SUMMARY OF TABLE 1 - 2012 JORC: Waihi Gold Mine

The Martha Underground Project is an advanced stage exploration project located 142 km Southeast of Auckland in the Township of Waihi in the Hauraki district of New Zealand. The Waihi township is known as a gold mining town and has a notable history of gold production. Open pit mining commenced at the site in 1988 with the first ore processed in that year and underground mining commenced in 2004 with the extraction of ore commencing in late 2006. The Waihi operation holds the necessary permits, consents, certificates, licences and agreements required to operate the Martha open pit and the Martha underground mine.

Resources

Martha underground project resource estimates, as at 31 December 2020, are presented in Table 1, and are classified in accordance with CIM and JORC 2012.The resource estimate reported in this document relates exclusively to the Martha Underground Project and excludes other site projects which will be reported later in 2021. The Martha Underground Mineral Resources are depleted for historic mining as at 31 October 2020.

Table 1: Martha Underground Mineral Resource Estimate

Class	Tonnes (Mt)	Au (g/t)	Ag (g/t)	Au (Moz)	Ag (Moz)
Measured	-	-	-	-	-
Indicated	6.0	5.21	16.6	1.00	3.2
Measured & Indicated	**6.0**	**5.21**	**16.6**	**1.00**	**3.2**
Inferred	2.5	4.73	15.3	0.38	2.3

Notes to Accompany Mineral Resource Table:

1. There are no Ore Reserves associated with the Martha underground project, however normal practice for the company would be to report Mineral Resources inclusive of Ore Reserves where appropriate.
2. Mineral Resources are reported on a 100% basis.
3. Mineral Resources are reported to a gold price of NZD$2,394/oz;
4. Martha Underground Mineral Resource is reported below the conceptual Martha Phase 5 open pit design.
5. This Resource is constrained within a conceptual underground design based upon the incremental cut-off grade.
6. No dilution is included in the reported figures and no allowances have been made for mining recoveries. Tonnages include no allowances for losses resulting from mining methods.
7. Ounces are estimates of metal contained in the Mineral Resource and do not include allowances for processing losses.
8. All figures are rounded to reflect the relative accuracy and confidence of the estimates and totals may not add correctly.
9. Tonnage and grade measurements are in metric units. Gold ounces are reported as troy ounces.

The Waihi site contains several projects at different stages of development. These include the Martha Underground Project, the Martha Open Pit, the Gladstone Open Pit and the Wharekirauponga (WKP) project.

The Martha underground project was successfully consented in February 2019 and relates directly to the mineralisation contained within the Martha vein system centred beneath the open pit mine within the Waihi Township.

This updated Table 1 report relates entirely to the Martha Underground Project. There has been no change in the status of the WKP, Gladstone Pit and Martha Open Pit projects since the time of the last public report.

Exploration activity has continued in proximity to the Martha project. In 2021, the Company expects to drill a further 27,000 metres in the Martha Underground with a focus on resource conversion (20,000 metres) and resource extension (7,000 metres) to support the Life of Mine Plan. Ongoing drilling is planned to test the full extent of the mineralised system represented by an Exploration Target of 5 to 7 million tonnes with a grade of 4.0 to 5.0 g/t Au. It is important to note that the Exploration Target is exclusive of the reported Mineral Resources and relates to the portion of the deposit that has not yet been adequately drill tested. The Exploration Target is based on the assessment of surface and underground drill data collected by the Company in addition to the significant amount of historical and archived geological and mine data from over a century of mining activity at Waihi. The Exploration Target is conceptual in nature and insufficient exploration has been undertaken in the areas that the Exploration Target relates to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource. The Martha Underground resource is associated with numerous veins that form part of the Martha Vein system, the largest of which include the Martha, Edward, Empire, Royal and Rex veins. Exploration drilling of this vein system is ongoing.

The major gold - silver deposits of the Waihi District are classical low sulphidation adularia-sericite epithermal quartz vein systems associated with north to northeast trending faults. Larger veins have characteristically developed in dilational sites in the steepened upper profile of extensional faults with narrower splay veins developed in the hanging wall of major vein structures. Figure 1 shows a plan of the Waihi area illustrating the major vein locations and recent drill hole collars. The Waihi epithermal gold-silver mineralised veins are hosted in Miocene andesite lavas beneath the Waihi township area.

Approximately 675,000m of diamond drilling has been done on the Waihi projects since 1980. All drill core, since 1990, was routinely oriented below the base of the post-mineral stratigraphy, either by plasticine imprint or using the Ezimark or Reflex core orientation tool.

Gold mostly occurs as electrum in the Waihi epithermal vein deposits and has a particle size less than 10µm. The main ore minerals are electrum and silver sulphides with ubiquitous pyrite and variable, though usually minor, sphalerite, galena and chalcopyrite in a gangue consisting of quartz, locally with calcite, chlorite, rhodochrosite and adularia. Base metal sulphides increase with depth.

Domaining is performed based on geological observation from logging of diamond drill core and mapping of exposure in both the open pit and underground. Mineralised geologic domains are typically narrow, subvertical epithermal veins within which gold is modelled via ordinary kriging or inverse distance methods dependent on data density. Dry bulk densities ranging between 1.8 and 2.5 t/m^3 are assigned by rock type.

Estimation is completed using either ordinary kriging (OK) or inverse distance weighting to the second or third power (ID2/ID3), as deemed suitable by the density of data in each domain.

The quantity and quality of the lithological, geotechnical, collar and down hole survey data collected in the exploration, delineation, underground, and grade control drill programs are sufficient to support the Mineral Resource and Ore Reserve estimation.

To classify the Mineral Resource, appropriate account was taken of geology, drill hole spacing, search criteria, location and geometry of historic mining voids, reliability of input data, and the Competent Person's confidence in the continuity of geology and metal values.

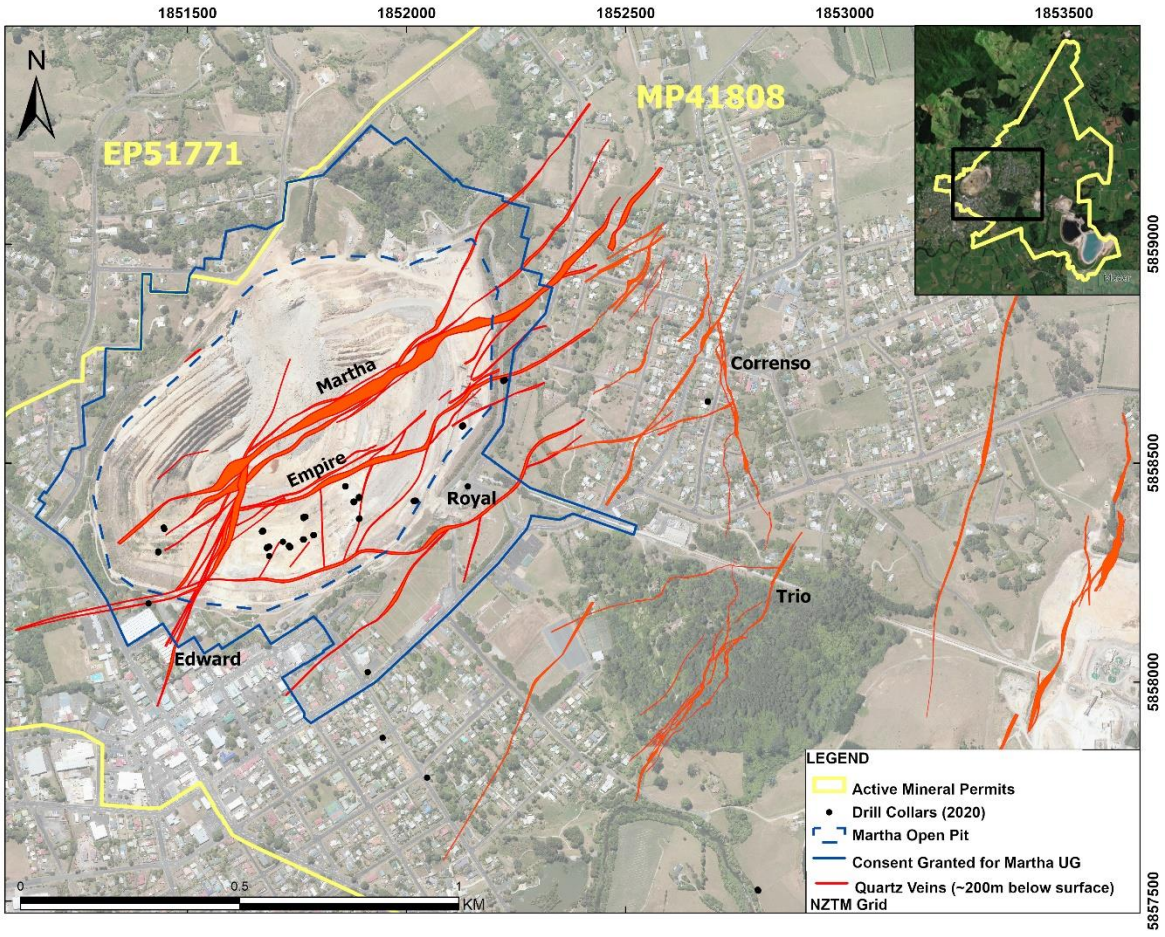


Figure 1: Map of Waihi showing a plan view representation of the Martha vein system, recent drill collars (Jan 2020 to Dec 2020), mining permit boundaries and the area covered by Mining Consent.

Reserves

There are no Ore Reserves relating to the Martha Underground Project.

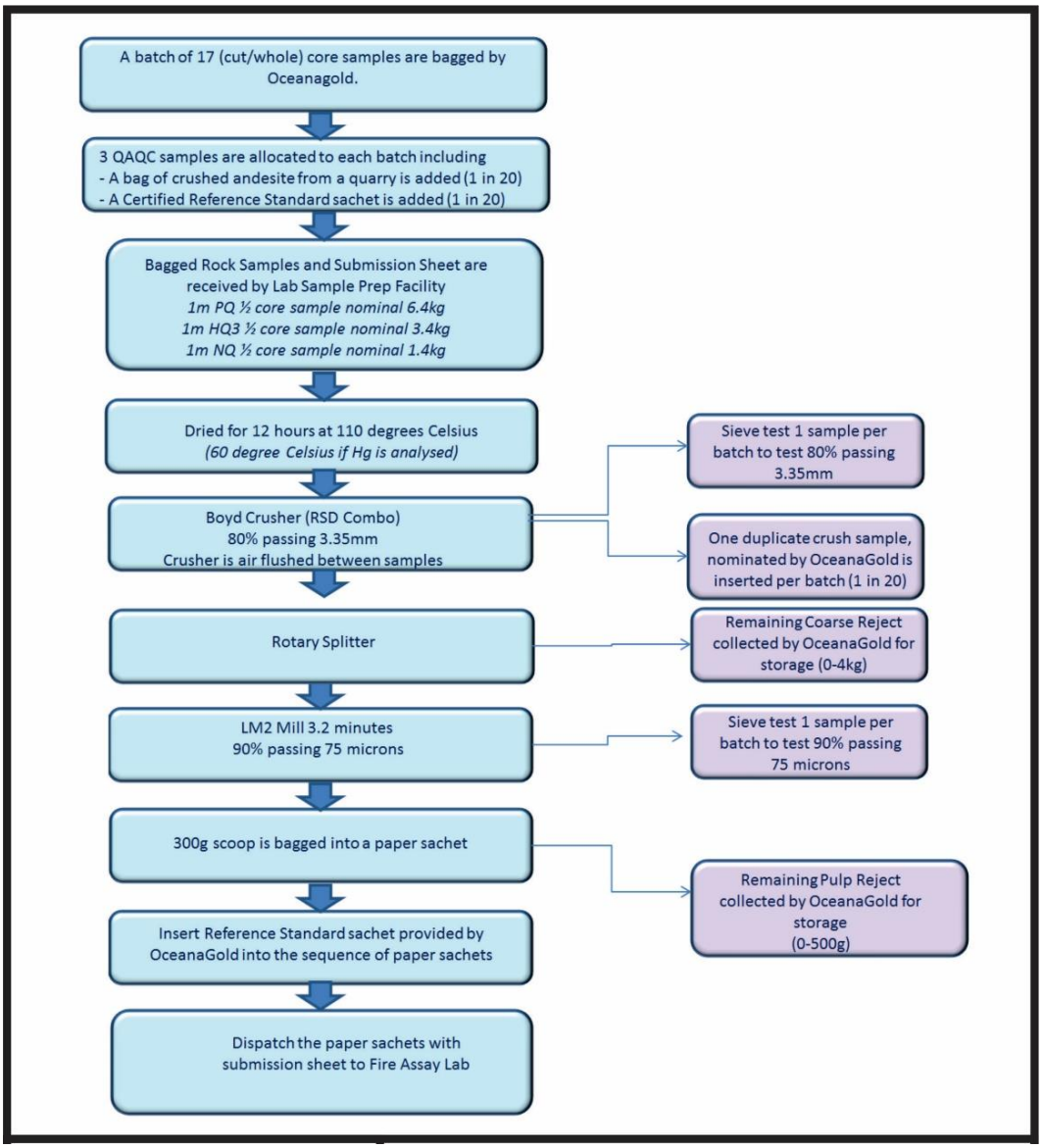
Competent Persons

Information relating to Exploration Results and Mineral Resources in this document were prepared by, or under the supervision of Mr Peter Church. Mr Church is a member and Chartered Professional of the Australasian Institute of Mining and Metallurgy. Mr Church is the Principal Resource Geologist and is a full-time employee of OceanaGold (New Zealand) Limited. Mr Church has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Church consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	• The Mineral Resource estimate for the Martha Underground in Waihi uses a combination of sampling techniques including diamond drill (DD) core, Reverse Circulation (RC) chips from exploration drilling, RC chips from open pit grade control drilling and grade control channel samples. • DD and RC drilling sampling techniques are discussed further in 'drilling techniques' criteria. • Pit channel sampling: Channel sampling was undertaken on a regular basis prior to 2006 and occasionally since then as a method of grade control sampling in the Martha open pit. The sample material was chipped from scraped channels on the bench floor using a pneumatic hammer along 1m sample intervals and collected in a pre-labelled calico bag. Three QAQC samples were assigned per channel including a blank sample, a crush duplicate and a standard. Prior to 2006, this was common practice, however after 2006 RC drilling was used as the preferred method of pit grade control until mining ceased in 2016. • Diamond drilling sample intervals are guided by logged geological boundaries and vary in length between 0.3 and 1.3m in length. Where possible, a discrete vein will have a sample start point along the up-hole contact and sample end point along the downhole contact of the structure. • Checks used to verify sample representivity include the collection and analysis of field and pulp duplicates and analysis of a selection of samples through third party laboratories. • Core samples are processed using industry standard practices of drying, crushing, splitting and pulverisation at the SGS Waihi or SGS Westport Laboratory. SGS are an internationally accredited global analytical services provider with strong internal governance standards and a reputation to uphold.
Drilling techniques	**<u>Diamond Drilling:</u>** • The Martha Underground Resource Estimation uses 244 450m of diamond drill (DD) core in 1077 holes. • All diamond drilling is triple tube wireline diamond core drilling from surface or underground. • All drill core is routinely oriented either by plasticine imprint or using Ezimark, Reflex or TruCore core orientation tools. • DD core diameter is PQ (85mm diameter), HQ3 (61mm diameter), NQ3 (45mm diameter) or BQ (36.4 mm diameter). Surface holes are collared using large-diameter PQ core, both as a means of improving core recovery and to provide greater opportunity to case off and reduce diameter when drilling through broken ground and historic stopes. Underground holes are collared using HQ3 core diameter. PQ, HQ, NQ and BQ core diameters are used in the Mineral Resource estimate with HQ3 being the dominant core diameter used in the resource estimations. **<u>RC Drilling:</u>** • RC drill chips were collected predominantly as part of the grade control process during the Martha Open Pit operation but also on a minor scale for exploration purposes (approximately 4309m used in MUG estimate). 88,000m have been drilled in 4,445 reverse circulation (RC) grade control holes in the open pit between May 2007 and May 2015, using a 114mm hole diameter and rig-mounted cyclone sampler. This grade control RC drilling is used to inform the estimate for the Martha Underground project in proximity to the open pit. • Grade control RC collars were designed on a 10x5m horizontal grid, with exception of areas in proximity to highwalls or known historical voids and the holes angled at a -50° dip. • Samples were collected in a bag attached to the cyclone at 1.5m intervals from which a nominal 3.6kg sample was split using a cone splitter.

Criteria	Commentary
Drill sample recovery	• In diamond drill core recovery is estimated by measuring the recovered core length against the drilled length which is uploaded to an AcQuire Database as a percentage. • Recovery data has been captured for all sample intervals for all diamond drill holes. • Core from the Martha project is monitored for recovery daily to rationalize actual core loss against the intersection of historic mining voids with re-drilling actioned if necessary. • Drilling induced core loss is recorded against the normal logged/sampled interval where intact rock is reasonably inferred, i.e. where no historic workings are expected. Areas logged as modified by historic mining will be subject to review during the historic workings' adjustment, during which interpreted historic mining shapes are modified to enclose these intervals. These shapes are depleted or incur SG and confidence reductions during post-processing of the estimate and are therefore not treated as material to the gold estimate. • There is no observed relationship between core recovery and grade. Core recovery within veined material (>40% vein in sample interval) is approximately 92.4% within the Martha Underground project. • RC drill sample recoveries were assessed by weight for representivity by the sampling technician and dispatching geologist. Samples were discarded where the recovered sample weight did not correlate well with the drilled interval.
Logging	• DD core and RC chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation. Logging includes geotechnical parameters, lithology, weathering, alteration, structure and veining. • Geological logging is based on both qualitative identification of geological characteristics, and semi-quantitative estimates of mineral abundance. Geotechnical logging uses standard semi-quantitative definitions for estimating rock strength and fracture density. • Logging intervals are based on geological boundaries or assigned a nominal length of one metre. • Some logging processes have varied over time. Recent core drilled since June 2015 has been logged using an excel spreadsheet and uploaded to an acQuire database. Between 2009 and 2015 logging was entered using Newmont proprietary Visual Logger software and uploaded onto a web-based database. • Logging of recent drilling (2009 onwards) has been validated using inbuilt validation tables and checked for consistency. • A complete digital photographic record is maintained for all drill core. • Unsampled drill core forming part of a resource is stored in a core shed for a minimum of 2 years, but usually until the area has been mined. Core in storage is divested after a review process after which it is either thrown away or retained in government core storage facilities. • All geological logging data is stored in an acQuire database.
Sub-sampling techniques and sample preparation	• Once the core is logged, photographed and sample intervals allocated, it is cut in half length ways. If a vein is present, the cut line is preferentially aligned to intercept the downhole apex of the structure. Within each sample interval, one half of the core is bagged for sampling and the other is kept in storage. Whole core has been sampled on occasion where there was significant core loss coupled with visible electrum and for all BQ core due to reduced sample volumes. • Labelled calico bags containing the core samples were either transported to the local Waihi SGS Laboratory or the Westport SGS laboratory for crushing and sample preparation. • Sample size for resource DD holes drilled from surface is optimised through initial collection of large-diameter diamond drill core samples, generally PQ3 or HQ3. Current drilling from underground utilises an HQ3 or NQ3 diameter core size for advanced exploration and resource conversion drilling. The core is then split using a core saw to produce an initial

Criteria	Commentary
	sample size of 3.5-4kg (HQ3) or 1.7-2kg (NQ3). Drilling for the purposes of grade control utilises an HQ3 or NQ3 diameter core size which is whole core sampled to produce an initial sample size of 7-8kg or 3.5-4kg respectively. • Sample preparation (drying, crushing, splitting and pulverising) is carried out by SGS using industry standard protocols. The sample preparation flow sheet is illustrated in Figure 1.1. • Since mid-2006, sample preparation has been carried out at the SGS laboratory in Waihi. Prior to mid-2006, the sample preparation facility was located at the Martha mine site and operated by Waihi Gold personnel. • Standardised sample preparation procedures are based on nomograms that were developed using Gy's Estimation of the Fundamental Sampling Error. Gold particle liberation size for the Waihi gold deposits is based on petrographic studies, which indicate that gold mostly occurs as electrum in the Waihi epithermal vein deposits and has a particle size between <5 to 10µm. • Representivity of diamond core samples is checked by duplication at the crush stage, one in every 17-20 samples.  **Figure 1.1 Sample Preparation Flow Sheet, SGS, Waihi**

Criteria	Commentary

Quality of assay data & laboratory tests	• All exploration samples are assayed for gold by 30g Fire Assay with AAS finish
	• Silver, copper, arsenic, lead, zinc and antimony are routinely analyzed at the Waihi SGS Laboratory using ICP analysis for all Martha exploration core samples (since 2017). These are common pathfinder elements for epithermal mineralisation.
	• Quality of exploration assay results has been monitored in the following areas:
	  ○ Sample preparation at the SGS Waihi and Westport labs through sieving of jaw crush and pulp products,
	  ○ Monitoring of assay precision through routine generation of duplicate samples from a second split of the jaw crush and calculation of the fundamental error.
	  ○ Monitoring of accuracy of the primary SGS assay and ALS results through insertion of Certified Reference Materials (CRM's) and blanks into sample batches.
	• Blank, duplicate and CRM results are reviewed prior to uploading results in the acQuire database and again on a weekly basis. The Waihi protocol requires CRMs to be reported to within 2 standard deviations of the certified value. The criterion for preparation duplicates is that they have a relative difference (R-R1/mean RR1) of no greater than 10%. Blanks should not exceed more than 4 times the lower detection method of the assay method. Failure in any of these thresholds triggers an investigation and re-assay.

Verification of sampling and assaying	• CRMs performance is regularly scrutinised and the database QAQC function thresholds are reviewed bi-annually. CRMs are currently assigned to batches on a rotational roster in a "pigeon pair" system. • Monthly QAQC reporting and review is undertaken on all assay results from SGS. • In addition to routine quality control procedures, umpire assay has been carried out on 248 samples (Correnso Project) at Ultratrace Laboratories in Perth. Results for gold were consistent with original SGS assay results and showed no effective bias, apart from 3 umpire samples that returned significantly higher gold values than the original assays. Those three samples were repeat assayed by SGS, the re-assay producing results consistent with the Ultratrace umpire assays; the second set of SGS assays have therefore replaced the initial assays in the database. • Comparison of the Ultratrace data with routine multi-element data produced by SGS Laboratory in Waihi showed good correlation between the parent (SGS) and umpire (Ultratrace) data sets for silver, lead, zinc and arsenic, which gives confidence in the accuracy of SGS data for these elements. For samples with over-range silver and lead, these elements are found to be extracted more efficiently by using a more dilute Aqua Regia digest (1-gram sample weight rather than the standard 10 grams per 50 ml). Antimony is not efficiently extracted by the current Aqua Digest method at SGS and consideration should be given to using the Peroxide Fusion extraction if more accurate antimony results are required. • For every batch of results received, SGS release its internal QAQC data to OceanaGold for review. The performance of SGS internal standards appears satisfactory. • No data from geophysical tools, spectrometers or handheld XRF instruments have been used for the estimation of Mineral Resources. • Underground face samples contain one blank, one crush duplicate and one standard per channel. Results are required to pass QAQC validation prior to being imported to a Microsoft Access database. • Open pit RC samples contained one blank, one crush duplicate and one standard every 20 samples. Results were required to pass QAQC validation prior to being imported to an acQuire database. • All laboratory results are uploaded directly into an acQuire database. Below level detection limit assay results are stored in the database as (negative) half the detection limit. No other modification of the assay results is undertaken.

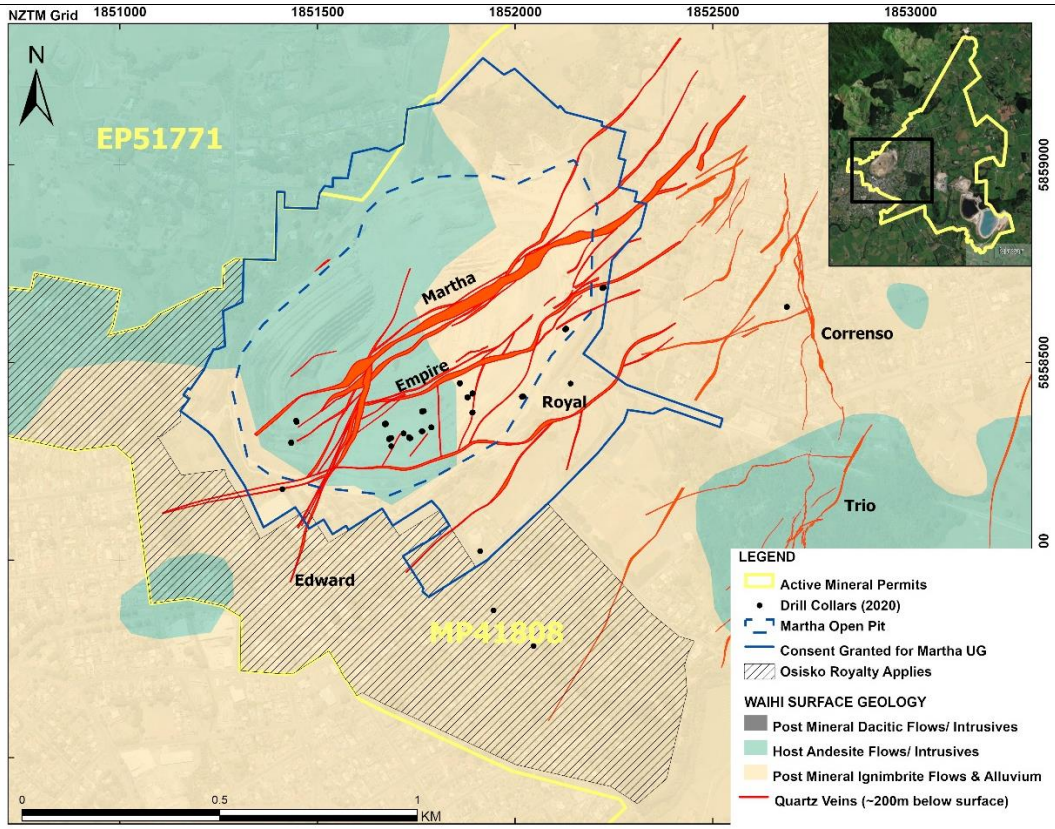
Criteria	Commentary
	• All intercepts are reviewed during the construction of the geological wire frames prior to grade estimation, this review involves visual comparison of core photography, assay and logging data and spatial relationships to adjacent data. Significant intercepts are reported internally on a weekly basis for peer review purposes. • Check assay programs have been undertaken for some projects in Waihi in the past as a part of advancing milestones such as feasibility level studies.
Location of data points	• All historic underground mine data in Waihi was recorded in terms of Mt Eden Old Cadastral grid (MEO). This is the grid utilised for all underground and exploration activity within 3km of the Waihi Mine beyond which New Zealand Map Grid is utilised. • The MEO grid is offset from New Zealand Transverse Mercator (NZTM Grid) by 5215389.166 (shift mN) and 1456198.997 (shift mE). • Relative level (RL) is calculated as Sea Level + 1000m. • Drill collars are surveyed using a total station or differential GPS by a registered professional land surveyor. At the start of the hole the drillers line up the mast in the correct azimuth using a Gyrocompass Azimuth Aligner. • The positions of underground Face Sampling channel samples are located by the geologist using digital Leica Disto Meter from known survey stations within headings underground. • The positions of Open Pit channel samples were surveyed using a total station by a registered professional land surveyor. • For the underground mine, a transformation is used to convert all data to NZGD2000 as per the regulations for the purpose of all statutory underground plans. Checks show that all underground coordinates are within the allowed 1:5000. • Down hole surveys are recorded at 30m intervals by using a digital downhole survey camera tool.
Data spacing and distribution	• The Martha UG project uses an average spacing to three drill holes of 60m for inferred and 40m for indicated. The extensive mining history of Martha (>135 years+) has developed significant experience in assessing the continuity of mineralisation and mining the Martha vein system and the adjacent deposits. The vein style mineralisation has a strong visual control, is well understood and has demonstrated continuity over significant ranges. An estimation run utilizing a maximum of three drill holes with a single sample per drill hole was undertaken storing the average distance to the three drill holes used to estimate the block. This formed the basis for the resource classification. • Diamond Drill samples are not composited prior to being sent to the laboratory.
Orientation of data in relation to geological structure	• Drill holes are designed to intersect known mineralised features in a nominally perpendicular orientation as much as practicable given the availability of drilling platforms. Sample intervals are selected based upon observed geological features. • All drill core is oriented downhole. Structural orientation measurements recorded during logging are used to inform vein modelling for resource estimation and true width interpretation for reporting of significant intercepts. • Sample intervals are selected based upon observed geological features. • Photogrammetry captured during underground grade control sampling is used to update the vein model for the reserve estimation.
Sample security	• Drill core is stored within secure facilities where access is controlled. Site employees transport samples to the analytical lab. The laboratory compound is secured.

Criteria	Commentary
Audits or reviews	• The SGS laboratory in Waihi has been audited on a quarterly basis by OceanaGold geologists and the Competent Person when possible. No sampling risks have been recorded during these visits. • Sampling techniques and data handling processes are reviewed annually during internal OceanaGold technical service reviews. External reviews of sampling techniques and data have been undertaken during third-party technical assessments

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	• Mineralisation within the Martha Underground resource occurs on a granted mining permit MP41808 • Rights to prospect, explore or mine for minerals owned by the Crown are granted by permits issued under the Crown Minerals Act 1991 (CMA). Crown-owned minerals include all naturally occurring gold and silver. A map showing the location of the Favona Mining permit and surface geology is shown in Figure 2.1. Mining permit MP41808 in Waihi was granted in March 2004 for a duration of 25 years, under the provisions of the Crown Minerals Act 1991. On the 18th December 2020 an application was lodged to extend the duration of the Favona Mining permit for a further 15 years to 21st March 2044. The current mining permit covers an area of 1572.59 hectares and encompasses the Martha Underground Project. • On MP41808 the higher of a 1.0% royalty on net sales revenue from gold and silver or 5% accounting profits is payable to the Crown. • On the area of MP41808 that was part of EP40767, Figure 2.1, there is a 2% royalty payable to Osisko Gold Royalties Limited. • An updated Land Use Consent (202.2018.00000857) was granted by Hauraki District Council (HDC) on the 1st of February 2019 and commenced on the 27th July 2019. This Land Use Consent allows for mining of the Martha Underground resource and the remainder of the Phase 4 Martha Pit. In addition to the authorisations required by HDC, a suite of consents was obtained from Waikato Regional Council (WRC) covering matters such as vegetation removal, water takes, diversions and discharges of water, discharges to air, and construction of the tailing's storage facilities. Both HDC and WRC have conditions in place relating to mine closure, bonds and a post closure trust. • The Martha Underground Project is situated below land owned by various landowners including government agencies, private landowners and OceanaGold. Office blocks, the processing plant, the underground portal and the tailings facilities are on land owned by OceanaGold.
Exploration by other parties	• Waihi Gold Company held exploration and mining licences and permits over the Open Pit portion of the Martha deposit and the current underground mine since the early 1980's. The Waihi East area covering the Correnso deposit and easterly extensions of the Martha system was historically held and explored by Amoco Minerals, Cyprus Minerals and a Coeur Gold-Viking Mining joint venture from whom Waihi Gold Company purchased the tenement area, EP40428, in 1998. These companies drilled approximately 18km in 60 holes in the Waihi East area and identified some remnant resources on the eastern end of the Martha vein system on which they undertook scoping studies. OceanaGold purchased the Waihi Gold Company from Newmont in 2015.
Geology	• The Au-Ag deposits of the Waihi District are classical low-sulphidation adularia-sericite epithermal quartz vein systems associated with north to northeast trending faults. Larger veins have characteristically developed in dilational sites in the steepened upper profile of extensional faults often with narrower splay veins developed in the hanging wall of, or between more than one major vein structure. Gold occurs exclusively within quartz vein structures, usually as electrum. Free gold is only rarely observed. **<u>Martha Underground</u>** • This project is focused on the large Martha Vein System, a complex vein network largely comprising a dominant southeast-dipping Martha vein (up to 30m thick in places) and several NW-dipping hanging wall splays including the Empire, Welcome, Royal and Rex veins.

Criteria	Commentary
	• Two additional steeply dipping, NNE-trending and well mineralised vein structures known as the Edward and Albert veins also form an important part of the overall Martha Vein System. • The host rocks are andesitic flows, intrusives and volcaniclastics which have undergone pervasive hydrothermal alteration. Much of the Waihi area, including the Martha open pit is overlain by post-mineral volcanics (Figure 2.1).
Drill hole Information	• See Table 2 in the announcement, which lists for each hole with a significant intercept, the hole ID, intersection depth, downhole length and estimated true width of the intersect where possible to determine.
Data aggregation methods	• Compositing of data for grade estimation is within distinct geological boundaries, typically within modelled veins. • The grades are compiled using length weighting. • Grades are not cut in the database; however appropriate statistically derived top-cuts are assigned by domain in the estimation process.
Relationship between mineralisation widths and intercept lengths	• Drill intercepts are typically reported in true width where reliable orientation data is available or able to be inferred from angle to core axis, alternately down hole lengths are reported when orientation data is not available. Holes are designed to intersect veins at more than 60 degrees to the vein as much as practicable.

Diagrams	 Figure 2.1: Map showing the simplified surface geology, subsurface plan of gold bearing veins and relevant permit and consent boundaries applicable to the Martha Underground Project.
Balanced reporting	• Recent Waihi drill hole information is available from www.oceanagold.com.
Other substantive exploration data	• OceanaGold is continuing with exploration programs within the district on permits EP 51771, EP40598, EP40813, EP51041, EP51630, EP52804, EP60148, EP60149, EP60528 and MP60541.
Further work	• OceanaGold continues to drill in the Waihi area with much of the diamond drilling concentrated on the Martha Underground Project.

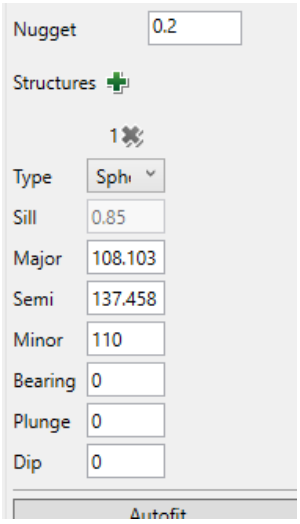
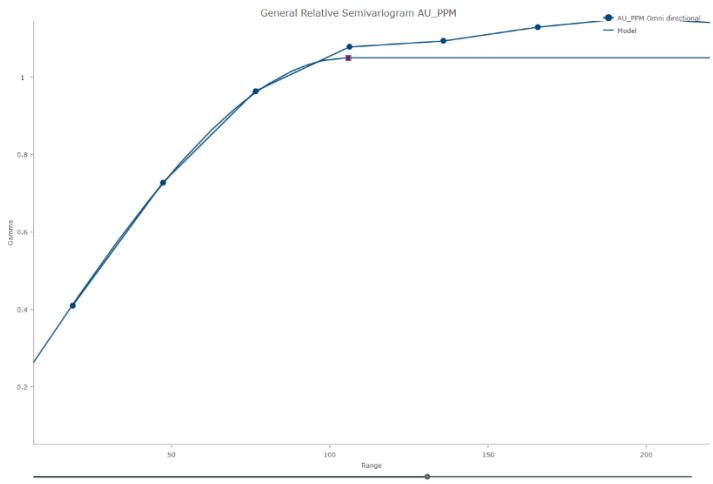
Section 3. Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	• Drill hole data is initially captured in an Access Database used for drill hole planning and management. That data is validated by several inbuilt data-entry checks. • The data is imported from Access into the main acQuire database interface which includes validation protocols. • Personnel are well trained and routinely check source versus input data during the entry process. • The Martha underground model r1120_mug_subblocked_fnl.bmf incorporates all available data, exploration diamond drilling, in-pit channel grade control data and in-pit RC grade control data have all been utilised in both the building of the geologic model and in the grade estimate. • In the construction of the MUG model it was recognised that there is significant historic crosscut data from the historic level development (circa 1880 to 1930) that could be utilised to aid in estimating grade particularly in the poorly drilled portions of the deposit. This legacy crosscut data is of unknown quality, grade historically was recorded as an economic value and a gold equivalent value was back calculated for this data set previously. The legacy crosscut data is utilised in the construction of vein wireframes. This data is excluded from the grade estimation for material reported under this report. • The cross-cut data was reviewed spatially and only data that spanned the full width of the vein was selected for utilisation in the vein wireframe construction. This data was further limited to only the second pass grade estimation pass which is utilised on an on-site basis purely as an aid to drill planning. • Each dataset was extracted independently from the parent Waihi AcQuire database for EDA purposes. Local Vulcan isis databases are created with the extracted data. These local databases are then flagged with domain codes and utilised for all subsequent processes
Site visits	• Peter Church has been employed at the operating mine since 2011. He is employed in the role of Principal Resource Geologist with responsibility for resource estimation. • The wider resource development team is site-based and familiar with mine geology and exploration protocol. Validation of interpretation is regularly performed during mine development. • RSC Consulting Limited (RSC) was commissioned by OGC in Q4 2020 to verify that exploration data and resource estimation domains are fit for the purpose of classifying an Indicated Mineral Resource in accordance with the JORC Code (2012). Spot-checking and data verification were conducted to provide further confirmation that the data quality management system has delivered fit-for-purpose data. • Martha Underground resource estimation protocols were independently reviewed and deemed fit for purpose in 2018 by Entech Pty Ltd during project study work
Geological interpretation	**Martha Resources** • Open pit and underground mining since 1988 have provided a large database of mapping and grade control sampling, which has confirmed the geological interpretation to date. • The geologic interpretation processes utilised in construction of all Waihi Models utilizes log data, assay data, underground face and backs mapping – where available, digital core photos and oriented core measurements, all of which are systematically collected and validated. The dip and dip direction of significant veins, faults, bedding and geological contacts are estimated from oriented core measurements. • Gold mineralisation is confined to quartz veins and is not disseminated in wall rock; therefore, the main vein boundaries are usually coincident with assay intervals, which attempt to honour the geology. There are a small number of instances where high grade

Criteria	Commentary

	assay results located immediately outside the main vein boundary have been included within the vein wireframe; such as where the grade is interpreted as belonging to small-scale, localized, parallel or sub-parallel veins / stringers rather than being attributed to contamination or a cross-cutting structure.
	• Geological modelling of the Martha Underground project was performed in Leapfrog Geo 6.0 using the interval selection and vein systems tools. The project was linked directly to the ADMWAIHIEXP acQuire database using the acQuire API.
	• Key geological features are interpreted from a combination of spatially referenced logging, assay and mapping data. Domain-specific grade and geological continuity characteristics were created to create representative wireframes of vein structures. The following data sources contribute to final wireframe shapes:
	  ○ Exploration drilling data – Diamond and rare RC
	  ○ Open Pit Grade Control channel samples and RC samples
	  ○ Historic Quartz Vein Mapping
	  ○ Historic mining triangulations
	  ○ Surface mapping
	  ○ Full width historic x-cuts
	  ○ Core Photography and Logs
	• Diamond drilling intersects were assigned to structures from a merged assay and geology table. Discrete colourmaps were used to ensure that only distinguishing features were selectable. Criteria commonly used to determine inclusion within a vein include;
	  ○ Au and Ag values
	  ○ Vein quartz percentage
	  ○ Composition of the interval, commonly quartz or quartz-calcite
	  ○ Lithology type, including void intercepts (for example stope fill, open stope, cavity)
	  ○ Brecciation type and intensity
	• Filters were commonly applied to identify primary structures within dense data. These were modified on a vein-by-vein basis and compared to core photography to establish geological consistency between veins.
	• A structural database was constructed using the structural modelling functions in Leapfrog Geo. Oriented discs were used to inform intercept relationships, with structure type, thickness and measurement confidence commonly used as filters.
	• The digital core photographic record is used extensively during the modelling process. Identifiable characteristics of veins can be recognised, such as mineralogical and textural characteristics, the nature of contacts, and the existence and relative timing of mineral phases within the vein zones. The mineralized veins have a distinctive appearance, and common textures and mineralogy - consisting of chlorite-smectite clays and base-metal sulphides, along with quartz, and which are commonly complex due to internal multi-phase syn- and post-mineralisation deformation, quite different to barren veins such as the 5995 (calcite-quartz lode). Another reference used to guide the geological interpretation is the mapped geometry of veins that have been mined previously. Waihi veins are characterised by sinuous deflections that tend to be continuous over a considerable vertical extent. Where the orientation data varies along the length of a given vein, or down dip, it is considered in context of the overall geometry of the deflections.
	• Geological models are integrated with regional geology and with detailed surface topographic models, which are routinely updated by mine surveyors. Geological models and geological concepts have been routinely reviewed by internal and external reviewers.

Criteria	Commentary
Dimensions	**Martha underground Resources** **Martha Underground –** r1120_MUG_subblocked_ fnl.bdf block model was constructed in Mt Eden old grid. ○ Origin: X 395200; Y 642200; Z 500 (Mine Grid) ○ Rotation: Bearing 065; Plunge 0; Dip 0 ○ Parent cell size 10.0m X, 10.0m Y, and 10.0m Z ○ Sub blocking cell size 1.0m X, 1.0m Y, and 1.0m Z ○ Offset in X direction 1600m ○ Offset in Y direction 1200m ○ Offset in Z direction 700m •
Estimation and modelling techniques	**Martha Resources** • Vulcan® software has been used to construct the Martha underground estimation model. The estimation techniques discussed below are considered to be appropriate. Grade Capping • Reconciliation history for the Waihi project has demonstrated that some level of high-grade restriction is necessary to limit the influence of outliers on grade estimates for the epithermal veins that have been mined during the operations history. • Statistical assessment of the input data is undertaken by domain, typical top-cut selection is based on the assessment of the population distribution characteristics and for inverse distance estimates cutting at the 98th percentile on the log probability distribution has been a long-standing methodology that has produced acceptable results. Estimates using an ordinary kriged estimation scheme utilise a 99th percentile threshold. • The use of this method in determining top cuts has resulted in good reconciliation historically. Typically, different data types are assessed independently in the capping analysis process. • The Martha Underground estimate is based on an Ordinary Kriged Estimation plan and based on comparative assessment of the Ordinary Kriged outputs a top-cut % of 99 has been adopted for kriged estimates. • The metal removed analysis includes tabulation of the following: ○ Number of samples above the cap ○ Percentage of samples above the cap ○ Minimum, maximum, mean, and variance of samples above the cap ○ Mean and variance of uncapped data ○ Mean and variance of capped data ○ Capped % difference: $\frac{(\text{uncapped mean} - \text{capped mean})}{\text{uncapped mean}} \times 100\%$ ○ Contribution of the samples above the cap to the uncapped variance: $(\text{mean above the cap} - \text{uncapped mean})^2 \times \frac{\%\text{ of data above the cap}}{\text{uncapped variance}}$ ○ Contribution of the samples above the cap to the total metal: $(\%\text{ of data above the cap}) \times \frac{\text{mean of data above cap}}{\text{uncapped mean}}$

Criteria	Commentary
	Variography • Down hole and directional variography are typically run using Snowden Supervisor v7 software or Vulcan Version 11.0. Variograms are run to test spatial continuity within the selected geological domains. • The process of domaining in the Waihi deposits removes the majority of the variance and consequently compromises the variogram modelling process. The best variography is therefore obtained for the Martha deposit when un-domained data is utilised. Variogram orientation is defined for each domain based on the strike and dip of the veins as modelled. Both downhole and omni-direction variograms have been defined that fitting of a variogram model. The variogram structure is defined using a standardised spherical single structure model with parameters as follows:   Estimation / Interpolation Methods • Veins for the Martha underground model were interpreted using Leapfrog software. Vein and geology wireframes were then utilised to construct a block model within Vulcan. Compositing of data for grade estimation is within distinct geological boundaries. For this model the vein domains were estimated using Ordinary kriging and tetra unfolding was employed to deal with complex vein geometries and to aid in resolution of the grade distribution and sample selection for the estimation. • The Martha Underground block model is rotated in bearing to align with the dominant strike of the veins and they are run using Vulcan® software. Sub-blocking is used to

Criteria	Commentary
	define narrow veins and to maintain volume integrity with the geology solids. The grade estimation for all models is strictly controlled by the geology, with both sample selection and estimation of blocks limited to domains defined by the geological interpretation solids. Gold is estimated using one of the following methods; either - a single pass with a combined channel and drilling dataset; OR - two-pass estimation using a combined dataset with short search range first, then followed by a second pass using drill hole data only with longer search ranges to estimate blocks not estimated in the first pass.
Moisture	• Estimates of tonnage are prepared on a dry basis.
Cut-off parameters	All Mineral Resource cut-off grades are based on gold price of USD 1700/oz. and silver price of USD20/oz. Martha Underground • A cut-off grade of 2.15g/t has been used for the Martha underground Mineral Resource. Cut off grades based on processing costs of NZD 30/tonne, general and administration costs of NZD 20/tonne and underground mining costs of NZD85/tonne.
Mining factors or assumptions	**Martha Underground Project** Hydrogeology • GWS Limited Consulting (GWS) have modelled the groundwater system in Waihi since the late 1980's. • GWS report that a shallow groundwater system associated with volcanic ash, alluvium and completely weathered rhyolite tephra is present at shallow depth. Monitoring data shows that it is unaffected by mine dewatering except immediately adjacent to the Martha Pit. Shallow groundwater levels are controlled principally by rainfall infiltration, low surface soil permeability and natural and assisted drainage to surface water systems. • GWS report that the higher volumes of water in the deeper aquifer are contained primarily in the quartz vein, the historic underground workings and infiltrated through the open pit which is more permeable than the surrounding andesite country rock. Water levels are maintained at the lowest underground mine level (705mRL) by the current underground pumping system. • Further drawdown of the water table is required to extract the Martha Underground resource. Permits are in place for the drawdown of the water table to 500mRL. Boreholes have been installed for further dewatering to 620mRL. A slurry pump system has been installed on 790mRL capable of handling the high level of entrained solids for the permanent pump stations. • GWS estimate the average daily pumping rates to dewater to 500mRL to be around 14,000m^3/day. Historic Stope Modelling ***Stope Fill*** • Accurate definition and appropriate treatment of risk associated with historic stopes is important for the Martha underground project. • Wireframes of the historic workings contain development levels, open and filled stopes, shafts, passes and the Milking Cow caved zone. Adjustments to development levels and stopes have been made based on interaction with current underground mining activity, historic plans, surface drilling campaigns and open pit mining throughout the 30+ year Martha project history, and the current underground Martha diamond drilling campaign. • Current mining interactions have provided a source of more accurate information to base adjustments to the immediate area intersected. In some areas sufficient evidence has been determined to enable further adjustment to surrounding and wider areas. These are

Criteria	Commentary

achieved either through directly mining into/ through old workings, targeted probe holes and scanning of the old voids.

- Logging of diamond drill holes identified voids and stope fill within the drill core and provided an interpretation of voids as open stopes or levels, filled stopes or collapsed stope zones.

Methodology

- As new information becomes available the current data for the old level/s are reviewed and updated accordingly.
- Stope shapes are digitised using stope widths annotated on the historic long-section plans, and stope orientation was determined by wireframes and/or drill hole intercepts.
- The individual stope files that are situated entirely within the open pit shell and the Milking cow collapsed zone are archived and not included in the stope model.

Modelling of voids

- Historical stope voids and backfill is captured in the model via the *mined* variable. No back filled material is included in the reported Mineral Resource, this material is regarded as an exploration target and will be de-risked through further exploration work.

Table 3-1 Historical Stoping Modelling Variables

Mined Variable value	Material Type	Modifying factors
0	In-situ	As estimated
1	Back filled stopes	Density and grade modified
2	Subsidence	Density and grade modified
5	Open stope	Density set to zero, grade removed
6	Open development	Density set to zero, grade removed

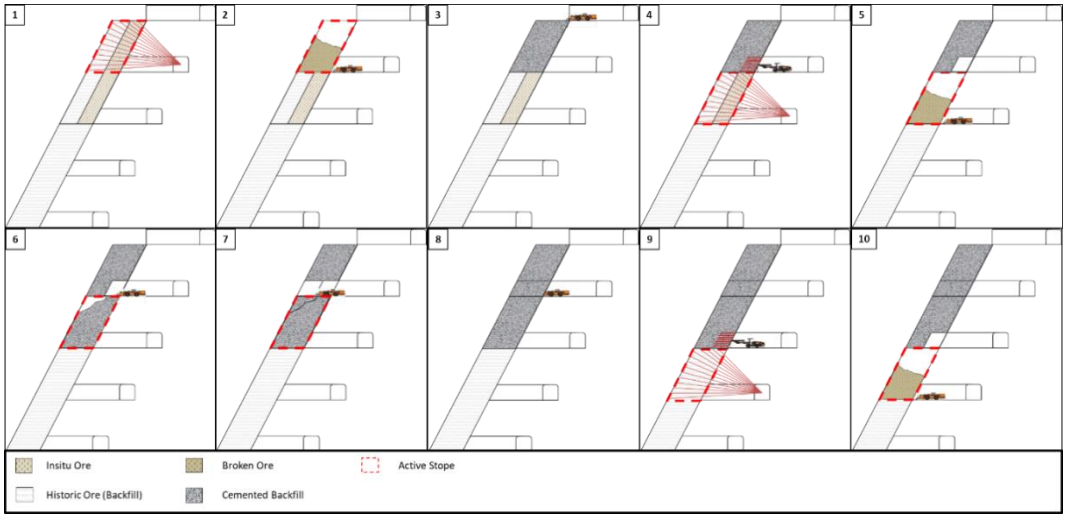
<u>Geotechnical</u>

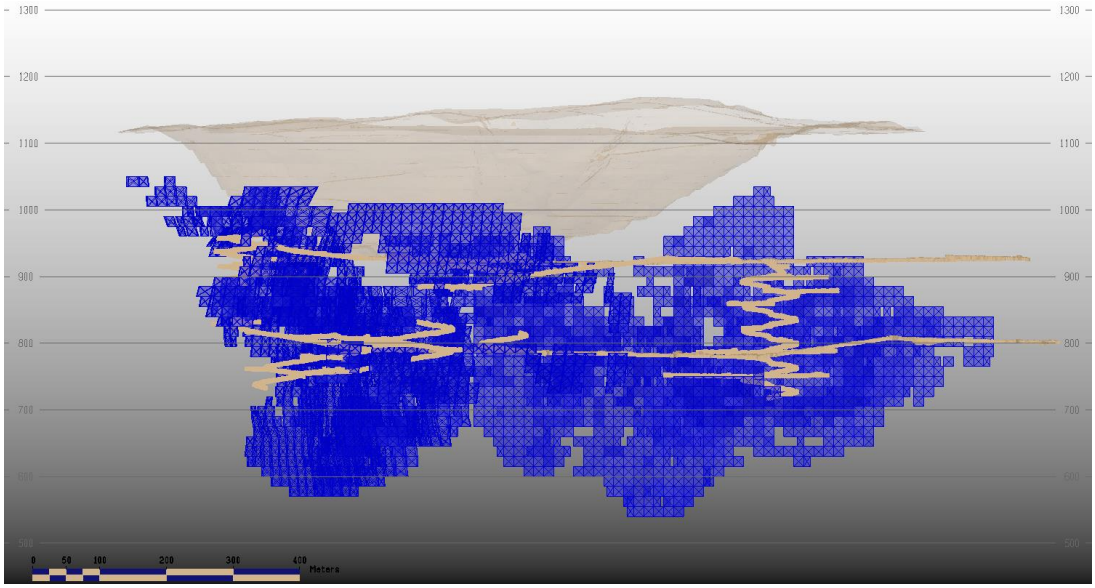
- Ground conditions within the Martha underground project will be impacted due to proximity to historic mining voids. Mechanisms for mitigating the associated risks will be considered as part of the project feasibility study to be undertaken in the coming year.

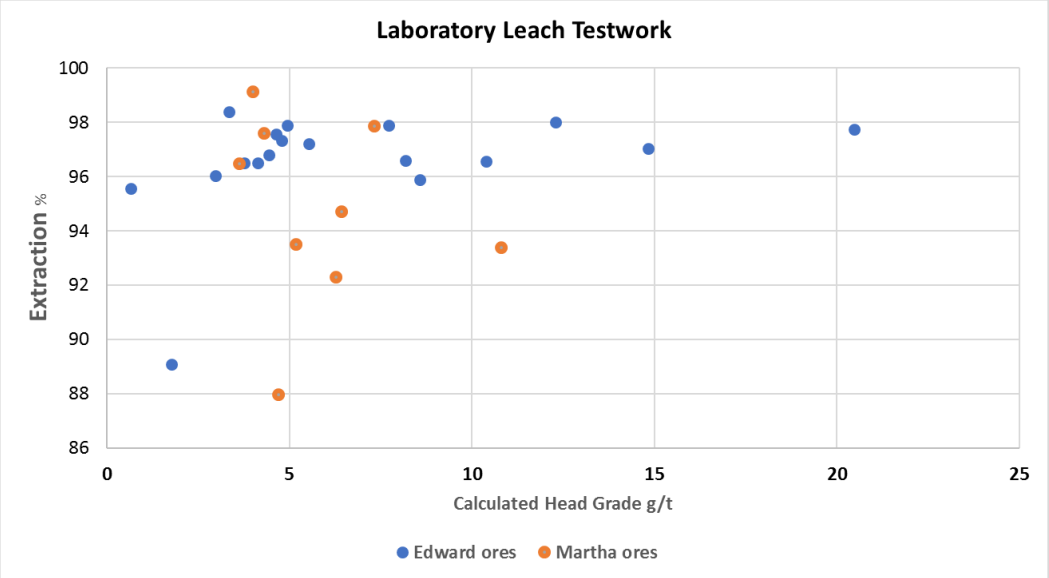
- AMC, engineering consultants, investigated the stability of the underground workings and reported that based on the current understanding of ground conditions, the planned ongoing investigation of conditions as suitable drilling positions become available, and the proposed cautious approach to development using close ground control techniques where required. AMC is confident that the proposed Martha underground mine can be developed and brought into production without any compromise to underground or surface stability.
- AMC reported that the ground conditions influence the mining method, the means of access, and the design of stopes and access tunnels. A critical aspect of the Martha Underground Project is to undertake investigations to understand those conditions so that a safe and efficient mining method and well-informed approach to developing the mine is used.

<u>Mining Method</u>

- Mining method selection work for the Martha underground project was undertaken by SRK in 2011, 2016 and 2017 and confirmed by Entech Pty Ltd in 2018. The Mineral

Criteria	Commentary
	Resource estimate has applied the same recommended mining methods recommended by SRK and Entech. • Much of the deposit will be extracted using modified Avoca which has been the predominant mining method at Waihi since 2004. • A proportion of the Mineral Resource inventory will involve the extraction of remnant ore skins in the footwall or hanging wall of previously mined stopes, or the extraction of both remnant ore skins and historical backfill. The proposed mining method is illustrated in Figure 3.1, this mining method will utilise remote drilling and loading methods combined with remote LHD equipment for ore extraction. • SRK and Entech conclude that once established, the mining method is expected to achieve acceptable ore recovery, productivity with few safety issues anticipated.  ***Figure 3.1: Side Ring Mining Method*** <u>Mining Recovery and Dilution</u> • No mining recovery or dilution were applied to the Mineral Resource estimate. <u>Mineral Resource Estimate</u> • OceanaGold has estimated the Mineral Resource using the Deswik Stope Optimiser (SO). • The Mineral Resource is reported within the SO shapes above the 2.15 g/t cut-off grade. No unclassified material contained within the SO shapes is reported. • Nominal stope dimensions of 15m high by 10m in length were selected for the design. • Stope widths vary, depending on the thickness of the mineralisation. A minimum stope width of 0.5 m was used and 0.5m of dilution was applied to both the footwall and hanging wall resulting in a minimum stope width of 1.5m. • A maximum stope width of 15m was used with a minimum pillar width between stopes of 8m. A maximum percentage of historical stoping of 10% was allowed in each SO shape. • The method of specifying the strike and dip angles for the initial stope-seed-shapes in SO was to apply a stope control surface wireframe over the full extent of the orebody where stope shapes are to be generated. • The following stope shapes were manually excluded from the Mineral Resource estimate: ○ Isolated stope shapes either showing lack of continuity or distant from the main concentrations of shapes.

Criteria	Commentary
	○ Stopes closer than 50m from the surface. ○ Within a solid created as an exclusion solid around the historical “Milking Cow” zone by projecting the cave zone outwards by 20 m. ○ All stopes intersecting the base of the Martha Reserve pit. • Figure 3.2 presents the SO shapes after exclusion based on geotechnical and economic assessment.  ***Figure 3.2: Martha Underground Mineral Resource Long Section***
Metallurgical factors or assumptions	**<u>Martha Underground Project</u>** • Metallurgical test work has been completed on 30 composite samples of mineral resource intercepts from Edward (18), Martha (9), Welcome (1) and Empire East (2). Twenty-three samples were submitted to the Newmont Inverness testing facility. Six samples representing the Edward vein were submitted to Amtec Laboratory in Perth, Western Australia. Samples were mostly submitted both as quarter core and as jaw crush reject material (95% <7mm), if both were available. • Leach tests showed a range of recoveries from 89% to 98% for the Edward mineral resources and 87% to 99% for Martha mineral resources, as shown in Figure 3.3 below where calculated head grade is plotted against recovery or extraction. • It was found that the recoveries of the Martha resources achieved a minimum of 90% leach extraction at a P80 of 53 µm across the 30 samples. This high base recovery indicates there may be less refractory gold in Martha mineral resources than Correnso. • Project work and metallurgical testing have shown Martha underground mineral resources to be amenable for processing via the existing Waihi treatment plant flowsheet and achieve practicable throughput rates, reagent and consumable consumption and process recovery. • A metallurgical recovery of 94% been used for the Mineral Resource calculation. ***Figure 3.3: Laboratory Leach Testwork Chart***

Criteria	Commentary
	
Environmental factors or assumptions	• The Waihi operation holds the necessary permits, consents, certificates, licences and agreements required to conduct its current operations, and to construct and operate the Correnso underground, the Martha open pit and the Martha underground. **<u>Martha Underground</u>** • During 2017 and 2018, environmental studies were conducted by independent consultants to support resource consenting. Studies have included air quality, water quality and ecology, noise, blast vibration effects, traffic, potential for subsidence, ground settlement in response to dewatering, property values, de-watering, and geochemistry of tailings, waste and groundwater. • The Hauraki District Council and Waikato Regional Councils have issued resource consents for Project Martha. The conditions impose restrictions on blasting magnitudes and firing times, mine design, geotechnical monitoring, dewatering and surface stability.
Bulk density	**<u>Martha Underground Resources</u>** • Martha Underground density (sg) assignment is based on a density assessment completed in 2018. Density samples are routinely collected during logging of diamond drill core. Specific Gravity is automatically calculated using the following formula: <u>Weight in Air</u> (Weight in Air – Weight in water) = SG • Interpreted vein domain has a mean SG of 2.56 as derived from 2553 samples across a cumulative length of 482m. • A minor proportion of naturally occurring cavity does occur in the rock mass. Natural voids are rarely observed during UG mining and therefore not considered material to SG calculations; however, it is acknowledged that a sampling bias may result from intact core being more readily selected for SG measurements. A “round down” approach to 2.5 is used to mitigate this. • The specific gravity of the host rocks and veining is complex and dependant on several factors. The specific gravity of the quartz andesite host rock decreases in the near

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td></td><td>surface weathering profile. The host rocks are variably hydrothermally altered with weakly altered andesites exhibiting the highest specific gravity (up to 2.8 grams per cubic/cm) compared to more the more clay altered andesites. Quartz veining appears to be affected more by weathering adjacent to the historical workings than surface weathering which influences the specific gravity. Weathered vein material has a relatively lower specific gravity than unweathered vein material. The Martha vein system varies in clay, calcite and base metal content which in turn influences the relative specific gravity.
• In assigning density within the Mineral Resource estimate, historic stope fill is assigned a density of 1.8. Collapse zones associated with the Milking Cow subsidence zone has been assigned a density of 1.9.</td></tr>
<tr><td>Classification</td><td><u>Martha Resources</u>
• The resource classification is based on an assessment of average drilling density.
• Confidence category is defined by average drill hole spacing, the ranges employed in classification of the Martha underground Mineral Resource are consistent with the ranges used in classification of other vein zones currently being mined within the larger Waihi operation.
• There is significant experience in mining and assessing the continuity of mineralisation with the veins for Martha and the adjacent deposits, the vein style mineralisation has a strong visual control and is well understood and has demonstrated continuity over significant ranges.
• An estimation run utilizing a maximum of three drill holes with a single sample per drill hole was undertaken storing the average distance to the three drill holes used to estimate the block. This forms the basis for the drill hole spacing and therefore the confidence categorisation.
Table 3-3: Average Drill hole spacing required for resource classification
<table>
<tr><th>Confidence category</th><th>Vein Zones Average distance to 3 closest holes</th><th>Stope backfill</th></tr>
<tr><td>Measured</td><td>N/A</td><td>N/A</td></tr>
<tr><td>Indicated</td><td>0 to 40 m</td><td>N/A</td></tr>
<tr><td>Inferred</td><td>40 to 60 m</td><td>N/A</td></tr>
</table>
• Mine fill within the historic stopes is not classified as Mineral Resource.
• The resource estimate outlined in this document appropriately reflects the Competent Person’s view of the deposit.</td></tr>
<tr><td>Audits or reviews</td><td>• The models are regularly cross checked by OceanaGold employees that are familiar with the resource estimation practices employed on site.
• OceanaGold Group Geologist - Tim O’Sullivan has undertaken a site review for the Martha Underground Model.
• Entech Pty Ltd has also undertaken an independent review of the Martha Underground resource model.
• RSC Consulting Limited (RSC) was commissioned by OGC in Q4 2021 to undertake an independent review of the
▪ 1) Quality of all data and data collection processes; and</td></tr>
</table>

Criteria	Commentary
	▪ 2) Domaining practices supporting the mineral resource that underpins the feasibility study (2020 Mineral Resource). RSC concluded that; ○ Location, Density, Geology and Grade Data meets appropriate quality objectives to allow for the estimation of Indicated Mineral Resources. ○ OGL's quality assurance (QA) systems are generally of a high standard. ○ The use of implicit modelling in the complex vein environment of the MUP to be good practice and considers it to have been applied effectively.
Discussion of relative accuracy/ confidence	**<u>Martha Underground Resource.</u>** • Mining operations on the Martha Underground resource focused on the establishment of the capital infrastructure at this early stage of the project. Minor development derived ore extraction has taken place and is expected to increase throughout 2021 • There is no reconciliation history for underground mining of the Martha underground project with which to validate the model. Notwithstanding though the grade estimate and modelling techniques in preparing this estimate are consistent with the techniques utilised in estimates for the Correnso project and other narrow vein epithermal vein systems in the Waihi district, many of which have been extensively mined and have reconciled well with production records at the time of mining