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Mineral Resource Estimate for the Eagle Mountain Gold Project, Potaro-Siparuni Region, Guyana

NI 43-101 Technical Report

PREPARED FOR: GOLDSOURCE MINES INC.

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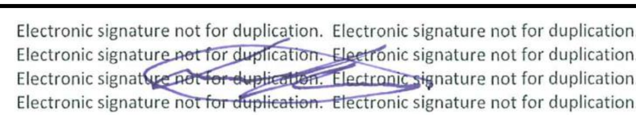
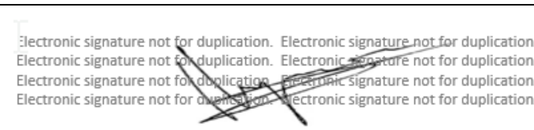
Coordinating Author	Leon McGarry B.Sc., P.Geo (APGO)	
Contributing Author	Luke Longridge PhD, P.Geo (APEGBC)	
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1 Summary

1.1 Introduction

Goldsource Mines Inc. ("Goldsource", the "Company" or the "Issuer") is a Canadian based mineral exploration company headquartered in Vancouver, British Columbia (BC); its common shares trade on the TSX Venture Exchange (TSX-V) under the symbol "GXS" and on the OTCQB under the symbol "GXSFF". Goldsource owns 100% of the Eagle Mountain Gold Project (the "Project"), located approximately 200 km south-southwest of Georgetown, the capital of Guyana, South America.

Goldsource commissioned CSA Global Consultants Canada Limited ("CSA Global"), an ERM Group company, to complete an updated Mineral Resource estimate (MRE) and prepare a Technical Report on the Eagle Mountain Gold Project in accordance with National Instrument 43-101. This Technical Report is based on Project data, internal company technical reports, testwork results, maps, published government reports, and public information. The cut-off date for drilling results to be included in MRE is December 31, 2022. The Effective Date of this Technical Report is April 05, 2022.

1.2 Mineral Resource Estimate Update

Table 1-1: Total Project Mineral Resources by weathering type

Classification	MRE Update April 2022			February 2021 MRE			Difference
	Tonnes (000 t)	Gold (gpt)	Ounces Au (oz)	Tonnes (000 t)	Gold (gpt)	Ounces Au (oz)	Ounces Au (%)
Indicated							
Saprolite	12,480	1.04	417,000	11,000	0.95	353,000	18%
Fresh rock	18,660	1.28	766,000	12,000	1.32	495,000	55%
Total	**31,130**	**1.18**	**1,183,000**	**23,000**	**1.14**	**848,000**	**40%**
Inferred							
Saprolite	6,100	0.71	139,000	5,000	0.82	140,000	-6%
Fresh rock	12,300	1.12	443,000	20,000	1.16	728,000	-44%
Total	**18,400**	**0.98**	**582,000**	**25,000**	**1.09**	**868,000**	**-38%**

Notes:
- *Numbers have been rounded to reflect the precision of a MRE. Totals may vary due to rounding.*
- *Gold cut-off has been calculated based on a gold price of US$1,600/oz, mining costs of US$1.5/t for saprolite and US$2.0/t for fresh rock, processing costs of US$6.0/t for saprolite and US$12.0/t for fresh rock, and mine-site administration costs of US$3.0/t. Metallurgical recoveries of 95% are based on prior test work.*
- *Mineral Resources conform to NI 43-101, and the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standards for Mineral Resources & Mineral Reserves.*
- *The Company is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing or political factors that might materially affect these MREs.*
- *Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in this MRE are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated or Measured Resources, however, it is reasonably expected that majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.*

1.3 Property Description and Location

The Eagle Mountain Property is located in west-central Guyana, approximately 200 km south-southwest of Georgetown, the capital of Guyana, bounded by latitudes 573,600 N and 581,500 N and longitudes 261,000 E and 271,800 E (UTM WGS84, Zone 21N).

The Eagle Mountain Property is 5,050 ha in area and includes Goldsource's 100% owned Eagle Mountain Prospecting Licence 03/2019 (Eagle Mountain PL) totalling 4,784 ha (with the exception of certain third-party lands legally held or occupied therein), Kilroy Mining Inc.'s ("Kilroy") Medium-Scale Mining Permit K-60/MP/000/2014 totalling 254 acres on which Stronghold Guyana Inc. ("Stronghold", a subsidiary of Goldsource) has a long-term lease, and the Ann Mining Claim where Goldsource has an option and purchase agreement to acquire a 100% interest. A total of sixteen verified, legal third-party small-scale mining permits and two medium-scale mining permits (including the Kilroy permit) are located within the Eagle Mountain PL boundary. The Bishops Growler medium-scale permit lies in the central part of the EMPL northeast of the Eagle Mountain resource area and was under an option and purchase agreement by Goldsource in 2018/19 which has since expired.

As any small or medium-scale mining permit is required under Guyana law to be held by a Guyanese national, Stronghold entered into agreements with Kilroy, a private arm's length Guyanese company, pursuant to which Stronghold and Kilroy will jointly operate the Kilroy permit area, granted in July 2014 on a 254-ha portion of the Eagle Mountain PL. Kilroy has granted to Stronghold the exclusive right to conduct mining operations on the permit area and any additional areas acquired by Kilroy. Stronghold will fund all expenditure and receive 100% of all revenues, subject to applicable government royalties and a 2% net smelter return (NSR) royalty to Kilroy.

Goldsource has pledged a US$206,200 (31 December 2019) performance bond, held by the Guyana Geology Mines Commission (GGMC), for exploration permits on the Eagle Mountain Property.

1.4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Property is located approximately 7 km south of Mahdia Township and the Mahdia commercial airstrip. Mahdia has a population of approximately 3,000 and is the capital of Potaro Region 8. There is a local hospital, school, shops, restaurants, a gas station, several mechanical shops, two hotels/guest houses, diesel generated power, and cell phone coverage. The local economy is dominated by small-scale mining activity and a labour force familiar with mining is available to draw upon for any future mining activities. Several large gold mining operations are currently active in Guyana and suitable skilled personnel should be available with limited reliance on expatriates.

Mahdia can be accessed by road from Georgetown in five to seven hours, a driving distance of ~275 km. The road is paved from Georgetown to Linden, a wide laterite road between Linden and Mabura which is currently the subject of a major upgrade, and all-weather unpaved road from Mabura to Mahdia. The Mahdia airstrip is hard surfaced and is suitable for small commercial and charter passenger aircraft. Unpaved roads and tracks from Mahdia provide access to and within the EMPL.

The region has limited infrastructure, with no commercial electric power. The Amaila Falls area located approximately 50 km west-northwest of the Eagle Mountain PL has received government approvals for a 165 MW hydroelectric power project. Construction is scheduled to start in 2022. The Company has two 500 kVA and one 120 kVA diesel generators on site, installed to provide power to the inactive gravity pilot plant and the exploration camp. Potable water is available from multiple small creeks and a few small rivers within the EMPL.

Goldsource's current field activities are supported by the 65-man exploration camp and offices on the Property. Supplies are partly sourced from Georgetown and partly from Mahdia. The camp has limited cell-phone coverage and an established satellite internet link. Dirt tracks that have been constructed to facilitate exploration.

The area of the EMPL appears to be sufficiently large for proposed exploration activities and infrastructure necessary for potential future mining operations should a mineable deposit be delineated.

1.5 Project History

The Eagle Mountain Property and adjacent Mahdia areas to the north were previously held by Golden Star Resources Ltd (GSR). Between 1998 and 2002, GSR operated a joint venture agreement with Cambior Inc. to explore the Eagle Mountain Property through a joint venture company, Omai Gold Mines Ltd (OGML). GSR sold its interest in OGML to Cambior in 2002. Cambior became part of IAMGOLD Corporation (IAMGOLD) in 2006 with OGML becoming a 95% owned subsidiary of IAMGOLD (the remaining 5% held by the Republic of Guyana). In 2010, the EMPL was transferred from OGML to Eagle Mountain Gold Inc. (EMGI – the holding company for OGML) and renewed in 2012.

In 2010, via its Guyana subsidiary, TSX-V listed Stronghold Metals Inc. entered a joint venture with OGML and EMGI, amended and restated in 2012 when Stronghold Metals Inc. exercised its option to earn a 50% interest in EMGI and changed its name to Eagle Mountain Gold Corp. (EMGC). In 2013, EMGC exercised its option to acquire the remaining 50% interest in EMGI and the Eagle Mountain Property from OGML, giving EMGC 100% ownership of EMGI and the Property. Subsequently, a new three-year prospecting licence (PL20/2013) was issued to EMGC's 100% Guyanese subsidiary, Stronghold Guyana Inc., on 9 August 2013, which was in turn renewed on October 18, 2019.

Alluvial gold has been exploited in the Eagle Mountain area since at least 1884, tunnels and shafts exploited hard-rock gold in the WW1-WW2 period, and dredging was carried out in the Mahdia and Minnehaha rivers up to 1948. Several phases of exploration were carried out in the Eagle Mountain area during the latter half of the 20th century, including:

- Anaconda British Guiana Mines Ltd (Anaconda) (1947–1948) carried out geological mapping, diamond drilling, tunnelling and shaft sinking.
- Guyana Geological Survey (1964–1965, 1970–1973, and 1980), who completed a soil geochemical sampling program, pitting and diamond drilling.
- Amax Exploration Inc. (1966–1967) who drilled an anomaly located to the north of the EMPL boundary.
- GSR (1986-1997), who carried out a multi-element drainage sample geochemical survey, soil and auger sampling, surface geophysics, trenching, and limited diamond drilling.
- OGML/Cambior (1998–2004), who carried out diamond drilling, auger sampling and surveying.
- OMGL/IAMGOLD (2006–2009), who compiled a digital GIS database incorporating all available historical data, a regional multi-element drainage sampling program, auger sampling and geological mapping, fixed-wing airborne radiometric and magnetometer surveys, three-dimensional (3D) induced polarisation (IP) and resistivity surveys, and diamond drilling.

Mineral Resource estimations were previously carried out by IAMGOLD Technical Services and Exploration Guyana Group (ITS) in 2009 and audited by ACA Howe International Limited (ACA Howe) in 2010, as well as in 2012 (re-reported in 2014) by ACA Howe on behalf of EMGC, and most recently in 2021 by CSA Global on behalf of the Company.

1.6 Geology and Mineralization

The Eagle Mountain Gold Project occurs in the northern part of the Guiana Shield, an area of Paleoproterozoic greenstone belts and associated tonalite-trondhjemite-granodiorite (TTG) intrusive belts, deformed in the Trans-Amazonian Orogeny between 2.2 Ga and 1.9 Ga. The greenstone-TTG terrain is intruded by younger Paleoproterozoic basic intrusions of the Avanavero Large Igneous Province. The northern Guiana Shield hosts multiple large gold deposits was originally contiguous with the Birimian of West Africa where numerous >2 Moz gold deposits are known.

The Property is underlain by metavolcanic and metasedimentary rocks intruded by a composite granodiorite pluton that hosts the gold mineralization at the Eagle Mountain deposit. At the Salbora deposit, mineralization is within metavolcanic rocks adjacent to a northeast-trending monzonite pluton.

A large mafic sill of the Avanavero Suite intrudes the granodiorite pluton and metavolcanic-metasedimentary sequence and forms the ridge and cliffs at the top of Eagle Mountain. Associated dykes are oriented ~060° and are probably less than 10 m thick.

The sequence has been deformed and folded in the Trans-Amazonian Orogeny and metamorphosed at greenschist facies. A system of low-angle, west-dipping thrust faults at the Eagle Mountain deposit and upright, north-south to northwest-southeast trending faults and breccias at the Salbora deposit are associated with this event and with gold mineralization. Younger northwest to north-northwest trending faults crosscut and offset the shallow dipping structures at the Eagle Mountain deposit.

The shallow-dipping faults in granodiorite at the Eagle Mountain deposit range from narrow mylonite zones to broader zones of pervasive deformation and fracturing. These fault zones are affected by silicification and chloritic alteration with disseminated pyrite and associated gold mineralization. The steep breccia zones at the Salbora deposit are also affected by chloritic alteration and silicification with disseminated pyrite and associated gold mineralization.

At the Eagle Mountain deposit, the mineralized thrust zones vary from 1 m to 40 m in thickness separated by zones 10–100 m thick of unmineralized granite. At the Salbora deposit, gold mineralization within steep breccia zones coalesces near surface into a broad, sub-horizontal zone of mineralization. Gold occurs as very fine disseminations of native gold within and associated with pyrite. The Eagle Mountain deposit is modelled as a series of tabular, sub-horizontal to shallowly dipping zones. The variable thickness of each of the mineralized zones appears to be related to whether a single shear occurs or whether the deformation zone splits into several subparallel shears, thereby broadening the zone of alteration and mineralization.

At Salbora, gold mineralization occurs within and adjacent to sub-vertical, north-south trending breccia zones that are generally a few centimetres to a few metres in thickness. Near the surface, these breccia zones appear to coalesce into broad, sub-horizontal zones of brecciation with mineralization occurring over tens of metres. Breccias are developed in a tholeiitic mafic volcanic and altered granitoid adjacent to a monzonite intrusion.

The Eagle Mountain and Salbora areas have been affected by tropical saprolite weathering to a depth of 10–50 m. Gold mineralization at the Eagle Mountain deposit (particularly Zones 1 and 2) has been heavily weathered and occurs largely within saprolite derived from granitoid-hosted shear zone material, consisting of clay-rich material hosting very fine disseminated gold grains.

1.7 Deposit Types

The similarity of alteration types at Eagle Mountain and Salbora suggest they are part of a single mineralized system and are considered to be orogenic-type gold deposits, also known as lode-gold deposits or, for Archean and Paleoproterozoic examples, greenstone gold deposits. Orogenic gold deposits typically form in metamorphic rocks in the mid- to shallow crust (5–15 km depth), at or above the brittle-ductile transition, in compressional settings that facilitate transfer of hot gold-bearing fluids from deeper levels. Orogenic gold deposits have formed for more than 3 billion years of Earth’s history and contribute significantly to global gold production. There are a large number of orogenic gold deposits globally that could be considered comparable to Eagle Mountain, including several located in Guyana that are currently in production or under development.

1.8 Exploration

Exploration-related work carried out at the Eagle Mountain Property between 2011 and 2020 by Goldsource (including work conducted between 2011 and 2013 by EMGC), included diamond drilling, infrastructure improvements, environmental data collection, topographic surveys, line cutting, trench and outcrop sampling, hand auger drilling and sampling, ground geophysical surveys, and reprocessing of existing geophysical data.

Trench and outcrop channel sampling used samples equivalent to NQ-sized core collected at 1 m intervals or according to identified geological intervals. Hand auger saprolite sampling programs were carried out in 2015 and 2017–2018 along cut lines at 25 m or 50 m pre-marked stations with 1 m samples collected by compositing four samples collected every 25 cm, to a maximum depth of 6 m.

In 2019 and 2020, ground geophysical surveys in an area of ~7.5 km^2 surrounding Salbora consisted of gradient array and pole-dipole IP and ground magnetics. Follow-up drill testing of IP/resistivity targets helped define the Salbora deposit and several additional targets.

1.9 Drilling

In 2011, 73 HQ/NQ diamond drillholes totalling 10,715.93 m were focused on infill and step-out drilling at the Eagle Mountain deposit to confirm previous results and to upgrade the Inferred Resources to Indicated. In 2017 and 2018, drilling focused on shallow saprolitic material using a Geoprobe® 540 direct push drill rig. A total of 257 holes (2,741.72 m) were drilled. Between 2018 and 2021, a total of 449 HQ/NQ diamond drillholes totalling 58,527.74 m were completed for infill and expansion of the Mineral Resource at the Eagle Mountain deposit, as well as identification and delineation of additional deposits within the Project area.

Core sampling procedures were similar for 2011 and 2018–2021 diamond drilling, with core retrieved using conventional wireline techniques, placed in plastic core boxes, and transported to the core facility where it was cleaned, marked, logged, photographed, and sampled to a minimum interval of 30 cm and a maximum of 1.5 m. Sample details were recorded in a ticket book, one side placed in the sample bag and the second part stapled on the box.

Saprolitic samples were split with a spatula and fresh core with a core saw. Half the core was placed into sample bags with an assay tag and half returned to the core box. A QAQC sample (either a blank, a certified reference material (CRM), or a duplicate) was inserted every 15 samples. Core logging and sampling was completed either by or under the onsite supervision of a Goldsource geologist.

For the 2017–2018 Geoprobe drill core sampling, samples were placed in core trays inside plastic tubing. On delivery to the core shed, tubing was removed using tube cutter and the sample was split by using a knife or putty knife. Each sample was 1 m in length.

Following analysis, digital assay files provided by the laboratory were merged with a “from” and “to” interval file created by Goldsource, with the sample number linking the two files. This methodology limits data entry errors to sample numbering, as well as the “from” and “to” specifications.

Core recovery for diamond drilling and Geoprobe drilling was generally very good, and the Qualified Person is confident there are no sampling or recovery factors that would negatively impact the sampling procedures. Overall, core sampling methods are to industry standards for mineralization of this type.

Upon completion, drillhole collar coordinates and elevations were surveyed in Universal Transverse Mercator (UTM) coordinates, Zone 21N (PSAD 56 datum). The drill contractor completed downhole directional surveys on all diamond drillholes at approximately 50 m intervals using a single shot digital survey tool.

1.10 Data Verification, Sampling Preparation, Analysis and Security

Samples from the 2011 diamond drilling program were prepared at Acme Analytical Laboratories (Acme), Georgetown, Guyana and sample pulps were forwarded to Acme Santiago, Chile for gold assay and to Acme Vancouver, Canada for multi-element analyses. Gold analyses were carried out using gold fire assay and AA finish. The Acme facilities were individually certified to standards within ISO 9001:2008. Sample preparations followed industry best practices and the analytical methods used are routine. Umpire check assays were completed at Activation Laboratories Ltd (Actlabs) in Georgetown.

Samples from the 2017–2018 Geoprobe drilling and the 2018–2020 diamond drilling programs were prepared, and gold fire assays with AA finish were completed at Actlabs, Georgetown. Sample pulps were forwarded to the Actlabs Ancaster, Canada laboratory for multi-element analyses using instrumental neutron activation analysis

(INAA) and inductively coupled plasma with atomic emission spectrometry. The Actlabs facilities are individually certified to standards within ISO 9001:2008. Sample preparations followed industry best practices and the analytical methods used are routine. Umpire QAQC check assays were completed at MS Analytical in Georgetown using gold fire assay and AAS finish.

Bulk density tests were carried out in 2011 on a variety of fresh and saprolitic, mineralized and non-mineralized rock types. In 2020, additional bulk density tests were carried out at MS Analytical in Georgetown on a variety of mineralized and unmineralized core samples. The water displacement method was used for both 2011 and 2020 tests and porous samples were coated with wax.

QAQC programs include CRM samples, blank samples, core duplicate, coarse duplicate samples, and pulp duplicate samples. During the 2011 program, CRMs were used at an average insertion frequency of 2.3%. During the 2017–2021 programs, CRMs were used at an average insertion frequency of 2.6%. Results for most CRMs show no significant negative or positive bias at the CRM grades evaluated. A total 1202 blank samples during the 2017–2021 program, an average insertion frequency of 2.8%, returned below detection or very low values, indicating very little contamination with the exception of a few outliers. A total of 342 quarter-core field duplicates, and 478 pulp duplicates were submitted between 2017 and 2021 at an average insertion frequency of 1.9%. Duplicates showed good repeatability. An umpire laboratory, MSA, completed a total of 262 quarter-core duplicate analyses and a total of 481 repeat analysis of pulps at an average insertion frequency of 1.7%. For this 2017-2021 period, QAQC samples represented 9% of all assays in the exploration database.

Qualified Person, Dr. Luke Longridge, authored Section 12 of this report and carried out a four-day site visit to the Eagle Mountain Project in November 2020, validated drillhole positions, reviewed drill core, inspected geology, observed core logging and sampling and preparation facilities, and documentation related to drilling, sampling, and assaying. Analytical facilities at both Actlabs and MSA in Georgetown, Guyana, were inspected. No samples were collected for additional laboratory verification; however, mineralized intervals were inspected and compared with assay values for confirmation of mineralization.

It is the Qualified Person’s opinion that sample preparation and analyses were done in line with industry standards and are satisfactory. Although the number of CRM, duplicate and blank samples are lower than typical standards of best practice, the quality of assays is considered robust and reliable, and suitable to be used for the MRE. The data available are a reasonable and accurate representation of the Eagle Mountain Project and are of sufficient quality to provide the basis for the conclusions and recommendations reached in this report.

1.11 Mineral Processing and Metallurgical Testing

Metallurgical studies completed by GSR in 1989 and 1991 were limited to desliming and gravity gold recovery testwork.

In 2009, OGML completed testwork on four saprolite and four fresh samples at SGS Canada including head analyses, mineralogy and grindability studies and an investigation of the amenability of the samples to gold recovery/extraction utilizing gravity separation and cyanide leaching. Gold in saprolite was mostly present as native gold. Bottle roll cyanidation tests on both saprolite and fresh rock samples showed good response with gold recoveries over 90% to 95.5% in saprolite and 92.7% to 95.5% in fresh rock.

In 2013, Goldsource completed preliminary metallurgical testwork as part of its due diligence for potential amalgamation with EMGC. Twelve samples were sent to Met-Solve Laboratories Inc. for scoping level metallurgical testwork to evaluate the response of the material to gravity concentration and flotation. Grinding, gravity and flotation results were integrated into a preliminary process flowsheet. Overall, 83.1% of gold was recovered resulting in final tail grade of 0.38 g/t. The gravity approach, without flotation, provided an overall gold recovery of 77.3% resulting in a final tail grade of 0.50 g/t. The expected gold recovery using only gravity concentration without grinding of the -1.3 mm material was estimated to be 60.3% based on an interpolation of the mass balance presented in the flowsheet.

A gravity pilot plant was constructed between October 2015 and December 2015 and operated intermittently from 28 January 2016 to 28 February 2017. An estimated 148,844 tonnes of feed grading 0.74 g/t Au (3,541 ounces gold contained) were processed through the gravity plant with 643.2 ounces gold reporting to doré, giving an estimated 18% recovery overall. Approximately 2,898 ounces gold (very fine size) went into tailings storage for potential recovery by cyanidation in future.

In 2018, testwork was completed on 22 saprolite samples from different mineralized zones at Eagle Mountain with additional samples of gravity plant tailings and the plus 2 mm stockpile. Five saprolite composites were generated together with a combined master composite. Sample characterization (assaying, sizing, mineralogy, and gold deportment) and grindability testing was followed by gravity separation and cyanidation testwork. With grinding and gravity concentration followed by cyanidation, the five saprolite composites produced elevated gold recoveries ranging from 94.8% to 97.7% with a relatively coarse grind size (p80 averaging 164 microns). The +2 mm stockpile and plant tailings material produced gold recoveries of 93.6% and 87.4%, respectively. Based on the results, a conceptual flowsheet envisaged a standard gravity-grind-leach (carbon-in-pulp) processing facility at a throughput rate of 4,000–5,000 tpd.

In April 2022, 26 samples totalling 850 kilograms from Eagle Mountain, Salbora, Toucan and Powis were shipped to SGS Canada for additional metallurgical testwork. Results are not yet available.

1.12 Mineral Resource Estimates

The MRE for the Eagle Mountain Project has been prepared by Mr. Leon McGarry, CSA Global Senior Resource Geologist and a Qualified Person (QP) for the reporting of Mineral Resources, as defined by NI 43-101. Mr. McGarry is responsible for the geological domaining, block modelling, and MRE studies presented in this report.

Goldsource provided CSA Global with wireframes representing the interpretation of mineralized zones at Eagle Mountain, the contact of saprolite with the fresh rock, a digital elevation model of the topography, drillhole collars, survey, assay results, density measurements, and geological logging of the oxidation state of the rock. Mineralization models for the Salbora deposit were prepared independently by Mr. McGarry. The drillhole data was reviewed, formatted, and validated.

At the Eagle Mountain deposit, mineralized zones are modelled as extensive horizons that span the deposit area. Mineralized zones are drill tested in a 700 m to 1,300 m corridor extending approximately 2,800 m to the northeast from the Salbora shear zone in southwest of the project area. These zones are modelled in Leapfrog using the stratigraphic modelling tool to create a set of stacked planar 3D wireframes. These broad wireframes are constrained using a polygon digitised around mineralized drill holes at a typical 80 m offset distance.

Mineralization at the Salbora deposit occurs within a sub-vertical, north-south trending shear zone. The deposit is bound by two thin (1 to 3 m) steeply dipping shear zones up to 1,500 m in length and extending to a depth of 250 m. These zones converge at the centre of the Salbora deposit. At the centre of the Salbora deposit four thicker (5 to 15 m) breccia lenses extend over a strike length of 250 m to 350 m, with down dip extents of 200 m. Near the surface, two thick (10 to 30 m) 100 m-wide inclined zones of mineralization dip shallowly to the south over 150 m. Zones were modelled in Leapfrog using the vein system modelling tool. The extent of each vein model was limited using a boundary string. Wireframe solids were projected from drillhole intervals by up to 100 m along strike and down dip.

The saprolite zone at both deposits is up to 50 m thick and was modelled using logging information and used to define densities.

Block models were built and constrained by the interpreted mineralization model and weathering and topography boundary surfaces. Samples composited to 1 m length were used to interpolate gold grades into the block model using Ordinary Kriging (OK). Block grades were validated both visually and statistically. All block modeling and estimation was completed using Datamine Studio RM.

Dry bulk density determinations were obtained using the displacement method. Average densities assigned to MRE models are based on the modelled rock type and weathering zone. The density ranges were 1.01 to 2.92 t/m^3 for saprolite, 1.32 to 3.01 t/m^3 for transition, and 2.14 and 4.17 t/m^3 fresh rock, depending on lithology.

The Mineral Resource has been classified as Indicated and Inferred based on the guidelines specified in the CIM Definition Standards. Classification is based upon an assessment of geological understanding of the deposit, geological and grade continuity, drillhole spacing, quality control results, search and interpolation parameters, and an analysis of available density information. Modelled Mineral Resources for each deposit appear to be of sufficient grade, quality, quantity, and coherence to have reasonable prospects for eventual economic extraction by open pit mining methods.

Exploration to date has identified gold mineralization outside of the current Mineral Resource area that warrants further exploration.

1.13 Environmental, Permitting and Social Considerations

Wet and dry season biodiversity baseline assessments were carried out in 2013 and 2021, water quality sampling studies were carried out on the project in 2013, both covering the entire EMPL area. No endemic, rare and threatened plants, birds or habitats were found to occur in the project area, but several rare, vulnerable or endangered fish, tortoise and mammal species were found to occur and vulnerable bird species were identified in 2021. Generally, the water quality within the project area is representative of water quality of similar environments in Guyana, with some streams directly affected by historical mining showing high sediment loads, but most streams exhibit characteristics of the natural environment.

The QP is unaware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, and political or other relevant issues could potentially materially affect the MRE and the Eagle Mountain Property.

1.14 Recommendations

The Eagle Mountain Project hosts a significant gold Mineral Resource that merits further exploration and evaluation as an economic development opportunity through a Prefeasibility Study. Drilling should be completed to continue extending and upgrading Mineral Resources from Inferred to Indicated classification.

Recommended work includes:

- Investigate shallow parts of Eagle Mountain deposits deemed amenable to early-stage mining through tightly spaced infill drilling in cross patterns to obtain an understanding of the short-range variability of mineralization and weathering and to help establish Measured resource classification criteria.
- Conduct infill drilling to increase data density and support the upgrading of Mineral Resources from Inferred to Indicated throughout the Project.
- Conduct step-out drilling to expand the currently defined resource.
- Undertake geotechnical drilling and other geotechnical studies to confirm appropriate slope angles for future open pit design work.
- Complete a LIDAR survey or other similar technique for high-resolution definition of the project topography.
- Acquire a dedicated geological and mining database solution.
- Continue all permitting processes.
- Complete a detailed structural evaluation using orientated drill core to improve understanding of mineralization geometry and structural controls on distribution and grade.
- Undertake a targeting study to identify new exploration targets and prioritize step-out drill targets, utilizing existing auger and drill data, high-resolution topography, and results of the structural study.

2 Introduction

2.1 Issuer

Goldsource Mines Inc. ("Goldsource", the "Company", or the "Issuer") is a Canadian based mineral exploration company headquartered in Vancouver, British Columbia (BC) and its common shares trade on the TSX Venture Exchange (TSX-V) under the symbol "GXS" and on the OTCQB under the symbol "GXSFF".

Goldsource owns 100% of the Eagle Mountain Gold Project (the "Project") located approximately 200 km south-southwest of Georgetown, the capital of Guyana, South America.

2.2 Terms of Reference

In October 2021, Goldsource commissioned CSA Global Consultants Canada Limited (CSA Global) to complete an updated Mineral Resource estimate (MRE) and prepare a Technical Report on the Eagle Mountain Gold Project in accordance with National Instrument 43-101 – Standards for Disclosure for Mineral Projects (NI 43-101) regulations.

This Technical Report is based on internal company technical reports, testwork results, analytical results performed by accredited laboratories, maps, published government reports and public information. The cut-off date for drilling results to be included in the MRE is 31 December 2021. This report was completed in accordance with disclosure and reporting requirements set forth in NI 43-101, Companion Policy 43-101CP, and Form 43-101F1. This Technical Report discloses material changes to the Property, in particular an updated MRE for the Eagle Mountain Gold Project.

The MRE update has been prepared in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (10 May 2014) as per NI 43-101 requirements. Only Mineral Resources are estimated – no Mineral Reserves are defined for the Project. The report is intended to enable the Issuer and potential partners to reach informed decisions with respect to the Project.

The principal author of this report is Mr Leon McGarry, CSA Global Associate Resource Geologist. Mr McGarry has more than five years' experience in the field of structurally controlled gold deposits and is a Qualified Person according to NI 43-101 standards.

The Effective Date of this report is 5 April 2022. The report is based on technical information known to the authors and CSA Global at that date.

The Issuer 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 at the date of this report.

2.3 Principal Sources of Information

This report is based, in part, on internal Goldsource technical reports and maps, consultants' reports, and public information as listed in Section 27 (References) of this Technical Report. This study is an update to a previous MRE for the Eagle Mountain Gold Project reported under NI 43-101 by CSA Global with an effective date of 17 February 2021.

The authors have not conducted detailed land status evaluations, and have relied upon previous reports, public documents, and statements by Goldsource regarding Property status and legal title to the Eagle Mountain Gold Project.

The authors also had discussions with the management and consultants of the Issuer, including:

- Mr Steve Parsons (Chief Executive Officer, Goldsource) regarding the tenure of the Property and metallurgy
- Mr Ioannis (Yannis) Tsitos (President and Director, Goldsource) regarding the Project history, tenure, and metallurgy
- Mr Kevin Pickett (Chief Geologist, Goldsource) 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 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
Leon McGarry, B.Sc., P.Geo. (ONT), Associate Resource Geologist, CSA Global	Sections 1 to 11 and Sections 13 to 27 inclusive
Luke Longridge, Ph.D., P.Geo. (BC), Senior Geologist, CSA Global	Section 12 and property visit in 2020

The 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 Goldsource and that there is no circumstance that could interfere with the Qualified Persons' judgement regarding the preparation of the technical report.

2.5 Qualified Person Site Inspections

A four-day visit to the Eagle Mountain Gold Project was completed during the current drill program by Luke Longridge from 22 to 25 November 2020, as detailed in Section 12.1. Leon McGarry did not visit the Eagle Mountain Gold Project. The Qualified Persons consider Luke Longridge's 2020 site visit current under section 6.2 of NI 43-101.

3 Reliance on Other Experts

The authors and CSA Global have relied upon Goldsource and its management for information related to the Eagle Mountain Prospecting Licence (Eagle Mountain PL) and the Kilroy Mining Inc. (Kilroy) Mining Permit location and status, and underlying contracts and agreements pertaining to the acquisition of the Prospecting Licence and the Mining Permit (Section 4). The status of the tenements and company agreements was confirmed in a legal opinion provided by Robert H.O. Corbin and Associates, Attorneys-at-Law of Georgetown, Guyana, dated 20 May 2021.

The Property description presented in this report is not intended to represent a legal, or any other opinion as to title.

4 Property Description and Location

4.1 Location of Property

The Eagle Mountain Property is located approximately 200 km south-southwest of Georgetown, the capital of Guyana, South America (Figure 4-1). The Property comprises an area of approximately 4,896 ha (12,098 acres) and is located between the Potaro, Konawaruk and Essequibo rivers in Guyana's Administrative District VIII-2 (Potaro-Siparuni) and in Mining District 2 (Potaro). It lies within the Kaieteur 1:50,000 scale topographic map sheets 43NE and 43SE, approximately bounded by latitudes 573,600 N and 581,500 N and longitudes 261,000 E and 271,800 E (UTM WGS84, Zone 21N).

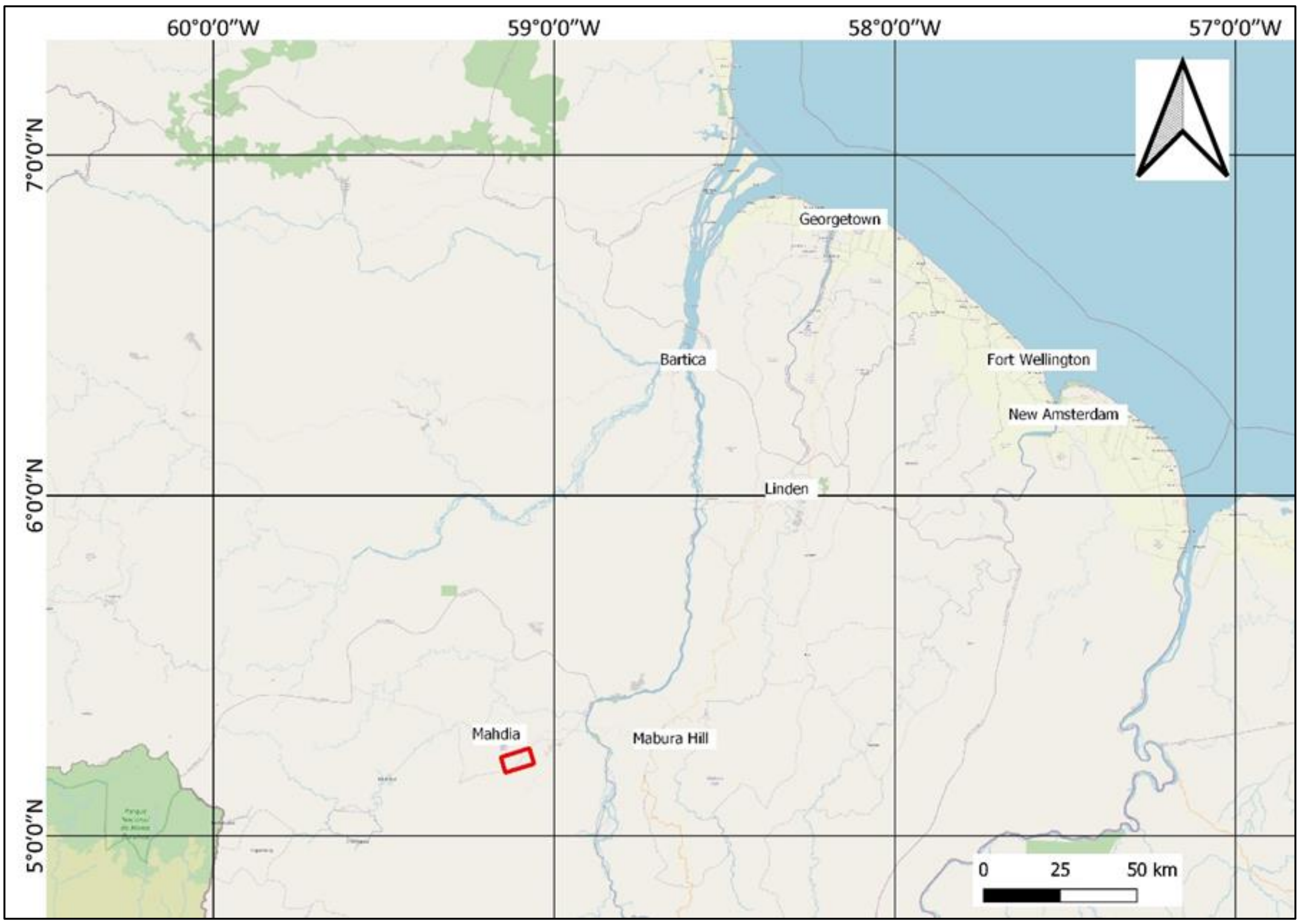

Figure 4-1: Location of the Eagle Mountain PL (red rectangle) relative to towns and villages
Note: Coordinates are WGS84, geographic coordinates.

4.2 Mineral Tenure and Surface Rights

4.2.1 Mining Regulations of Guyana

All mineral resources in Guyana are the property of the State. The state body responsible for the management of these resources is the Guyana Geology and Mines Commission (GGMC) under the Ministry of Natural Resources. The Mining Act of 1989 and extensive Mining Regulations provide the framework for the mineral tenure system. Tenure is categorized as small-, medium- and large-scale and title renewal applications are reviewed based on actual performance relative to stated work programs and budgets.

The Mining Act of 1989 allows for four scales of operation:

1) A Small-Scale Permit has dimensions of 1,500 ft x 800 ft (457 m x 244 m) whilst a River Permit consists of one mile (1,609 m) of a navigable river.
2) A Medium-Scale Prospecting Permit (MSPP) and Medium-Scale Mining Permit (MSMP) cover between 150 acres and 1,200 acres (60.7–486 ha).
3) Prospecting Licences (PLs) and Mining Licences (MLs) are issued for areas between 500 acres and 12,800 acres (202–5,180 ha).
4) Permission for Geological and Geophysical Surveys (PGGS) is granted for reconnaissance surveys over large acreages, with the objective of applying for PLs over favourable ground selected based on results of the reconnaissance surveys. The permits and licences are located and identified by orthogonal coordinates indicating the corners of the permits/licences.

Only citizens of Guyana or legal Guyanese entities may hold a small-scale permit or medium-scale permit; however, foreigners may make joint venture arrangements whereby the two parties jointly develop the property under a private contract. In order to maintain such a permit, there is no requirement to submit a work program or budget, provide reports of work, or survey and mark the permit corners. The area may enclose earlier holdings that retain preferential mineral rights. The initial term of a MSPP is one year with a rental fee of US$0.25/acre (US$0.10/ha). The rental fee increases by US$0.10/acre (US$0.04/ha) per year and the permit may be renewed indefinitely for one-year periods.

A Mining Permit may evolve out of a Prospecting Permit at the permitee's option. There is no requirement for a Feasibility Study to accompany an application to convert a MSPP to a MSMP. The MSMP is for an initial term of five years or the life of the deposit, whichever is shorter, but it is common to be extended to multiple subsequent terms, subject to the owner performing work on the MSMP. The rental rate on a MSMP is US$1.00/acre (US$0.40/ha). The State is entitled to a 5% non-contributory interest or royalty on gross production from an MSMP. In individual cases, it is possible to negotiate and enter into a Mineral Agreement with the GGMC. Such an agreement would include, but not be limited to, prospecting, exploration and mining/processing, and taxation.

Foreign companies may apply for PLs, MLs and PGGSs. The term for PLs is three years with two rights of renewal of one year each for a total of five years. After five years, the licence may be further renewed through submission of a new licence application, the granting of which is at the discretion of the GGMC based on the company's performance during the previous five-year PL period considering fee payments and exploration expenditures in relation to the annual fillings and budgets submitted to GGMC. In practice, PLs may be renewed indefinitely provided the licensee performs according to stated work programs and budgets.

The Mining Act of 1989 stipulates that, three months prior to each anniversary date of licence, a work program and budget for the following year must be presented for approval. Rental rates for PLs are US$0.50/acre for the first year; US$0.60/acre for the second year, and US$1.00/acre for the third year. An application fee of US$100 and a Work Performance Bond, equivalent to 10% of the approved budget for the respective year, is also payable. The obligations of the licensee include quarterly technical reports on its activities and an audited financial statement to be submitted by 30 June for the previous year's expenditure. Should the licensee relinquish part or all the PL area, then it is required to submit an evaluation report on the work undertaken therein. PL properties are subject to ad hoc monitoring visits by technical staff of the GGMC.

At any time during the PL, and for any part or all the PL area, the licensee may apply for a ML. This application will consist of a positive Feasibility Study, Mine Plan, an Environmental Impact Statement, and an Environmental Management Plan. Rental for a ML is currently fixed at US$5.00/acre per year and the licence is usually granted for 20 years or the life of the deposit, whichever is shorter. Renewals are possible.

4.2.2 Eagle Mountain Property Description

The Property includes Goldsource's 100% owned Eagle Mountain PL 03/2019 totalling 4,784 ha or 11,820 acres (with the exception of all third-party lands legally held or occupied therein) and MSMP K-60/MP/000/2014 held by Kilroy totalling 254 acres on which Stronghold Guyana Inc. (Stronghold), a subsidiary of Goldsource, has a long-term lease with a 2% net smelter return (NSR) royalty (Figure 4-2). In October 2020, Goldsource also entered into an option and purchase agreement to acquire a 100% interest in the Ann Mining Claim, located within the Eagle Mountain PL 03/2019 boundary. A summary of all relevant licences is provided in Table 4-1.

Table 4-1: Summary of licences for the Eagle Mountain Property

License Name/Number	Ownership/ Agreement	Grant date	Expiry date	Area	Rent per year	Expenditure commitments
Eagle Mountain Prospecting Licence PL 03/2019	Stronghold Guyana Inc. (100% Guyanese subsidiary of Goldsource Mines Inc.)	18 Oct 2019	18 Oct 2022 which can be extended to 18 Oct2024	11,820 acres (area of PL which excludes the Kilroy and Bishops Growler MSMPs but includes 16 valid SSMPs	US$1.10/acre per year combined for gold, valuable minerals and molybdenum, and base metals (copper, lead, zinc, tin, tungsten, etc.)	Variable based on own (Stronghold Guyana Inc.'s budget/reporting
Kilroy Mining Medium Scale Mining Permit (MSMP) K-60/MP/000/2014	Kilroy Mining Inc. (100%). Under agreement with Stronghold Guyana Inc. for 100% control subject to 2% Royalty	17 Jul 2014	17 Jul 2024	254 acres	US$1.00/year per acre	N/A
HO#21/213/1995, Small Scale Mining Claim, known as Ann SSMC	Mark Crawford (Guyanese). Under Option and Purchase Agreement, dated 20 Oct 2020 for 100%. Currently in its first Option year.	21 Dec 1998	N/A as long as fees paid annually	24.4 acres	US$20,000/year for whole claim	N/A

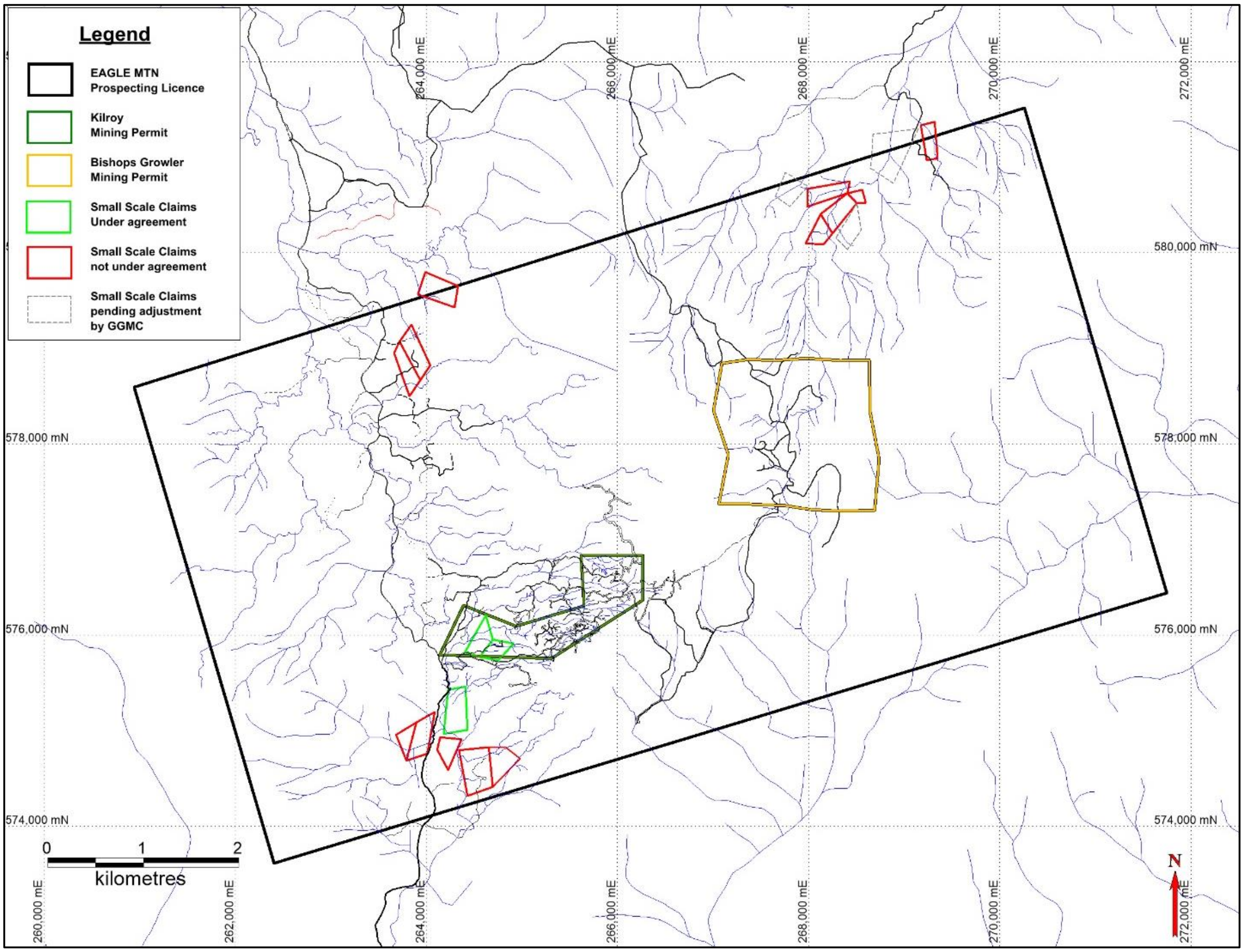

Figure 4-2: The Eagle Mountain PL with internal legal third-party small-scale and medium-scale permits

4.2.3 Eagle Mountain Prospecting Licence 03/2019

Goldsource currently holds a 100% interest in the Eagle Mountain PL 03/2019 through Stronghold, a Guyanese subsidiary held 100% by Eagle Mountain Gold Corp. (EMGC), which itself is a 100% subsidiary of Goldsource as per a business combination described in Section 6.1.3.

Eagle Mountain PL 03/2019 was issued to Stronghold by GGMC on 18 October 2019 for a period of three years (expiring 18 October 2022). The PL covers 4,784 ha and gives Goldsource specific exploration rights to gold, valuable minerals and molybdenum, and base metals including copper, lead, zinc and tungsten. On April 12, 2022, Goldsource submitted an application for an extension of the existing PL by two years, bringing the term to five years. The Eagle Mountain PL is located in Potaro Mining District No. 2 on Terra Surveys 1:50,000 topographic map, 43SE. It is described as follows and takes for its reference, a point "X", at the confluence of the Tiger River and Chance Creek at coordinates (UTM Zone 21N) of:

- UTM Easting 269,653.89
- UTM Northing 582,678.58.

Thence 5 miles 1,462 yards (9.38 km) at a true bearing of 153° to the boundary commencement point "A" at the northeastern corner of the PL located with coordinates of:

- UTM Easting 270,266.02

- UTM Northing 581,508.97.

Thence 3 miles 532 yards (5.31 km) at a true bearing of 164° to the southeastern corner of the PL, at point "B", located with coordinates of:

- UTM Easting 271,758.61
- UTM Northing 576,434.36.

Thence 6 miles, 105 yards (9.75 km) at a true bearing of 253° to the southwestern corner of the PL, at point "C", located with coordinates of:

- UTM Easting 262,415.52
- UTM Northing 573,607.89.

Thence 3 miles 425 yards (5.22 km) at a true bearing of 344° to the northwestern corner of the PL, at the point "D", located with coordinates of:

- UTM Easting 260,953.87
- UTM Northing 578,590.66.

Thence 6 miles 103 yards (9.75 km) at a true bearing of 72° to the northeastern corner or commencement point "A" of the PL.

Sixteen verified, legal third-party small-scale and two medium-scale permits are located within the Eagle Mountain PL boundary. The boundary posts have been located by Goldsource and are shown in Figure 4-2. One of them, the Bishops Growler MSMP, is located northeast of Eagle Mountain in the central part of Eagle Mountain PL and was under an option and purchase agreement by Goldsource in 2018/19 which has since expired.

Eleven small-scale permits lie along the Mahdia River lowlands and work alluvial gold deposits. Three of these claims (outlined by green color in Figure 4-2), are 100% controlled by Goldsource, two of which were acquired by Kilroy in 2015 and are included in the agreement between Kilroy and Goldsource (Section 4.2.4) and the third, the Ann Small-Scale Mining Permit, is controlled through an option agreement entered into by Goldsource in October 2020, and lies adjacent to the southwest boundary of the Eagle Mountain Mineral Resource (Section 4.2.5). Five small-scale permits lie in the northeast of the PL.

The small-scale and medium-scale mining permits within the licence area that are not controlled by Goldsource are not considered to constitute a major risk to the future development of the Project.

In addition to the legal small-scale and medium-scale permits, a very small area with a farm grant, and a north-south historical public road (now a track) within the Eagle Mountain PL, mineral rights are 100% held by Goldsource. In the northern part of the Eagle Mountain PL, creek water is funnelled into a 6-inch PVC pipe to supply potable water to Mahdia Township.

During the life of the Eagle Mountain PL, quarterly and annual reports are submitted to the GGMC, along with work programs and proposed budgets. GGMC is paid an annual fee of US$1.10/acre for the respective rights to two mineral groups: 1) gold; and 2) other base metals and minerals except uranium. A performance bond representing 10% of the approved budget is also lodged. The currently lodged performance bond is approximately US$206,200.

4.2.4 Kilroy Medium-Scale Mining Permit K-60/MP/000/2014

The Eagle Mountain PL is beneficially controlled by Stronghold, Goldsource's 100%-owned subsidiary in Guyana. As a MSMP is required under Guyana law to be held by a Guyanese national, Stronghold has entered into agreements with Kilroy, a private arm's length Guyanese company pursuant to which Stronghold and Kilroy will jointly operate the permit area.

On 17 July 2014, Kilroy was granted MSMP K-60/MP/000/2014 (the "Kilroy Permit") for operations on a 254 acre portion ("permit area") of Goldsource's Eagle Mountain gold deposit located within the boundary of the Eagle Mountain PL (Figure 4-2).

The Kilroy Permit grants permission to mine gold, diamonds, precious metals, and precious minerals within the permit area located in Potaro Mining District #2 and it is valid until 17 July 2024. Kilroy, as the holder of the permit, has granted to Stronghold the exclusive right to conduct mining operations on the permit area including any additional areas acquired by Kilroy. Stronghold will fund all expenditures on the permit area and receive 100% of all revenues, subject to applicable government royalties and a 2% NSR royalty to Kilroy as compensation for its participation. As part of the agreement, Goldsource issued to Kilroy 250,000 common shares of the Company, before Goldsource completed a share consolidation in June 2021.

4.2.5 Ann Small-Scale Mining Permit

On 20 October 2020, Goldsource entered into an option and purchase agreement to acquire a 100% interest in the Ann Small-Scale Mining Permit, located within the Eagle Mountain PL boundary at the Minnehaha Creek area, for a total consideration of US$290,000. The terms of the agreement include immediate access to the land for exploration purposes for two years, the right to purchase the claim for US$250,000, and the right to terminate the agreement at any time. If not exercised, the option will expire after two years.

4.3 Tenure Agreements and Encumbrances

4.3.1 Underlying Property Agreement with Omai Gold Mines Limited (owned by IAMGOLD Ltd)

The business arrangements under which Goldsource acquired the Eagle Mountain Property are described in Section 6.1 and included a Property Agreement with Omai Gold Mines Limited (OGML). Under the terms of this underlying Property Agreement, on effective commencement of commercial production on the Property and the granting of a ML by GGMC:

a) Goldsource shall pay OGML (owned by IAMGOLD Corporation) (IAMGOLD) US$3,025,500.94 ("Initial Payment") in cash or, at Goldsource's option, in common shares of Goldsource at a price per share equal to a 5% discount to the volume weighted average price (VWAP) of Goldsource's common shares for the 20 trading days prior to issuance, upon the earlier of:
    1) If average market price of gold is US$1,400/oz or higher, upon achieving total production of 40,000 ounces of gold, the Initial Payment is due 90 days after 40,000 ounces have been produced, otherwise payment to be made 90 days after 50,000 ounces produced from the Property, or
    2) Ninety days after having completed one year of gold production under a Large-Scale Mining Licence issued by the GGMC, or
    3) Five days after the date on which the 20-day VWAP of Goldsource exceeds CAD$0.75 per share (pre the June 2021 share consolidation, $7.50 after), provided such date is not earlier than 1 March 2015.
b) Goldsource shall pay OGML an additional US$5,000,000 ("Final Payment") in cash or, at Goldsource's option, US$2,500,000 cash and US$2,500,000 in common shares of Goldsource, at a price per share equal to a 5% discount to the 20-day VWAP of Goldsource's common shares, one year after the earlier of:
    1) The payment set out in (a) above has been made, or
    2) Commencement of gold production under a Large-Scale Mining Licence issued by the GGMC.

Note that the above agreement represents a financial obligation to OGML/IAMGOLD, and that these obligations do not affect mineral tenure, which is 100% held by Goldsource.

4.3.2 Kilroy – Medium-Scale Mining Permit 637/2014 Agreement

Goldsource, through its 100% owned subsidiary Stronghold, will fund all expenditures on the MSMP 637/2014 area and receive 100% of all revenues, subject to applicable government royalties and a 2% NSR royalty to Kilroy as compensation for its participation.

4.3.3 Ann – Small-Scale Mining Permit Agreement

On 20 October 2020, Goldsource entered into an option and purchase agreement to acquire a 100% interest in the Ann Mining Claim. The terms of the agreement include immediate access to the land for exploration purposes for two years, the right to purchase the claim for US$250,000, and the right to terminate the agreement at any time. If not exercised, the option will expire after two years. Goldsource made an option payment of US$20,000 upon the signing of the agreement.

4.3.4 Royalties Payable to the Government of Guyana

The State is entitled to a 5% non-contributory interest or NSR royalty on gross production from a MSMP and 8% on gross production from a ML. In most cases involving large scale mining operations by foreign corporations, it is necessary to negotiate and enter into a Mineral Exploitation Agreement with the Ministry of Natural Resources. Such an agreement would include, but not be limited to, prospecting, exploration, mining, processing, royalties and tax concessions, including for income tax, duty and value-added tax exemptions, withholding taxes, among other items.

4.4 Environmental Liabilities

Goldsource has a reclamation provision related to exploration activity and construction of the pilot plant at Eagle Mountain. This provision is currently estimated at US$308,615 (December 31, 2021). Significant reclamation and closure activities are expected to include land rehabilitation, the removal of buildings and processing plant, and other associated costs. It is assumed that rehabilitation costs will be incurred in 2027.

To the Qualified Person’s knowledge, there are no other known environmental liabilities at the Project, although some relatively small areas at low elevations and far from the main project have been deforested and disturbed by historical small-scale illegal alluvial mining before the involvement of Goldsource. There are currently no illegal artisanal miners on the Property.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Topography, Elevation and Vegetation

The Property covers an area with elevations ranging from low-lying alluvial valleys (elevation ~100 m above mean sea level (amsl) to the summit of Eagle Mountain (elevation ~724.8 m amsl). Majority of the Eagle Mountain deposit lies on the northwestern and southwestern slopes of Eagle Mountain and generally lies at elevations between 160 m amsl and 500 m amsl, extending over an area approximately 2.5 km x 1 km (Figure 5-1). The topography in the mineralized areas is characterized by steep sections separating less steep "benches".

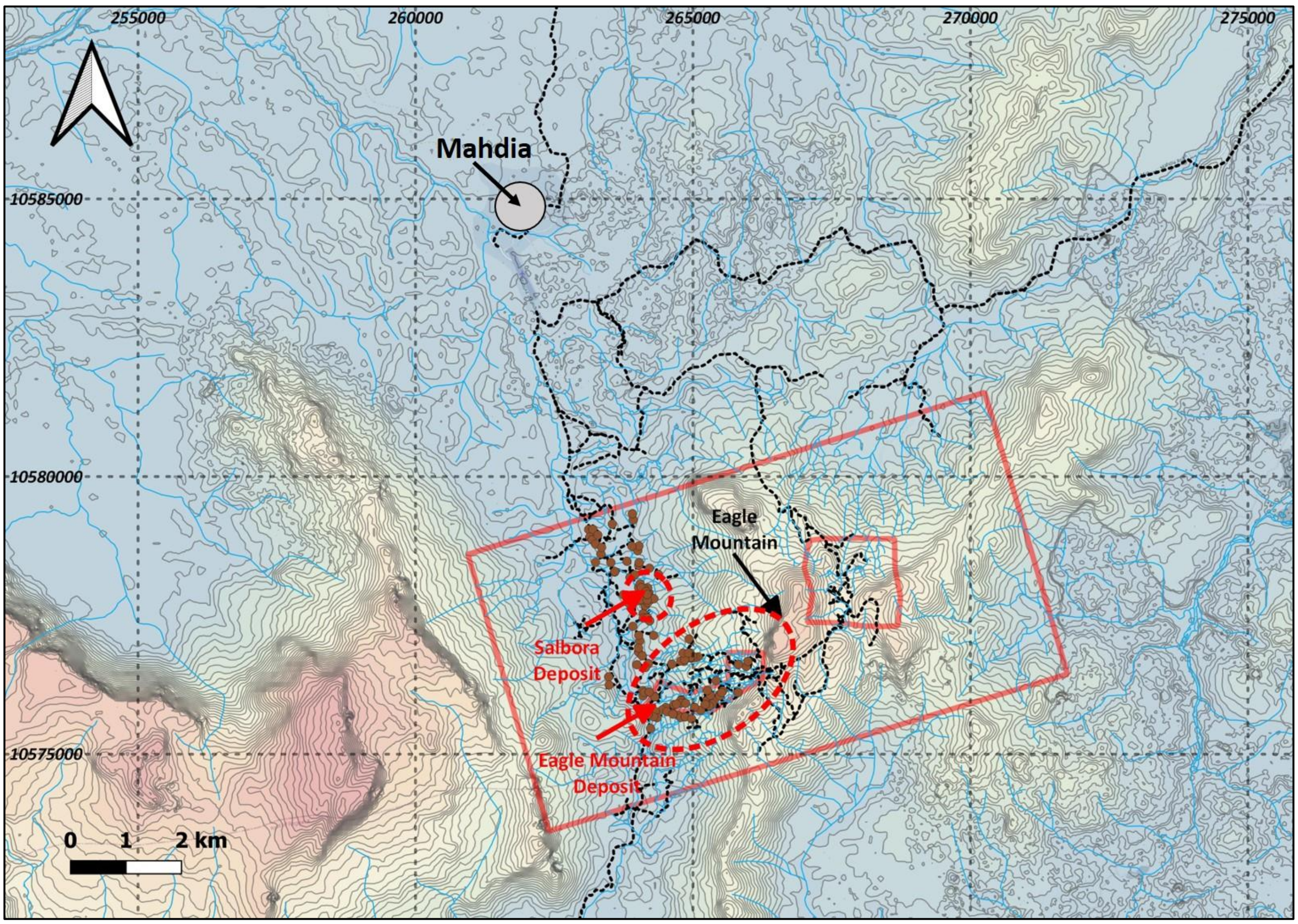

Figure 5-1: Physiography of the Eagle Mountain Property area showing the location of the Eagle Mountain and Salbora deposits, and of Mahdia town

At higher elevations near the summit of Eagle Mountain, dolerite sills and dikes form steep cliffs of up to 150 m vertical relief. Unweathered dolerite boulders up to 15 m in diameter derived from erosion of the dolerite are frequent at lower elevations on the western flank of Eagle Mountain.

Small deeply incised creeks widen quickly to form alluvial flats up to 2 km wide that drain either to the Mahdia River and then to the Potaro River to the north, or south to the Minnehaha River and then to the Konawaruk River. The alluvial deposits within both watersheds have been historically worked by artisanal miners and are still worked today outside the Property area. According to the GGMC, more than 1 Moz of gold have been produced by artisanal miners and recorded at GGMC since commencement of production records approximately 50 years ago.

The area is covered by thick tropical jungle, including areas of historical mining dating to 1940s which have since been regrown by jungle vegetation.

5.2 Access to the Property

The Eagle Mountain and Salbora deposits are located in an area of the Eagle Mountain PL 03/2019 and MSMP K-60/MP/000/2014 located approximately 7 km south of Mahdia Township (Figure 5-1) and 6 km south of the Mahdia airstrip. The Mahdia airstrip was hard surfaced in the spring of 2010 and is suitable for small commercial and charter twin-engine passenger aircraft. Charter flights from Georgetown to Mahdia provide the quickest access route to the Project.

Mahdia can be accessed by road from Georgetown in 5–7 hours (approximately 275 km). The road is paved from Georgetown to Linden. Access between Linden and Mabura is via a wide laterite road historically built by OGML and Demerara Timbers Ltd. The road between Linden and Mabura (121 km) is currently the subject of a major road upgrade project financed by UK Caribbean Infrastructure Fund, Caribbean Development Bank and the government of Guyana. An unpaved road from Mabura to Mahdia is narrow and locally steep. The Mabura/Mahdia road is all weather, though access can be difficult during the rainy seasons. A large, motorized pontoon ferry is used to cross the Essequibo River at Mango Landing.

From Mahdia, the “old Potaro-Konawaruk Road” provides truck access to the western portion of the Eagle Mountain PL at Mile 118, a distance of 8 km. In 2015 and while Goldsource Mines was building the gravity pilot processing plant at Eagle Mountain, the Company widened and resurfaced the road and constructed eleven wooden bridges, allowing 40-ft container trucks with equipment to reach Eagle Mountain camp. From there, the old Millionaire Hill and Porphyry Hill roads allow easterly access into the main mineralized areas. These roads are steep and currently only traversable by four-wheel drive vehicles.

5.3 Climate

The climate is tropical, hot, and humid, with a main rainy season in May–August and “Christmas” rains in November–February, separated by a short March–April dry season and a more consistent dry season from August to October.

For Mahdia, the average monthly rainfall is estimated to range from 93 mm (October) to 418 mm (June), with a recorded maximum of nearly 700 mm for the month of June and an annual average rainfall of 2,826 mm. An abrupt topographic break in the Eagle Mountain project area results in higher average rainfall than Mahdia. In May 2021, the Company installed a weather station to provide project-area rainfall statistics.

Temperatures are hot and vary little through the year, with average monthly lows ranging from 21.4°C (January) to 23.1°C (September), and average monthly highs between 29.6°C (January) and 31.6°C (September and October).

Exploration and development activities may be conducted year-round at the Property; however, access can be more difficult during the rainy seasons.

5.4 Local Resources and Infrastructure

5.4.1 Sources of Power

There is no commercial electric power available locally. An abandoned hydroelectric power station is located at Tumatumari, approximately 21 km northeast of the resource area. This was constructed in 1957 by British Goldfields Limited and operated until 1959 when mining operations ceased. The Government of Guyana recommissioned the station in 1969 to serve local communities. This development included an embankment dam, a concrete overflow dam, and a two-unit powerhouse with an installed capacity of 1,500 kW.

Several organizations have signed memorandums of understanding within the last 10 years to investigate the viability of refurbishing Tumatumari, but all are now believed to have expired. The Amaila Falls area located approximately 50 km west-northwest of the Eagle Mountain PL has received government approvals for a 165 MW hydroelectric power project. Construction is scheduled to start in 2022.

Goldsource has two 500 kVA and one 120 kVA diesel generators on site. The generators were acquired to provide power to the pilot plant, which is no longer in operation, and the exploration camp, which can host up to 65 people at Eagle Mountain. The generators are still maintained and functioning.

5.4.2 Water

Potable water is available from multiple small creeks and a few small rivers within the Eagle Mountain PL which will be unaffected by proposed mining and processing plan.

5.4.3 Local Infrastructure and Mining Personnel

The nearby town of Mahdia was founded in 1884 and is the capital of the Potaro Region 8. It is reported to have a population of approximately 3,000 people, an increase from previous estimates of ~1,000 people since Mahdia was declared a township. Employment is dependent on local artisanal mining for gold and diamonds and mining related activities. There is a local hospital, regional airport, school, shops, restaurants, a gas station, several mechanical shops, and two hotels/guesthouses. Diesel generators provide electrical power to the town. Cell phone service is provided by Digicel and GTT. Apart from the hospital and regional airport, the limited infrastructure available (particularly with respect to power) is typical of inland villages in Guyana.

Goldsource’s current field activities are supported by a 65-man exploration camp on the Eagle Mountain Property. Supplies are partly sourced from Georgetown and partly from Mahdia. The camp has limited Digicel cell-phone coverage and an established satellite link at camp provides internet access.

The local economy of the Mahdia area is dominated by small-scale mining activity and a labour force familiar with mining is available to draw upon for any future mining activities. Skilled workers and specialists will need to be sourced from outside the region. Elsewhere in Guyana, several large gold mining operations are currently active, and suitable personnel should be available within Guyana, with limited reliance on expatriates.

5.4.4 Property Infrastructure

The Property has no infrastructure apart from dirt tracks that have been constructed to facilitate exploration, the current exploration camp and offices, a registered helipad site for potential emergency Medivac, and the remaining infrastructure from a gravity concentration plant that was constructed in late 2015 and operated until early 2017 to process the saprolite portion of the Eagle Mountain deposit (see Section 13.4).

5.4.5 Adequacy of Property Size

The area of the Eagle Mountain PL at this time appears to be sufficiently large for the proposed exploration activities and for the infrastructure necessary for potential future mining operations (including potential tailings storage areas, potential waste disposal areas, and potential processing plant sites), should a mineable mineral deposit be delineated at the Property. Alluvial flats in the northwest and southwest areas of the Eagle Mountain PL are potentially suitable sites for infrastructure and tailings facilities.

6 History

6.1 Project Ownership History

6.1.1 Golden Star Resources Ltd and Omai Gold Mines Ltd

The Eagle Mountain Property (then called Minnehaha) and adjacent Mahdia areas to the north were originally held by Golden Star Resources Ltd (GSR) as a five-year Mineral Agreement with the Republic of Guyana ("the State") dated 30 October 1987. Work was suspended between 1992 and 1997 while the State developed its current PL system, with various extensions of rights granted by Ministerial Decree.

In 1998, Cambior Inc. ("Cambior") entered into a joint venture agreement with GSR to explore the Eagle Mountain Property through OGML and a three-year PL was granted to GSR under the new licensing system and then transferred to OGML on 23 December 1998. A new PL was issued to OGML in October 2000 for a three-year period, and GSR sold its interest in OGML to Cambior in 2002, after which Cambior became the unique owner of the Property through OGML. The PL was renewed in its entirety for a two-year period in October 2003 and again in 2005.

OGML and Cambior became part of IAMGOLD in 2006, with OGML becoming a 95% owned subsidiary of IAMGOLD. The Republic of Guyana held the remaining 5% of OGML. A new PL (15/2007) was issued for a three-year period 14 October 2007, and in November 2010 a renewal of this PL until October 2011 was approved.

In December 2010, the Eagle Mountain PL was transferred from OGML to Eagle Mountain Gold Inc. (EMGI – the holding company for OGML) and was again renewed in October 2011 for an additional year. In August 2012, a new licence under EGMI was approved by the GGMC.

6.1.2 Stronghold/EMGI Joint Venture

On 29 September 2010, TSX-V listed Stronghold Metals Inc. announced it had entered in an Earn-In and Joint Venture Agreement with OGML and EMGI, affiliates of IAMGOLD, whereby it could earn increasing interests up to 95% in EMGI and the Eagle Mountain Property, through its Guyana subsidiary Stronghold, based on a combination of cash payments, share issuances, and work expenditures. At the date of the agreement, EMGI owned 100% of the Eagle Mountain Property and EMGI was 100% owned by OGML (95% owned by IAMGOLD and the remaining 5% held by the Republic of Guyana).

On 16 January 2012, Stronghold announced that it had entered in an Amended and Restated Earn-In and Joint Venture Agreement with OGML and EMGI. The amended agreement made several major changes to the terms of the original agreement pursuant to which the Stronghold was granted the right to acquire up to 95% of the issued and outstanding shares of EMGI.

Up to 16 January 2012, Stronghold had paid OGML US$600,000, issued OGML 4,000,000 shares, and incurred approximately US$3,500,000 in exploration expenditures on the Property. Stronghold incurred more than twice the required expenditures under the original agreement, which in part led to the restructuring of the amended agreement.

Under the terms of the original agreement, in addition to the cash and share payments made to 16 January 2012, Stronghold was required to:

- Pay OGML US$900,000 by 28 February 2012.
- Pay OGML an additional US$1.0 million; spend US$3.5 million in qualified expenditures on the Property and issue OGML 2 million common shares of Stronghold by 31 October 2012, in order to earn a 50% interest in EMGI.

- Pay OGML an additional US$1.0 million to increase the ownership to 95%. The Republic of Guyana holds the remaining 5%.

Under the terms of the amended agreement, OGML agreed to immediately transfer a 50% interest in EMGI to Stronghold in consideration of the issuance of 7,500,000 shares of Stronghold. The changes reduced the cash obligation required under the original agreement and acknowledged the progress Stronghold had made on the Property with US$3.5 million expenditure during 2011.

Stronghold had the right to acquire the remaining 45% interest (or 50% interest, if the Government of Guyana would not exercise its right to keep the 5%) in EMGI on or before 30 April 2013 by paying OGML an additional US$1,000,000 in cash or shares, at the Stronghold's discretion. The number of shares were to be determined based on a per share price equal to a 5% discount to the VWAP of Stronghold's shares for the 20 trading days before the date Stronghold notified OGML of its intention to issue such shares, provided such share issuance did not result in OGML controlling in excess of 19.99% of Stronghold's issued and outstanding shares. Between 31 October 2012 and 31 January 2013, OGML could require Stronghold to acquire the remaining 45% interest (or 50%, as above) in the Property under the same terms and conditions.

Upon the grant of a mining or exploitation licence by the Republic of Guyana for the development of the Property, Stronghold would pay OGML an additional US$3,500,000. Stronghold could, at its sole option, elect to issue shares to OGML having a deemed value of US$3,500,000, such value to be based on a per share price equal to a 5% discount to the VWAP of Stronghold's shares for the 20 trading days before the date Stronghold notified OGML of its intention to issue such shares, provided such share issuance did not result in OGML controlling in excess of 19.99% of Stronghold's issued and outstanding shares.

Finally, within 180 days from commencement of commercial production of gold from the Property, Stronghold would pay US$5,000,000 cash to OGML.

Stronghold had the option to issue shares to OGML in lieu of the latter two cash payments provided such share issuance did not result in OGML controlling in excess of 19.99% of Stronghold's issued and outstanding shares.

On 30 March 2012, Stronghold announced it had exercised its option to earn a 50% interest in EMGI. Stronghold issued 7,500,000 shares to OGML, which together with prior cash payments (US$600,000), share issuances (4,000,000) to OGML, and completion of exploration expenditure commitments (approximately US$3,500,000) on the Property, met the conditions for Stronghold to acquire 50% of EMGI and effectively an indirect 50% interest in the Property. Stronghold and OGML became joint venture partners, with Stronghold continuing to act as operator.

On 6 July 2012, Stronghold Metals Inc. announced its intent to change its name to Eagle Mountain Gold Corp. (EMGC) to emphasize its focus on the exploration and development of the Eagle Mountain Gold Project.

On 11 February 2013, EMGC announced that it had exercised its option to acquire the remaining 50% interest in EMGI for a total of 100% interest in the Eagle Mountain Property from OGML pursuant to the terms of its 16 January 2012 Amended and Restated Earn-In and Joint Venture Agreement. EMGC issued OGML 3,236,246 common shares in the capital of EMGC in consideration of the US$1,000,000 payment required for the remaining shares in EMGI. Consequently, as of 11 February 2013, OGML (owned 95% by IAMGOLD and 5% by the Republic of Guyana) held 5,536,246 out of 37,083,526 shares, representing 14.93% of the issued and outstanding shares in the EMGC subject to a hold period expiring four months and one day from their date of issue.

The closing of this transaction gave EMGC 100% ownership of EMGI and the Property. Subsequently, on 9 August 2013 GGMC issued a new three-year PL (20/2013) to EMGC's 100% Guyanese subsidiary, Stronghold. The PL gave EMGC specific exploration rights to gold, valuable minerals and molybdenum, and base metals including copper, lead, zinc and tungsten.

6.1.3 Goldsource – Current Ownership and Title

Eagle Mountain Prospecting Licence (PL 03/2019)

On 28 February 2014, Goldsource and EMGC completed a business combination, jointly announced on 26 November 2013 and 3 March 2014. As a result, all the shareholders of EMGC became shareholders of Goldsource and EMGC became a wholly owned subsidiary of Goldsource. Pursuant to the business combination, each common share of EMGC was exchanged for 0.52763 of a common share of Goldsource. EMGC's common shares were delisted from the TSX-V on 5 March 2014, as announced in a TSX-V Exchange Bulletin.

As a condition to the Goldsource and EMGC business combination, the parties announced on 6 March 2014 the execution of an Amendment Agreement with OGML, with respect to EMGC's 100% owned Eagle Mountain Property. The Amendment Agreement made several changes to the terms of the previous agreement dated 16 January 2012. Certain cash and/or common share payments to OGML by EMGC set out in the 16 January 2012 agreement and based on effective commencement of commercial production on the Property and the granting of a ML by GGMC were deferred and triggered by different events as summarized in the amending terms below:

a) Following the closing of the Business Combination announced on 3 March 2014, Goldsource agreed to issue to OGML 3,389,279 common shares subject to TSX-V approval, resulting in OGML acquiring 8% of the outstanding shares of Goldsource.

b) Goldsource shall pay OGML US$3,025,500.94 ("Initial Payment") in cash or, at Goldsource's option in common shares of Goldsource, at a price per share equal to a 5% discount to the VWAP of Goldsource's common shares for the 20 trading days prior to issuance, upon the earlier of:

    1) If average market price of gold is US$1,400/oz or higher upon achieving total production of 40,000 ounces of gold, then the Initial Payment is due 90 days after 40,000 ounces have been produced, otherwise payment to be made 90 days after 50,000 ounces produced from the Property, or

    2) Ninety days after having completed one year of gold production under a Large-Scale Mining Licence issued by the GGMC, or

    3) Five days after the date on which the 20-day VWAP of Goldsource exceeds CAD$0.75 per share, provided such date is not earlier than 1 March 2015.

c) Goldsource shall pay OGML an additional US$5,000,000 ("Final Payment") in cash or at Goldsource's option, US$2,500,000 cash and US$2,500,000 in common shares of Goldsource, at a price per share equal to a 5% discount to the 20-day VWAP of Goldsource's common shares. The Final Payment shall be made one year after the earlier of:

    1) One year after the payment set out in (b)(1) above has been made, or

    2) After having completed one year of gold production under a Large-Scale Mining Licence issued by the GGMC.

On 18 October 2019, GGMC issued a new three-year PL (03/2019) which can be extended to five years till 18 October 2024 to Goldsource's 100% Guyanese subsidiary Stronghold. The PL covers 4,784 ha and gives Goldsource specific exploration rights to gold, valuable minerals and molybdenum, and base metals including copper, lead, zinc and tungsten.

Kilroy Medium-Scale Mining Permit K-60/MP/000/2014

The Kilroy MSMP was issued on 17 July 2014 and is valid till 17 July 2024. It is the intention of Goldsource, subject to achieving certain technical conditions in the coming years, to apply for a ML as per Section 4.2.1, before the expiration of either the Eagle Mountain PL or the Kilroy MSMP.

6.2 Historical Property Exploration

Exploration work conducted prior to Goldsource and its predecessor companies' involvement in the Eagle Mountain PL is summarized in this section.

6.2.1 Pre-1986 Exploration

Alluvial gold has been exploited in the Eagle Mountain area since at least 1884. Dredging operations were carried out by the Minnehaha Development Company and the British Guiana Consolidated Gold Company in the Mahdia and Minnehaha rivers up to 1948 (MacDonald, 1968). Total production from the general area is estimated at over 1 Moz of gold from alluvial and eluvial sources.

During World War I and World War II, several small stamp mills processing vein material from tunnels and shafts operated in the Eagle Mountain area. The largest included No.1 Hill, which reportedly produced 1,000 ounces of gold from 1,000 tonnes of material in the period 1912–1914. The mine was revived in 1921, although production statistics were not recorded. In 1946, a small-scale miner named Larken drilled near the Powder Tunnel and also at Dickman's Hill north of the Eagle Mountain PL boundary.

Anaconda British Guiana Mines Ltd (Anaconda) explored the Eagle Mountain area in 1947 and 1948. Most quarterly and annual reports are still available and include maps. Anaconda's activities included geological mapping, diamond drilling (57 holes), tunnelling, and shaft sinking. This work outlined a series of shallow dipping (20–50°), gold-bearing mylonite zones of variable width (1.8–10.7 m), occurrences of auriferous sub-vertical quartz veining, and molybdenite mineralization within quartz-feldspar porphyry to the west of Minnehaha Creek (Waterman, 1948). A summary report by Bracewell (1948) includes additional information such as petrology and specific gravity data from drill core.

In 1964–1965, a soil sampling program completed by the Guyana Geological Survey outlined several significant molybdenum geochemical anomalies, one with a cumulative strike of 2 km within the Eagle Mountain PL (Bateson, 1965).

In 1966–1967, Amax Exploration Inc. drilled nine vertical holes into the Dickman's Hill anomaly located to the north, outside of the Eagle Mountain PL boundary, but intersected only low-grade molybdenum mineralization (Banerjee, 1970). Data from this drilling program has not been located.

During 1970–1973, the Geological Survey of Guyana conducted follow-up work on the Eagle Mountain molybdenum anomaly within the Eagle Mountain PL, including pitting and 15 diamond (AX) drillholes. An additional five holes were drilled at Dickman's Hill to the north and outside of the Eagle Mountain PL boundary (Banerjee, 1972). Some of this core still exists, although a portion was submitted to a commercial laboratory by GSR for re-assay. During the same period, drainage and soil sampling was carried out to test the Baboon Creek area for tungsten mineralization. This work revealed widespread scheelite mineralization, but not in high concentrations. Several reports on molybdenum and tungsten mineralization investigations at Eagle Mountain are summarized in a M.Sc. thesis by Inasi (1975).

Subsequent work by the GGMC was performed specifically to investigate the gold potential of the area, including eight vertical diamond drillholes (AX) completed in 1980 (Livan, 1981). Check assays completed at the GGMC and at various external institutions indicate that original gold assays are unreliable due to poor sample preparation techniques. Consequently, this data has not been included in the current Mineral Resource model.

6.2.2 Golden Star Resources Ltd (1986 to 1997)

In 1986, GSR tested the regional exploration potential of the Eagle Mountain PL area by detailed multi-element -80 mesh drainage sample analysis and panning. This work allowed subsequent exploration to be focused on discrete areas of identified gold anomalies. GSR carried out mapping, soil sampling, auger sampling and surface geophysics (very low frequency electromagnetics (VLF-EM) and magnetics) between 1988 and 1990.

The VLF-EM survey identified several distinct features that were interpreted as shear zones. Some of the known dykes could be identified by their strong magnetic signature. However, the large dolerite boulders, derived from weathering of the sill, create significant noise and render most of the ground magnetic data unusable (Jagodits, 1989).

From 1997, GSR completed deep augering, trenching, diamond drilling (1,285 m in 21 holes) and a preliminary three-dimensional (3D) model. Exploration results are documented in quarterly and annual reports held at the GGMC, and much of GSR's database was later transferred to OGML.

6.2.3 Growler Mine Joint Venture

Growler Mine Joint Venture partners obtained an Exclusive Exploration Permission (EEP) covering the Irene-Good Hope Creek headwaters in 1988. This area was briefly explored by Red Butte Resources and IMPACT Minerals. Several current small-scale permits held by a local owner occupy a portion of the original EEP area and are excluded from the Eagle Mountain PL (Figure 4-2).

6.2.4 Omai Gold Mines Ltd/Cambior Inc. (1998 to 2004)

OGML/Cambior exploration activities between 1998 and 2004 included diamond drilling (70 holes for 5,936 m), auger sampling, and surveying. This work is described in Section 6.3.1.

6.2.5 Omai Gold Mines Ltd/IAMGOLD Corporation (2006 to 2009)

A decision was made in late 2005 to re-examine the gold potential of the Eagle Mountain PL. Initial work included compilation of a digital GIS database incorporating all available historical data. A significant spatial offset between the Anaconda and GSR/OGML datasets as well as the topography in some areas was detected and subsequently corrected through this work.

Fieldwork resumed in early 2006 with a regional multi-element drainage sampling program (84 sites). Stream sediment results revealed no significant gold anomalies in the southeastern part of the Eagle Mountain PL and confirmed the historically identified areas of molybdenum mineralization. Several new tin-tungsten anomalies were also revealed. A number of areas were examined by shallow auger sampling and geological mapping, including an area of granitoid northeast of Zion, north of the Bishop-Growler excluded area and at the headwaters of Tiger Creek. Results were generally erratic.

In addition, Terraquest Ltd was contracted to fly the western part of the Eagle Mountain PL with a fixed-wing airborne radiometric and magnetometer survey. Total Count radiometric data dramatically highlights the regional-scale Mahdia Valley Fault. Not all the radiometric highs are directly related to the presence of granite; tailings and bare ground are also anomalous. Low magnetic areas correspond to areas of mafic volcanics without interbedded/faulted porphyry.

In late 2006, auger and outcrop sampling in the Zion-Bacchus area, together with rock and channel sampling in the Bottle Bank, Dead Stop and VG Pit areas, confirmed significant gold anomalies. Subsequent work programs included detailed auger sampling, principally over the Zion, Coolie (Toucan), and Kilroy-Bottle Bank areas, with a few lines in the Baboon area (6,255 samples from 1,985 auger holes). Several areas were trenched, and a number of historical adits were located and channel sampled. A total of 334 channel samples covering 306.3 m were collected, as well as 385 rock samples. Some petrological work was also completed.

Extensive auger sampling was instrumental in delineating the Eagle Mountain gold deposit. Together with earlier GSR/OGML/Cambior (1988–2004) programs, auger drilling by OMGL/IAMGOLD between 2006 and 2009 resulted in a total of 5,271 (1 m) auger sample sites and a total of 14,286 samples from 4,711 deep auger sites, collected over the entire Eagle Mountain PL area. In addition, 85 predominantly 1 m samples were collected from 10 Trado auger holes. Grab samples were collected at 184 locations where soils were very thin or absent. In total, 2,090 m of surface channel sampling was also completed in 39 localities, from hand dug and mechanically excavated trenches, road cuts, creek exposures, and small-scale workings.

The Eagle Mountain gold deposit was delineated by a 0.8 km^2 area of significant auger anomalies (Figure 6-1), where an anomalous result is defined as a minimum 3 m interval averaging over 0.5 g/t Au. The significant lateral extent of the auger anomaly is a consequence of the shallow-dipping deposit geometry and the fact that the soil profile is typically very thin in this area. The low-angle mineralized sheets are orientated approximately parallel to the topography in places so that the auger directly sampled mineralized saprolitic material.

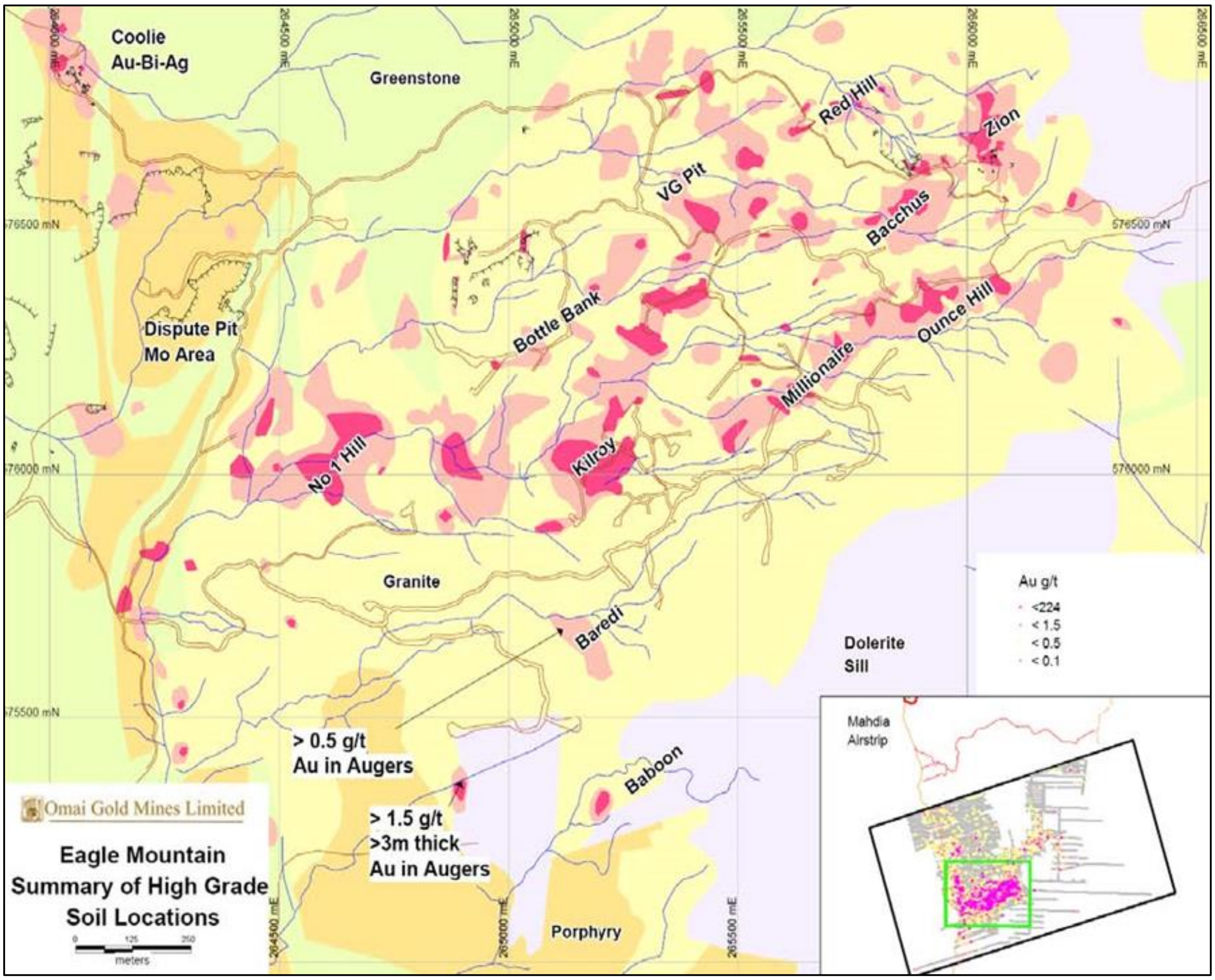

Figure 6-1: Eagle Mountain deposit area historical soil auger anomalies with local area names
Source: Casselman and Heesterman (2010)

Another significant auger gold anomaly occurs northwest of the main mineralized area, over flat alluvial areas. Systematic exploration to investigate potential alluvial resources has not been attempted, although small-scale miners have worked the Mahdia and Minnehaha valleys for at least 100 years.

A low-level gold anomaly to the northeast of the main mineralized area is potentially sourced from low-angle mineralized shear zones exposed on the other side of Eagle Mountain. Additional exploration is required to determine the tenor and thickness of mineralization in this area.

IAMGOLD completed a 3D induced polarization (IP) and resistivity survey in 2008 over the main mineralized area. Survey results enabled the identification of several major structures, and inversion 3D modelling confirmed the presence of low-angle structures bounding domains of differing geology (Hill, 2008).

OGML/IAMGOLD completed a total of 43 diamond drillholes for 8,060 m (EMD001 to EMD043; includes one restart) in four phases from 2007 to 2009. Drilling programs were designed to expand and further delineate the known gold resources, investigate the molybdenum potential of the Dispute Pit area (now called Powis) and to test satellite structural, geochemical and/or geophysical targets. Results of this work led to significant advances in the understanding of the mineralization styles at Eagle Mountain. Four, shallowly southwest dipping gold mineralization zones (Saddle, Zion, Kilroy, and Millionaire) that constitute the bulk of the 2009 Eagle Mountain deposit MRE were identified by OGML/IAMGOLD.

In the Dispute Pit area west of the Eagle Mountain deposit, follow-up drill targeting of scattered molybdenum anomalies yielded several significant gold intersections (e.g. 1.5 g/t Au over 14 m in EMD08-21). Gold mineralization in this area is specifically associated with “cloudy” quartz vein arrays associated with epidote alteration. Economically significant concentrations of this mineralization style have not been identified. In the Coolie 271B Adit (now called the Toucan area), a north-south striking quartz vein hosted in saprolitic granitoid is exposed in the adit walls, and averages 0.7 g/t Au over 6 m as well as 17.2 g/t Au over 19 m across the plunge of the vein. The sample widths are apparent; true thicknesses are uncertain. In the creek to the north, channel sampling across quartz veining in meta-volcanics returned results of 9.4 g/t Au over 3.5 m, 3.3 g/t Au over 3 m, and 9.8 g/t Au over 1 m. The sample widths are apparent; true thicknesses are uncertain.

Clouston (2009) considered the topography to be well defined over the main resource area but noted that it relied on sparser survey points in the fringe areas such as Baboon to the southwest and Dispute Pit to the northwest. Based on Clouston’s recommendations, additional theodolite survey points and traverses were collected by OGML after IAMGOLD’s October 2009 MRE. The survey included a total of 42 drillhole collars.

After completion of the October 2009 IAMGOLD MRE, OGML/IAMGOLD conducted specific gravity tests on a variety of fresh and saprolitic, mineralized and non-mineralized, rock types. The most significant observation was that the “Fresh” mineralized zones have average bulk densities of approximately 2.60 t/m^3 which was a 4% reduction from the value of 2.70 t/m^3 used for the October 2009 IAMGOLD MRE. The saprolitic mineralized zones maintained an average bulk density of approximately 1.60 t/m^3 as used for the October 2009 IAMGOLD MRE.

6.3 Historical Drilling Procedures

6.3.1 Drill Programs (1947 to 2009)

This section describes historical drilling procedures utilized by Anaconda, Guyana Geological Survey/GGMC, GSR, and OMGL from 1947 to 2009.

Anaconda completed 57 AX-sized diamond drillholes totalling 5,832 m in the period 1947 to 1948 (AD01 to AD57; Table 6-1 and Figure 6-2). Most holes are located within the known resource area but have not been used for the current MRE.

Guyana Geological Survey completed eight vertical AX-sized diamond drillholes totalling 473 m in 1970 to evaluate the gold potential of the Property. Gold assay results are incomplete and not considered representative. Consequently, they have not been incorporated into the database. Some of the holes were re-logged by GSR in the 1980s, which was useful for locating barren post-mineral dikes.

GGMC followed-up Anaconda’s significant molybdenum results with soil sampling, pitting and 15 AX-sized diamond drillholes totaling 4,187 m (EHD1 to EHD15; Table 6-1, Figure 6-2). Tape-and-compass surveying was used to define collar locations. However, several collars were subsequently relocated in the field and re-surveyed. Downhole dip survey data but not azimuth was recorded. Core was transported to Georgetown (Guyana), split and assayed for molybdenum using a spectrographic method. Results were encouraging, but partial re-assaying and re-logging of EHD02, EHD03, EHD08, EHD09, EHD10, EHD14 and EHD15 by GSR indicated that GGMC assay results had overstated molybdenum grades and were erratic for gold. Only GSR assay data has been retained in the database.

In 1997, GSR completed 30 diamond drillholes totaling 2,423 m using a bulldozer-supported Longyear 38 drill rig (EM001 to EM021 and re-drills; Table 6-1, Figure 6-2). HQ-sized core was drilled to the base of saprolite, reducing to NQ-sized core in hard rock. All drillhole collars were located and systematically surveyed using a theodolite. Down-hole survey data was collected using a Tropari survey tool. Core orientation surveys were completed.

GSR drilled a further 20 diamond drillholes totaling 1,114 m in late 1998 during the joint venture with OGML (EM022 to EM040; Table 6-1). Late in the following year, management of drilling shifted to OGML and 31 diamond drillholes totalling 2,399 m were completed (EM99-41 to EM99-70; Table 6-1). Almost all holes drilled between 1998 and 1999 were vertical.

OGML resumed drilling in 2007, with 21 diamond drillholes totaling 2,209 m (EMD07-01 to EMD08-19; Table 6-1). An RB 37 man-portable hydraulic drill rig was used, enabling access to steep areas such as Zion. HQ-sized core was drilled to the base of saprolite, reducing to NQ-sized core in fresh rock and continued to a maximum depth of 192 m. All drillhole locations were surveyed and marked with a concrete monument. Downhole survey data was not collected.

In 2008 to 2009, 25 diamond drillholes totalling 5,850 m were completed using a bulldozer-supported Longyear 38 drill rig (EMD08-20 to EMD09-43; Table 6-1). Holes tested predominantly geophysical targets. HQ-sized core was drilled to the base of saprolite, reducing to NQ-sized core in fresh rock and continued to a maximum depth of 414 m. Downhole survey data was collected for all holes except EMD09-32 to EMD09-37 using a Flexit survey instrument. All drillhole locations were marked with a concrete monument. All drillhole collars were positioned using a theodolite survey instrument. Core orientation surveys were completed for holes EMD08-32 to EMD08-43 using an orientation spear. Inconsistent work by drill crews and locally rubbly core resulted in the orientation work being discontinued.

Table 6-1: Summary of drilling completed on the Eagle Mountain Property (1947 to 2009)

Period	Company	Hole numbers	No. of DDH	Metres	Comments
1947 to 1948	Anaconda	AD01 to AD10, AD12 to AD26, AD28 to AD57	55	5,832	AX core. Not included in 2012 MRE.
1970	Guyana Geological Survey	G01 to G08	8	473	AX core. Only lithology data from a few holes available. Not included in 2012 MRE.
1973	Guyana Geological Survey	EHD01 to EHD15	15	4,172	AX core. Some holes re-assayed by Golden Star Not included in 2012 MRE.
1997	GSR	EM001 to EM021	21 (30 including failed starts)	2,423	HQ/NQ core. Metreage includes nine failed holes (272.01 m) that were restarted.
1998	GSR/OMGL	EM022 to EM040	19 (20 including failed starts)	1,114	HQ/NQ core – most holes vertical. Metreage includes one failed hole (16.5 m) that was restarted.
1999	OMGL/Cambior	EM99-41 to EM99-70	30 (31 including failed starts)	2,399	HQ/NQ core – most holes vertical. Metreage includes one failed hole (10.5 m) that was restarted.
2007 to 2008	OMGL/IAMGOLD	EMD07-01 to EMD08-19	19	2,209	HQ/NQ man-portable rig. Two drilling periods.

Period	Company	Hole numbers	No. of DDH	Metres	Comments
2008 to 2009	OMGL/IAMGOLD	EMD08-20 to EMD09-43	24 (25 including failed starts)	5,851	HQ/NQ LY38 – two drilling periods. Metreage includes one failed hole (66.0 m) that was restarted.
Total			**191 (203 including failed starts)**	**24,473**	**Includes failed starts**

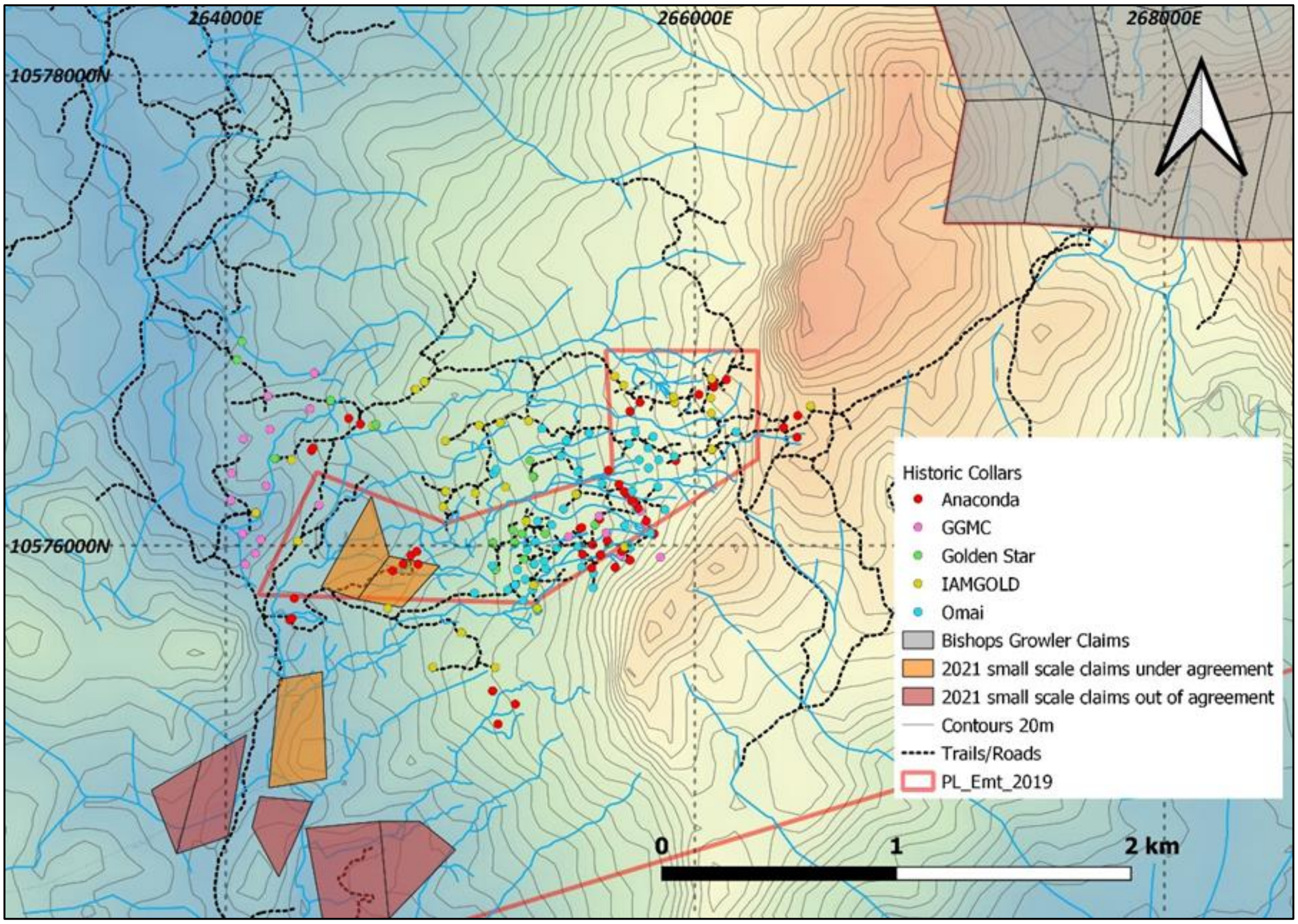

Figure 6-2: Eagle Mountain – historical diamond drillholes location plan

6.4 Historical Drill Core Handling, Logging and Sampling Methods

6.4.1 Drill Core Logging and Sampling

The sampling methodology described in this section relates specifically to post-2005 OGML diamond drilling campaigns. However, a similar procedure was followed for earlier GSR and OGML drillholes.

Diamond drill core was photographed using a digital camera and geotechnical data (recovery and rock quality designation – RQD) was recorded prior to geological logging. Historical core was also systematically photographed where available. Recovery data was recorded for most historical holes, and RQD data was documented for EM99-41 onwards.

The holes were logged and sample intervals marked out by the supervising geologist. Samples were collected to a minimum interval of 30 cm and a maximum of 1.5 m in areas that were visually unmineralized. Thick dolerite and gabbro-norite dikes were not routinely sampled, except at contact zones. Most samples were cut with a diamond saw, with one half placed in a sample bag and the other half retained in the core box for reference. A hydraulic core splitter was used to halve samples from drillholes directly targeting molybdenum mineralization and from all holes drilled prior to 2007. This applies to only 81 drillholes in the database.

Blanks and Rocklabs' commercial Certified Reference Materials (CRM) were randomly placed within the sample stream at a frequency of one blank and one standard per 50 samples. Blanks were inserted within zones that were considered to be mineralized or immediately after a sample containing visible gold. Blank material consisting of bauxite was inserted within saprolitic sample intervals; blank Omai dolerite was used for fresh rock sample intervals.

6.5 Previous Mineral Resource Estimates

6.5.1 Mineral Resource Estimate (2009–2010)

In October 2009, IAMGOLD Technical Services and Exploration Guyana Group (ITS) reported an internal MRE (Clouston, 2009). This was reviewed and audited by ACA Howe at the request of Stronghold. ACA Howe's 2010 audit was reported in a Technical Report prepared in accordance with NI 43-101 (Roy and Trinder, 2010).

The Mineral Resources were reported as Inferred classification using a cut-off grade of 0.5 g/t Au, estimated at 17.96 Mt with an average grade of 1.27 g/t Au for 733,500 ounces of gold.

6.5.2 Mineral Resource Estimate (2012–2014)

EMGC retained ACA Howe to prepare an updated MRE for the Eagle Mountain gold deposit in 2012 (Trinder, 2012). The MRE was prepared in accordance with CIM Definition Standards on Mineral Resources and Reserves (adopted 27 November 2010) and reported in accordance with NI 43-101. The Mineral Resource was reported at a cut-off grade of 0.5 g/t Au in Inferred and Indicated classification. Indicated Mineral Resources were estimated as 3.9 Mt at 1.49 g/t Au for 188,000 ounces of gold. Inferred Mineral Resources were estimated as 20.6 Mt at 1.19 g/t Au for 792,000 ounces of gold.

The 2012 MRE was re-issued in 2014 on behalf of Goldsource in a technical report disclosing a Preliminary Economic Assessment of the Eagle Mountain Saprolite Gold Project (Roy et al., 2014). Neither EMGC nor Goldsource had completed additional drilling since the 2012 MRE, therefore ACA Howe re-issued and reported the Mineral Resource without change, with an effective date of 15 June 2014 and in accordance with NI 43-101.

6.5.3 Mineral Resource Estimate (2021)

EMGC retained CSA Global to prepare an updated MRE for the Eagle Mountain gold deposit in 2021 (Longridge and Martinez, 2021). The MRE was based on results from 674 core holes for 57,550 metres drilled, as well as 158 auger drillholes for 532 metres drilled, which includes infill and exploration drilling up to 6 November 2020.

The 2021 MRE was prepared in accordance with CIM Definition Standards on Mineral Resources and Reserves (adopted 27 November 2010) and reported in accordance with NI 43-101. The Mineral Resource was classified as Inferred and Indicated and reported at a cut-off grade of 0.3 g/t Au for Saprolite and 0.5 g/t Au for Fresh rock. The MRE was constrained by an optimized pit shell based on a gold price of US$1,500/oz.

For the Eagle Mountain deposit, updated Indicated Mineral Resources were estimated as 22 Mt at 1.09 g/t Au for 782,000 ounces of gold. Inferred Mineral Resources were estimated as 24 Mt at 1.08 g/t Au for 835,000 ounces of gold. The updated MRE incorporated a substantial increase in gold ounces for both Indicated category resources amounting to 594,000 or 316%, and Inferred resources amounting to 43,000 or 5%.

For the Salbora deposit, maiden Indicated Mineral Resources were estimated as 0.81 Mt at 2.57 g/t Au for 67,000 ounces of gold. Inferred Mineral Resources were estimated as 0.7 Mt at 1.52 g/t Au for 835,000 ounces of gold.

The 2021 MRE is superseded by the 2022 MRE presented in Section 14 of this report.

7 Geological Setting and Mineralization

7.1 Regional Geology

The Eagle Mountain Gold Project occurs in the northern part of the Guiana Shield, an area of prominent Paleoproterozoic greenstone and tonalite-trondhjemite-granodiorite (TTG) belts. The Eagle Mountain Gold Project lies near the southwestern margin of these belts that are shown as red and green in Figure 7-1.

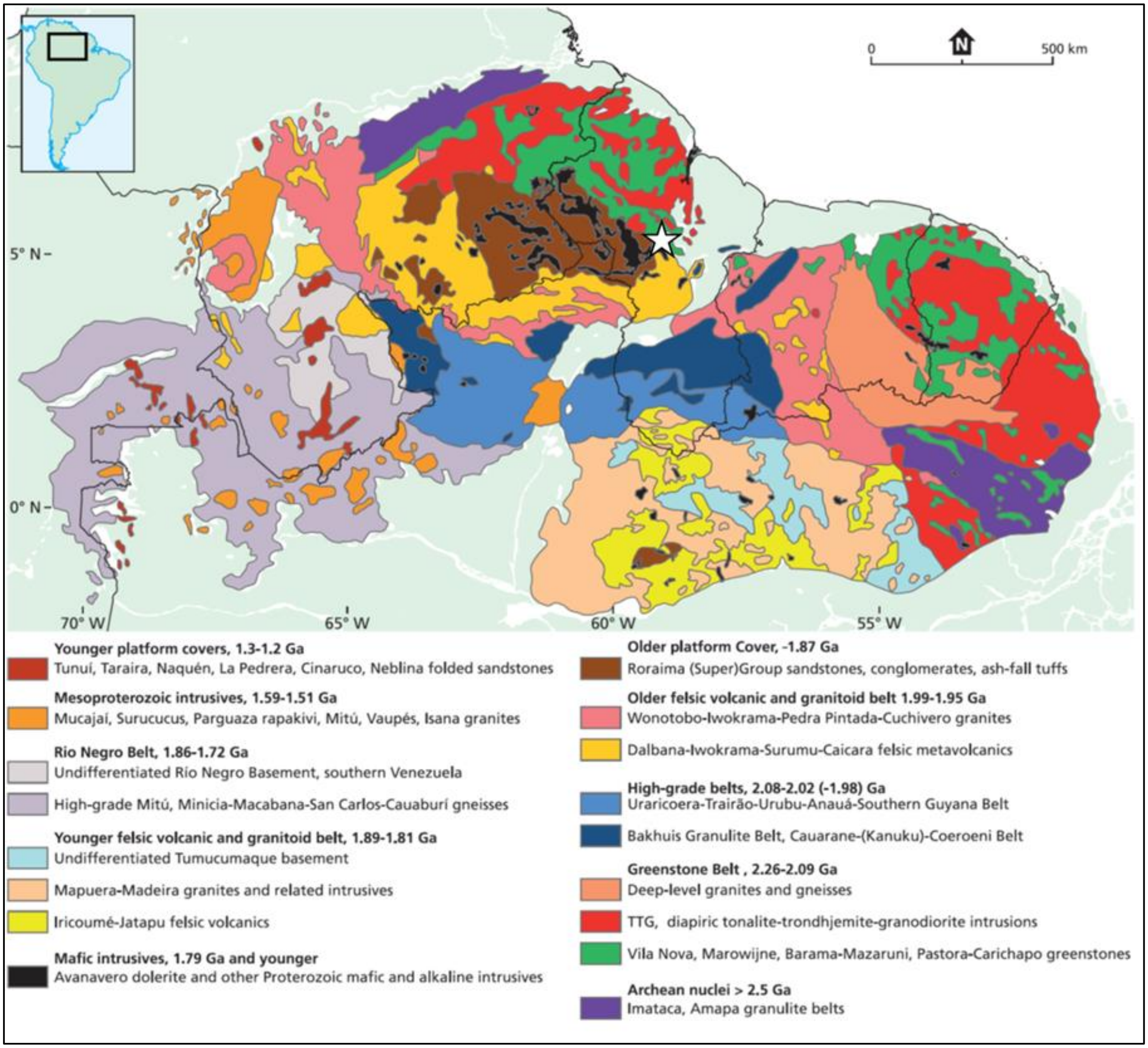

Figure 7-1: Simplified geological map of the Guiana Shield (from Kroonenberg et al., 2016)

Note: The location of the Eagle Mountain Gold Project is shown by the white star.

The greenstone-TTG belts are generally attributed to the Trans-Amazonian Orogeny. The orogeny records the convergence and eventual collision between the Archean nuclei of the Amazonian Craton and the West African Craton, thought to have occurred between 2.2 Ga and 1.9 Ga (Kroonenberg et al., 2016). The belts share close similarities with the more widely explored Birimian of the West African Shield, where numerous >2 Moz gold deposits are known in Senegal, Mali, Guinea, Ivory Coast, Ghana, and Burkina Faso.

Within the greenstone-TTG terrain, a series of major northwest-southeast striking, sinistral shear zones within a 75–100 km wide belt developed during Trans-Amazonian orogenesis (Voicu et al., 2001). These structures are spatially associated with many known gold deposits in Guyana (e.g. Voicu et al., 1999; Bassoo and Murphy, 2018). The Eagle Mountain Gold Project lies between two of these structures, the Makapa-Kuribrong Shear Zone (MKSZ) and Issano-Appaparu Shear Zone (IASZ). It is possible that the Eagle Mountain deposit is associated with another of these regional structures.

7.2 Property Geology

The Property is underlain by an older package of metavolcanic rocks that have been affected by several intrusions of various ages and compositions. These metavolcanics are typically dark coloured and fine-grained, contain minor disseminated pyrite and display a general cleavage trending 030°. The metavolcanics are generally mafic to intermediate in composition (tholeiitic basalts and andesites have been distinguished), although more felsic compositions are also recorded (dacite and rhyolite).

Metasediments, including sericitic fine-grained arkose and manganiferous siltstones, are locally interbedded with the mafic meta-volcanics. In addition, polymictic volcaniclastic units are also locally interbedded in the package. These older metavolcanic and minor metasedimentary rocks have been intruded by older mafic intrusions. Both the older intrusions and the host units have also undergone greenschist facies metamorphism, with porphyroblasts of actinolite/hornblende observed.

This package of metavolcanics and metasediments, as well as mafic intrusions, has been intruded by a composite granitoid pluton that hosts the gold mineralization at the Eagle Mountain deposit. This pluton has been mapped throughout the western flank of Eagle Mountain (Figure 7-2) and occurs in scattered outcrops and old workings to across the southern boundary of the Eagle Mountain PL. Several discrete compositions have been noted, including granodiorite, alkali granite and quartz diorite, but these have not been mapped as separate phases. In general, approximately equal amounts of medium-grained (2–6 mm) plagioclase, orthoclase and quartz are present, with minor amounts of biotite and amphibole.

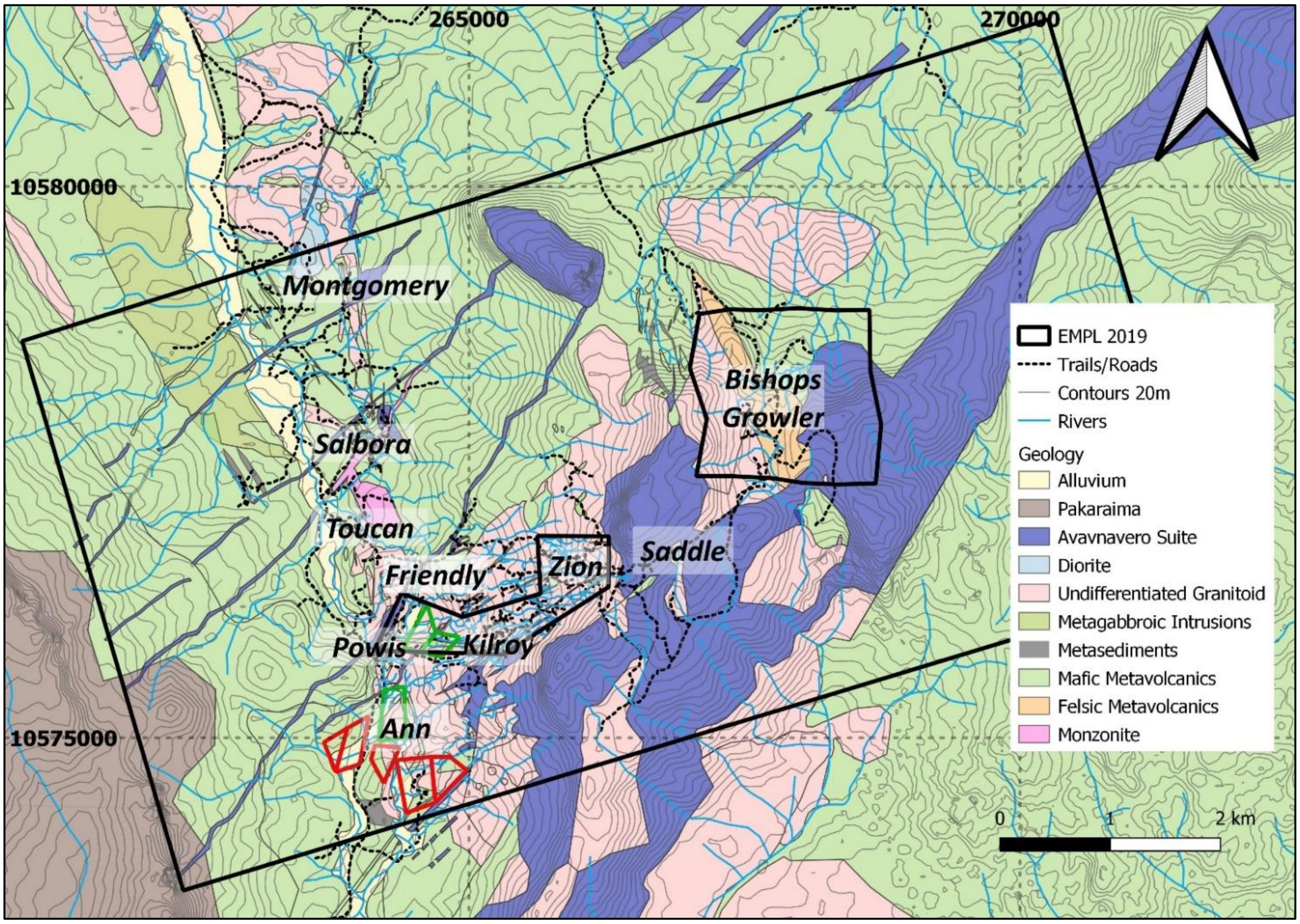

Figure 7-2: Simplified geological map of the Eagle Mountain area

Note: Names refer to target areas, although each of these names does not necessarily represent a single deposit (e.g. Kilroy and Zion are part of the Eagle Mountain deposit.)

In the Salbora deposit area, a northeast-trending monzonite pluton is emplaced into older metavolcanic rocks of tholeiitic composition, with mineralization occurring in structures formed within mafic units adjacent to the monzonite.

A large diabase to gabbro-norite sill (likely part of the Avanavero Suite) intrudes the granodiorite pluton and metavolcanic-sedimentary sequence. The sill is 25–40 m thick in the Saddle area but appears to thicken to the north and south. It partly forms the ridge and cliffs at the top of Eagle Mountain. Northwards, the sill merges with the Tumatumari Dike, which extends northeast to the Omai area where it intersects the Omai sill. The basic sill is interpreted to be generally flat lying, although locally it dips shallowly to the southwest. Additional examples of younger basic intrusions include at least two major (up to 60 m thick), 030–040° striking and steeply dipping dikes that extend up to 0.8 km in strike, plus a number of several smaller sills and dikes up to 15 m in thickness.

Rare mafic porphyry intrusions with feldspar crystals several centimetres in size and locally containing abundant rounded small xenoliths may be lamprophyres (Casselman, pers. comm., 2012). These dikes are oriented 120°, are probably less than 10 m thick, and postdate the granodiorite pluton that hosts the bulk of the gold mineralization.

Tertiary-age shallow marine/fluviatile sands are preserved as a thin cap below 60 m amsl outside of the Eagle Mountain PL. A number of Tertiary paleo-channels occur within the area and contain alluvial gold, including the Proto-Mahdia Channel and the Homestretch-Salbora area located east of the access road at the northern Eagle

Mountain PL boundary. Modern alluvium and dredge tailings fill the Mahdia and Minnehaha valleys downhill of the resource area, obscuring bedrock geology. A small bowl-like basin within the mineralized area is also filled with recent alluvium.

7.3 Eagle Mountain Property Structural Geology

7.3.1 Folding

Small-scale folding is observed in limited outcrop in the Friendly and Powis areas as well as isolated drill core within finely laminated sediments. The folding observed is related to adjacent shear deformation.

7.3.2 Faulting

Several episodes and orientation of faulting can be recognized within the Project:

- Within the Eagle Mountain area, a low-angle (10–30°), southwest dipping system of thrust faults can be identified. These range in character from single discrete, narrow mylonite zones only a few cm wide (Figure 7-3A) to broader zones of pervasive deformation and fracturing (Figure 7-3B). In places, several fracture orientations occur and Riedel shear fractures can be recognized (Figure 7-3C). These faults may occur as single deformation zones with a distinctive mylonite at the base and fracturing of the granitoid above or may occur as a series of sub-parallel zones of deformation, where several thrusts occur. Shear sense-indicators suggest a roughly top-to-the-east sense of vergence. These fault zones are affected by silicification as well as chloritic alteration and disseminations of pyrite. Gold mineralization at Eagle Mountain is associated with these low-angle thrusts.
- A series of upright, north-south to northwest-southeast trending faults and breccia structures are identified at the Salbora deposit. Rock-matrix breccia zones (Figure 7-4) that can be correlated between drillholes have been interpreted as structures and may form part of a larger system that extends south to the Toucan area. The sense of movement along these structures is not yet clear. These structures are also affected by chloritic alteration, silicification and contain associated pyrite disseminations. Gold mineralization is associated with these structures, and they are considered to be related to the low-angle thrusts at the Eagle Mountain deposit, although the relationship between the two orientations is not yet understood.
- Two younger, northwest to north-northwest trending, upright faults (referred to as the Elephant Fault and the Kilroy Fault) crosscut and offset the older shallow dipping structures at the Eagle Mountain deposit. These appear to be normal faults but may have a strike-slip component or be scissor faults.

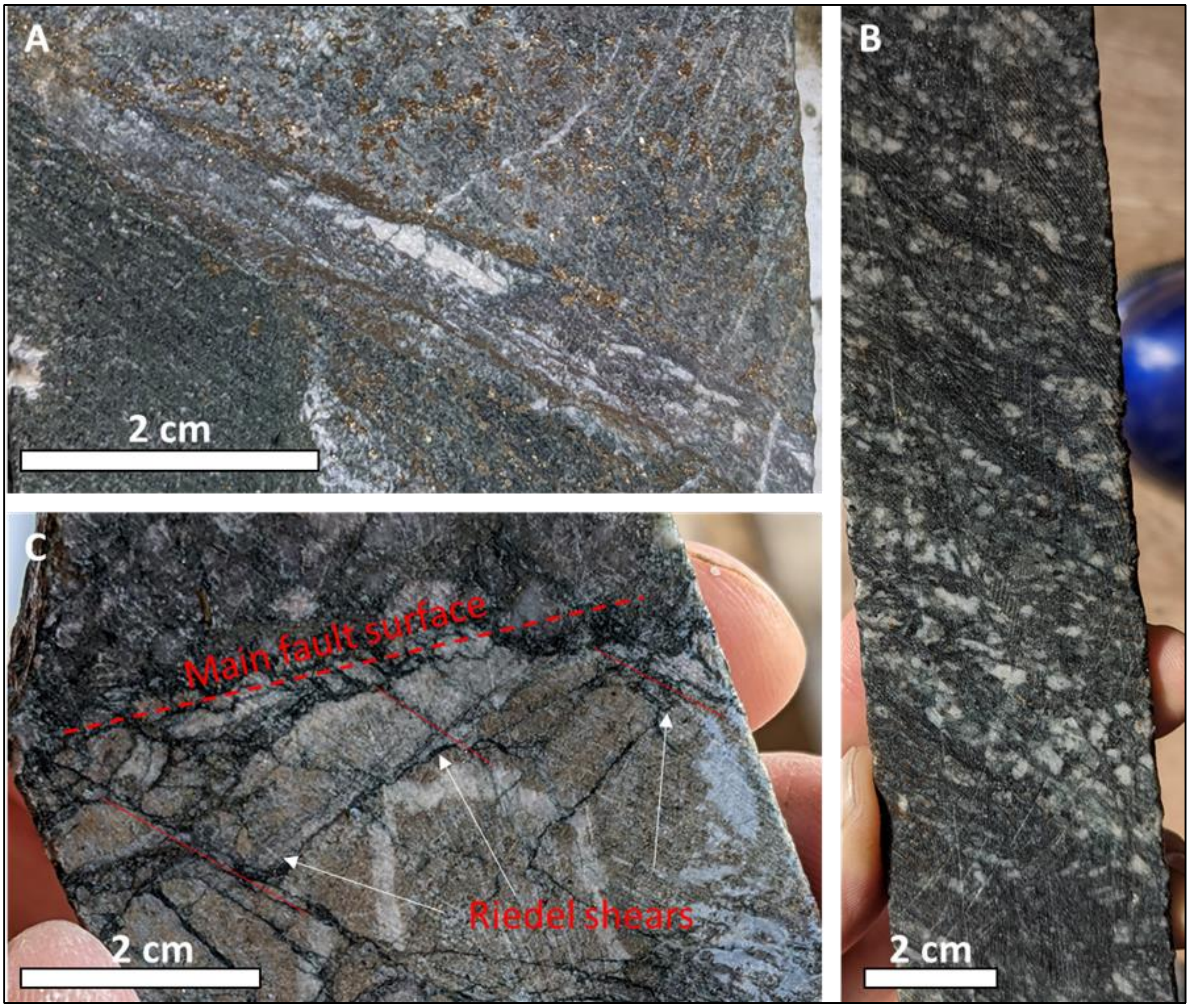

Figure 7-3: Examples of deformation associated with shallow shear zones at Eagle Mountain

A – Single discrete shear with associated pyrite. B – Broader zone of deformation. C – Discrete fractures displaying Riedel shears.

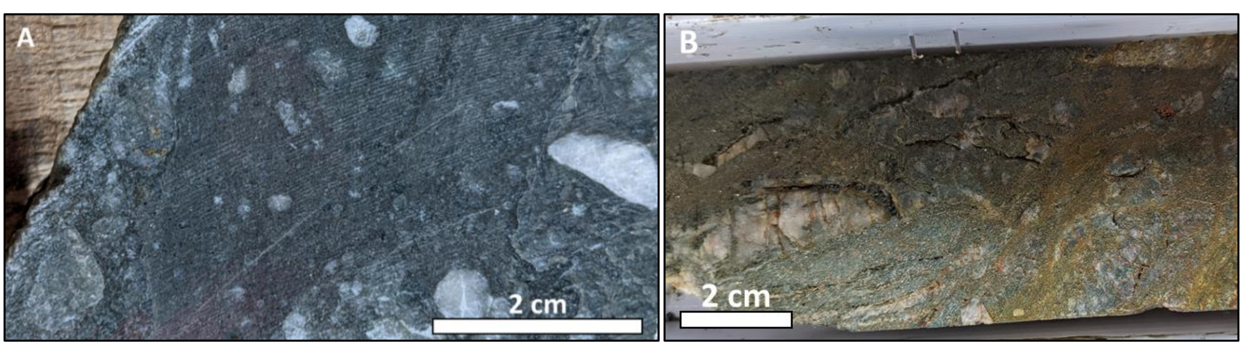

Figure 7-4: Example of breccia zones at Salbora

A – Rounded quartz and metavolcanic clasts within a fine-grained chloritic matrix. B – Partially weathered deformation zone with associated chlorite and pyrite.

7.4 Mineralization

Mineralization at both the Eagle Mountain and Salbora deposits is structurally controlled and related to shallow-dipping shear zones and upright faults and breccia zones, respectively.

Gold at both Eagle Mountain and Salbora occurs as native gold, as very fine disseminations associated with and contained in pyrite that is not visible to the naked eye. This pyrite is typically associated with chlorite alteration or chlorite veins (Figure 7-5A). An exception is rare visible gold within what appears to be an early generation of quartz veins that have been subsequently deformed (Figure 7-5B), and this may represent an earlier stage of gold mineralization than the main mineralization event. An earlier episode of molybdenum mineralization associated with quartz veining is also locally noted within the Eagle Mountain Gold Project.

Although the orientation of the controlling structures is different, both the Eagle Mountain and Salbora deposits show an association of gold with quartz-chlorite-pyrite alteration, and at both deposits these syn-mineralization alteration assemblages are overprinted by brittle carbonate veins. These veins crosscut mineralization (Figure 7-5B) and represent late-stage fluids. The similarity of the alteration assemblages suggests that both deposits formed as part of a single mineralizing system.

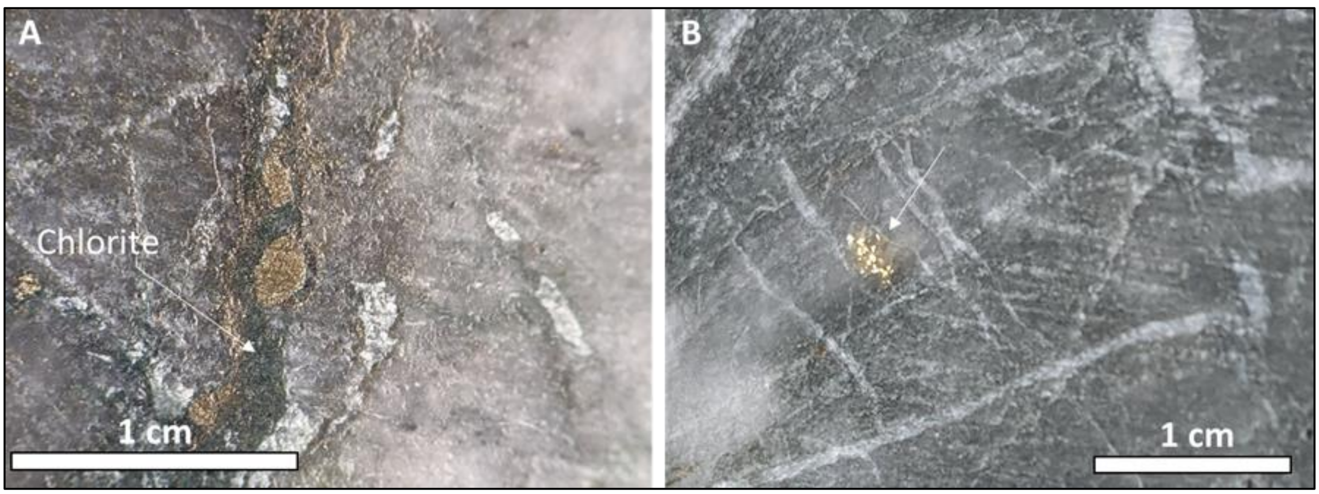

Figure 7-5: Examples of mineralization at the Eagle Mountain Gold Project

A – Typical mineralization with pyrite associated with chlorite infill within a structure. B – Rare visible gold (indicated by arrow) within vein quartz. Note the younger brittle carbonate veins overprinting the veining.

7.4.1 Eagle Mountain

At the Eagle Mountain deposit, gold mineralization occurs in granite as disseminated zones 1–40 m in thickness. Zones are controlled by a stacked series of low-angle southwest dipping thrust zone related structures. Mineralization is not strictly localized in thrusts but, very often the highest grades are found within or close to the main thrust zone, where alteration is intense and there is a high density of small fractures containing chlorite and pyrite. The mineralized zones are separated by 10–100 m thick zones of unmineralized granite.

The Eagle Mountain deposit is modelled as a series of tabular, sub-horizontal to shallowly dipping zones (Zone 1 to Zone 13).

- Uppermost zones 1 and 2 host most of the mineralization at the deposit and typically extend from outcrop to 20 m deep, and up to 80 m deep in areas of high elevation (e.g. the Saddle target). Zone 1 outcrops at the Zion, Ounce Hill, Bucket and Bacchus deposit areas. Zone 2 outcrops at the Friendly, Bottle, and Kilroy deposit areas. Both zones extend north-eastward at increasing depth below topography.
- Two additional zones (Zone 3 and the more substantive Zone 4), both stratigraphically below Zone 2, extend north-eastward from outcrops at the Ann, Baboon, Bottle and Friendly deposit areas.

- Zones 5 to 10 are encountered at the Powis deposit which displays characteristics of shallowly dipping mineralized zones with higher-grade quartz veins, and the Toucan prospect, which is at the western extents on the Eagle Mountain deposit.

  These zones extend westward to depths of 80 m in the Friendly at Bacchus areas and dip toward the south with depths increasing to a maximum of 150 m in the Baboon deposit areas. Mineralization at the Powis target occurs in small discrete "cloudy" veins, often showing visible gold, and preferentially developed in a quartz porphyry granitoid, and is thought to be an early stage of mineralization.
- At Toucan, a Salbora-style steeply dipping mineralization is encountered with increased silicification and mineralized breccias (Zone 14).

Eagle Mountain mineralized zones have been defined on the basis of alteration, grade and identification of structures, and the variable thickness of each of the mineralized zones appears to be related to whether a single shear occurs or whether the deformation zone splits into several sub-parallel shears, thereby broadening the zone of alteration and mineralization (Figure 7-6).

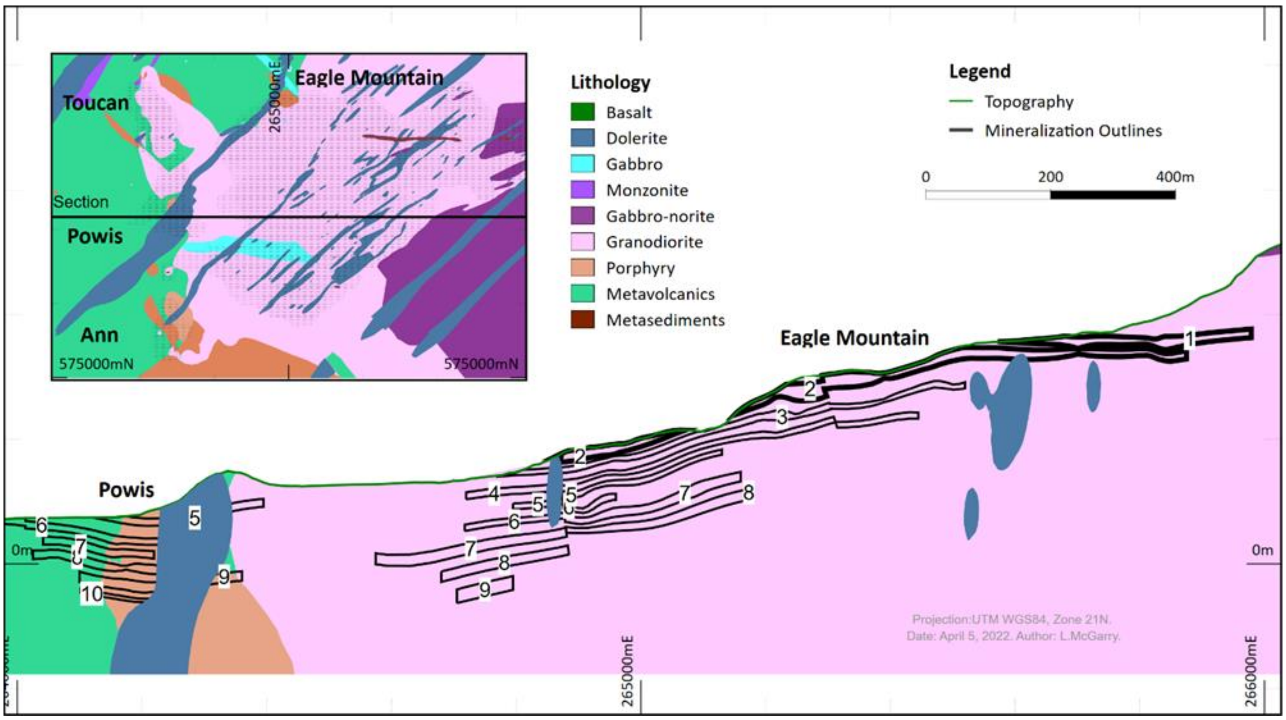

Figure 7-6: Schematic east-west section through the Eagle Mountain deposit looking north, illustrating the various mineralized zones,and host rock lithologies

7.4.2 Salbora

At Salbora, gold mineralization occurs within and adjacent to sub-vertical, north-south trending breccia zones that are generally a few centimetres to a few metres in thickness. Near the surface, these breccia zones appear to coalesce into broad, sub-horizontal zones of brecciation with mineralization occurring over tens of metres. Breccias are developed in a tholeiitic mafic volcanic and altered granitoid adjacent to a monzonite intrusion, and mineralization is associated with silicification, chloritic alteration and pyrite. Multi-element geochemistry indicates that gold is associated with minor silver and arsenic.

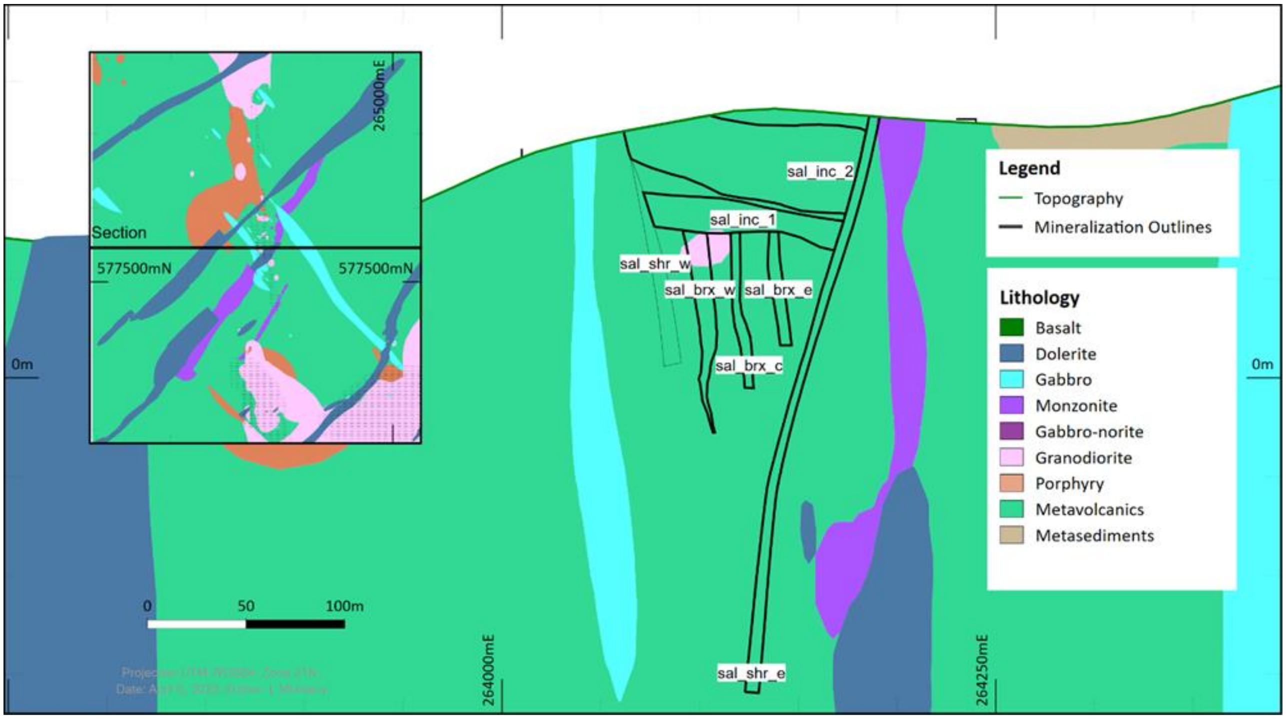

Figure 7-7: Schematic east-west section through the Salbora deposit looking north, illustrating the various mineralized zones

7.4.3 Target Areas

The Montgomery target lies north of Salbora, and mineralization occurs associated with chlorite +silica +pyrite filled breccia zones in granitoid rocks near the contact between mafic and granitoid units. Breccias are also developed in mafic units but appear to be less mineralized.

The Ann-Toucan-Powis-Salbora-Montgomery targets forms in a north-south alignment, interpreted to represent a large-scale, north-south trending zone for deformation and mineralization. The kinematics and orientation of this deformation zone are not yet clearly understood, but several targets identified along this structure suggest a large-scale mineralizing system. The shallowly-dipping mineralized zones at Eagle Mountain may be linked to this major zone as ramps in a compressional setting.

7.5 Weathering and Oxidation – Saprolite Mineralization

Saprolite is the chemical weathering product of the underlying bedrock that has decomposed in place and generally retains the rock's original structure and is especially characteristic of tropical lateritic weathering profiles. The saprolite consists of soft clay to sandy particles, depending on the rock type being weathered and the amount of quartz present. Both the Eagle Mountain and Salbora deposits are affected by weathering that results in a typical saprolite depth of 10–30 m and rarely to a maximum depth of 76 m from surface. Saprolite transitions to fresh rock across a variable horizon typically 1–3 m thick.

The vertical and lateral variability within the laterite profile at Eagle Mountain has not been clearly defined. No ferruginous zone has been described and the upper part of the laterite profile may have been removed by erosion.

Saprolite and transition material is mineralized and unmineralized. Gold mineralization within the saprolite at the Eagle Mountain deposit occurs where mineralized zones reach shallow depths or outcrop. Mineralized saprolite is derived from mineralized sheared granodiorite and consists of clay-rich material with very fine-grained disseminated gold. There is no evidence for gold remobilization or enrichment in the supergene environment.

At Salbora, the shallow mineralized zone has also been affected by weathering, resulting in a zone of mineralized saprolite near the surface. Figure 7-8 displays typical mineralized saprolite found in core drillholes.

Figure 7-8: Typical mineralized saprolite core from the Salbora area in DDH EME20-57

8 Deposit Types

The main style of gold mineralization on the Eagle Mountain Property is related to a series of tabular, shallow southwest-dipping, brittle-ductile composite shear zones within a granodiorite intrusion (Eagle Mountain deposit), or within upright breccia structures within mafic volcanics and altered granitoids (Salbora deposit). Gold mineralization is associated with silicification and with chloritic ± pyritic alteration. Alteration and sulphide mineralization within the tabular structures is interpreted to be syn-deformational, and the similarity of alteration types at Eagle Mountain and Salbora suggest that they are part of a single mineralized system.

Both the Eagle Mountain and Salbora deposits are considered to be an orogenic-type gold system, also known as lode-gold deposits or (in the case of Archean and Paleoproterozoic deposits), greenstone gold deposits. Orogenic gold deposits typically form in metamorphic rocks in the mid to shallow crust (5–15 km depth), at or above the brittle-ductile transition, in compressional settings that facilitate transfer of hot gold-bearing fluids from deeper levels (Tomkins, 2013). These deposits likely form in accretionary and collisional orogens (Groves et al., 1998), and hence the term “orogenic” is used.

Orogenic gold deposits have formed for more than three billion years of Earth’s history, episodically during the Middle Archean to younger Precambrian, and continuously throughout the Phanerozoic (Goldfarb et al., 2001). They contribute significantly to global gold production, and recognized production and resources from economic Phanerozoic orogenic-gold deposits are estimated at just over one billion ounces of gold (including placer accumulations associated with this deposit type), with known Precambrian gold concentrations are about half this amount (excluding Witwatersrand ores – Goldfarb et al., 2001). There are a large number of orogenic gold deposits globally that could be considered comparable to Eagle Mountain, including, several located in Guyana that are currently in production or under development (e.g. the Karouni gold deposit – Tedeschi et al., 2018; the 9-Mile deposit – Bassoo and Murphy, 2018; and Omai deposit – Voicu et al., 1999).

8.1 Mineralization Styles

In orogenic gold systems such as Eagle Mountain, mineralization forms with generally consistent geological characteristics, which include deformed and variably metamorphosed host rocks; low sulphide volume; carbonate-sulphide ± sericite ± chlorite alteration assemblages in greenschist-facies host rocks; and a spatial association with large-scale compressional to transpressional structures. The orogenic gold deposits normally consist of abundant quartz ± carbonate veins and show evidence for formation from fluids at supralithostatic pressures. The mineralized lodes formed over a uniquely broad range of upper to mid-crustal pressures and temperatures, between about 200–650°C and 1–5 kbar. Within the host volcano-sedimentary sequences at the province scale, world-class orogenic gold deposits are most commonly located in second-order structures adjacent to crustal-scale faults and shear zones.

8.2 Conceptual Models

In Phanerozoic orogenic gold systems, mineralization forms in subduction-related tectonic settings in accretionary to collisional orogenic belts, from metamorphic fluids derived either from metamorphism of intra-basinal rock sequences or de-volatilization of a subducted sediment wedge (Figure 8-1), during a change from a compressional to transpressional stress regime (Groves et al., 2018). Although Archean and Paleoproterozoic crustal tectonics and subduction may have differed in scale and duration, similar metamorphic and intrusive processes drove orogenic gold mineralization in greenstone belts.

Orogenic gold deposits are structurally controlled and typically located adjacent to second-order structures related to district-scale jogs in crustal-scale faults. These jogs are commonly the site of arrays of cross-faults that accommodate the bending of the more rigid components (e.g. volcanic rocks and intrusive sills) of the host belts.

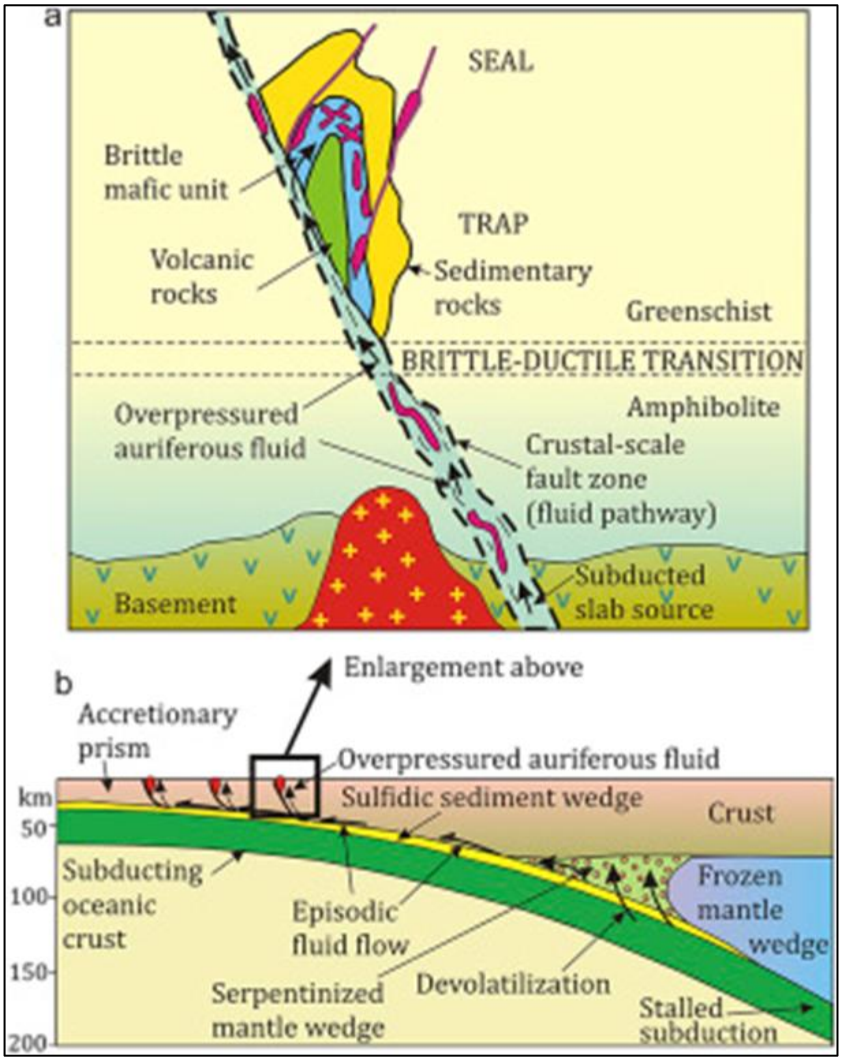

Figure 8-1: Schematic representation of orogenic gold deposit formation model, involving a subcrustal fluid and metal source from slab devolatilization

Note: Over-pressured slab-derived fluids intersect deep-crustal faults and advect upwards to form orogenic gold deposits in second-order structures or hydraulically fractured rock bodies (from Groves and Santosh, 2016).

9 Exploration

The following sections detail exploration carried out at the Eagle Mountain Property between 2011 and 2021 by Goldsource. Work conducted between 2011 and 2013 was completed by EMGC which was acquired in 2014 and is now a now a subsidiary of Goldsource. Historical exploration carried out prior to 2011 is documented under Section 6 of this report. Goldsource diamond drilling and metallurgical testwork programs are described in Sections 10 and 13 respectively of this report.

9.1 Infrastructure Improvements (2011)

EMGC's infrastructure improvements on the Eagle Mountain Property included the upgrade of camp buildings and expansion of the camp with additional housing and core storage sheds. A notable accomplishment was the building of a diamond drill rig access road over the top of the historic Saddle area between Eagle Mountain proper and Chalmers Cliff.

9.2 Environmental Data Collection (2010–2014 and 2021)

Daily temperature maximums and minimums and rainfall accumulations were recorded from October 2010 to June 2014, and Goldsource has over 3.5 years of data. Weather data was not recorded daily between 2014 and 2021. A digital weather station was established in May 2021 and records temperature, rain levels, rain rates, wind speed, wind direction, atmospheric pressure and humidity at 15-minute intervals.

EMGC retained Environmental Management Consultants (EMC) of East Coast Demerara, Guyana to conduct an environmental baseline study in 2013 and 2021. In 2013, the study comprised a biodiversity assessment conducted from 29 May to 9 June 2013 (wet season) and from 3 to 14 September 2013 (dry season), and a surface water quality assessment conducted on 30 May 2013 (wet season) and 4 September 2013 (dry season). In 2021, the biodiversity assessment was conducted from July 12 to July 25 (wet season) and from October 4 to October 16 (dry season).

9.3 Bulk Density Data (2011)

EMGC completed internal (non-independent) bulk density tests on a variety of fresh and saprolitic, mineralized and non-mineralized rock types from 2011 diamond drill core. Measurements from "fresh" mineralized zones and saprolitic mineralized zones confirmed historical average bulk densities of approximately 2.60 t/m^3 and 1.60 g/cm^3, respectively (see Section 11 for details).

9.4 Topographic Surveys (2012 and 2021)

9.4.1 LiDAR Survey (2012 and 2021)

EMGC contracted Atlis Geomatics Inc. to conduct a light detection and ranging (LiDAR) topographic survey for the Eagle Mountain Property area in an effort to establish better topographic control. The survey was partly flown (60%) on 9 May 2012 and was halted due to equipment failure.

A new helicopter-based LiDAR survey was flown in November 2021. Processing of data from this survey has not been finalized and it was not used for the current report. This is a high priority as the current topographic data has insufficient resolution for detailed deposit modelling and engineering studies.

9.4.2 *Line Cutting and Ground Surveying (2012)*

In 2012, EMGC collected additional theodolite survey points, traverses and 73 EMGC drillhole collar coordinates to supplement historical data (Figure 9-1). These points were collected utilizing a CST/Berger 205 theodolite survey instrument by Mr David Griffith of South Rumsveld, Guyana.

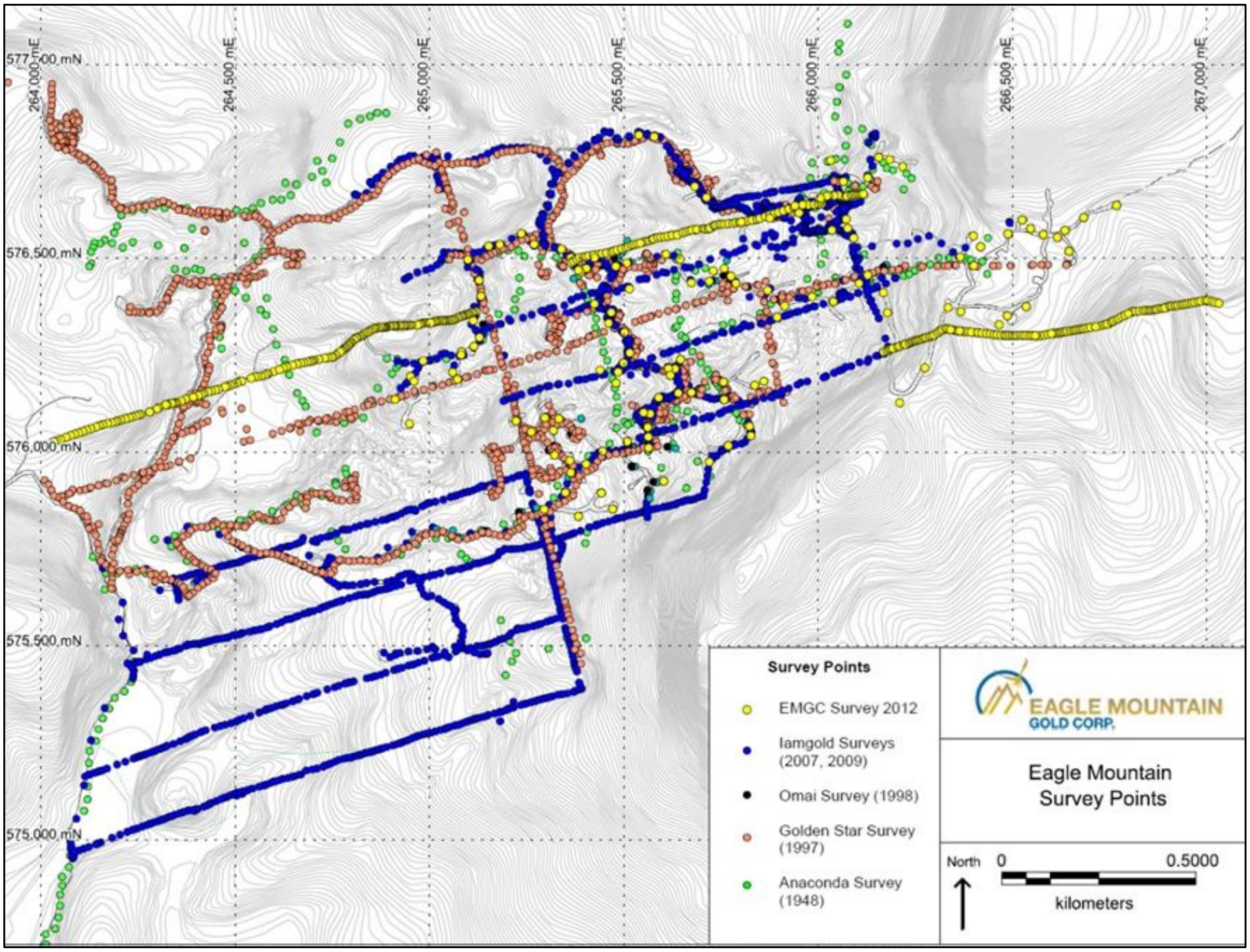

Figure 9-1: Topographic map and survey point locations – 2012 EMGC and historical 1948–2009 locations (EMGC, 2012)

9.5 Mapping and Geochemical Sampling (2011 and 2018)

9.5.1 *Trench and Outcrop Channel Sampling (2011)*

In 2011, EMGC completed a total of 102.4 m of surface channel sampling from mechanically excavated drill pad walls in 27 localities (Figure 9-2). At each site, a start point was designated, and from that point sample intervals were marked out using a tape measure, either at regular 1 m intervals or according to identified geological intervals. Samples equivalent to NQ-sized core were collected. Detailed plans and sections were created to illustrate logged geology, structure, and assay results.

9.5.2 *Hand Auger Saprolite Sampling Programs (2015 and 2017–2018)*

Goldsource completed 275 vertical hand auger holes for 1,062 m in 2015. Between 2016 and 2018, a total of 709 hand drilled auger holes totalling 2,481 m were completed and sampled. The auger program targeted expansion areas such as Friendly and Toucan as well as Salbora and Montgomery. The distribution of auger holes is shown in Figure 9-2.

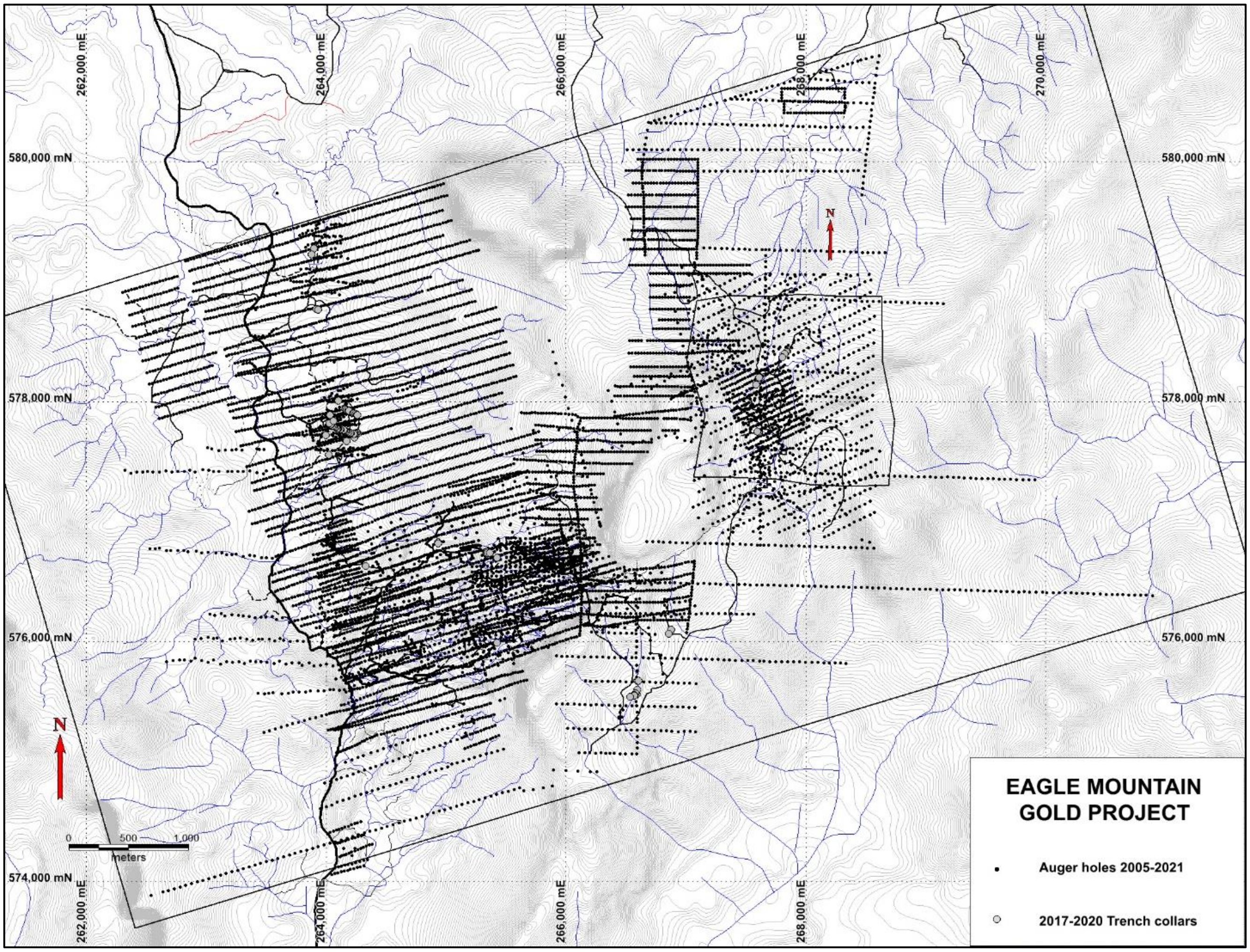

Figure 9-2: Auger, trench and outcrop channel sample location map

All 2015–2018 auger sampling was completed along cut lines at 25 m or 50 m pre-marked stations. Holes were bored vertically using a "Dutch" type hand auger within 5 m of each station. The auger was equipped with 1 m long extensions, each extension rod is used to measure a full 1 m sample interval while auguring. Whilst turning the auger, every 25 cm or quarter of a rod length, the auger head was pulled out, emptied onto a plastic sheet, and cleaned prior to continuing with drilling. Samples were collected at 1 m intervals until each hole reached the designated depth or hard ground prevented further penetration. Hand auger holes were generally completed to a depth of 6 m. If a hole failed to reach a depth of greater than 2 m, a second hole within a 5 m radius of the first site was attempted. If the second hole succeeded in reaching a depth of more than 2 m, material from the failed hole was discarded.

Upon collection of each 1 m of sample, the plastic sheet was rolled to mix the material thoroughly before a quarter of the material was subset into a sample bag using the "cone and quarter" method. A minimum of 250 g of material was subset, if one cone quarter was not sufficient, a second cone quarter was added. An aluminum tag with the sample number was added to the sample bag, along with a tag from the sample book and a piece of flagging tape with the sample number written on. The hole ID and depth of sample ("To" and "From") was recorded on each sample stub. The sample number was written on the bag using black permanent marker and the bag was tied using a piece of flagging tape with the sample number written on. The plastic sheet used to collect the sample was then cleaned to remove any contamination prior to collecting the next sample.

A global positioning system (GPS) position of the actual auger site was recorded with a handheld GPS left on ground within 20 cm of hole and left to stabilize to achieve the lowest GPS error possible. The GPS position was recorded on the collar list sheet (or notebook) as well as in the sample book. Samples were transported to camp by Goldsource personnel where they were packed in polypropylene sacks for transport to Georgetown for analysis at a commercial laboratory.

The 2015 auger sampling resulted in the discovery of additional mineralized saprolite near Goldsource's Scrubber plant ("Scrubber") and north of known resources. Saprolite near the Scrubber area was partially mined and processed through the onsite gravity pilot plant. This processed material is outside of known resources, with an estimated 600 ounces of gold sold in 2016 and an estimated 4,000 ounces of gold delivered to the tailings storage facility for future additional processing. The area north of known resources, including the Scrubber area, is approximately 500 m x 200 m and 5–15 m depth of saprolite.

The 2017 auger drilling defined a continuous northeast-southwest mineralized (greater than 0.5 g/t Au) trend west of the 2015 Scrubber area measuring approximately 600 m x 300 m and 5–15 m thick of saprolite.

9.5.3 Trench and Outcrop Channel Sampling (2018)

During 2018, Goldsource completed a total of 27 trenches for a total of 1,326 m of continuous horizontal sampling and 106 m of vertical sample channels throughout the Property including the Salbora, Toucan and Montgomery areas. At each site, a start point was designated, and from that point sample intervals were marked out using a tape measure, either at regular 1 m intervals or according to identified geological intervals. Sample channels equivalent to NQ-sized core were collected. Detailed plans and sections were created to illustrate logged geology, structure, and assay results. At Salbora Hill, trench TRSB18-002 followed up on the historical hand auger results and reported continuous horizontal channel sampling returning 123 m at 1.92 g/t Au. This trench was later followed up by Salbora discovery diamond drillhole EMD18-053 which intersected a 69 m downhole core length (40 m true thickness) grading 6.52 g/t Au. Drill pad wall exposures in the Friendly and Kilroy areas were also sampled along continuous horizontal channels and recorded as trenches.

Figure 9-3: Salbora trench TRSB18-002 – horizontal sampling channel in left-hand wall
Source: Goldsource (2018)

9.6 Geophysical Surveys

9.6.1 Historical Airborne Geophysical Re-Interpretation

In 2019, Goldsource retained Geophysics One Inc. of Ontario, Canada, to re-process and re-interpret a historical airborne Terraquest airborne (fixed wing) magnetic and radiometric survey, flown by IAMGOLD in 2007. The survey covers the western half of the Eagle Mountain PL, inclusive of the Salbora deposit, and was flown at 100 m line spacing. Unfortunately, this historical airborne survey was flown at 350° line direction (almost north-south) and at that time (2007), the important north-south structural corridor that includes Salbora was not known. The survey, although limited in defining features parallel to the flight lines, provided significant information on the Salbora structural setting and the other two crosscutting northeast- and northwest-trending structural directions (see Figure 9-4 below).

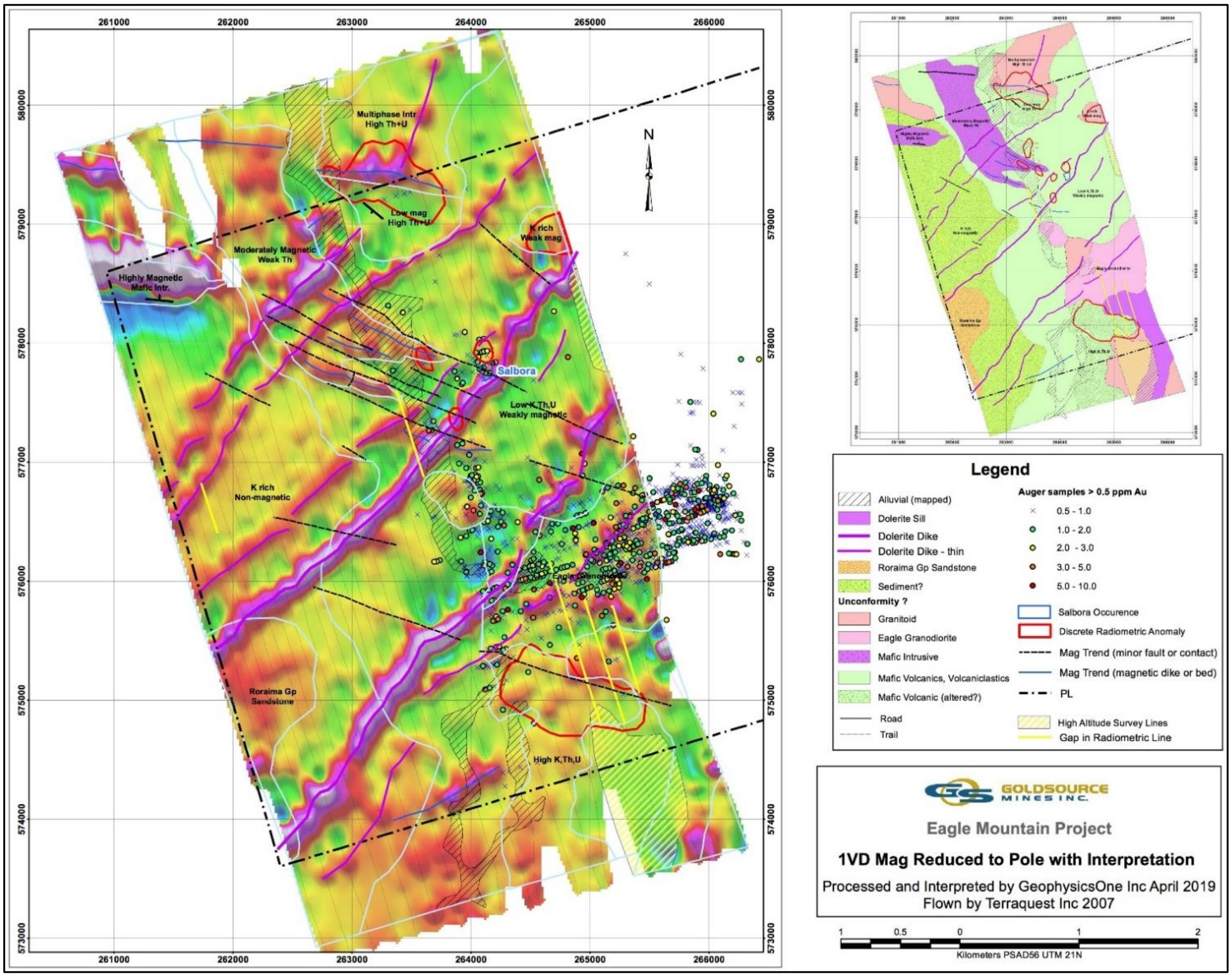

Figure 9-4: Example of reprocessed geophysical data from the 2007 airborne survey

9.6.2 Ground Geophysical Survey (2019 to 2020)

In 2019, Goldsource retained Matrix Geotechnologies Inc. (Matrix) of Ontario, Canada to complete ground geophysical surveys at the Property. The geophysical surveys covered an area of approximately 5 km^2 surrounding the Salbora deposit and consisted of:

- Gradient array IP – a grid of parallel lines spaced at 100 m apart with a total length of 39.5 km
- Pole-dipole IP – eight cross sections with a total length of 10.5 km
- Ground magnetics over the same grid at 25 m spacing (Figure 9-5).

The 2019 ground geophysical survey defined at least five moderate-to-strong IP targets, with complementary resistivity highs and a cumulative strike length of approximately 4 km. During Q1, 2020, Goldsource successfully completed an additional 62 line-km of gradient array IP, 62 line-km of high-resolution ground magnetic survey, and 10 line-km of pole-dipole IP over selected targets. The total 2019–2020 ground geophysical coverage was expanded to an area of approximately 7.5 km^2 (Figure 9-5). Additional geophysical anomalies were delineated and merit further exploration. Goldsource interprets the IP targets to represent subvertical sulphide-rich bodies and mineralized shear zones. The Salbora deposit was defined as the result of this geophysical survey and is located within a 600 m long x 100 m wide IP/resistivity geophysical anomaly.

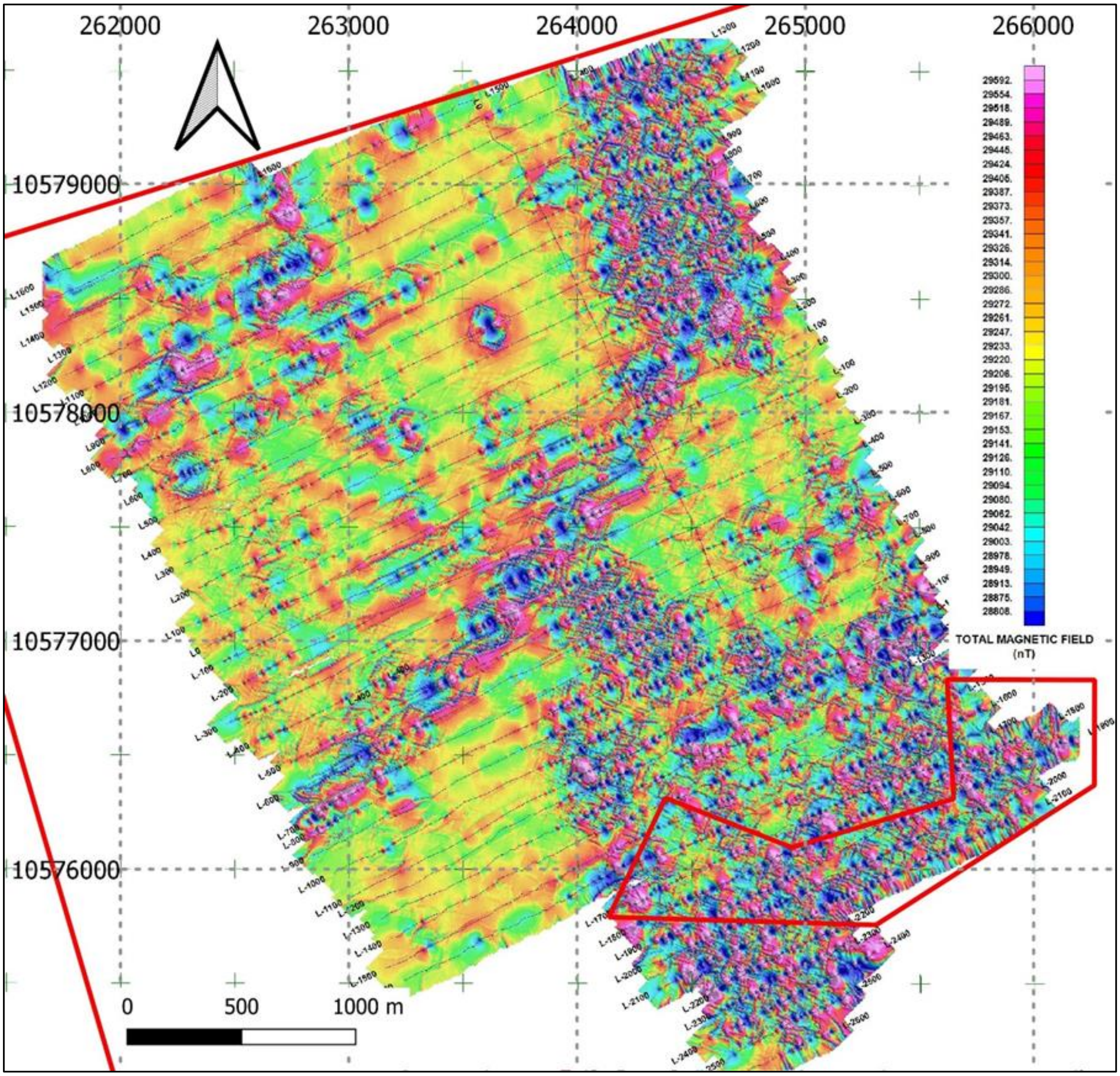

Figure 9-5: First vertical derivative of ground magnetic data over a portion of the Eagle Mountain PL

Follow-up drilling at the IP/resistivity geophysical targets has expanded the Salbora deposit to the north and has also resulted in the discovery of the Toucan, Powis, Friendly and Montgomery targets. Another target (Apollo) is located approximately 700 m northwest of Salbora, and shows a strong IP anomaly parallel to a foliation with intrusions of a rhyolitic feldspar porphyry. Pole-dipole cross sections over the Apollo area suggest multiple sub-vertical and parallel sulphide horizons.

The re-processed historical airborne and ground magnetic surveys, along with the IP results, suggest northwest to north structural trends with structural intersections interpreted for drill targeting. The geophysics confirms geological observations at Salbora including a lithological foliation at 140–150°, with significant shear structures at approximately north-south strike.

10 Drilling

10.1 Summary of Drilling

Drilling carried out between 1947 and 2009 by Anaconda, Guyana Geological Survey, GSR, and OMGL is described under Section 6. Goldsource drilling considered current in this report includes 2011 diamond core drilling, direct-push saprolite core drilling carried out in 2017 and 2018, and diamond core drilling carried out between 2018 and 2021. Drill collar locations are shown in Figure 10-1.

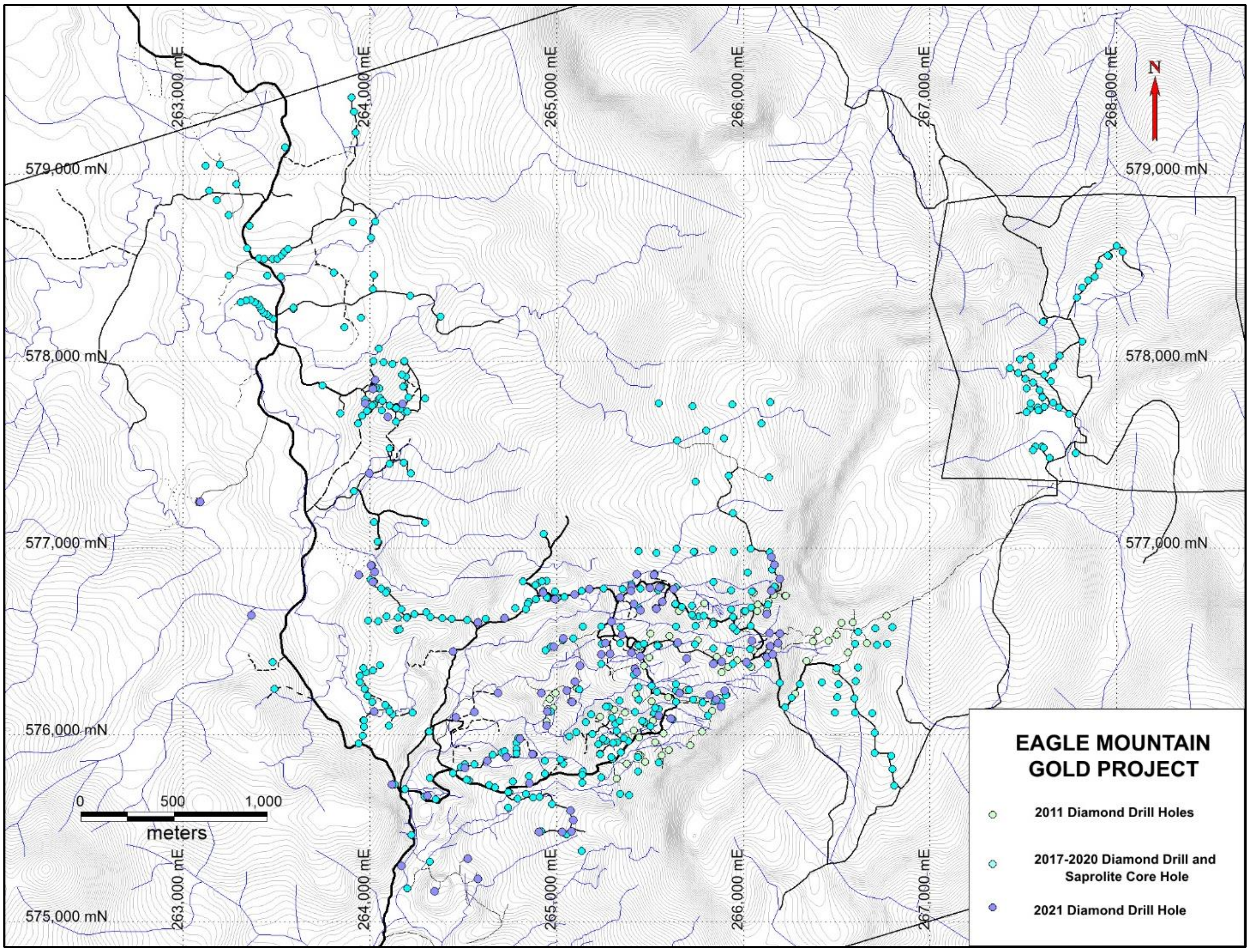

Figure 10-1: Location of diamond drillholes and Geoprobe direct-push holes, drilled by Goldsource between 2011 and 2021

10.1.1 Diamond Drilling (2011)

EMGC (now a Goldsource subsidiary) diamond drilling in 2011 was focused primarily on the Eagle Mountain gold deposit area. Between April and December 2011, 73 diamond drillholes totalling 10,715.93 m of HQ/NQ core (63.5/47.6 mm diameter) were drilled with the objectives of expanding the Inferred Mineral Resource by infill and step-out drilling, confirming historical records of gold mineralized horizons by drilling in close proximity to older historical holes (i.e. twinning) and upgrading part of the Inferred Mineral Resource to Indicated Mineral Resource with closely spaced infill drilling. Drilling was carried out by Orbit Garant Drilling Inc. (Orbit) using a Longyear 38 skid-mounted rig. Details of 2011 drillholes are provided in Appendix A.

Three failed holes totalling 97 m required a restart (EMD11-84, EMD11-102, and EMD11-112). The area's incised topography limited accessibility and constrained the locations of drillhole collars.

10.1.2 Geoprobe Drilling (2017–2018)

In 2017 and 2018, Goldsource carried out a program of drilling focused on shallow saprolitic material (maximum hole depth was 28 m). For this program, a Geoprobe® 540 direct push drill rig with bi-directional hammer rotation was used together with a Geoprobe® DT22 open tube soil sampling system which collects continuous 1 m core samples of unconsolidated materials (such as saprolite) 31.7 mm (1.25 inches) in diameter within a sealed liner casing that is threaded onto the leading end the drill rod. Core enclosed within these plastic liners was collected within core trays. A total of 257 holes (2,741.72 m) were drilled. Details of the 2017–2018 Geoprobe drillholes are provided in Appendix A.

10.1.3 Diamond Drilling (2018–2021)

Between 2018 and 2021, Goldsource carried out diamond drilling using several drill rigs, including a custom-built rig (owned by Goldsource, drillholes identified by the prefix "EMD"), a model FMD # SH-07 drill rig, operated by Orbit (identified by the prefix "EME") and an Omni Drill S3 drill rig, operated by Drilcor (identified by the prefix "EMM"). All rigs drill HQ (63.5 mm) and NQ (47.6 mm) diameter core. Between 2018 and 2021, a total of 449 HQ/NQ diamond drillholes totalling 58,527.74 m were completed.

The purpose of drilling was for infill and expansion of the Mineral Resource at the Eagle Mountain deposit, as well as identification and delineation of additional deposits within the Project area (e.g. the Salbora deposit). A list of all drillhole collars is included in Appendix A.

10.2 Drilling Procedures, Core Handling, Logging and Sampling Methods

10.2.1 Diamond Drill Core Sampling (2011 and 2017–2021)

Core was retrieved from the drill string using conventional wireline techniques. Core recovery was generally very good.

Sample security and chain of custody started with the removal of core from the core tube and boxing of drill core at each drill rig. Core was removed from the core tube by the drill contractor's personnel, carefully placed in labeled corrugated plastic core boxes and located by inserted depth blocks. When filled with core, a matching corrugated plastic lid was placed on the box and secured with fibre tape. The boxed core remained under the custody of the drillers until it was transported from the rig to the secure core logging, processing and sampling facility by either the drill contractor or one of the Company's designated personnel.

The core logging and processing facility was located at the Eagle Mountain camp. The facility was used for logging, sawing core, and packing samples for shipment to the assay laboratory. The facility has covered rack storage space for core prior to logging and sampling.

The core was stored securely until it was moved into the core shack for processing. Processing of the core started with the core being laid out on workbenches and cleaned prior to logging and sample interval marking. The core was next photographed with a digital camera, capturing images in JPEG format. Spatial information related to each box of core was checked for accuracy and consistency and remedial actions were undertaken, if necessary, to correct deficiencies in the spatial information prior to entry into a database. A geotechnical log of core recovery and RQD measurements was completed by a Goldsource geologist. The geologist then completed a descriptive log comprising a detailed description of rock type, structure, alteration, and mineralization.

The geologist then selected the sample intervals and input the intervals into the drillhole database. The selected portions of core were marked and measured for sampling and were identified with one part of a three-part assay tag, placed at the downhole end of the sample interval. Samples were collected to a minimum interval of 30 cm and a maximum of 1.5 m in areas that were visually unmineralized. Thick dolerite and gabbro-norite dikes and sections of unmineralized granodiorite below the mineralized zones were not routinely sampled, except at contact zones.

Saprolitic samples were split with a spatula. Most non-saprolitic (fresh – unoxidized) samples were sawn with a 110-volt 1.5 hp water-cooled masonry saw with 14-inch diamond blade and a mounted jig to ensure the core is split equally. The core saw is located in a roofed, open-walled area separate from the core logging facility. Fresh water is used as a cooling/lubricating fluid; recycled water is not used.

The core was cut in half longitudinally using a circular electrical core saw, perpendicular to the foliation (50% split), with one half placed into plastic sample bags along with part two of the three-part assay tag and sealed. The other half-core was returned to the core box for archive and future verification and testing (if required). Each sample bag had the sample number written on the outside of the bag with black permanent marker corresponding to the sample tag placed inside. Information on the third part of the assay tag was entered into the database and the drill log, at which time accuracy and consistency were again reviewed and remedied, if necessary.

Core logging, sawing, sample bagging and sample shipment preparation was completed either by or under the on-site supervision of a Goldsource geologist. After sampling was completed, the archived core boxes were re-covered with a lid, labelled, and stacked on tarpaulin covered racks at the Eagle Mountain Camp.

Following analysis, digital assay files provided by the laboratory were merged with a “from” and “to” interval file created by Goldsource, with the sample number linking the two files. This methodology limits data entry errors to sample numbering, as well as the “from” and “to” specifications.

Overall, core sampling methods were to industry standards for mineralization of this type and the Qualified Person is confident there are no sampling or recovery factors that would negatively impact the sampling procedures.

10.2.2 Geoprobe Drill Core Sampling (2017–2018)

On delivery of core to the core shed, the boxes were laid out in sequence order and metre marking was checked. The plastic core tubing was removed using the tube cutter and with metre markers showing, photographed for reference. The core was measured with recovered amount noted per metre run as “recovery %”. Core recovery was generally very good.

The sample was split by using a knife or putty knife, cutting the sample in half through the hole in the plastic tube. The left half of the core was kept in the remaining plastic tubing and remains in the box as reference, the right half was removed as sample. Each sample was 1 m in length, corresponding to the drill run interval. If the final sample in the hole sample was not 1 m in length, it was added onto previous sample if <0.5 m or treated as a new sample if >0.5 m in length.

Date, and hole interval were recorded in a ticket book, and one side of ticket was placed in the bag with sample, the second part was stapled on the box at the end of the sample interval.

An aluminum tag was also placed in bag with sample number written on it. The sample bag was sealed and placed in a white polypropylene sack. A quality assurance/quality control (QAQC) sample (either a blank, a CRM, or a duplicate) was inserted every 15 samples. Duplicates were taken by splitting the half-core sample into two, so that the original sample and the duplicate sample each contain one quarter of the total core each, with samples labelled sequentially.

Core logging, splitting, sample bagging and sample shipment preparation was completed either by or under the onsite supervision of a Goldsource geologist. After sampling was completed, the archived core boxes were re-covered with a lid, labelled, and stacked on tarpaulin covered racks at the Eagle Mountain Camp.

Following analysis, digital assay files provided by the laboratory were merged with a “from” and “to” interval file created by Goldsource, with the sample number linking the two files. This methodology limits data entry errors to sample numbering, as well as the “from” and “to” specifications.

Overall, core sampling methods are to industry standards for mineralization of this type and the Qualified Person is confident there are no sampling or recovery factors that would negatively impact the sampling procedures.

10.3 Surveying

10.3.1 Collar Surveying

The drill casing was removed from the drillholes. A short piece of scrap drill steel was left in each hole, capped, and cemented in place with a concrete monument after the drill rig was removed. Upon completion of drillholes, drillhole collar coordinates and elevations were surveyed in Universal Transverse Mercator (UTM) coordinates, Zone 21N (PSAD 56 datum). This was completed between 2011 and 2018 by utilizing a CST/Berger 205 theodolite survey instrument by Mr David Griffith of South Rumsveld, Guyana. The survey has a horizontal and vertical accuracy of approximately 2–3 cm. Between April 2018 and 2021, the collar surveys were completed by Zenith Spatial Solutions of West Coast Demerara, Guyana, utilizing a Trimble R8s GNSS System, which gives a similar horizontal and vertical accuracy of approximately 2–3 cm.

10.3.2 Downhole Surveying

The drill contractor completed downhole directional surveys on all diamond drillholes at approximately 50 m intervals using a Flexit (Orbit) or Trushot (Drilcor) single-shot digital survey tool.

10.4 Significant Intervals

Significant intervals for 2011 diamond drillholes, 2017–2018 Geoprobe drilling, and 2017–2021 diamond drillholes are presented in Appendix A.

10.5 Interpretation

10.5.1 Mineralization Orientation

At the Eagle Mountain deposit, mineralization occurs as several tabular, gently west-dipping zones that may crop out at surface. At Salbora, mineralization occurs in narrow, subvertical north to northwest trending structures that coalesce into a broader, sub-horizontal lens of mineralization at surface.

10.5.2 Area and True Thickness

At the Eagle Mountain deposit, tabular mineralized zones vary between 1 m and 80 m in thickness, and these zones extend over an area that extends for approximately 2.2 km in a northeast direction and 1.4 km in a southeast direction.

At the Salbora deposit, narrow subvertical mineralized zones range in true thickness between 0.5 m and 25 m, and extend along a strike length of approximately 1,500 m in a north-south direction, to depths of at least 300 m. The shallow, sub-horizontal lens of mineralization at Salbora is approximately 80 m thick, extending from surface down to 80 m depth (below which mineralization continues as narrow veins), and with a lateral extent of approximately 200 m x 200 m.

11 Sample Preparation, Analyses and Security

Samples from the 2011 diamond drilling program were submitted to Acme Analytical Laboratories Ltd (Acme) facility in Georgetown, Guyana (Lot 13 Plantation Non Pariel, East Coast Demerara) for sample preparation and analysis, with QAQC check assays (umpire samples) for this program carried out at Activation Laboratories Ltd (Actlabs) facility in Georgetown, Guyana (27/28 Parcel Beterverwagting Industrial Area, East Coast Demerara).

Samples from the 2017–2018 Geoprobe drilling and the 2018–2021 diamond drilling programs were submitted to the Actlabs facility in Georgetown, Guyana for primary assay. From 2020, umpire QAQC check assays and density measurements were carried out at MS Analytical Guyana (MSA) in Georgetown, Guyana (Lot 14 Coldingen Industrial Estate, East Coast Demerara).

Acme, Actlabs and MSA laboratories and their employees are independent from Goldsource. Goldsource personnel and consultants and contractors are not involved in sample preparation and analysis.

11.1 Sample Preparation and Security

11.1.1 Acme (2011–2012)

Samples were prepared at the Acme Georgetown facility and sample pulps were forwarded to the Acme Santiago, Chile laboratory (Av. Claudio Arrau 7152, Pudahuel, Santiago) for gold assay and the main Acme Vancouver, Canada laboratory (1020 Cordova St. East, Vancouver, BC) for multi-element analyses. These Acme facilities were individually certified to standards within ISO 9001:2008. The Vancouver analytical facility had received accreditation to ISO/IEC 17025:2005 from the Standards Council of Canada (SCC) for fire assay gold – gravimetric finish. The Santiago analytical facility had received accreditation to ISO/IEC 17025:2005 from the SCC for fire assay gold – gravimetric and atomic absorption spectrometry (AAS) finish. Sample preparations followed industry best practices and procedures. The analytical methods used are routine and provide robust data associated with a high degree of analytical precision.

Acme used a Laboratory Information Management System (LIMS) to track the flow of every sample through each stage of sample handling and analysis. When received, each sample was barcoded and labelled. This unique barcode was used to build an audit trail that documented the complete history of work performed on each sample.

At the Acme Georgetown facility, each sample was logged into the LIMS, dried then crushed to 80% passing a 10 mesh screen. A split of 150 g was taken using a riffle splitter and pulverized in a grinding mill with a low-chrome steel bowl to better than 85% passing a 75 µm (Tyler 200 mesh) screen (code R150). Compressed air was used to clean the equipment between samples. Barren material was crushed between sample batches. A split of the sample pulp was then forwarded to either the Santiago or Vancouver laboratory for analysis.

11.1.2 Actlabs (2011–2021)

Samples were prepared and gold fire assays completed at the Actlabs laboratory in Georgetown. Sample pulps were forwarded to the Actlabs Canada laboratory (1336 Sandhill Drive Ancaster, Ontario) for multi-element analyses. The Actlabs facilities are individually certified to standards within ISO 9001:2008. The Ancaster analytical facility has received accreditation to ISO/IEC 17025:2005 (CAN-P-4E) and CAN-P-1579 from the SCC. Sample preparations follow industry best practices and procedures. The analytical methods used are routine and provide robust data associated with a high degree of analytical precision.

At the Actlabs Georgetown facility, the rock/core sample was logged into the sample management system, dried then crushed to 80% passing a 10 mesh (1.7 mm) screen. A split of 100 g was taken using a riffle splitter and pulverized in a mild steel grinding mill with a low-chrome steel bowl to better than 95% passing a 105 micron

(Tyler 150 mesh) screen (code RX2). Compressed air was used to clean the equipment between samples. Barren material was crushed between sample batches. A split of the sample pulp was then assayed for gold on site or forwarded to the Ancaster laboratory for multi-element analysis.

11.1.3 MSA (2020)

Samples were prepared and gold fire assays completed at the MSA facility in Georgetown. Samples were received and captured into the MSA LIMS. Samples were crushed and then milled using a Rocklabs automated mill with auto-splitter. The crusher was cleaned with barren material at the discretion of the operator or every 20 samples. Sample particle size distribution was checked every 20 samples to ensure that samples were >80% passing 75 µm.

11.2 Analytical Method

Samples were analysed as follows:

11.2.1 Acme (2011–2020)

Gold fire assay with AAS finish (Acme Code G6). A 30 g prepared sample was fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with gold-free silver and then cupelled to yield a precious metal bead. The bead was digested in dilute nitric acid, concentrated hydrochloric acid was then added and the bead was further digested. The digested solution was cooled, diluted with de-mineralized water, and analyzed by AAS against matrix-matched standards.

11.2.2 Actlabs (2011–2021)

Gold fire assay with AAS finish (Actlabs Code 1A2). A 30 g prepared sample pulp was mixed with fire assay fluxes (borax, soda ash, silica, litharge) and with silver added as a collector, and the mixture was placed in a fire clay crucible, the mixture preheated at 850°C, intermediate 950°C and finish 1,060°C – the entire fusion process should last 60 minutes. The crucibles were then removed from the assay furnace and the molten slag (lighter material) carefully poured from the crucible into a mould, leaving a lead button at the base of the mould. The lead button was then placed in a preheated cupel which absorbs the lead when cupelled at 950°C to recover the silver (doré bead) + gold. The entire silver doré bead was dissolved in aqua regia and the gold content was determined by AAS. If value exceeds upper limit (3,000 ppb) re-analysis by fire assay-gravimetric (Code 1A3) was completed.

Multi-element (48) by instrumental neutron activation analysis (INAA) and inductively coupled plasma with atomic emission spectroscopy (ICP-AES) analysis (Actlabs Code 1H). For INAA, a 30 g aliquot, if available, was encapsulated in a polyethylene vial and irradiated with flux wires and an internal standard (one for 11 samples) at a thermal neutron flux of 7 x 10 12 n cm-2 s-1. After a seven-day decay to allow Na-24 to decay, the samples are counted on a high-purity Ge detector with resolution to better than 1.7 KeV for the 1332 KeV Co-60 photopeak. Using the flux wires, the decay-corrected activities were compared to a calibration developed from multiple certified international reference materials. The standard present was only a check on accuracy and was not used for calibration purposes. From 10% to 30% of the samples were rechecked by re-measurement. For values exceeding the upper limits, assays were recommended. One standard is run for every 11 samples. One blank was analyzed per work order. Selected duplicates were analyzed when enough material was submitted.

For almost total digestion and ICP analysis, a 0.25 g sample was digested with four acids beginning with hydrofluoric, followed by a mixture of nitric and perchloric acids, heated using precise program-controlled heating in several ramping and holding cycles which takes the samples to incipient dryness. After incipient dryness was attained, samples were brought back into solution using aqua regia. With this digestion, certain phases may be only partially solubilized. These phases included zircon, monazite, sphene, gahnite, chromite, cassiterite, rutile, and barite. Silver greater than 100 ppm and lead greater than 5000 ppm should be assayed, as high levels may not be solubilized. Only sulphide sulphur would be solubilized. The samples were then analyzed using a Varian ICP. Quality control for the digestion is 14% for each batch, five-method reagent blanks, 10 in-house controls, 10 samples duplicates, and eight CRMs. An additional 13% quality control is performed as part of the instrumental analysis to ensure quality in the areas of instrumental drift.

11.2.3 MSA (2020–2021)

Gold fire assay with AAS finish (MSA Code FAS-111). A 30 g prepared sample pulp was mixed with fire assay fluxes (borax, soda ash, silica, litharge) and lead collector and the mixture was placed in a clay crucible and heated in stages to 1,050°C to fuse the sample. The molten slag was poured into a mould, and the lead button at the base of the mould removed and placed in the cupel and heated to ~1,000°C – the remaining precious metal bead was dissolved in aqua regia and the gold content determined by AAS. If value exceeds the upper limit (10 ppm), re-analysis by fire assay-gravimetric (code FAS-418) was completed.

11.3 Dry Bulk Density Determinations

11.3.1 Methodology

During 2011, bulk density tests were carried out on a variety of fresh and saprolitic, mineralized and non-mineralized rock types from the 2011 diamond drill core. Measurements were carried out in-house using a water displacement method similar to that used by MSA labs in 2020.

During the 2020 and 2021 drill campaigns, additional bulk density tests were carried out on a variety of mineralized and unmineralized core samples from the Eagle Mountain and Salbora deposits. Samples were shipped to MSA in Georgetown, Guyana, where densities were determined (MSA method codes SPG-411 and SPG-415).

Density measurements were carried using the following method: A sample receiving vessel was filled to the reference mark with de-ionized water and weighed. Then, approximately one half of the volume of de-ionized water in the sample receiving vessel was discarded and the remainder weighed. Samples were dried and a representative portion of the dried sample was transferred into the sample receiving vessel which was approximately half-filled with de-ionized water. The vessel was then filled to the reference volume with de-ionized water and weighed. This weight was recorded and used for determining the specific gravity of the sample. If samples were porous or absorb >2% water (e.g. saprolite), samples were dried, weighed in air, coated with wax, and weighed again in air. The coated samples were then weighed again in water. Care was taken when transporting and drying saprolitic core to retain solid samples.

11.3.2 Results

The 2011 density tests on "Fresh" mineralized zones and saprolitic mineralized zones yielded average bulk densities of approximately 2.60 t/m^3 and 1.60 t/m^3 respectively, and these densities were used for the 2012 and 2014 MREs.

The 2020 to 2021 density tests on saprolite samples from the Eagle Mountain Project show a range of densities between 1.01 t/m^3 and 2.92 t/m^3, with an average of 1.57 t/m^3. Transition samples had a range of 1.32 to 3.01, with an average of 2.29 t/m^3. Fresh samples had densities between 2.14 t/m^3 and 4.17 t/m^3, with an average of 2.72 t/m^3.

Density statistics for the main rock types at the Project are presented in Table 14-3 in section 14.6.3.

11.4 Quality Assurance and Quality Control

Several different QAQC programs have been implemented at the Eagle Mountain Property, and the monitoring and assessment of QAQC data is used to provide guidance as to the confidence that sample and assay data obtained from laboratories can be used for resource estimation.

The QAQC programs implemented at the Eagle Mountain Gold Project by the current operators include the following types of QAQC samples:

- CRM samples – prepared from mineral matrices that contain known gold values uniformly distributed throughout the pulverized rock. Submitted to the assay laboratory in foil sachets, CRM samples are used to assess laboratory accuracy and precision. All CRMs used at the project were prepared by Rocklabs Ltd.
- Blank samples – prepared from material containing trace amounts of the element under investigation. Blank samples are used in the assessment of contamination from other samples during sample processing and laboratory accuracy.
- Core duplicate samples – quarter-core samples taken from remaining core, used to assess the presence of a "nugget effect".
- Coarse duplicate samples – duplicate splits of coarsely crushed material, generated during sample preparation, used to check the presence of a nugget effect and to assess laboratory precision.
- Pulp duplicate samples – duplicate splits taken from pulp sample material generated during sample preparation, used to assess laboratory precision.

11.4.1 Certified Reference Materials (2011)

Four different Rocklabs oxide standards were used during the 2011 program at an average insertion frequency of 2.3% (i.e. a total of 161 CRMs for 6,913 samples submitted during the 2011 program). CRMs were chosen to test the range of gold grades encountered at the Eagle Mountain Property.

Results for the CRMs used in 2011 are summarized in Table 11-1 below.

Table 11-1: Summary of CRM results for 2011 drill core samples

CRM	Control grade (ppm)	No. of analyses	Mean* of analyses	Minimum*	Maximum*
OxE42	0.611	66	0.616	0.55	0.788
OxH52	1.291	61	1.277	0.99	1.394
OxC88	3.557	26	3.537	3.352	3.88
OxN33	7.378	8	7.535	7.7073	7.843

**Mean, minimum and maximum exclude outliers mentioned in the text.*

Analysis results show no significant negative or positive bias at the CRM grades evaluated.

Across all CRM grades, 67% and 92% of assay values were within ± 1 and 2 standard deviations, respectively. CRM OxE42 had four samples greater than 2 standard deviations from a mean of 0.616 ppm Au. Two of these were outliers, samples 902326 and 902231 returned grades of 0.788 and 0.713 ppm Au respectively. CRM OxH52 had seven samples greater than 2 standard deviations from a mean of 1.291 ppm Au. Two of these were outliers; samples S04116 and S05633 returned grades of 0.990 and 1.010 ppm Au respectively.

All CRMs show a degree of cyclical analytical drift. It is particularly apparent in the Standard OxE42CRM plot, where there is a gradual decrease in the mean of returned CRM grades over the observation period, expressed as linear trend line from 0.645 ppm Au to 0.584 ppm Au.

Analytical drift does not appear to correlate with outlying values. There is only one occasion where successive CRM assay values are greater than 2 standard deviations the expected value, (OxH52 samples S04116 and S05481).

11.4.2 Certified Reference Materials (2017–2021)

Seven different Rocklabs oxide standards and two fresh rock standards were used during the 2017–2021 programs at an average insertion frequency of 2.6% (i.e. a total of 1136 CRMs for 40,157 samples submitted during this period). The reference grades and standard deviation performance for the CRMs are shown in Table 11-2. CRM control charts are shown in Figure 11-1 to Figure 11-9.

CRM	Control grade (ppm)	No. of analyses	Mean* of analyses	Minimum*	Maximum*	% Within 1 standard deviation	% Within 2 standard deviations
OXC152	0.21	593	0.21	0.14	0.25	57	95
OxD108	0.41	71	0.43	0.24	0.87	69	89
OXE150	0.66	154	0.65	0.50	0.83	62	92
OXE152	0.22	17	0.22	0.20	0.25	59	94
OXG098	1.02	58	1.03	0.86	1.16	64	95
OXG140	1.02	171	1.04	0.88	1.09	40	68
OXJ137	2.42	9	2.64	2.40	2.83	22	67
SG99	1.04	4	1.01	0.90	1.07	75	100
SH82	1.33	59	1.25	1.03	1.31	0	7

Table 11-2: CRM results for 2017–2020

**Mean, minimum, maximum and standard deviations exclude outliers mentioned in the text.*

With the exception of CRMS OXG140 and SH82, CRMs performed well with between 40% and 75% of assay values within ± 1 standard deviation and between 68% and 100% within ± 2 standard deviations.

OXC152 had a cluster of six outliers ranging from 0.14 ppm to 0.16 ppm, approximately 30% less than the expected value. OXCD108 had a single outlier at 0.87 ppm. OXE152 and OXG098 had no outliers. OXG140 had two outliers at 0.94 ppm and 0.88 ppm. OXJ137 and SG99 had no outliers. SH82 had five outliers in a tight range ranging from 1.03 ppm to 1.09 ppm, approximately 20% less than the expected mean. The similar grade of SH82 outliers suggest they could be mislabelled CRM sachets.

CRM OXG140 (1.02 g/t Au) performed badly due to a consistent positive bias of approximately 10% that resulted in only 67% of samples being within ± 2 standard deviations of the certified mean. CRM SH82 (1.33 g/t Au) performed badly due to a consistent negative bias of approximately -5% that resulted in only 7% of samples being within ± 2 standard deviations of the certified mean. The consistent but contradictory biases seen for these similar grade CRMs is difficult to explain. Both CRMs were prepared and analysed in the same way during the 2021 drill campaign. The only significant difference is that OXG140 is an oxide CRM whereas SH82 is a fresh rock CRM.

Ongoing surveillance of CRM results is necessary to identify and resolve consistent bias is sequential CRMs. A common batch failure criterion is two or more sequential CRMs that are all >2 standard deviations below the mean, or all >2SD above the mean. The Company should implement this quality control criterion and determine the cause of the OXG140 and SH82 CRM bias.

All CRMs suggest a degree of analytical drift. The cyclicity and amplitude of drift over time is difficult to determine because the QAQC database does not contain analysis dates. CRMs can only be reviewed in sample number sequence not by date. A robust database that includes analysis date should be established in future.

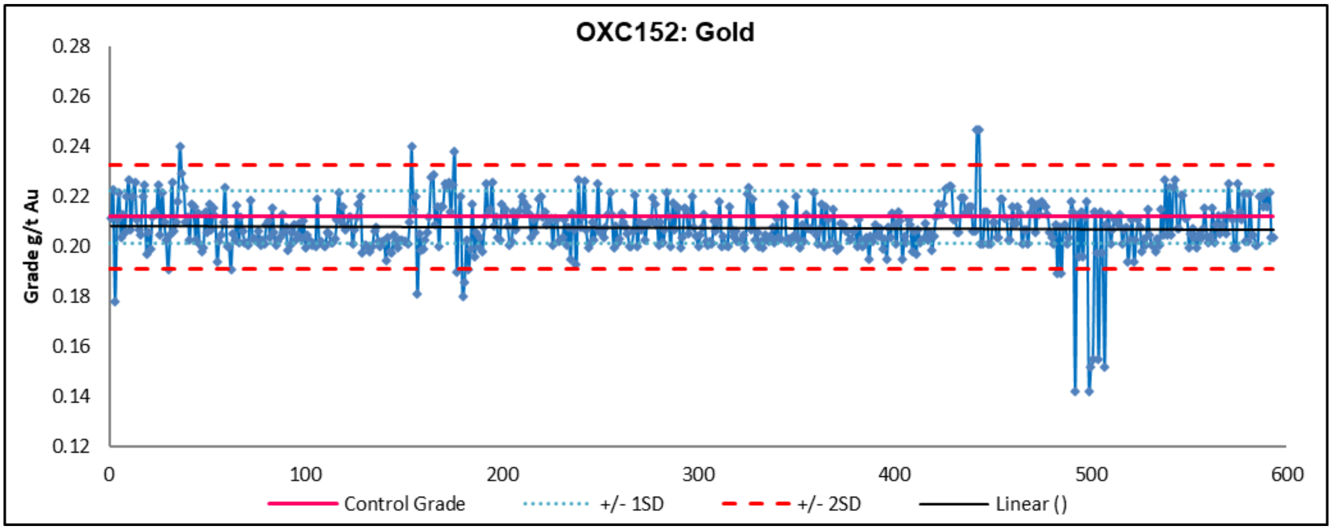

Figure 11-1: Control plot for gold CRM OX152

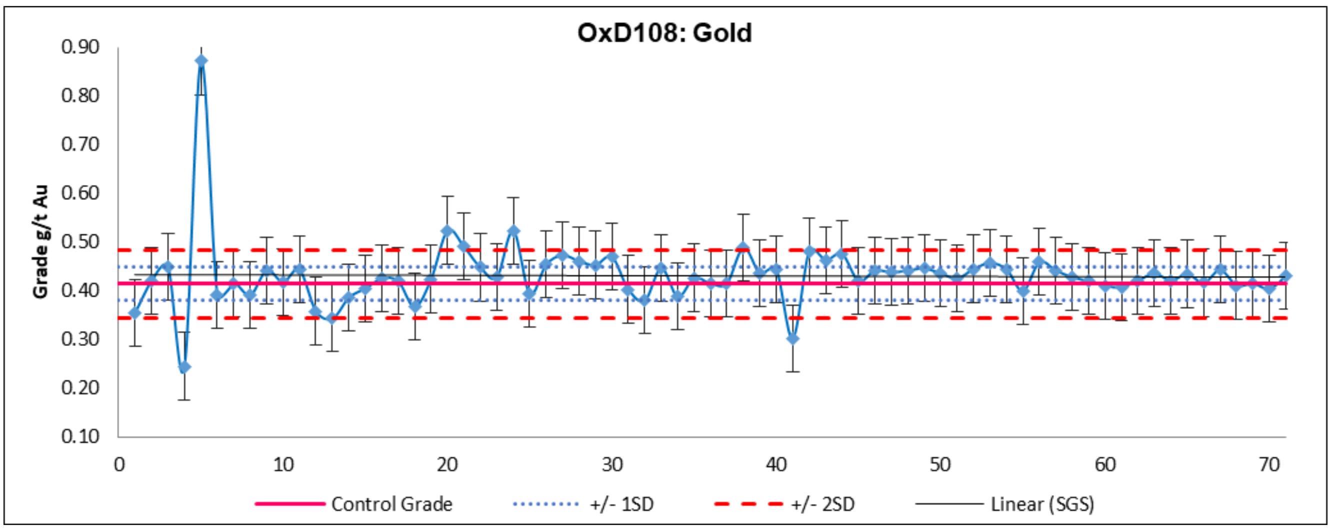

Figure 11-2: Control plot for gold CRM OXD108

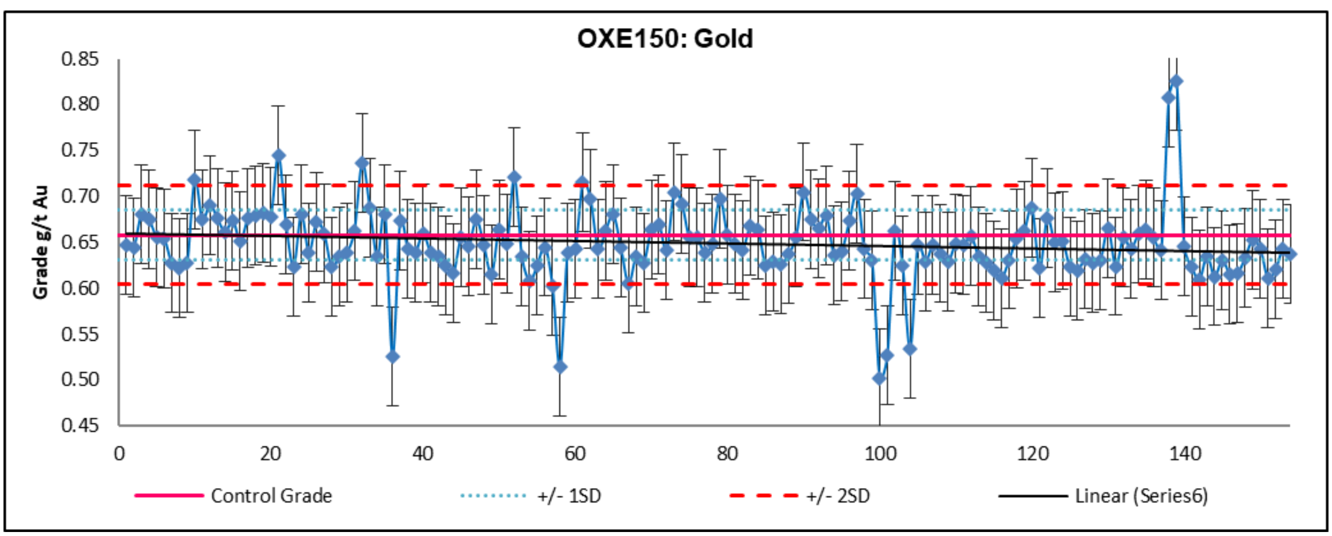

Figure 11-3: Control plot for gold CRM OXE150

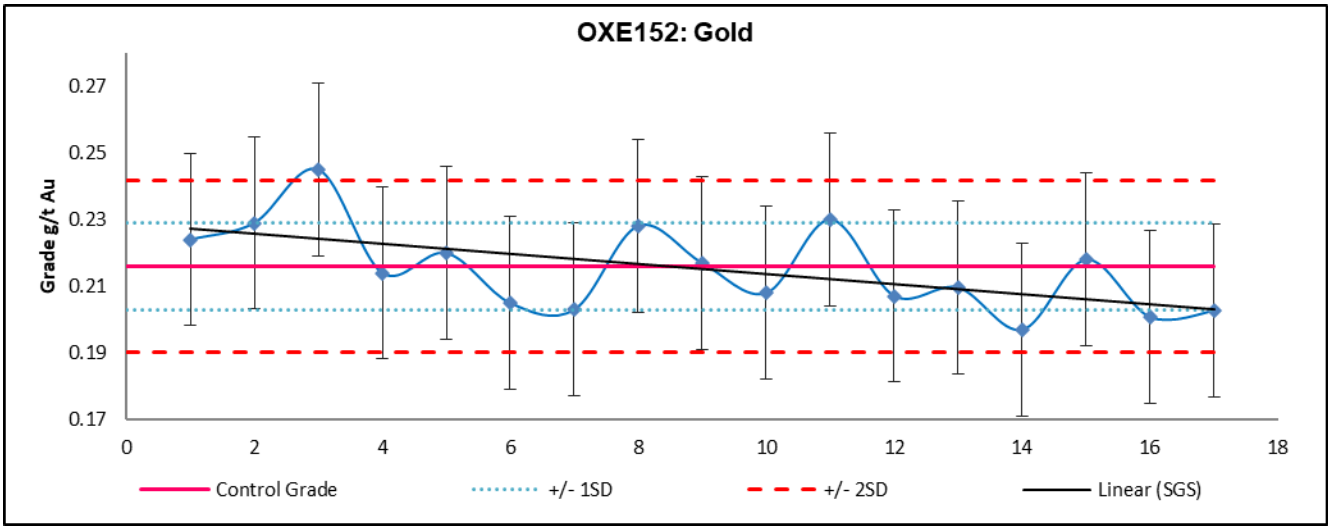

Figure 11-4: *Control plot for gold CRM OXE152*

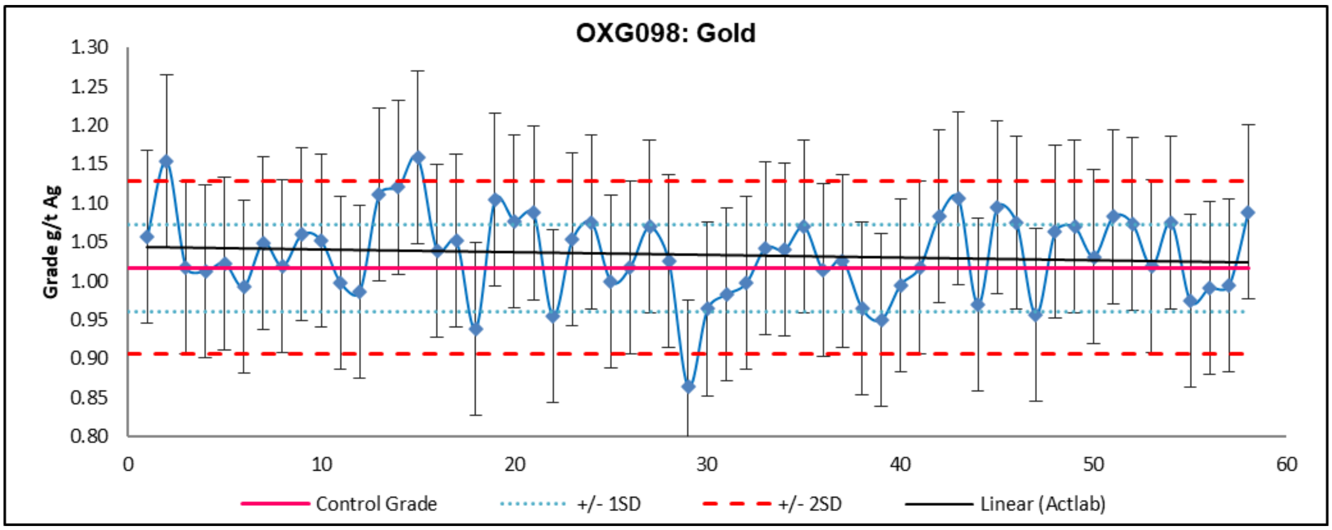

Figure 11-5: *Control plot for gold CRM OXG098*

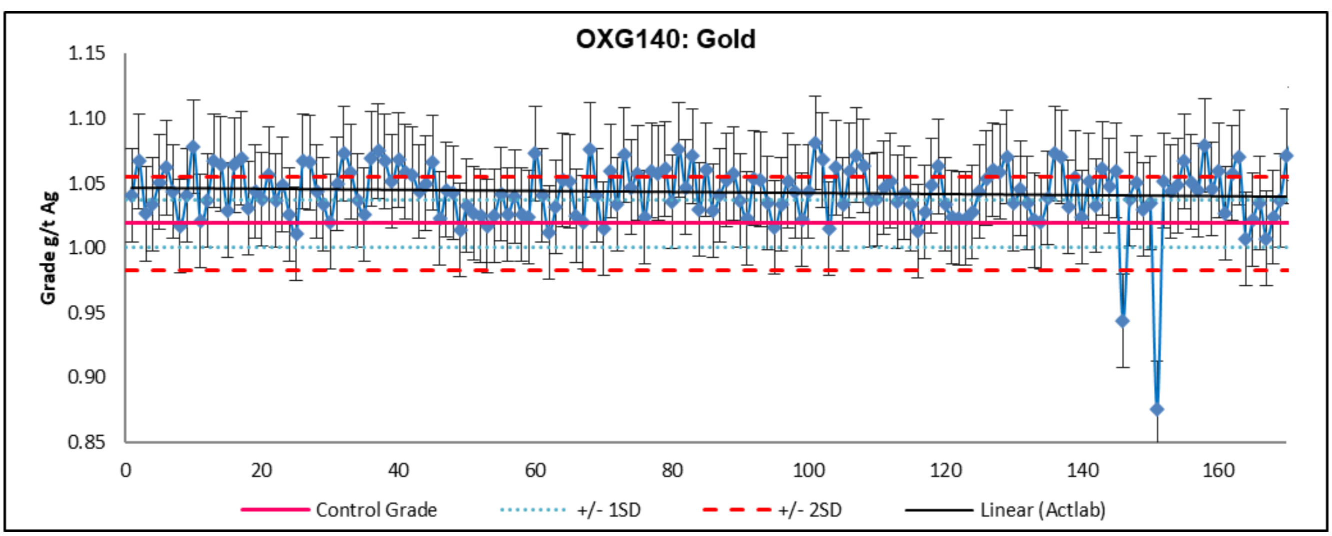

Figure 11-6: *Control plot for gold CRM OXG140*

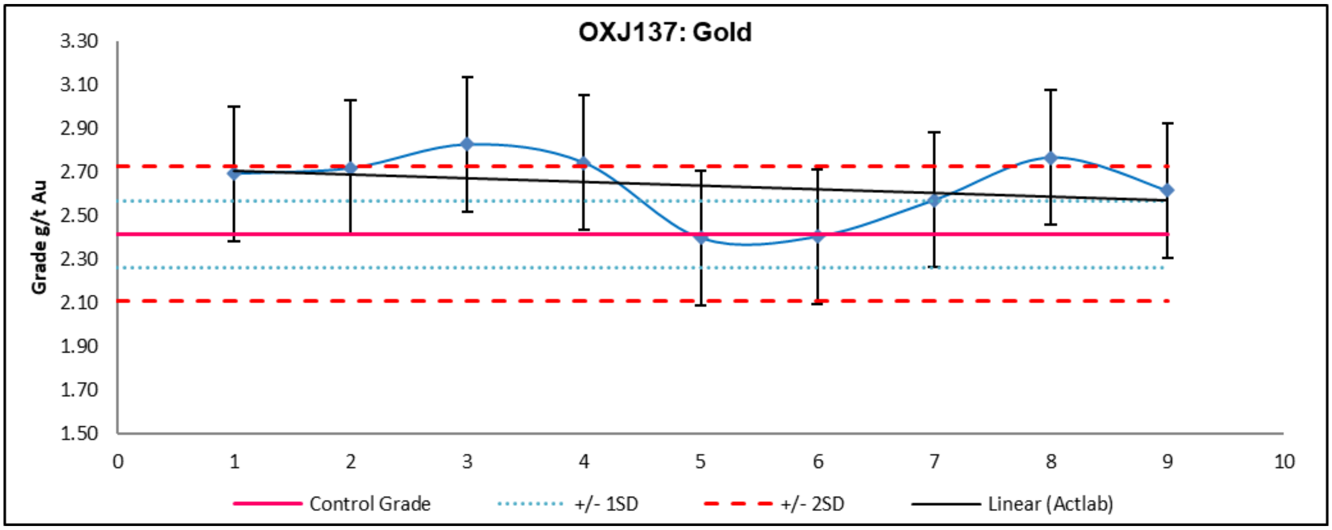

Figure 11-7: Control plot for gold CRM OXJ137

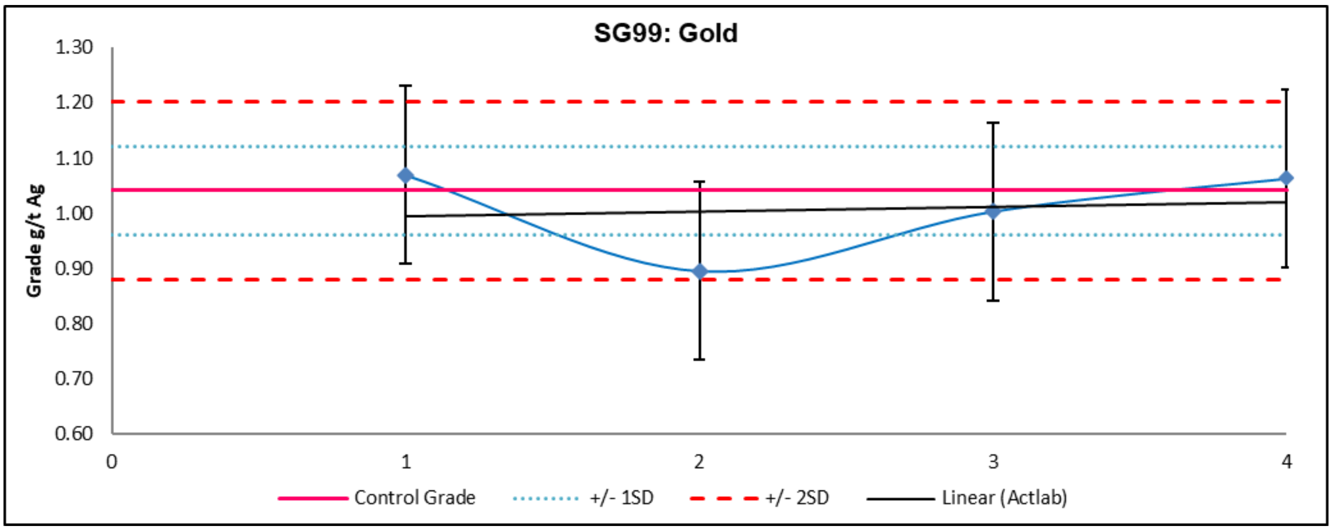

Figure 11-8: Control plot for gold CRM SG99

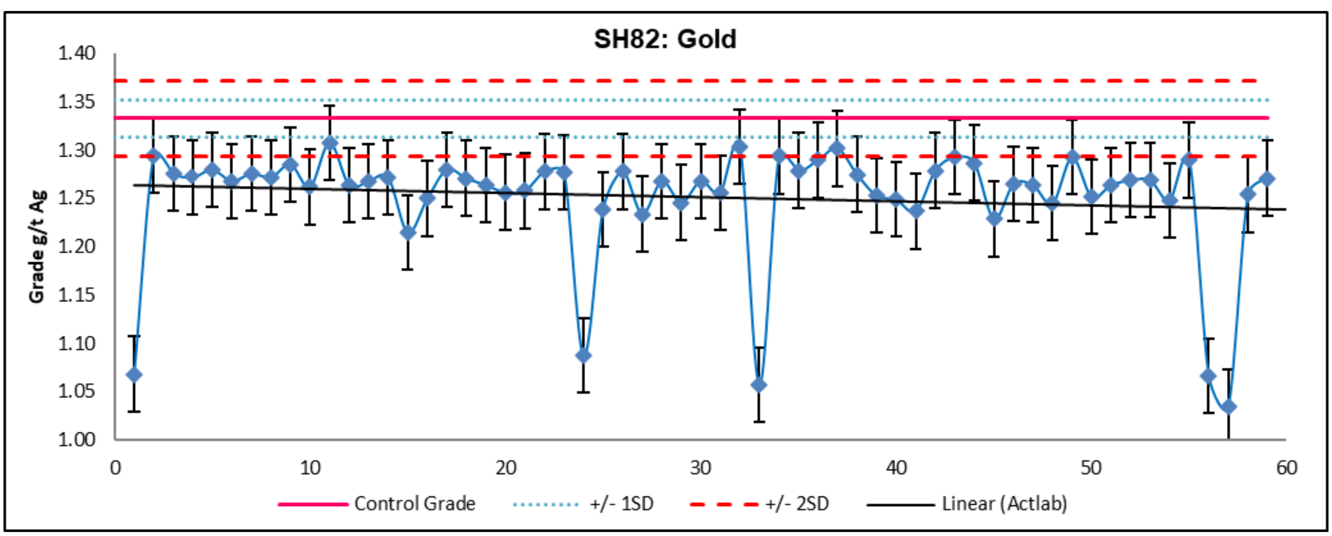

Figure 11-9: Control plot for gold CRM SG99

11.4.3 Blanks (2011)

A total of 169 blank samples were assayed during the 2011 program (2.4% of submitted samples). Blank samples of Linden bauxite were inserted with saprolitic drill and auger samples and Omai dolerite core were inserted with fresh rock drill samples. Blanks were placed within the sample stream at a frequency of one blank per 50 samples. Blanks were inserted within zones considered to be mineralized or immediately after a sample containing visible gold.

Of the blanks, 79% returned a gold grade below 0.01 ppm Au (>95% upper tail confidence interval after removal of spurious values); 21% of samples returned assays of greater than 0.01 ppm Au with values ranging up to 0.036 ppm Au. One sample returned a spurious value of 0.079 ppm Au and may be the result of mislabelling.

11.4.4 Blanks (2017–2021)

A total of 1,202 blank samples (2.8% of all samples) were submitted for analysis between 2017 and 2021. Blank samples were either barren dolerite from an intrusion near to the project site, or quartz sand, which is used by the assay laboratories for blank material. As shown in Figure 11-10, majority of the blanks had below detection or very low values reported; thus, the blank values indicate there is very little contamination overall.

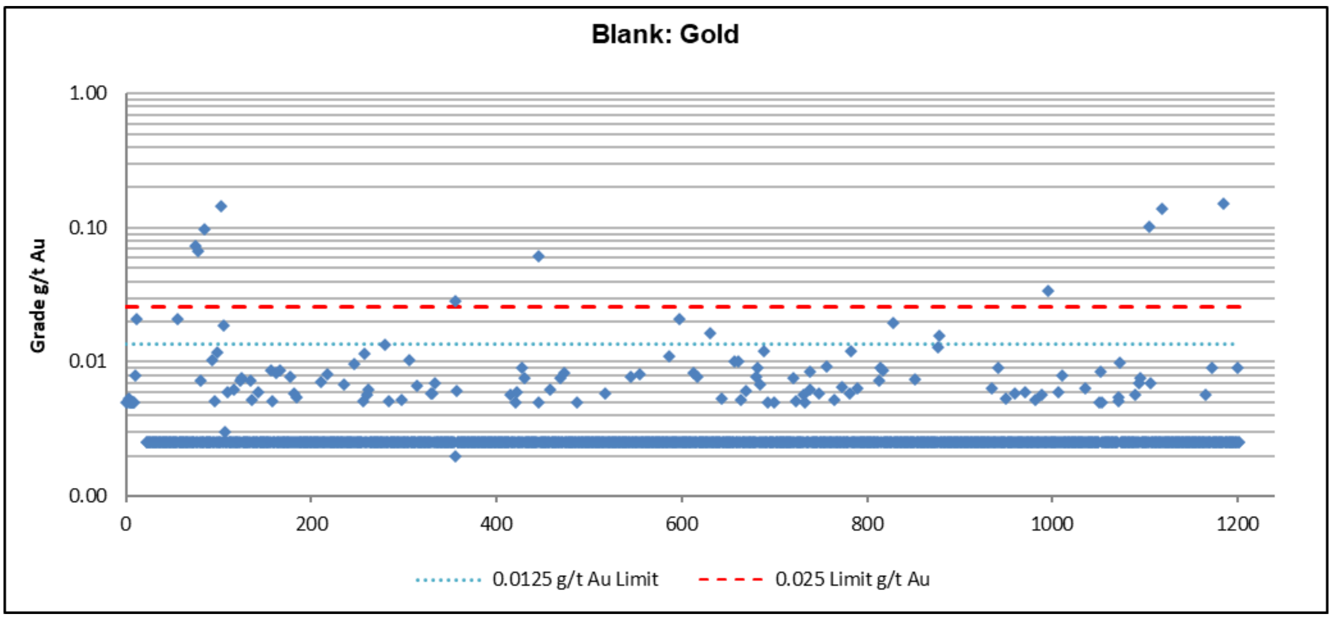

Figure 11-10: Results of blank samples taken during the 2017–2021 program

Table 11-3: 2017 to 2021 blank assay results

Element	Minimum (ppm)	Maximum (ppm)	Mean (ppm)	No. of results
Au (ppm)	<0.002	0.15	0.004	1,202

11.4.5 Duplicates (2011)

Duplicates from the 2011 program comprised a mixture of coarse duplicates and pulp duplicates. A total of 283 duplicates were submitted (4.1% of all samples).

For coarse duplicates, data is available for 215 samples. Duplicates were selected from five holes, namely EMD11_052 (three samples), EMD11_053 (98 samples), EMD11_054 (46 samples), EMD11_067 (58 samples), and EMD11_099 (10 samples), and were submitted for re-analysis at Actlabs in three batches over the course of the drill program. Good repeatability of original assay values is indicated by a Pearson correlation coefficient of 0.90, and 64% of repeat assays pairs had a half absolute relative difference (HARD) value within ±20%. Variability decreases as mean grade increases and there was no relative bias between original and repeat assay values. Large relative differences between assays at the lower limit of detection can result in an inaccurate analysis of sample repeatability. Because duplicate samples were not selected from mineralized zones, only 20 pairs had a mean gold grade above a cut-off of 0.2 ppm Au and tested repeatability at economically significant grades. Above this nominal cut-off repeatability appears to improve with 90% of pairs having HARD value within ±20%.

For pulp duplicates, data is available for 68 samples. Duplicates were selected from two holes, EMD11_054 (36 samples) and EMD11_055 (34 samples) and were submitted for re-analysis at Actlabs in a single batch. Good repeatability of original assay values is indicated by a Pearson correlation coefficient of 0.99 and 70% of repeat assays pairs had a HARD value within ±20%. There was no relative bias between original and repeat assay values. Pulp duplicates were not selected from samples with economically significant grades. Only six pairs had a mean gold grade above 0.2 ppm, all returned values within 20% of the mean of the sample pair.

11.4.6 Field Duplicates (2017 - 2020)

A total of 342 duplicates were submitted between 2017 and 2020 (1.3% of all samples from that period). Following recommendations in the previous NI 43-101 report (Roy et al., 2014), quarter-core duplicates were submitted during this time to assess the nugget effect. Because duplicate samples were not selected from mineralized zones, only 86 pairs had a mean gold grade above 0.1 g/t Au. These samples were used to calculate average coefficients of variation (CVs) following the approach of Stanley and Lawie (2007), and as recommended by Abzalov (2008). The average CV for quarter-core field duplicates is 40%. This matches the 40% CV reported for acceptable sampling practice at coarse gold projects (Abasov, 2008). A scatter plot of field duplicate samples >0.1 g/t Au is shown in Figure 11-11.

11.4.7 Repeat Pulp Analysis (2020 - 2021)

Following recommendations in the previous NI 43-101 report (CSA Global, 2021), a total of 478 repeat analyses were made on pulp samples between 2020 and 2021 (1.6% of all samples of all samples analysed during that period). Repeat analysis was undertaken to assess laboratory assay precision. A significant proportion, 398 pairs, contained gold grades above 0.1 g/t Au. These samples were used to calculate average CVs following the approach of Stanley and Lawie (2007). The average CV for repeat pulp analyses is 23%. This in line with the 20% CV specified for acceptable sampling practice at coarse gold projects (Abasov, 2008). A scatter plot of repeat pulp analyses >0.1 g/t Au is shown in Figure 11-11.

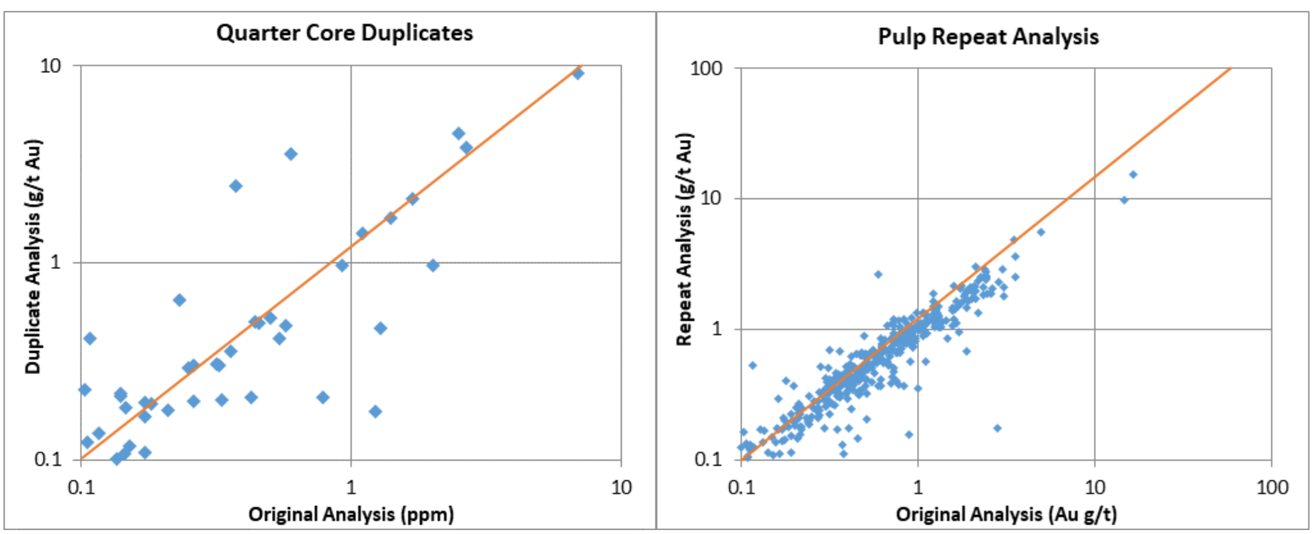

Figure 11-11: Scatter plot for 2017–2020 quarter-core duplicates (left) and pulp repeat analysis (right)

11.4.8 2017 to 2021 Laboratory Umpire Analysis – Quarter Core

In addition to duplicate analysis, quarter-core duplicates were also submitted to MSA laboratories, who acted as the umpire laboratory. A total of 262 duplicates were submitted between 2017 and 2020 (1.2% of all samples). No pulp duplicates or coarse duplicates were submitted. Reasonable repeatability of original assay values was indicated by a Pearson correlation coefficient of 0.75, and 62% of repeat assays pairs had a HARD value within ±20%. There was no relative bias between original and repeat assay values. Umpire samples were from mineralized zones but not based on previous gold assays. A larger number (213 pairs) had a mean gold grade above 0.2 g/t Au, with 62% of repeat assays above this threshold had a HARD value within ±20%.

11.4.9 Laboratory Umpire Analysis – Pulps

Following recommendations in the previous NI 43-101 report (CSA Global, 2021) a repeat umpire analysis program was established in 2021. Pulp samples were submitted for repeat analysis at MSA laboratories, which acted as the umpire laboratory. Repeat analysis was undertaken to assess laboratory assay accuracy and bias.

A total of 204 pulp samples analysed by Acme in 2011 were submitted for repeat analysis at MSA laboratories. A significant proportion, 183 pairs, contained gold grades above 0.1 g/t Au. These samples were used to calculate average coefficients of variation (CV). The average CV for repeat pulp analyses is 16%, in line with the 20% CV specified for acceptable sampling practice at coarse gold projects (Abasov, 2008). There was no relative bias between original and repeat assay values

A scatter plot and QQ plot for umpire analyses is shown in Figure 11-12.

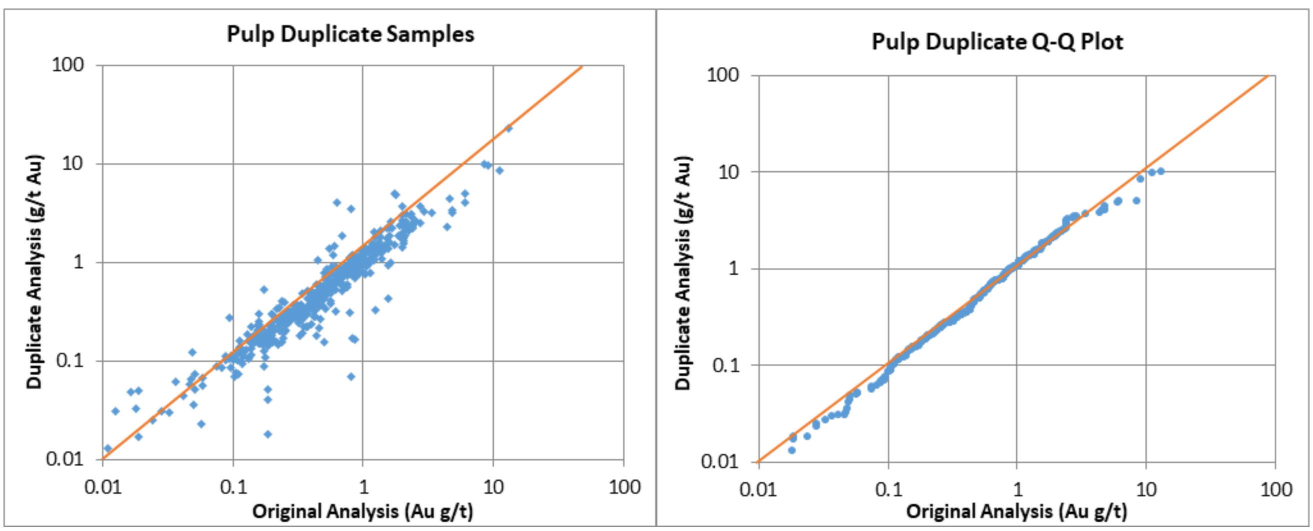

Figure 11-12: Scatter plot (left) and quantile-quantile plot (right) for 2011 umpire samples

A total of 481 pulp samples analysed by Actlabs in 2020-2021 were submitted for repeat analysis at MSA laboratories. (1.6% of all samples from that period). A significant proportion, 411 pairs, contained gold grades above 0.1 g/t Au. The average CV for repeat pulp analyses is 21%. A scatter plot of repeat pulp analyses >0.1 g/t Au is shown in Figure 11-13. The average result for original values were 3.13% less than the MSA umpire values, which is an acceptable relative difference for this study. The possibility for systematic under-reporting by Actlabs assay values should be monitored by continuing the umpire analysis programme and by careful surveillance of CRM results.

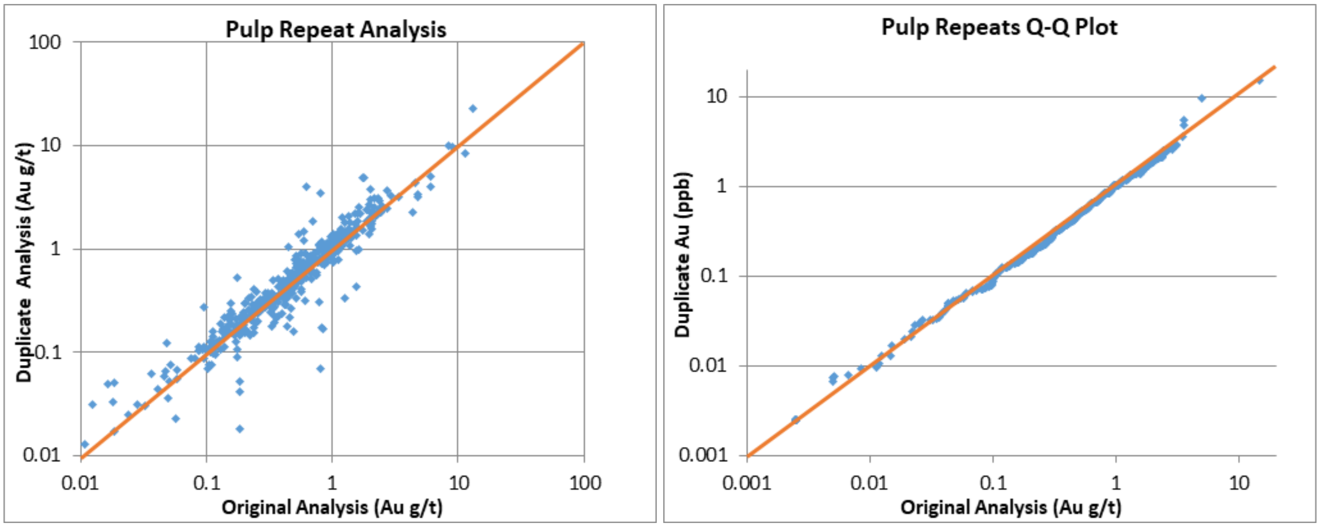

Figure 11-13: Scatter plot (left) and QQ plot (right) for 2020–2021 umpire samples

11.5 Qualified Person's Opinion on Sample Preparation, Security and Analytical Procedures

The total number of core samples analysed between 2017 and 2021 is 40,157. For this period, a total of 2,765 QAQC sample were analysed representing 9% of all assays in the exploration database.

It is the Qualified Person's opinion that sample preparation and analyses were done in line with industry standards and are satisfactory.

Although a small number of CRMs show both positive and negative bias, the quality of assays is considered robust and reliable, and suitable to be used for the MRE. Saprolite CRM OXG140 and fresh rock CRM SH82 had numerous outliers and showed poor precision and bias not seen in umpire repeat analysis. Careful surveillance is required to identify and correct CRM failures when they are reported.

12 Data Verification

12.1 Site Visit

Dr Luke Longridge, Qualified Person and author, carried out a four-day site visit to the Eagle Mountain Gold Project on 22–25 November 2020, which was during the 2018-2021 drill program. During this time, the Qualified Person visited the property site, validated drillhole and auger collar positions using a handheld GPS, reviewed drill core at the Eagle Mountain core logging facility, and inspected the geology of the Project site.

During the site visit, Dr Longridge observed core logging and sampling procedures, reviewed sampling preparation facilities and procedures, and inspected documentation related to drilling, sampling, and assaying. Analytical facilities at both Actlabs and MSA in Georgetown, Guyana, were inspected. No samples were collected for additional laboratory verification; however, mineralized intervals were inspected and compared with assay values for confirmation of mineralization.

It is the Qualified Person's opinion that the data available are a reasonable and accurate representation of the Eagle Mountain Gold Project and are of sufficient quality to provide the basis for the conclusions and recommendations reached in this report.

13 Mineral Processing and Metallurgical Testing

13.1 Introduction

Metallurgical testwork for the Eagle Mountain Project has been conducted by various groups, including Goldsource. Preliminary testwork was completed by GSR and OGML. More detailed gold recovery analysis of the Eagle Mountain saprolite material was completed in 2018 by SGS Canada for Goldsource. The results were used to generate a preliminary flowsheet design (TetraTech 2019). Results of each metallurgical testwork program are summarized below.

In April 2022, 26 samples totalling 850 kilograms from the Eagle Mountain and Salbora deposits as well as from the Toucan and Powis prospects were shipped to SGS Canada for additional metallurgical testwork to establish the design parameters for a Prefeasibility study. Results are not yet available.

13.2 GSR Metallurgical Testwork (1989–1991)

Metallurgical studies completed by GSR in 1989 and 1991 were limited to desliming and gravity gold recovery testwork. During the first quarter of 1989, two samples of saprolite were collected and treated to evaluate the free gold content and the feasibility of gold extraction by gravity. The preliminary results indicated that majority of the gold does not appear to be amenable to the gravity recovery method.

Additional testwork on the saprolite material completed later in 1989 showed that desliming achieves feed volume reduction of up to 81% with a high gold recovery to the sands fraction (+90%). It was anticipated that desliming ore could be an important pre-concentration step prior to processing. Gold recovered by gravity reached only 24% of the total gold content.

In 1991, GSR carried out additional gold gravity testwork at Lakefield Research using a Falcon concentrator. Nine gravity tests were completed, and average gold recovery was between 33% and 42% of the total gold content. The gravity gold recovery increased using the more advanced gold recovery technology, but not significantly enough to be retained as a single processing route for the recovery of gold from the Eagle Mountain deposit.

13.3 OMGL Metallurgical Testwork (2009–2010)

OGML submitted samples of saprolite and fresh rock mineralization from the Eagle Mountain deposit to SGS Canada Inc. in Lakefield, Ontario (SGS Lakefield) for testwork to establish the nature of the gold occurrence. The testwork involved sample characterization using head analyses, mineralogy and grindability studies and an investigation of the amenability of the samples to gold recovery/extraction utilizing gravity separation and cyanide leaching.

SGS Lakefield received the shipment of Eagle Mountain samples on 11 September 2009 containing four fresh rock mineralization samples (Kilroy, Millionaire, Zion, and Saddle) and four saprolite mineralization samples (Kilroy Sap, Millionaire Sap, Zion Sap, and Saddle Sap). The Saddle mineralization samples were not used in this test program and were retained in storage.

The following description of testwork and results has been extracted from the Executive Summary of SGS Canada's final report (SGS Canada Inc., 2010).

The individual saprolite mineralization samples underwent head analyses and cyanidation testing. A composite test sample generated from the three individual samples was used for mineralogical studies and gravity separation testwork.

The individual fresh rock mineralization samples underwent grindability testing, head analyses and cyanidation testing. A composite test sample generated from the three individual samples was used for mineralogical studies and gravity separation testwork.

The head analyses of the saprolite mineralization samples are summarized in Table 13-1. The first column gives the gold grade by screened metallics protocol, and the second column reports the mean gold grade based on fire assay of duplicate cuts. The screened metallics gold values are likely to be more reliable due to the larger sample mass used.

Table 13-1: Head analysis summary – Eagle Mountain saprolite mineralization samples

Sample ID	Au[1] (g/t)	Au[2] (g/t)	Ag (g/t)	S %	Fe %	Cu (g/t)	Zn (g/t)
Kilroy Sap	2.79	1.62	3.0	<0.01	0.28	25	65
Millionaire Sap	0.68	0.45	1.1	0.05	0.44	37	67
Zion Sap	0.68	0.70	3.3	0.02	0.35	71	49

Au[1] gold by screened metallics protocol. Au[2] gold by fire assay – duplicate cuts.

The significant difference in gold grade seen between the screened metallics and fire assay data for the Kilroy Sap sample indicated the presence of "nugget" gold in the sample. The Kilroy Sap sample was found to contain a significant quantity of coarse gold with 34.4% of the gold reporting to the +106 µm fraction (0.8% of the mass) of the screened metallics. The Millionaire and Zion samples contained little coarse gold with the screened metallics +106 µm fraction containing only 3.1% (in 2.5% mass) and 0.3% (in 2.2% mass) of the gold, respectively.

Examination of the bulk mineralogy of the saprolite composite showed that the sample was mainly composed of quartz, with moderate amounts of plagioclase and kaolinite and minor to trace amounts of gibbsite, illite, potassium feldspar, goethite and magnetite.

The gold deportment study identified and measured 253 gold grains. Approximately 40% (accounting by total surface area) of the gold particles occurred as liberated grains with an average size of 10 µm, with a further 39% occurring as locked grains (mainly with goethite) averaging 6 µm in size. The remaining 21% were seen to occur as attached grains, predominantly to goethite and hematite, with an average size of 7 µm. The largest gold grains observed were approximately 40 µm.

A significant proportion of attached and locked gold occurred either partially or completely rimmed by a complex oxide/chloride phase which is mainly composed of variable amounts of copper, silver, iron (silicon, aluminium, nickel, tin, chromium), chlorine, and oxygen. Further testwork was suggested to determine the effect on leaching kinetics and on gold recoveries.

The gold in the sample was found to be present mostly as native gold, hosting trace amounts of silver, copper, and iron. The average composition was approximately 97.4% Au, 1.9% Ag, 0.4% Cu, and 0.3% Fe.

Approximately 25% of the gold reported to the float fraction. Super-panning of a 60 g subsample of the floats revealed no visible gold, indicating that it is possibly present as fine inclusions in silicate minerals.

The head analyses of the fresh rock mineralization samples are summarized in Table 13-2. The Kilroy "fresh rock sample (1.18 g/t Au) was higher grade than the Millionaire and Zion fresh rock samples at 0.58 g/t Au and 0.57 g/t Au, respectively. The silver head grades for the three fresh rock mineralization types were all below the detection limit (<0.5 g/t).

Table 13-2: Head analysis summary – Eagle Mountain fresh rock mineralization samples

Sample ID	Au (g/t)	Ag (g/t)	S %	Fe %	Cu (g/t)	Zn (g/t)
Kilroy Fresh	1.18	< 0.5	0.53	0.20	11	44
Millionaire Fresh	0.58	< 0.5	0.30	0.24	15	43
Zion Fresh	0.57	< 0.5	0.37	0.17	11	43

Examination of the mineralogy of the fresh rock composite by bulk modal analysis conducted using QEM ARMS (Automated Rapid Mineral Scan) showed that 47.5% of the mineralization was composed of plagioclase and 28.3% was quartz. Potassium feldspar, micas and amphibole accounted for a further 15% of the sample. Pyrite was the main sulphide mineral present. The mineralogical analysis identified 72.7% of the pyrite as free and 4.1% liberated. Iron/titanium oxides in the sample were identified as being 30.9% free and 26.5% liberated.

The Eagle Mountain deposit fresh rock samples underwent a standard Bond Ball Mill grindability test with a closing screen size of 150 µm. The mineralization types were found to be medium (Millionaire) to moderately hard (Kilroy) based on the SGS database. The Bond Ball Mill grindability test results are presented in Table 13-3.

Table 13-3: Bond Ball Mill grindability test results (metric)

Sample	Work Index (kWh/t)	Hardness percentile	Relative hardness
Millionaire	15.2	57	Medium
Zion	16.2	67	↓
Kilroy	17.0	74	Mod hard

Estimated gravity recoverable gold (GRG) tests were carried out on saprolite composite and fresh rock composite samples to determine the GRG value (theoretical maximum amount of GRG) as a function of the size distribution.

The saprolite composite had a GRG number of 70.2, indicating that approximately 70% of the gold in the sample was recoverable by gravity separation. This data is supported by the results of the heavy liquid separation (HLS) at specific gravity 3.1 g/cm^3 conducted during mineralogy sample preparation which showed 75% gold distribution to the HLS sink fraction.

The calculated head grade from the GRG test for the saprolite composite was 1.78 g/t Au. This correlated well with the expected head grade based on the individual head analyses of approximately 1.4 g/t Au. The estimated GRG value is likely to be more reliable due to the larger sample size and assay methodology used.

The fresh rock composite had a GRG number of 47.5, indicating approximately 45% of the gold in the sample was recoverable by gravity separation. Most of the gold was recovered at the progressively finer grind sizes.

The calculated head grade from the GRG test for the fresh rock composite was 0.87 g/t Au. This correlated well with the expected head grade based on the individual head analyses of approximately 0.8 g/t Au. The estimated GRG value is likely to be more reliable due to the larger sample size and assay methodology used.

Standard "rolling bottle" leach tests were completed on the each of the Eagle Mountain saprolite and fresh rock mineralization samples to examine response to cyanide leaching. There was no preliminary gravity separation stage employed prior to cyanidation to remove any free gold. The cyanidation conditions applied were as follows:

- Target grind size = 74 µm
- Pulp density = 40% solids (w/w)
- Pulp pH = 10.5–11 (maintained with lime)
- Cyanide concentration = 1.0 g/L as NaCN
- Retention time = 24 hours.

The cyanidation test results are summarized in Table 13-4. The Kilroy and Millionaire saprolite samples showed good response to cyanidation with gold recoveries over 90%. The Zion saprolite sample showed slower leach kinetics with an initial gold recovery of 64.9%. A further "rolling bottle" leach test was conducted maintaining the same leach conditions but with a 72-hour retention time. Gold recovery increased to 95.5%. The complex rims observed during the gold deportment study may be influencing the leach kinetics. Further study is recommended to confirm this.

Table 13-4: Cyanidation test results summary

Feed	Grind actual (P80 µm)	Extraction (%)		Residue (g/t)	
		Au	Ag	Au	Ag
Kilroy Sap	83	96.7	81.9	0.09	0.5
Millionaire Sap	99	91.0	69.2	0.10	0.5
Zion Sap	91	64.9	80.9	0.31	0.5
Kilroy Fresh	72	92.7	30.5	0.07	0.5
Millionaire Fresh	75	95.5	20.8	0.03	0.5
Zion Fresh	79	94.2	29.1	0.03	0.5

Silver extraction in the saprolite mineralization showed a relationship to feed grade. The Millionaire saprolite sample assayed at 1.1 g/t Ag and showed approximately 69% silver recovery. The Kilroy saprolite showed almost 82% silver recovery with a 3 g/t Ag head grade.

All the fresh rock mineralization types showed a good response to cyanidation with gold recoveries from 92.7% to 95.5%. Silver recovery was low showing a relationship to low head grade.

The metallurgical tests demonstrated that the Kilroy and Millionaire saprolite mineralization types are amenable to gold extraction by cyanidation. Cyanidation was also effective for gold extraction from the Zion saprolite mineralization. However, the rate of leaching appeared to be much slower. The saprolite composite tested showed a favourable response to gold recovery by gravity separation.

The metallurgical tests demonstrated that the fresh rock mineralization types are amenable to gold extraction by cyanidation. Gravity separation techniques were not of significant value for recovering gold from the fresh rock composite sample tested.

13.4 Goldsource Preliminary Metallurgical Testing (2013–2014)

13.4.1 Introduction

In September 2013, Goldsource collected 17 representative mineralized samples (trenching, adit, and core) of saprolite (Table 13-5 and Figure 13-1) to complete preliminary metallurgical testwork as part of its due diligence for potential amalgamation with EMGC. These samples were initially provided to McClellan Laboratories in Reno, Nevada, USA. After size analysis of gold particles, 12 of the samples were sent to Met-Solve Laboratories Inc. for scoping level metallurgical testwork to evaluate the response of the material to gravity concentration and flotation.

Table 13-5: Saprolite sample intervals for metallurgical testwork

Sample no.	Location	Length (m)	Type	Rec’d weight (kg)	Description	Au average (g/t)
EM001	Coolie Adit	3	Horizontal Channel	5.50	Granitoid Saprolite near contact with metavolcanics, 95% sandy clay Fe, orange colour, 5% cobbles, sap is estimated 5 m thick, average grade 0.5 g/t Au.	0.5
EM002	Coolie Wall	10	Horizontal Channel	10.65	Granitoid Saprolite, sandy clay Fe, red to orange colour, no cobbles/boulders, wall is 4 m high, average grade 5.0 g/t Au.	5.0
EM003	Zion Wall 11-059	3	Vertical Channel	10.31	Granitoid Saprolite, sandy clay Fe, red colour to orange at btm, 5% cobbles/boulders, wall is 4 m high, average grade 0.5 g/t Au.	0.5

Sample no.	Location	Length (m)	Type	Rec'd weight (kg)	Description	Au average (g/t)
EM004	Zion Wall 11-076	3	Vertical Channel	14.64	Granitoid Saprolite, sandy clay Fe, high silica – resistant to cut, orange and yellow colour, 10% cobbles/boulders (large topple blocks of dolerite), wall is 5 m high, average grade 1.0 g/t Au. Hole 076 intercepted 21 m at 9 g/t Au.	1.0
EM005	Zion Wall 11-075	3	Vertical Channel	22.55	Granitoid Saprolite, sandy clay Fe, red to orange colour, no cobbles/boulders, wall is 6 m high, average grade 0.3 g/t Au. Hole 075 intercepted 22 m at 2.28 g/t Au from surface.	0.3
EM006	Zion Adit	1	Channel Cuts Bedding	14.59	Granitoid Saprolite with 20% rock, sandy clay Fe, orange to yellow colour with chlorite infill fractures/Mn staining just above mylonite zone (bottom of Zion mineralization), average grade 4.8 g/t Au in sample # 526019 – 17 m from portal.	4.8
EM007-A+B	Zion Adit	13.7	Horizontal Channel	30.57	Granitoid Saprolite, coarser grained sandy clay Fe, red-yellow colour with chlorite infill fractures, average grade 3.5 g/t Au in samples # 526001 to 14. Channel to contact with 1-ft wide dolerite dike (footwall). Estimated 15 kg sample collected and best rep of Zion saprolite.	3.5
EM008	Zion - Baccus Pit	2	Horizontal Channel	8.45	Sample collect by Kevin – Granitoid Saprolite, coarser grained sandy clay Fe, average grade 2.5 g/t Au in samples # 525515-16. No boulders.	2.5
EM009	Zion-Kilroy Dead Stop Point	3	Horizontal Channel	8.86	Granitoid Saprolite, fine-grained clayey (clay-rich rep sample for met testing) sand Fe with 1 inch q. Vein (high grade), large dolerite topple boulders, average grade 1.5 g/t Au with select up to 13.2 g/t.	1.5
EM010	Zion-Kilroy Dead Stop Point	2	Horizontal Channel	10.30	Granitoid Saprolite, quartz-rich sandy clay, average grade 1.5 g/t Au with select up to 13.2 g/t. Sample a continuation of EM009, good met test for quartz-rich material.	1.5
EM011	Kilroy Bottle Bank	0.5	Horizontal Channel	7.10	Sample collected by Marcio – Granitoid Saprolite, clayey sand with rock frags, sample #519521.	
EM012	EMD11-077	0 to 3	DH Core Quarter-Split	1.54	Granitoid Saprolite, clay-rich sandy Fe, fine grained, red colour, average 1 g/t Au from sample #s 502101-02.	1.0
EM013	EMD11-077	3 to 6	DH Core Quarter-Split	2.38	Granitoid Saprolite, sandy clay Fe, coarser grained, mid-brown colour, average 1.0 g/t Au.	1.0
EM014	Zion EMD11-077	6 to 9.5	DH Core Quarter-Split	2.62	Granitoid Saprolite, clay-rich sandy Fe, fine grained with coarser grained near rock contact at 9.5 m, dark red colour to orange at 9 m, average 2.0 g/t Au.	2.0
EM015	Zion EMD11-075	0 to 7.5	DH Core Quarter-Split	3.70	Granitoid Saprolite, sandy clay Fe, fine to mid grained, mixed red-brown colour, average 0.5 g/t Au, start of 25 m mineralized saprolite intercept (pocket).	0.5
EM016	Zion EMD11-075	7.5 to 14.5	DH Core Quarter-Split	3.90	Granitoid Saprolite, sandy Si-rich clay Fe, coarse grained, red to brown to yellow colour, average 3.0 g/t Au, 1 m differential weathering (mineralized) boulder at 14.5 m depth (not sampled).	3.0
EM017	Zion EMD11-075	15.5 to 25	DH Core Quarter-Split	5.07	Granitoid Saprolite, sandy Si-rich clay Fe, coarse grained, brown to yellow colour, average 1.3 g/t Au, dolerite dike contact at 25 m then hard rock.	1.3

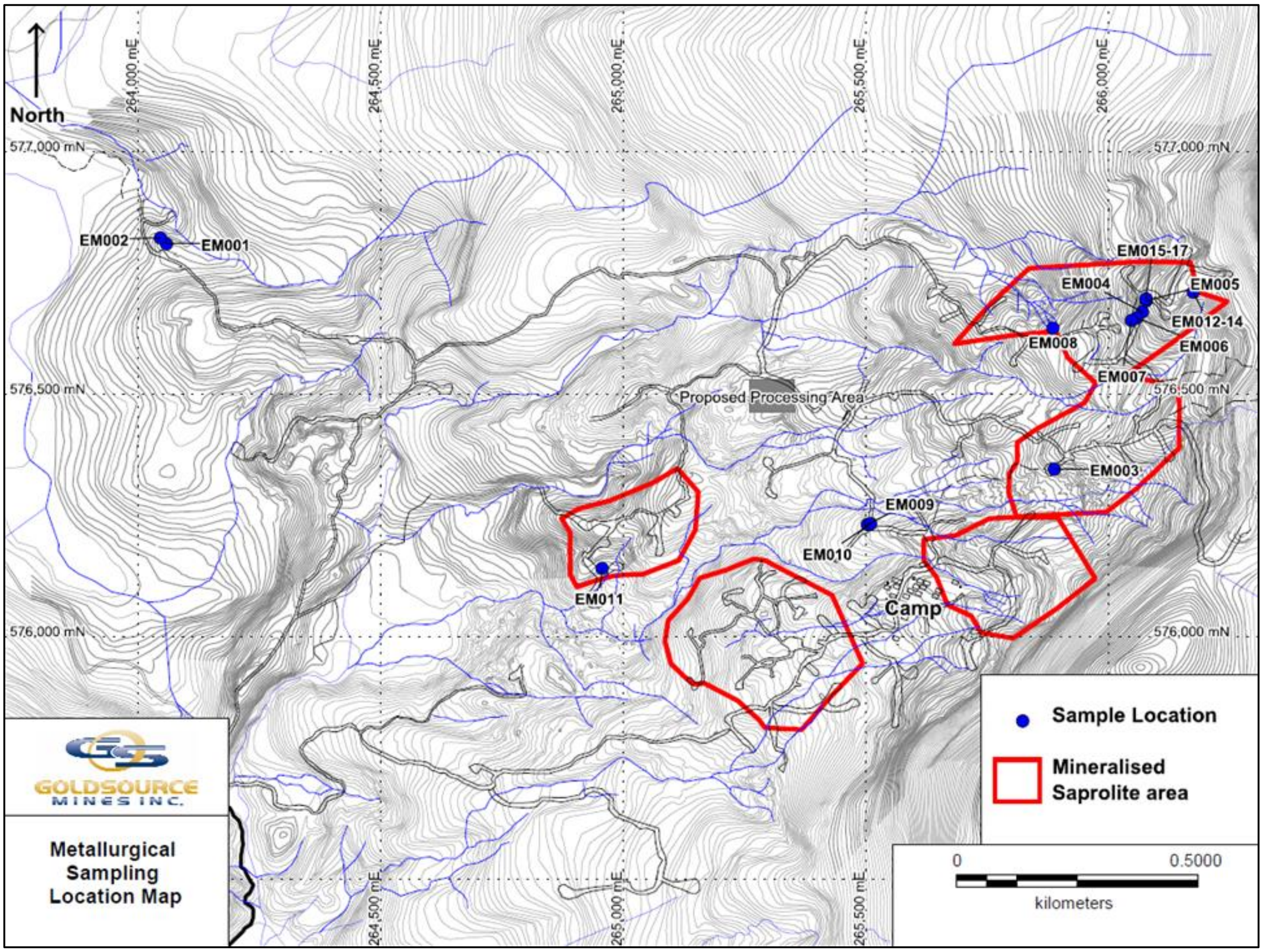

Figure 13-1: Goldsource metallurgical sample location map

The samples were shipped from the Eagle Mountain Property to McClellan Laboratories in sealed bags and barrels where they were dried and approximately 2–3 kg of material was split out for screen analysis (ASTM wet screening procedures, ASTM E-276 13). Each of the size fractions was then submitted for assay of gold and silver by fire assay. Total weight of all samples received was 163 kg.

The screen analysis showed that samples described as having boulders or cobble present did include material on the coarsest screens (+3/4-inch). Additionally, the gold and silver distribution for each size fraction was calculated (Figure 13-2). Most gold is contained within -325 mesh (-44 microns), averaging between 51% and 80% of the distribution.

Calculated head assays based on size fractional analyses were generally within expectations based on described grade ranges in the sample descriptions, with the exception of EM010 (Zion-Kilroy Dead Stop Point-Horizontal Channel) which evidently contained a significant amount of free gold, scattered across the 35 mesh and finer sizes, and caused the calculated head to rise to 23 g/t Au.

The gold distribution data showed that a few samples have a different gold distribution profile than the greater percentage of samples (Figure 13-2).

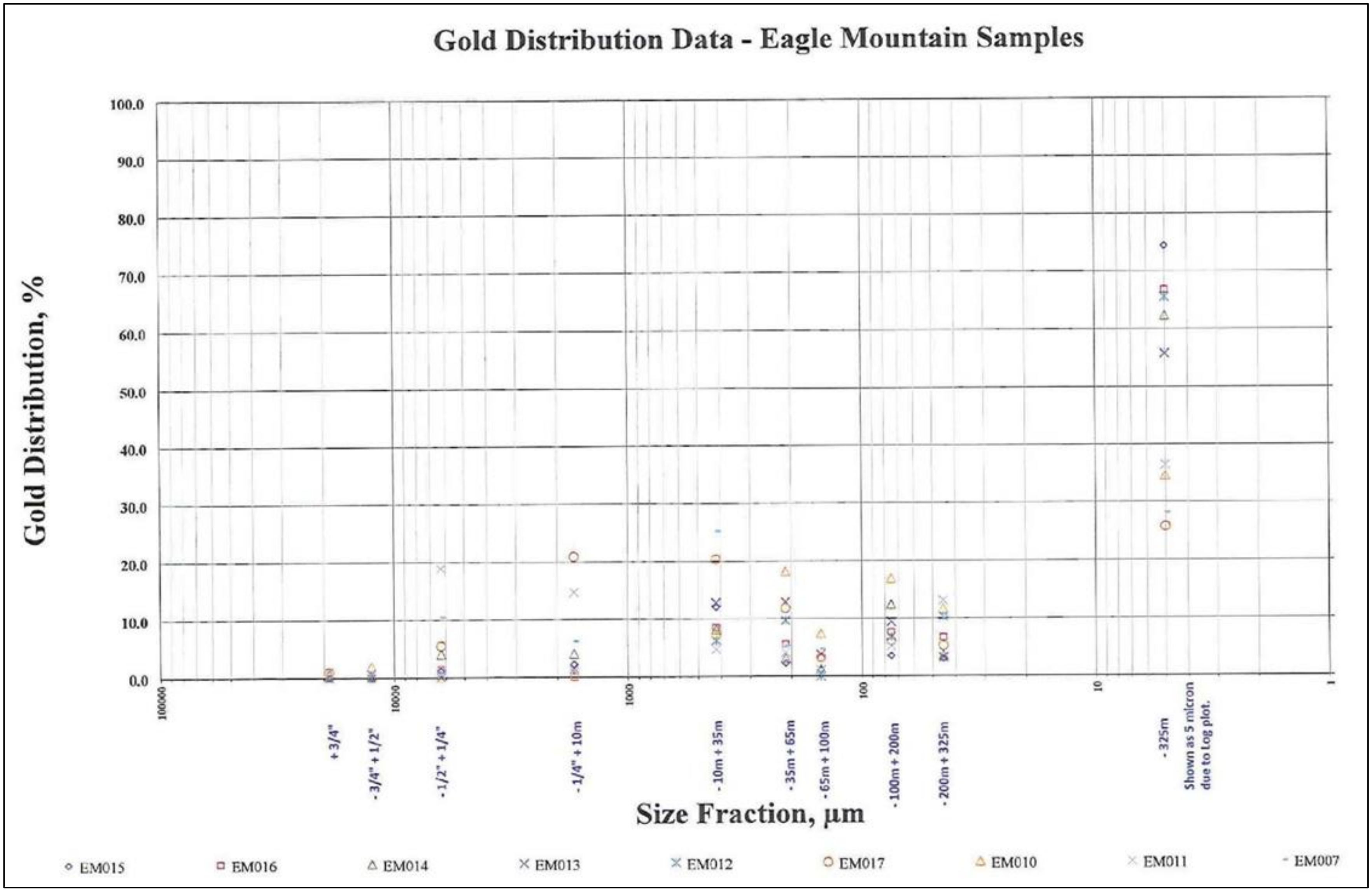

Figure 13-2: Gold distribution for each size fraction of samples submitted to McClellan Laboratories

EM017 (EMD11-075 15.5–25 m) and EM007 (Zion Adit, Horizontal Channel) have a sharp spike in gold contained in the mid-range screen sizes (-1/4” x 10 m; -10 m x 35 m; -35 m x 65 m). Two additional samples have a medium spike in the mid-range sizes; EM010 (Zion-Kilroy Dead Stop Point-Horizontal Channel) and EM011 (Kilroy Bottle Bank – Horizontal Channel). There does not appear to be a grade relationship to the distribution characterization, higher grades do not mean higher gold concentration in mid sizes or in the fines

McClellan Laboratories was equipped only with Knelson Concentrators which are for coarse gold recovery, therefore 12 of the samples were sent to Met-Solve Labs in Langley, BC in November 2013 to test using Falcon Concentrators which are designed for fine gold recovery. The remaining five samples were either consumed in the McClellan testwork or were considered too low grade (one sample, EM005). Total weight of samples sent to Met-Solve was 73 kg.

Goldsource selected four of the samples to form one composite for testwork (Table 13-6). Descriptive details are presented in Table 13-5. The remaining eight samples were not used in this test program and were retained in storage by Met-Solve.

Table 13-6: Saprolite sample intervals selected for metallurgical testwork composite

Sample ID	Type	Location	Weight (kg)	Au average (g/t)
EM003	Reject	Zion	5.33	0.5
EM004	Reject	Zion	9.34	1.0
EM006	Reject	Zion	8.48	4.8
EM007	Reject	Zion	15.17	3.5

13.4.2 Met-Solve Testwork and Results

A screen fraction assay was done on the composite to determine the distribution of gold by particle size class; the results are presented in Table 13-7. While gold grades varied across all size fractions, the grades were noticeably higher in the range of 37–150 microns.

Table 13-7: Screen fraction assay of Head Composite

Particle size				Au		
Mesh	Microns	Weight (%)	Cumulative weight (%)	(g/t)	Distribution (%)	Cumulative distribution (%)
4	4,750	5.1	5.1	1.24	3.5	3.5
8	2,360	11.7	16.9	0.91	5.8	9.3
12	1,700	3.8	20.7	0.62	1.3	10.6
16	1,180	11.6	32.3	0.78	5.0	15.6
20	850	5.3	37.6	1.77	5.1	20.7
30	600	5.3	42.9	2.45	7.1	27.9
40	425	4.9	47.8	0.76	2.1	29.9
50	300	4.4	52.2	0.92	2.2	32.1
70	212	3.8	56.0	2.98	6.2	38.3
100	150	3.3	59.3	1.46	2.7	40.9
140	106	2.9	62.2	4.03	6.3	47.3
200	75	2.6	64.8	5.73	8.1	55.4
270	53	3.3	68.1	4.97	9.1	64.4
400	37	2.1	70.2	3.35	3.9	68.3
-400	-37	29.8	100.0	1.94	31.7	100.0
	NET:	**100.0**		**1.82**	**100.0**	

The composite was screened at 150 µm (100 mesh) and the oversize and undersize were each tested separately on a Falcon L40 to compare the response of the two fractions to gravity concentration. This approach provided a relatively equal distribution of mass and gold between the two parts and presented an opportunity to evaluate how each responded to gravity with and without grinding. The combined tails were then processed by flotation for additional gold recovery.

The overall grade determined by averaging the calculated grades from the metallurgical tests and was determined to be 2.1 g/t Au.

The gravity concentration test results from both fractions are presented in Table 13-8.

Table 13-8: Results for the gravity concentration testwork

Fraction	Grinding	Final PSA (P80, µm)	GRG (%)	Gold grade (g/t)	
				Head	Tails
+150 µm	Int. Grind	91	72.8	1.40	0.39
-150 µm	No Grind	47	73.6	2.82	0.76
-150 µm	Single Grind	41	79.5	2.82	0.60
Overall	No grind on -150 µm	69	73.4	2.13	0.59
Overall	With Grind on -150 µm	65	77.3	2.13	0.50

The -150 µm fraction was tested using the Falcon concentrator in three stages without grinding followed by a grind prior to a fourth stage. The results showed that grinding provided some benefit even on this finer (-150 µm) fraction. Gold recovery with and without the extra stage of grinding was 79.5% and 73.6% respectively.

The grade of the finer fraction was higher at 2.82 g/t vs 1.40 g/t for the +150 µm fraction. This is consistent with the head screen fraction assay presented in Table 13-7.

The +150 µm fraction was treated directly, without grinding in the first stage followed by grinds for the second and third stage. The overall gravity gold recovery from the coarser fraction was 72.8% after grinding to a final particle size of 91 µm (P80).

The gravity concentrates were panned to understand upgradability; the concentrates upgraded readily indicating that a high-grade concentrate could be produced from this material.

A flotation test done on the combined gravity tails recovered an additional 25.3% of the gold into a concentrate grading 6.5 g/t.

The gravity and flotation test were integrated into the following overall flowsheet (Figure 13-3) to show the recoveries from multi-step operation. Overall, 83.1% gold was recovered resulting in final tail grade of 0.38 g/t. The gravity only approach (without flotation) provided an overall gold recovery of 77.3%, resulting in a final tail grade of 0.50 g/t.

The flowsheet shows that screening the composite at 150 µm resulted in 48.9% of the mass in the oversize with 32.3% of the gold at 1.40 g/t. The undersize contained 51.1% of the mass with 67.7% of the gold at 2.82 g/t.

The expected gold recovery using only gravity concentration without grinding on the -1.3 mm material was estimated to be 60.3% based on an interpolation of the mass balance presented in the flowsheet.

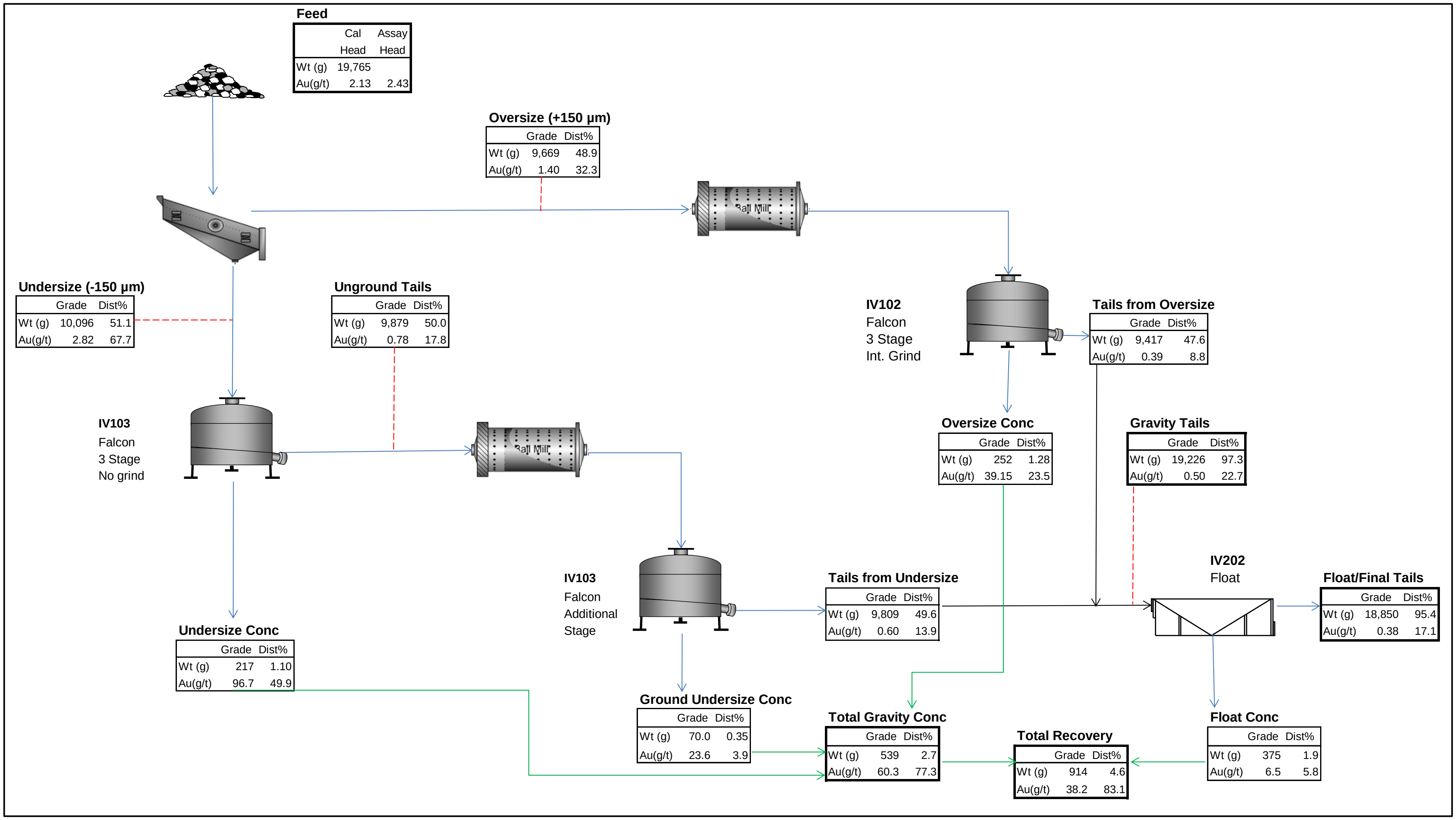

Figure 13-3: Goldsource 2013–2014 saprolite gold metallurgical testwork flowsheet and mass balance

13.4.3 Further Metallurgical Testwork

The testing done by Met-Solve was preliminary in nature and carried out on a relatively small sample that included material from the Zion area, which is now known for having coarser gold than the other areas of Eagle Mountain. Met-Solve noted that future testwork should be on a much larger and more representative sample. The objectives of future testwork were recommended to include the following:

- Scrubber testwork to determine scrubber sizing.
- Since the first phase of processing is expected to be done only on material screened at 2 mm via gravity concentration, a large sample should be screened to remove oversize with undersize being subject to gravity concentration testwork using a centrifugal gravity concentrator.
- Upgrading of gravity concentrates using secondary units, such as a shaking table, should be evaluated.
- Determine the extent of gold recovery improvement by floating the gravity tails.
- Since not all the gold will be recovered into a high-grade product as a result of upgrading (i.e. tabling), cyanide leaching of table tails should be evaluated.
- The +2 mm material will require attrition and the following approaches have been indicated for size:
    - Hammer mill
    - Vertical shaft impactor
    - Lab jaw crush followed by a rod mill.

13.5 Kilroy Gravity Pilot Plant (2016 to 2017)

A gravity pilot plant was constructed between October 2015 and December 2015 and operated intermittently from 28 January 2016 to 28 February 2017. An estimated 148,844 tonnes of mineralized saprolite from the Eagle Mountain deposit grading 0.74 g/t Au (3,541 ounces gold contained) were processed through the gravity plant with 643.2 ounces gold reporting to doré, giving an estimated 18% recovery. Approximately 2,898 ounces gold (very fine size) went into tailings storage for potential recovery by cyanidation in future.

A summary of the gravity pilot plant operations follows.

Q1 2016:

- On 28 January, Kilroy commenced commissioning Phase I of Eagle Mountain gravity pilot plant. During February and March, Kilroy re-designed and re-fabricated the mine grizzly and processing gold room. The first gold was poured at the end of March.

Q2 2016:

- Kilroy completed its first gold sale to the Guyana Gold Board in early April.
- On 20 June, Kilroy completed commissioning on Phase I of its processing plant, which was defined as an average minimum of 80% of the 1,000 tpd name plate capacity and 45% recovery in gold concentrate, over a continuous 30-day period. Completion of commissioning or commercial production does not imply economic viability.

Q3 2016:

- At the end of July, Kilroy suspended operations due to low feed grades and a delay in the shipment of a 40-tonne truck to the Eagle Mountain site.
- Kilroy recommenced mining, stockpiling, and processing of the higher-grade feed material towards the end of August.
- Sepro Mineral Systems Corp., the manufacturer of the Eagle Mountain gravity pilot plant, completed a process audit on 18 September and provided recommendations to improve the process plant performance

and recovery. While the head-grade improved substantially, the gold recovery from the Falcon concentrators dropped to an average of approximately 15% in September, short of the targeted minimum recovery rate of an estimated 30% for economic viability. As a result, Kilroy deferred Phase II capital purchases in order to focus on the processing plant and recovery optimization rather than expansion.

Q4 2016:

- In October, Kilroy hired a process engineer to optimize the plant at Eagle Mountain to improve throughput and recovery for the gravity-only operation.
- Production was also materially impacted by equipment related downtime and water shortages due to the dry season.
- During November, the pilot plant process was altered to bypass the recirculation of +2 mm oversize material and to stockpile it in inventory. This significantly decreased plant maintenance requirements with less downtime and improved throughput.
- Plant operations ran continuously at near capacity in the first three weeks of December and gravity gold recovery to concentrate in Q4 increased to 27% (up from 25% in Q3 2016). However, as this recovery rate remained below the design of 35–40% for a gravity-only operation, the process plant was shut down on 23 December and one-half of the workforce at Eagle Mountain was released to reduce in-country costs while Goldsource and Kilroy completed further plant modifications intended to improve throughput and recovery.

Q1 2017:

- As part of optimization efforts at the gravity-only processing plant and given the ultra-fine nature of most of the gold grains in the saprolite deposit, the Krebs cyclone was installed on 12 February in an effort to improve gold recovery. Initial assay results suggested gold recoveries of 15–50%, depending on cyclone parameters and processing feed rates. Work continued through the quarter to define the optimal operating parameters for both short-term and long-term planning.
- Operations for the pilot gravity plant consisted of a feed mix of dry (truck-excavator) and wet mining (Marok pumping).
- Gold recovered during testing was 34.90 ounces.

Q2 2017:

- Kilroy intermittently operated the plant at a reduced average rate (less than 300 tpd) with the purpose of:
    - testing the wet mining system for potential large-scale mining
    - cyclone optimization
    - mining and metallurgical testwork.
- A high-density polyethylene (HDPE) slurry pipeline, to reduce operating downtime, was installed by mid-May. Successful testing of the HDPE piping took place following the mobilization of the Marok system to Pit 6.
- Gold recovered was 29.17 ounces.

13.6 Metallurgical Testwork and Grinding Cost-Benefit Analysis Studies (2018)

Goldsource retained SGS Lakefield to conduct metallurgical testwork on saprolite mineralization under the supervision of independent Vancouver-based Tetra Tech Inc. (Tetra Tech). Twenty-two saprolite samples representing the different mineralized zones of the Eagle Mountain deposits were collected (trench and core) with additional samples representing the existing pilot gravity plant tailings and the +2 mm stockpile from the same operation. The samples, totalling approximately 500 kg, were shipped to SGS Lakefield in Q1 2018 for testing.

The test program consisted of sample characterization (assaying, sizing, mineralogy, and gold deportment), grindability testing, followed by gravity separation and cyanidation. The received samples were grouped into seven composites designated as VC1 through VC7 for the purposes of the test program (see Table 13-11 below). The Master Composite is a blend of the composite samples (VC1 to VC4 and VC7). The composite sample, VC5 is representative of the existing pilot gravity plant tailings from the 2016 operation. The composite sample, VC6 is representative of the +2 mm stockpile from the same pilot plant operation.

13.6.1 Sample Characterization Studies (2018)

The master composite, referred to as "MC", was submitted to the Advanced Mineralogy Facility at SGS Lakefield and was prepared for bulk mineralogy and gold deportment studies. The objectives of this investigation were to determine (1) the bulk mineralogy of the sample, (2) the gold mineral speciation, grain size, liberation, and association, and (3) the overall gold distribution by a comprehensive mineralogical analysis, including a cyanide leach test and chemical analysis. A summary of the testwork results is presented below (SGS, 2018).

Chemical Analysis

Chemical analyses were completed on the MC sample. The sample consists of major amounts (in wt %) of SiO_2 (57.8%), moderate amounts of Al_2O_3 (21.3%), minor amounts of Fe_2O_3 (7.71%), and trace amounts (<2%) of K_2O, TiO_2 as well as other elements.

The gold grade for the MC sample is 0.96 g/t and for tellurium is <4 g/t. The sulphur grade (as sulphide) is <0.05% and the grade of arsenic is <0.001%.

Bulk Mineralogy

The bulk mineralogy of the sample was determined with QEMSCAN Rapid Mineral Scan (QEM-RMS) analysis and x-ray diffraction (XRD) bulk analysis, including clay mineral speciation. The MC sample contains major amounts of quartz (52.6%), moderate amounts of gibbsite (19.2%) and kaolinite (11.1%), minor amounts of iron-oxide (7.3%), iron-aluminium-silicate (5.6%), sericite/muscovite (2.1%), and trace amounts (<2%) of titanium-oxides and other minerals.

Gold Deportment Study

The sample procedure for the gold deportment study included preconcentration by gravity separation with HLS and super-panning. Chemical assays were used to determine the mass balance and main elemental distribution in the preconcentration products. Optical microscopy and scanning electron microscopy (SEM), equipped with Energy Dispersive Spectrometers (EDS), was conducted on the polished sections prepared from representative preconcentrated products for gold mineral scanning, identification, grain size measurement, and association characteristics. To aid the mineralogy deportment characterization of gold in the HLS Float products, a representative HLS Float subsample was submitted for a cyanide leach test.

The mineralogical gold deportment study method used by SGS is based on the assay distribution and target mineral (gold) occurrence in the preconcentration fractions. This method was accredited by the SCC to conform to the requirements of ISO/IEC 17025: The General Requirements for the Competence of Testing and Calibration Laboratories.

The main findings for the microscopic gold mineral grains (>0.5 µm) of HLS Sink fraction are summarized in Table 13-9.

Table 13-9: Characteristics of microscopic gold

Sample ID	Association	No. of gold grains	Size range (µm)	Average size (µm)	Au-mineral abundance	Minerals associated with exposed and locked Au-minerals
MC	Liberated	207	0.6–89.9	11.8	Native gold (100%)	Silicate (61.1%), iron-oxide (32.2%), arsenopyrite (6.7%), ilmenite (<1%), pyrite (<1%)
	Exposed	20	1.6–19.5	6.5		
	Locked	22	0.8–20.1	4.7		

A total of 249 gold grains were found in the MC sample, including liberated, exposed, and locked gold, with average grain size of 11.8 µm, 6.5 µm, and 4.5 µm, respectively. Gold minerals identified are mainly native gold (gold/silver alloy with gold >75%) with trace occurrences of electrum (gold/silver alloy with 50% to 75% gold). The exposed and locked gold grains were associated mainly with silicates (61.1%), iron-oxide (32.2%), arsenopyrite (6.7%), and trace amounts (<1%) with silicates.

The results of chemical assays, the mass balance, and a cyanide leach test for the HLS Float were combined with those of the mineralogical microscopic gold from HLS Sink fraction to estimate the potential of gold extraction for the entire sample. The results are summarized in Table 13-10.

Table 13-10: Overall gold deportment

Sample ID	Mass (wt%)	Assays Au (g/t)	Distribution Au (%)	Exposed and leachable gold (%)	Locked and unleachable gold (%)
MC	100	0.96	100	96	4
MC HLS Sink	2.47	22.3(3)	57.3	55.5(1)	1.82
MC HLS Float	97.5	0.42	42.7	40.5(2)	2.18

Notes:
- *Liberated and exposed gold distribution in HLS Sink.*
- *Extracted gold in HLS Float by leach test.*
- *Back-calculated assay.*

The gold grade of the head sample is 0.96 g/t, of which 57.3% occurs in the HLS Sink fraction (including 46.4% liberated, 9.1% exposed, and 1.8% locked gold) and 42.7% in the HLS Float fraction (including 40.5% leach extracted gold and 2.2% unleachable gold). Therefore, the exposed (including liberated and exposed gold grains) and leachable gold accounts for 96% overall, and the locked and unleachable gold accounts for 4% of the total gold in the sample.

Only the contribution of microscopic (visible, >0.5 µm) gold is considered in the calculation of the gold grade distribution. Submicroscopic gold (<0.5 µm), possible carbon-related surface gold, and other possible non-observed forms of gold are not taken into consideration, and therefore, their contribution to overall head grade is unknown.

13.6.2 Summary of 2018 Metallurgical Testwork

The results of the detailed metallurgical testwork are summarized as follows and in the table below:

- The Bond Ball Mill Work Index is 8.1 kWh/t for the overall sample (including fines) and 16.3 kWh/t for the coarse fractions of the MC (with fines removed).
- The Bond Abrasion Index is 0.004 and indicates low abrasiveness in the mineralization.
- The gold grade for the MC sample was 0.98 g/t. The sulphur (as pyrite) content is <0.05%. No deleterious elements were noted in assays results.
- For the MC sample, approximately 50% of the gold occurs within the finer fraction of -25 micron.
- The gravity concentration tests, excluding pilot plant tails, resulted in a gold recovery between 18.9% and 29.5% (averaging 24.4%).

- For the Master Composite samples, cyanide leach test results of gravity tailings showed an average gold recovery of 96.7%.
- Test results show a conceptual grind size of 200 micron (P80) for processing comprised of gravity concentration followed by leaching. The applied standard condition for cyanide concentration was 0.5 g/L.
- The cyanide detoxification results indicated that the CN_{WAD}, present in the carbon-in-pulp barren pulp could be destroyed to levels below the typical effluent discharge requirement of 1 mg/L.

Table 13-11: Summary of gravity and cyanide leach results

Sample no.	Sample description	Head Au grade (g/t)	Feed size P80 (µm)	Gravity Au extraction recovery (%)	Gravity + CN ** Au extraction recovery (%)
VC1	Zion 01-07	0.90	173	27.6	97.6
VC2	Zion 08-10	1.29	175	25.4	96.0
VC3	Kilroy 01-06	1.13	132	18.9	97.4
VC4	Kilroy 07-08	0.39	162	29.5	94.8
VC5	Pilot Gravity Plant Tails	0.77	761 *	N/A	87.4
VC6	Stock +2 mm	1.99	195	13.7	93.6
VC7	Saprolite Drill Core	1.17	179	20.7	97.7
Average	VC1 to VC4 and VC7	0.98	164	24.4	96.7

**VC5 sample (Pilot Gravity Plant Tailings) without prior grinding or additional gravity separation; already passed through the FALCON Gravity Concentrators at the pilot plant.*

***48-hour leach residency times.*

Table 13-12: Summary of gravity and cyanide leach results from coarser grinding

Sample no.	Sample description	Head Au grade (g/t)	Feed size P80 (µm)	Gravity Au extraction/recovery (%)	Gravity + CN ** Au extraction/recovery (%)
CN5	Master Composite	0.98	563	26.0	97.6
CN6			186		97.0
CN7			124		97.3

***48-hour leach residency times.*

The recommended proposed design rate for mineralized saprolite volume to bypass the grinding circuit was 45%. No additional metallurgical testwork is recommended at this stage. However, further metallurgical testwork may be justified depending on the success of expansion drilling on newly defined targets.

Based on the above detailed metallurgical results, the general flowsheet conceptually suggested an open-pit mining operation followed by a standard gravity-grind-leach (carbon-in-pulp) processing facility at a throughput rate of 4,000–5,000 tpd.

14 Mineral Resource Estimates

14.1 Introduction

During the period November to March 2022, CSA Global carried out a MRE update study for the Eagle Mountain Gold Project. In the opinion of the author, the Mineral Resource reported herein is a reasonable representation of the gold Mineral Resources at the deposit based on the available information.

The updated MRE has an effective date of April 5, 2022 and is reported in accordance with the Canadian Securities Administrators' NI 43-101. The MRE is generated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines" (CIM Council, 29 November 2019).

The MRE for the Eagle Mountain Project has been prepared by Mr Leon McGarry, CSA Global Senior Resource Geologist and a Qualified Person for the reporting of Mineral Resources, as defined by NI 43-101. Mr McGarry is responsible for the geological domaining, block modelling, and MRE studies presented in this report section.

Previous NI 43-101 MREs generated for the Project are described in Section 6 (History). The current MRE presented in this report supersedes all past estimates and benefits from the changes that are summarized in Section 14.12 (Comparison with 2021 CSA Global Estimate).

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.

14.2 Informing Data and Database Validation

Goldsource provided CSA Global with a drillhole database and wireframes representing topography, the base of saprolite, base of transition zone, and significant geological units.

Mr McGarry worked with the Company to generate mineralization wireframe models for the Eagle Mountain deposit based on geological parameters. Mineralization models for the Salbora deposit were prepared independently by Mr McGarry.

The Qualified Person reviewed all informing data and considered that the quality and quantity of the information is appropriate for Mineral Resource estimation.

14.2.1 Drillhole Data

The drillhole data used in this study is derived from a data export provided by Goldsource via email with a cut-off date of 31 December 2021 for 75,269 m of core drilling (772 holes) and 533 m of auger drilling (158 holes). The drillhole data was provided as a set of ASCII CSV files containing collar, survey, assays, lithology, density, and oxidation state. Drill collar locations are shown in Figure 10-1.

The December data export includes 25,770 m of drilling in 209 holes completed by the Company in 2021 since the previous MRE which are included in this updated MRE. These holes were completed to improve data density for classification upgrades and to expand Mineral Resources.

A summary of drill holes used to generate the Eagle Mountain MRE is shown in Table 14-1

Table 14-1 Summary of drill holes used to estimate Mineral Resources at the Eagle Mountain project

Period	Company	Count	Metres	Proportion of Total
1997	Golden Star Resources Ltd	29	2,265	3%
1998	Golden Star / Omai Gold Mines Ltd	21	1,271	2%
1999	Omai Gold Mines Ltd / Cambior	31	2,399	3%
2007 -2009	Omai Gold Mines Ltd / IAMGOLD	44	8,059	11%
2011	Goldsource Mines Inc.	76	10,727	14%
2017-2020	Goldsource Mines Inc.	391	28,887	38%
2021	Goldsource Mines Inc.	180	21,661	29%
Grand Total		**772**	**75,269.34**	**100%**

All drillhole data was imported into Micromine™ software and interrogated via Micromine™ validation functions prior to constructing a drillhole database for the deposit. The resulting database contains all available drilling and sampling data for the Project. Key fields within these critical drillhole 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 drillhole 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, very 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.

The current grid system used is PSAD56 UTM Zone 21N. Drillhole azimuths are recorded in True North. All data was provided in metric units. All assays are for gold and are expressed in g/t (or ppm).

Drillhole Data Editing

Numerous discrepancies between the elevation of drillhole collars and the topography wireframe were observed, mainly in areas of high relief or at the deposit periphery where topographic survey data is sparse. This issue was resolved by projecting the collars to the topography as described in Section 14.2.3 below.

Unsampled intervals are encountered throughout the deposit. Within the mineralization wireframes, 113 unsampled intervals are generally associated with poor recovery resulting from faults and weathered zones close to surface. Over 70% of unsampled intervals occur in saprolite. To ensure blocks are estimated using representative values un-sampled intervals are not assigned a zero grade.

14.2.2 Auger Data

Drillhole auger data was provided in separate collar, survey, and assays tables. In the 2021 MRE study, data from a limited number of auger drillholes with supporting QAQC data were used to estimate Mineral Resources. These auger holes are superseded by higher quality core drilling completed in the same deposit areas since the previous estimate.

In the current study, auger data is used to support interpretation of mineralization extents but is not used to estimate Mineral Resources.

14.2.3 Topography

Goldsource has provided a topography surface derived from elevation contours and drill collar locations surveyed by differential GPS.

Numerous, and sometimes large, discrepancies between drill collar elevations and the topography were observed. Where high quality differential GPS collar survey data is available the topography surface was offset in Leapfrog to align with more recent collar elevation data.

Elsewhere, offsets were resolved by projecting collars on to the topography.

14.3 Geological Interpretation and 3D Modelling

14.3.1 Software

Geological modelling was undertaken by Goldsource using Leapfrog Geo™ Software Version 2021.01. Leapfrog™ is an algorithm-based solid modelling software that uses mathematic best-fit (implicit) computations to generate geological solids from point data.

Goldsource provided CSA Global with a Leapfrog Project containing 3D interpretations of geological units, mineralized zones, weathering surfaces and major faults. Additional geological modelling and editing was undertaken by the CSA Global using Micromine™ and Leapfrog™ software.

14.3.2 Lithology

The geological model was constructed to aid interpretation of mineralization, assign bulk densities, and to assign a zero grade to blocks within post-mineralization intrusions. The geological model included interpretations for:

- Three host geological units: Metavolcanics (MVOL – 1), Metasediments (SEDS – 5), Granodiorite (GRDR – 2), and Gabbro (GABN – 10).
- Six post-mineralization intrusive units: Dolerite (DOLE – 3), Monzonite (MONZ – 4), Gabbro (GABB – 6), Porphyry (PORPHS – 7), Basic Porphyry (BPOR – 8), and Hornfels-Feldspar Porphyry (HFPO – 9). Samples and blocks from within these units are excluded from informing the resource estimate.

For each lithology interval greater than 10 m in thickness, the contact point with the stratigraphically underlying units is extracted and 3D surfaces are generated using the intrusion modelling tool. Intrusion surfaces are sequentially merged to generate closed wireframe models representing the volume of each major lithological unit.

Lithology wireframes coloured by units are shown in plan for Eagle Mountain in Figure 7-6 on page 38 and for Salbora in Figure 7-7 on page 39. CSA Global accepted the models provided by the Company and no additional modification was necessary.

14.3.3 Weathering

Weathering profiles were modelled for features logged by Goldsource:

- Base of saprolite surface (SAPR), extending to a maximum depth of approximately 76 m with an average depth of approximately 20 m
- Base of transition surface (TRAN), extending to a maximum depth of approximately 30 m with an average depth of approximately 25 m.

For each feature, 3D points representing the base saprolite depth and transition zone depth were extracted from drillhole logs. CSA undertook minor modifications including the filtering of inconsistent and possibly mis-logged intervals.

Depths were contoured at a variable resolution or 30 m or less. Saprolite and transition zone wireframes were generated from gridded depths offset from the topography surface. The extent of weathering at the Eagle Mountain deposit is shown in Figure 14-1.

Weathering models are used to apply variable bulk densities, mining cost adjustment factors and reporting cut-off criteria for fresh and weathered material.

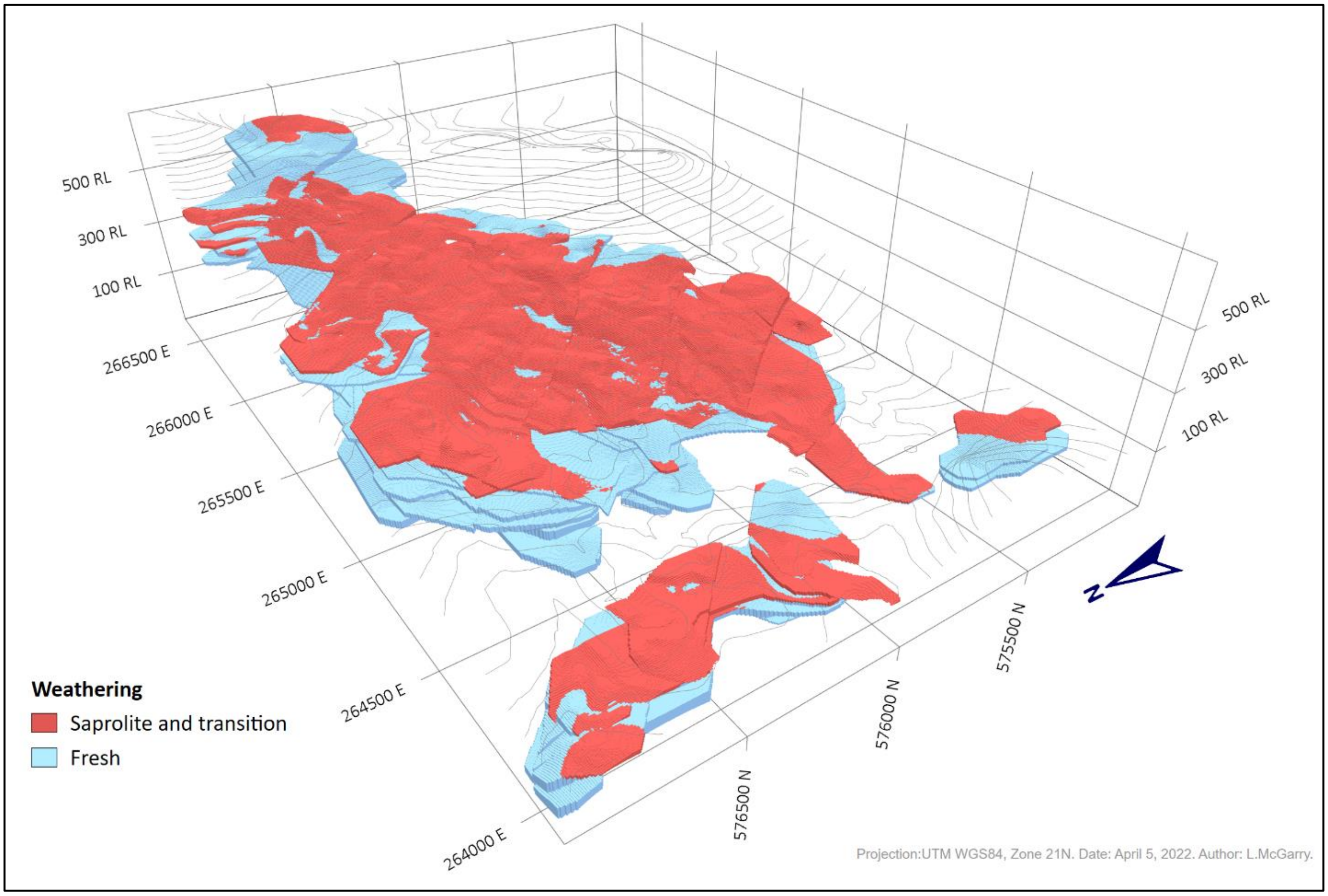

Figure 14-1: Oblique 3D view of the area showing modelled saprolite and fresh-rock domains.

14.3.4 Structures

Geology and mineralization models are intersected by series of post-mineralization faults with offsets of 5–10 m. These faults are interpreted to have limited horizontal displacement. Grade trends can be projected across these features, and they were not used as hard boundaries during resource estimation.

14.4 Mineralization Model

14.4.1 Eagle Mountain

Mineralization at the Eagle Mountain deposit is interpreted to be controlled by and related to shallow dipping shear structures. Disseminated, fracture-controlled gold mineralization occurs in granite, and is related to multiple low-angle southwest dipping zones which vary from 1 m to 40 m in thickness. Mineralized zones are associated with chloritic alteration, silicification, disseminated pyrite and lesser arsenopyrite.

- The Company has assigned mineralized intervals to 13 zones modelled as laterally extensive horizons that span the deposit area. These zones were modelled in Leapfrog using the stratigraphic modelling tool to create a set of stacked planar 3D wireframes. Initially, wireframes cover broad areas and include significant amounts of waste.
- To limit mineralization models to within a reasonable distance from drillholes, and to avoid the incorporation of excessive amounts of waste, CSA Global has constrained the mineralization wireframes using a polygon

digitized around mineralized drillholes at a typical 80 m offset distance. Unclipped wireframes are shown in Figure 14-2. Example clipping parameters for Zone 2 are shown in Figure 14-3.

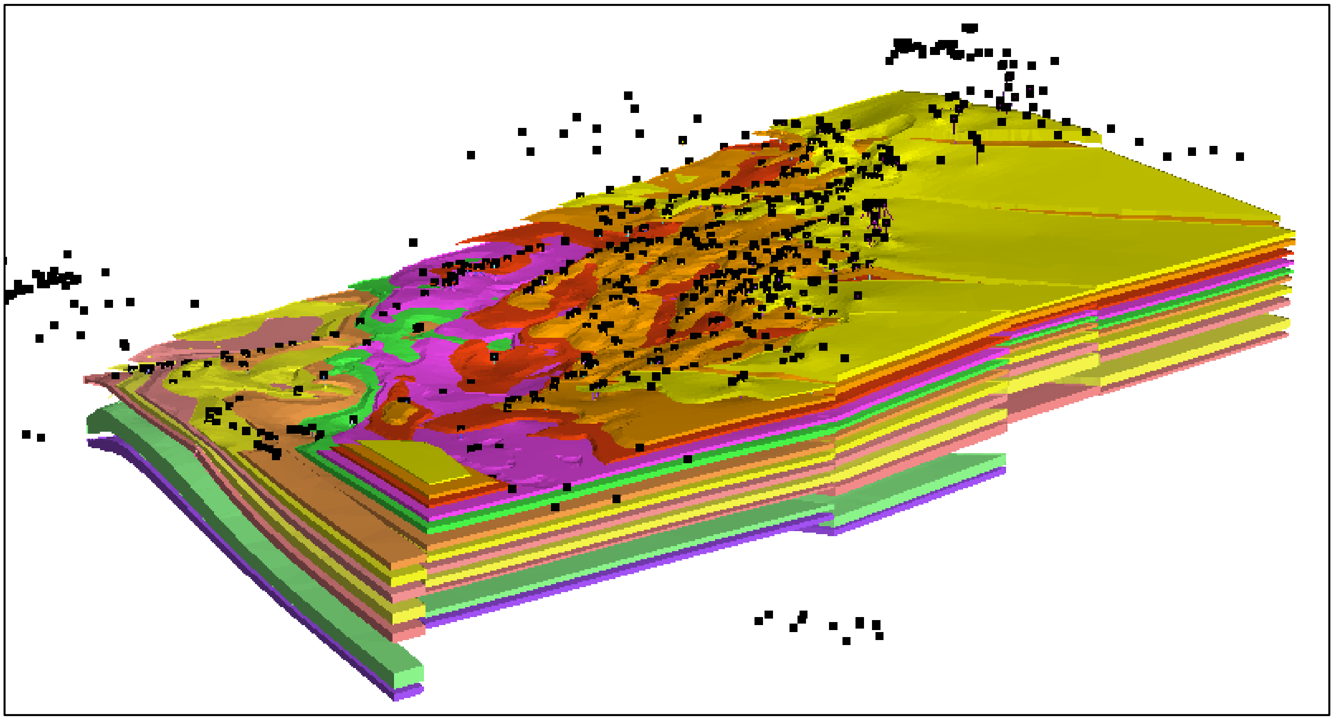

Figure 14-2: 3D view of Goldsource mineralization domains – bird's eye view towards north-northeast (-15 dip toward 35 azimuth)

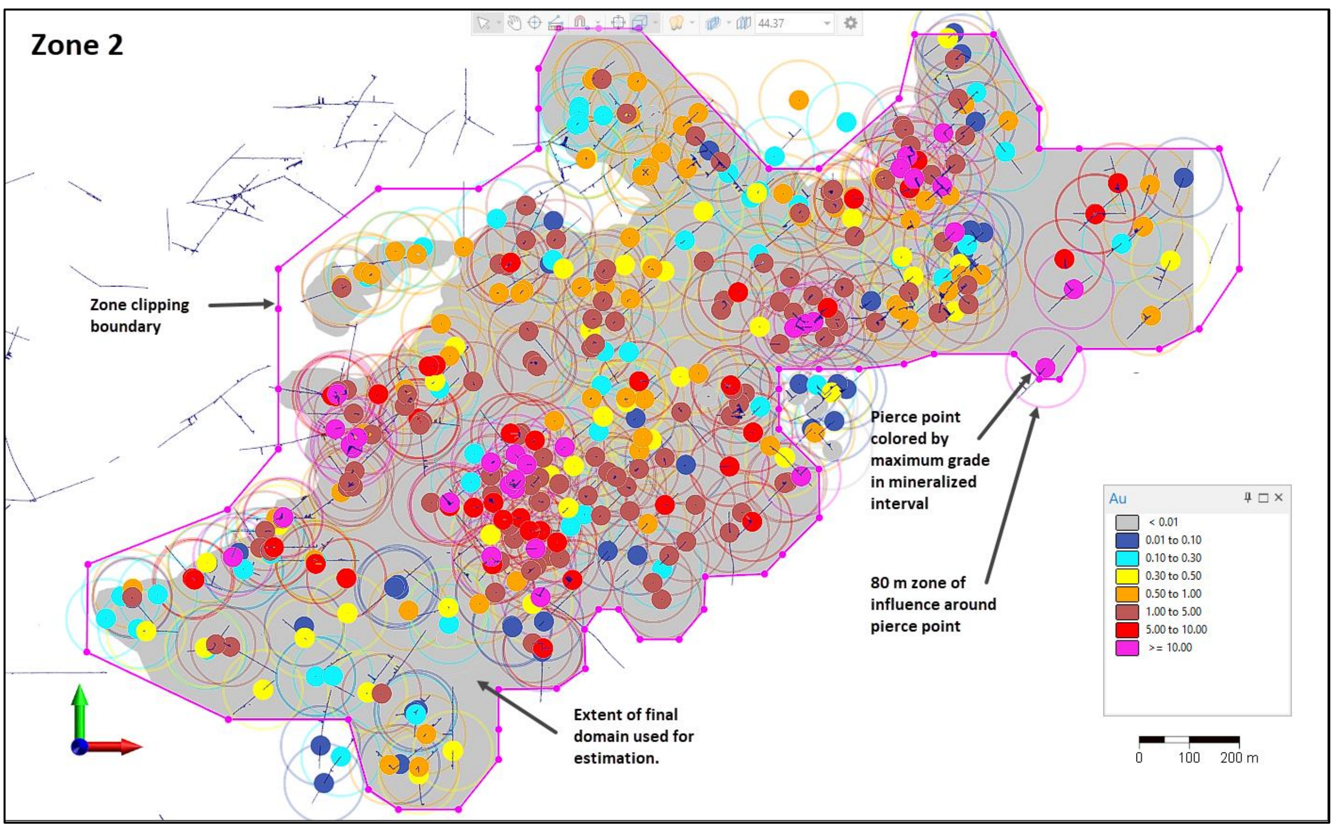

Figure 14-3: Plan view of the Zone 2 intervals, clipping limit and final domain 2 extents

- At the Eagle Mountain deposit, mineralized zones are modelled as extensive horizons that span the deposit area. Mineralized zones are drill tested in a 700 m to 1,300 m corridor extending approximately 2,800 m to the northeast from the Salbora shear zone in southwest of the project area. The Eagle Mountain model encompasses the Powis and Ann areas.
- At the Toucan deposit area, a steeply dipping high-grade breccia zone 5–10 m wide is associated with the Salbora shear was modelled in Leapfrog using the Vein modelling tool along a strike length of 215 m and down dip extent of 80 m (Zone 14).
- Outside of the modelled horizons, south of northing 576,956 mN, a broad envelope domain comprises granodiorite and volcanic rocks that host occasional lenses and panels of structurally controlled gold mineralization present over limited extents. Search parameters were used to force the general trend and extent of distributed mineralization within domain which is unconstrained and generally low grade.

14.4.2 Salbora

Mineralization at the Salbora deposit occurs within a sub-vertical, north-south trending shear zone:

- The deposit is bound by two thin (1–3 m) steeply dipping shear zones up to 1,500 m in length and extending to a depth of 250 m. These zones converge at the centre of the Salbora deposit. To the north, two small panels are modelled parallel to the eastern shear (shr_w - , shr_e, shr_e1, and shr_e2).
- At the centre of the Salbora deposit, four thicker (5–15 m) breccia lenses extend over a strike length of 250 m to 350 m, with down dip extents of 200 m (brx_w, brx_c, brx_c1, and brw_e).
- Near the surface, two thick (10–30 m) inclined zones of mineralization 100 m wide dip shallowly to the south over 150 m.

Zones were modelled in Leapfrog using the Vein system modelling tool. The extent of each vein model was limited using a boundary string. Wireframe solids are projected from drillhole intervals by up to 100 m along strike and down dip. If a vein set did not extend to the adjacent drillhole section, the wireframe was projected halfway to the next section and terminated.

14.5 Sample Coding and Compositing

To ensure equal sample support and to avoid splitting assay intervals, a composite interval length of 1.5 m, equal to the dominant sample length of the raw assays, was selected. This is in keeping with the previous resource estimate. It is also a convenient fit to the 3 m elevation dimension of the parent block model size.

Lithology was used as a key field such that composite intervals honoured geological boundaries.

Residual composites less than 0.5 m in length were discarded so as not to introduce a short sample bias into the estimation process. Density weighting is not required.

Composite intervals within post-mineralization dikes are assigned a null grade and are not used to estimate block grades. Un-sampled intervals are not assigned a zero grade prior to compositing.

14.6 Statistical Analysis

Domains 1 to 14 have similar skewed distributions with high CVs associated with a high grade gold tail containing extreme gold values (as shown in the histogram in Figure 14-5). Treatment of very high grades is required.

The cumulative distribution function (CDF) in Figure 14-5 tentatively suggests a break between high- and low-grade populations at 0.1 g/t Au – roughly the median grade of domained composite samples. Previously, this grade threshold was used to define a grade shell used as a hard boundary for resource estimation.

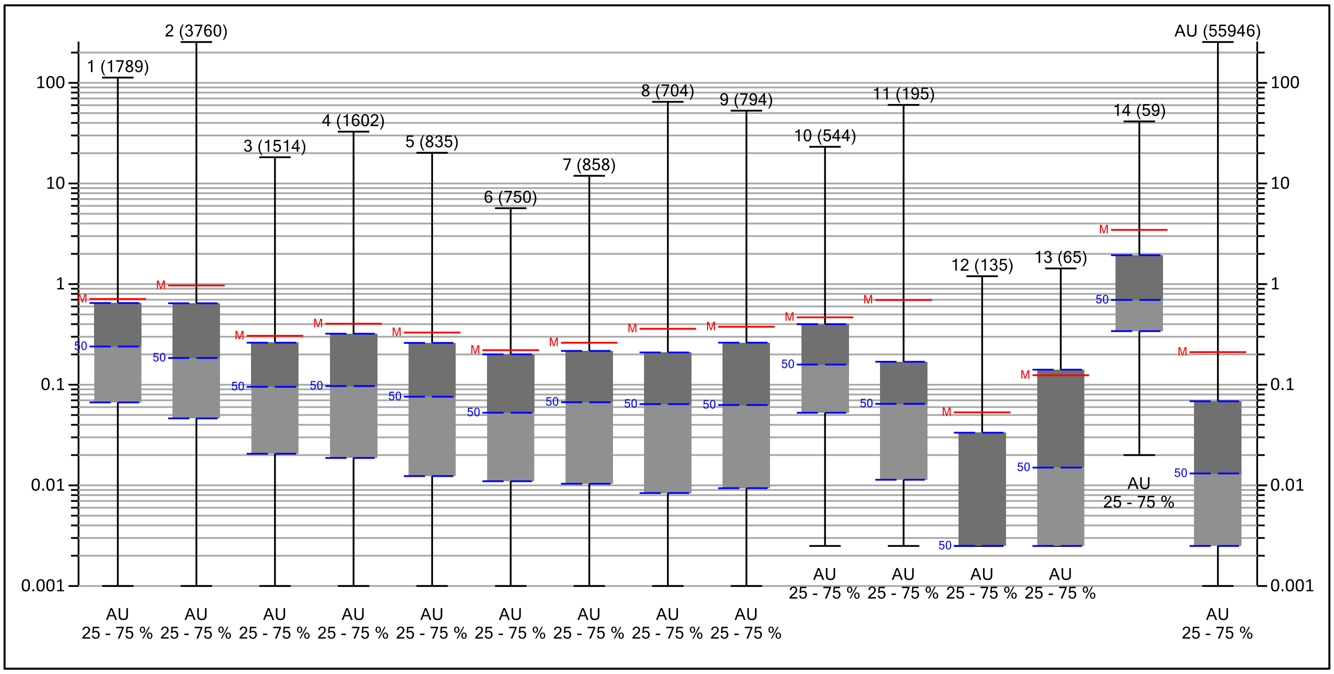

Figure 14-4: Gold grade box plots and summary statistics for mineralization domains

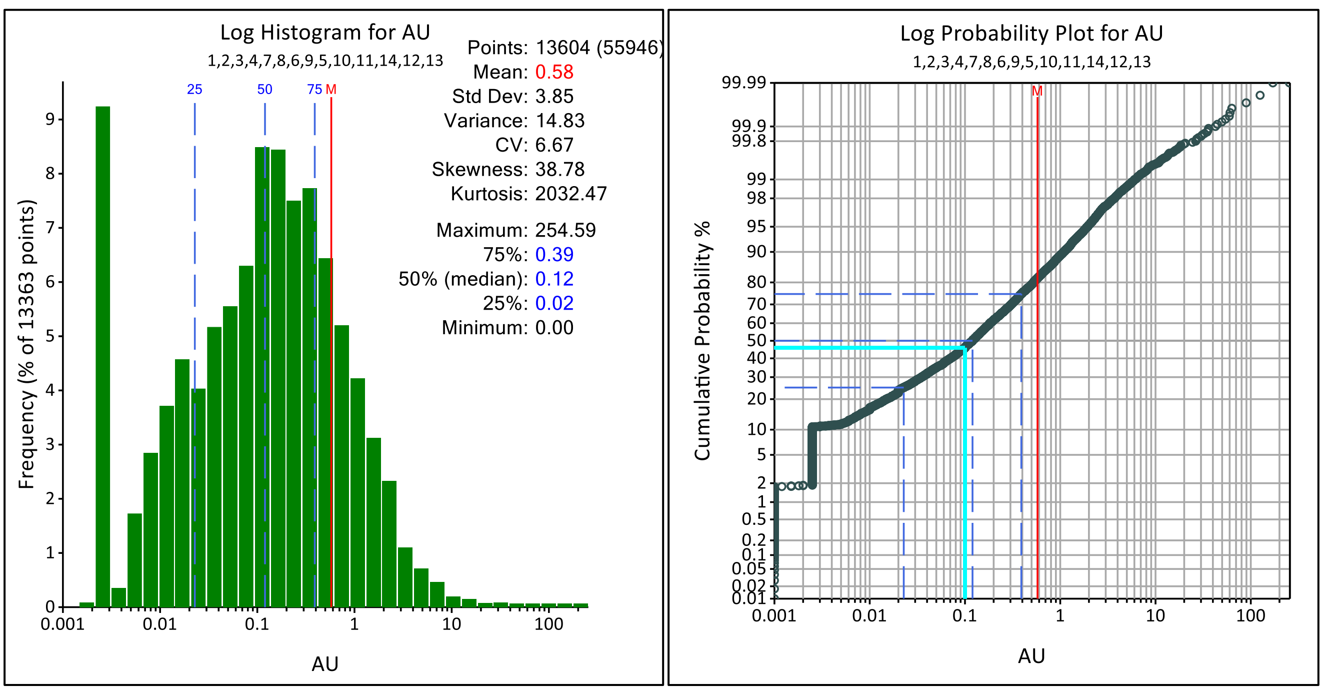

Figure 14-5: Gold grade histogram and CDF all domained composites

14.6.1 Top Cuts

Capping occurred after compositing in keeping with the previous MRE. In general, very high grades are located within the well mineralized portions of the deposit. Most very high-grade samples are well constrained by surrounding drillholes. 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.

Summary composite statistics by resource domain and the impact of top cuts are shown in Table 14-2.

Table 14-2: Eagle Mountain deposit composite summary

Domain	Count	Minimum	Maximum	Mean	Standard deviation	Uncut CV	Capping value	No. capped	Capped mean	Capped standard deviation	CV
Eagle Mountain											
1	1,687	0	112.79	0.7	3.24	4.61	20	4	0.68	1.52	2.23
2	3,681	0	254.59	0.98	6.56	6.72	65	4	0.97	3.79	3.91
3	1,500	0	18.23	0.3	0.88	2.9	10	3	0.31	0.77	2.46
4	1,594	0	32.72	0.41	1.32	3.25	15	1	0.41	1.13	2.74
5	836	0	20.19	0.33	1.08	3.28			0.35	1.12	3.18
6	747	0	5.68	0.22	0.51	2.31			0.23	0.52	2.29
7	870	0	11.92	0.26	0.79	3			0.26	0.7	2.68
8	722	0	64.8	0.38	2.61	6.78	10	2	0.32	1.01	3.15
9	783	0	52.9	0.38	2.24	5.9	10	3	0.31	0.87	2.76
10	544	0	23.16	0.47	1.4	2.99	15	1	0.45	1.18	2.61
11	195	0	60.41	0.7	4.6	6.62	10	2	0.39	1.41	3.59
12	135	0	1.2	0.05	0.16	3.07			0.05	0.16	3.07
13	65	0	1.43	0.12	0.25	1.99			0.13	0.25	1.92
14	65	0	41.38	3.25	7.2	2.21			3.25	7.2	2.21
Salbora											
21	149	0	37.88	1.89	4.46	2.36	20	2	1.9	3.6	1.9
22	405	0	69.23	2.29	4.76	2.08	35	1	2.21	3.77	1.71
23	276	0	12.33	0.39	1.16	2.95			0.4	1.17	2.93
24	139	0	13.4	0.65	1.95	2.99			0.65	1.95	2.99
25	307	0	16.54	0.57	1.39	2.43			0.57	1.39	2.43
26	171	0	22.74	0.75	2.02	2.7	10	1	0.68	1.32	1.96
27	48	0.01	37.86	1.71	6.14	3.6	10	2	0.9	2.09	2.32
28	85	0	16.95	0.39	1.85	4.68			0.39	1.85	4.68
29	10	0	8.45	1.64	2.8	1.71			1.64	2.8	1.71
30	5	0.11	1.61	0.79	0.6	0.76			0.79	0.6	0.76

14.6.2 Grade Clamping

"Clamping" of composite grades was utilized for all estimation domains to manage potential bias from extrapolation of extreme values at the periphery of the model. Clamping limits the influence of samples above a 5 g/t Au cut-off to the first two estimation runs only. For the third run, are samples are clamped at a maximum grade of 5 g/t Au. Grade clamping affects limited portions of the deposit peripheral to high grade zones that are estimated in run 3.

14.6.3 Density

Average densities were applied to fresh rocks and to saprolite based on lithology. There are 165 measurements of density in saprolite from a total of 394 density measurements.

A comprehensive tabulation of bulk density data with respect to rock type and oxidation state was provided by Goldsource. This tabulation was grouped into respective rock types and oxidation states, and bulk density averages and standard deviations were calculated. The table is presented below (Table 14-3**Error! Reference source not found.**).

If there was no average density available for a specific rock/oxide combination, or there were any cells that did not receive a rock type attribute, then the average density for the oxidation state was applied.

Mineralized domains inherit the same densities as the ROCK/ZONE configuration as described above.

Table 14-3: Density summary

Weathering	LITHO	Count	Minimum (t/m³)	Maximum (t/m³)	Average (t/m³)	Standard deviation
Saprolite	BPOR	1	1.28	1.28	1.28	-
	DOLE	8	1.32	1.79	1.49	0.14
	GABN	7	1.31	2.53	1.77	0.48
	GRDR	756	1.01	2.92	1.59	0.18
	HFPO	5	1.14	1.58	1.33	0.16
	MSED	6	1.31	1.66	1.50	0.12
	MVOL	73	1.01	2.67	1.46	0.27
Saprolite total		**856**	**1.01**	**2.92**	**1.57**	**0.20**
Transition	DOLE	2	1.32	2.79	2.06	1.04
	GRDR	41	1.35	3.01	2.33	0.41
	MSED	3	2.16	2.49	2.30	0.17
	MVOL	13	1.38	2.70	2.23	0.46
Transition total		**59**	**1.32**	**3.01**	**2.29**	**0.43**
Fresh	BPOR	7	2.61	3.01	2.76	0.16
	DOLE	28	2.51	3.01	2.84	0.15
	GABN	12	2.85	4.17	3.03	0.36
	GRDR	458	2.14	3.43	2.66	0.13
	HFPO	15	2.56	3.02	2.75	0.14
	MONZ	3	2.98	3.09	3.03	0.06
	MSED	9	2.60	2.79	2.71	0.06
	MVOL	100	2.62	3.18	2.85	0.10
Fresh total		**632**	**2.14**	**4.17**	**2.71**	**0.16**

Table 14-4: Average densities by zone

Weathering	Count	Minimum (t/m³)	Maximum (t/m³)	Average (t/m³)	Standard deviation
Saprolite	865	1.01	2.92	1.57	0.20
Transition	64	1.32	3.01	2.29	0.42
Fresh	745	2.14	4.17	2.72	0.15

14.6.4 Variography

Composite gold values underwent a normal score transform prior to being assessed for anisotropy, or directional dependence. Maps of gold value continuity were used to investigate the strike, dip, and pitch direction axis of gold mineralization trends.

The grade variation between sample pairs orientated along each direction axis ±10° was reviewed using semi-variogram charts. Sample pairs are grouped by their separation distance, or "lag interval" on the X axis. For each lag interval assessed, half of average variance value of paired samples is plotted on the Y axis. The resulting empirical semi-variogram chart can show if there is a relationship that can be modelled between grade variance and distance along each axis. Normal score variograms are back transformed for use in ordinary kriging (OK).

Nugget (i.e. intrinsic sample variance) was determined by downhole extrapolation of variance towards a sample separation distance of zero. Ellipses were visualized in Micromine and to confirm alignment with mineralization trends.

Eagle Mountain

A subset of samples from within the 14 mineralization wireframes was selected for geostatistical analysis. Semi-variogram charts for gold were modelled using two spherical functions, except for Domain 0 which was modelled using two exponential functions. Semi-variogram models are presented in Table 14-5. For minor domains 12 and 13, insufficient samples were available to create reliable models and the domain 11 model was used.

Table 14-5: Modelled semi-variogram parameters for Eagle Mountain grade interpolation

Domain	DM rotation			Model			Range		
	Z	X	Y	Nugget	Structure	Sill	Major	Semi-major	Minor
1	-70	10	0	0.43	1. Sph	0.43	25	30	10
					2. Sph	0.15	110	120	15
2	-60	15	0	0.43	1. Sph	0.35	10	10	10
					2. Sph	0.22	110	60	20
3	0.43	6.40	-7.69	0.43	1. Sph	0.35	20	20	3.5
					2. Sph	0.22	80	60	15
4	-60	15	0	0.43	1. Sph	0.44	60	15	5
					2. Sph	0.13	100	110	15
5	-80	10	0	0.42	1. Sph	0.48	40	50	5
					2. Sph	0.10	70	80	15
6	-60	10	0	0.53	1. Sph	0.25	80	50	5
					2. Sph	0.23	140	140	10
7	-60	10	0	0.48	1. Sph	0.35	80	50	5
					2. Sph	0.17	160	100	15
8	-60	10	0	0.43	1. Sph	0.40	80	99.3	10
					2. Sph	0.17	120	138.3	20
9	-60	10	0	0.41	1. Sph	0.42	120	50	10
					2. Sph	0.17	130	80	20
10	10	0	25	0.55	1. Sph	0.30	35	35	5
					2. Sph	0.15	60	50	15
11 (12, 13)	10	0	25	0.58	1. Sph	0.27	25	35	5
					2. Sph	0.15	75	60	15
14	-90	-90	90	0.56	1. Sph	0.20	10	30	5
					2. Sph	0.24	40	60	15
0	0	270	90	0.220	1. Exp	0.26	14	10	12
					2. Exp	0.52	75	70	60

For all domains, semi-variogram models for gold have high nugget values, describing expected variation between the grade of samples collected from the same location, ranging from 22% to 58% of the total variance for domains 0 and 6 respectively. High nugget values are in line with the style of mineralization and known levels of continuity where often rapid changes in grade and thickness across horizons are observed.

Salbora

A subset of samples from within the seven mineralization wireframes was selected for geostatistical analysis to give the semi-variogram parameters presented in Table 14-6. For minor domains 29 and 30, insufficient samples were available to create reliable semi-variograms and the domain 28 model was used.

At Salbora, semi-variogram models for gold also have high nugget values ranging from 29% to 68% of the total variance for domains 22 and 24 respectively.

Table 14-6: Modelled semi-variogram parameters for Salbora grade interpolation

Domain	DM rotation			Model			Range		
	Z	X	Y	Nugget	Structure	Sill	Major	Semi-major	Minor
21	-100	0	20	0.45	1. Sph	0.29	45	20	10
					2. Sph	0.26	75	40	15
22	-100	0	20	0.29	1. Sph	0.39	45	15	10
					2. Sph	0.32	70	50	20
23	180	0	-85	0.50	1. Sph	0.31	60	40	10
					2. Sph	0.20	140	90	20
24	165	0	-100	0.68	1. Sph	0.17	60	30	6
					2. Sph	0.15	140	90	15
25	175	0	-90	0.57	1. Sph	0.29	20	30	10
					2. Sph	0.14	100	90	20
26	175	0	-110	0.46	1. Sph	0.33	30	30	6
					2. Sph	0.21	60	60	10
27	180	0	-80	0.54	1. Sph	0.26	30	30	2
					2. Sph	0.19	60	60	5
28 (29, 30)	175	0	90	0.60	1. Sph	0.26	30	30	3
					2. Sph	0.14	60	60	6

14.7 Block Model Construction

Block models were built assuming that selective mining within an open pit will be completed. The block model is non-rotated and uses sub-cells. Estimation cell size is 20 m x 20 m x 3 m (X-Y-Z). The smallest sub-cells are 5 m x 5 m x 1 m. The number of parent cells in the X-direction is 312, 210 in the Y-direction, and 200 in the Z-direction. The model origin (bottom left-hand corner of block model) is 263600 mE, 575100 mN, and -200 mRL.

Cells were filled in the mineralization wireframes and the corresponding "DOM" code was applied to respective block model cells. Similarly, cells were filled in the geology wireframes and corresponding "ROCK" code was applied to respective block model cells.

Table 14-7: Block model parameters

	X	Y	Z
Eagle Mountain			
Origin (minimum extent)	263,600	575,100	-200
Range (m)	3,120	2,100	600
Largest (parent) cell	10 m	10 m	3 m
Smallest sub-cell*	5 m	5 m	1 m
No. of parent cells	312	210	200
Salbora			
Origin (minimum extent)	263,600	577,200	-280
Range (m)	3,120	2,100	930
Largest (parent) cell	10	20	12
Smallest sub-cell*	2.5	2.5	3
No. of parent cells	90	90	82

Cells above the topography surface were clipped from the block model. Cells above the base of saprolite surface and base of transition surface were assigned a corresponding weathering code in the "Zone" field. Cells above the topography surface were clipped from the block model. After estimation, both block models were split to a maximum parent block size of 10 m x 10 m x 3 m.

14.7.1 Dynamic Anisotropy

The block model is coded with strike and dip data derived 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 a 50 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 (IDW) of angles method in Datamine.

14.8 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 semi-variograms in Table 14-5 to weight composite assay values when estimating block grades. The OK estimation process incorporates a locally varying average sample grade and is therefore an appropriate method for estimating block grades at the Eagle Mountain deposit where mineralization has a locally variable nature.

For validation purposes, interpolation was also undertaken using IDW of input samples. The IDW technique weights sample grades proportionally to the inverse of their distance from the block raised by a power of three (IDW^3).

14.8.1 Kriging Parameters

Interpolation parameters were derived by iteratively generating block model estimates for domains 1 and 2, to derive a set of estimation parameters that result in the best block model validation result, specifically through global change of support (GCOS) analysis.

Up to three search passes were used if blocks were not estimated in the first pass. For all domains, the first search distance was of 80 m x 80 m x 30 m and subsequent searches were undertaken using two and three times this distance.

For a block elevation size of 3 m, a maximum of 2 x 1.5 m samples per hole is appropriate. The sensitivity of the MRE to overall informing sample maximums of 6, 8 and 12 was tested.

Due to a mix of low and high grades within mineralization domains, max8 and max12 both resulted in too much "smoothing", had worse validation results, and resulted in significant decreases in average grade relative to the previous 2021 estimate.

In 2021, a maximum of six samples in total and two per hole was used. These restrictions were retained for the current study for runs 1 and 2. To avoid smearing of high gold grades over unreasonably large distances for run 3, up to four samples per hole were used. In run 3, grades were also clamped to a maximum of 5 g/t Au.

The grade of parent cells was estimated using a discretization of three divisions in the easting northing and elevation directions. No de-clustering weights were used.

Table 14-8: Estimation search ellipse ranges

Orientation domain	Orientation			Range		
	Strike	**Dip**	**Plunge**	**Major**	**Semi-major**	**Minor**
Eagle Mountain						
Eagle Mountain	Dynamic			80	80	30
Salbora						
Eagle Mountain	Dynamic			60	60	20

Table 14-9: Estimation run parameters

	Pass 1	Pass 2	Pass 3
Discretization	3 x 3 x 3		
Boundaries	Hard		
Ellipse segments	1		
Search volume multiple	x 1	x 2	x 3
Eagle Mountain			
Minimum samples	5	5	8
Maximum samples	6	6	12
Maximum per hole	2	2	4
Salbora			
Search volume multiple	x 1	x 2	x 3
Minimum samples	8	8	8
Maximum samples	12	12	12
Maximum per hole	4	4	4

14.9 Block Model Validation

Validation of the grade estimates was completed by:

- Visual checks on screen in cross section and plan view to ensure that block model grades honour the grade of sample composites
- Statistical comparison of composite and block grades.
- Generation of swath plots to compare input and output grades in a semi-local sense, by easting, northing, and elevation.

14.9.1 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 and the modelled semi-variogram. Poorly informed deposit areas with widely spaced samples are more smoothed which is expected. Cross-section views of the Eagle Mountain block model coloured by gold are shown in Figure 14-6.

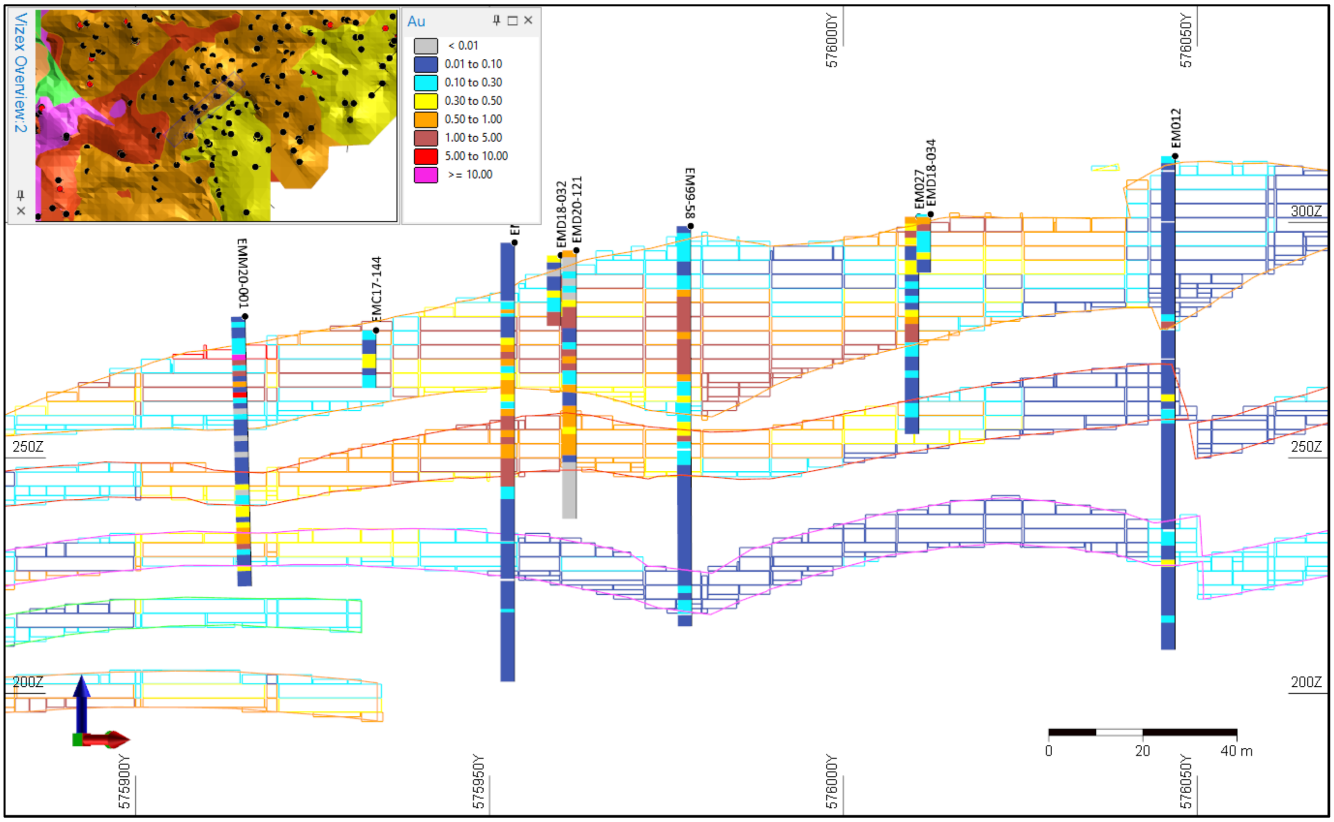

Figure 14-6: Example cross section shown validation view plot for gold

14.9.2 Comparison of Means

A comparison of the average gold grade of input composites and estimated block grades was undertaken for each resource estimate domain. Drilling is highly clustered with significantly more samples collected from mineralized portions of the deposit and few samples collected from low-grade areas, therefore the simple averages of block grades are significantly lower than input composites for all estimation methods.

To account for locally clustered sample data, sample data were de-clustered using the procedure detailed in Deutsch and Journel (1998) with variable de-clustering cell sizes deduced on a domain-by-domain basis.

The test demonstrated that the grades for the de-clustered mean input composites and the grade of OK and IDW block models are broadly comparable with difference typically within ±10% for individual domains and within ±2% globally. The OK estimate had the best overall correlation at 1% (Table 14-10). Larger differences are seen for domains with greater grade variance and fewer samples.

Table 14-10: Comparison of Eagle Mountain de-clustered composite and block model gold grades

Domain	Samples	Mean	De-clustered mean	Au OK	Difference OK	Au IDW3	Difference IDW
Domain 1	1,510	0.68	0.57	0.54	-5.26	0.56	-1.75
Domain 2	3132	0.98	0.70	0.67	-4.29	0.69	-1.43
Domain 3	1,413	0.33	0.34	0.37	8.82	0.36	5.88
Domain 4	1,548	0.42	0.38	0.38	0.00	0.39	2.63
Domain 5	753	0.39	0.34	0.34	0.00	0.35	2.94
Domain 6	656	0.25	0.22	0.22	0.00	0.23	4.55
Domain 7	748	0.27	0.23	0.21	-8.70	0.22	-4.35
Domain 8	566	0.30	0.24	0.27	12.50	0.26	8.33

Domain	Samples	Mean	De-clustered mean	Au OK	Difference OK	Au IDW3	Difference IDW
Domain 9	624	0.36	0.31	0.34	9.68	0.32	3.23
Domain 10	539	0.45	0.32	0.36	12.50	0.34	6.25
Domain 11	199	0.39	0.28	0.20	-28.57	0.23	-17.86
Domain 12	134	0.06	0.07	0.06	-14.29	0.06	-14.29
Domain 13	61	0.13	0.17	0.19	11.76	0.21	23.53
Domain 14	65	3.25	2.76	2.76	0.00	2.60	-5.80
Block volume weighted average:					**0.61**		**1.93**
Domain 0	23,447	0.04	0.04	0.04	0.00		

Table 14-11: Comparison of Salbora de-clustered composite and block model gold grades

Domain	Samples	Mean	De-clustered mean	Au OK	Difference OK	Au IDW3	Difference IDW
Domain 21	137	1.90	2.11	1,718	2.28	7.79	2.29
Domain 22	404	2.21	1.83	3,153	1.85	1.17	1.81
Domain 23	272	0.40	0.46	14,798	0.46	1.75	0.46
Domain 24	139	0.65	0.54	6,299	0.49	-8.72	0.46
Domain 25	307	0.57	0.57	2,915	0.59	3.58	0.58
Domain 26	171	0.68	0.89	1,761	0.90	1.00	0.88
Domain 27	48	0.90	1.10	670	1.04	-5.30	0.97
Domain 28	85	0.39	0.77	1,125	0.84	9.41	0.68
Domain 29	10	1.64	2.03	417	2.09	2.96	1.99
Domain 30	5	0.79	0.75	446	0.75	-0.23	0.76
					0.26		-2.33

14.9.3 Global Change of Support

Domains 1 to 7 contain 88% of MRE tonnes and 95% of MRE ounces. These domains were selected for further validation by analysis of histograms, CDF and quantile-quantile (Q-Q) plots which were generated in Supervisor. For all domains, the CDF and histogram validation plots for OK and IDW gold grades estimates show a degree of smoothing relative to input samples, with the OK estimate (black line) showing a slightly larger decrease in grade variance.

The GCOS assessment compares the estimated block model grade and tonnage curves to the theoretical grade and tonnage curves deduced from sample distributions. The sample grade and tonnage curves are adjusted to account for the decrease in variability that is expected for grades between selective mining unit (SMU). This decrement in variability is known as "support effect" and was modelled using the discrete gaussian model. Estimates were validated by comparing global theoretical grade-tonnage curves in SMU support with global theoretical grade-tonnage calculated with OK and IDW3 estimates.

Results are tabulated for domains 1 to 7 in Table 14-12. OK and IDW^3 estimates returned average block grades and tonnages that are similar to theoretical de-clustered SMU grade-tonnage curves. At a 0.2 g/t Au cut off, grades estimated by OK and IDW3 are well within ±15% of the theoretical SMU grades.

Table 14-12: GCOS for gold grades at a 0.5 g/t Au cut-off

Domain	Series	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)	Difference in grade	Difference in ounces
1	OK	7.147	1.075	247	-0.1 (-9%)	-3 (-1%)
	IDW	6.879	1.024	227	-0.15 (-13%)	-23 (-9%)
	Declus SMU	6.600	1.178	250		
2	OK	11.838	1.369	521	-0.19 (-12%)	-51 (-9%)
	IDW	11.067	1.497	533	-0.07 (-4%)	-39 (-7%)
	Declus SMU	11.382	1.563	572		
3	OK	4.314	1.041	144	0.03 (3%)	12 (9%)
	IDW	4.196	1.058	143	0.04 (4%)	10 (8%)
	Declus SMU	4.056	1.014	132		
4	OK	5.224	1.293	217	0.21 (20%)	-3 (-1%)
	IDW	5.071	1.406	229	0.33 (30%)	9 (4%)
	Declus SMU	6.344	1.080	220		
5	OK	2.149	0.833	58	-0.14 (-14%)	-13 (-19%)
	IDW	2.332	0.860	64	-0.11 (-12%)	-6 (-9%)
	Declus SMU	2.269	0.973	71		
6	OK	1.955	0.845	53	0 (0%)	12 (28%)
	IDW	1.772	0.934	53	0.08 (10%)	12 (28%)
	Declus SMU	1.523	0.849	42		
7	OK	1.620	0.927	48	-0.04 (-4%)	-28 (-37%)
	IDW	1.911	1.008	62	0.04 (4%)	-14 (-19%)
	Declus SMU	2.444	0.971	76		

An example GCOS plot for Domain 2 is shown in Figure 14-7.

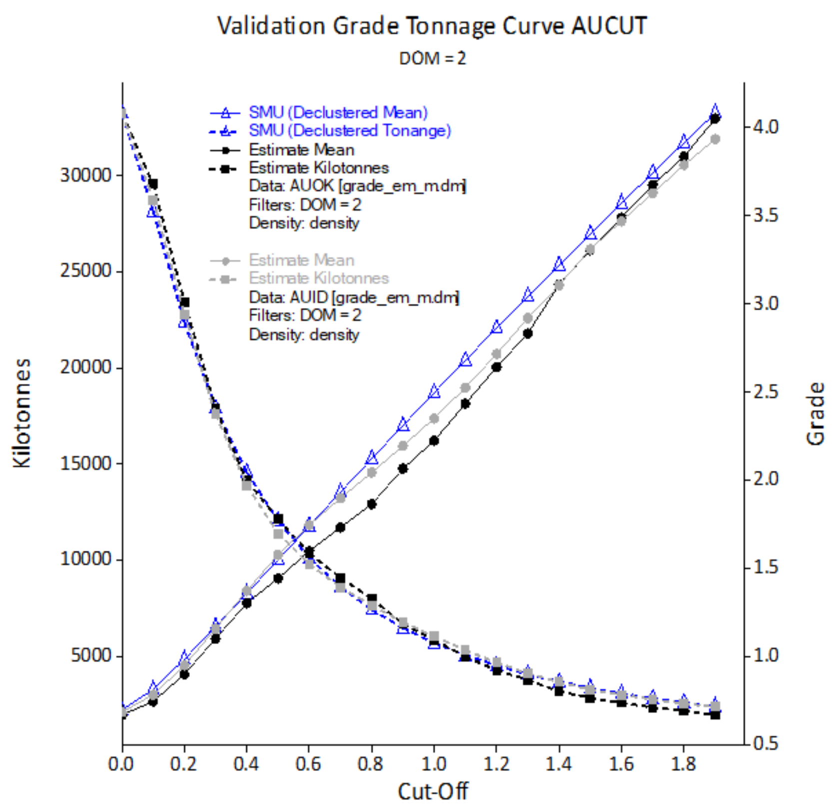

Figure 14-7: Example GCOS plot for gold estimated by OK and IDW, Domain 2

14.9.4 Swath Plots

Swath plots were generated for the two major sub-domains which compare the grades of composites and block grade estimates that fall within 20 m easting and northing slices and 3 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 IDW^3 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. The OK profile is slightly smoother than IDW. Both models reflect drillhole data on a local basis.

An example easting direction swath plot for gold in Domain 2 is shown in Figure 14-8.

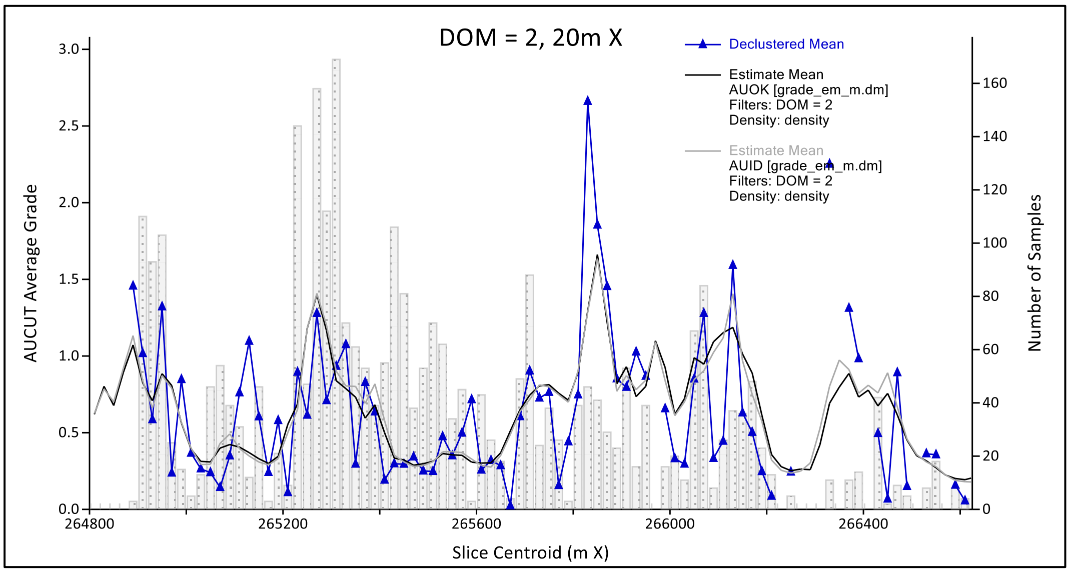

Figure 14-8: Example swath plot for gold, easting direction, Eagle Mountain Domain 2

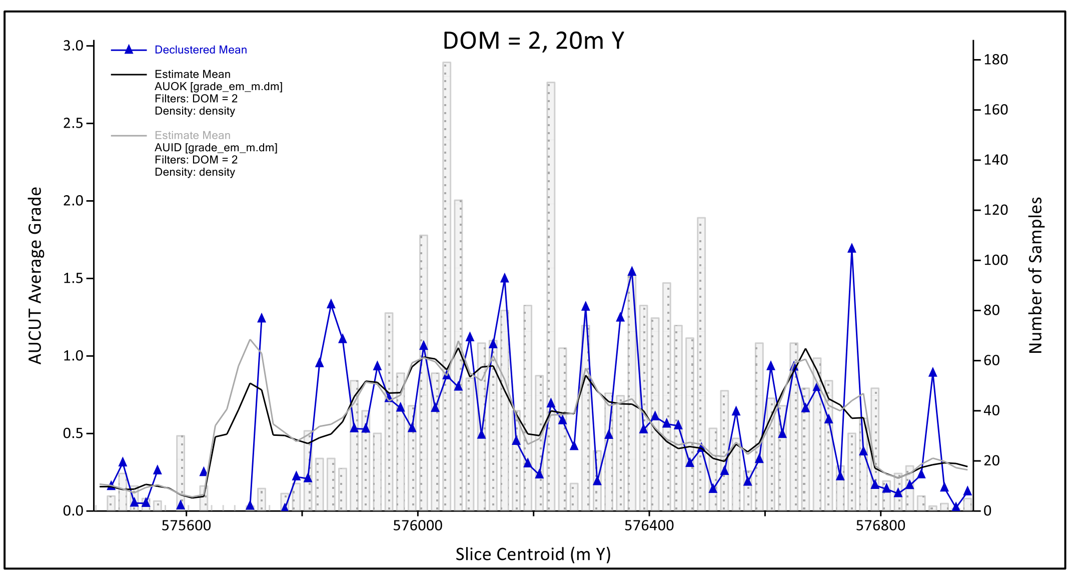

Figure 14-9: Example swath plot for gold, northing direction, Domain 2

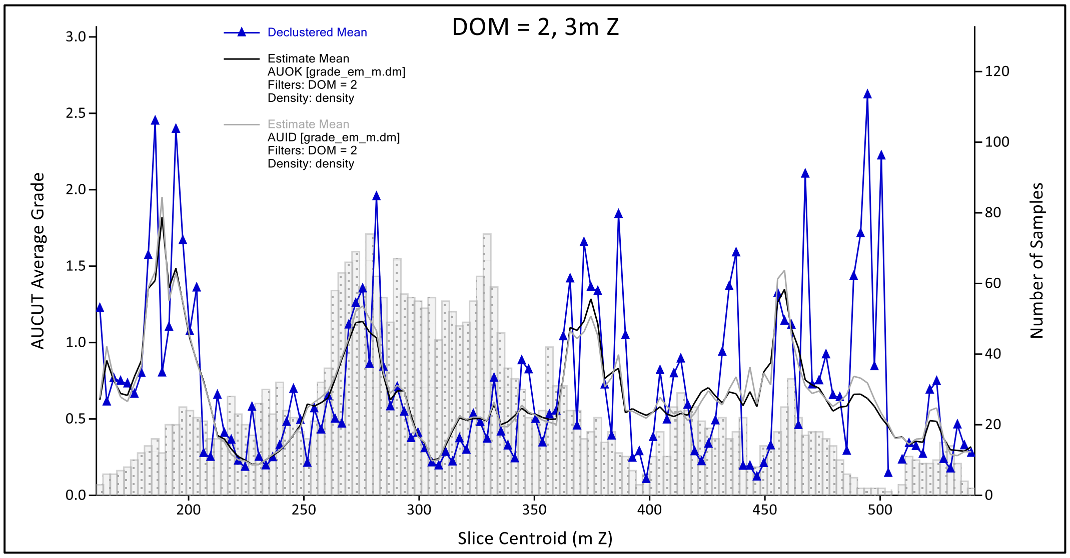

Figure 14-10: Example swath plot for gold, elevation direction, Domain 2

14.10 Mineral Resource Classification and Reporting

14.10.1 Reasonable Prospects for Eventual Economic Extraction

The depth, geometry and grade of gold mineralization at the deposits make them amenable to exploitation by open pit mining methods. Two cut-off grades are reported: 0.3 g/t Au for saprolite and transitional material and 0.5 g/t Au for fresh rock. Selected cut-off values assume a revenue factor of US$1,600/oz of gold and the processing recoveries and costs are detailed in Table 14-13.

Table 14-13: Cut-off selection parameters

Material	Price (US$/t gold)	Price (US$/g gold)	Process recovery	Recovered price	Process + G&A cost (US$/t)	Minimum economic grade	Selected cut-off
Oxide	1,600	51	95%	48.9	9	0.18	0.30
Fresh	1,600	51	95%	48.87	15	0.31	0.50

The resource is constrained by a conceptual pit shell derived from a Whittle optimization. Material falling outside of this shell is considered to not have reasonable prospects for eventual economic extraction. The Whittle optimization considers block gold grade estimates, and mining and processing parameters are listed in Table 14-14.

Table 14-14: Whittle pit shell parameters

Item	Value
Gold price	US$1,600/oz
Mining cost mineralization and waste	US$1.5/t oxide and transition US$2.00/t fresh
Processing cost	US$6/t oxide and transition US$12/t fresh
Processing gold recovery	95%
General and administration cost	US$3.0/t
Pit slope angle	45°

At Eagle Mountain, out of total tonnage of 50.93 Mt above the reporting cut-off grades, 38.73 Mt or 76% falls within the conceptual shell. Areas excluded include speculative blocks at depth and the periphery of the deposit. The extent of the resource constraining shell is shown in Figure 14-11.

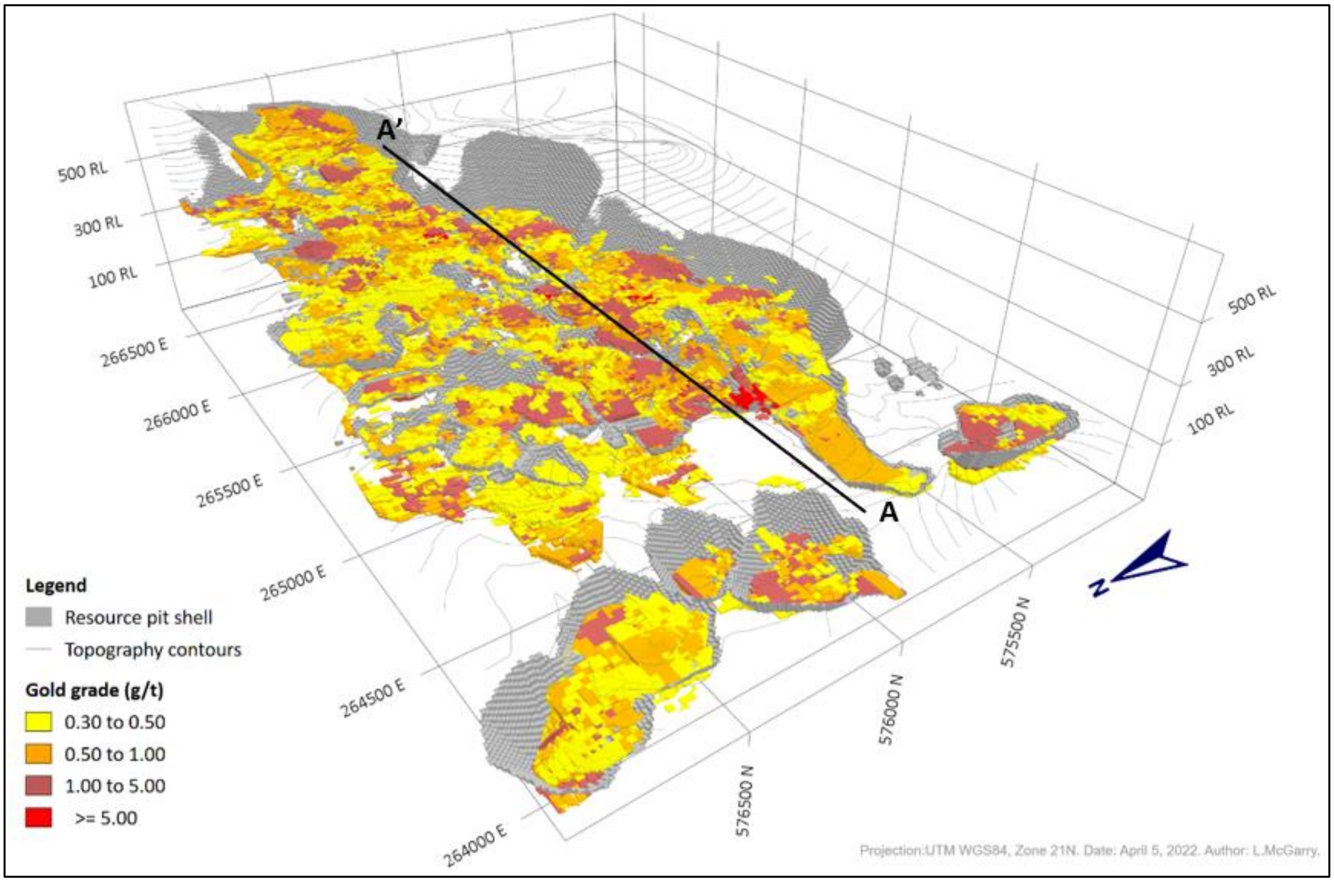

Figure 14-11: 2022 Eagle Mountain block model coloured by gold grade with resource constraining shell – bird's eye view to southeast (A-A' cross section shown in Figure 14-13)

At Salbora, out of total tonnage of 4.65 Mt above the reporting cut-off grades, 3.19 Mt or 69% falls within the conceptual shell.

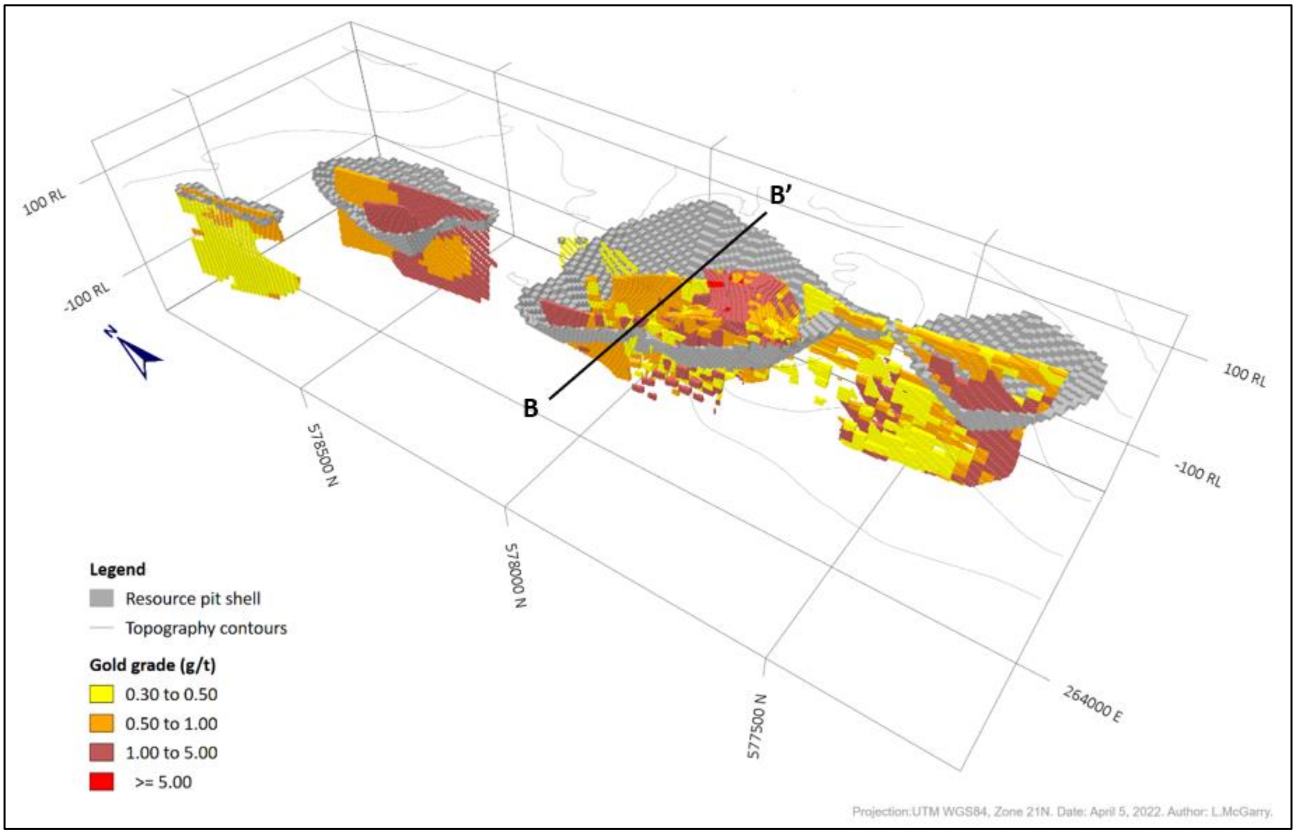

Figure 14-12: 2022 Salbora block model coloured by gold grade with resource constraining shell – bird's eye view to northeast (B-B' cross section sown in Figure 14-13)

A cross-section view of resource constraining shells at the Eagle Mountain and Salbora deposits is shown in Figure 14-13.

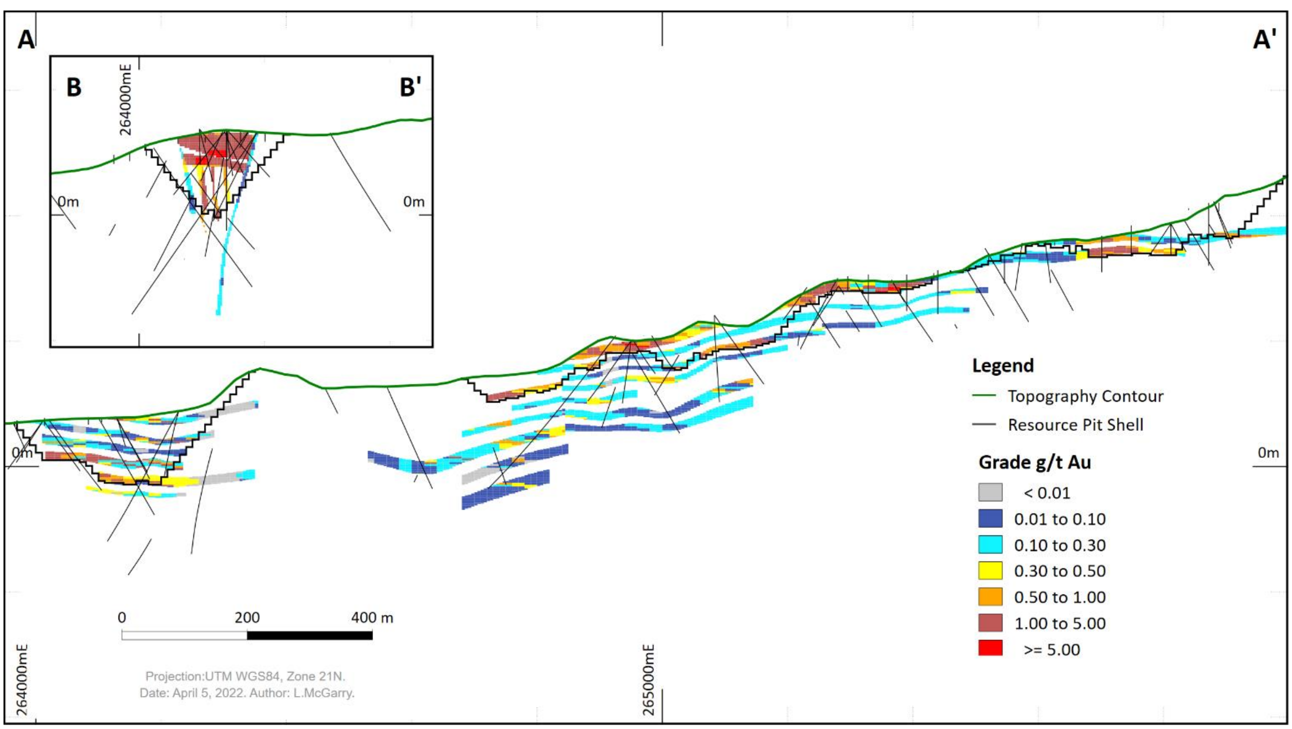

Figure 14-13: 2022 block model coloured by gold grade with resource constraining shell (cross-section view)

14.10.2 Resource Classification Parameters

The MRE is classified in accordance with CIM Definition Standards for Mineral Resources and Mineral Reserves, adopted by the CIM Council on 10 May 2014. The Mineral Resource has been classified as Indicated and Inferred on a qualitative basis. The classification level is primarily based upon an assessment of the validity and robustness of input data and the estimator'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.

Resource classifications are assigned to the block model in a cookie-cutter fashion using manually digitized classification boundary strings:

- Indicated blocks are captured in an area that broadly meets the following criteria:
  - Demonstrates reasonable geological and grade continuity
  - Estimated in runs 1 or 2
  - Typically within 50 m to the nearest drillhole (and locally up to 80 m – equal to the typical variogram range in the along strike or strike and down dip directions).
- Inferred blocks are captured in an area that broadly meets the following criteria:
  - Within a 120 m buffer of drilling in the Eagle Mountain deposit area (see Figure 14-3)
  - Informed in search ellipse volumes 1 to 3.

At the Eagle Mountain deposit, Indicated Resources extend from surface to a maximum depth of 150 m and have an average depth of 35 m. Of the Indicated Resources, 75% are within 50 m of the surface.

At the Salbora deposit, Indicated Resources extend from surface to a maximum depth of 156 m and have an average depth of 49 m. Of the Indicated Resources, 58% are within 50 m of the surface.

A histogram showing distances between blocks and samples for each category is shown in Figure 14-14. The Eagle Mountain and Salbora block models are shown coloured by class and with resource constraining shells in Figure 14-15 and Figure 14-16.

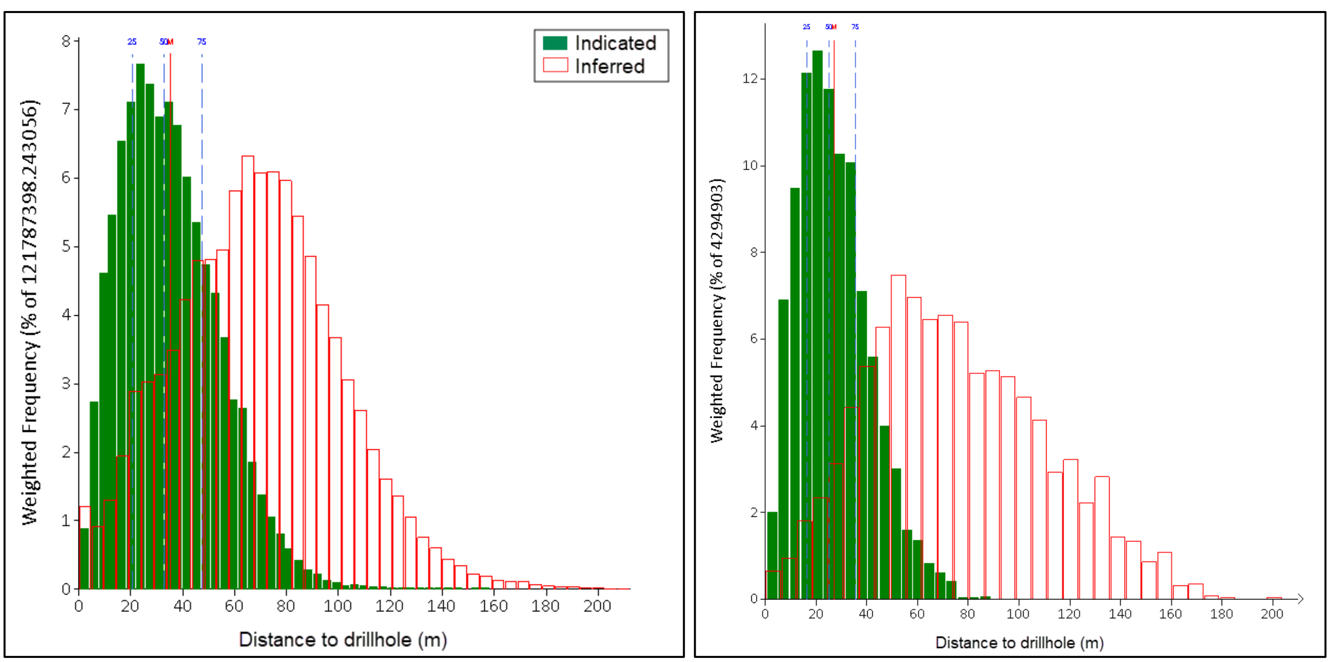

Figure 14-14: Classified block distances from nearest drillhole – Eagle Mountain (left) Salbora (right)

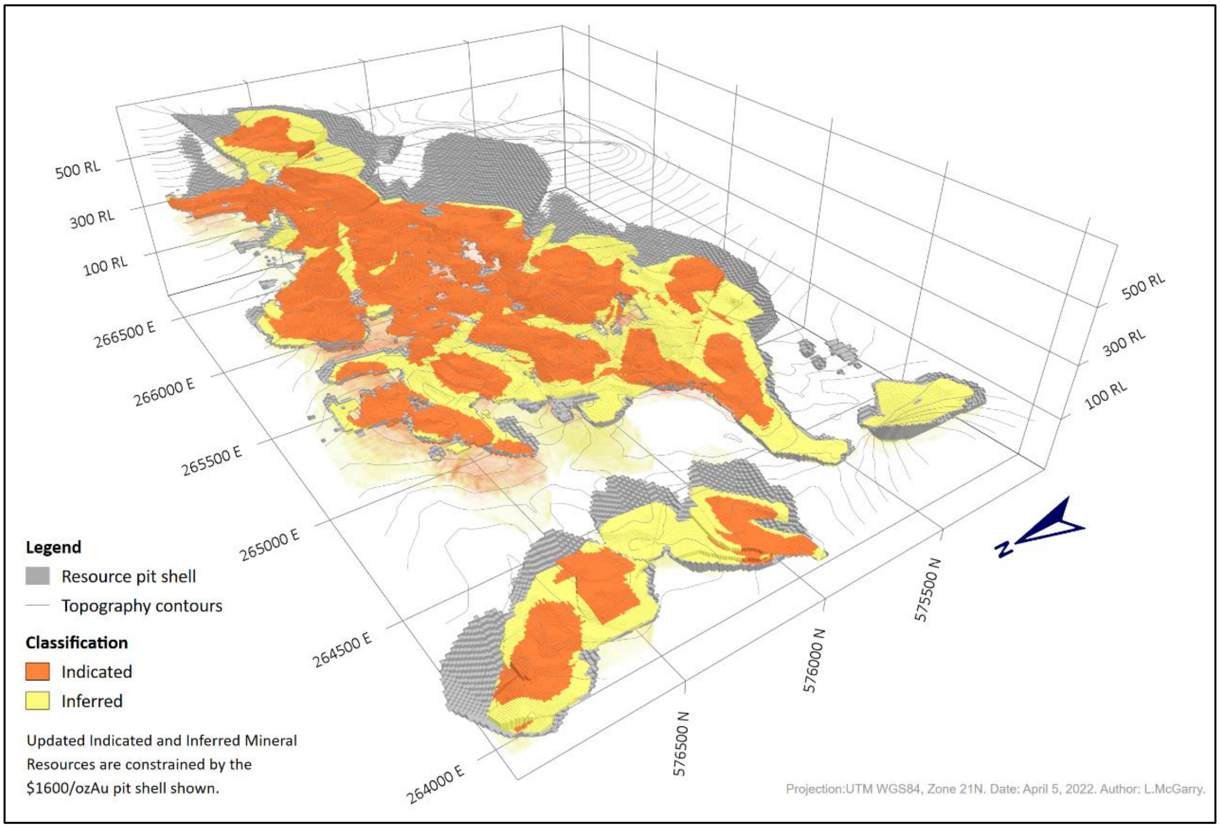

Figure 14-15: 2022 Eagle Mountain block model coloured by class with resource constraining shell – bird's eye view to southeast

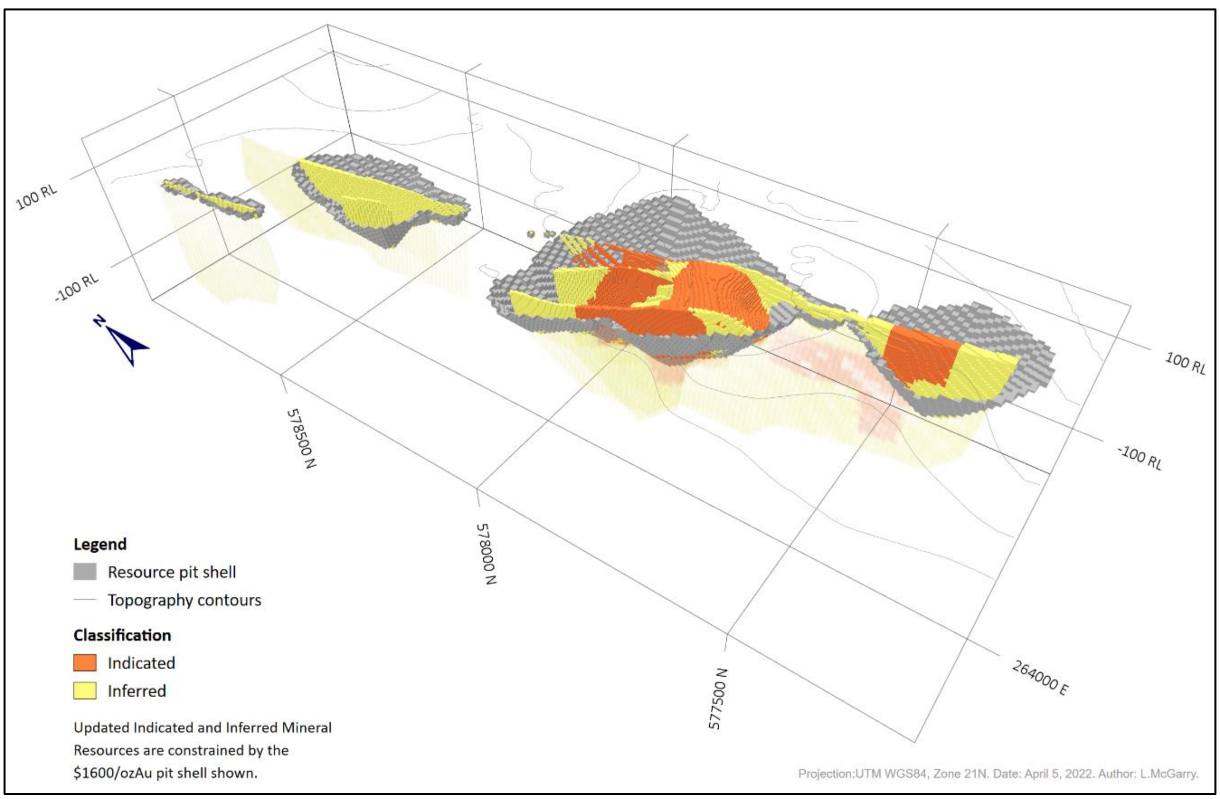

Figure 14-16: 2022 Salbora block model coloured by class with resource constraining shell – bird's eye view to northeast

14.11 Mineral Resource Reporting

Resources are reported in adherence to NI 43-101 Standards of Disclosure for Mineral Projects (Canadian Securities Administrators, 2011), and to the CIM Definition Standards on Minerals Resources and Reserves (CIM Council, 2014). The MRE is summarized by resource category in Table 14-15. The Mineral Resource has an effective date of 5 April 2022.

Table 14-15: Total Project Mineral Resources by weathering type

Class	Material	Cut Off	Tonnes (Mt)	Gold (g/t)	Gold (oz)
Eagle Mountain					
Indicated	Sap and Trans	0.30	11.93	0.99	381
	Fresh	0.50	17.15	1.24	682
	All		**29.08**	**1.14**	**1,063**
Inferred	Sap and Trans	0.30	5.86	0.68	131
	Fresh	0.50	11.34	1.12	407
	All		**17.20**	**0.97**	**538**
Salbora					
Indicated	Sap and Trans	0.30	0.55	2.09	37
	Fresh	0.50	1.50	1.74	84
	All		**2.05**	**1.83**	**121**
Inferred	Sap and Trans	0.30	0.24	0.87	8
	Fresh	0.50	0.96	1.15	35
	All		**1.20**	**1.13**	**44**
EAGLE MOUNTAIN PROJECT – TOTAL					
Indicated	Sap and Trans	0.30	12.48	1.04	417
	Fresh	0.50	18.66	1.28	766
	All		**31.13**	**1.18**	**1,183**
Inferred	Sap and Trans	0.30	6.10	0.71	139
	Fresh	0.50	12.30	1.12	443
	All		**18.40**	**0.98**	**582**

Notes:

- *Numbers have been rounded to reflect the precision of a MRE. Totals may vary due to rounding.*
- *Gold cut-off has been calculated based on a gold price of US$1,600/oz, mining costs of US$1.5/t for saprolite and US$2.0/t for fresh rock, processing costs of US$6.0/t for saprolite and US$12.0/t for fresh rock, and mine-site administration costs of US$3.0/t. Metallurgical recoveries of 95% are based on prior test work.*
- *Mineral Resources conform to NI 43-101, and the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standards for Mineral Resources & Mineral Reserves.*
- *The Company is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing or political factors that might materially affect these MREs.*
- *Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in this MRE are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated or Measured Resources, however, it is reasonably expected that majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.*

As shown in Table 14-16, the effect of gold price is very modest, as mineralization is structurally controlled within shears and does not have a low-grade halo that is sensitive to changes in gold price. The pit-constrained Mineral Resource does, however, increase more materially above US$1,700/oz, allowing for the pit to capture mineralization at depth, notably in the Eagle Mountain deposit.

Table 14-16: Total Project MRE update – sensitivity to gold price used for resource constraining shell

	Classification	Gold price (US$/oz)	Tonnes ('000)	Gold (g/t)	Gold ('000 oz)
Saprolite	Indicated	1,500	12,388	1.05	416,000
		1,600	**12,475**	**1.04**	**417,000**
		1,700	12,517	1.04	418,000
		1,800	12,544	1.04	418,000
	Inferred	1,500	5,998	0.72	138,000
		1,600	**6,104**	**0.71**	**139,000**
		1,700	6,117	0.71	139,000
		1,800	6,146	0.71	140,000
Fresh Rock	Indicated	1,500	17,467	1.30	732,000
		1,600	**18,659**	**1.28**	**766,000**
		1,700	19,094	1.27	777,000
		1,800	21,110	1.24	839,000
	Inferred	1,500	11,341	1.14	417,000
		1,600	**12,300**	**1.12**	**443,000**
		1,700	12,841	1.12	463,000
		1,800	15,007	1.09	524,000

14.12 Comparison with 2021 CSA Global Estimate

14.12.1 Eagle Mountain

The updated MRE for the Eagle Mountain Project incorporates new Mineral Resources at the Toucan, Powis and Baboon deposit areas amounting to approximately 186,000 additional gold ounces.

Infill drilling throughout the deposit has upgraded 281,000 gold ounces from Inferred to Indicated category. A 36% increase in Indicated ounces.

Within the deposit, infill drilling has constrained the extent of previously defined Inferred Resources in some places. At the periphery of mineralization zones, a tighter limit on model extents (including the introduction of a polygon clipping boundary) has also constrained the extent of previously define Inferred Resources.

In addition to the 281,000 oz upgraded to Indicated, exploration results and more constrained mineralization models have decreased Inferred Resources by 180,000 oz.

Overall, the differences between the 2022 CSA Global and previous estimates are considered acceptable and justified.

14.12.2 Salbora

The updated model incorporates new gold resources within steeply dipping shear and breccia zones at depth and along strike to the north.

Relative to the 2021 MRE, within a US$1,600/oz gold pit shell the updated saprolite and fresh Indicated MRE incorporates a 1.3 Mt in increase in Mineral Resource tonnes, a 0.74 g/t Au decrease in gold grade, and an 81% increase in gold ounces from 67,000 oz gold to 121,000 oz gold

The updated saprolite and fresh Inferred MRE incorporates a 0.5 Mt in increase in Mineral Resource tonnes, a 0.34 g/t Au decrease in gold grade, and 33% increase gold ounces from 33,000 oz gold to 44,000 oz gold.

Table 14-17: Comparison of CSA Global block model estimates – all blocks

Class		Current model			Previous Feb 2021 model			Difference		
		Tonnes (Mt)	Grade Au g/t	Ounces Au	Tonnes (Mt)	Grade Au g/t	Ounces Au	Tonnes (Mt)	Grade Au g/t	Ounces Au
Eagle Mountain										
Indicated	Saprolite/Trans	11.9	0.99	380.6	11.4	0.95	346	0.6 (5%)	0.04 (5%)	34 (10%)
	Fresh	17.2	1.24	681.9	11.0	1.23	436	6.1 (56%)	0.01 (1%)	246 (57%)
	All	**29.1**	**1.14**	**1,062.5**	**22.4**	**1.09**	**782**	**6.7 (30%)**	**0.05 (5%)**	**281 (36%)**
Inferred	Saprolite/Trans	5.9	0.68	131	5.1	0.81	134	0.7 (15%)	-0.13 (-16%)	-3 (-2%)
	Fresh	11.3	1.12	407	19.0	1.15	701	-7.7 (-40%)	-0.03 (-3%)	-294 (-42%)
	All	**17.2**	**0.97**	**538**	**24.1**	**1.08**	**835**	**-6.9 (-29%)**	**-0.1 (-10%)**	**-297 (-36%)**
Salbora										
Indicated	Saprolite/Trans	0.6	2.09	37.0	0.2	1.45	7	0.4 (175%)	0.64 (44%)	30 (429%)
	Fresh	1.5	1.74	84.0	0.7	2.82	60	0.8 (114%)	-1.08 (-38%)	24 (40%)
	All	**2.1**	**1.83**	**121.0**	**0.8**	**2.57**	**67**	**1.3 (156%)**	**-0.74 (-29%)**	**54 (81%)**
Inferred	Saprolite/Trans	0.2	0.87	8	0.2	0.99	6	0 (20%)	-0.12 (-12%)	2 (33%)
	Fresh	1.0	1.15	35	0.5	1.74	27	0.5 (92%)	-0.59 (-34%)	8 (30%)
	All	**1.2**	**1.13**	**44**	**0.7**	**1.47**	**33**	**0.5 (71%)**	**-0.34 (-23%)**	**11 (33%)**

14.13 Recommendations

The following recommendations for additional work are made with respect to the MRE:

- Update the mineralization model to delineate mineralized structures of variable orientation within the shallow dipping thrust zones, and to model relay veins linking the thrusts. The model should be supported by a detailed structural interpretation incorporating data from orientated angled drillholes.
- If Leapfrog software is to be used in future, the veins system modelling tool should be used instead of the stratigraphic approach used currently.
- Complete a high-resolution LiDAR survey with ground truthing to improve the resolution of the topography model. An updated MRE model should be generated when a high-resolution topography model is available.
- High-resolution topography could support a detailed map of weathering features and resistive post mineralization dikes. This information could provide the basis for a detailed review of auger data to improve the definition of mineralization trends in saprolite for drill targeting and mineralization modelling.
- Obtain a dedicated geological and mining database solution. This will enable efficient sharing of increasingly complex project data between the multi-disciplinary teams involved in the project as it progresses to more advanced stages of development.

The following targets warrant further exploration:

- The steep breccia zone at Toucan (Zone 14) at Salbora is open to the south. This zone would be tested by drillholes on a fence 40 m to the south of EMD20-103 which included a 10.5 m intercept at 1.16 g/t Au.
- At Toucan, the convergence of the steep breccia zone and flat horizons is associated with increased mineralization intensity. Drilling on a regular grid should test the Salbora shear zone adjacent to the Eagle Mountain deposit to explore for similar breccia zones.
- At the south of the Eagle Mountain deposit, mineralized horizons continue at depth south-westward from the Baboon deposit area. Exploration should target extensions to mineralization encountered in EMD09_43 (6.10 m at 2.12 g/t Au from 141.90 m) and EMM21-052 (10.5 m at 0.85 g/t Au from 139.50 m), particularly where changes in topography bring these zones closer to surface.

15 Mineral Reserve Estimate

This section is not applicable to the current report.

16 Mining Methods

This section is not applicable to the current report.

17 Recovery Methods

This section is not applicable to the current report.

18 Project Infrastructure

This section is not applicable to the current report.

19 Market Studies and Contracts

This section is not applicable to the current report.

20 Environmental Studies, Permitting and Social or Community Impact

20.1 Summary of Environment Work to Date

In 2013, Stronghold commenced a Biodiversity Baseline Assessment and water quality sampling studies over the Eagle Mountain Project. EMC, a reputable local Guyanese environmental consulting group, was contracted to perform these studies. The main benefits of the studies at this phase of development have been:

- An understanding of the local biodiversity environment
- The potential de-risking by proving non-existence of endangered species over the area covered by the PL
- The preparation of the studies to be used as the basis of any future application for operations.

Given the time elapsed since the 2013 survey, the Company engaged EMC to conduct additional wet and dry season biodiversity surveys in 2021. EMC reported their findings in a November 2021 report titled "Consolidated Report Biodiversity Baseline Assessment Eagle Mountain, Region 8, Guyana", ("the 2021 EMC report").

The 2021 EMC report presents the consolidated findings of the 2013 and 2021 biodiversity baseline surveys and is summarized in the following section.

20.2 2013 and 2021 Biodiversity Baseline Assessment

As it relates to the Biodiversity Baseline Assessment, EMC commissioned a multi-disciplinary team with experience in each task and conducted a biodiversity survey within the Project area (PL). This was done in accordance with national and international regulations and guidelines which require an assessment of the baseline environmental conditions as well as the protection and conservation of biodiversity, including endangered species and sensitive ecosystems, and identification of legally protected areas. Since the Project area is relatively small, the biodiversity surveys covered the entire area.

EMC surveyed plants and animals at selected sites throughout the project area and tried to identify endangered, rare and threatened species as defined by The International Union for the Conservation of Nature (IUCN) Red List of Threatened Species Version 2021-3. https://www.iucnredlist.org (Accessed – December 2021) was used to conduct the 2021 assessment.

There were four biodiversity surveys for the two survey years, 2013 and 2021. One survey each year was conducted for the wet season and the other for the dry season to capture any seasonal variation in the presence and distribution of species. Areas covered are assessment of the vegetation, the Lepidoptera (butterflies) and other invertebrates, assessment of the fish, fauna and associated water quality, amphibians and reptiles, mammals and avifauna (birds).

No endemic, rare and threatened plants or habitats were found to occur in the project area. Two species of frogs recorded from the study area are Threatened: The Kaei rocket frog (*Anomaloglossus kaiei*) and *Anomaloglossus praderioi* are listed by IUCN Red List as Endangered. The yellow/red-footed Tortoise (*Chelonoidis denticulata*), categorised by IUCN as Vulnerable, was noted. Mammals in the area that are categorised by IUCN as Vulnerable include the lowland tapir (*Tapirus terrestris*), Guiana spider-monkey (*Ateles paniscus*), giant anteater (*Myrmecophaga tridactyla*), and white-lipped peccary (*Tayassu pecari).* Several birds recorded from the study area are listed on the IUCN Red List as Threatened: The channel-billed toucan (*Ramphastos vitellinus*), white-throated toucan (*Ramphastos tucanus*), and Guianan streaked antwren (*Myrmotherula surinamensis*), are listed by the IUCN as Vulnerable.

20.3 2013 Surface Water Sampling

In addition to the Biodiversity Baseline Assessment, a surface water survey was conducted in both the wet and dry seasons, which included the streams within and around the Project area. Surface water quality assessment was conducted in May and September 2013, and analyses were conducted in the field and at a laboratory.

Baseline data on water quality prior to mining will be beneficial for monitoring impacts during mining. Once mining commences, Goldsource will implement a Water Quality Monitoring Program and the baseline data will be useful in comparing the water quality for impacts and potential remediation.

Generally, the water quality within the Project area is representative of water quality of similar environments in Guyana. Most of the streams exhibited characteristics of the natural environment. Only streams which have been directly affected by historical mining show elevated levels of contamination in the form of high sediment loads. From the two sampling exercises conducted, water quality shows that streams recover well and improve once mining has ceased in an area. Seasonal variation also seems to influence the water quality in the streams with parameters such as Dissolved Oxygen, Conductivity and Total Dissolved Solids pH, Turbidity, etc., fluctuating between the wet and dry seasons. Variations are mainly a result of the dilution from rainfall water and the flow rate of streams.

20.4 Closure Planning

Under the MSMP, no closure plan is required. Best Management Practices will be conducted on site to minimize surface impact for operations closure. Generally, if the operation does not progress from a medium-scale permit to a large-scale operation (requiring a closure plan) then the operation will be closed with all facilities removed from site and disturbed areas will be graded for erosion control and re-vegetated with local species. Reclamation of the open cut or pit is not required under law, but safeguards will be implemented for protection of life and erosion control.

20.5 Social and Community Impact

Environmental, permitting, legal, title, taxation, socio-economic, marketing, and political or other relevant issues could potentially materially affect the Mineral Resource estimate and the Eagle Mountain Property. However, at the time of this report, the Qualified Person is unaware of any such potential issues affecting the Mineral Resource and Property.

21 Capital and Operating Costs

This section is not applicable to the current report.

22 Economic Analysis

This section is not applicable to the current report.

23 Adjacent Properties

There are no significant mineral properties adjacent to the Eagle Mountain PL other than medium-scale mining leases. The 16 small-scale mining claims located inside the Eagle Mountain PL have been verified by the GGMC as valid.

24 Other Relevant Data and Information

There is no other relevant information known to the Qualified Persons that would make this report more understandable or that if undisclosed would make this report misleading.

25 Interpretation and Conclusions

The Eagle Mountain Gold Project is a 5,050 ha property comprises the 100% owned 4,784 ha Eagle Mountain PL 03/2019, the 254 acre (102.8 ha) MSMP K-60/MP/000/2014, and an option over the Ann SSMC (24.4 acres), excluding small areas held by third-parties under SSMCs. The Project area is underlain by a package of metavolcanic and metasedimentary rocks and granodioritic intrusions, part of the Paleoproterozoic greenstone-TTG belts of the Guiana Shield that share close similarities with the Birimian of West Africa. The greenstone-TTG belts were deformed in the Trans-Amazonian orogeny and are affected by both upright, north-south trending and shallow, west-dipping structures that host gold mineralization. The belt has been intruded by younger intrusions, notably an extensive mafic sill and dykes, part of the Avanavero Large Igneous Province.

Two discrete gold deposits have been identified on the Property – the Eagle Mountain deposit and the Salbora deposit. The Eagle Mountain deposit is modelled as a series of tabular, sub-horizontal to shallowly dipping zones separated by 10–100 m of unmineralized granite, that are formed by a series of east-verging thrust zones, where gold mineralization is associated with silicification, chloritic alteration and pyrite mineralization within these deformation zones. The Salbora deposit comprises a series of subvertical, north-south trending shear and breccia zones developed in a tholeiitic mafic volcanic and altered granitoid adjacent to a monzonite intrusion. These structures are generally a few centimetres to a few metres in thickness, and appear to coalesce into broad, sub-horizontal zones of brecciation with mineralization occurring over tens of metres.

Structural mapping and logging of oriented drill core has been limited and additional structural evaluation integrated with alteration studies will improve understanding of the overall mineralized system and the relationship between Eagle Mountain and Salbora. An improved understanding of mineralization controls is expected to guide successful future resource extension and discovery at the Project. Alteration characterization incorporating focused acquisition of lithogeochemical and hyperspectral mineralogical data may provide important additional vectors to support structural targeting.

The upper portions of both Eagle Mountain and Salbora have been affected by saprolitic weathering typically to depths of up to 30 m. Additional characterization of the vertical laterite profile and lateral variability will support modelling and definition of density and metallurgical domains.

Both the Eagle Mountain and Salbora deposits are structurally controlled, and the similarity of the alteration assemblages suggests that both deposits formed as part of a single mineralizing system. Both are considered to be orogenic-type gold deposits formed in greenstone belts analogous to the prolific Birimian gold belts of West Africa.

The Property has a long history (>50 years) of exploration prior to the acquisition by Goldsource in 2010. Exploration-related work carried out by Goldsource between 2011 and 2020 includes infrastructure improvements, environmental data collection, topographic surveys, line cutting, trench and outcrop sampling, hand auger sampling, ground geophysical surveys and reprocessing of existing geophysical data. In addition to drilling by previous operators, several phases of drilling have been carried out by Goldsource since 2011 including 73 diamond drillholes in 2011, 257 direct push drillholes in 2017–2018, and 216 diamond drillholes between 2018 and 2021 and 209 drillholes completed in 2021. In addition, hand augering has been carried extensively over the property on shallow saprolitic material.

Samples from the 2011 program were submitted to Acme in Georgetown, Guyana, and samples from the 2017–2018 Geoprobe drilling and the 2018–2020 diamond drilling programs were submitted to the Actlabs facility in Georgetown, Guyana. All samples were analysed for gold by fire assay with AAS finish. QAQC procedures and results are considered satisfactory, although in future programs, a higher frequency of blanks should be inserted, more mineralized samples should be submitted for duplicate analysis, and a higher frequency of CRM, duplicate and blank samples should be inserted. The quality of assays and other data inputs is considered suitable to be used for the MRE.

Goldsource has conducted preliminary metallurgical testwork on the Eagle Mountain saprolite hosted (oxide) gold mineralization and on fresh mineralization. A gravity pilot plant was operated intermittently from January 2016 to February 2017. Gold mineralization does not appear to be amenable to the gravity-only recovery method, but both hard rock and saprolite mineralization does appear amenable to gold extraction by cyanidation. A preliminary processing flowsheet was developed based on the 2018 metallurgical testwork. The work supports a standard gravity-grind-leach (carbon-in-pulp) processing facility at a conceptual throughput rate of 4,000–5,000 tpd. In April 2022, 26 samples totalling 850 kilograms from the Eagle Mountain and Salbora deposits as well as from the Toucan and Powis prospects were shipped to SGS Canada for additional metallurgical testwork to establish the design parameters for a Prefeasibility study. Results are not yet available.

The MRE for the Eagle Mountain Project has been prepared by Mr. Leon McGarry, CSA Senior Resource Geologist and a Qualified Person (QP) for the reporting of Mineral Resources for this deposit type, as defined by NI 43-101. Mr. McGarry is responsible for the geological domaining, block modelling, MRE studies presented in this Report.

The MRE uses assay results from diamond drilling and Geoprobe drilling carried out since 2011. A cut-off date of December 31, 2021 applied to data used in the MRE. Mineral Resources were classified as Indicated or Inferred based on the continuity of geological features and mineralization and the level of certainty obtained in the estimate. The deposit is assumed to have the potential for extraction via open pit mining.

Potential opportunities at the Project include the following:

- The alignment of targets along an apparent north-south structure (the Montgomery, Salbora, Toucan, Powis, Ann targets) suggest a large-scale structure that has not been fully understood and tested.
- Ongoing step-out exploration drilling at the Eagle Mountain deposit continues to discover lateral extensions to this deposit, suggesting scope for further resource expansion.
- The similarity of alteration styles in structures with different orientations between the Eagle Mountain deposit and Salbora deposit suggests an extensive system with several mineralized structures.
- Improved structural understanding of the Project and evaluation of structure and alteration across targets should allow for a more robust targeting and deposit model that may yield further discoveries.
- Shallow depths of mineralization, particularly at Zone 1 and Zone 2 of the Eagle Mountain deposit, may allow for low strip ratios during open pit mining.

26 Recommendations

The Eagle Mountain Project hosts a significant gold Mineral Resource that merits further exploration and evaluation as an economic development opportunity. Infill drilling to continue extending and upgrading Mineral Resources from Inferred to Indicated classification.

- Investigate shallow portions of Eagle Mountain deposits deemed amenable to early-stage mining through tightly spaced infill drilling in cross pattern to obtain an understanding of the short-range variability of mineralization and weathering; and to help establish Measured Resource classification criteria.
- Conduct infill drilling to increase data density and support the upgrading of Mineral Resources from Inferred to Indicated throughout the Project. Conduct step-out drilling to expand the currently defined resource.
- Undertake geotechnical drilling and other geotechnical studies to confirm appropriate slope angles for future open pit design work.
- Complete a LiDAR survey or other similar technique for high-resolution definition of the Project topography.
- Acquire a dedicated geological and mining database solution.
- Continue of all permitting processes.
- Complete a detailed structural evaluation using orientated drill core to improve understanding of mineralization geometry and structural controls on distribution and grade, and to support targeting.
- Undertake a targeting study to identify new exploration targets and prioritize step-out drill targets. The targeting study should utilize existing auger and drill data, a high-resolution topography and be underpinned by a structural framework for the Project area.

These items should be carried out concurrently as a single phase of work. The authors estimate that the total cost of the next phase exploration work program is approximately US$1.5 million.

Table 26-1: Recommended exploration work program

Item	Number	Unit cost (US$)	Total cost (US$)
Drilling	12,000 m	$100/m	$1,200,000
LiDAR survey	N/A	N/A	$100,000
Geotechnical investigation	N/A	N/A	$200,000
Total cost			**$1,500,000**

The Property has been subject to a previous Preliminary Economic Assessment in 2014 and warrants an updated evaluation at Prefeasibility Study level. To continue advancing the Project towards this next stage, the author recommends that the next phase work should include the initiation of the following studies:

- Geometallurgical model to guide further composite selection and testwork
- Mining and rock characterization studies
- Infrastructure assessment study
- Progress environmental and social studies
- Tailing facility study.

Table 26-2: Recommended program for technical study (engineering and environmental) to progress the project

Item	Total cost (US$)
Geometallurgical model	$100,000
Mining and site characterization	$200,000
Hydrogeological assessment	$200,000
Tailing facility study	$650,000
Infrastructure assessment	$130,000
Environmental and social studies	$30,000
Total	**1,310,000**

The author estimates that the total cost of the program for technical study is approximately US$1.31 million.

27 References

Abzalov, M., "Quality control of assay data: A review of procedures for measuring and monitoring precision and accuracy." Exploration and Mining Geology, 17, 131-144."

Bassoo, R., and Murphy, J.B. 2018. The 9 Mile Deposit of the Barama-Mazaruni Greenstone Belt of the Guiana Shield: geochemistry, geochronology and regional significance. Brazilian Journal of Geology, 48, 671-683

Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2014. Definition Standards for Mineral Resources & Mineral Reserves. Adopted by CIM Council May 19, 2014.

Casselman, A., and Heesterman, L. 2010, Information Memorandum - Eagle Mountain Project, Guiana Shield, Guyana. Omai Gold Mines Ltd unpublished report, 22 pp.

Deutsch, C.V., and Journel, A.G., 1992 "Geostatistical software library and user's guide." New York 119.147.

Goldfarb, R.J., Groves, D.I., and Gardoll, S. 2001. Orogenic gold and geologic time: A global synthesis Ore Geology Reviews, 18, 1-75.

Groves, D.I., and Santosh, M. 2016. The giant Jiaodong gold province: The key to a unified model for orogenic gold deposits? Geoscience Frontiers, 7, 409-417

Groves, D.I., Santosh, M., Goldfarb, R.J., and Zhang, L. 2018. Structural geometry of orogenic gold deposits: Implications for exploration of world-class and giant deposits. Geoscience Frontiers, 9, 1163-1177

Groves, D.I., Goldfarb, R.J., Gebre-Mariam, M., Hagemann, S.G., and Robert, F. 1998. Orogenic gold deposits-a proposed classification in the context of their crustal distribution and relationship to other gold deposit types. Ore Geology Reviews, 13, 7-27.

Kroonenberg, S.B., de Roever, E.W.F., Fraga, L.M., Reis, N.J. Faraco, T., Lafon, J.-M., Cordani, U., and Wong, T.U. 2016. Paleoproterozoic evolution of the Guiana Shield in Suriname: A revised model. Netherlands Journal of Geosciences, Available on CJO 2016 doi:10.1017/njg.2016.10

Roy, W.D., Trinder, I.D., Lum, A., and Lundt, M. 2014. Preliminary Economic Assessment of the Eagle Mountain Saprolite Gold Project, Guyana. Prepared by A.C.A. Howe International Limited for Goldsource Mines Inc., 277 p.

SGS, 2018. Goldsource Mines Inc. – Project 16506-001 – MI5015-APR18 – Final Report

Stanley, C.R., and Lawie, D., 2007. "Average relative error in geochemical determinations: Clarification, calculations and a plea for consistency." Exploration and Mining Geology, 16, 267–275.

Tedeschi, M., Hagemann, S.G., and Davis, J. 2018. The Karouni Gold Deposit, Guyana, South America: Part I. Stratigraphic Setting and Structural Controls on Mineralization. Economic Geology, 113, 1679–1704.

Tomkins, A.G. 2013. A Biogeochemical Influence on the Secular Distribution of Orogenic Gold. Economic Geology,108, 193.

Voicu, G., Bardoux, M., and Stevenson, R. 2001. Lithostratigraphy, geochronology and gold metallogeny in the northern Guiana Shield, South America: a review; in Ore Geology Reviews 18, 211-236.

28 Certificates

CERTIFICATE OF QUALIFICATION OF CO-AUTHOR – Leon McGarry, B.Sc., P.Geo.

I, Leon McGarry B.Sc., P.Geo. (ON), do hereby certify that:

1) I am contracted as an Associate Senior Resource Geologist by CSA Global Geosciences Canada Ltd. located at 1100 Melville St., Suite 1000, Vancouver, BC V6E 4A6.
2) I graduated with a degree in Bachelor of Science Honours, Earth Science, from Brunel University, London, United Kingdom, in 2005 and have practiced the profession of geoscience since my graduation.
3) I am a Professional Geoscientist (P. Geo.) registered with the Association of Professional Geoscientists of Ontario (APGO, No. 2348).
4) I have practiced my profession for over 15 years and was employed as a consultant with ACA Howe since 2007, with CSA Global between 2016 and 2019 and independently since 2020. I have over ten years of direct experience with the preparation of mineral resource estimations for structurally hosted precious metal deposits in Proterozoic terrains. Additional experience includes over eight years of direct experience in the completion of NI 43-101 technical reports.
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 (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of NI 43-101.
6) I am a co-author of the technical report titled: "Mineral Resource Estimate Update for the Eagle Mountain Gold Project, Potaro-Siparuni Region, Guyana" for Goldsource Mines Inc. dated April 5, 2022 (the "Report"). I am responsible for Sections 1 to 11 and 13 to 26 of the Report.
7) As of the effective date of the technical report (April 5, 2022), to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
8) I am independent of the Issuer, and the Property applying all of the tests in section 1.5 of National Instrument 43-101.
9) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
10) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Effective Date: April 5th, 2022

DATED this 24th day of May 2022

["SIGNED"]
{Leon McGarry}

____
Leon McGarry, B.Sc., P. Geo

CERTIFICATE OF QUALIFICATION OF CO-AUTHOR – Luke Longridge, Ph.D., P.Geo.

I, Luke Longridge, Ph.D., P.Geo (BC), do hereby certify that:

11) I am employed as Vice President Exploration by Canterra Minerals Corporation, 580 - 625 Howe Street, Vancouver, B.C., V6C 2T6, Canada.
12) At the time of the site visit to the Eagle Mountain Project, I was employed as Senior Structural Geologist by CSA Global Geosciences Canada Ltd., 1100 Melville St., Suite 1000, Vancouver, BC V6E 4A6.
13) I was admitted to the Degree of Bachelor of Science with Honours (Geology), from the University of the Witwatersrand, Johannesburg, South Africa in 2007. I was admitted to the Degree of PhD (Geology) from the University of the Witwatersrand in 2012.
14) I am a Professional Geoscientist (P.Geo.) registered with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC, Licence No. 49259).
15) I have worked as a geologist since my graduation 15 years ago, and I have over nine years' experience with orogenic gold mineral projects.
16) I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that because of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of NI 43-101.
17) I have visited the Eagle Mountain Project on 22-25 November 2020.
18) I am a co-author of the technical report titled: "Mineral Resource Estimate Update for the Eagle Mountain Gold Project, Potaro-Siparuni Region, Guyana" for Goldsource Mines Inc. dated April 5, 2022 (the "Report"). I am responsible for Sections 1 to 11 and 13 to 26 of the Report.
19) I am a co-author of the technical report titled: "Eagle Mountain Gold Project, Potaro-Siparuni Region, Guyana NI 43-101 Technical Report" for Goldsource Mines Inc., with an effective date of February 17, 2021, and signed and dated April 7, 2021 (the "Technical Report"). I am responsible for Sections 12 and contributed to Sections 7 and 8.
20) As of the effective date of the technical report (April 5, 2022), to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
21) I am independent of the Issuer applying all the tests in section 1.5 of NI 43-101.
22) I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
23) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Effective Date: April 5th, 2022

DATED this 24th day of May 2022

["SIGNED"]
{Luke Longridge}

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Luke Longridge, Ph.D., P. Geo

29 Abbreviations and Units of Measurement

°	degrees
°C	degrees Celsius
3D	three-dimensional
AAS	atomic absorption spectrometry
ACA Howe	ACA Howe International Limited
Acme	Acme Analytical Laboratories Limited
Actlabs	Activation Laboratories Limited
Ag	silver
Al_2O_3	aluminium oxide
amsl	above mean sea level
Anaconda	Anaconda British Guiana Mines Ltd
ARMS	Automated Rapid Mineral Scan
Au	gold
BC	British Columbia
CAD	Canadian dollar(s)
Cambior	Cambior Inc.
CDF	cumulative distribution function
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
cm	centimetre(s)
CRM	certified reference material
CSA Global	CSA Global Consultants Canada Limited
Cu	copper
CV	coefficient of variation
Eagle Mountain PL	Eagle Mountain Prospecting Licence
EDS	energy dispersive spectrometer(s)
EEP	Exclusive Exploration Permission
EMC	Environmental Management Consultants
EMGC	Eagle Mountain Gold Corp.
EMGI	Eagle Mountain Gold Inc.
ERT	endangered, rare and threatened
Fe	iron
Fe_2O_3	iron(III) oxide (or ferric oxide)
ft	feet (or foot)
g	gram(s)
G&A	general and administration
g/cm^3	grams per cubic centimetre
g/L	grams per litre
g/t	grams per tonne

GCOS	global change of support
GGMC	Guyana Geology and Mines Commission
Goldsource	Goldsource Mines Inc.
GPS	global positioning system
GRG	gravity recoverable gold
GSR	Golden Star Resources Ltd
ha	hectare(s)
HARD	half absolute relative difference
HDPE	high-density polyethylene
HLS	heavy liquid separation
IAMGOLD	IAMGOLD Corporation
IASZ	Issano-Appaparu Shear Zone
IDW	inverse distance weighting
ICP-AES	inductively coupled plasma with optical emission spectroscopy
INAA	instrumental neutron activation analysis
IP	induced polarization
ITS	IAMGOLD Technical Services and Exploration Guyana Group
IUCN	International Union for Conservation of Nature
K_2O	potassium oxide
kg	kilogram(s)
Kilroy	Kilroy Mining Inc.
km, km^2	kilometres, square kilometres
kVA	kilovolt-ampere
kW	kilowatts
kWh/t	kilowatt hours per tonne
LiDAR	light detection and ranging (survey)
LIMS	Laboratory Information Management System
m	metre(s)
Matrix	Matrix Geotechnologies Inc.
mg/L	milligrams per litre
MKSZ	Makapa-Kuribrong Shear Zone
ML	mining licence
mm	millimetres
Mn	manganese
Moz	million ounces
MSMP	Medium-Scale Mining Permit
MSPP	Medium-Scale Prospecting Permit
MRE	Mineral Resource estimate
MSA	MS Analytical Guyana
Mt	million tonnes
NI 43-101	National Instrument 43-101 – Standards for Disclosure for Mineral Projects

NSR	net smelter return
OGML	Omai Gold Mines Limited
OK	ordinary kriging
Orbit	Orbit Garant Drilling Inc.
oz	ounce(s)
PGGS	Permission for Geological and Geophysical Survey(s)
PL	prospecting licence
ppb	parts per billion
ppm	parts per million
PSB	Pakaraima Sedimentary Block
Q-Q	quantile-quantile
QAQC	quality assurance/quality control
QEM-RSM	QEMSCAN Rapid Mineral Scan
RQD	rock quality designation
S	sulphur
SCC	Standards Council of Canada
SEM	scanning electron microscopy
SGS Lakefield	SGS Canada Inc. in Lakefield, Ontario
Si	silicon
SiO_2	silicon dioxide
SMU	selective mining unit
Stronghold	Stronghold Guyana Inc.
t	tonne(s)
t/m^3	tonnes per cubic metre
Tetra Tech	Tetra Tech Inc.
TiO_2	titanium dioxide
tpd	tonnes per day
TSV-V	TSX Venture Exchange
TTG	tonalite-trondhjemite-granodiorite
US$	United States of America dollar(s)
UTM	Universal Transverse Mercator
VLF-EM	very-low frequency electromagnetic
VWAP	volume weighted average price
wt %	weight percent
XRD	x-ray diffraction
Zn	zinc

Appendix A Details of Drilling

Table A1: Significant intervals (>2 m at >1 g/t Au) drilled using Geoprobe drilling at Eagle Mountain; actual core length is considered to represent true thickness

Hole	From (m)	To (m)	Core length (m)	Au (g/t)
EMC17-001	4	8	4	1.1
EMC17-009	0	6.7	6.7	7.5
EMC17-010	0	4.6	4.6	1.45
EMC17-033	5	17	12	1.31
EMC17-048	0	15	15	1.05
EMC17-050	0	2.4	2.4	1.82
EMC17-051	0	19	19	3.04
EMC17-101	0	11	11	1.19
EMC17-110	0	7	7	1.97
EMC17-120	0	11	11	1.98
EMC17-145	8	11.46	3.46	1.2
EMC18-057	0	8	8	2.65
EMC18-059	1	4	3	2.01
EMC18-066	4	6	2	87.5
EMC18-077	0	2	2	1.02
EMC18-096	0	8.4	8.4	3.69
EMC18-098	0	2	2	1.6
EMC18-107	0	6	6	2.32

Table A2: Significant intervals (>2 m at >1 g/t Au) drilled using diamond drill core at the Eagle Mountain Gold Project; actual core length is considered to represent true thickness

Hole	From (m)	To (m)	Core length (m)	Au (g/t)
EMD18-052	0	44.7	44.7	2.82
EMD18-053	0	69	69	6.52
EMD19-054	0	39	39	2.78
EMD19-055	0	49.5	49.5	2.9
EMD19-056	0	55.5	55.5	1.19
EMD19-057	0	49.5	49.5	2.36
EMD19-058	0	49.5	49.5	2.95
EMD19-059	24	36	12	1.21
EMD19-061	57	60	3	1.03
EMD19-072	16.5	19.5	3	2.36
EMD19-083	145.5	148.5	3	1.8
EMD19-084	22.5	28.5	6	1.27
EMD19-088	18	27	9	1.07
	55.5	60	4.5	2.86
EMD19-096	81	91.5	10.5	9.94
EMD19-098	43.5	48	4.5	1.33
EME19-003	0	2.5	2.5	1.3

Hole	From (m)	To (m)	Core length (m)	Au (g/t)
EME19-012	39	45	6	1.06
	57	61.5	4.5	2.2
EME19-013	48	87	39	1.75
EME19-015	16	96	80	2.07
	124.5	127.5	3	1.13
	142.5	154.5	12	4.93
EME19-016	17.5	75	57.5	2.55
EME19-019	137	213.5	76.5	1.18
EME19-023	121.5	148.5	27	1.72
	121.5	148.5	27	1.72
	225	231	6	1.32
	225	231	6	1.32
EME19-024	22	25	3	1.1
	22	25	3	1.1
	112.5	115.5	3	3.34
	112.5	115.5	3	3.34
EME19-025	207	216	9	1.73
	207	216	9	1.73
EMD20-100	25.5	28.5	3	2.46
EMD20-102	21	24	3	1.17
	79.5	87	7.5	9.19
EMD20-103	73.5	84	10.5	1.16
EMD20-105	46.5	66	19.5	3.76
	46.5	82.5	36	2.1
	79.5	82.5	3	1.76
EMD20-107	103.5	108	4.5	1.53
EMD20-110	67.5	73.5	6	3.81
EMD20-111	7.5	16.5	9	1.48
	48	51	3	1.59
	78	99	21	1.84
EMD20-113	39	42	3	1.24
EMD20-114	13.5	18	4.5	3.2
	96	99	3	1.01
	132	135.5	3.5	1.51
EMD20-115	84	90	6	4.1
EMD20-117	81	85.5	4.5	1.18
EMD20-118	3	7.5	4.5	25.32
EMD20-119	18	39	21	1
EMD20-120	24	43.5	19.5	1.26
EMD20-121	12	25.5	13.5	1.01
EMD20-129	15	39	24	1.03
EMD20-130	0	7.5	7.5	1.34
EMD20-131	0	9	9	2.03
EMD20-132	33	52.5	19.5	1.59

Hole	From (m)	To (m)	Core length (m)	Au (g/t)
EMD20-133	18	55	37	1.11
EMD20-139	42	45	3	9.88
EMD20-140	0	4.5	4.5	1.7
EMD20-141	55.5	66	10.5	1.45
EMD20-149	9	46.5	37.5	1.02
EMD20-150	0	21	21	1.44
	76.5	79.5	3	5.32
EMD20-151	0	19.5	19.5	1.26
EME20-033	88.5	93	4.5	3.18
	123	126	3	1.78
EME20-034	268.5	271.5	3	1.55
EME20-041	114	127.5	13.5	1.13
	142.5	169.5	27	1.01
EME20-043	108	111	3	3.69
EME20-054	84	94.5	10.5	1.49
	115.5	118.5	3	1.46
EME20-057	22	57	35	1.1
EME20-058	0	4	4	1.42
	13	41.5	28.5	2.03
	137	156	19	1.44
EME20-060	99	123	24	1.6
EME20-064	31	34	3	1.08
	64.5	67.5	3	1.34
EME20-066	150	153	3	8.71
EME20-067	189	207	18	1.31
	214.5	217.5	3	1.3
EME20-070	193.5	199.5	6	3.36
EME20-071	50.5	56.5	6	3.06
	139.5	144	4.5	1.98
EME20-072	55	59.5	4.5	1.56
	198	217.5	19.5	1.38
EME20-073	97.5	100.5	3	1.39
EME20-074	48	87	39	1.55
EME20-077	10	28.5	18.5	1.55
	48	55.5	7.5	1.08
EME20-078	10	46.5	36.5	1.83
EME20-079	0	11.5	11.5	3.37
EME20-081	63	66	3	5.4
EMM20-001	10.5	64.5	54	1.72
EMM20-002	19.5	27	7.5	2.2
EMM20-003	4.5	7.5	3	1.52
	54	60	6	1.15

Table A3: Significant intervals intersected since the previous MRE (>2 m at >1 g/t Au) drilled using diamond drill core at the Eagle Mountain Gold Project; actual core length is considered to represent true thickness

Hole	From (m)	To (m)	Core length (m)	Au (g/t)
EME20-077	10	28.5	18.5	1.55
	48	55.5	7.5	1.08
EME20-078	10	46.5	36.5	1.83
EME20-079	0	11.5	11.5	3.37
	4	11.5	7.5	5.21
EMD20-149	9	46.5	37.5	1.02
EMD20-150	0	21	21	1.44
EMD20-151	0	19.5	19.5	1.26
EMM20-001	10.5	64.5	54	1.72
	10.5	22.5	12	6.91
EMM20-002	19.5	27	7.5	2.2
EMM20-003	54	60	6	1.15
EMX21-002	114	124.5	10.5	1.04
	199.5	204	4.5	1.29
EMM21-007	0	42	42	20.38
	21	42	21	39.00
EMM21-008	1.5	31.5	30	3.41
EMM21-009	0	51	51	2.02
EMM21-010	25.5	33	7.5	2.61
EMM21-011	39	52	13	1.15
	39	43.5	4.5	2.92
EMM21-013	6	24	18	1.75
EMM21-014	6	21	15	1.17
EMM21-015	36	43.5	7.5	1.03
EMM21-016	51	66	15	1.51
EMM21-017	22.5	37.5	15	1.17
	39	49.5	10.5	1.35
	22.5	49.5	27	1.19
EMM21-022	16.5	24	7.5	1.91
	16.5	21	4.5	3.00
EMM21-031	15	27	12	1.83
EMM21-033	16.5	21	4.5	2.50
EMM21-037	139.5	144	4.5	2.35
EMM21-041	57	63	6	15.73
EMM21-44A	69	87	18	1.46
EMM21-044/44A	49.5	87	37.5	1.14
EMM21-048	94.5	99	4.5	1.63
EMM21-050	117	121.5	4.5	1.16
EME21-090	0	5.5	5.5	1.16
EME21-092	114	120	6.0	7.68
EME21-093	19.5	24	4.5	1.56
EME21-094	85.5	96	10.5	2.58

Hole	From (m)	To (m)	Core length (m)	Au (g/t)
EME21-095	51	72	21.0	1.86
	100.5	106.5	6.0	18.14
EME21-104	87	93	6.0	1.09
	156	165	9.0	1.06
EME21-105	0	24	24.0	1.28
EME21-106	0	5.5	5.5	1.10
	24	33	9.0	1.23
EME21-107	0	10.5	10.5	1.02
EME21-108	0	21	21.0	2.61
EME21-108	5.5	13.5	8.0	4.69
EME21-109	1	19.5	18.5	2.60
	102	108	6.0	1.21
EME21-110	0	5.5	5.5	1.20
	26	42	16.0	1.96
EME21-111	19	29.5	10.5	2.71
EME21-112	14.5	23.5	9.0	1.35
EME21-113	49.5	57	7.5	2.23
EME21-114	14.5	20.5	6.0	1.82
	135	139.5	4.5	2.55
	154.5	163.5	9.0	1.18
EME21-115	7	16	9.0	1.66
EME21-116	8.5	13	4.5	4.22
EME21-124	16	23.5	7.5	1.05
EME21-125	14.5	20.5	6.0	3.75
EME21-127	0	8.5	8.5	1.10
	85.5	90	4.5	1.86
EME21-128	105	112.5	7.5	1.41
EME21-129	51	78	27.0	3.87
EME21-130	135	139.5	4.5	1.04
EME21-138	108	112.5	4.5	1.02
	243	253.5	10.5	1.51
EME21-140	126	130.5	4.5	1.26
EME21-141	81	91.5	10.5	1.12
EME21-142	66	70.5	4.5	1.10
EME21-143	115.5	121.5	6.0	1.68
EME21-144	43.5	48	4.5	2.22
EME21-147	25.5	33	7.5	1.32
	63	69	6.0	1.54
EME21-148	73.5	78	4.5	3.24
	87	94.5	7.5	1.32
EME21-153	37	41.5	4.5	1.28
	112.5	117	4.5	7.70
EME21-154	25.5	31.5	6.0	2.26

Hole	From (m)	To (m)	Core length (m)	Au (g/t)
EME21-155	0	7	7.0	2.66
	72	81	9.0	1.30
EMD21-167	19.5	27	7.5	1.06
EMD21-175	9	16.5	7.5	1.70
EMD21-180	28.5	37.7	9.2	1.06
EMD21-186	57	67.5	10.5	1.18
EMD21-189	9	13.5	4.5	1.72
EMD21-193	6	22.5	16.5	21.80
	16.5	21	4.5	78.16
	93	114	21	1.32
EMD21-194	58.5	81	22.5	1.89
	69	79.5	10.5	2.77
EMD21-195	75	79.5	4.5	2.77
EMD21-196	25.5	46.5	21	1.13
	88.5	93	4.5	2.55
EMD21-197	12	16.5	4.5	26.77
	24	58.5	34.5	3.62
	49.5	58.5	9	11.64
	85.5	91.5	6	1.15

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