My name is Dr Hayden Cawte, I am the managing director of New Zealand Heritage Properties Limited, a cultural heritage management consultancy firm. I have over 14 years' experience in national and international heritage consulting including lecturing at the University of Otago and James Cook University Australia. My PhD and research area is in archaeological and heritage mining and metallury. I have been and are involved in the mitigation of effects for mining across the globe as it relates to heritage and archaeology.

My evidence addresses Chapter 26 Heritage of the Proposed District Plan ("PDP") on behalf of New Zealand Tungsten Mining Limited ("NZTM"), and relates specifically to the proposed scheduling of the Glenorchy Heritage Landscape ("GHL") and the relationship between this landscape and modern mining.

I have reviewed evidence as submitted in relation to PDP Heritage Chapter 26 and draw upon my knowledge and experience and the heritage survey undertaken within the GHL.

While gold mining and pastoral development were the initial reasons for the settlement at Glenorchy, it was the mining of scheelite that was to become the area's primary industry. Glenorchy and the GHL have a strong connection to mining. Tungsten mining began in the 1880's on Mt Judah and have continued in various scales since following the wax and wane of the mining cycle and the demand for scheelite throughout the 19th and 20th centuries.

Historical research and heritage survey (Cawte and Cropper 2015) undertaken as part of NZTM's application for an access arrangement with the Department of Conservation has shown the the GHL to be a 'complex of sites' that include the primary evidence for mining in terms of mine entrances, adits and sluiced areas, the mining by-products of waste rock and tailings, and the necessary mining infrastructure such as processing areas, roads and water races. For the 130 plus years of mining in the area, evidence shows that extraction swings between small scale and industrial operations.

The features and evidence that remain within the GHL reflect this sequence however, despite the definition of a Heritage Landscape in section 2 of the PDP, there is a lack of an obvious assessment methodology for identifying and assessing the value and significance of proposed heritage landscapes, including identifying the importance of, and the interplay between the range of site and feature types. Relatedly, the PDP does not have a means of valuing the ongoing occupation by an

industry, an original or long-term occupier, which in themselves, contribute to the overall historical, social and cultural significance of a space, place or building. Thus, does not appear to allow for the sustainable use of historic heritage.

The main reason for scheduling heritage places in a district plan is to ensure the effective protection and management of the heritage resource in order to maintain a connection with past events, experiences or activities. How effectively a heritage place or building achieves this connection, is considered by how well it can be interpreted by novice persons. The easiest form of interpretation is to enable the continued occupation of a site by those occupants who in themselves, contribute to the understanding of a site or overall site value. Where an existing owner/tenant has maintained a long history with a building or place, and that occupation contributes to the value, weight needs to be given to their continued use of the space and the ease in which this can occur. Despite being a nationally significant area, the GHL is not well known and the level of interpretation made available to the public does not do it justice. This means that most novice persons visiting the area will not appreciate the complexity and sequence of mining evidence on show.

The GHL is a nationally significant heritage landscape. This does not, however, rule out the continuation of modern mining whereby these activities maintain core values, and where heritage features and archaeological sites are managed and amenity values improved while enhancing user and visitor experience through collaboration. Similarly providing economic benefit to community which further enhances local responses to heritage protections and management.

Accordingly, the key features to be protected within the GHL appear general and on the face of it, to contain feature bias. Thus are unlikely to protect the ratio of evidence types within the GHL. Under 26.12.9.3, few sites within the GHL meet the legislative definition of an archaeological site. Other sites that do meet the definition have not been recorded and thus, are not considered under the "known" site protections. It is better to understand the full nature of evidence, evaluate all parts, and mitigate in this context which could mean allowing the modification to some physical features such as adits to better protect and manage the range of sites in the complex. For this reason and those stated above (and in my evidence), I recommend that modern mining be provided for within the PDP to maintain a connection within GHL, subject to identification and sustainable management of heritage and archaeological features and sites within the complex and general improvements in visitor experiences.