

OCEANAGOLD (NEW ZEALAND)  
LIMITED

## **WAIHI NORTH PROJECT**

Blasting and Vibration Assessment

Evidence of John Heilig Regarding  
Technical Assessment of Blasting and  
Vibration Effects and Proposed  
Conditions

24 January 2025

## INTRODUCTION

My name is John Heilig.

My role in relation to the Waihi North Project (“**WNP**”) has been to provide expert advice in relation to blasting. I wrote the blasting and vibration assessment which is provided within *Part H – Supporting Technical Assessments* of the application.

This evidence has been prepared to accompany the application by Oceana Gold (New Zealand) Limited (“**OGNZL**”) for approvals required for the WNP under the Fast-track Approvals Act 2024 (“**FTAA**”). It has been prepared on the understanding that the process for determining applications under the FTAA does not require a hearing to be held, and accordingly the purpose of this evidence is to confirm that, relative to my area of expertise the Waihi North Project Blasting and Vibration Assessment provides an appropriate description of the relevant environment, the proposed activities comprising the effects of the WNP on that environment, and the way those effects are proposed to be managed.

My findings are set out in full in the Waihi North Project

Blasting and Vibration Assessment included within *Part H – Supporting Technical Assessments* of the application.

While this application is not being considered by the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing this evidence. Other than when I state I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

## QUALIFICATIONS AND EXPERIENCE

My full name is Dr. John Herbert Heilig and I am the Principal of Heilig & Partners Pty Ltd., a consulting engineering company based in Brisbane Australia. I hold the qualifications of Bachelor of Engineering (“**BE**”) Honours in Mining and a Doctor of Philosophy (“**PhD**”), both from the University of Queensland in Australia. These were awarded in 1984 and 1988. I am also a registered unrestricted shotfirer since 1985. I am currently employed as principal and have held that position since 2002.

My previous work experience includes more than 40 years of extensive specialised international work in blasting and vibration related engineering. I am acquired special skills in optimisation of hard rock excavation using drilling and blasting, application of specialised

mining techniques and the measurement and analyses of vibration. I have consulted to more than 2000 projects in over twenty countries.

In providing this evidence in relation to blasting and vibration effects, I have considered the following matters as relevant to that topic:

- (a) The project description provided by OGNZL as set out in Section 2 of the Substantive Application prepared by Mitchell Daysh Limited;
- (b) The description of the existing environment, the effects of the WNP on that environment and their significance, and the proposals to manage those effects all as set out in the assessment of environmental effects accompanying the application;
- (c) The technical assessments of Rob Greenaway & Associates with regard to the Wharekirauponga Valley walking track, Clough & Associates as the heritage consultants and both Biorearches and Lloyds Ecological Consulting as ecologists to the project have been relied upon in the preparation of my blasting report; and
- (d) I have relied upon documents relating to the planned blast areas for the project that have been provided by OceanaGold.

## **CONFIRMATION OF CONTENTS OF REPORT AND PROPOSED CONDITIONS**

I confirm that in my opinion the Waihi North Project Blasting and Vibration Assessment report contains an accurate and appropriate description of the environment, the actual and potential effects of the WNP, and the recommended actions to manage those effects within my area of expertise.

I confirm that in my opinion the contents of the Blasting and Vibration Assessment may be relied on in making a decision on the approvals sought for the WNP, and confirm that provided effects within my area of expertise are managed as proposed in the application those effects will not be unacceptable and will be managed to a standard that I consider meets good practice.

I confirm that I have reviewed the conditions that OGNZL proposes for the various approvals being sought as they relate to my area of expertise. I confirm that in my opinion those proposed conditions are appropriate.



**John Heilig**

Dated this 24<sup>th</sup> day of January, 2025