

## Material Information Summary

A Material Information Summary pursuant to ASX Listing Rules 5.8 and 5.9 is provided below for the Macraes Gold Project (MGP) which includes both open pit and underground mining, ore processing and a single economic analysis based on combined open pit and underground Mineral Reserves as at 30 June 2020.

MGP is controlled by OceanaGold Corporation through its wholly owned subsidiary OceanaGold (New Zealand) Limited (“OceanaGold”). OceanaGold Corporation is listed on the Toronto and Australian stock exchanges under the code “OGC”.

The areas included in the Project comprise the following:

- Coronation North, Coronation, Deepdell, Round Hill, Innes Mills, Frasers West and Gay Tan open pits;
- Frasers Underground mine and a new underground mine at Golden Point;
- Processing plant; and
- Tailings Storage Facilities, including a new storage facility that is currently being investigated for storage from 2024.

The Assessment and Reporting Criteria in accordance with JORC Code 2012 is presented in Appendix 1.

### 1.0 Macraes Gold Project

The Macraes Gold Project (MGP) is located 91 km northwest of Dunedin, in the Otago Region of the South Island, New Zealand. The Macraes Gold Project is located 1-2km to the east of the Macraes Flat township and is predominately surrounded by farmland. Modern open pit mining commenced in 1990 and underground mining commenced in 2006. Except for Deepdell and the Golden Point Underground, OceanaGold holds the necessary permits, consents, certificates, licenses, and agreements required to operate the open pits and underground mines that form MGP. OceanaGold is well advanced in the process of obtaining the necessary permits, consents, certificates, licenses, and agreements to mine Deepdell and Golden Point Underground. OceanaGold has a 30 year history of obtaining the necessary permits, consents, certificates, licenses, and agreements required for mining.

MGP comprises a number of areas that are at different stages of mining development. The Coronation, Coronation North, Gay Tan and the Frasers Underground are in production and are the ore sources for 2020. During 2020 work commenced to bring the Deepdell open pit and the Golden Point underground into production. Resource development drilling in 2020 has been completed or planned will be at Deepdell, Golden Point / Round Hill, Gay Tan and Frasers Underground. Resource development drilling will continue in 2021 and beyond.

### 1.1 Geology and Geological Interpretation

The Macraes orogenic gold deposits, consisting of a series of 12 open pits and 1 underground mine, which are located within a low-angle (~15-20°) late metamorphic (Jurassic) shear zone called the Hyde Macraes Shear Zone (HMSZ), which has been traced for at least 30km along strike as shown on Figure 1. The HMSZ consists of variably altered, deformed, and mineralized schist up to 150m thick, known as the Intra-shear Schist. The thickest part of the shear zone consists of several stacked mineralized zones. These shears have ductile deformation textures overprinted by cataclasis. The Hangingwall shear can be up to 25m thick and is commonly darker coloured due to fine grained graphite and sheared sulphide minerals.

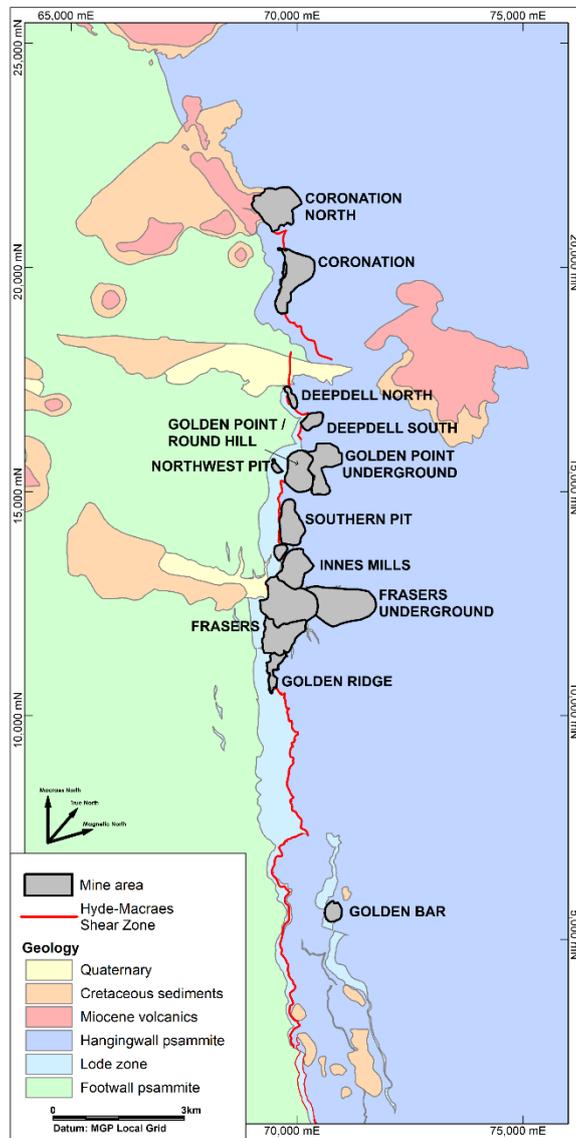
The following four types of mineralization occur within the HMSZ at Macraes.

- Mineralized schist. This style of mineralization involved hydrothermal replacement of schist minerals with sulphides and microcrystalline quartz. Mineralization was accompanied by only minor deformation.
- Black sheared schist. This type of schist is pervaded by cm to mm scale anastomosing fine graphite and sulphide bearing micro shears. This type of mineralization is typically proximal to

the Hangingwall Shear and can be up to 1m to 15m thick. Scheelite mineralization occurs in the silicified cataclastic shears.

- Shear-parallel quartz veins. These veins lie within and/or adjacent to the black sheared schist, and have generally been deformed with the associated shears. The veins locally cross-cut the foliation in the host schist at low to moderate angles. Veins are mainly massive quartz, with some internal lamination and localized brecciation. Sulphide minerals are scattered through the quartz, aligned along laminae and stylolitic seams. These veins range from 1cm to > 2m. Scheelite mineralization is associated with quartz veining in some areas.
- Stockwork. These veins occur in localized swarms that are confined to the Intrashear Schist. Individual swarms range from c. 100m<sup>2</sup> to 2,000m<sup>2</sup> in area and consist of numerous (10 – 100) subparallel veins. Most of these veins formed sub-perpendicular to the shallow east dipping shear fabric of the Intrashear Schist. Stockwork veins are typically traceable for 1-5m vertically with most filling fractures that are 5 – 10cm thick, but can be up to 1m thick. Swarms of stockwork veins within the Intrashear Schist were lithologically controlled by the dimensions and locations of more competent psammite pods within the Intrashear Schist.

**Figure 1: MGP Geology Plan & Pit Location**



## **1.2 Drilling, Sampling and Sub-Sampling**

A total of 7,575 drill holes for 972,121m has been drilled since 1990 at MGP and used for resource estimation of which approximately 80% are RC. The main ore minerals are pyrite and arsenopyrite sulphides with ubiquitous gangue consisting of quartz, sheared schist with a trace of graphite.

Resources at the MGP are defined using a combination of predominately reverse circulation (RC) drilling and diamond drilling.

RC samples were collected as bulk samples in 1 metre intervals and riffle split into uniquely numbered sample bags to produce a 2 to 4kg sub-sample. Geological logging and sampling was completed at the drill site using Tough books. At conclusion of the drill hole the samples are taken directly to the onsite laboratory operated by SGS (NZ) Ltd.

Diamond core is geologically logged, photographed and sawn in half with a diamond saw. In general samples are 1m in length unless dictated to by significant geological or mineralisation contacts in the core. The half-cut core samples are then delivered to the onsite lab operated by SGS (NZ) Ltd.

All drill holes collars are picked up by mine surveyors. All drill holes deeper than 70m are downhole surveyed on a 25m or 30m down hole interval.

The quantity and quality of the lithological, geotechnical, geochemical data collected in the exploration, surface resource delineation, underground resource delineation and grade control drill programs are considered sufficient to support the Mineral Resource and Ore Reserve estimation.

## **1.3 Sample Analysis methods**

At MGP, OceanaGold operates an assay laboratory under contract to SGS (NZ) Ltd. QAQC procedures involve the use of certified reference materials (CRM), lab standards, lab and field duplicates and field blanks. Sample batches are re-assayed if 1 of the OceanaGold CRM's is outside 3 standard deviations. The performance of CRMs, field duplicates and blanks is actively monitored and reported.

RC samples are dried and crushed to 100% passing 5mm. A 500gram sub-sample is split and the entire sub-sample pulverised to 90% passing 75 microns. A 50gram aliquot is split for fire assay using SGS's FAA505 scheme which has a detection limit of 0.01 g/t Au. Diamond core is dried and crushed to 100% passing 5mm. A 500gram sub-sample is split and the entire sub-sample pulverised to 90% passing 75 microns. A 30gram aliquot is split for fire assayed using SGS's FAA505 scheme which has a detection limit of 0.01 g/t Au

## **1.4 Estimation Methodology**

Grade estimation for open pit resources is by large panel (25mE x 25mN x 2.5mRL) recoverable resource estimates using either ordinary kriging or multiple indicator kriging (MIK) using FSSI proprietary GS3 software. Grades are estimated into 25m x 25m x 2.5m panels which are approximately half the nominal drill hole spacing and a mining selectivity of 5mE x 10mN by 2.5mRL is assumed.

Wire-framed shear structures are largely defined on the basis of sectional and plan interpretations of gold grade, geology and geological interpretations from previously mined resources. The wire-framed structures are generally a minimum of 2m  $\geq$  0.4g/t with 1m of external dilution. Internal dilution is generally a maximum of 2m to 3m  $\leq$  0.4g/t. Wire-frames are extended to a maximum of 25m past the end of any drilling. Unconstrained domains are defined by exclusion.

Grade correlation for MIK was determined by variogram analysis for each of the MIK class bins for each domain. Grades are not top cut, however, the grade of the last bin used in the MIK interpolation is usually the average of the bin average and bin median for the domain.



This resource estimation methodology has been successfully used at MGP since 2001 and is considered appropriate for the style of mineralisation and mining method.

For underground resources geological wireframes are constructed based on a combination of geology, grade and structure. Grade estimation is by ordinary kriging using PANGEOS software into 5mE x 5mN x 2.5mRL blocks into an unfolded geological wireframe. The wire frame is then unfolded and the resource reported.

This resource estimation methodology has been successfully used at MGP since 2008 and is considered appropriate for the style of mineralisation and mining method.

A number small, sparsely drilled, non-producing resources located at the northern and southern ends at MGP (Nunns/NZGT, Ounce & Stoneburn) are estimated using ordinary kriging into 25mE x 25mN x 2.5mRL blocks.

### **1.5 Resource Classification**

The resource estimate is classified using a combination of the geological wireframes and on GS3 search parameters which also provides a resource classification scheme based on search criteria. The GS3 search parameters and resultant resource classification are tuned to each deposit to match geological confidence with resource confidence.

The above classification protocol used at MGP since 2001 is considered by the Competent Person to be appropriate for the deposit.

### **1.6 Cut-off Grade**

Mineral Resources are reported at a cut-off grade of 0.3g/t Au for resources to be extracted by open pit mining. For resources to be extracted by underground mining methods a 1.2g/t cut-off is used for Frasers and a 1.34g/t cut-off is used for Golden Point.

### **1.7 Mining and Metallurgical methods, parameters and other modifying factors.**

For the conversion of volumes to tonnage Dry bulk densities of 2.50 t/m<sup>3</sup> are assigned to oxide 2.65 t/m<sup>3</sup> to fresh rock and 2.35 t/m<sup>3</sup> and for moved fresh rock (Gay Tan). These are based on 732 density determinations.

Inputs to the calculation of the reserve cut-off grades for the MGP open pit and underground mine include mining costs, metallurgical recoveries, treatment and refining costs, general and administration costs, royalties, and commodity prices. All these costs are reviewed annually as part of the LoM process. Annually the resource and reserve gold price assumptions are reviewed and if necessary changed. Using the updated costs and gold prices the resource is re-optimised and forms the basis of the Resource and Reserve Statement.

As part of the pit design process the geotechnical stability of proposed open pit stages are reviewed by PSM geotechnical consultants of Sydney and are used as inputs into optimisation runs and subsequent pit designs.

At the MGP mining is by a combination of conventional open pit and underground by retreat uphole open stoping methods.

OceanaGold owns and operates both the open pit and underground mining fleets and mining costs and productivities are updated as part of the annual LoM process.

Recovery of gold at the MGP is achieved through crushing, grinding, sulphide floatation, pressure oxidation (POX) sulphides and a standard Carbon In Leach (CIL).

The plant has an established skilled workforce and management team in place. As part of the annual LoM, process costs, through put assumptions and processing recoveries are reviewed and used in

the annual LoM optimisation runs and subsequent pit designs which are used to report the annual Ore Resource and Reserve statement.

**SUMMARY OF TABLE 1 - 2012 JORC: Macraes Gold Project**

The combined MGP resource estimates inclusive of stockpiles, as at 30 June 2020, are presented in Table 1-1, Table 1-2, and Table 1-3 and are classified in accordance with CIM and JORC 2012.

The resource estimate is sub-divided for reporting purposes: an open-cut resource that excludes material within the limits of the Golden Point and Frasers underground mines; and underground resources within the Golden Point and Frasers Underground mines. The resources are depleted for mining as at 30 June, 2020.

For Golden Point Underground, the Company has announced an initial Measured and Indicated Resource of 260,000 ounces of gold along with an initial Inferred Resource of 80,000 ounces. Note that approximately half of the Golden Point underground resource was previously included in the Round Hill open pit resource which has now been excised from the Round Hill open pit resource.

**Table 1-1: Open Cut Resource Estimate**

Class	Tonnes (Mt)	Au(g/t)	Au(Moz)
Measured	24.7	0.99	0.79
Indicated	90.7	0.77	2.24
<b>Measured &amp; Indicated</b>	<b>115.4</b>	<b>0.82</b>	<b>3.02</b>
Inferred	40	0.7	0.9

**Table 1-2: Underground Resource Estimate**

Class	Tonnes (Mt)	Au(g/t)	Au(Moz)
Measured	1.62	2.91	0.15
Indicated	4.56	2.48	0.36
<b>Measured &amp; Indicated</b>	<b>6.18</b>	<b>2.60</b>	<b>0.52</b>
Inferred	1.3	2.4	0.10

**Table 1-3: Combined Resource Estimate**

Class	Tonnes (Mt)	Au(g/t)	Au(Moz)
Measured	26.3	1.11	0.94
Indicated	95.2	0.85	2.60
<b>Measured &amp; Indicated</b>	<b>121.5</b>	<b>0.91</b>	<b>3.54</b>
Inferred	42	0.74	1.0

Notes to Accompany Mineral Resource Table:

1. All figures are rounded to reflect the relative accuracy of the estimates. Totals may not sum due to rounding.
2. Open pit cut-offs range between 0.3 g/t and 0.4 g/t Au. Frasers underground and Golden Point underground reported at 1.20 g/t and 1.34 g/t Au respectively. Cut-off grades are based upon a gold price of NZD2,394/oz (US\$1,700/oz @ USD: NZD 0.71).
3. Open pit Mineral Resources, are reported within an Inferred-on gold price of NZD\$2,394/oz (US\$1,700/oz @ USD: NZD 0.71). Underground Resources are geologically constrained.
4. Mineral Resources reported included the Mineral Reserves reported for the same deposit and are inclusive of stockpiles.
5. There is no certainty that Mineral Resources that are not Mineral Reserves will be converted to Mineral Reserves.
6. No dilution is included in the reported figures and no adjustments have been allowed for mining recoveries or processing losses.

7. The tabulated resources are estimates of metal contained as troy ounces of gold.
8. Mineral Resources are reported on a 100% basis;

## 1.8 Reserves

The Ore Reserve estimate for MGP as at 30 June 2020 is shown in Table 1-4:

As at June 30, 2020, the Company increased Macraes Proven and Probable Mineral Reserves by 240,000 ounces of gold, net of mine depletion inclusive of the Golden Point Underground initial Mineral Reserve of 160,000 ounces of gold.

**Table 1-4: MGP Ore Reserve Estimate**

JUNE 2020	Cut-off	Proven			Probable			Proven & Probable		
		Mt	g/t	Moz	Mt	g/t	Moz	Mt	g/t	Moz
Coronation North	0.4 g/t	0.98	1.39	0.04	1.23	0.92	0.04	2.21	1.13	0.08
Coronation	0.4 g/t	-	-	-	0.22	1.10	0.01	0.22	1.10	0.01
Deepdell	0.4 g/t	1.67	1.06	0.06	1.29	0.98	0.04	2.96	1.03	0.10
Round Hill	0.4 g/t	3.89	1.32	0.17	8.21	1.00	0.26	12.1	1.10	0.43
Innes Mills	0.4 g/t	1.73	1.26	0.07	5.81	0.84	0.16	7.51	0.94	0.23
Frasers OP	0.4 g/t	1.52	0.69	0.03	6.89	0.71	0.16	8.41	0.71	0.19
Stockpiles	0.4 g/t	4.36	0.55	0.08	-	-	-	4.36	0.55	0.08
Frasers UG	1.36 g/t	0.69	2.11	0.05	0.58	1.47	0.03	1.28	1.82	0.07
Golden Point UG	1.61 g/t	0.12	2.39	0.01	2.26	2.12	0.15	2.34	2.13	0.16
<b>Macraes Total</b>		<b>15.0</b>	<b>1.05</b>	<b>0.51</b>	<b>26.5</b>	<b>0.99</b>	<b>0.84</b>	<b>41.4</b>	<b>1.01</b>	<b>1.35</b>

### Notes to Accompany Ore Reserve Table:

1. All figures are rounded to reflect the relative accuracy of the estimates. Totals may not sum due to rounding.
2. Ore reserves are reported based on cut-off grade based on metal price assumptions, exchange rates and mining, processing, general and administrative costs. Ore Reserves have been derived assuming a gold price of USD1,300/oz for Open Pit and USD1,500/oz for underground and NZD: USD 0.71. The Macraes processing plant recovery varies based on ore source and feed grade – an average 82% recovery is achieved.
3. Open pit Dilution and recovery estimates are built into the resource model and no additional factors are applied.
4. Underground Insitu Recovery, Mining Recovery and Dilution modifying factors have been applied that result in an average underground mining recovery of 98% of the designed tonnage and 89% of the designed grade.
5. Ore Reserves have been estimated based on mine designs and plans consolidated into a Life of Mine Schedule.
6. JORC (2012) definitions were followed for Ore Reserves.
7. Ore reserves are inclusive of stockpiles and are reported within current mine designs which are based on current economic assumptions;

Inputs to the calculation of the reserve cut-off grades for MGP open pits and underground mines include mining costs, metallurgical recoveries, treatment and refining costs, general and administration costs, royalties, and commodity prices. At MGP mining of the reserves is by a combination of conventional open pit and underground retreat uphole open stope methods.

For the Frasers and Golden Point Underground mines, stope dilution has been estimated based on expected geotechnical conditions, stope spans and 12 years of operational experience. Recovery of ore requires the use of remote loaders, and allowances have been made for loss of Ore Reserves and for dilution from roof caving. OceanaGold owns and operates both the open pit and underground mining fleets and the mining costs and productivities are well understood.



Recovery of gold at MGP is by crushing, grinding, sulphide floatation, pressure oxidation (POX) of the sulphides and a standard Carbon In Leach (CIL). The plant has an established skilled workforce and management team in place. Recent cost estimates, through put assumptions and processing recoveries support the reporting of the stated Ore Resources and Reserves.

OceanaGold has two granted Mining Permits with terms sufficient to extract known reserves and owns all the land necessary for open pit and underground mining to proceed. Except for Deepdell and Golden Point Underground OceanaGold holds all the necessary permits, consents, certificates, licenses, and agreements required to operate the open cuts and underground mine that form MGP. OGL is well advanced in the process of obtaining the necessary permits, consents to mine at Deepdell and Golden Point Underground. OceanaGold has a 30 year track record of obtaining consents necessary for mining to proceed.

## 1.8 Economic Analysis

Economic analysis is based upon mine schedules that include only Ore Reserves,

Over the life of mine, the Company expects to produce approximately 1.11 million ounces at an AISC of \$1,025 per ounce from July 1, 2020. The average AISC from 2021 to 2028 is forecast at \$990 per ounce. The costs are based on historic operating costs and sustaining capital expenditures.

### LOM Unit Operating Cost Summary

<b>Mining Unit Costs</b>	<b>Units</b>	<b>USD</b>
Open Pit	<i>per tonne total material mined</i>	1.27
Frasers Underground	<i>per tonne ore mined</i>	43.63
Golden Point Underground	<i>per tonne ore mined</i>	37.04
Processing	<i>per tonne milled</i>	7.16
Site General & Administrative	<i>per tonne milled</i>	1.96

## 1.9 Competent Persons

Information relating to Exploration Results and Mineral Resources in this document was prepared by or under the supervision of S. Doyle. Any information regarding metallurgy or mineral processing has been prepared, verified and approved by D. Carr. The open pit Ore Reserves have been prepared under the supervision of P. Doelman and the underground Ore Reserves have been verified and approved by T. Cooney. The cost estimation and economic evaluation has been prepared under the supervision of P. Doelman.

Messrs Carr, Doyle, Doelman and Cooney are members and Chartered Professionals of the Australasian Institute of Mining and Metallurgy. Mr Doyle is the Principal Resource Geologist at MGP and is a full-time employee of Oceana Gold (New Zealand) Limited. Mr Doelman is the Technical Services and Projects Manager at MGP and is a full-time employee of Oceana Gold (New Zealand) Limited. Mr Cooney is General Manager Studies based in the companies Brisbane Office and is a full-time employee of Oceana Gold Corporation. Mr Carr is Chief Metallurgist, based in the companies Brisbane Office, is a full-time employee of Oceana Gold Corporation

Messrs Carr, Doyle, Doelman and Cooney have 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 Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Messrs Carr, Doyle, Doelman and



Cooney consent to the inclusion in the report of the matters based on the information in the form and context in which it appears.

For further scientific and technical information relating to the Macraes Gold Project, please refer to the NI 43-101 technical report which will be available on SEDAR.

# JORC Code, 2012 Edition – Table 1 for the Macraes Gold Project

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (eg 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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Reverse Circulation (RC) drill hole samples comprise 90% of the drilling at the Macraes Gold Project (MGP). The remaining 10% are from sampled diamond core.</li> <li>• The current RC sampling, logging and assay protocol has been in place since 1994. Prior to 1994 the logging protocol was more complex and in 1994 was simplified to the existing protocol.</li> <li>• Reverse circulation drill holes are sampled on 1 metre intervals from which 2 to 4kg sub-samples are riffle split. In mid-2018 RC samples started to be weighted as a check on recovery.</li> <li>• Since 1994 representative RC drill chips for each 1 metre were collected and placed in plastic chip trays which are stored on-site at MGP for future reference.</li> <li>• Assay pulps are recovered from the contract laboratory and stored onsite at MGP for future reference.</li> <li>• Diamond drill core is photographed, logged, sawn to half core and sampled by OceanaGold personnel at the on-site core shed.</li> <li>• Sample lengths are generally 1 metre lengths, or less, as dictated by lithological contacts.</li> <li>• The remaining half cut core and assay pulps are stored on-site at MGP for future reference.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Between 1985 and 1994, 29 holes were drilled using open-hole hammer. With the mining of Round Hill these holes have been mined out.</li> <li>• Pre 1995 approximately 300 RC holes were drilled using cross over sub technology. With 29 years of mining these holes have now been mined out.</li> <li>• In 1995 RC drill holes were obtained by using a reverse circulation drill rig with a 135mm face sampling hammer.</li> <li>• The diamond drill core was obtained using triple tube PQ,HQ or NQ diameter drilling, however the majority of the diamond drilling is HQ.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The reverse circulation drilling was sampled in 1 metre intervals. Sample recovery was estimated from visual inspection of sample bags with a target of &gt; 90% recovery. Since mid-2018 samples have been weighted to confirm the mass of the sample recovered. For the drill holes reported sample recovery was considered acceptable.</li> <li>• It is OceanaGold's current procedure that if a reverse circulation drill hole goes wet, drilling is stopped and completed with a diamond tail. This is because reverse circulation drill hole sampling at MGP under wet conditions is prone to sampling grade bias.</li> <li>• In the Round Hill, Innes Mills, Frasers &amp; Golden Bar resource estimate there are a number of wet RC holes. Where RC holes have been twinned by diamond core, the RC holes have been removed from the resource estimate. For the remaining wet RC holes, grade-based correction factors derived from wet RC / diamond pairs have been applied. A significant proportion of wet sampled RC drill holes have been mined out over the past 25 years. The remaining risk related to sample bias is considered relatively low.</li> <li>• For diamond drilling recovery is recorded for every run and in general core recovery is in excess of 95%. Triple tube drilling was used to maximize core recovery through the Au mineralised zones.</li> <li>• Analysis of grade versus diamond core recovery does not show any grade-recovery relationship to be present.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC drilling is logged every 1 metre using MGP logging codes that have been in place since 1994. For holes prior to 1994 holes were logged using a similar protocol.</li> <li>• Diamond core was geologically logged and photographed following OceanaGold's standard operating procedure for core logging. The geological logging process documents lithological and structural information as well as basic geotechnical information on RQD and major defects. Core logging generally identifies the upper surface of the mineralised shear. RC chip logging is not as effective at defining the position of this contact. As a result, a combination of logged geology and gold grade data is required to define the boundaries of mineralised shears.</li> <li>• Drill holes were generally logged and sampled from 20m above the Hangingwall contact. If position of Hangingwall contact uncertain holes were/are logged and sampled in their entirety.</li> </ul>
<i>Sub-sampling techniques</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC 1 metre samples are collected into a cyclone and then split through a riffle splitter. Close attention is paid to ensure each interval</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>sampled is 1 metre. Drilling advance is paused at the end of each 1 metre, to allow the entire sample to clear the splitter prior to resuming drilling. The cyclone and splitter are kept clean and dry.</p> <ul style="list-style-type: none"> <li>• Diamond core was cut along the inferred long axis of the mineralised ellipse to achieve a representative half core sample. The only rare exception to this is in the Frasers Underground where areas of resource development drilling are going to be mined within 3 months of hole completion the full core is sent for assay.</li> <li>• Sub-sampling size is considered appropriate and the method representative for the style and thickness of mineralisation. This is borne out by 29 years of mining at Macraes.</li> <li>• At MGP, OceanaGold and its predecessors have operated a sample preparation / assay laboratory for 29 years under contract.</li> <li>• QAQC procedures involve the use of certified reference material, lab duplicates, and lab standards.</li> </ul> <p><u>Sample preparation RC</u></p> <ol style="list-style-type: none"> <li>1. Samples checked off against submission sheet.</li> <li>2. Samples are then dried at 150 degrees until visibly dry.</li> <li>3. Entire sample is crushed. Crush size is under 5mm and approximately 500g is retained for pulverising.</li> <li>4. The 500 gram sample is pulverised to 90% passing 75 micron and put into a bag.</li> <li>5. <a href="#">From the bag a 30g aliquot is scooped out.</a></li> <li>6. <a href="#">The pulverised reject for all samples is recovered from the laboratory and retained by OGL for future reference.</a></li> </ol> <p><u>Sample preparation diamond</u></p> <ol style="list-style-type: none"> <li>1. Samples checked off against submission sheet.</li> <li>2. Samples are then dried at 150 degrees until visibly dry.</li> <li>3. Entire core pre-crushed using a crusher. Nominal top size is 30mm (in one dimension only).</li> <li>3. Entire sample is crushed. Crush size is under 5mm and approximately 500g is retained for pulverising.</li> <li>4. The 500 gram sample is pulverised to 90% passing 75 micron.</li> <li>5. <a href="#">From the bag a 30g aliquot is scooped out.</a></li> <li>6. <a href="#">The pulverised reject for all samples is recovered from the laboratory and retained by OGL for future reference. Additionally the coarse reject is collected from the laboratory and used on occasions used to make up metallurgical samples.</a></li> </ol>

Criteria	JORC Code explanation	Commentary
		<p>Metallurgical Samples</p> <ul style="list-style-type: none"> <li>Where sufficient core is available, generally &gt;15kgs and preferably &gt;30kgs of quarter cut core are selected. Due to the volume requirement this means a metallurgical sample may consist of material from multiple holes.</li> <li>Metallurgical sampling aims to be as geologically and spatially representative as possible.</li> <li>RC chips cannot be used at MGP for metallurgical sampling due to contamination with hammer oil which negatively impacts sulphide float test work.</li> </ul>
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>At MGP, OceanaGold and its predecessors have operated a sample preparation / assay laboratory for 29 years under contract.</li> </ul> <p>Assay 30g fires assays were completed using SGS's FAA505 scheme.</p> <ol style="list-style-type: none"> <li>30 gram of sample is weighed with 170 gram of lead flux and tumble mixed in a plastic pot.</li> <li>contents are transferred to a crucible and fusion of the gold in the sample with the lead in the flux occurs in a LPG fired blast furnace at 1,100 degrees C</li> <li>cupellation of the lead button to recover the gold prill then occurs in an LPG fired muffle furnace set at 950 degrees C</li> <li>the prills are recovered from the cupels, digested in plastic test tubes with aqua regia. Gold determinations by atomic absorption.</li> </ol> <p>The laboratory QA/QC is checked, and results released</p> <ul style="list-style-type: none"> <li>For RC holes one of 8 randomly selected Certified Reference Material (CRM) is inserted into every 20th sample for each hole.</li> <li>For Diamond drill holes one of 8 randomly selected CRM is added every 20th sample into the sample submission. Also blank basalt standards are inserted into each ore zone and a duplicate sample of ¼ cut core from each ore zone is added into the sample submission.</li> <li>On receipt of assays all the laboratory and OceanaGold's QA/QC information is loaded into the acQuire database. If all the CRMs are within 3 standard deviations the submission is loaded to the</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>database. If a single CRM is outside 3 standard deviation the submission is rejected and sent for re-assay.</p> <ul style="list-style-type: none"> <li>As part of the QA/QC process grade control and Frasers Underground use the same set of CRM's. This generates statistical mass which enables OGL to track monthly performance of all 8 CRM's and to identify and raise any QA/QC issues with the laboratory.</li> <li>OGL has not recently completed an external laboratory check.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Geological logging since 1995 was compiled digitally using Tough Books or equivalent at the drill site or the core shed. Prior to 1995 geological logging was onto paper logs that were then manually entered, checked and loaded into the geological database.</li> <li>Geological observation of mineralisation is generally well correlated with assay results.</li> <li>No adjustments have been made to the assay data received from the respective companies that have operated the Macraes site laboratory.</li> <li>Where wet sampled RC holes have been twinned by diamond core, the wet sampled RC holes have been removed from the resource estimate. For the remaining wet RC holes, grade-based correction factors derived from wet RC / diamond pairs have been applied. A significant proportion Most wet sampled RC drill holes have been mined out over the past 25 years. The remaining risk related to sample bias / resource estimation is considered relatively low.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All drill hole collars are surveyed by mine surveyors using MGP grid to an accuracy of +/- 0.15 metre</li> <li>Prior to 1994 RC drill holes were not downhole surveyed. Post 1994 and for RC holes deeper than 70m RC holes were surveyed every 50m to the end of hole with an Eastman single shot or multi shot camera. With the advent of digital down hole cameras holes since 2006 have been down hole surveyed at 25m or 30m intervals to end of hole.</li> <li>Diamond drill holes have always been down hole surveyed at 25m or 30m and at end of hole.</li> <li>Topographic control is by detailed aerial/drone surveys of the mine and prospect areas.</li> </ul>

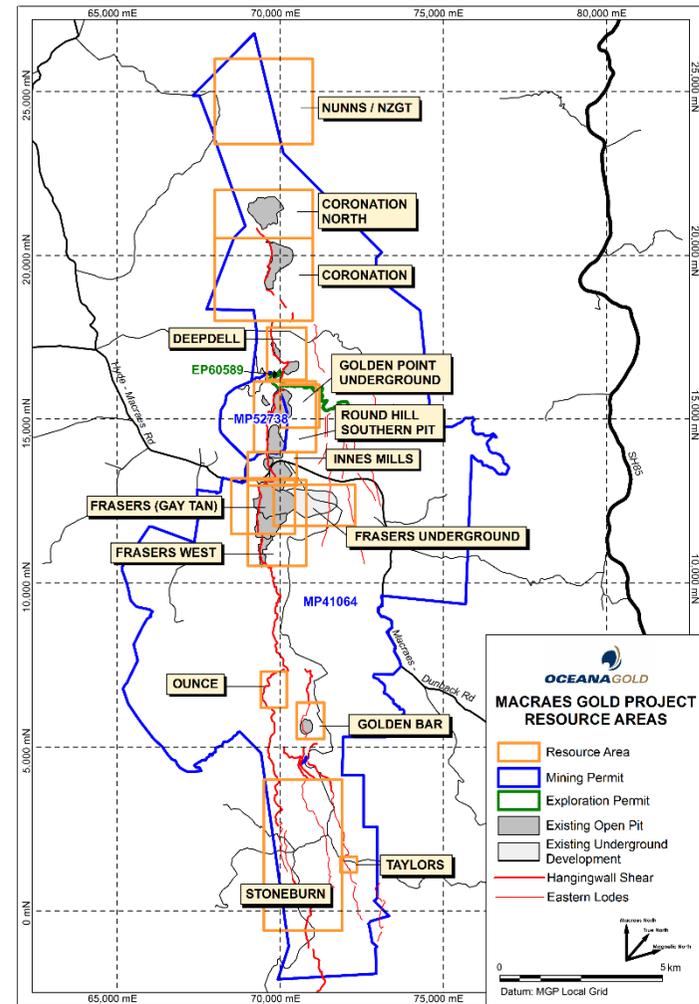
Criteria	JORC Code explanation	Commentary
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole spacing at the exploration stage is initially at 100m by 100m spacing. If drill holes intersect significant mineralisation the drill hole spacing is progressively reduced to limited infill to 25 x 25 metres. RC drill holes are sampled in 1 metre intervals. Diamond drill holes are generally sampled in 1 metre intervals unless hole geology dictates otherwise.</li> <li>• Average spacing of pierce points for Frasers Underground is 50 by 50 metre grid spacing and for the Golden Point Underground the average drill spacing is 25 x 25 metre spacing.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Surface drill holes are generally vertical to intersect a generally 15 to 25 degree dipping gold mineralised structure.</li> <li>• Whilst this direction is sub-optimal for steeply dipping quartz vein arrays, near-vertical reverse circulation and diamond drilling has been used as the basis for resource definition MGP since 1985.</li> <li>• At FRUG drill holes are typically drilled from exploration drives or rises, positioned 25 metres to 100 metres above the Hangingwall Shear. The holes fan out to achieve pierce point intersections at angles typically greater than 45 degrees relative to the mineralised structure.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sample bags are uniquely numbered and transported directly from the drill site or core shed to the on-site laboratory and are logged into the laboratory system on delivery.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RSC completed an audit of the MGP site laboratory in November 2014 and concluded that "the laboratory in general operates at an acceptable level of quality"</li> <li>• OceanaGold's sampling procedures conform to industry standard practice and resource to mine to mill reconciliation for over 25 years of mining supports this.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and</i>	<ul style="list-style-type: none"> <li>• <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties,</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Resources covered by this report fall in a number of permits as shown on Figure below.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>land tenure status</i>	<p><i>native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <ul style="list-style-type: none"> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>MP40 164 is a granted mining permit held 100% by OceanaGold (NZ) Ltd which expires on 31<sup>st</sup> January 2030.</li> <li>MP52 738 is a granted mining permit held 100% by OceanaGold (NZ) Ltd which expires on 31<sup>st</sup> October 2020. In May 2020 OceanaGold applied for a 20 extension of duration. OceanaGold is not aware of any reason as to why this should not be granted.</li> <li>EP60 589 is a granted exploration permit held 100% by OceanaGold (NZ) Ltd which expires on 13<sup>th</sup> July 2025.</li> <li>OceanaGold has a 29-year track record of obtaining and maintaining all the necessary consents and permits required to mine defined resources and reserves at MGP.</li> </ul>



Exploration done by other parties

- Acknowledgment and appraisal of exploration by other parties.

- Within permits listed above and shown on Figure above OceanaGold (NZ) Ltd and its predecessor companies has carried out most of the exploration.
- Prior to OceanaGold (NZ) Ltd and its predecessor companies

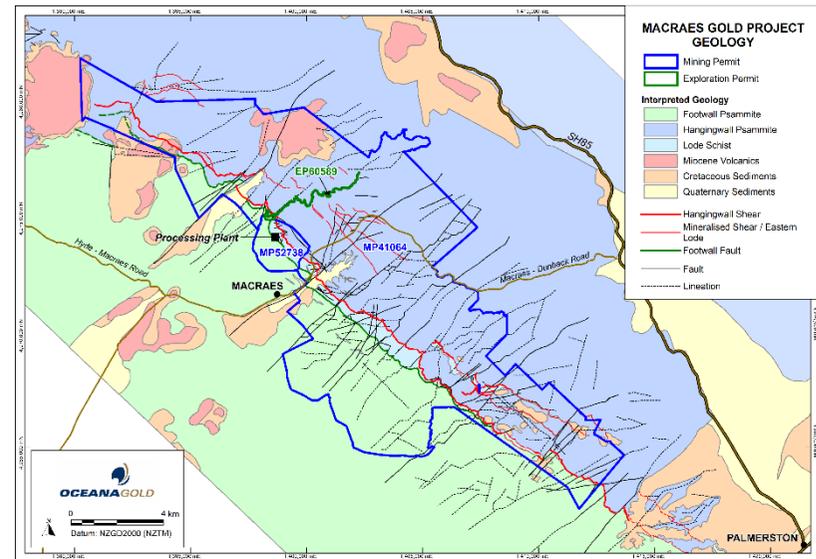
Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>exploration was carried out by Homestake, BHP Gold Mines Ltd, BP Minerals (NZ) Ltd and Kiwi Gold.</p> <p>The Macraes orogenic gold deposits are located within a low-angle (~15-20°) late metamorphic (Jurassic) shear zone, the Hyde Macraes Shear Zone (HMSZ), which has been traced for at least 30km along strike, see figure below. The HMSZ consists of variably altered, deformed, and mineralized schist up to 150m thick, known as the Intrashear Schist. The thickest part of the shear zone consists of several mineralized zones stacked on metre-thick shears. These shears have ductile deformation textures overprinted by cataclasis. The Hangingwall shear can be up to 25m thick and is commonly darker coloured due to fine grained graphite and sheared sulphide minerals.</p> <p>The following four types of mineralization occur within the HMSZ at Macraes.</p> <ul style="list-style-type: none"> <li>• Mineralized schist. This style of mineralization involved hydrothermal replacement of schist minerals with sulphides and microcrystalline quartz. Mineralization was accompanied by only minor deformation.</li> <li>• Black sheared schist. This type of schist is pervaded by cm to mm scale anastomosing fine graphite and sulphide bearing micro shears. This type of mineralization is typically proximal to the Hangingwall Shear. Scheelite mineralization occurs in the silicified cataclastic shears.</li> <li>• Shear-parallel quartz veins. These veins lie within and/or adjacent to the black sheared schist and have generally been deformed with the associated shears. The veins locally cross-cut the foliation in the host schist at low to moderate angles. Veins are mainly massive quartz, with some internal lamination and localized brecciation. Sulphide minerals are scattered through the quartz, aligned along laminae and stylolitic seams. These veins range from 1cm to &gt; 2m. Scheelite mineralization is associated with quartz veining in some areas.</li> <li>• Stockworks. These veins occur in localized swarms that are confined to the Intrashear Schist. Individual swarms range from c. 100 to 2000m<sup>2</sup> in area and consist of numerous (10 – 100)</li> </ul>

Criteria

JORC Code explanation

Commentary

subparallel veins. Most of these veins formed sub-perpendicular to the shallow east dipping shear fabric of the Intrashear Schist. Stockwork veins are typically traceable for 1-5m vertically with most filling fractures that are 5 – 10cm thick but can be up to 1m thick. Swarms of stockwork veins within the Intrashear Schist were lithologically controlled by the dimensions and locations of more competent pods of Intrashear Schist.



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:
  - easting and northing of the drill hole collar
  - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
  - dip and azimuth of the hole
  - down hole length and interception depth
  - hole length.
- If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does

- No exploration results are presented in this report.

Criteria	JORC Code explanation	Commentary
	<i>not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high grade results and longer 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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>No exploration results are presented in this report.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill holes are generally vertical to intersect a generally 15 to 25 degree dipping gold mineralised structure.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No exploration results are presented in this report.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No exploration results are presented in this report.</li> </ul>
<i>-Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>OceanaGold has been mining at the MGP for 29 years and in that time has mined and milled over 115Mt of ore. As a result, OceanaGold has significant in-house experience in mining what is a structurally complex, low grade and refractory ore body.</li> <li>As far as the Competent Person is aware there is no other substantive exploration data.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-</i></li> </ul>	<ul style="list-style-type: none"> <li>Infill and step out drilling of the Golden Point and Round Hill for gold and tungsten resources commenced in 2019 and will continue in</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>out drilling).</p> <ul style="list-style-type: none"> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<p>2020 to define both open pit and underground resources.</p> <ul style="list-style-type: none"> <li>Following completion of these drilling programs the resource estimate will be updated for both open pit and underground resources.</li> <li>In 2019 a pre-feasibility study on underground mining at Golden Point / Round Hill commenced and will be completed in 2020.</li> <li>The Frasers Slip resource was named Gay Tan in 2019 and mining commenced. In 2020 further drilling will be completed in 2020 and the resource estimate updated and re-optimised.</li> <li>Assaying by pXRF all locatable assay pulps in the Golden Point, Round Hill and Innes Mills areas for tungsten commenced in 2021 will continue.</li> <li>Metallurgical samples collected in late 2019 for both gold and tungsten for the Golden Point/Round Hill project will be processed.</li> <li>Compilation of a JORC compliant resource estimate for Tungsten.</li> <li>As project requirements evolve seeking necessary consents, agreements or permits required to sustain the operation.</li> </ul>

## Section 3 Estimation and Reporting of Mineral Resources

### Introduction

Exploration at Macraes began in the early 1980's for gold and tungsten and culminated in the definition of the Round Hill resource in 1985. The Macraes Gold Project (MGP) as it became known commenced operations in November 1990 and has been in continuous operation since that time. In that time ore has been sourced from Golden Bar, Golden Ridge, Frasers, Gay Tan, Frasers Underground, FRIM, Innes Mills, Southern Pit, Round Hill, North West pit, Golden Point, Deepdell South, Deepdell North, Coronation and Coronation North (pits in Macraes Grid south to north order). To date over 110Mt of ore has been mined and milled from these ore sources. Milling at MGP commenced in 1990 using a 1.0g/t mining cut-off and a milling rate of 1.5Mtpa. In 2019 MGP operated at a 0.4g/t mining cutoff milling 5.9Mtpa. The annual Life of Mine Plan (LoMP) was updated and based the increased gold price at the end of 2019 it was determined that it was economic to treat at the end of mine life ore to treat ore with a grade as low as of 0.3g/t. As a consequence, in January 2020 the mine cut-off was lowered to 0.3g/t and resources within 10km are reported at this cut-off. The MGP consists of 13 resource estimates spaced along 25km of strike and are spread across two mining permits MP52 738 and MP41 064 and one exploration permit EP40 524. The resource estimates covered by this Table 1 report are for Stoneburn, Taylors, Golden Bar, Ounce, Frasers Underground, Frasers West, Gay Tan, Innes Mills, Round Hill/Golden Point, Golden Point Underground, Deepdell, Coronation, Coronation North and Nunns-NZGT as shown on the Figure 1 and tabulated in Table 1 below. The majority of the resource estimates are large panel recoverable resource estimates compiled using GS3 software and have been in use since 2001. Taylors, Golden Bar, Frasers west, Gay Tan, Innes Mills, Round Hill/Golden Point,

Deepdell, Coronation and Coronation North are estimated using large panel recoverable resource estimates and these resource estimates cover all current open pit Life of Mine (LoM) production.

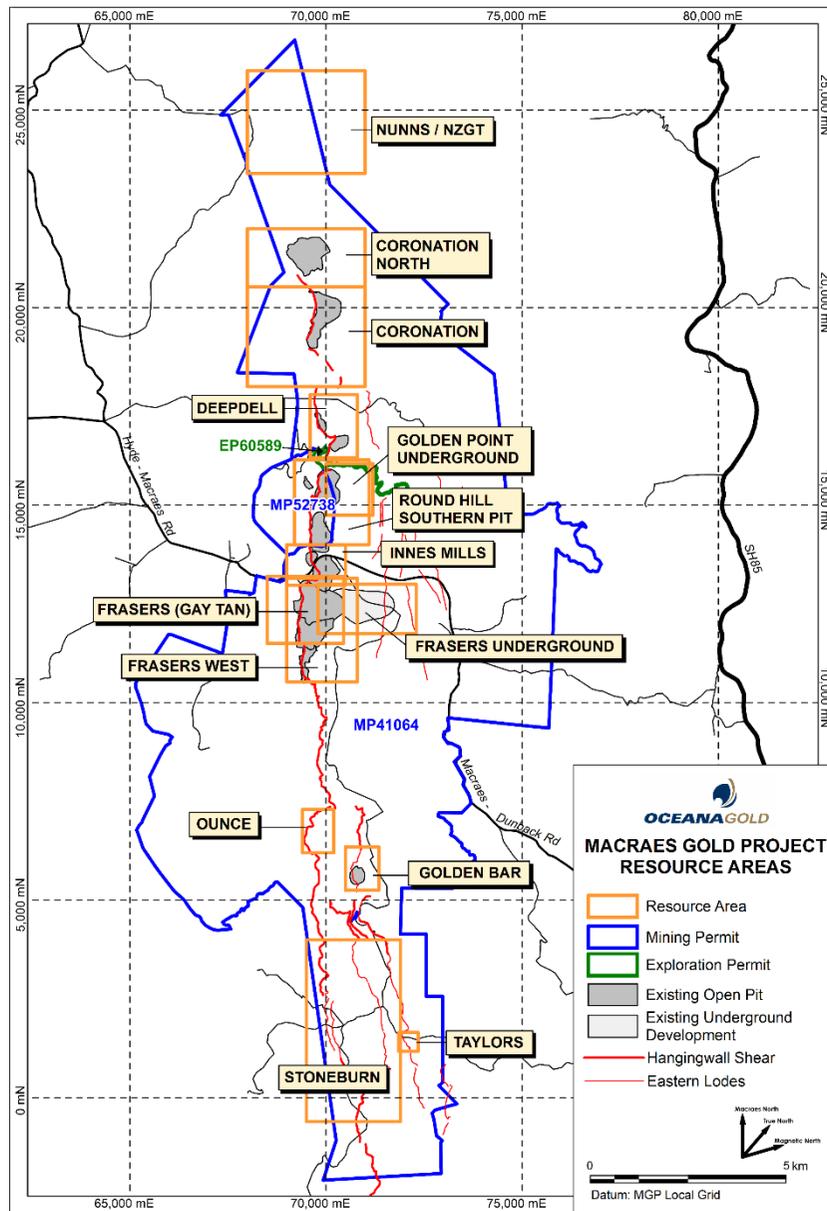
Stoneburn, Ounce and Nunns/NZGT inferred resources were estimated using ordinary kriging into large blocks. No portion of these resources has yet been converted to reserves.

The Frasers Underground and Golden Point Underground resource is estimated using ordinary kriging using *PANGEOS* software. A geological wireframe is interpreted, then unfolded in *PANGEOS* software. The resource is then estimated using ordinary kriging in the unfolded geological wireframe. The resource and the geological wireframe are then unfolded and the resource reported.

This Table 1 covers 13 separate resource estimates compiled using drilling data collected over a 35-year period, using a number of resource estimation methods. As a result this Table 1 should be considered a summary and will focus on the large panel recoverable resource estimates which form the basis of current and future open pit mining.

**Figure 1: Resource Estimate Locations at the Macraes Gold Project**

**Table 1: Macraes Gold Project Resources by Resource Area.**



**OCEANA GOLD LTD : RESOURCE STATEMENT AS AT 30 June 2020**

RESOURCE CUT OFF GRADE	RESOURCE AREA	MEASURED			INDICATED			MEASURED & INDICATED			INFERRED RESOURCE		
		Mt	Au g/t	Au Moz	Mt	Au g/t	Au Moz	Mt	Au g/t	Au Moz	Mt	Au g/t	Au Moz
0.4g/t	Nunns / NZGT	0.00	0.00	0.00	0.23	0.83	0.01	0.23	0.83	0.01	0.64	0.92	0.02
0.3g/t	Coronation North	1.30	1.26	0.05	4.32	0.75	0.10	5.61	0.87	0.16	2.82	0.65	0.06
0.3g/t	Coronation	0.00	0.00	0.00	2.43	1.06	0.08	2.43	1.06	0.08	1.67	0.74	0.04
0.3g/t	Deepdell	2.25	1.06	0.08	1.81	0.96	0.06	4.06	1.02	0.13	2.09	0.54	0.04
0.3g/t	Round Hill / Southern pit	8.72	1.25	0.35	44.23	0.82	1.16	52.95	0.89	1.51	11.62	0.65	0.24
Geologically Constrained 1.34g/t	Golden Point Underground	0.15	2.97	0.01	2.86	2.68	0.25	3.00	2.69	0.26	0.95	2.54	0.08
0.3g/t	Innes Mills	2.53	1.07	0.09	17.20	0.72	0.40	19.72	0.76	0.48	9.61	0.52	0.16
0.3g/t	Frasers West	2.47	1.04	0.08	8.21	0.70	0.19	10.68	0.78	0.27	3.76	0.56	0.07
0.3g/t	Gay Tan	2.98	0.57	0.05	10.81	0.54	0.19	13.79	0.55	0.24	1.04	0.65	0.02
Geologically Constrained -1.20g/t	Frasers Underground	1.48	2.90	0.14	1.71	2.16	0.12	3.18	2.50	0.26	0.32	2.14	0.02
0.4g/t	Ounce	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.75	0.02
0.4g/t	Golden Bar	0.09	1.54	0.00	1.21	1.35	0.05	1.30	1.37	0.06	4.31	1.33	0.18
0.4g/t	Stoneburn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.72	0.03
0.4g/t	Taylors	0.00	0.00	0.00	0.23	0.84	0.01	0.23	0.84	0.01	0.43	0.76	0.01
0.4g/t	Stockpiles	4.36	0.55	0.08	0.00	0.00	0.00	4.36	0.55	0.08	0.00	0.00	0.00
<b>MACRAES TOTAL</b>		<b>26.3</b>	<b>1.11</b>	<b>0.94</b>	<b>95.2</b>	<b>0.85</b>	<b>2.60</b>	<b>121.53</b>	<b>0.91</b>	<b>3.54</b>	<b>41.45</b>	<b>0.74</b>	<b>0.99</b>
<b>MGP Open Pit</b>		24.7	0.99	0.79	90.7	0.77	2.24	115.35	0.82	3.02	40.18	0.69	0.89
<b>MGP Underground</b>		1.6	2.91	0.15	4.6	2.48	0.36	6.18	2.60	0.52	1.27	2.43	0.10

Notes: Cut-off grades are based upon a gold price of NZD2,394/oz (US\$1,700/oz @ USD:NZD 0.71).

Open pit resources are reported within shells optimized using a gold price of NZD2,394/oz (US\$1,700/oz @ USD:NZD 0.71).

Mineral Resources reported include the Mineral Reserves reported for the same deposit.

There is no certainty that Mineral Resources that are not Mineral Reserves will be converted to Mineral Reserves.

No dilution is included in the reported figures and no adjustments have been allowed for mining recoveries or processing losses.

The tabulated resources are estimates of metal contained as troy ounces of gold.

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The Macraes Gold Project (MGP) commenced circa 1984 with Homestake (NZ) Exploration Ltd commencing the drill out of the Round Hill project. Drilling has continued on a semi continuous basis since 1984 over a 25km of strike length of the Hyde Macraes Shear Zone as shown in Figure 1. As a result, data collection has evolved from paper to electronic data methods.</li> <li>The pre 1994 drilling data has been checked and validated on a number of occasions and OGL has the original drill logs and in most cases the original assay reports.</li> <li>From 1996 drill hole data was captured electronically via Tough Books or equivalents and loaded into an electronic acQuire database.</li> <li>Assay data were/are loaded electronically from digital data files supplied by the on-site laboratory. No editing or factoring of the assay results during the database loading process. The data is checked and validated in 3D. On completion of validation drill hole data is locked to prevent any further editing.</li> <li>Copies of the electronic drill logs and assay files are also archived for future reference.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Mining commenced at MGP in Nov 1990 at Round Hill. Mining has continued continuously since that time. Over this period Sean Doyle has been employed at MGP between 1994 - 2006 &amp; 2008 to current and has an extensive knowledge of the MGP.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Given the high proportion of RC drilling, much of the interpretation is made via wire framing on the basis of gold grade and logged geology. These wireframes define discrete mineralised shears and are modelled with hard grade boundaries. Mineralisation below these shears is modelled as unconstrained "Stockwork" mineralisation.</li> <li>Wireframes are generally a minimum of 2m <math>\geq</math> 0.4g/t with 1m of external dilution. Internal dilution is generally a maximum of 2m to 3m <math>\leq</math> 0.4g/t. Wireframes are extended to a maximum of 25m past the end of any drilling.</li> <li>For Frasers &amp; Golden Point underground the geological wireframes are generally a minimum of 2m <math>\geq</math> 0.5g/t. Internal dilution is generally a maximum of 2m to 3m <math>\leq</math> 0.5g/t.</li> <li>Geological complexity remains a challenge at Macraes, particularly</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>for smaller subsidiary structures. However, experienced gained through 29 years of open pit and underground mining has greatly reduced the geological interpretation risk at MGP.</p> <ul style="list-style-type: none"> <li>Geological risk can be reduced by decreasing the drill spacing. At MGP most of the resources are based on 50 x 50m drill spacing, however most resources are drilled to 37.5 x 37.5m. In areas of geological uncertainty or where overly thick or high-grade intersections are intersected the drill spacing is reduced to 25 x 25m.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All the resources covered in this Table 1 are located along the 35 kilometre long Hyde Macraes Shear Zone.</li> <li>See Section 2; Geology for a description of the project geology and mineralisation styles.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the</i></li> </ul>	<ul style="list-style-type: none"> <li>Large panel recoverable open pit resource estimates via multiple indicator kriging (MIK) using FSSI proprietary GS3 software have been successfully used at MGP since 2001 and are considered appropriate for the style of mineralisation. The panels are 25mE x 25mN x 2.5mRL.</li> <li>The estimates for Coronation North, Coronation, Deepdell, Golden Point/Round Hill, Innes Mills, Frasers West, Gay Tan and Golden Bar open pits are Large panel recoverable resource estimates.</li> <li>Recoverable proportions and grades are estimated into panels for a number of cut-off grades. The panel dimensions approximate the nominal drill hole spacing. The mining selectivity is accommodated by defining SMU dimensions which are independent of the panel size.</li> <li>Wireframes define mineralised shears, largely defined on the basis of sectional interpretations of geology, gold grade and where available grade control data. Unconstrained domains are defined by exclusion.</li> <li>Search parameters for the wire framed mineralisation vary between the various resource estimates and are a function of mineralisation orientation and drilling spacing. As a general rule searches require a minimum of 16 samples and a maximum of 48 samples from a minimum of 4 octants with the search ellipse aligned along the trend of the mineralisation.</li> <li>Block support correction used the indirect log normal method for large panel recoverable resource estimates.</li> <li>The estimates for Frasers &amp; Golden Point Underground are E-Type</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>comparison of model data to drill hole data, and use of reconciliation data if available.</i></p>	<p>estimates using blocks sizes of 5mN x 5mE x 1mRL. Nunns/NZGT, Ounce, Taylors and Stoneburn are E-Type estimates using blocks sizes of 25mN x 25mE x 2.5mRL.</p> <ul style="list-style-type: none"> <li>• The maximum extrapolation distance of a drill hole assay is generally less than 75m.</li> <li>• Mining at Round Hill commenced in 1990 and subsequently moved north and south. Resource estimates are reconciled monthly for all production areas.</li> <li>• There are currently no economically significant by-products recovered at the MGP, however, there have been investigations on the economic viability of recovering Tungsten.</li> <li>• No deleterious or non-grade variables are currently estimated.</li> <li>• The resource estimate panel size is 25mE x 25mN x 2.5mRL Drill spacing at MGP ranges from limited 25m x 25m to 100m x 100m, however, the drill spacing is generally 37.5m x 37.5m or less. The panel size to drill spacing is considered appropriate.</li> <li>• The recoverable resource estimate assumes an SMU size of 5 mE x 10mN x 2.5mRL which approximates the minimum ore block size mined at the MGP.</li> <li>• Indicator thresholds and variograms are defined at 10, 20, 30, 40, 50, 60, 70, 75, 80, 85, 90, 95, 97.5, 99 percentiles for each domain.</li> <li>• Grades are not top capped; however, the class mean for the top indicator class is set between the class mean and median depending on the grade distribution.</li> <li>• The resource estimate was validated by comparing the average bench panel grade with the average of the bench composites on a domain by domain basis.</li> <li>• The resource estimate was validated in 3D.</li> <li>• Resource Estimate to mine to mill reconciliations are updated monthly to test the veracity of the estimates. Reconciled tonnages of 1 Mt or more are generally required before reconciliations are considered meaningful</li> <li>• In 2017 sulphur estimates based on 100m x 100m x 1m down hole sampling were estimated using ordinary kriging for Coronation &amp; Coronation North prospects. The estimates were required as the sulphate leachate threshold was lowered from a 1,000ppm to 400ppm in resource consents for the Coronation North prospect. The</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>estimates were used to model bulk waste, mineralised waste and ore sulphur contents to enable modelling of sulphate leaching in the new Coronation North waste rock stack. These estimates are not validated and are not currently being reconciled.</p>
Moisture	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tonnages in the resource estimate are estimated on a dry basis.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The resource estimate is reported at a 0.3g/t cut-off which the current is mining cut-off used at MGP. The Frasers Underground resource is reported using a combination of geological wireframes and a 1.20g/t cut-off and the Golden Point Underground resource is reported using a combination of geological wireframes and a 1.34g/t. The cut-off is applied to undiluted grades (cf underground reserves).</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The resource estimates at MGP are constrained to a NZ\$2,394 ounce per tonne optimised pit shell using on 2020 mining costs. Inferred Resources are included in the optimisation of the resource reporting shell.</li> <li>• Approximately 80% of the ore will be mined by open pit mining methods using the current mining fleet. The remaining 20% is anticipated to be mined by underground methods using the existing underground mining fleet.</li> <li>• Open cut mining is on 2.5m benches with grade control drilling on a 4m x 4.5m pattern drilling 7.5m deep holes sampled in 3 x 2.5m lengths. Ore is blasted in 7.5m lifts and waste in 15m lifts.</li> <li>• Underground mining commenced at MGP in 2006 and is by long hole open stope methods. It is anticipated that this mining method will continue for the foreseeable future.</li> <li>• The 2020 Life of Mine has all the ore mined being recovered from MP41 064 &amp; MP52-738. The location of the respective royalty areas is shown on the Figure below.</li> <li>• Mining permit MP41 064 is subject to two royalties, a royalty payable to the New Zealand government “Crown” and a private individual “Hopgood Royalty”</li> <li>• The “Crown” Royalty is to a maximum of 1% ad valorem, or 5% of accounting profits, whichever is greater which are payable to the Crown annually for gold, silver or any other recovered minerals.</li> </ul>

Criteria

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- A private royalty (payable to Owen Hopgood) of 5% of gross value (from open pit mining) or 3% of gross value (from underground mining) for gold, silver or any recovered mineral. The area of the royalty is shown in red on the diagram below.
- Mining permit MP52 738 is subject a royalty payable to the New Zealand government "Crown" The "Crown" Royalty is to a maximum of 2% ad valorem which are payable to the Crown annually for gold, silver or any other recovered minerals.



Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical test work on the 13 identified orebodies at MGP has been an ongoing and continuous process. This is a function of plant evolution and new orebodies being discovered.</li> <li>At the resource development stage, it is standard practice to select diamond drill core from selected representative holes and for metallurgical test work to be completed.</li> <li>The Macraes processing plant recoveries have ranged from 73% to 85% over the last 5 years with an average of 83%, and in H1 2020 averaging 79.9%</li> </ul>
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>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. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>OGL owns all the land required for current open pit and underground mining operations and the associated infrastructure. For the Nunns/NZGT and Stoneburn resource areas OGL does not own the land nor have access agreements, however, OGL is confident that access agreements with the right to purchase can be obtained.</li> <li>With the exception of Deepdell and Golden Point underground OGL has all of the necessary resource consents and permits to continue mining (mining = mining of ore and waste from open pits and underground, construction of waste rock stacks and tailings dam facilities) and has a 29 year track record of obtaining the necessary resource consents to allow mining to continue.</li> <li>OGL is in the process of obtaining the necessary resource consents for those areas for which it does not have consent and is confident that the necessary resource consents will be obtained.</li> <li>OGL has successfully operated for 29 years within the issued resource consent the conditions that are designed to protect the environment.</li> </ul>
Bulk density	<ul style="list-style-type: none"> <li>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.</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Over 667 SG measurements have been done on core from the respective resource areas at MGP.</li> <li>The tonnages are based on dry bulk densities that were determined in 1994/2005/2013 from the analysis of 667 drill core samples. From this work an SG of 2.50 is applied to oxide ore and waste and an SG of 2.65 is applied to sulphide ore and waste. Mining of over 115Mt of ore has shown these values to be appropriate.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>alteration zones within the deposit.</i></p> <ul style="list-style-type: none"> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• MGP is in an area of active uplift and therefore experienced high erosion rates. As a consequence, the weathering profile at MGP is typically 10m to 15m. The only exception to this has been at Coronation North where the orebody is covered by a combination of flow basalts, tuffs and sediments. This cover has protected the schist oxidized schist and as a result the weathering profile is 30 to 40m deep. By the end of 2019 all this material had been mined off the Coronation North orebody.</li> </ul>
<p><i>Classification</i></p>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (ie 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).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Macraes uses a three-tier classification methodology; geological domain, drill spacing, and probability of a panel exceeding the cut-off grade.</li> <li>• Once the geological domains have been assigned, classification is assigned via search parameters, which includes drill hole spacing, octants and minimum sample thresholds.</li> <li>• Measured if the panel meets the primary sample search distance, minimum octant, minimum sample criteria. If the panel's recoverable proportions above the cut-off grade are greater than 80% it is classified as Measured. If not, the panel is classified as Indicated.</li> <li>• Indicated if the panel meets the secondary sample search distance, minimum octant, the minimum sample criteria. If the panel's recoverable proportions above the cut-off grade are greater than 30% it remains Indicated. If not, the panel is classified as Inferred.</li> <li>• Inferred if the panel meets the secondary sample search distance, minimum octant, but only meets half the minimum sample number threshold.</li> <li>• The above classification protocol has been used at MGP since 2001 and is considered by the Competent Person to be appropriate for the deposit.</li> <li>• The resource estimates that are reported to a 0.3 g/t cut-off remain classified (via probability threshold) to the previous 0.4 g/t cut-off. The reclassification will be completed in 2020 and is expected to result in a small increase in Indicated Resources and an equal reduction in Inferred Resources for no change in total resources.</li> </ul>
<p><i>Audits or reviews</i></p>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A majority of the resource estimates have not been externally audited, although internal peer review is standard practice at</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>OceanaGold. The Round Hill and Golden Bar resource estimates have been audited by FSSI Consultants (Australia)</p> <ul style="list-style-type: none"> <li>All resources that are being mined are reconciled on a monthly basis in order to monitor resource estimate predictions. In 2019 all resource estimates for Measured + Indicated under called contained gold.</li> </ul>
<p><i>Discussion of relative accuracy/confidence</i></p>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>OGI has been using large panel recoverable resource estimation for resource estimates since 2001 and has long history of acceptable reconciliation. The method is considered appropriate by the competent person.</li> <li>The open pit and underground resource estimates are expected to provide acceptable outcomes for periods no less than 3 months</li> </ul>

## 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
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	<ul style="list-style-type: none"> <li><i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i></li> <li><i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource estimates used as a basis for conversion to Ore Reserves are described in Section 3 of Table 1.</li> <li>Mineral Resources are reported inclusive of the Ore Reserves.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person for Open Pit Ore Reserves is Pieter Doelman who is employed by OceanaGold Ltd as the Technical Services and Projects Manager, at the Macraes Gold Mine. Mr Doelman makes regular visits to the operating areas.</li> <li>The Competent Person for Underground Ore Reserves is Tom Cooney who is employed by OceanaGold Ltd as the General Manager of Studies, based in Brisbane. Mr Cooney has visited the Macraes site on several occasions, including during 2020.</li> </ul>
<i>Study status</i>	<ul style="list-style-type: none"> <li><i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Open pit mining and ore processing at Macraes has been in continuous operation since 1990. Life of Mine planning studies are undertaken annually to demonstrate the future economic viability of the mine.</li> <li>Underground mining and ore processing at Frasers Underground has been in continuous operation since 2006. Life of Mine planning studies are undertaken annually to demonstrate the future economic viability of the mine.</li> <li>A Pre-Feasibility level study has been completed for the Golden Point underground mine. This study includes a mine plan that is technically achievable and economically viable. Modifying Factors have been considered based on local geotechnical information and experience at the nearby Frasers underground mine.</li> <li>A mine plan has been developed which is technically achievable and economically viable for both the Macraes open pit, Frasers underground and Golden Point underground operations. All</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Modifying Factors have been considered.</p> <ul style="list-style-type: none"> <li>With the exception of Deepdell and Frasers West, OGL holds the necessary permits, consents, certificates, licenses, and agreements required to operate the open cuts and underground mine that form MGP. OGL is currently in the process of obtaining the necessary permits and consents to mine at Deepdell and Frasers West.</li> </ul>
<p><i>Cut-off parameters</i></p>	<ul style="list-style-type: none"> <li><i>The basis of the cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Cut –off grade is based on Ore Reserve metal price of NZD2,113 per ounce. USD1,500 and NZD:USD 0.71</li> <li>Inputs to the calculation of cut-off grades for Macraes open pits, Frasers underground and Golden Point underground include mining costs, metallurgical recoveries, treatment and refining costs, general and administrative costs, royalties and metal prices.</li> <li>The cut-off grade used to report Ore Reserves for the Macraes open pits is 0.4 g/t Au.</li> <li>The following cut-off grades have been used to determine the Frasers underground Ore Reserve: <ul style="list-style-type: none"> <li>If capital development is in place but ore drive development is required - 1.29 g/t Au,</li> <li>If ore drive development is in place ready for stoping - 1.21 g/t Au,</li> <li>If material is removed from the mine to the portal area – 0.5 g/t Au.</li> </ul> </li> <li>The following cut-off grades have been used to determine the Golden Point underground Ore Reserve: <ul style="list-style-type: none"> <li>If capital development is in place but ore drive development is required - 1.54 g/t Au,</li> <li>If ore drive development is in place ready for stoping - 1.42 g/t Au,</li> <li>If material is removed from the mine to the portal area –</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>0.5 g/t Au.</p> <ul style="list-style-type: none"> <li>•</li> </ul>
<p><i>Mining factors or assumptions</i></p>	<ul style="list-style-type: none"> <li>• <i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></li> <li>• <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li>• <i>The mining dilution factors used.</i></li> <li>• <i>The mining recovery factors used.</i></li> <li>• <i>Any minimum mining widths used.</i></li> <li>• <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> <li>• <i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<p><b>Macraes Open Pits</b></p> <ul style="list-style-type: none"> <li>• The resource models used to determine the 2020 Ore Reserve are: <ul style="list-style-type: none"> <li>○ Coronation North: <b>corn15.crn</b> (February 2020)</li> <li>○ Coronation: <b>cors15.dat</b> (August 2018)</li> <li>○ Deepdell: <b>dd1815.dat</b> (July 2018)</li> <li>○ Round Hill: <b>gp1915.dat</b> (Oct 2019)</li> <li>○ Innes Mills: <b>im1715.dat</b> (May 2019)</li> <li>○ Frasers West : <b>im1715.dat</b> (May 2019)</li> <li>○ Frasers Gay Tan: <b>fspu15.dat</b> (May 2020)</li> </ul> </li> <li>• Stockpile Reserves were taken from the end of June 2020 survey.</li> <li>• Pit optimisation methods were used to determine the subset of the Mineral Resources that could be converted to Ore Reserves. Whittle software was used to provide design basis pit shells but the Reserves are based on actual pit designs, inclusive of all berms/batters and pit access ramps.</li> <li>• Macraes Gold Project open pit is an owner mining operation and utilises conventional drill, blast, load and haul with standard 180t off highway rear dump trucks and a combination of 250 tonne and 360 tonne excavators. The selected mining method and design is appropriate for the Macraes open pits.</li> <li>• The open pit mining process at Macraes is determined largely by the land use consents granted to the Company. Waste is categorised into Topsoil, Brown rock, and general bulk waste. Topsoil and brown rock is stockpiled for later use during rehabilitation and general waste rock is dumped onto waste rock stacks. Waste is also used for construction of the Tailings Dams or for backfilling mined out pits.</li> <li>• Open cut mining is on 2.5m benches with grade control drilling on a 4m x 4.3m pattern drilling 7.5m deep holes sampled in 2.5m lengths. Ore is blasted in 7.5m lifts and waste in 15m lifts. Ore blocks are blocked out based on this sampling and consider the selective mining</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>capacities of the site equipment. Ore blocks are generally a minimum of 500t.</p> <ul style="list-style-type: none"> <li>• Geotechnical design parameters for the open pits are recommended by PSM consultants. PSM have been involved with the Macraes open pits for over 20 years. Open pit geotechnical conditions are primarily governed by geological structures rather than rock mass strength. Overall slope angles range between 37° and 54°, and are typically 43°.</li> <li>• The resource model provides recoverable resource estimates using panel dimensions (25mE x 25mN x 2.5mRL) that approximate the nominal drill hole spacing. The mining selectivity is accommodated by defining SMU dimensions which are independent of the panel size. No additional dilution is applied beyond that already built into the resource model and mining recovery is assumed 100%. These parameters are supported by resource model to mine to mill reconciliation results (that is, mined metal is typically close to or more than that modelled).</li> <li>• Pit optimisations for the Coronation, Deepdell, Round Hill, Innes Mills, Frasers Gay Tan and Frasers West deposits do not consider Inferred Resources and pit designs are developed on this basis. Inferred Resources that are mined within these pits are included in Life of Mine Plan. Only Measured and Indicated Resources within these designs have been reported as Ore Reserves.</li> <li>• Coronation North pit optimisations are completed assuming Inferred Resources have value and these are the basis of the pit designs. Only Measured and Indicated Resources within these designs have been reported as Ore Reserves. Optimisations that do not attribute value to Inferred Resources result in a smaller pit shell, where the primary reduction is down-plunge to the SE. The designed Coronation North pit has a positive economic value based on Ore Reserves alone. Due to the history at Coronation North of conversion of Inferred Resources and the performance of the resource model to date, this is not considered a material risk.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p data-bbox="1256 209 1514 236"><b>Frasers Underground</b></p> <p data-bbox="1256 261 1339 288"><u>Mining</u></p> <ul data-bbox="1301 314 2116 1430" style="list-style-type: none"> <li data-bbox="1301 314 2063 379">• The resource model used to determine the July 2020 Ore Reserve for Frasers Underground is <b>200415.dat</b> (April 2020).</li> <li data-bbox="1301 387 2078 453">• The Frasers Underground Mineral Resource was converted to an Ore Reserve through detailed design.</li> <li data-bbox="1301 461 2024 560">• Open Stope Retreat mining method was selected as the preferred mining method for ore extraction. In addition, sublevel caving is used to recover regional pillars.</li> <li data-bbox="1301 568 2107 815">• The Frasers Underground orebody encompasses the down dip continuation of the hangingwall shear mined in the Frasers open pit. The orebody is relatively shallow dipping (15° - 20°) to the east. The orebody is tabular with undulations and has a thickness varying between 5m - 30m. The Frasers Underground mine targets the high-grade ore zone at the top of the hangingwall shear.</li> <li data-bbox="1301 823 2116 1031">• The open stope retreat mining method used involves 15m wide open stopes with 6m yielding pillars between stopes. Mining areas are separated by 20m - 60m wide regional pillars. The mining areas are generally restricted to about 120m width and 160m length. Stope heights vary between minimum drive height (4.5m) and 25m.</li> <li data-bbox="1301 1038 2040 1104">• The minimum mining width used is 4.5m in longhole open stopes and 1m in narrow vein stopes.</li> <li data-bbox="1301 1112 2107 1251">• Access to the Frasers underground is via a decline which also serves as a fresh air intake. There is a single primary exhaust rise. An additional rise serves as an escapeway and as a fresh air intake. The portal is located in the east wall of Frasers pit.</li> <li data-bbox="1301 1259 2101 1430">• Frasers Underground mine designs are completed with the inclusion of Inferred Resources. Only Measured and Indicated Resources within these designs have been reported as Ore Reserves. The Frasers Underground mine has a positive economic value based on Ore Reserves alone.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p><u>Hydrogeology</u></p> <p>Hydrogeology has been investigated by Kingett Mitchell. The outcome was dry mining conditions expected with any ground water being slightly alkaline.</p> <p><u>Geotechnical Model</u></p> <p>The geotechnical design parameters are based off several reports written by K. Rosengren and Associates. The main stipulation is that stoping retreat shall wherever possible, be based upon a centre-out approach, whereby stoping panels are retreated towards solid abutments, and not internal regional pillars. Regional pillars range from 30m wide solid pillars to 60m wide access pillars.</p> <p><u>Mining Recovery and Dilution</u></p> <p>The assumptions for ore loss and dilution in stopes are as follows:</p> <ul style="list-style-type: none"> <li>• In situ recovery (fired material after under-break and hangingwall uncertainty) is 89.5% of design tonnage;</li> <li>• Dilution/enrichment is 19% of the design tonnes at an average grade of 0.75 g/t Au; and</li> <li>• In an open stope mined recovery is 92%. This is less than 100% due to ore being trapped behind large waste rocks that have fallen from the stope backs, ore that is unable to be bogged from the very corners of a blast and stope collapses. This gives a mined stope quantity of 98% of the design tonnes at 89% of the design grade.</li> <li>• In a cave stope the mined recovery is reduced to 75%. It is assumed that by the time 75% of the ore has been extracted, the grade at the draw point will be decreasing due to lower grade</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>material getting drawn in. This gives a mined stope quantity of 80% of the design tonnes at 89% of the design grade.</p> <ul style="list-style-type: none"> <li>Where regional pillars are being removed using an Open Stope Retreat method the mined recovery is reduced to 60%. This is to account for the anticipated reduction in stope stability and increased likelihood of rockfalls in stopes. This gives a mined stope quantity of 64% of the design tonnes at 89% of the design grade.</li> </ul> <p><b>Golden Point Underground</b></p> <p><u>Mining</u></p> <ul style="list-style-type: none"> <li>The resource model used to determine the July 2020 Ore Reserve for Golden Point Underground is <b>191015.dat</b> (November 2019).</li> <li>The Golden Point Underground Mineral Resource was converted to an Ore Reserve through detailed design and schedule.</li> <li>Blind Uphole Open Stope Retreat mining method was selected as the preferred mining method for ore extraction. This is due to ore body geometry (flat dip), the relatively high productivity and relatively low cost.</li> <li>The Golden Point Underground orebody encompasses the down dip continuation of the hangingwall shear mined in the Golden Point and Round Hill open pits. The orebody is relatively shallow dipping (15° - 20°) to the east. The majority of the orebody is tabular with undulations and has a thickness varying between 5m - 10m. In addition, some concordant lodes are present parallel to the main shear. The Golden Point Underground mine targets the higher-grade zone at the top of the main tabular orebody and within the concordant lodes.</li> <li>The open stope retreat mining method used involves 11m and 15m wide open stopes with 5m yielding pillars between stopes. Mining areas are separated by 25m - 60m wide regional pillars.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>The mining areas are generally restricted to hydraulic radius of 25m – 30m. Mine production targets the higher-grade zones within the mineralized zone. Stope heights vary between minimum drive height (4.5m) and 10m.</p> <ul style="list-style-type: none"> <li>• The minimum mining width used is 4.5m in longhole open stopes.</li> <li>• Access to the Golden Point Underground is via a decline from a portal located in the east wall of the Golden Point pit. The decline serves as the fresh air primary intake, with a single primary exhaust air drive, which exits through a portal in the east wall of the Golden Point pit. Secondary egress from the mine is via the primary exhaust drive.</li> <li>• Golden Point Underground life of mine plan was completed with the inclusion of Inferred Resources, with only Measured and Indicated Resources converted and reported as Ore Reserves. Inferred and Unclassified material was treated as dilution and totals less than 1% of the reported ounces.</li> </ul> <p><u>Hydrogeology</u></p> <p>Hydrogeology has been investigated by WGA Consultants. The prediction is a groundwater inflow of up to 22 L/s, twice that experienced at the nearby Frasers underground. Pumps and pump lines have been upsized accordingly in the Pre-Feasibility Study.</p> <p><u>Geotechnical Model</u></p> <p>The geotechnical design parameters are based off a report by OreTeck Mining Solutions completed in 2020. Stopes widths are reduced in areas of expected low RQD. Regional pillars of 25m to 60m width are maintained around the decline and between stoping panels. Stopping areas are retreated towards solid abutments to avoid internal regional pillars.</p>

Criteria	JORC Code explanation	Commentary
		<p data-bbox="1249 261 1603 290"><u>Mining Recovery and Dilution</u></p> <p data-bbox="1249 316 2029 379">Two stope widths are used in the design, 15m wide stopes where <math>RQD \geq 50</math> and 11m wide stopes where <math>RQD &lt; 50</math>.</p> <p data-bbox="1249 402 2007 466">The modifying factors described below have been derived from reconciliation and operating practices at FRUG.</p> <p data-bbox="1249 488 2074 587">The assumptions for ore loss and dilution in 15m wide stopes, deliver 98% of the designed tonnage and 89% of the design grade are as follows:</p> <ul data-bbox="1301 616 2116 1043" style="list-style-type: none"> <li data-bbox="1301 616 2116 679">• In situ recovery (fired material after under-break, hangingwall uncertainty and periodic reslots) is 89.5% of design tonnage;</li> <li data-bbox="1301 689 2116 753">• Dilution/enrichment is 19% of the design tonnes at an average grade of 0.75 g/t Au; and</li> <li data-bbox="1301 762 2116 858">• Mined recovery is 92% of the diluted tonnage to account for ore trapped behind large waste rocks that have fallen from the stope backs, ore that is unable to be bogged from stopes.</li> <li data-bbox="1301 868 2116 1043">• Where regional pillars are being extracted the mined recovery is reduced to 60%. This is to account for the anticipated reduction in stope stability and increased likelihood of rockfalls in stopes. This gives a mined stope quantity of 64% of the design tonnes at 89% of the design grade.</li> </ul> <p data-bbox="1249 1104 2116 1203">The assumptions for ore loss and dilution in 11m wide stopes, that delivers 100% of the designed tonnage and 85% of designed grade are as follows:</p> <ul data-bbox="1301 1232 2116 1366" style="list-style-type: none"> <li data-bbox="1301 1232 2116 1295">• In situ recovery (fired material after under-break, hangingwall uncertainty and rings lost at the brow) is 88% of design tonnage;</li> <li data-bbox="1301 1305 2116 1366">• Dilution/enrichment is 23.7% of the design tonnes at an average grade of 0.6 g/t Au; and</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Mined recovery is 92% of the diluted tonnage. This is less than 100% due to ore being trapped behind large waste rocks that have fallen from the stope backs, ore that is unable to be bogged from stopes.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li><i>Any assumptions or allowances made for deleterious elements.</i></li> <li><i>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.</i></li> <li><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <li>The metallurgical process at Macraes is well-tested and proven technology, having been in operation for 30 continuous years.</li> <li>Recovery of gold at the MGP is achieved through crushing, grinding, sulphide flotation, pressure oxidation (POX), carbon-in-leach (CIL), elution, electro-winning and gold smelting.</li> <li>The Processing Plant has the capacity to treat 5.9 million tonnes per annum of ore. Typically, the plant will preferentially treat all UG ore that is delivered and make up the rest of its capacity from open pit ore. This normally means a split of 0.9Mtpa UG and 5.0Mtpa open pit.</li> <li>Metallurgical test work on the 13 identified orebodies at MGP has been an ongoing and continuous process. At the exploration stage it is standard practice to select for testing diamond drill core from representative holes and for the various orebodies.</li> <li>The Macraes processing plant recoveries have ranged from 73% to 85% over the last 5 years with an average of 82%.</li> <li>Testwork on Golden point underground ore has confirmed metallurgical recoveries of 83.7%</li> <li>A metallurgical test programme is underway to test the recoveries of material below the current open pit cutoff grade. This may result in a lower cutoff grade in the future</li> </ul>
<i>Environmental</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Except for the Deepdell and Frasers West open pits and the Golden Point Underground, OGL holds the necessary permits, consents, certificates, licenses, and agreements required to operate the open cuts and underground mine that form MGP including the storage of waste rock. These consents are currently under application.</li> <li>Current consents and approvals for tailings storage are not in place for the entire Ore Reserve. The currently consented storage facility</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>at Top Tipperary is expected to be full in mid 2021. Design and approvals for an extension to this facility is currently underway. Work is underway to design and permit tailings storage capacity for the remainder of the mine life. Applications are expected to be submitted into the applicable local authorities by the end of 2020.</p> <ul style="list-style-type: none"> <li>• Environmental management and mitigation measures are maintained at MGP, including ongoing monitoring to ensure compliance with resource consent conditions. These consents are issued by the Otago Regional Council (“ORC”), the Waitaki District Council (“WDC”) and the Dunedin City Council (“DCC”). Tailings and waste rock disposal facilities are maintained and managed on an ongoing basis. Progressive rehabilitation is ongoing.</li> <li>• Environmental data has been collected over the last 29 years of MGP operations and baseline data was collected prior to the start of operations and reported in the original mining license application. Data is routinely collected for noise levels, blast vibration, air quality, and discharge water quality from various sources, ground settlement and ground water levels. Data collected in relation to hydrogeology, open pit and tailings storage facility, geotechnical engineering, geochemistry, closure and rehabilitation is peer reviewed on an annual basis by independent reviewers engaged by the Regional Council, District Council and central Government.</li> <li>• In obtaining and operating within the granted resource consents to mine and mitigate the environmental effects of mining for the Macraes Mine, the Company is deemed to have met the purpose and requirements of New Zealand’s Resource Management Act 1991 (“RMA”)</li> <li>• OGL is in partnership with Otago Fish and Game, a semi-government organisation, to manage a Trout Hatchery on the Macraes mine site. OGL has consents for the expansion of the Macraes Mine through to 2020. The closure strategy includes expenditure focussed on community projects with the establishment of a Macraes Community Trust</li> <li>• The 29 year operational history since attainment of commercial</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>production in 1990 has provided a good understanding of performance of the waste rock dumps and tailings storage facilities.</p>
<p><i>Infrastructure</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Macraes operation has been in commercial production since 1990 and all mine site infrastructure has been completed to support the open pit and Frasers underground operations including; tailings storage facility, workshops, water and power reticulation and ore processing facilities.</li> <li>• The power supply for the Golden Point underground will be delivered via a surface power line from the nearby processing plant.</li> <li>• Water supply for Golden Point underground will come from the Round Hill pit.</li> <li>• The Macraes operations are connected to the local power grid which supplies electrical power. The power line has adequate capacity to supply the mine at full operating limits.</li> <li>• Water supply has not been a significant problem in the history of the project.</li> <li>• OGL owns all the land required for current open pit and underground operations.</li> </ul>
<p><i>Costs</i></p>	<ul style="list-style-type: none"> <li>• <i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li>• <i>The methodology used to estimate operating costs.</i></li> <li>• <i>Allowances made for the content of deleterious elements.</i></li> <li>• <i>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</i></li> <li>• <i>The source of exchange rates used in the study.</i></li> <li>• <i>Derivation of transportation charges.</i></li> <li>• <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li> <li>• <i>The allowances made for royalties payable, both Government and private.</i></li> </ul>	<p><b>Macraes Open Pits</b></p> <ul style="list-style-type: none"> <li>• A detailed cost model provides the basis for the estimate of open pit operating costs. The cost model was developed using first principles derived from supplier quotations and current cost data. Other capital costs include the Property and Community programs, plant and administration sustaining capital. The model develops cash flows based on: <ul style="list-style-type: none"> <li>○ mining schedules, processing stockpiles and mine feed to process plant,</li> <li>○ application of driver and non-driver costs to mining, processing and G&amp;A,</li> <li>○ application of capital costs, closure costs,</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>exploration and employee severance costs, and</p> <ul style="list-style-type: none"> <li>○ calculation of cash flows including provision of royalties, working capital and depreciation and taxation.</li> </ul> <ul style="list-style-type: none"> <li>● Processing, freight, insurance and general and administrative costs have been developed using data sourced from recent operating activities.</li> <li>● The detailed cost model is in New Zealand currency. Pit optimisations and resultant designs are based on a gold price of US\$1,300/oz. Financial models to evaluate the Ore Reserves have used a long term gold price of US\$1,500/oz and an exchange rate of 0.71 NZ\$/US\$.</li> <li>● All open pits with the exception of Round Hill fall within the Macraes Mining Permit 41 604 (MP 41 604) area which is governed by the 1996 Minerals Program for Crown royalty purposes. The Macraes Mining Permit provides for the higher of one per cent royalty on net sales revenue from gold and silver, or five per cent royalty on accounting profits.</li> <li>● Round Hill pit partly lies within MP41 604 and partly within MP52 738. In addition, part of Round Hill is within the OW Hopgood royalty area.</li> <li>● With respect to gold and silver recovered from MP 52 738, a royalty of 2% ad valorem is payable to the reigning monarch of New Zealand or the Government acting on behalf of that monarch (the “Crown”) annually. A royalty in an amount that is yet to be fixed will also be payable in respect of any scheelite recovered from the permit area.</li> <li>● A royalty is payable to OW Hopgood on any gold, scheelite, or other minerals recovered from a specified project area in an amount equal to 5% of recovered minerals if recovered by open pit mining, and 3% of recovered minerals if recovered by underground mining. The area of the royalty is shown in green in the diagram below. MP boundaries are shown in red:</li> </ul>



#### **Frasers and Golden Point Underground Mines**

- Capital costs for the Frasers underground comprise mainly of capital mine development. Other capital costs include the property, plant and administration sustaining capital.
- Golden Point Underground capital costs include all pre-production capital equipment, portal and ventilation circuit establishment, some replacement mining equipment and capital mine development.
- A detailed cost model provides the basis for the estimate of

Criteria	JORC Code explanation	Commentary
		<p>underground operating costs. The cost model was developed from supplier quotations and current cost data. The model develops cash flows based on:</p> <ul style="list-style-type: none"> <li>○ mining schedules, processing stockpiles and mine feed to process plant,</li> <li>○ application of driver and non-driver costs to mining, processing and G&amp;A,</li> <li>○ application of capital costs, closure costs, exploration and employee severance costs, and</li> <li>○ calculation of cash flows including provision of royalties, working capital and depreciation and taxation</li> </ul> <ul style="list-style-type: none"> <li>● Processing, freight, insurance and general and administrative costs have been sourced from recent operating activities.</li> <li>● The detailed cost model is in New Zealand currency. The commodity assumptions used in the determination of Ore Reserves were US\$1,500 per ounce for gold. An exchange rate of 0.71 NZ\$/US\$ has been used.</li> <li>● Both underground mines fall within MP41 604 which has the same royalty regime for underground as open pit mining.</li> <li>● A small section of the Golden Point underground falls within the OW Hopgood royalty area. An amount equal to 3% of any gold, scheelite, or other minerals recovered from the area by underground mining methods is payable in addition to the MP 41 604 royalties.</li> <li>● A section of Golden Point underground sits under Deep Dell creek, within an exploration permit but outside the mining permit. Royalties in this area have been applied at the MP 41 604 rates, which is the higher of one per cent royalty on net sales revenue from gold and silver, or five per cent royalty on accounting profits.</li> </ul>

Criteria	JORC Code explanation	Commentary
Revenue factors	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>he derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Detailed mine designs were undertaken for both the open pit and underground operations. Diluted and recovered grades were calculated for all material being mined, which were in turn assessed against the relevant cut-off grades for determination of inclusion within the Ore Reserve estimate. Head grades for material sent to the process plant directly correspond to mined grades calculated.</li> <li>• Silver credits are not included in the revenue factors.</li> <li>• All costs at Macraes operation are based in New Zealand Dollars. Costs have been converted using the following exchange rates, which are long-term OGL benchmark rates: <ul style="list-style-type: none"> <li>○ USD 0.71 : NZD 1.00</li> </ul> </li> <li>• Charges for transportation, treatment and refining are based on operational history and in part based on existing contracts that are periodically reviewed and renewed.</li> <li>• Metal prices used for in economic evaluation were: <ul style="list-style-type: none"> <li>○ US\$1,500 per ounce for gold.</li> </ul> </li> </ul>
Market assessment	<ul style="list-style-type: none"> <li>• <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li>• <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li>• <i>Price and volume forecasts and the basis for these forecasts.</i></li> <li>• <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The market for gold doré is well-established and it is assumed that Macraes bullion will always be able to be sold into this market.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Open pit mining costs, underground mining costs, processing costs and general and administrative costs at Macraes open pit and Frasers underground are well understood, with a long history of continuous operation.</li> <li>• Sensitivity studies were carried out on various parameters including mining cost, processing cost, metal prices and discount rate. This data suggests that the NPV is robust.</li> </ul>
Social	<ul style="list-style-type: none"> <li>• <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></li> </ul>	<ul style="list-style-type: none"> <li>• OGL is committed to operating in a way that protects and supports social integrity, environmental biodiversity, and equitable development. The Company has maintained a greater focus on</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Corporate Social Responsibility through the implementation of specific and detailed Policies for Health and Safety, Environment, Communities and Human Rights</p> <ul style="list-style-type: none"> <li>• The 30 year operating history has proven that Macraes complies with all material statutory requirements applicable to its operations and is committed to rehabilitating the mine site during operations and on closure so the site does not pose any unacceptable risk to the environment</li> <li>• OGL is committed to develop an end of mine life land use that aims to leave a positive legacy.</li> </ul>
Other	<ul style="list-style-type: none"> <li>• <i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li> <li>• <i>Any identified material naturally occurring risks.</i></li> <li>• <i>The status of material legal agreements and marketing arrangements.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Procedures and costing are in place to deal with high rainfall events for the open pit operation, and will not impact on the viability of extracting the Ore Reserve.</li> <li>• Provision has been made in the underground study to account for anticipated water inflow, based on a hydrogeology study undertaken by WGA.</li> <li>• New Zealand has an established framework that is well regulated and monitored by a range of regulatory bodies. OGL has dedicated programs and personnel involved in monitoring consent compliance and works closely with authorities to promptly address additional requests for information. Risks associated with review and renewal of operating consents is, upon that basis, regarded as manageable within the ordinary course of business.</li> <li>• Contracts are in place covering transportation and refining of bullion, and the purchase and delivery of fuel, electricity supply, explosives and other commodities. These agreements conform to industry norms.</li> <li>• Macraes mine maintains several operating permits for the importation of reagents into New Zealand. New Zealand has an established framework that is well regulated and monitored by a range of regulatory bodies. Risk associated with renewal of importation permits is, upon that basis, regarded as manageable.</li> <li>• There are approximately 8,000 gold ounces in the Golden Point</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Underground Reserve, 4.3% of the total Golden Point Reserve, that are contingent on the granting of an additional Land Use Consent to permit mining beneath the Deepdell Creek . Technical work to support this consent application is well progressed and there is a reasonable prospect of gaining this consent.</p>
<p><i>Classification</i></p>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> <li>• <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Proved Ore Reserve is a sub-set of Measured Mineral Resources, and the Probable Ore Reserve is derived from Indicated Mineral Resources.</li> <li>• Inferred included in design is treated as dilution and total less than 1% of total ounces at FRUG and GPUG.</li> <li>• Underground dilution is included at a nominal 0.75 g/t Au and 0.6 g/t Au.</li> <li>• No Probable Ore Reserves have been derived from Measured Mineral Resources.</li> <li>• It is the opinion of the Competent Persons for Ore Reserve estimation that the Mineral Resource classification adequately represents the degree of confidence in the orebody.</li> </ul>
<p><i>Audits or reviews</i></p>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Ore Reserve estimates.</i></li> </ul>	<p>In 2018, OGL conducted an internal technical review for the Macraes 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 found that: (aspects relevant to the production of Ore Reserves):</p> <ul style="list-style-type: none"> <li>• The understanding of material flows in bottom lift 'cave' stopes may be inadequate to satisfactorily estimate the recovery of tonnes and grade;</li> <li>• The selection of ore samples for future metallurgical testwork should be made on drill hole intervals rather than as a blended composite.</li> </ul>
<p><i>Discussion of relative accuracy/ confidence</i></p>	<ul style="list-style-type: none"> <li>• <i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>• Reconciliation of actual production to the Mineral Resource model since the commencement of operations indicates that the estimate is representative of the deposit (see resource model versus mine versus mill reconciliation in "discussion of relative accuracy/</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p> <ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<p>confidence" in Section 3).</p>