

Before a joint hearing of the

Otago Regional Council and  
Waitaki District Council

RM 20.024

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of applications by Oceana Gold (New Zealand) Limited for  
resource consents for the Deepdell North Stage III Project

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**STATEMENT OF EVIDENCE OF MATTHEW HINE FOR OCEANA GOLD  
(NEW ZEALAND) LIMITED**

4 August 2020

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## QUALIFICATIONS AND EXPERIENCE

- 1 My name is Matthew Saul Hine.
- 2 I am General Manager and Site Senior Executive of Macraes Gold Operation (**Macraes Operation**), owned and operated by OceanaGold (New Zealand) Limited (**OceanaGold**). I am also an appointed Director on the Board of OceanaGold (New Zealand) Limited.
- 3 I am a mining professional with a Bachelor of Mining Engineering degree with first class honours from the University of Queensland, Australia. I am currently studying a Master's degree in Business Administration and Management externally through Central Queensland University. I am a certified First Class Mine Manager and Site Senior Executive. I have extensive mining experience working across 14 surface and underground mining operations throughout my career. Before joining OceanaGold at the Macraes Operation in 2018 I worked in Management roles with Evolution Mining and Glencore Xstrata throughout Australia. As General Manager of the Macraes Operation I am responsible for all aspects of the Macraes operations including the Deepdell North Stage III Project.

## SCOPE OF EVIDENCE

- 4 On behalf of OceanaGold I will provide background on OceanaGold and the Macraes Operation. I will provide an overview of the proposed expansion of mining operations called the Deepdell North Stage III Project (**Deepdell**) with the detail to be covered in the evidence of Gavin Lee. My involvement in Deepdell has been to oversee all teams evaluate its viability and benefits, and more recently the OceanaGold Environment and Community consenting team progress its consent. I will outline the consultation we have undertaken and the measures that we intend to use to avoid, remedy, mitigate and offset or compensate for potential adverse effects of the development.
- 5 My evidence will cover:
  - (a) Background to OceanaGold and a summary of the history of the Macraes Operation;

- (b) A description of the Deepdell project including the existing environment;
- (c) An outline of the alternative options considered during the development of the Deepdell project; and
- (d) OceanaGold's environmental and community commitments.

## **CONTEXT: BACKGROUND TO OCEANAGOLD AND HISTORY OF MACRAES OPERATION**

### **Overview**

- 6 OceanaGold is a wholly owned subsidiary of OceanaGold Corporation (**OGC**). OGC is a publicly listed company on the Australian and Toronto stock exchanges, and can be described as a mid-tier, multinational gold producer with a portfolio of high-quality assets located in the Philippines, the United States of America and New Zealand. OGC is internationally recognised as a responsible miner that is a leader in sustainability.
- 7 OceanaGold has a portfolio of exploring, development, operating and closing assets within New Zealand. We have operating gold mines at Macraes and Waihi and a closed mine on public conservation land in Reefton which is under rehabilitation. Although today OceanaGold has a global presence, it was the company's New Zealand assets the company was founded on, almost 30 years ago. Our mines employ over 900 people directly across Otago and the Bay of Plenty. Not only is the Macraes Operation the largest producing gold mine in New Zealand, contributing significantly to the local, regional and national economies, it is New Zealand's largest producer of gold and the most successful gold mine in New Zealand history.
- 8 The Macraes Operation is located about 30 kilometres to the northwest of Palmerston, in East Otago. The mining operation is located 1 to 2 km to the east of the Macraes village and is predominantly surrounded by farmland.
- 9 The Macraes Operation includes open pit mining - currently at Frasers, Coronation and Coronation North Pits - and underground mining at Frasers Underground (known as FRUG) which has been operating since 2006. Mining focuses on the Hyde-Macraes Shear Zone, a geological feature which extends about 35 kilometres through the Macraes site.

- 10 The Macraes Operation has been operating continuously since 1990 when a gold processing plant to treat ore mined from open pit methods was constructed and commissioned. Originally the processing plant capacity was 1.5 million tonnes of ore per annum but that was increased through a series of upgrades. The plant now processes nearly 6 million tonnes of ore per annum. Until March 2016 this included ore concentrate from OceanaGold's Reefton Mine.

|                               | 2020 Budget | Life of Mine To Date |
|-------------------------------|-------------|----------------------|
| Production (Oz)               | 140-150koz  | 5.1Moz               |
| Export Value (NZD)            | \$450M      | \$8,442M             |
| NZ Expenditure (NZD)          | \$310M      | \$5,943M             |
| Our Safety (TRIFR)            | 1.5         | +20                  |
| Our People (FTE)              | 595         | +3,000               |
| Our Community (Donations \$k) | \$250       | \$7,500              |
| Our Environment (Rehab/Bond)  | 18ha/\$47M  | 540ha                |

**Figure 1: Macraes Snapshot**

- 11 As Figure 1 shows, today annualised gold production from the Macraes Operation is around 140,000 – 150,000 ounces. In 2019 OceanaGold poured the five millionth ounce of gold from Macraes Operation
- 12 Macraes Operation currently provides about 595 FTE jobs for employees and about 140 FTE jobs for contractors, with a further 25 staff engaged in the Dunedin office. We pay about \$65M per annum in wages, with an average salary of \$100,000 or more (when the New Zealand average is \$55,000). Our PAYE is \$28,002 per person compared to the average in NZ of \$9,450 per person.

- 13 Less than 20% of our workforce holds a university degree, and we provide people an opportunity to advance their skills with on-the-job training and qualifications. Currently 14% of our workforce is female and we have an active diversity programme which aims to increase that to 20% by 2022.
- 14 We are enthusiastic about supporting local businesses. Dunedin and Oamaru are our main hubs, with Waikouaiti, Palmerston and surrounding townships also being supported by our operation. Our 2019 spend with contractors was \$290M with our contractors very supportive of our operation. Many contractors were established or gained significant scale as a result of the work they do for the Macraes Operation. One example is Skevingtons: the Managing Director began at Macraes as a drill offside in the mid 1990s and now operates a company that Macraes spends \$11M per annum with. I have attached a letter of support from the Skevingtons Managing Director as **Appendix A**, along with an e-mail from another site contractor, Site Weld NZ (attached as **Appendix C**). WAE is another: they began working on Mill relines at Macraes and now export their specialised services internationally. An economic study commissioned in 2016 identified that 88% of every \$1 spent at the Macraes Operation stays in New Zealand
- 15 Some other highlights in sustainability performance at the Macraes Operation include:
- (a) Safety: We have been able to create and maintain a safe and healthy working environment for all employees. In 2017, Macraes launched a behavioral-based safety programme which has played a significant role in reducing the number of injuries to employees and contractors. Between 2013 and June 2020 the total recordable injury frequency rate (TRIFR) has dropped from 14.15 to 1.5, making Macraes one of the safest workplaces in New Zealand.<sup>1 2</sup>
  - (b) Diversity: 2018 saw Macraes set a target to achieve 20% female representation in the workforce by 2022. A Women In Mining committee was established to better understand the barriers to women

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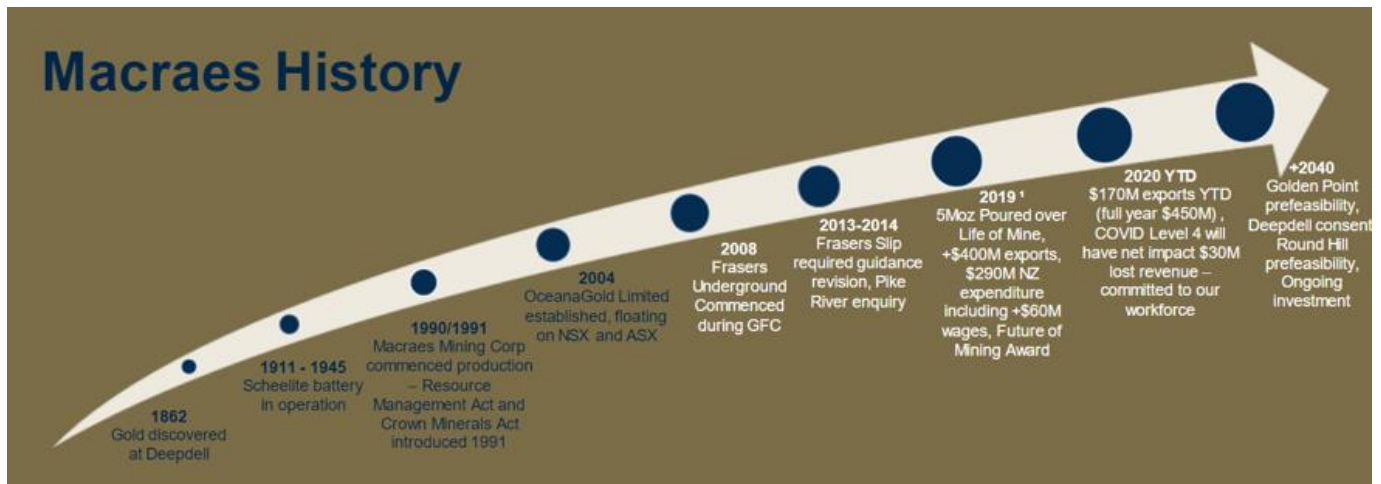
<sup>1</sup> Air New Zealand recorded a TRIFR of 10.3 in 2018: (<https://p-airnz.com/cms/assets/PDFs/2019-Sustainability-Report.pdf>).

<sup>2</sup> <http://www.zeroharm.org.nz/assets/docs/benchmarking/2015-Benchmarking-report-Published-May-2016.pdf>

entering the mining workforce and leadership roles within Macraes. In order to assist in removing those barriers in 2020 we began piloting a flexible work programme and are midway through implementing 'lunch roster' for the Open Pit operations to facilitate the (re)entry of mothers into the workforce.

- (c) Community: In the period between 2013 and 2019 total contributions towards community sponsorship and donations were \$1,834,329. The sponsorship program focuses on health, education, community resilience and conservation. This excludes a further \$1,558,393 payment made to the Macraes Community Development Trust in 2015 to support development of the Macraes Village beyond mining.
- (d) Partnerships: Macraes Mine has developed a number of important partnerships with local organisations, these include.
  - (i) Fish & Game in connection with the operations of the Macraes Trout Hatchery which provides over 10,000 rainbow trout fingerlings annually to DoC-approved reservoirs around Otago,
  - (ii) University of Otago in conducting research on aspects associated with the mine including biodiversity, social and geological research.
  - (iii) Macraes has recently signed a Protocol of Engagement with the tangata whenua in which Macraes mine operates.
- (e) Emergency Response Support: During 2018 and 2019 the Macraes Emergency Response Team responded to 16 emergency scenes as either the first responder in support to of other emergency teams.
- (f) Understanding of Macraes Ecological District: Over 50% of the specimen identifications of threatened species in Macraes Ecological District are a result of surveys conducted for the Macraes Operation.
- (g) Recognition: In 2019 We received awards for sulphate management as the New Zealand Minerals Forum and for biodiversity management at the Future of Mining Awards in Sydney.

## History of Macraes



**Figure 2: Macraes History**

- 16 As Figure 2 demonstrates mining has a rich history in Otago, commencing with a goldrush within 15 years of Dunedin being settled by colonial migrants. This led to a population growth from 4,000 to 60,000 within 12 months. Mining operations sustained WW1 and WW2 efforts.
- 17 Mining has evolved to meet societal expectations over time. Modern-day mining at Macraes began in 1990 and successive mine-life extensions have been canvassed in a series of public consenting processes that have each drawn on the growing body of experience to date. Today, the mine has a dedicated environment and community team of seven as well as access to company-wide environmental and social performance teams, an expert External Affairs and Social Performance (EA&SP) Advisory Panel and membership of the World Gold Council.

## Major Phases of the Macraes Operation

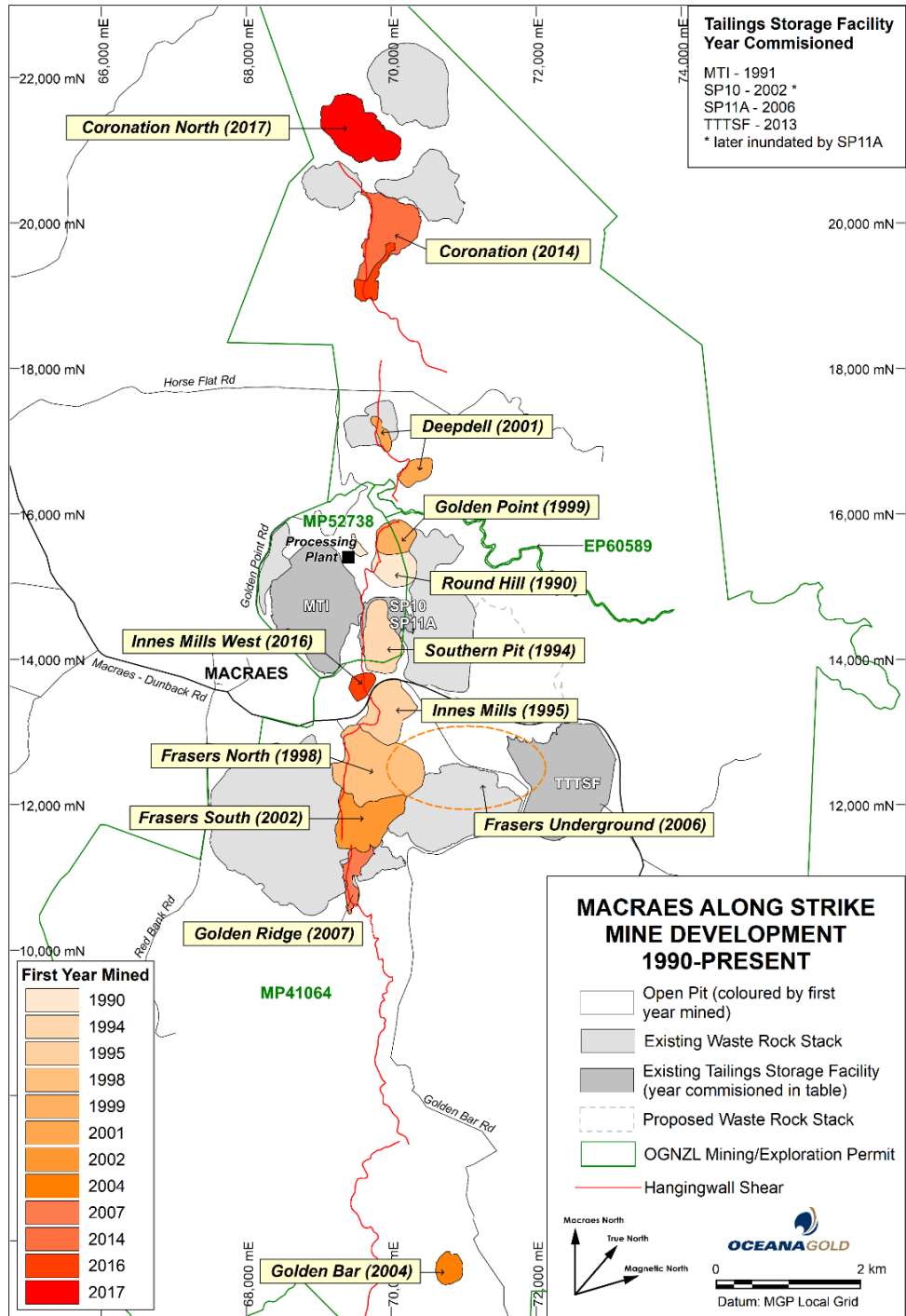


Figure 3: Macraes Along Strike Mine Development 1990 to Present

18 Figure 3 shows the progression of mining at Macraes over its 30 years of operations.



- 19 Phase I: In 1990 the Macraes operation was consented to allow the processing plant construction, the mining of Round Hill and Southern pits and the construction of associated structures including the earlier waste rock stacks, roads, tailings and water storage dams.
- 20 Phase II: In 1996 the Macraes operation was consented to allow the mining of Golden Point, Innes Mills and Frasers pits and associated waste rock stacks and increased tailings storage. This consent (LRC96/98) required mining operations to cease no later than 31 August 2012.
- 21 Phase III: In 2011 the Macraes Phase III (MPIII) consents were put in place to allow mining to continue beyond 2020. The suite of consents included provision for:
- (a) A new tailings storage facility called Top Tipperary Tailings Storage Facility (TTTSF) to be constructed in the upper Tipperary catchment basin to increase consented tailings storage capacity from 81 million tonnes (Mt) to 132Mt;
  - (b) Construction of new waste rock stacks and extensions of existing rock stacks to increase the total consented tonnage from 850Mt to 1,180Mt;
  - (c) Road realignments (Macraes-Dunback Road and a portion of Golden Bar Road);
  - (d) Expansion of existing open pits;
  - (e) Continuation of development of FRUG;
  - (f) A new freshwater storage dam in Camp Creek (a tributary of Deepdell Creek) that will fill from flood flows and be used to maintain a permanent residual flow in Deepdell Creek in dry periods so as to ensure water quality is maintained;
  - (g) Management of surface water from expanded mining infrastructure by diversions and new silt control dams;
  - (h) A revised community support closure strategy.
- 22 The majority of MPIII activities operate within the Waitaki District Council's Macraes Mining Zone. However, activities outside the Zone were also

authorised, for instance the Camp Creek dam and reservoir are located within the Rural Scenic Zone.

- 23 A slip in the Frasers Pit in 2014 suspended operations in that pit and with it the development of the pit and waste rock storage envisaged in the MPIII applications. However, the tailings storage capacity consented as part of the MPIII project continues to sustain operations at other parts of the Macraes site, including Coronation and Coronation North.
- 24 Phase IV: In 2013 OceanaGold consented the Coronation Project - a 62 hectare (ha) open pit, associated 94Mt waste rock stack covering 105ha, and other infrastructure (haul road, diversions, silt ponds and so on). Coronation pit and infrastructure straddles the local authority boundary between Waitaki and Dunedin City Districts. We obtained a land use consent from the Dunedin City Council (DCC) and Waitaki District Council (WDC) and various water and discharge permits from the Otago Regional Council (ORC).
- 25 OceanaGold was fortunate to have the Coronation consents in hand when, as noted above, a large slip in Frasers Pit in 2014 closed the pit and access to FRUG for a period. Operations at Coronation were brought forward in the mining schedule and, by virtue of this, potential workforce redundancies were avoided.
- 26 Phase V: In 2016/17 OceanaGold consented the Coronation North Project which added 3 years to mine life – an expansion of Coronation Pit from 62 ha to 85 ha; reduction in size of the Coronation Waste Rock Stack from 94Mt/105 ha to approximately 29Mt/41 ha; a new 63ha Coronation North Pit; a new Coronation North WRS at 280 Mt/230 ha with staged waste rock deposition in Areas A, B and C; potential construction of Coal Creek freshwater storage dam to supplement natural low flow periods and dilute sulphate within discharged mine water; two ecological covenants totaling 388 ha and a comprehensive package of ecological mitigation measures; and associated road realignments, extended haul road and infrastructure.
- 27 In 2019 we obtained consent to the Coronation North Extension Project which increased Coronation North Pit by 26 ha for ore recovery and 8 ha for pit stability; partially backfilled a completed part of Coronation North Pit to assist stability and reduce surface WRS footprint; enabled waste rock

deposition in Area A of Coronation North WRS and new Trimbells WRS covering an additional area of disturbance of 17.5ha and an associated surrender of 53ha of consented Coronation North WRS; and adjusted a road realignment.

### **Future Growth**

- 28 Macraes Mine and its employees and contractors have proven to be remarkably resilient over 30 years of continuous operations. In 2014 with the Gold Price half of what it current is today, Macraes was forced to temporarily scale back its operations to processing ore stockpiles only. Mining of ore and waste was suspended for about 9 months. At that time, we were able to see the effects the cessation of mining had albeit temporarily. About 140 employees were made redundant, with about 400 remaining, and many contractors had to scale back or diversify. The Otago Chamber of Commerce president, interviewed at the time of the decision to scale-back, said the jobs were a significant loss for the region: "From Dunedin's point of view and from a community point of view, a lot of those jobs are high paid, so the multiplier effect hitting those communities is going to be large." Without employment options in the area, he expected that many of the mine's skilled workers would leave and observed that this was happening already.<sup>2</sup> In the end, a number of the mine's larger contractors were forced to restructure their own businesses.
- 29 Fortunately, the mine was able to re-establish full operations within 9 months however, the experience confirmed the significant and lasting impact that an indefinite cessation of all mining at Macraes would have, with no obvious replacement for the lost jobs and contracts. The ability of those employees and contractors to continue to thrive within their local communities is closely linked to the continuation of future open cast and underground mining at the Macraes Operation.
- 30 The company is not complacent about its continued ability to operate at Macraes. As society's expectations around mining continue to evolve so does Macraes ability to manage its impacts. The site is classed as a world

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<sup>2</sup> Stuff, *Macraes Mine job losses top 140*, Tess McClure, Jan 21 2014.

class gold discovery, one of just a handful of equivalent scale ever discovered in NZ, and has known resources that suggest the mine could continue to operate for decades to come. We have a wealth of knowledge and experience at the site and the commitment of our group management and shareholders (including Blackrock, our single largest shareholder) to maintaining high standards of corporate social responsibility and sustainability.<sup>3</sup> Our long-term focus is heavily “brownfields” (that is, centred on returning to previously disturbed parts of the mine site), with Deepdell (at about one quarter re-mining) signalling the start of that new phase. With the continuation of open pit mining, underground opportunities (with fewer impact, than surface environments) remain viable, and the site begins to offer long-term benefits for the environment and community stretching out towards 2035 and beyond. Deepdell is an important keystone in realising that opportunity.

### **Brownfields Mining**

- 31 While the Macraes district is highly prospective, before an open pit or underground mine can be established there is an intense and prolonged period of capital investment and review that the company undertakes. Exploration activities such as aerial surveys that map topographical features, surface-based soil and rock sampling, and progressive exploration drilling campaigns are required after which point collected material can be assayed for mineral content. This information is then used to construct detailed geological modelling, which represents the size and endowment of the resource. Engineering work then occurs to identify whether the resource can be safely and economically extracted while simultaneously minimizing and where possible avoiding environmental impacts. The process of exploring for, modelling, designing and approving each new pit or underground mine takes place over decades and throughout the life of the mine as more information becomes available or market conditions change.
- 32 Macraes has an active exploration programme to identify and define further gold resources that can be developed as part of the Macraes Operation. As demonstrated in Figure 3, mining at Macraes over the years has generally

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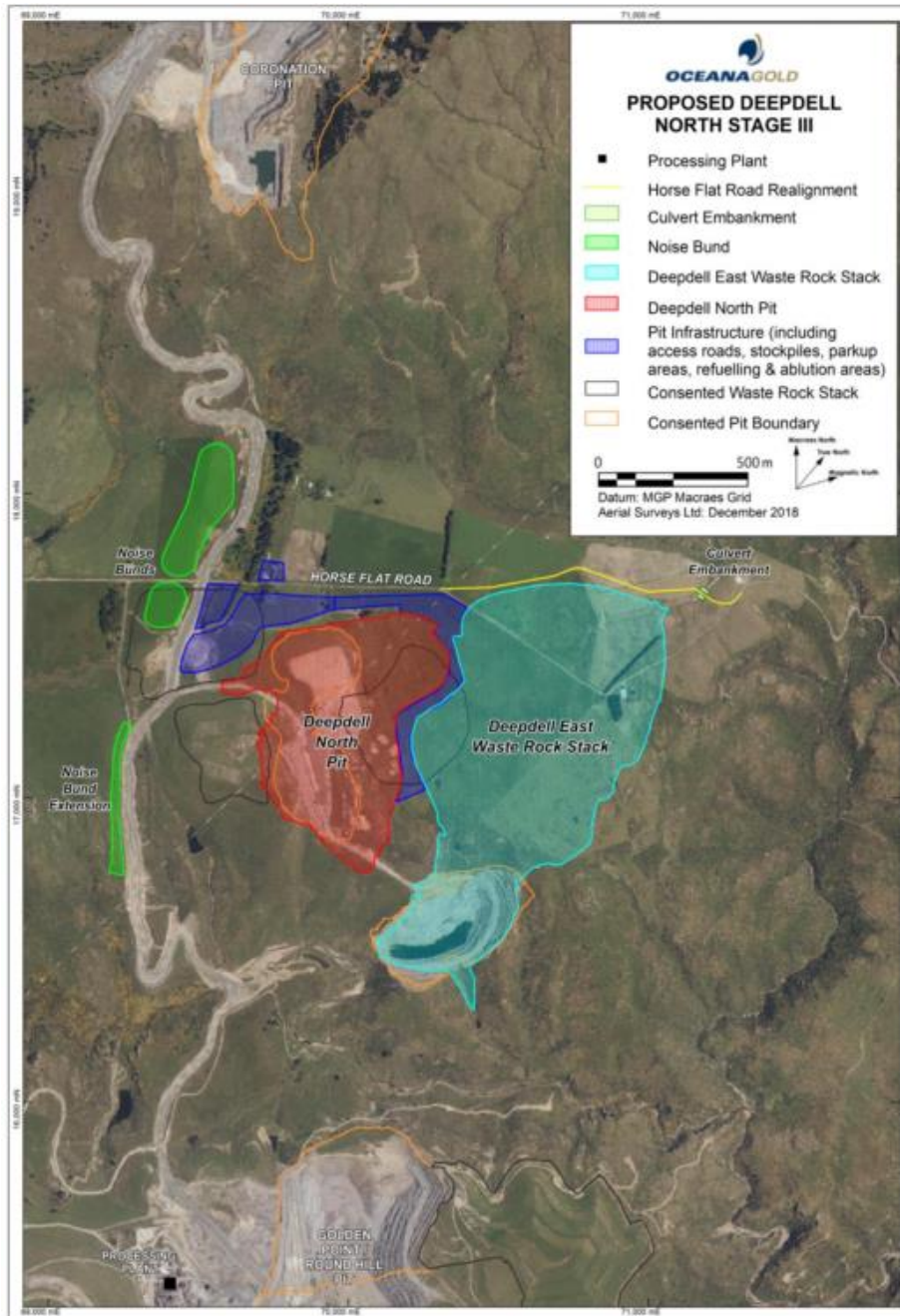
<sup>3</sup> <https://www.blackrock.com/corporate/sustainability>

occurred within 10km along strike from the processing plant. The current rising gold price makes it economic to re-assess brownfields sites within this range and return to areas that have been disturbed by previous mining activity. These areas are currently confined to OceanaGold owned land.

- 33 Macraes have a suite of potential projects with the Deepdell project by far the most advanced. The consenting of Deepdell is critical in supplying the base feed necessary to sustain existing operations for the next few years, by which point other projects (collectively named the “Round Hill” project) will have been technically assessed and where internally approved ready to consent. Without the consenting of Deepdell, not only will these projects be unable to be sufficiently evaluated to realize benefits for all stakeholders, but the operation would not be able to sustain its current levels of activity. The short-term viability of the entire Macraes operation would require review.

#### **OVERVIEW OF DEEPDELL NORTH STAGE III PROJECT**

- 34 Figure 4 (reproduced Figure 2 from the AEE) shows the key Deepdell Project elements:



**Figure 4: Deepdell North Stage III Project Elements**

35 The Deepdell Project includes:

- (a) The Deepdell North Stage III Pit – which involves re-mining the Deepdell North Pit and expanding it from 18.7ha to 38ha. On closure a pit lake will form;
- (b) The Deepdell East WRS – backfilling the existing Deepdell South Pit and approximately re-establishing the original ground contours but

raising the ground profile to the north, with a footprint of 70.6ha and a storage capacity of 59.5Mt;

- (c) Establishment of noise bunds towards the north-west of the site to mitigate potential noise effects on the Howards in their nearby residence;
- (d) Realignment of about 900m of Horse Flat Road where the WRS crosses the current road, including a culverted vehicle crossing in an unnamed tributary of Highlay Creek;
- (e) All water from the Deepdell Project will report to the catchment of Deepdell Creek, a tributary of the Waihemo (Shag) River.

36 Access will be via the existing Coronation and Deepdell South haul roads, and the project will use the existing consented Process Plant and Tailings storage facility. The current mining rate, mining methods, and measures to manage environmental effects will continue to be the same or similar to those used for existing and consented activities at the Macraes Operation. Like our other projects the Deepdell project will be progressively rehabilitated and once the haul road is no longer required it will be rehabilitated in part (Deepdell South) and in part (Coronation) dedicated as public road in accordance with commitments previously made under the Coronation suite of consents.

37 The Project is expected to take about 3 years to complete, plus rehabilitation.

### **Existing Environment**

38 The existing environment of the Deepdell project has already been widely impacted and modified by past farming and mining activity. Although you will hear a lot about the ecological values of the project site during this hearing, please bear in mind that it is not a pristine or uninfluenced natural environment.

### **ALTERNATIVE OPTIONS**

39 Our goal is to produce superior results that leave a positive legacy every day. What this means in practice is that for every project that we progress to a consent hearing, a large number of projects are raised, assessed and

discarded, primarily because we have not been able to meet our own internal expectations around their economic, social or environment return.

- 40 We aim to get it right and we think that generally we do. It's not always a fast process to get a project to the point where we will offer it up for consenting. The Deepdell project has been carefully planned using a consultative and adaptive process that started back in 2018. We have put a lot of energy into engaging early and seeking input from a range of our stakeholders – anyone who we felt would have an interest in the project. This has continued right up to this hearing.
- 41 Alternative options were considered in the development of the Deepdell project for possible locations of the WRS. Gavin Lee will provide more detail in his evidence, but in summary the comprehensive process undertaken led to a location that allowed the opportunity for back filling of Deepdell South Pit and the efficient disposal of waste rock on relatively flat area, with reduced noise disturbance and lesser effects on terrestrial, aquatic and heritage values than other options assessed.

## **ROADING**

- 42 Since its earliest days, the Macraes Operation has targeted a broadly continuous line of strike known as the Hyde-Macraes Shear Zone (the "HMSZ"). As its name suggests, the HMSZ runs North-West to South-East between Hyde and Palmerston. It is bisected by the Macraes-Dunback Road and, spanning approximately 30 kilometres, crosses a number of other formed and unformed roads. Consequently, roading is an area where some impacts from mining are unavoidable.
- 43 We have a number of places around the Macraes Operation where development has required roads to be moved. The best example is the Macraes-Dunback road which has been realigned several times over the years, including at present, to allow mining to take place while still ensuring public traffic is able to move freely. These roading changes are always done in conjunction with traffic engineers within the Council, and are subject to all the necessary statutory approvals.



## ENVIRONMENTAL COMMITMENT

- 44 OceanaGold operates the Macraes Operation within the framework of our Group Environment Policy. A copy of this policy is attached in Appendix B. In all our operations in New Zealand and globally we strive to make an overall positive contribution to the environment. We avoid, remedy and mitigate adverse effects and where there are residual effects, we aim to address them with either appropriate offsets or compensation. We operate as efficiently as we can to maximise benefits and reduce wastage and unnecessary costs (both financial and environmental). We are committed to continually improving our environmental performance.
- 45 Over 30 years of operations at Macraes OceanaGold has demonstrated it is able to operate a large mine in a way which respects the environment within which we operate. While the nature of mining means that some adverse effects cannot be avoided, and there must inevitably be changes to things such as landscape, biodiversity, and end-of-mine land use, these sorts of effects are always taken seriously, and appropriate mitigation, rehabilitation, offset and compensation practices are used to ensure that overall the concept of sustainable management is promoted.
- 46 To the extent that we can, we seek to internalise the effects that mining has. By that I mean that we tend to own the land upon which major mine-related activities like the Deepdell project occur, and we own the surrounding land thereby creating an effective buffer between our active mining activities and our neighbours. This works well and means that we have very few issues with effects such as noise, vibration from blasting, dust, lighting and so on.
- 47 However, there are some effects that cannot be fully internalised. For example, some aspects of the mine are clearly visible from adjacent properties or public roads, and sometimes it is necessary to temporarily or permanently close and relocate roads where the road alignment coincides with the necessary location of a pit or other infrastructure. When this happens, we are required to ensure the adverse effects on people are appropriately managed.
- 48 By their very nature mineral resources are fixed in location. The location of gold is fixed by geological processes over which we have no control and if

we want to access and use those resources we can only do so in the places where they exist. As a consequence, the effects that mining has on other values that co-locate with the mineral resource are often unavoidable. While they can be and are mitigated, minimised and compensated, they cannot be avoided entirely. To put it another way, if adverse effects are not able to be mitigated, minimised and compensated, and have to be avoided, the result will be that the development of the mineral and the benefits that come that that will be foregone.

- 49 For example, open pit mining and associated waste rock stacks have inevitable and unavoidable impacts on the habitats, plants and animals that occupy the areas to be disturbed. The only way to avoid those impacts is not to mine in the first place, and then of course the consequence is that the substantial net benefits of mining are not realised.
- 50 We ensure that the modified landscapes created by the pits and waste rock stacks are shaped and contoured to fit into the surrounding landscapes. We do this in consultation with landscape experts and have achieved excellent results over time.
- 51 Our approach to biodiversity has gained rigour over time. Our most recent project – Coronation North – involved development of a major and comprehensive suite of measures to address several residual impacts on biodiversity values. Through careful planning, and with the assistance and support of key stakeholders in the form of the Department of Conservation and Waitaki District Council ecological advisors, we have implemented measures that will ensure that biodiversity values are maintained and improved in the wider area, and knowledge of how to manage biodiversity in the Macraes environment is increased through research and adaptive management. Through central government’s consultation on the proposed National Policy Statement for Indigenous Biodiversity we have been encouraged to be told that the company’s work is a good example of how biodiversity effects can be appropriately managed through the RMA consenting process.
- 52 For Deepdell we have gone even further, to the point where the proposal for managing and mitigating the impacts of Deepdell on native wildlife and

habitats has been prepared with the help of a specialist in biodiversity off-setting. While the nature of the mitigation, off-setting and compensation for residual effects that we are able to offer varies with the knowledge that exists for the different species, our aim is to deliver no net loss (and preferably a net gain) for biodiversity overall. While inevitably there are some unavoidable residual effects for which indirect, non-site-based off-setting and compensatory measures will be required, we have sought to achieve balance overall for ecological effects on a stand-alone basis and to avoid the notion of “trading off” ecological impacts for non-ecological benefits (such as jobs).

## **CARBON EMISSIONS**

- 53 I am advised that the relevance of the potential project impact of carbon emissions on the environment is legally complicated. However, to the extent it may be considered relevant, I am able to offer some context for the decision-makers around emissions at Macraes.
- 54 Hard-rock gold mining produces Scope 1, 2 and 3 carbon emissions. Two key parts of the process produce the vast bulk of the total emissions. Scope 1 emissions (diesel usage) are principally the result of the heavy diesel trucks and ancillary fleet used for the operations involved in moving and transporting rock and excavating and transporting the ore to the processing plant. Scope 2 emissions (electricity usage) result from operating underground mining machinery and other fixed and mobile plant, while Scope 3 emissions are negligible with the gold industry one of the lowest Scope 3 emitters globally (99.9% of gold produced stays within circulation). By far the largest proportion of energy expelled throughout the process is in Scope 2 whereby renewable electricity powers the processing plant (CMD of 18MW) that crushes and then grinds the ore as the first step in liberating the gold and silver in the host-rock. This electricity is solely sourced from New Zealand’s hydro-electric schemes, making Macraes one of highest renewable energy driven gold mines in the world.
- 55 Hard-rock gold mining does not produce “fugitive” emissions from the rock itself and emissions produced from chemical processes (such as the use of lime as a reagent) are so minor as to be below the reporting threshold under NZ’s emissions reporting regulations.

- 56 OceanaGold is not a participant in the New Zealand Emissions Trading Scheme. However, we have a strong interest in New Zealand's developing climate change policy. We support a just transition to a net zero carbon New Zealand by 2050, to the point OceanaGold is one of the few mining companies that has a Statement of Position – Climate Change Energy Use and Greenhouse Gas Emissions.
- 57 Relative to the value of the gold produced, the combined open pit and underground operations at Macraes and Waihi are comparable in their emissions intensity to manufacturing generally in New Zealand. Compared to other mineral production such as coal or steel, gold mining is not emissions-intensive on a value produced basis.
- 58 Under NZ regulations, OceanaGold's operations are not classified as Emissions Intensive Trade Exposed (“EITE”), and therefore do not qualify for industrial allocations. Relative to the EITE threshold of 800 whole tonnes per \$1 million of revenue from production, OceanaGold produces around 190 whole tonnes CO<sub>2</sub>-e per \$1 million in revenue or 560 tonnes CO<sub>2</sub>-e per \$1 million in value added. A 2010 study estimated the overall New Zealand Manufacturing Industry generated an average 506 Tonnes CO<sub>2</sub>-e per \$1m value added.
- 59 OceanaGold's gross (Scope 1 and 2) emissions sit at about 100,000 CO<sub>2</sub>-e annually. This puts the current "cost" of emissions to the business at close / up to about \$2.5 million per annum.

## **MITIGATION**

- 60 As is described in the evidence of others who will present to the Panel, a significant number of mitigation actions are going to be undertaken to ensure that the overall effects of the mining of Deepdell are acceptable. Those actions will take place right across the range of expected or potential effects including water quality, biodiversity, protection of amenity, and landscape.
- 61 I would like to highlight that for this Consent, we have, for the first time, proposed a formal biodiversity offset. I understand that this is the first time a biodiversity offset is being proposed in the Otago Region. There has been a

significant amount of work put into preparing this proposal to ensure that it will lead to a positive ecological outcome.

- 62 I want to assure the Panel that OceanaGold will place a high priority on ensuring that all the actions that are required under the proposed Deepdell consents will in fact be undertaken, and will be done to a high standard. Performance against environmental requirements is a key matter that is required to be reported on regularly. In turn, I am required by the company's corporate standards and reporting requirements to ensure that I demonstrate to the company's senior management and Board that the Macraes Operation is performing to a high environmental standard.
- 63 We regularly do internal consent compliance checks; consent obligations are budgeted for and financial provision made in each operating budget; we maintain close contact with the local community and with compliance staff at the respective councils; and consent-related and closure actions are provided for in our financial bonds which are independently calculated annually.
- 64 I am confident that OceanaGold will do what it says it is going to do to ensure that the effects of the Deepdell project are acceptable.

## **CONSULTATION**

- 65 I personally have a strong passion for the minerals industry and am a firm believer in partnering with our local communities to ensure a project realises its full potential.
- 66 During development of the Deepdell project OceanaGold identified some parties as potentially being affected by our proposals. After the application was lodged and submissions closed it became apparent that some additional parties were interested in the effects of the project on them or the area. As discussed in Mr Lee's evidence, OceanaGold has liaised extensively with all parties to explain the project and try to resolve concerns and mitigate potential effects where they might exist.

## CONCLUSION

- 67 OceanaGold has successfully mined at the Macraes Operation for 30 years. Over that time the mine has contributed enormously to the local and wider communities. That contribution is set to continue as we develop projects like Deepdell. We have demonstrated the ability to operate a large mine in this environment in a responsible and appropriate way, and on the basis of advice from recognised experts. This includes having some unavoidable effects on significant values, but providing appropriate mitigation, offsets and compensation for those values to promote beneficial ecological outcomes.
- 68 OceanaGold will comply with the conditions of the resource consents granted for the Deepdell project.
- 69 I ask that OceanaGold be granted the resource consents necessary for the Deepdell project to proceed.



**Matthew Hine**

4 August 2020

## **APPENDIX A**

Letter from Skevingtons Managing Director

1<sup>st</sup> August 2020

## **RE: LETTER OF SUPPORT – OCEANA GOLD NEW ZEALAND LIMITED OPERATIONS**

To whom it may concern,

Skevington Contracting Limited TA Skevingtons began from opportunities generated by OceanaGold NZ Ltd, Macraes Gold Mine. I, Blair Skevington the Managing Director of Skevingtons started work at Macraes Gold Mine in 1998 with a contracting firm (WAE). At the time there was very little job opportunities available in the area, especially for inexperienced persons looking to venture into the workforce.

I was offered a full-time position with Macraes gold mine in various departments, progressing to finally become a fully qualified crane operator for Macraes before seizing the opportunity to start my own contracting business and from there, Skevingtons was born (2004). Angela Jarman (Co-Owner of Skevingtons) also previously worked as a Personal Assistant to the General Manager at Macraes, before taking on the administration duties at Skevingtons.

From 2004 Skevingtons initially supplied labour to the Frasers Underground (FRUG) project, only to evolve into the supply of both labour and machinery hire, and in later years bigger project work such as, tailings embankment builds, large earth moving and civil construction projects. Gaining experience across the mining, irrigation and construction industries completing work for mining, civil, residential, and agricultural clients. Skevingtons worked with some of the South Island's most well-known companies including OceanaGold, Downers, Fulton Hogan, Meridian, PowerNet and Alpine Energy.

Now a multidisciplinary family owned and operated company, undertaking projects South Island wide. Skevingtons main operations can be summarised as but not limited to; Earth moving, Hydro-Excavation, Utility Infrastructure Install/ Maintenance and Rock supply/cartage. Our experienced staff and range of machinery/equipment enables us to complete works varied in scope to meet client's requirements in a safe, efficient, and timely manner.

Continued support and opportunities made available by the operations of OceanaGold has aided Skevingtons growth/sustainability, enabling us to support the regions in which we operate including various local clubs and charities with sponsorship and donations. It has also enabled us to support our employees and their families, with their own sporting endeavours, fundraising duties and if needed, through personal hardships.

Skevingtons employs 60 full time staff, (and an additional 9 casuals during Macraes shutdown work). Our staff live locally and in surrounding communities such as - Palmerston, Waikouaiti, Karitane, Oamaru, Hampden, Dunedin, Ranfurly and Mosgiel. Currently half of our staff are employed to work at OceanaGold's Macraes gold mine, for both project work and daily labour hire.

While the past saw 99% of operations based at OceanaGold with experience and growth, opportunities presented to expand our services around the South Island. Skevingtons Income from OceanaGold last financial year was approximately \$11,000,000.00 generally 70% of our company's turnover, and therefore a fundamental factor for the continued viability of Skevingtons.

Our swift growth saw the establishment of Quality, Health, Safety and Environmental (QHSE) management systems put into place allowing us to meet the requirements of many prequalification such as Sitewise, Impac, and ISN to meet our legislative requirements. Our aim is to continue developing our processes to align with ISO standards and gain accreditation.

Demand enables Skevingtons to actively seek and invest in innovative plant/machinery, policies, and procedures necessary for a safe and productive workplace, enabling us to deliver high quality, well managed



and safe worksites for all. As part of our valued long-term working relationship with OceanaGold regular audits are completed in collaboration. OceanaGold's feedback assists us in our continual improvement aspirations.

In addition, benefits of a long-standing relationship with OceanaGold has meant we have been able to make various commitments such as providing ongoing general, specialist training and apprenticeships to our employees to empower personal growth. The purchase of various capital such as e.g. New Zealand's largest Hydro-Excavator, which is in comparison to other machinery more environmentally friendly, cost effective and able to work in a diverse range of challenging environments. A lot of our plant has specifically been purchased to best service job requirements at OceanaGold.

The impact of OceanaGold ceasing its mining operations in this area would be catastrophic and detrimental, for Skevingtons as a business and for the local /surrounding communities. Many businesses and individuals rely on OceanaGold for work opportunities. Local schools play centres/preschools, medical centres, small to medium businesses, Fish and Game, NZPAM and sports clubs also rely on funding from OceanaGold.

Such an event would raise genuine concern and surely have critical economic and social consequences. Job and income loss for hundreds of employees, would surely induce uneven regional economic and social development.

Even in uneasy economic times we find that our business with Minerals stays strong when local businesses slow/halt which is valuable to our local economy.

Yours faithfully,



**Blair Skevington – Managing Director**  
SKEVINGTONS

## **Appendix B**

Oceana Gold (New Zealand) Limited Group Environment Policy

# ENVIRONMENT POLICY

OceanaGold is committed to responsible environmental management to protect the environment and prevent pollution. This commitment extends across all of our business activities including exploration, all stages of the project development cycle (pre-feasibility, feasibility and construction), mining operations and closure.

We will contribute to the conservation of biodiversity by respecting designated protected areas, sharing information and practices on biodiversity management, and supporting, developing and implementing inclusive and transparent procedures for integrated land use.

Our commitment to responsible environmental management will be achieved through the implementation of a management system and structure focused on:

- Complying with all host country environmental laws as a minimum;
- Implementing effective environmental management systems and standards across OceanaGold aligned with ISO14001:2015 and other Internationally accepted Standards and Conventions;
- The identification, elimination and management of environmental impacts due to our activities, products and services;
- Establishing measurable environmental objectives and targets that focus on key areas to minimize, mitigate or off-set our environmental impacts, including;
  - The protection of biodiversity and integrated approaches to land use;
  - Ensuring adequate resources for effective mine closure to meet post mining land use and closure requirements;
  - Climate change and responsible use of energy and resources;
  - Water management;
  - The provision of safe transport, storage and disposal of all chemicals (including cyanide), residual waste and process residues (tailings);
- Providing all necessary training, education, equipment, information and opportunities for participation to our employees and contractors to ensure greater environmental performance associated with our Business activities; and
- Continuously reviewing and improving our environmental management system and performance.

We require and expect the cooperation of employees, contractors and visitors to:

- Report all environmental hazards and incidents and undertake the corrective actions identified;
- Comply with all policies, standards and procedures relevant to the work environment; and
- Observe and support good environmental practice within our workplace.

These commitments underpin OceanaGold's Vision and Values, are integral to all aspects of our business, are endorsed by the Board of Directors and promoted and championed by the Executive Committee.

Signed:



**Michael Holmes**  
President & CEO

June 2020

## Appendix C

E-mail from Site Weld NZ

**From:** Kurt Chisholm <[kurt@siteweld.co.nz](mailto:kurt@siteweld.co.nz)>

**Sent:** Thursday, 30 July 2020 11:49 AM

**To:** Matthew Hine <[Matthew.Hine@oceanagold.com](mailto:Matthew.Hine@oceanagold.com)>

**Cc:** Steph Olsen <[admin@siteweld.co.nz](mailto:admin@siteweld.co.nz)>; Adrian Olsen <[adrian@siteweld.co.nz](mailto:adrian@siteweld.co.nz)>

**Subject:** OceanaGold's impact on Site Weld NZ

## *External*

Good Morning Matt,

Please find some info below as per your earlier request. Feel free to let us know if you need anything further.

Site Weld NZ is an Engineering business that directly employs 40 people and has workshops in Dunedin and Cromwell. The vast majority of these employees are based in Dunedin and we deliver a wide range of engineering services to our mining, industrial, heavy transport, marine and forestry clients. We are regularly involved in Health and Safety solutions for all our clients.

Site Weld NZ incorporated in 2012 with Adrian Olsen previously being a sole trader who got his start repairing machinery and equipment at Macraes.

In 8 years we have grown to a company with annual sales in excess of \$5 Million dollars with at least 50% of our revenue being directly attributed to OceanaGold's Macraes operations.

We have three new staff members starting with us in August, two of them are beginning apprentices. Without the volume and security of the work supporting the Macraes operation we would not be in a position to take on any of these staff.

Knowing that OceanaGold was very likely to restart immediately following the countries lockdown earlier in the year allowed us to commit to paying all of our staff 80% of their contracted wage for the entire lock down period.

Despite the uncertainty of Covid, we have to date managed to avoid any redundancies or restructuring.

Recent large capital purchases of a line boring machine (approx. value \$150,000) and a large plasma cutter (approx. value \$500,000) have been strategic decisions based on better meeting the anticipated demands Oceana Gold's Macraes operation.

Despite being a large organisation OceanaGold appear to truly value the contractors they work with and it is a relationship based on both respect and shared values. Their prompt payment terms have been a crucial and timely contributor to our cashflow (especially in the current Covid climate) and their expectations and responsibilities when it comes to Health and Safety have allowed us to position ourselves as leaders in this regard in the engineering field.

Put simply, if OceanaGold ceased operating at Macraes then our viability as a company would be under extreme pressure and in even a best case scenario we would likely be forced to reduce the size of our operations (including employees) by at least 50%.

OceanaGold and Macraes in particular have been the major customer of Site Weld's since the business first began in 2012.

While OceanaGold may be our major customer, we in turn are the major customers for a number of businesses in Dunedin. The money OceanaGold introduce into the Dunedin (and wider Otago) economy through our business has a significant flow on effect.

Cheers



**Kurt Chisholm** | Operations Manager  
**Site Weld NZ Ltd**

[47 Willis Street, Dunedin 9016](#)

**p** [+64 3 477 9339](#) | [+64 27 480 6065](#)

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