BEFORE THE EXPERT PANEL **FTAA-2507-1089**

I MUA I TE ROOPU TOHUNGA

IN THE MATTER of the Fast-track Approvals Act 2024 (the Act)

AND

IN THE MATTER of an application made under the Fast-Track Approvals Act 2024 by Matakanui Gold Limited (Santana Minerals)

STATEMENT OF EVIDENCE OF DR. ALAYNA ADA PAKINUI RĀ (LANDSCAPE) ON BEHALF OF KĀTI HUIRAPA RŪNAKA KI PUKETERAKI, TE RŪNANGA O MOERAKI, TE RŪNAKA O ŌTĀKOU, AND HOKONUI RŪNANGA (KĀ RŪNAKA)

10 APRIL 2026

[redacted] HOLM | MAJUREY

Mike Holm/Nicole Buxeda
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Shortland Street
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Solicitor on the record Mike Holm
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INTRODUCTION

Qualifications and experience

1. He uri au nō Mere Titope Kaikanui Pakinui, nō reira ko Tahu Potiki te tīpuna, ko Puketeraki te papatipu marae, ko Kāti Huirapa ki Puketeraki te Rūnaka. Ko Dr. Alayna Ada Pakinui Rā tōhoku ikoa.

2. I hold the qualifications of Doctorate of Philosophy in Landscape Architecture and Kāi Tahu voice in Landscape Policy from Queensland University of Technology. I also hold a Bachelors of Landscape Architecture (Hons) from Lincoln University, Diploma in Māori He Tohu Pōkairia from Ara Institute of Canterbury, Diploma in Te Rōnakitanga ki te Reo Kairangi (Rumaki Level 5) from the Southern Institute of Technology, Certificate in Iwi Environmental Management from Te Wānanga o Aotearoa.

3. My current position is Technical Director, Infrastructure Advisory, WSP. I am a Registered Landscape Architect with Tuia Pito New Zealand Institute of Landscape Architects (NZILA) and the Australian Institute of Landscape Architects (AILA). I am the Chair of Te Papa Tū Whirinaki Landscape Foundation of Aotearoa and Chair of Te Tī Māori Advisory to the Infrastructure Commission. I am a core member of Te Tau-a-Nuku Māori Landscape Architects rōpū and Pae Matua with Ngā Aho Māori Design Institute. I am a recent outgoing board member of both Infrastructure New Zealand (INZ) and NZILA.

4. I have 20 years of experience as a landscape architect and landscape planner, from across Aotearoa, Canada and Australia. I was a lead author of the Australian Institute of Landscape Architects (AILA) 'Guidance Note for Landscape and Visual Assessment (GNLVA)' and a contributor to the New Zealand Institute of Landscape Architects (NZILA) 'Te Tangi a Te Manu Aotearoa Landscape Assessment Guidelines'. My impact assessment experience spans an array of built

environment and infrastructure sectors including large scale open cut mining in Australia, pit-to-port infrastructure, broader linear rail/road infrastructure, transmission lines and substations, water treatment plants, subdivision and high-rise development, among other infrastructure typologies. I have prepared landscape character assessments which consider the amenity and character of suburbs, towns and whole districts.

5. For a decade I was a key contributor to the AILA Queensland Landscape Planning Committee and was awarded two institute awards for my service to the advancement of the landscape planning profession, being the AILA QLD Presidents Award and the AILA National Presidents Award.

6. My work has included preparing and giving expert evidence.

Purpose and scope of evidence

Whakarongo ake au ki te tangi a te manu nei,
a te mā-tui; Tui, tui, tui, tuia.

Tuia i runga, tuia i raro;
Tuia i roto, tuia i waho.
Tuia te here tangata;
Ka rongo te ao, ka rongo te pō.

Tuia te muka tangata i takea mai i Hawaiki-nui,
i Hawaiki-roa, i Hawaiki pāmāmao.
Te hono i wairua;
Ki te whai ao, ki te ao marama.

Tihei Mauri Ora!

I listen to the cry of the mā-tui; binding and uniting.

Binding that which is from above, with that below;
Binding that which is from within, with that outwards;
Binding together the threads of people;
Through the peace of day, through the peace of night.

Binding the threads of humankind, from the great homeland, from the far homeland, from the remote homeland Connecting with the spirit;
From the world of light, and the world of consciousness.

Behold the sneeze of life!

7. The primary purpose of this evidence is to provide a landscape assessment that properly recognises and upholds Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines, NZILA (2022) to correctly incorporate, reflect and support the binding together of Kā Rūnaka rights and interests to the lands, waters and skies impacted by this Application.

8. This primary purpose extends to upholding the ihi and vital force held in the whakapapa of Kā Rūnaka and the mana of the places that they care for. It therefore extends into the protection of mauri and those kaitiaki and ariā that warn of impending transgression of tapu relating to Papatūānuku and Parawhenuamea.

9. My evidence will cover the following matters:

   (a) Methodological fatal flaws relative to Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines, NZILA (2022).

   (b) Effects relative to recognised best-practice approaches for mining assessment, including those where large-scale extractive activities are routinely assessed over extended timeframes.

   (c) The 'parts' vs the 'whole', integrative approaches and the coming together of natural character assessment.

   (d) Failure to apply Te Tangi a te Manu's bicultural methodology, including the omission of Te Ao Māori

as a foundational lens and the resulting under-assessment of both direct and indirect effects on ancestral and cultural landscapes in breach of Te Tiriti o Waitangi.

(e) Provide an assessment of the effects arising from the proposal on landscape values, through correctly applying TTatM principles and appropriately recognising Te Ao Māori and the interconnectedness and cultural values of tangata whenua.

10. I have visited publicly accessible locations noted in documents (c) through (f), and have considered the following documents as matters of relevance to this kaupapa:

(a) Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines, NZILA (2022).

(b) Visual Landscape Planning in Western Australia: a manual for evaluation, assessment, siting and design, Department for Planning and Infrastructure (2007). Specifically, Part 3 – Mining and Industry.

(c) B.19 Boffa Miskell Landscape, Natural Character and Visual Effects Assessment (Boffa Miskell 2025) Part 1 and Part 2. Herein referred to as the LNCVE Assessment.

(d) K.02 - Boffa Miskell - Assessment of Dunstan Mountains Outstanding Natural Landscape dated May 2024 (10 March 2026). Herein referred to as the ONL Assessment.

(e) B.19A Boffa Miskell Landscape Graphic Supplement.

(f) B.19B Boffa Miskell Landscape Visual Simulations Part 1, Part 2, Part 3 and Part 4.

(g) B.18 Boffa Miskell Assessment of Freshwater Ecological Effects (Boffa Miskell 2025a).

11. I have attended a late stage engagement meeting (3 March 2026) with Santana representatives and the landscape assessment authors.

Expert Witness Code of Conduct

12. Although these proceedings are not before the Environment Court, I confirm that I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and agree to comply with it while giving oral evidence before the Hearings Panel. This evidence is within my area of expertise, except where I state that I am relying upon the specified evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

PEER REVIEW OF APPLICANT'S ASSESSMENT

13. Both the LNCVE Assessment and the ONL Assessment (herein referred to collectively as the Assessments) present a series of methodological fatal flaws relative to Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines, NZILA (2022), herein referred to as TTatM. TTatM establishes a distinctly Aotearoa lens for landscape assessment. This lens is not stylistic; it sets the baseline principles through which all assessment is to be undertaken. In particular, TTatM requires that landscape assessment in Aotearoa:

    (a) recognises landscape as culturally constituted, not value-neutral;

    (b) treats whenua as lived, travelled, remembered, and practised, not simply observed;

    (c) avoids inherited Eurocentric assumptions about objectivity, neutrality, or scenic containment;

(d) and explicitly shifts away from reductionist, effects-component logic toward relational and place-based understanding.

14. These principles are not optional contextual statements. They define the lens through which landscape is to be understood before character, values, effects, or mitigation are even considered. Despite the LNCVE Assessment and the ONL Assessment making reference to TTatM, the approach for both remains grounded in a largely conventional, effects-based planning paradigm characterised by:

(a) emphasis on physical modification;

(b) reliance on visibility, distance, and containment; and

(c) segmentation of effects by project component.

15. While tangata whenua values and cultural associations are referenced, they are not used as an organising framework for understanding landscape. The Assessments do not re-centre whenua as relational, storied, or continuously occupied, nor does it allow those understandings to influence how the receiving environment is defined or how effects are weighted. As a result, the Assessments approach landscape as if it were operating within an inherited Anglo-planning assessment model, rather than through the specifically articulated Aotearoa lens clearly stipulated in TTatM.

16. When measured against industry best practice assessment of mining proposals, the Assessments do not meet expectations for cumulative effects analysis; do not explicitly assess many of the primary visual drivers identified as critical in mining assessment; rely on design intent rather than tested or demonstrable visual outcomes; and omit key analytical tools that are explicitly recommended in industry. As a result, the Assessments cannot be relied upon as a complete or robust assessment of mining-related landscape and visual effects

relative to internationally recognised best-practice guidance for extractive industries. This has further resulted in effects ratings that are materially lower than would typically be concluded under established international mining assessment frameworks, even though those frameworks are often applied within landscape systems of substantially greater scale and capacity to absorb change than those present in Aotearoa or Otago. In my opinion, this has led to an under-representation of effects as a result of the following:

(a) Elements that are intended to be explicitly interrogated, not implied, have not been addressed in full. This includes mining footprint size, depth, boundary configuration, face angles, exposure duration, planting and timing, access road alignment, services corridors, lighting, and changes to original landform and vegetation. The Assessments describe many of these elements individually, but do not systematically or critically analyse them as primary visual drivers of effect, nor test their influence on visibility, prominence, or landscape character at appropriate spatial scales.

(b) Best practice mining assessment is explicit that rehabilitation earthworks must emulate natural landforms, that regularity, angularity and simplified engineered contours are discouraged, and that it is inadequate for only the final stage of rehabilitation to look naturalistic. The Assessments rely on aspirational statements about integration and rehabilitation intent, without providing comparative or analytical evidence that interim or permanent landforms will not remain visually legible as engineered features, particularly when viewed at medium and long distances.

(c) Lighting is repeatedly identified in mining assessment guidance as a core visual element requiring focused assessment, including night-time visibility, skyglow, glare from elevated facilities, and the need for directional control and shielding. The Assessments mention lighting only briefly and qualitatively, do not assess night-time visual magnitude, glow from elevated plant or ELF-mounted infrastructure, or visibility from remote dark landscapes, and does not assess lighting effects separately from daytime visual effects. This omission is critical given that the Dunstan Mountains are a sparsely lit, high-naturalness landscape where night-time effects can materially exceed daytime visual effects, and the guidance clearly treats night-time effects as distinct and requiring specific, targeted assessment.

(d) Industry guidance identifies terrain cross-sections as a key analytical tool for assessing visibility, screening effectiveness, required earthwork heights, and planting performance over time; however, no such cross-sections are provided from critical viewpoints to pits, engineered landforms, the tailings storage facility, or plant infrastructure. In the absence of this analysis, conclusions regarding containment, screening, backdrop integration, and rehabilitation effectiveness cannot be technically verified and instead rely on assumption, resulting in residual visual effects being understated.

17. As set out in TTatM, landscape is perceived and experienced as a unified phenomenon, where the integrated whole is greater than the sum of its parts. Landscapes comprise networks of places and connections that are understood as parts of a whole and which consist of physical, associative, and perceptual attributes in combination. TTatM

acknowledges that assessment of landscape character and values entails both reductive analysis of its parts and synthesis to interpret how the parts come together as character and value.

(a) The Assessor expresses that a site level landscape effect could be construed as an artificially combined rating; however, to assess individual landscape effects in a void is to not consider the inherent interactions of whenua, wai and all that landscape encompasses.

(b) The Assessments have not outlined how the Application will affect relationships between domains, layered values, and connective spaces during the operational period. Perceptual, physical, and associative effects on these interconnected spaces are disregarded in the absence of an overall site level landscape effect.

(c) Landscape is experienced as a continuous, embodied whole, through which associative effects are generated by hīkoi, interaction, and relationship with whenua. The scale and nature of the proposed modification will sever this relationship, interrupting the inherited ability to traverse and experience the landform in a manner consistent with that of tīpuna and, later, early European settlers who moved through the same topography. This represents a fundamental loss of whakapapa-based connection to place, where landform is not merely observed but known through physical presence, memory, and story. The resulting loss of associative value is irreversible, as the historic landform itself will be permanently altered, and the capacity for that relationship to be re-established forever removed. Accordingly, the associative effects arising from this

intervention cannot reasonably diminish over time and must be afforded full weight in the assessment of overall site-level landscape effects.

18. It is widely understood in landscape planning practice in Aotearoa that Te Ao Māori is a foundational methodological requirement, not an adjunct consideration, particularly where an assessment claims to have been prepared in accordance with TTatM. TTatM is explicitly grounded in a bicultural methodology that gives effect to Te Tiriti o Waitangi through a partnership between Te Ao Māori and Te Ao Pākehā, requiring both worldviews to shape the structure, lens, and evaluative framework of assessment. 'Landscape' and 'whenua', within this context, is not merely a visual or physical construct, but a living cultural entity defined through whakapapa relationships between people, land, waters, and longstanding connection. Where Te Ao Māori is not embedded as a core methodological foundation, the assessment cannot be said to comply with TTatM. If such an omission occurs, an assessment therefore fails to meet the principles of partnership, protection, and participation required under Te Tiriti o Waitangi. It is my view that this omission has occurred in the preparation of the Assessments for this Application, which represents a material methodological deficiency, resulting in a systemic under-representation of landscape values and effects as they are properly understood in Aotearoa.

(a) The Assessments demonstrate an incomplete application of TTatM as illustrated by the two Venn diagrams on page 72 of TTatM. The Assessments have focused predominantly on limited physical attributes, while largely disregarding perceptual and associative dimensions of landscape value. Even within the physical domain, the analysis is deficient. This is evidenced by the cursory treatment of established ara tawhito, traditional pathways, used by tīpuna to

traverse between the East coast of Otago and the inland lakes (Section 6 of Cultural Impact Assessment, Aukaha, 19/11/2025). These wāhi tīpuna, as significant ancestral landscapes dating back several hundred years, are acknowledged only in passing and do not appear to have informed the evaluation of effects. The omission of consideration for the destruction of these ara tawhito represents a fundamental abdication of Te Tiriti assessment obligations. This failure further illustrates that an assessment of 'landscape' and 'whenua' in an Aotearoa context, which positions hīkoi, whakapapa, and kōrero tuku iho as fundamental to understanding landscape in its fullest sense, has been entirely disregarded by the Assessor.

(b) The Assessments have further failed to properly consider indirect and consequential landscape effects, a fundamental obligation of landscape planning practice as articulated in TTatM. Best-practice assessment requires effects to be understood as an interconnected sequence, beginning with physical change and extending through associative and perceptual impacts. Such effects can result in behavioural changes by communities, including mana whenua and those who whakapapa to Kā Rūnaka. As a result of these impacts, communities are at risk of no longer connecting with these wāhi tīpuna, ultimately resulting in the degradation of mauri. The Assessments before me have largely confined the analysis to narrowly defined physical effects and have not traced how those changes alter cultural meaning, lived experience, patterns of engagement, or the maintenance of cultural relationships with the landscape. By failing to identify or evaluate this chain

of effects, the Assessments materially understate the scale and significance of impacts, and do not reflect how cultural landscapes in Aotearoa are experienced, valued, and sustained.

EXISTING ENVIRONMENT

19. The existing visual environment, as described in the Assessments as 'descriptions of views', is accurate for those viewpoints being described.

20. The existing natural character of the site and surrounding landscape are, however, inaccurately described, and contradictions exist between character based descriptions in the LNCVE Assessment and the ONL Assessment.

21. A central flaw is the description of the wāhi tīpuna and ara tawhito, noted as 'traditional travel routes' in Section 7 of the ONL Assessment. These have been incorrectly categorised as being 'Associative Values'. The existence of a well-documented wāhi tīpuna travel route is not 'Associative' but in fact a strongly 'Physical' landscape value that exists immediately in the Shepherds Creek and Rise and Shine Creek (and tributaries) locations. TTatM identifies hīkoi as the intersection of the overlapping dimensions of Physical and Perceptual, as illustrated by the two Venn diagrams on page 72. This is of critical importance as the nature of Natural Character Effects under TTatM are determined largely on changes to physical conditions. This determination that a Physical pathway is Associative has led to the overarching LNCVE Assessment NOT giving consideration to this wāhi tīpuna route.

22. As a result, the LNCVE Assessment incorrectly describes the Existing Natural Character of Shepherds Creek and tributaries to be Moderate and the Rise and Shine Creek and tributaries to be Low-moderate, as they are inaccurately considered to be void of physical cultural landscape values.

ASSESSMENT OF EFFECTS ON THE ENVIRONMENT

23. I am in agreement with the LNCVE Assessment's summary that the Bendigo Ophir Gold Mine will result in a substantial modification to the Rise and Shine Creek and Shepherds Creek within the Dunstan Mountains ONL.

24. I am further in agreement with the LNCVE Assessment that the proposal will affect the coherent backdrop of the Dunstan Mountains ONL, however I hold the position that this effect will extend beyond the duration of the proposed mining activities, as the simulated viewpoints and mitigation plans indicate that scars on the landscape will remain largely unmitigated after operation of the mine ceases.

25. I strongly disagree with the LNCVE Assessment finding that indicates that landscape effects on the Dunstan Mountains ONL will remain 'relatively localised' and that the more substantial impacts of mining will remain 'relatively well contained'. I refer to Section 4.44 of TTatM which states that 'cultural landscapes can comprise relatively small areas and features but are often landscapes comprising a network of places and connections in which the whole is greater than the sum of the parts'. The term 'relatively' has been used by the Assessor through the lens of their subjective understanding of what is defined as having significance, hence their classification of a Physical traditional travel route being merely 'Associative' and therefore diminishing the cultural landscape's role in the determination of this landscape being of Outstanding Natural character.

26. Furthermore, the LNCVE Assessment fails to acknowledge the limited absorption capacity of the Dunstan Mountains ONL, as a geographically constrained landscape surrounded on all edges by lakes, rivers, streams and communities. This ONL is not vast in its scale, by comparison to other Australasian landscapes where mines of an equivalent size and character

are more readily absorbed into landscapes that are hundreds of kilometres from major waterbodies or communities. This proposal, as described in the Assessor's Summary of Natural Character Effects Table in Section 7.3.1 of the LNCVE Assessment, will result in enduring destructive changes to natural character. In this table alone, the Assessor makes reference to 'highly modified' landscape changes in six instances, notes that hydrological and fluvial processes will be 'almost completely impeded' and 'permanently altered', that 'flow and levels will remain irregular and highly modified', and that habitat quality will remain 'largely depleted'.

27. Through a full assessment, using TTatM effectively, I find:

(a) The existing Natural Character of Shepherds Creek and its tributaries to be **high,** not moderate as defined by the LNCVE Assessment.

(b) The existing Natural Character of Rise and Shine Creek and its tributaries to be **high**, not moderate-low as defined by the LNCVE Assessment.

28. Through a full assessment, using TTatM effectively, I find that:

(a) Natural Character Effects on the Shepherds Creek Catchment are considered **high adverse** during the proposed mining activity reducing the overall natural character from **high** to **low**, not moderate high adverse reducing the overall natural character from moderate to low as defined by the LNCVE Assessment.

(b) Natural Character Effects on the Rise and Shine Creek Catchment are considered **high adverse** during the proposed mining activity reducing the overall natural character from **high** to **low**, not moderate adverse reducing the overall natural character from low

moderate to low as defined by the LNCVE Assessment.

(c) Landscape effects on the Dunstan Mountains ONL to be **high adverse**, not moderate adverse as defined by the LNCVE Assessment.

CONCLUSIONS

29. In my professional opinion, the Assessments are materially deficient and cannot be relied upon for decision-making regarding this Application. Although they claim alignment with Te Tangi a te Manu Aotearoa Landscape Assessment Guidelines (TTatM), they do not apply its foundational bicultural methodology or Aotearoa-specific lens, resulting in Te Ao Māori being treated as peripheral rather than determinative of landscape character, values, and effects.

30. This is compounded by an inadequate application of established mining assessment practice, where key drivers of landscape and visual effects are insufficiently interrogated and effects are systematically understated.

31. The Assessments further fail to evaluate landscape as an integrated whole, neglecting Associative, Perceptual, cumulative, and consequential effects and the relationships between them, and inaccurately defining ara tawhito as Associative rather than as the intersection between overlapping Physical and Perceptual dimensions of landscape.

32. Taken together, these deficiencies amount to a material failure to recognise and provide for mana whenua rights and interests, including the significance of ancestral landscapes and pathways, and result in a systemic under-representation of effects contrary to both TTatM and Te Tiriti o Waitangi.

33. In my opinion, the Bendigo Ophir Gold Mine proposal, as presently presented to the Panel, is not appropriate to be

granted consent. The proposal would result in high adverse landscape and natural character effects within and upon the Dunstan Mountains Outstanding Natural Landscape, including substantial and enduring modification to the Rise and Shine Creek and Shepherds Creek catchments and associated tributaries, and a sustained degradation of natural character from **high** to **low**. Those effects are not temporary or readily reversible; the evidence before me indicates that the modification will remain legible in landform and landscape pattern beyond the operational period, with rehabilitation outcomes untested, unverified, and materially uncertain.

34. These effects go beyond physical change to constitute an enduring disruption to whakapapa-based relationships with whenua, wai, and the interconnected system of wāhi tīpuna and ara tawhito that anchor identity, mobility, and tikaka across this landscape. The permanent alteration of historic landform and waterways represents a severance of lived connection that cannot be restored through rehabilitation, planting, or design intent alone. In this context, whenua is not a passive receiving environment but an ancestor, and the magnitude of modification proposed exceeds what can be reconciled with the ongoing exercise of kaitiakitaka.

35. Further, because the Applicant's landscape assessments are materially deficient, failing to apply TTatM's foundational bicultural methodology, failing to embed Te Ao Māori as a determinative lens, and failing to recognise landscape as a relational, lived, and inherited whole, the Panel does not, in my opinion, have an adequate evidential basis to understand the true scale and significance of effects on mana whenua values. The under-assessment of physical, associative, perceptual, cumulative, and consequential effects, particularly in relation to wāhi tīpuna and ara tawhito, results in effects being materially understated and mischaracterised.

36. **Accordingly, I consider that consent should be declined as the proposal is currently framed.** At a minimum, the application should not proceed to approval unless and until it is supported by a fully TTatM-compliant reassessment that properly identifies the receiving environment, evaluates landscape and natural character effects holistically, and demonstrates, through robust and testable evidence, that effects on cultural and natural character values can be genuinely avoided or materially reduced. On the information currently before the Panel, that threshold has not been met.

Dr. Alayna Ada Pakinui Rā

10 April 2026