recommended work program for the Moss Project

Task	Estimated Cost (C\$)
<b>Phase I</b>	
Preliminary Economic Assessment	800,000
Geological mapping prospecting, and soil geochemistry surveys on early-stage targets with discover potential	250,000
Scout drilling on early-stage targets	1,500,000
Confirmatory and infill diamond drilling to upgrade and expand resources to Indicated category (all-inclusive: staff, drilling contractors, and assaying, etc.)	21,000,000
MRE update based on new drilling data	150,000
Contingency	300,000
<b>Total - Phase I</b>	<b>24,000,000</b>
<b>Phase II</b>	
Geotechnical Drilling and related studies	800,000
Further infill drilling to expand mineral resources	4,500,000
Environmental and social baseline studies and mine permitting	150,000
Detailed metallurgical testwork	250,000
Prefeasibility Mining Study and technical report	1,000,000
Contingency	300,000
<b>Total - Phase II</b>	<b>7,000,000</b>



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## 28 Abbreviations and Units of Measurement

°	degrees
°C	degrees Celsius
µm	micron
1D, 2D, 3D	one-dimensional, two-dimensional, three-dimensional
ABA	acid base accounting
Acme	Acme Analytical Labs Ltd
ActLabs	Activation Laboratories Ltd
Ag	silver
Alto	Alto Ventures Ltd
ARD	acid rock drainage
Au	gold
CDN	CDN Resource Laboratories Ltd
CFB	Central Felsic Belt
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
cm	centimetres
COA	certificate of analysis
CRM	certified reference material
CSA Global	CSA Global Consultants Canada Limited
CSV	comma separated values
Cu	copper
CV	coefficient of variation
EWL	EWL Management Ltd
Foundation	Foundation Resources Inc.
ft	feet (or foot)
g, g/L, g/t	grams, grams per litre, grams per tonne
Geotech	Geotech Ltd
Goldshore	Goldshore Resources Inc.
GPS	global positioning system
ha	hectares
ICP	inductively coupled plasma
ICP-AES	inductively coupled plasma-atomic emission spectroscopy
ICP-MS	inductively coupled plasma-mass spectrometry
ID <sup>2</sup>	inverse distance squared
IDW2	inverse distance weighting to the power of two
IOCG	iron oxide copper-gold
IP	induced polarisation
JV	joint venture
Kesselrun	Kesselrun Resources Ltd
kg	kilograms
kHz	kilohertz
km, km <sup>2</sup>	kilometres, square kilometres
KNA	kriging neighbourhood analysis



kph	kilometres per hour
kV	kilovolts
lb	pound(s)
LREE	light rare earth element(s)
m	metre(s)
M	million(s)
MECP	(Ontario) Ministry of the Environment, Conservation and Parks
Mlb	million pounds
MLO	Mining Licence of Occupation
mm	millimetres
MMI	mobile metal ion
MNDMNR	(Ontario) Ministry of Northern Development, Mines, Natural Resources and Forestry
Mo	molybdenum
MOE	(Ontario) Ministry of Environment
Moz	million ounces
MRE	Mineral Resource estimate
Mt	million tonnes
NI 43-101	National Instrument 43-101 – Standards for Disclosure for Mineral Projects
NMB	Northern Mafic Belt
NN	nearest neighbour
NSR	net smelter return
OK	ordinary kriging
OREAS	ORE Research and Exploration of Australia
oz	ounce(s)
PGE	platinum group element(s)
ppm	parts per million
QAQC	quality assurance and quality control
Q-Q	quantile-quantile
RPREE	reasonable prospects for eventual economic extraction
SD	standard deviation(s)
SGS	SGS Laboratories
SMB	Southern Mafic Belt
Strike Copper	Strike Copper Corp.
t	tonne(s)
TechnoImaging	TechnoImaging LLC
TSX-V	TSX Venture Exchange
UTM	Universal Transverse Mercator
VMS	volcanogenic massive sulphide
VTEM	versatile time domain electromagnetic
Wesdome	Wesdome Gold Mines Ltd
White Metal	White Metal Resources Corp.
wt.%	weight percent
Zn	zinc



## 29 Certificates

Certificate of Qualified Person Author - Matthew Field

I, Matthew Field, PhD, Pr.Sci.Nat. (membership number 400060/08), do hereby certify that,

1. I am employed as Manager – Resources for CSA Global UK Ltd, Suite 2, First Floor, Springfield House, Horsham, West Sussex, RH12 2RG, United Kingdom.
2. I graduated with BSc (1983), BSc Hons (1984) and MSc (1986) degrees in geology from Rhodes University, Grahamstown, South Africa and a PhD from University of Bristol, Bristol, United Kingdom in 2009.
3. I am a fellow in good standing of the Geological Society of London and the Geological Society of South Africa and registered as a Professional Natural Scientist Geological Sciences with the South African Council for Natural Scientific Professions (SACNASP).
4. I have worked as a geologist continuously for more than 35 years since leaving university and have significant experience with geological modelling and Mineral Resource estimation.
5. 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 and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am responsible for Sections 12.2, 12.3.3.1 and 14.1 of the Technical Report titled “NI 43-101 TECHNICAL REPORT MINERAL RESOURCE ESTIMATES FOR THE MOSS GOLD AND EAST COLDSTREAM DEPOSITS, ONTARIO, CANADA” (the “Technical Report”) with an effective date of May 5, 2023.
7. I was previously the QP responsible for responsible for Sections 12.2, 12.3 and 14 of the Technical Report titled “Technical Report on Mineral Resource Estimate for the Moss Lake Project, Ontario, Canada” (the “Technical Report”) with an effective date of December 9, 2022. Prior to the MRE dated Dec 9, 2022.
8. I have not completed a site visit (personal inspection) of the Moss Project.
9. I am independent of the issuer applying all of the tests in Section 1.5 of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1 and the sections for which I am responsible for in the Technical Report have been prepared in accordance with NI 43-101 and Form 43-101F1.
11. As of the Effective Date of this Technical Report, to the best of my knowledge, information, and belief, the sections for which I am responsible for in the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed on this 19<sup>th</sup> day of June 2023

Signed and Sealed – Matthew Field

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Matthew Field



Manager – Resources (EMEA)  
CSA Global UK Ltd.



Certificate of Qualified Person Author – Neal Reynolds

I, Neal Reynolds, PhD, FAusIMM (membership number 111681), MAIG (membership number 2334, do hereby certify that,

1. I am employed as Partner by ERM Consultants Canada Ltd dba CSA Global Consultants Canada, 1100 Melville St. #1000, Vancouver, B.C. Canada, V6E 4A6, on secondment from CSA Global Pty Ltd, an ERM Group company, of Level 3, 1-5 Havelock Street, West Perth, WA 6005, Australia.
2. I graduated with a BSc (Geology), 1982, and a PhD (Geology), 1987 from University College Dublin.
3. I am a Fellow in good standing with the Australasian Institute of Mining and Metallurgy and a Member in good standing with the Australian Institute of Geoscientists.
4. I have practised my profession as a geologist for the past 30 years in areas of gold, silver, and base metals exploration and evaluation in a number of countries around the world. I have experience in exploration and evaluation of greenstone gold deposits in Canada and Australia and have the necessary technical experience and expertise to complete this Technical Report on the Moss Lake Project.
5. 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 and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am responsible for Sections 6 to 11 and 12.1 of the Technical Report titled “NI 43-101 TECHNICAL REPORT MINERAL RESOURCE ESTIMATES FOR THE MOSS GOLD AND EAST COLDSTREAM DEPOSITS, ONTARIO, CANADA” (the “Technical Report”) with an effective date of June 5, 2023.
7. I was previously the QP responsible for all sections, except Sections 12.2, 12.3 and 14, Technical Report on Mineral Resource Estimate for the Moss Lake Project, Ontario, Canada” (the “Technical Report”) with an effective date of December 9, 2022. Prior to the MRE dated Dec 9, 2022.
8. I completed a site visit (personal inspection) of the Moss Project between October 19 to 21, 2022.
9. I am independent of the issuer applying all of the tests in Section 1.5 of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1 and the sections for which I am responsible for in the Technical Report have been prepared in accordance with NI 43-101 and Form 43-101F1.
11. As of the Effective Date of this Technical Report, to the best of my knowledge, information, and belief, the sections for which I am responsible for in the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed on this 19<sup>th</sup> day of June 2023

Signed and Sealed – Neal Reynolds

Neal Reynolds

Partner – Principal Geologist



ERM Consultants Canada Ltd (CSA Global Consultants Canada)

Certificate of Qualified Person Author – Nigel Fung

I, Nigel Fung, P.Eng (PEO #100173276, EGBC #56108 ), do hereby certify that,

1. I am employed as Partner by ERM Consultants Canada Ltd dba CSA Global Consultants Canada, 1100 Melville St. #1000, Vancouver, BC V6E 4A6 Canada.
2. I graduated with a BSc (Biology), 1993, from University of Toronto and a P.Eng (Mining), 2001 from McGill University, Montreal.
3. I am a Fellow in good standing with PEO and EGBC.
4. I have practised my profession as a licenced engineer for the past 10+ years in areas of gold, silver, oil sands and a variety of metals in a number of countries around the world. I have experience in reviewing and supervising engineering and geological work as a peer reviewer and have the necessary technical experience and expertise to complete required work on this Technical Report on the Moss Gold and East Coldstream Project.
5. 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 and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI43-101.
6. I am responsible for all sections, except Sections 6 to 11 and 12.1, 12.2, 12.3.3.1, 14.1 and 20 of the Technical Report titled “NI 43-101 TECHNICAL REPORT MINERAL RESOURCE ESTIMATES FOR THE MOSS GOLD AND EAST COLDSTREAM DEPOSITS, ONTARIO, CANADA” (the “Technical Report”) with an effective date of June 5, 2023.
7. I was not previously involved in technical work on the Moss Gold nor East Coldstream Projects.
8. I have not completed a site visit.
9. I am independent of the issuer applying all of the tests in Section 1.5 of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1 and the sections for which I am responsible for in the Technical Report have been prepared in accordance with NI 43-101 and Form 43-101F1.
11. As of the Effective Date of this Technical Report, to the best of my knowledge, information, and belief, the sections for which I am responsible for in the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed on this 19<sup>th</sup> day of June, 2023

Signed and Sealed – Nigel Fung

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Nigel Fung

Partner – Principal Engineer

ERM Consultants Canada Ltd (CSA Global Consultants Canada)



Certificate of Qualified Person Author – Chris Perusse

I, Chris Perusse, P.Geol. (Member ID. 2011), do hereby certify that,

1. I am employed as President of CSL Environmental & Geotechnical Ltd., 1100 Russell Street, Unit 10, Thunder Bay Ontario, P7B 5N2.
2. I graduated with H.BSc (2009) degree in Applied Science - Geology from Lakehead University, Thunder Bay in 2009.
3. I am a fellow in good standing of the Professional Geoscientist of Ontario since 2011.
4. I have worked as a geologist continuously for more than 15 years since leaving university and have significant experience with environmental assessments utilized for developing mine projects.
5. 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 and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am responsible for Sections 20 of the Technical Report titled “NI 43-101 TECHNICAL REPORT MINERAL RESOURCE ESTIMATES FOR THE MOSS GOLD AND EAST COLDSTREAM DEPOSITS, ONTARIO, CANADA” (the “Technical Report”) with an effective date of May 5, 2023.
7. I was not previously involved in this project.
8. I have not completed a site visit (personal inspection) of the Moss Project.
9. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1 and the sections for which I am responsible for in the Technical Report have been prepared in accordance with NI 43-101 and Form 43-101F1.
11. As of the Effective Date of this Technical Report, to the best of my knowledge, information, and belief, the sections for which I am responsible for in the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed on this 19<sup>th</sup> day of June 2023

Signed and Sealed – Chris Perusse

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Chris Perusse, P.Geol.

CSL Environmental & Geotechnical Ltd.



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