SUMMARY OF TABLE 1 - 2012 JORC: Palomino

A Material Information Summary pursuant to ASX Listing Rules 5.8 and 5.9 is provided below for the Haile Gold Mine (HGM) Underground Palomino resource. The Assessment and Reporting Criteria in accordance with JORC Code 2012 is presented in Appendix 1.

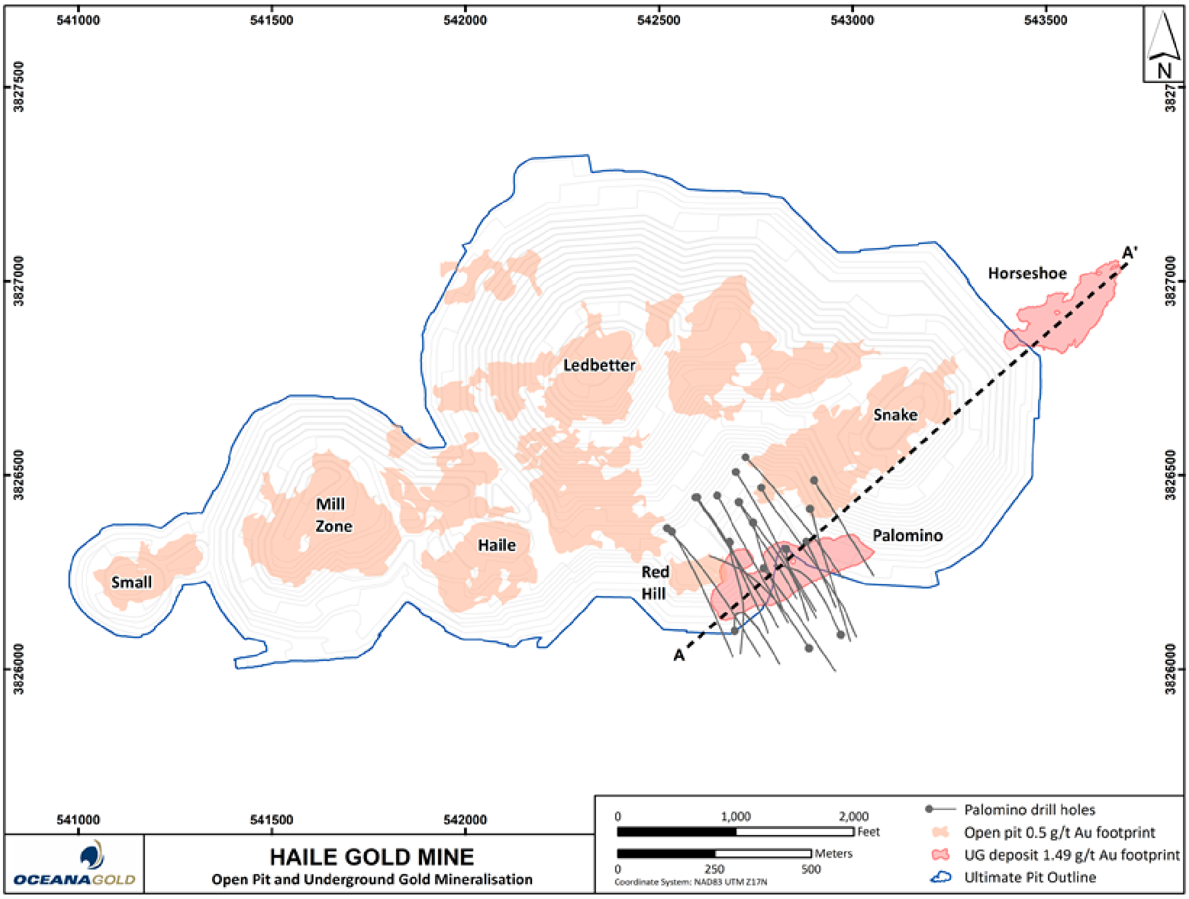
1.0 Palomino Mineral Resource

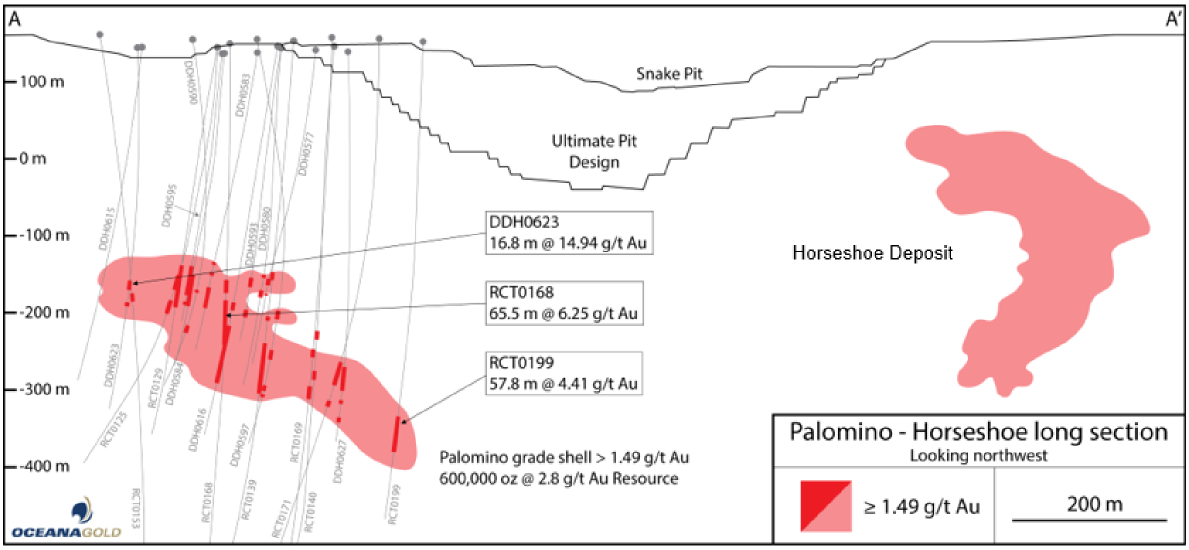
The Palomino deposit (Palomino) is located in the Haile mining district 6 km north of Kershaw, South Carolina, USA. Palomino is located about 300 meters below the Red Hill pit and1 km southwest of the Horseshoe underground reserve. Palomino is a medium-grade, stratiform intrusion-related gold deposit hosted within Neoproterozoic metasediments and metavolcanics of the Persimmon Fork Formation. The Haile area has been mined intermittently since its discovery in 1827. Open pit mining was active from 1985 to 1993 and resumed under Romarco Minerals and then OceanaGold in 2015. The first ore was processed in OceanaGold's new plant in January 2017. The Haile operation holds the necessary permits and agreements required to operate the Haile open pits, process plant and tails storage facility. An SEIS decision for expanded pits and the Horseshoe underground mine is expected by June 2020. All land around the Haile gold mine is 100% owned by OceanaGold with no royalties.

1.1 Geology and Geological Interpretation

Palomino is a medium-grade, stratiform intrusion-related gold deposit hosted within Neoproterozoic metasediments and metavolcanics of the Persimmon Fork Formation. Deposit dimensions are approximately 300 meters long by 100 meters wide by 10-50 meters thick. Depth of sulfide mineralisation ranges from 300 to 500 meters. Base of oxidation is 30-60 meters.

Gold mineralisation occurs as ENE-striking, 30-400NNW-dipping tabular zones hosted in silicified and pyritic siltstone and minor rhyodacite intrusions along a steeply SE-dipping contact with barren dacite. Host rocks are strongly foliated and dip 30-40oNNW. Foliation is sub-parallel to bedding. Rhyodacite intrusions are both steeply dipping along the regional ENE-striking siltstone-dacite contact and are emplaced along NNW-dipping siltstone beds. The northeast margin of Palomino is bound by a barren, sub-vertical NNW-striking diabase dike. The southeast margin of Palomino is defined by the 70-750 SSE-dipping siltstone-dacite contact. Strong hydrothermal silicification and fine-grained disseminated pyrite >1% correlate spatially with gold. Pyrite is the dominant sulphide mineral. Local pyrrhotite up to 1% occurs along the edges of mineralized zones. Proximal alteration zones of sericite-pyrite grade outward into chlorite-carbonate-pyrite.





1.2 Sampling and Sub-Sampling

Diamond core drilling has been the sole drilling method for gold assays at Haile since 2012. Diamond drilling utilises wireline methods with HQ and NQ size core 63.5 mm and 48 mm core. Core is transferred from the core barrels to a 3m long metal trough to mark orientation lines along the length of the core if the entire 3m length can be confidently fit together across natural breaks (joints, faults, veins, etc.). The core orientation line is marked with a red crayon by the driller assistant at the drill site before boxing the core. Mechanically induced breaks from hammering are marked with black crayon so that 0.6 m lengths of core can be fit into the core boxes. After mark-up, the core is manually placed in plastic core boxes at the drill rig by the driller assistant. The mechanically induced fractures are not counted during geotechnical logging. Drill hole ID and depth ranges are marked on the outside of the core boxes and interval marker blocks are labelled and placed in the core box with depth, drilled length and recovered length. Whole core is transported to the core shed for logging and cutting by OceanaGold Corporation (OGC) personnel.

Half core samples are cut by rotary diamond saw or, if too soft, are cut by knife. Half core is placed in a bar-coded, labelled sample bag and the other half is returned to the core box. Sample preparation for both the diamond core and RC samples is considered appropriate. Sample lengths of 1 to 3 metre lengths produce bagged sample weights of 2-5 kg. These are considered adequate for the Haile deposits, which are primarily of the finely disseminated sediment-hosted style. Although coarse gold has been observed in drill core, it is rare and is not representative of the bulk mineralisation that will be mined.

1.3 Drilling Techniques

Core drilling is by wireline methods and utilizes HQ and NQ size core 63.5 mm and 48 mm core. All drilling is conducted by OGC drillers using OGC-owned equipment. Core recoveries are measured at the core shed by the geotechnicians. Core recoveries typically range from 97 to 100%. There is no observed relationship between core recovery and grade. Core recoveries are typically less than 50% in the uppermost 5-15 m of each hole due to soft, crumbly saprolite in the surficial weathering zone.

1.4 Sample Analysis methods

At AHK the samples were dried at 65º C, crushed to 80% passing 2mm. From this a 250gm sample was obtained using a riffle splitter and pulverised to 90% passing 150 mesh. The sample was split to 125gm with one sample sent to AHK Lab in Fairbanks Alaska for fire assay of a 30gm aliquot with Atomic Absorption finish. The second sample retained at lab. Coarse rejects were returned to Haile.

At KML the samples were dried at 93º C, crushed to 80% passing 2mm. From this a 450gm sample was obtained using a riffle splitter and pulverised to 85% passing 140 mesh. The sample was split to 225gm with one sample sent for fire assay of a 30gm aliquot with Atomic Absorption finish. Coarse rejects and pulps returned to Haile.

Blanks and standards were inserted at Haile, and check assays are submitted to a second lab on a regular basis.

The AHK laboratory is an independent laboratory. The KML laboratory is based at Haile and staffed by OceanaGold personnel.

1.5 Estimation Methodology

Grade estimation is based on ordinary kriging into blocks of 5x5x5m. The model is rotated anti-clockwise 30° to align the blocks with the dominant foliation fabric and strike of mineralisation.

Estimation used a multiple pass strategy with increasing search distances to progressively populate blocks. The first pass a minimum four and maximum twelve composites were required, with additional constraints on minimum number of drill holes (two) and octants (two) required. The second pass used a minimum two and maximum twelve samples. Variograms sills and ranges are typical of gold, with a moderate nugget and short ranges.

The resource model was validated by visual inspection, statistical analysis of estimation metrics, and global and swath plot comparison of input to output grades.

1.6 Resource Classification

The Palomino resource has been classified as Inferred as confidence in the geological interpretation of the mineralisation boundaries and orientation is not sufficient for a higher classification. The average drill density for the mineralisation at Palomino is 40m x 70m

1.7 Cut-off Grade

The underground Cut-off grade of 1.49 g/t Au for the Palomino resources is based on a gold price of US$1,500/oz.

Resources

The Palomino Resource is located on a mineralised trend one kilometre southwest of the Horseshoe reserve where underground mining is scheduled to commence in 2021. A total of 21 mineralised diamond core holes have been drilled at the Palomino deposit and have been previously reported (see OceanaGold homepage). This drilling provides coverage at approximately 40m to 70m spacings and defines a mineralised package approximately 300 metres long with a 50-100 metre vertical extent by 100-150 metres wide. Lozenge-shaped mineralised zones that strike east-northeast, dip moderately northwest and plunge gently northeast are identified within this package. The style of mineralisation is similar to the Horseshoe deposit with thick zones of fine-grain gold hosted by pyritic and silicified siltstone and intrusive rocks.

A resource estimate based upon an updated geological interpretation was completed in Q4 2019. High level mine designs and economic and sensitivity analyses were subsequently completed. This work has provided the basis for reporting an underground Palomino Inferred Resource of 6.5 Mt @ 2.8 g/t Au for 0.6 Moz at a 1.49 g/t Au cut-off.

Class	Cut-off Au g/t	Tonnes (Mt)	Au (g/t)	Au (Moz)
Measured				NA
Indicated				NA
Measured & Indicated				**NA**
Inferred	1.49	6.5	2.8	0.6

Reserves

There are currently no Ore Reserves relating to the Palomino deposit.

Competent Persons

Information relating to the Palomino Underground Mineral Resources in this document was prepared by or under the supervision of T. O'Sullivan. Mr O'Sullivan is a member of the Australian Institute of Geoscientists and is a full-time employee of OceanaGold Management Pty Limited. Mr O'Sullivan has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a "competent person" as defined in the JORC Code.

JORC Code, 2012 Edition – Table 1, Haile Gold Mine Project

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	Reverse Circulation (RC) and Diamond Drilling (DDH) samples are used for the resource estimates at Haile. Since OceanaGold's ownership, resource sampling has been exclusively by diamond core drilling. Historical drilling prior to 2007 accounts for approximately 30% of the data. The sample procedures applied to the historical drilling (i.e. drilling prior to Romarco Minerals Inc.) at Haile were not well documented. Having said this, over three years of mining has tested the veracity of the resource estimates which are based on this data. No material flaws have been identified. There were however six RC drill holes, located in the Snake open pit, that were found to be at odds with adjacent grade control sample grades as mining progressed. These holes were drilled prior to Romarco Minerals ownership, had shallow inclinations and were collared adjacent to historical open pits. As a precautionary measure these RC drill holes, and all other RC drill holes meeting these criteria, were removed from the resource estimation database prior to EOY 2018 and remain excluded. Romarco has been drilling at the Haile project since 2007. The techniques described in this section reflect the procedures applied by Romarco and OceanaGold. <u>Reverse Circulation Drilling</u> The reverse circulation drilling at Haile typically uses 16 cm drill bits. Sample intervals were predominately 1.5m. The RC rigs were equipped with a cyclone and a rotary splitter. Most RC drilling at Haile was in wet conditions. Water injection was typically 15 to 19 ltr/min above the water table and decreases to 4 ltr/min when groundwater is encountered. Wet samples were bagged, drained and allowed to settle (aided by flocculent) before being transported to a storage facility for initial drying. Sample sizes were generally between 9 and 14 kg dry mass, representing a 11% to 17% split of the total sample mass. Lithological chip samples are retained in chip trays, labelled with the drill hole number and depth intervals in permanent marker. RC drilling has not been conducted at Haile since 2011.

Criteria	JORC Code Explanation	Commentary
		Diamond Drilling Diamond core drilling is by wireline methods and generally utilizes HQ and NQ size core 6.35cm and 4.8cm core. Core is transferred from the core barrels to plastic core boxes at the drill rig by the driller. Core orientation is not utilized other than for specific geotechnical programs. Core is broken as required to completely fill the boxes. Drill intervals are marked on the core boxes and interval marker blocks are labelled and placed in the core box. Whole core is transported to the sample preparation area by company personnel.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Drilling at the Haile property commenced in the 1970's and has continued intermittently to the present by several different companies. Drilling used for resource estimation purposes are either reverse circulation or diamond coring. Over 30% of the sampled intervals are by diamond core. Diamond tailing, where used, typically commenced at around 120m down-hole. The reverse circulation drilling at Haile typically uses 16 cm drill bits. Diamond core is HQ and NQ. Core orientation is not routinely utilized other than for specific geotechnical programs.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	Core recoveries were measured at the core shed by the logging geologist. Core recoveries average 97% and are rarely less than 90%. There is no observed relationship between core recovery and grade. RC drilling was conducted prior to OceanaGold's ownership. No primary RC sample weights were recorded so RC recoveries cannot be directly calculated. However, 34,000 rotary split RC sub-samples were weighed by Romarco Minerals. Splitter ratio settings ranged from 8% to 17% and on the basis of back-calculating the range of likely total sample weights, RC recoveries are thought to have been largely acceptable. As a precautionary measure, where RC recoveries are estimated to be low on the basis of sub-sample mass, and sampled at depth (>200m), factors have been applied to gold grades. These will remain until such time as they are replaced by diamond samples. Sensitivity analysis shows the impact on the resource estimates to be low (a few per cent globally).
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	Core logging is completed on site by staff geologists at Haile Gold Mine. Geotechnical and geologic logging is completed on the whole core. Rock Quality Data (RQD) and core recovery are recorded as part of the geotechnical suite of data. All core intervals are photographed. Limited intervals have structural orientation measurements for bedding, foliation and veins. RC chips are logged by the staff geologists from samples that are sieved from the coarse rejects. Representative chip samples are stored in plastic chip trays on 1.5m intervals. All logging, which is qualitative, is recorded in Excel files with a separate file for each drill hole. The logged information is stored on site and backed up periodically. All drilled intervals are logged. Logging fields include rock type, color, grain size, structure, alteration, redox, mineralogy and comments.

Criteria	JORC Code Explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**On Site Sample Preparation** RC Samples RC sampling was carried prior to OceanaGold's ownership. OceanaGold does not use RC sampling for resource drilling at Haile. The bagged reverse circulation samples were transferred to the Haile sample handling facility where they were prepared for shipment to a lab. RC samples were prepared at either the Kershaw Mineral Lab (KML) in Kershaw, SC or the AHK Geochem (AHK) preparation facility in Spartanburg, SC. Samples followed one of two paths. Samples were weighed and poured through a Jones riffle splitter to reduce the size to roughly 2.7 kg for shipment to the sample lab. Alternatively, samples were staged at the Haile site and placed in containers for direct shipment to KML or AHK. Core Samples At the core logging facility, the core is cleaned, measured and photographed. Geotechnical and geologic logging is completed on the whole core. Rock Quality Data (RQD) and core recovery are recorded as part of the geotechnical suite of data for all core holes. Holes drilled since September 2016 also record hardness, joint condition rating and fracture frequency The logging geologist assigns the sample intervals and sample numbers prior to core sawing. Sample lengths are typically 1.5m and are defined based on geology in potentially mineralized areas. Sample lengths range in size from 0.3 to 3m. Core is either sawed or split with a putty knife if soft. Half core is collected in a sample bag with unique sample ID and the other half is retained in the core box for future logging or test work. Split core is delivered to the sample preparation facilities. Core is prepared at the either the Kershaw Mineral Lab (KML) facility in Kershaw, South Carolina or at the AHK Geochem preparation facility in Spartanburg, South Carolina. **Off Site Sample Preparation** The AHK sample preparation and assay facility is independent of HGM. The KML sample preparation and assay facility was owned and operated by the Haile Gold Mine, but as of 2019 operated by SGS.

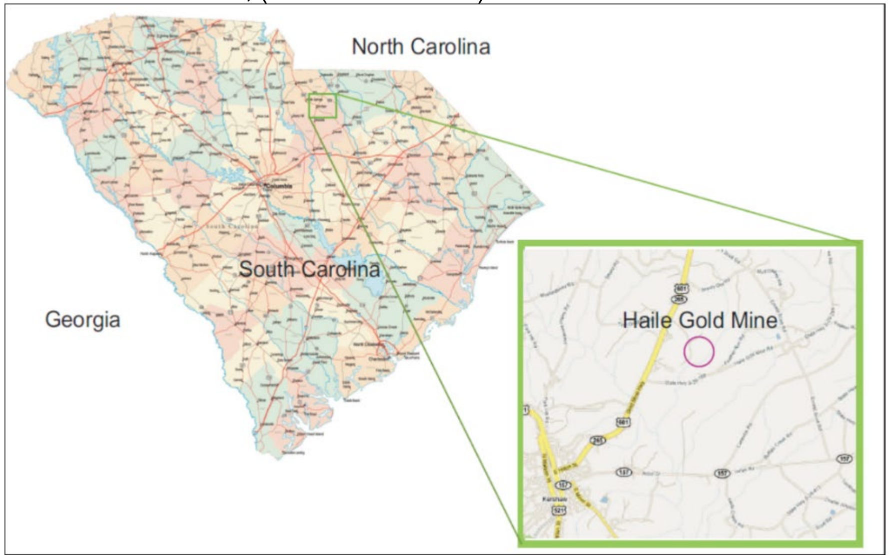
Criteria	JORC Code Explanation	Commentary
		AHK Geochem (AHK) Once the samples arrive at AHK in Spartanburg, the following procedures were applied: Sample Preparation: Dry samples at 65.5 degrees C, Jaw crush samples to 80% passing 2 mm, Split sample with a riffle splitter to prepare the sample for pulverizing, Pulverize a 250 gm sample to 90% passing 150 mesh (0.106 mm), Ship about 125 gm of sample pulp for assay, Typically 30g aliquot for fire assay Kershaw Mineral Laboratory (KML) Once the samples arrived at KML, the following procedures are applied: Sample Preparation: Dry samples at 93 degrees C, Jaw crush samples to 70% passing 10 mesh (2 mm), Split sample with a riffle splitter to prepare the sample for pulverizing, Pulverize a 450 gm sample (+/- 50 gm) to 85% passing 140 mesh (0.106 mm), Approximately 225 gm of pulp sample is sent for fire assay, Coarse rejects and reserve pulps are returned to Haile for storage. Typically 30g aliquot for fire assay Coarse gold is present but rare at Haile. The sampling methodology is believed to be appropriate for the style of mineralisation.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	The resource estimates at Haile are based on fire assay of a 30 gm aliquot for gold with an Atomic Absorption finish. Blanks and standards are inserted by Haile at a frequency of 1 in 20. Field split duplicates are not routinely submitted Check assays are submitted to an independent laboratory at an approximate frequency of 1 in 50. These quality control procedures indicate acceptable levels of accuracy and precision.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	During Romarco Minerals and OceanaGold's involvement numerous checks have been completed, including: • Database checks in 2011 by IMC for Romarco Minerals • Database translation from EXCEL to AcQuire on transition to OceanaGold's ownership

Criteria	JORC Code Explanation	Commentary
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• A large number of spot checks of paper records versus database entry in 2018 / 2019 A -5% adjustment has been made to all pre-Romarco RC drill hole sample grades as a precautionary measure. Due to their clustered distribution and that there are a significant proportion of Romarco RC drill hole samples and diamond core samples, this has had a very minor impact (approximately 2% globally). Over time, as mining progresses, this adjustment may be discontinued. As a precautionary measure, where RC recoveries are low (based upon back-calculated rotary splitter weights) and sampled at depth (>200m), factors have been applied to gold grades until such time as they are replaced by diamond drill hole samples. Sensitivity analysis shows the impact to the global resource estimates to be low (approximately 2%).
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Drill hole collars are currently surveyed with differential GPS with sub-centimetre accuracy. The historic Amax and early Romarco holes were surveyed by a South Carolina licensed surveyor using conventional ground methods. Frequent check surveys have been completed during the project. The drill hole locations and the project coordinate system are South Caroline State Plane Coordinates NAD 83 UTM Zone 17N. Down-hole survey control for RC holes prior to Romarco Minerals was generally poor. However, these holes were typically shallow, so the cumulative down hole deviation is unlikely to be large. Given the typical 40m x 40m drill hole spacing, this is not considered to be a material issue for the open pit resource estimates. The underground resources are based on diamond core drilling with good survey control. Topographic control has been established to a high level of precision. Resource estimation and mine planning relied on contour maps with 0.6m contour intervals. During 2018 and 2019 there was focus on refining historical (pre-Romarco Minerals) open pit mining and underground void depletion volumes. These have been incorporated into the resource estimates. Further refinements are unlikely to be material.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been*	The drill hole spacing for the Haile open, whilst approximating 40m x 40m, is variable due to the limited rig access that was available prior to the commencement of mining. The wetland environment necessitated collaring a number of variously angled holes off single pads resulting in a complex fanned drill hole distribution. The estimation approach adopted has mitigated the impacts of irregular drill hole spacing. Whilst the enveloping geometry of the mineralisation is not untowardly complex in relation to the drill hole spacing, high grade internal pods tend to exhibit considerable local variability on a 5-10m scale. This has resulted is some short-term reconciliation disparities (positive and negative), but the impact

Criteria	JORC Code Explanation	Commentary
	applied.	diminishes over longer periods. Large panel recoverable resource estimation via MIK is well suited to this style of mineralisation, and despite variable spacing, has provided acceptable estimates for periods of 6-12 months. The resource classification fairly reflects the underlying drill hole spacing and mineralisation characteristics. For open pit resources: Measured: 27m x 27m x 10m, Indicated: 41m x 41m x 15m, Inferred: 41m x 41m x 15m with relaxed sample number thresholds. The drilling coverage for the underground estimates is reflected in their resource classification. For Horseshoe underground: Indicated: 25m x 25m, Inferred: 35m x 35m For Palomino underground: Inferred: 40m x 70m 3m downhole compositing is used.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	Haile exhibits complex local controls on mineralisation although in general the mineralised envelope dips 30-50 degrees to the north-northwest. Drilling orientation ranges from vertical to SE-bearing angles to intercept mineralisation. Several holes have been drilled to the northwest to confirm orientation of mineralisation, and in some areas where metasediments dip to the southeast. The orientation of the drilling is unbiased. However, given the structural complexity and variable drill hole orientation, it is anticipated that there will local estimation aberrations which will manifest with positive and negative outcomes. Such aberrations are unlikely to be material for medium to long term scheduling.
Sample security	• *The measures taken to ensure sample security.*	All drill hole samples are transported from the drill rigs to the Haile Gold Mine sample preparation facility by OGE personnel. Access to the property is limited and controlled. When samples are shipped, to the lab, the sample manifests are checked by the lab and the receipt of all samples are confirmed. During off-shift hours, a Deputy Sherriff is on site providing security for the site and sample storage facility.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	During Romarco Minerals and OceanaGold's involvement numerous checks have been completed, including: • Database checks in 2011 by IMC for Romarco Minerals • Database translation from EXCEL to AcQuire on transition to OceanaGold's ownership • A large number of spot checks of paper records versus database entries in 2018 / 2019

Section 2 Reporting of Exploration Results

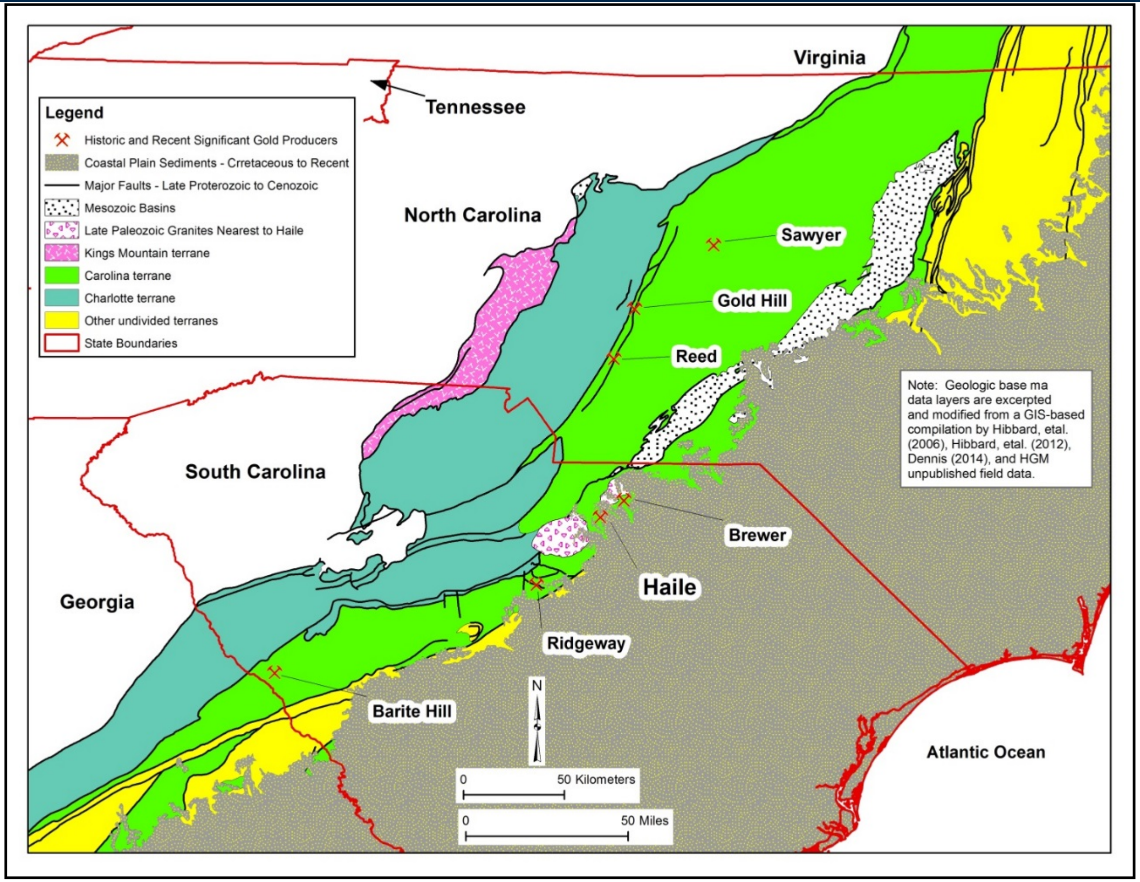
(Criteria listed in the preceding section also apply to this section.)

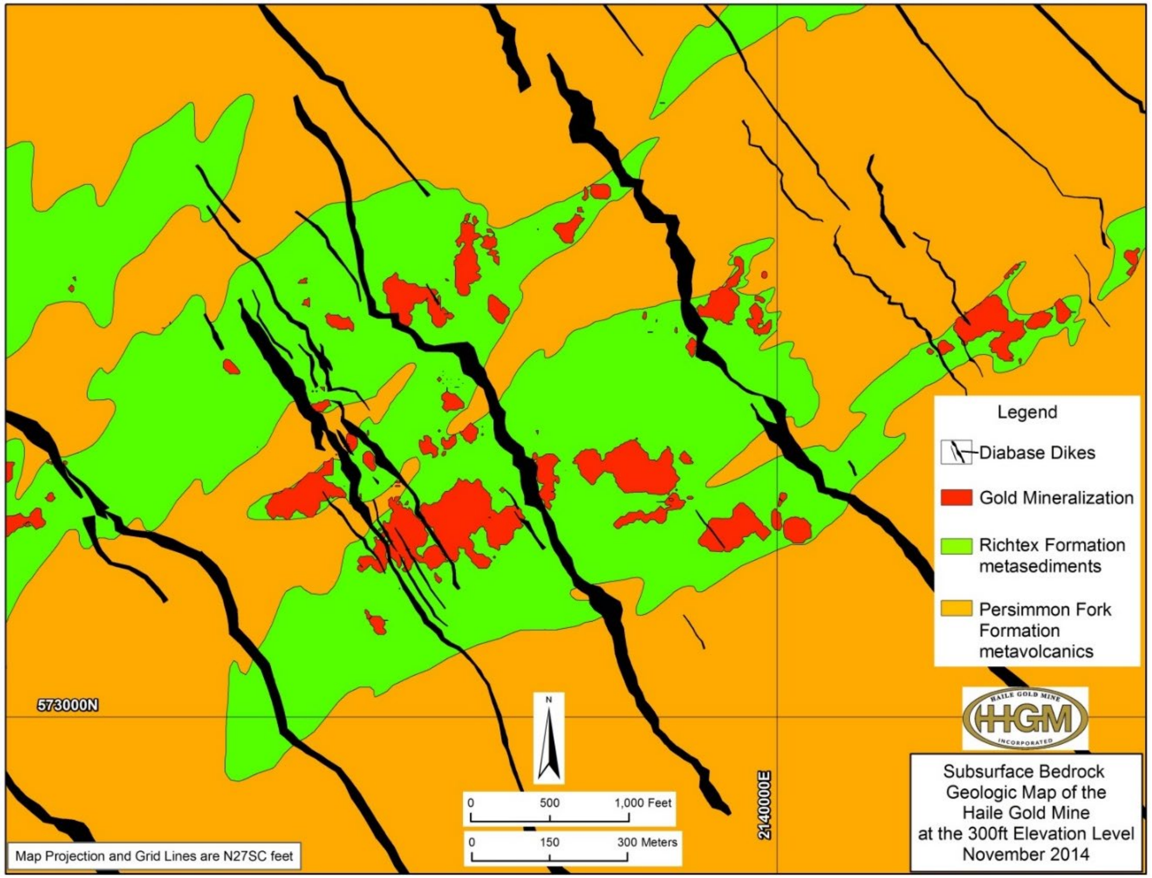
Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	**Property Location** The Haile property site is located 4.8km (3mi) northeast of the town of Kershaw in southern Lancaster County, South Carolina, Lancaster County lies in the north-central part of the state. The Haile Gold Mine is approximately 27.4 km (17 mi) southeast of the city of Lancaster, the county seat, which is approximately 48.3 km (30 mi) south of Charlotte, North Carolina. The approximate geographic centre of the property is at 34° 34' 46" N latitude and 80° 32' 37" W longitude. The mineralized zones at Haile lie within an area extending from South Carolina state plane coordinates 2136300 E to 2142300 E, and from 573700 N to 576300 N, (1927 North Datum).  (Source: State-Maps.org and Google Maps, 2014) Figure 1: General Location Map of the Haile Gold Mine **Ownership** Following a Plan of Arrangement completed on October 1st, 2015 between Romarco Minerals Inc and OceanaGold Corporation, Haile Gold Mine Inc. (HGM) is a wholly owned subsidiary of OceanaGold Corporation. References in this document to OceanaGold refer to the parent company together with its subsidiaries, including HGM and Romarco Minerals Inc. HGM provided an inventory of property that is owned both within the project boundary and as buffer land outside the project boundary. After transferring approximately 4,388 acres of land into

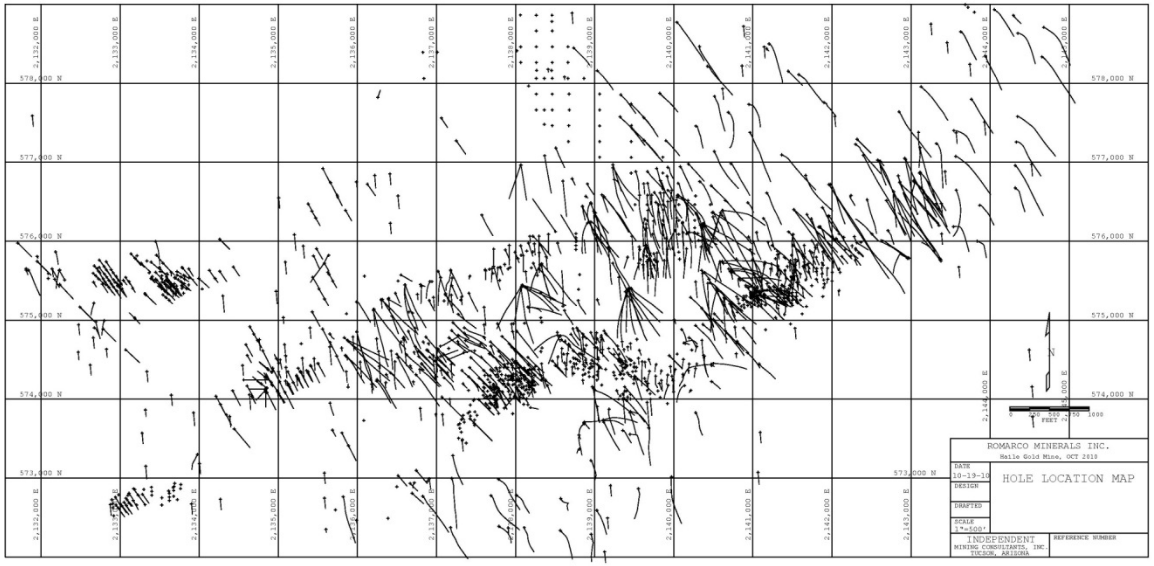
Criteria	JORC Code Explanation	Commentary
		mitigation and conservancy projects, HGM owns approximately 5,719 acres of land in total. HGM owns additional land that is not associated with the project.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Historic exploration was completed prior to acquisition of the Haile Gold Mine by Romarco. That work has been superseded by the drilling completed at Haile.
Geology	• *Deposit type, geological setting and style of mineralisation*.	Hundreds of gold deposits are located along a northeasterly trend that extends from eastern Georgia to Virginia. Four of these deposits have been mined since the 1980s and are all inactive except for OceanaGold's Haile mine. Many of these deposits are located at or near the contact between felsic volcanics and sedimentary dominated sequences. Various metal associations and mineralization styles indicate that this is a complex metallogenic province. Brewer has many features of an acid-sulfate mineralization system such as the presence of aluminosilicates, topaz, and enargite. Gold mineralization at Barite Hill contains the assemblage of pyrite-chalcopyrite-galena-sphalerite and is characteristic of a submarine, high-sulphidation volcanogenic massive sulfide deposit. Haile and Ridgeway are similar in that the mineralization is hosted within silicified siltstones. Both deposits contain molybdenite and the mineralization correlates with anomalous silver, arsenic, antimony, molybdenum, and tellurium. The genesis of Haile and Ridgeway are controversial and both deposits have been proposed to have been formed by conflicting models. This controversy has been exacerbated by poor exposures, overprinting deformation, metamorphism, and intense weathering. Submarine hot springs have been suggested for the gold mineralization by several geologists (Worthington and Kiff, 1970; Spence et al., 1980; and Kiff and Spence, 1987). Foley et al. (2001) and Ayuso et al. (2005) have presented additional evidence in support of this model which include geochemistry of sulfide phases and geochronology. The exhalative model stipulates that gold deposition occurred when "black smokers" on the sea floor fumed out silica, gold, and sulfide bearing fluids and the minerals precipitated in a wide area over a uniform seafloor. The precipitated minerals were buried by later sedimentation. The resulting mineral deposits are typically classified as being stratiform and lenticular in shape, and the concentration of mineralization dissipates away from the source. Alternatively, several workers have proposed the mineralization is structurally controlled and was caused by deformation. Tomkinson (1990) proposed that shearing was responsible for the mineralization at Haile and Ridgeway. This model invokes shears as the conduit for focusing gold bearing fluids into the metasiltstones. Drops in pressure during faulting are speculated to be responsible for gold precipitation. Nick Hayward (1992) proposed that folding of the phyllites controlled the gold mineralization. This genetic model proposes that gold was emplaced within the dilational zones of fold hinges during deformation. Gillon et al. (1995) proposed a model which invoked both early mineralisation and remobilization during deformation. O'Brien et al. (1998) proposed that the deposits were generated during the Neoproterozoic by the arc related volcanic activity in a hydrothermal system. This is supported by the close spatial associations between Haile and the felsic volcanic rocks. Pressure shadows around pyrite grains within the mineralized zones, folded mineralized zones, and flattened hydrothermal breccias indicate that the mineralisation is pre-tectonic and rules out that the

Criteria	JORC Code Explanation	Commentary
		mineralisation is related to deformation. This is the currently preferred genetic model. Mineralisation is broadly stratiform in mostly folded metasediments, and is commonly silicified and pyritic. Hydrothermal breccias containing well bedded clasts, silicification fronts cross-cutting bedding, and multiple phases of silicification indicate that the mineralisation is post depositional and invalidate the submarine hot springs or exhalative model. Key geologic events with ages in millions of years (Ma) include: • 580-550 Ma Carolina terrane volcanism & sedimentation, NE-trending • **550-540 Ma gold deposition** & folding, dominantly ENE fold axes • 311 Ma Alleghanian orogeny – ENE-trending lamprophyre dikes • 300 Ma Alleghanian granite pluton emplacement & folding • 220 Ma Pangaea rifting – emplacement of NW-trending dolerite dikes • 100 Ma – present Coastal Plain sands cover areas from Haile to the coast • Recent – weathering & saprolitization
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	No Exploration Results are being presented in this document. This report is focused on an advanced project that has well defined geological models and associated resource estimates completed
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer*	No Exploration Results are being presented in this document. This report is focused on an advanced project that has well defined geological models and associated resource estimates completed.

Criteria	JORC Code Explanation	Commentary
	lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Drill intercepts are typically reported in down hole length from the drill collar. Most are 1.5m long assay intervals. No Exploration Results are being presented in this document. This report is focused on an advanced project that has well defined geological models and associated resource estimates completed.

Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	 Figure 1: Gold Deposit Locations within the Carolina Terrane

Criteria	JORC Code Explanation	Commentary
		 Figure 2: Schematic Geologic Map of Haile Property, November 2014

Criteria	JORC Code Explanation	Commentary
		 Figure 3: Drill Hole Collar Locations
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	No Exploration Results are being presented in this document. This report is focused on an advanced project that has well defined geological models and associated resource estimates completed.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	OceanaGold Corporation (OGC) continues to drill in the district surround the Haile Gold Mine. However, no Exploration Results are being presented in this document. This report is focused on an advanced project that has well defined geological models and associated resource estimates completed.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	OGC continues to drill in the district surrounding the Haile Gold Mine. However, no Exploration Results are being presented in this document. This report is focused on an advanced project that has well defined geological models and associated resource estimates completed.

Criteria	JORC Code Explanation	Commentary
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	During 2016, the Romarco Minerals drilling database was translated to OceanaGold's standard AcQuire database platform. Where available, original source assay and survey data were used for the AcQuire translation and database validation. There was a further internal database review in late 2018 / early 2019. No material errors were identified.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	Jonathan Moore, MAusIMM(CP), is the Competent Person for open-pit resources. Mr Moore is employed by OceanaGold Ltd as Chief Geologist, based in Brisbane and has visited the Haile Gold Mine numerous times, most recently in January 2020. Timothy O'Sullivan, Member of the A.I.G. is the Competent Person for underground resources. Mr O'Sullivan is employed by OceanaGold Ltd as Group Geologist, based in Brisbane and visited Haile in April 2019.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	Mineralisation is hosted within a sheared and folded sequence of meta-sediments / meta-volcanics. The majority of mineralisation is hosted within the logged meta-sediments. The geometry of folding and the identification of fault and shear planes are important controls in modelling of the three-dimensional distribution of meta-sediments, and the meta-sediment / meta-volcanic boundary. Steeply dipping, NW-SE trending, post-mineralisation dolerite dykes cut the sequence. Accurate delineation of these dykes is critical for underground ore definition. Geologic surfaces were interpreted from drill logs and 3D lithological wireframes were constructed by Haile geology personnel. Sand, saprolite, metasediment, metavolcanic, dyke, fill and the old tails and heaps were assigned to the block model. The geological interpretation is believed to be appropriate for purposes of estimation.

Criteria	JORC Code Explanation	Commentary
		Historical (pre-Romarco Minerals) open pit and underground void surfaces have also been interpreted and used to deplete the block model.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The gold mineralisation at the Haile property occurs along a trend of moderately- to steeply-dipping ore bodies within a regional corridor which runs from the west-southwest (WSW) to the east-northeast (ENE). The corridor is approximately 1 km wide (NNW to SSE) and over 3.4 km long (WSW to ENE). Most of the mineralisation at Haile is hosted within the laminated metasiltstone of the Richtex Formation. Within this corridor, individual shoots tend to have dimensions of approximately 250m strike, 100m down-dip, and > 50m thick. The mineralized zones at Haile are believed to be hosted along a gently northeast plunging antiform (trending approximately northeast to east-northeast). The interpreted dips of the ore zones range from 25° northeast at the western end of the property to steeply southeast at the eastern end of the known trend. In several areas, multiple mineralised zones exist.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of*	Large Panel Recoverable resource estimation using multiple indicator kriging was used to for resource estimation. A panel size of 25mE x 25mN x5mRL was selected to reflect the drill hole spacing, which typically ranges between 25m x 25m to 40m x 40m. Multiple Indicator kriging was used given the positively skewed grade distribution. A 100 g/t Au top cap was applied to 3m composited grades. A 12.5mE x 5mN x5mRL SMU was used as a basis for block support correction. The meta-sediment / metavolcanic contacts were treated as soft grade boundaries for estimation to reflect the ambiguity of the contacts. After grade estimation, the post-mineralisation dyke, historical (pre-Romarco) open pit and underground mining void wireframes were used to sterilise block grades. The open pit estimates provide acceptable medium to long-term estimates when compared against production data. Alternative estimates using 10mE x 10mN x 5mRL, E-Type estimates, constrained to a 0.065 g/t Au indicator shell, were produced and provided similar outcomes. Silver, carbon and sulphur contents were estimated. In addition to gold grade, the key indicators to gold mineralization are silicification and pyrite content. Core logging has also identified brecciation as a feature often found with high-grade mineralization. The Horseshoe and Palomino underground deposits were modelled separately for the purposes of underground design.

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr>
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selective mining units.

Any assumptions about correlation between variables.
Description of how the geological interpretation was used to control the resource estimates.
Discussion of basis for using or not using grade cutting or capping.
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

</td>
<td>
<u>Underground Resource Estimate – Horseshoe Deposit</u>
The Horseshoe underground resource was estimated using Ordinary Kriging. The limits of the Horseshoe model are shown below:
<table>
<tr><th></th><th>Origin</th><th>Extent (m)</th><th>Block dimensions (m)</th><th>sub-block (m)</th><th>rotation</th></tr>
<tr><td>Eastings</td><td>543,100</td><td>620</td><td>10</td><td>5</td><td rowspan="3">60° Clockwise</td></tr>
<tr><td>Northings</td><td>3,827,000</td><td>700</td><td>10</td><td>5</td></tr>
<tr><td>Elevation</td><td>-500</td><td>700</td><td>10</td><td>5</td></tr>
</table>
The mineralisation at Horseshoe is dominantly hosted within folded meta-sediments. While a major anti-formal structure constrains the gross geometry of mineralisation, the local scale controls on mineralisation appear to be complex. A shallow north-northwest dipping shear defines mineralisation at the top of the deposit, and this has been used to guide interpolation of grades. It is anticipated that infill drilling, which will be completed as underground access is developed, will resolve much of the local scale complexity.
Grade interpolation was constrained within an indicator shell based on a gold grade of 1.0 g/t. Interpolation of the indicator shell was based on 3m composites and used structural trends planes to guide the interpolant. A number of iterations were undertaken to develop a shell that is considered geologically reasonable, and which captures an acceptable proportion of mineralised intervals and an acceptable amount of internal dilution.
Grade estimation is based on ordinary kriging into blocks of 10m x 10m x 10m. The model is rotated clockwise 60° to align the blocks with the dominant foliation fabric and strike of mineralisation.
Estimation used a multiple pass strategy with increasing search distances to progressively populate blocks. For the first pass a minimum four and maximum twelve composites were required, with additional constraints on minimum number of drill holes (two) and octants (two) required. The second pass used a minimum of two and a maximum of twelve samples. Variograms sills and ranges are typical of gold, with a moderate nugget and short ranges.
The resource model was validated by visual inspection, statistical analysis of estimation metrics, and global and swath plot comparison of input to output grades. Finally the impact of edge dilution on the boundary of the mineralised enveloped was assessed.
<u>Palomino Deposit</u>
<table>
<tr><th></th><th>Origin</th><th>Extent (m)</th><th>Block dimensions (m)</th><th>rotation</th></tr>
<tr><td>Eastings</td><td>542,500</td><td>925</td><td>5</td><td rowspan="3">30° Anti-clockwise</td></tr>
<tr><td>Northings</td><td>3,825,800</td><td>525</td><td>5</td></tr>
<tr><td>Elevation</td><td>-800</td><td>750</td><td>5</td></tr>
</table>
</td>
</tr>
</table>

Criteria	JORC Code Explanation	Commentary
		Grade estimation is based on ordinary kriging into blocks of 5m x 5m x 5m. The model is rotated anti-clockwise 30° to align the blocks with the dominant foliation fabric and strike of mineralisation. Estimation used a multiple pass strategy with increasing search distances to progressively populate blocks. The first pass a minimum four and maximum twelve composites were required, with additional constraints on minimum number of drill holes (two) and octants (two) required. The second pass used a minimum two and maximum twelve samples. Variograms sills and ranges are typical of gold, with a moderate nugget and short ranges. The resource model was validated by visual inspection, statistical analysis of estimation metrics, and global and swath plot comparison of input to output grades.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Estimates of tonnage are prepared on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	Open pit cut-off grade is 0.45g/t is based on actual and anticipated costs, prices and metallurgical recoveries. Underground Cut-off grades of 1.44 g/t Au and 1.49 g/t Au for Horseshoe and Palomino resources respectively are based on a gold price of US$1,500/oz. The reader is cautioned that the Mineral Resources that do not qualify as Mineral Reserves are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Ore Reserves. There is no certainty that these Mineral Resources will be realized or that they will convert to Ore Reserves.

Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The open pit Mineral Resource is the material that is contained within a computer generated Lerchs-Grossmann shell based upon a US$1,500/oz gold price. No additional mining dilution is applied to the open pit resource estimate because the recoverable resource estimation process approximates mining selectivity. Mining modifying factors have been applied to the underground reserve model (see section 4). The underground resource estimate for Horseshoe however is reported undiluted. The Palomino underground Inferred Resource is reported within a conceptual mine design.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	All open pit and underground reserves are expected to be treated at the existing Haile processing plant. Extensive processing testing was completed for detailed design and engineering of the process plant.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported.*	Acid generating rock is stored on lined storage facilities and the seepage from the facility treated before release. Potentially acid generating material is typically stored in the depleted pits below the water table after mixing with lime. Non-acid generating rock is stored adjacent to the pit at convenient haul distances.

Criteria	JORC Code Explanation	Commentary
	Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Density was assigned to each block in the model based on the rock type, redox and mineralization codes. Density information was based on the average results by rock type as recorded by Mr. van Brunt from analysis of core results. The following dry densities were assigned to each rock type in the block model. The dry density assignments are: Coastal Plain Soils = 1.90 Saprolite = 2.14 Clay Weathered = 2.46 Metasediment = 2.77 Metavolcanic = 2.60 Dyke = 2.91
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	For the open pit, panels were coded as Measured, Indicated or Inferred based upon drill sample spacing. Measured: 27m x 27m x 10m with minimum of 16 samples and 4 octants. Indicated: 41m x 41m x 15m with minimum of 16 samples and 4 octants. Inferred: 41m x 41m x 15m with minimum of 8 samples and 2 octants. Furthermore, Measured or Indicated panels with probabilities less than 30% of exceeding the cut-off grade, are demoted one level of classification. Horseshoe classification is based upon a combination of drill density, geological interpretation and estimation parameters. Indicated: 25m x 25m with a minimum of 12 samples within a 1.0 g/t Au grade shell. Inferred: 35m x 35m with a minimum of 6 samples within a 1.0 g/t Au grade shell. Palomino has been classified as Inferred as confidence in the geological interpretation of the mineralisation boundaries and orientation is not sufficient for a higher classification. The average drill density for Palomino is 40m x 70m with a minimum of 4 samples within a 1.0 g/t Au grade shell.

Criteria	JORC Code Explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	No external audits / reviews have been completed on the resource models. However, independent check estimates via E-Type (cf recoverable) estimations achieve very similar estimation outcomes. Model to mine to mill reconciliation is conducted on a monthly and annual basis and suggests that the estimates are acceptable.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Both the open pit and underground models have been classified to reflect appropriate confidence for open pit and underground estimates respectively. Both estimates are appropriate for medium and long-term planning. Additional grade control drilling is required to improve local estimates prior to mining.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the*	The open pit Mineral Reserves at HGM are based on a block model and resource estimate discussed in section three which includes infill drilling completed up to December 2019. The underground Mineral Reserves at HGM are based on a block model and resource estimate discussed

Criteria	JORC Code Explanation	Commentary
conversion to Ore Reserves	*Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	in section 3, completed in May 2019. The Mineral Resources are reported inclusive of Mineral Reserves.
	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	Gregory Hollett, P.Eng, is the Competent Person for open-pit Ore Reserves. Mr Hollett is employed by OceanaGold Ltd as Group Mining Engineer–Open Pits, based in Brisbane and most recently visited Haile in March 2020. Tom Cooney, MAusIMM CP (Min), is the Competent Person for underground Ore Reserves. Mr Cooney is employed by OceanaGold Ltd as General Manager-Studies and Project Development, based in Brisbane and most recently visited Haile in December 2018.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	Open-pit mining at Haile commenced in 2016, followed by commissioning and commercial operation of the processing plant in January 2017. Life of Mine planning studies have been undertaken to demonstrate the future economic viability of the mine. The Haile Mine Optimisation Study completed in 2017 included both open pit and underground resources and reserves and was completed to a Feasibility Study level.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	Open pit cut-off grade which was 0.45 g/t Au last year has been increased to 0.5g/t, due largely to the application of TSF construction costs. The underground cut-off grade, which was 1.50 g/t Au last year has been increased to 1.64g/t due largely to the application of TSF construction and increased underground mining costs.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve*	<u>Open Pit</u> The open pit resource model used recoverable resource estimation with a 12.5mE x 5mN x 5mRL SMU. No further ore loss or ore dilution was considered as part of the mining process.

Criteria	JORC Code Explanation	Commentary
	(i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	The open-pit Ore Reserves are reported within a pit design based on open pit optimisation results. The optimisation included Measured, Indicated and Inferred Mineral Resource categories with a gold price of USD$1300/oz Au. Inferred material within the pit design was treated as waste and given a zero gold grade. The overall pit slopes used for the design are based on operational level geotechnical studies. The stage cutbacks are approximately 100m-250m wide with a minimum mining width of 50m. Bench sinking rates are approximated to 10m bench per month, mined as either a single-pass or three flitches of ~ 3.3m per flitch. Mining is a conventional drill/blast/load/haul open pit operation using 10m benches in waste and 5m benches in ore. The mining method is considered appropriate for the size and style of the deposit. <u>Underground</u> The rotated block model which updated in May 2019 was optimised using 25mH x 15mW x 30mL stopes and includes additional dilution of 3% in primary stopes and 7% in secondary stopes and stope recoveries of 95% in primary stopes and 80% in secondary stopes. The net result of the updated resource model and increase to the underground cut-off grade has resulted in an approximate 3.5% decrease in tonnes, a 4.5% increase in grade, for a 1% increase in contained gold. A single decline will access long hole open stoping panels, which will be back-filled with paste fill delivered to the stopes from a surface paste plant via a series of pipes. Mining areas will be grade controlled from underground before production drilling is designed. Inferred material has been treated as waste with no grade. Infrastructure provisions have been made to support the open pit and underground mining methods as discussed below in the infrastructure section.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in*	Recovery of gold at Haile is achieved through crushing, grinding, flotation, carbon-in-leach (CIL), elution, electro-winning and gold smelting.

Criteria	JORC Code Explanation	Commentary
	nature. • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	As at 31 December 2019, the Processing Plant has the capacity to treat 3.6 million tonnes per annum of ore with debottlenecking projects still underway to improve throughput and plant utilization. Metallurgical test work: • A series of metallurgical testing programs have been completed under HGM supervision by independent commercial metallurgical laboratories from different zones of mineralisation. Samples were composited to represent a range of plant feed grades. • Samples have been selected from the separate zones of mineralisation that make up the expected process plant feed. • There is minimal variation in metallurgical response apparent in the testwork between samples from the various zones of mineralisation at HGM. Specific metallurgical domains have not been demarcated and a uniform recovery model has been applied. No assumption or allowances have been made for the presence of deleterious elements. None are known to exist in Haile ore at a significant level. The CiL process is the customary choice for gold mine process plants of this scale, feed grade and metallurgical response.

Criteria	JORC Code Explanation	Commentary
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Work associated with permitting for the expanded Haile open pit and underground operations as reflected in the reported resource and reserves is in progress. This process considers environmental and social impacts including air quality, land disturbance, water and wastes management. No major impediments are anticipated. Waste material is classified and routed based on lithology, percent sulphur, and the calculated Net Neutralizing Potential (NNP) of the block. NNP is the ratio of acid neutralizing potential to acid generation potential. Based on the NNP, waste material is categorized into green (non-acid generating), and yellow and red waste (PAG – Potentially Acid Generating) types based on the NNP. Class-red material is to be stored in dedicated, lined PAG storage facilities, while class-yellow material is to be stored either in the PAG facilities or as backfill in mined-out pits, at least 5 m below final water table.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	The Haile Project is located in an area that is highly populated, therefore a good infrastructure exists. The project is adjacent to a state highway and there is a very large, skilled workforce nearby. All necessary infrastructure for the project either exists as part of the operation or has been accounted for and costed in the project evaluation. This includes the following elements: • Tailing Storage Facility (TSF) the existing facility will be expanded to accommodate the increased mine Reserves. The method of construction and type of facility is unchanged from that which has been reported previously;

Criteria	JORC Code Explanation	Commentary
		• Overburden storage areas (OSA's). This includes material generated that will be classified as either potentially acid generating (PAG) or non-acid generating. Currently designed facilities will be either expanded, amalgamated (or both) to accommodate the material generated. Where applicable alterative storage areas will be prepared. • Site wide water management has been revised based on the change in mine design and the updating of the site wide water balance model. There is no change to the classification of contact or non-contact waters and these will be managed and utilized as previously reported; • Highway crossings and road realignment related to mining and tailings storage have been accounted for; • All ancillary facilities either exist as part of the existing project or are planned for completion as and when required throughout the mine life, this includes underground mine infrastructure; • Power Supply remains from Lynches River Electric Cooperative. The nearby power transmission infrastructure is well established and will be upgraded as required and this has been taken into consideration.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• The capital costs for the Haile project expansion are estimated in US dollars. All cost estimates are based on North American supply. Where appropriate equipment quotations or supplier quotations were obtained and utilized. The estimate used labour rates provided by the existing operations and current contractors. • Capital costs include all infrastructure costs, owner's costs and contingency. No specific deleterious elements have been found with the Haile project. The management of acid rock drainage as discussed in the mine plan and geotechnical sections have been addressed in the project costs. • Exchange rates do not apply to this project because it was designed and is under construction in the United States, based on U.S. Dollars. • Estimation of the operating costs have been developed from first principles, reviewed against actual operating data from 2017-2019. • Operating costs include allowance for general and administrative costs, waste management and site reclamation. • Gold pricing, refining, and transport costs are discussed in the Market Assessment section. • Projected capital and operating costs for mining have been developed based on production schedules over more than 15 years to achieve a processing production rate of 4.0 Mtpa. Estimation of the production rates and operating costs have been developed from first principles and benchmarked against existing operations in New Zealand and USA. • No allowance was made for royalties, government or private.

Criteria	JORC Code Explanation	Commentary
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• Gold is readily traded and the cost structure is well known. The basis of the financial analysis within this study was $1300/oz. Transportation and refining cost have been included in the financial analysis based on current terms at precious metal refineries. Silver was included in the evaluations but has limited economic contribution relative to gold.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• The market for gold dore is well-established. Market predictions and discussions for gold are beyond the scope of this document. The impacts of gold price volatility on the mine plan and process operation are well understood. • The Competent Person is not aware of any forward sales or hedging contracts for Haile metal production. • A contract is in place with Metalor USA Refining Corporation, located in North Attleboro, Massachusetts for the refining of dore bullion. The contract commenced in January 30 2017 and has an indefinite term, subject to termination by either party. This contract sets a range of prices and surcharges for refining the dore under terms and conditions which generally comply with industry norms.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• The Haile Gold Project economics have been completed using a discounted cash flow model. The financial indicators examined for the project including the Net Present Value (NPV). • Annual cash flow projections were estimated over the life of the mine based on capital expenditures, production costs, transportation and refining charges and sales revenue. • The life of the mine is 13 years as of 1st January, 2019.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• Prior to commencement of operations, Haile actively participated in rigorous permitting reviews on the federal, state, and local levels. At each step of this process, the public was afforded the opportunity to engage in those technical reviews, afforded the right to ask questions, voice concerns, and consider alternatives.

Criteria	JORC Code Explanation	Commentary
		• The main permit to construct and operate was the Environmental Impact Statement (EIS) and Record of Decision (ROD). During this review and evaluation, cooperating agencies from the US Army Corp of Engineers, US Environmental Protection Agency (EPA), South Carolina Department of Health and Environmental Control (SC DHEC), US Fish and Wildlife, SC Department of Natural Resources, and the Catawba Indian Nation worked collectively to issue the respective permits. • All required permits have been obtained and the project is legally operating at this time. • Haile is in the process of completing a Supplemental Environmental Impact Statement (SEIS) with the same regulatory agencies for the project expansion – larger open pits, underground mining, and process plant modifications. Permits will be obtained, as required, in consultation with all key (government and non-government) stakeholders. There is reasonable expectation that these permits can be obtained based on positive supporting technical data, reclamation plan, and proposed mitigation plan.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	Several potential risks and opportunities were identified. • *Metal Prices* – The base case long-term gold price is $1300/ounce. • *Silver Grade* – Silver is a byproduct for this project and is modelled based on limited sample coverage. The overall economic contribution of silver to revenue is small, however the mill needs to understand the Ag/Au ratio of the mill feed in advance to efficiently run the elution circuit. • *Existing Mining Facilities and Underground Workings* – Due to the historic mining in the area, there is a chance that underground mining and other facilities will be found. This could potentially reduce mining efficiency. • *Reclamation/Closure* – Interim reclamation is a part of the overall mine. Opportunity(s) may present themselves to include additional/more expedient reclamation/closure activities as part of mining, thus reducing final closure obligations and financial assurance costs. • *Fresh Water Makeup Risks and Opportunities* – The results of the site wide water balance indicate that sufficient water is expected to be available. Because the water balance is run on a monthly time step, instantaneous water demand shortages can be handled with the addition of water storage once Haile moves into operations. Water is available from the local municipal source if there is a shortage. • *Inferred Mineralisation* - There is known inferred mineralisation within the bounds of the reserve that is not included as reserves. If this mineralisation is converted to reserves the available ore tonnage may go up and the amount of waste (overburden) that will need to be handled will be reduced. • *Underground Project* – There is opportunity to optimize the underground mine plan through detailed short term planning on a stope by stope basis to reduce the planned dilution, currently included in the stope design, and therefore increase the grade of the underground mine plan.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.*	• The Proved Ore Reserve is a sub-set of Measured Mineral Resources, and the Probable Ore Reserve is derived from Indicated Mineral Resources. Inferred Mineral Resource material has not been included in the Ore Reserves.

Criteria	JORC Code Explanation	Commentary
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• It is the opinion of the Competent Person for Ore Reserve estimation that the Mineral Resource classification adequately represents the degree of confidence in the orebody.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• In 2018, OGC conducted an internal technical review for the Haile operation. The guiding principles for the review included quality of data, supporting information, methodologies employed, conformance to acceptance industry practice and professional standards, and site coverage and capability. The review included: o Geology o Geotechnical o Mine planning o Mining operations o Hydrology and hydrogeology o Tailings Management Facility • The 2018 review did not indicate that there were any issues that would materially impact the Ore Reserve estimate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should*	• The accuracy and corresponding confidence in the mineralisation is addressed based on both qualitative and quantitative means. The classification of the Haile open pit and underground Ore Reserves is believed to appropriately reflect the accuracy of the estimates. • Gold deposits have higher levels of grade uncertainty than other metal deposits due to the high coefficients of variation. Manageable short-term variability will be an ongoing condition in the mine operation.

Criteria	JORC Code Explanation	Commentary
	include assumptions made and the procedures used. • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	

Section 5 Estimation and Reporting of Diamonds and Other Gemstones

(Criteria listed in other relevant sections also apply to this section. Additional guidelines are available in the 'Guidelines for the Reporting of Diamond Exploration Results' issued by the Diamond Exploration Best Practices Committee established by the Canadian Institute of Mining, Metallurgy and Petroleum.)

[Section 5 is not applicable to the Haile Gold Mine].