

Before a joint hearing of the

Otago Regional Council
Waitaki District Council

RM 20.024

Under the Resource Management Act 1991

In the matter of applications by Oceana Gold (New Zealand) Limited for resource consents for the Deepdell North Stage III Project

Statement of evidence of Benjamin Teele for Oceana Gold (New Zealand) Limited

4 August 2020

INTRODUCTION

- 1 My full name is Benjamin Whittemore Teele. I am the Principal Archaeologist at Origin Consultants Ltd, a company specialising in heritage and archaeology consultancy throughout the South Island and parts of the North Island. I hold a Bachelor of Art with Honours and Master of Arts in Anthropology from the University of Otago.
- 2 I am a member of the New Zealand Archaeological Association
- 3 I have eight years of experience in archaeological and heritage matters.
- 4 Examples of my recent experience in assessing the effects of activities that have the potential to damage or destroy archaeological and affect heritage sites include:
 - a. Preparation of archaeological assessments for various mining activities around Macraes for Oceana Gold (New Zealand) Limited (OGNZL)
 - b. Preparation of archaeological assessments for rural sites across Otago, including Queenstown, Cromwell, Clyde, and Dunedin
 - c. Preparation of archaeological assessments for urban development sites in Queenstown, Clyde, Cromwell, Invercargill, and Dunedin.
 - d. Preparation of heritage impact assessments for listed heritage buildings under the Queenstown Lakes District Council and Central Otago District Council District Plans.
 - e. Preparation of heritage assessments for Department of Conservation and Queenstown Lakes District Council
 - f. Preparation of conservation plans for New Zealand's built heritage, including bridges, tunnels, cemeteries, and buildings.
- 5 I have been directly involved with undertaking archaeological and heritage assessments of sites in the areas of development by OGNZL in Otago since 2015.
- 6 I am the author of the report entitled "*Deepdell North Stage III, Macraes – Archaeological Assessment*" dated December 2019 (Origin Consultants Ltd)
- 7 I was requested by OGNZL on 29 July 2020 to provide evidence for this hearing. I am familiar with the site and area to which the consent application relates. I have undertaken a number of site visits to the area, the most recent in relation to Deepdell North Stage III Pit Project on the 27 May 2019.
- 8 I record that I have read and agree to abide by the Environment Court's Code of Conduct for Expert Witnesses as specified in the Environment Court's Practice Note 2014. This evidence is within my expertise, except where I state that I rely upon the evidence of

other expert witnesses as presented to this hearing. I have not omitted to consider any material facts known to me that might alter or retract from the opinions expressed.

SCOPE OF EVIDENCE

- 9 My evidence will address the following:
- a. Summary of proposed activity;
 - b. Aspects of heritage and archaeological values that are relevant to the proposed mine works;
 - c. The effects of the proposed mining activity on the heritage and archaeological values of the site;
 - d. The proposed conditions to address impacts on any archaeological values;
 - e. Responses to public submissions and the Otago Regional Council's Officer's section 42A report; and
 - f. Conclusions on the overall effects of the proposed mining activity on archaeological and heritage values.

EXECUTIVE SUMMARY

- 10 As set out in my archaeological assessment under a summary of proposed works it is understood that OGNZL is proposing to re-mine and extend the current Deepdell North Pit, backfill the existing Deepdell South Pit and construct a new waste rock stack (WRS).
- 11 It is understood mining of the Deepdell North Pit is expected to commence in 2020 and will add an additional two years to the Macraes Gold Project's life.
- 12 The site is approximately 1.5 kilometres southwest of the nearest residence and 7 kilometres from Macraes Village.
- 13 The proposed expansion to mining in the Deepdell North area will have no known effects on pre-1900 recorded archaeological sites.
- 14 Previously recorded archaeological sites within the proposed mining area have already been recorded and destroyed by earlier mining activities as per conditions of archaeological authorities under the Historic Places Trust Act 1993.
- 15 Heritage values associated with the post-1900 mining site recorded as I42/15 have been dealt with in a previous report (Teele 2017). This site has been placed under a heritage covenant between OGNZL and Heritage New Zealand, and a boundary to the covenant established in 2018. This boundary will not be infringed by the proposed mining works.

- 16 From the summary of Effects on Heritage in the Waitaki District Council Section 42A report it is understood that no submissions were received on the topic of heritage.
- 17 I have reviewed the sections of the Waitaki District Council Section 42A report that relate to heritage, I concur with the conclusions and recommendations of the report.

SUMMARY OF PROPOSED ACTIVITY

- 18 OGNZL operates an open pit gold mine at Macraes Flat in North Otago. OGNZL is proposing to re-mine and extend the current Deepdell North Pit, backfill the existing Deepdell South Pit and construct a new waste rock stack (WRS). The project elements are to be known as Deepdell North Stage III Pit, Deepdell South Backfill and Deepdell East WRS.
- 19 Mining of the Deepdell North Stage III Pit is expected to commence in 2020 and will add an additional two years to the Macraes Gold Project's life.
- 20 The proposed North Stage III Pit area will be mined using the same equipment and processes as currently used in other areas of the Macraes mining operation. No additional equipment, such as trucks or excavators, will be used. The mining will use the existing fleet of diesel-powered mining equipment and will involve drilling and blasting. However, overall, the level of activity at the Macraes Gold Project will not increase.

ENVIRONMENTAL SETTING

- 21 The Macraes Gold Project is located in a rural area that is dominated by OGNZL's existing mining activity and low intensity pastoral farming. Macraes Village, located to the southwest of the Gold Project mining area, is a small settlement of approximately 20 houses and an historic hotel.
- 22 The existing Deepdell North Pit is located to the north of the main Macraes Gold Project, approximately 4.3km from the village. The Deepdell North Stage III Pit is located to the north of Deepdell Creek. Land in the vicinity of the Stage III Pit is similar in character to land around the overall Project area.
- 23 Historically the area was the focus initially of alluvial gold mining and pastoral farming. Alluvial workings were confined by availability of sufficient supplies of water, so are generally confined to creeks or serviced by water races. Hard rock mining occurred from the end of the 19th century onwards and was a more intensive operation focused on seams of gold. Pastoral farming had a historically low intensity effect and is now generally identified in homestead buildings and fence lines.
- 24 Extensive mining operations from the 1990s onwards have extensively altered the historic mining landscape around Horse Flat Road and Deepdell Creek. The remaining

portion not previously mined has been grazed by stock and ploughed for sowing pasture grasses and fodder.

- 25 A number of archaeological surveys have previously been undertaken in the proposed mining area from the 1990s in relation to the modern mining operations. These have outlined the location of known archaeological sites and their values.
- 26 A combination of 20th and 21st century mining and pastoral activity have removed any visible traces of archaeological sites that may have been present within the proposed mining site.

PROPOSED MITIGATION MEASURES

- 27 My proposed mitigation measures as given in my assessment report are based on the lack of recorded archaeological sites (pre-1900 date in origin) within the proposed mining area. Based on these findings no archaeological authority is required.
- 28 If archaeological material is encountered during works, an Accidental Discovery Protocol should be followed. This includes material related to Māori use or occupation of the area. If archaeological material is found all work is to cease immediately with a 20m exclusion zone established around the find with damage to any material minimised or avoided. Once the Regional Archaeologist has been contacted, they will advise on the best way to proceed. If any Māori material is encountered, they will be, prima facie, property of the Crown and decision made regarding their management, including recording, analysis and custody will be made in collaboration with mana whenua.

RESPONSE TO SECTION 42A

- 29 I have reviewed the sections of the Waitaki District Council Section 42A report (July 2020) that relate to heritage. I concur with the conclusions and recommendations of the report.

CONCLUSIONS

- 30 OGNZL is proposing to re-mine and extend the current Deepdell North Pit, backfill the existing Deepdell South Pit and construct a new waste rock stack (WRS).
- 31 There are no known archaeological features that will be impacted by the proposed mining works. Any that may be discovered during works will be managed by an Accidental Discovery Protocol as specified in the Archaeological Assessment.
- 32 The core heritage values of the hard rock mining site recorded as I42/15 have been placed under a covenant between OGNZL and Heritage New Zealand. The covenanted area will be unaffected by the proposed mining works.

33 I consider that providing the proposed mitigation methods are diligently carried out any adverse effects on the heritage and archaeological values of potential sites within the proposed Deepdell North Stage III Project should be adequately avoided, remedied or mitigated to the extent that any adverse effects on the environment would be no more than minor.

Benjamin Teele

4 August 2020