

30 January 2026

J-NZ0488-003-L-Rev0

Cheryl Low
Environment Manager
Matakanui Gold Limited
15a Chardonnay Street
Cromwell, 9310

Otago Regional Council Clarifications

Dear Cheryl,

Mine Waste Management Limited (MWM) has provided this letter report to address requests for further information (RFI) from the Otago Regional Council (ORC) received in December 2025 for the Matakanui Gold Limited (MGL) Fast Track Approvals Act (FTAA) application for the Bendigo-Ophir Gold Project (BOGP). Two RFI documents were provided by ORC (reference RMFT25.007):

- Document 1 (dated 18 December 2025), in which ORC requested information relating to groundwater, water modelling, and geochemistry. Questions were raised following a peer-review of the application material by Alexandra Badenhop, Technical Director Water & Environmental Management, of e3 Scientific Limited (e3), on behalf of ORC.
- Document 2 (dated 12 December 2025¹), in which ORC requested information relating to Geotechnical Engineering, River Engineering, Erosion and Sediment Control. The supporting peer review was completed by Geosolve Limited.

Responses are required by 30 January 2026.

ORC has requested that all modelling, interpretation, and assessment requested in the following questions should be undertaken by a suitably qualified and experienced person (SQEP) or persons. Our responses are provided by:

- Dr Paul Weber, Director and Principal Environmental Geochemist for Mine Waste Management, part of the Green Road group of companies with over 25 years working within the field of mine environmental geochemistry:
 - <https://www.linkedin.com/in/dr-paul-weber-amd-geochemist/>
- Mr Ryan Burgess, Principal Consultant for Hydro Geochem Group, part of the Green Road group of companies with over 15 years practising in the field of mine water management and hydrogeology.
 - <https://www.linkedin.com/in/ryan-b-76840240/>

¹ Supporting peer review document by Geosolve Limited was amended 15 December 2025, which corrected a misinterpretation between TSF filling vs RAS Pit Lake filling post-closure.

RESPONSE SCOPE

The scope of MWM's responses for each of these RFI are laid out as follows:

- Document 1: Groundwater, water modelling, geochemistry.
 - RFI #1 to #3 are addressed by Kōmanawa Solutions Limited in a separate response.
 - RFI#4 to #16 are provided in this letter report
- Document 2: Geotechnical Engineering, River Engineering, Erosion and Sediment Control
 - RFI #7 is addressed in this letter report.
 - All other RFIs from this document are addressed by others in a separate response(s).

REQUEST FOR INFORMATION

Document #1: Groundwater, water modelling, geochemistry

RFI#4

Question:

The source term for surficial mine impacted water quality was sourced from 95th percentile Frasers Pit sump (at Macraes Mine) wall water quality prior to 2011, which was then allowed to equilibrate using PHREEQC geochemical model which indicated precipitation of arsenic, copper, aluminium, iron and lead would greatly decrease the concentrations of these parameters. This relies on there being high concentrations of iron, which was not indicated in the groundwater quality monitoring within the pit locations. In addition, given the high quantities of arsenic indicated within soils, the risk of mobilising higher arsenic loads is not insignificant. Please undertake uncertainty analysis on the effect of lower concentrations of iron within the surficial mine-impacted water source term.

Response:

The source term for the pit sump suggested for dust suppression uses data from Table 16 of the MWM (2025a) Source Term Report J-NZ0475-001-R-Rev2.

- Iron (Fe) is 21 mg/L and arsenic (As) is 0.36 mg/L (95th percentile data) for Frasers Pit at Macraes.
- The Fe and As are sourced from the oxidation of sulfide minerals in the highwall. Groundwater is not the source of this Fe.
- PHREEQC modelling reduces these concentrations (due to precipitation/adsorption), i.e., this modelling explains the mechanism.
- The source term for runoff uses the empirical data from Macraes for mine runoff: Table 19 of the MWM Source Term Report J-NZ0475-001-R-Rev2 of 930 mg SO₄/L; 0.04 mg As/L; 0.032 mg Fe/L.

Any sensitivity modelling would demonstrate that higher concentrations of As and Fe would lead to poorer water quality at compliance monitoring locations. To manage this risk, it is proposed that Pit Sump Water is not used beyond the pit bounds for dust suppression (i.e., only bore water is proposed outside the pit) unless validated as being low risk. This is therefore an effective control for the risk.

This has been proposed in the Water Management Plan (MGL, 2025a) and in reports. For instance: The MWM (2025b) Water and Load Balance Model Report J-NZ0457-001-R-Rev2 notes that "*Pit sump water could potentially be used for dust suppression early on in mine life. Adaptive management processes should be developed to proactively manage and respond if performance and/or compliance monitoring data suggests use of pit sump water may begin to provide a risk of non-compliance (i.e., potential to cause exceedance of water quality limits at SC01 and RS03)*".

The risk is lower at the start of the project when the pit extent is smaller and concentrations of solutes will be lower. Effective performance monitoring will ensure these risks are minimised if pit water is used for dust suppression outside the pit catchments.

The risks associated with high As soils will be managed by the Soil Management Plan (MGL, 2025b). Please refer to this document.

RFI#5

Question:

Please undertake groundwater contaminant modelling to predict the potential distribution of contaminants in groundwater from mine sources, such as the TSF, ELF, and pits. This modelling should be done over an appropriate timescale to predict the potential impact on the groundwater and surface water receptors downgradient of the mine site.

Response:

Mine waste storage facilities (MWSFs), including the Tailings Storage Facility (TSF) and Engineered Landforms (ELFs), are planned to be situated within the deeply incised valleys at the BOGP. It is noted this is in contrast to Macraes Mine, an often-used nearby analogue, where many MWSFs are situated on a flatter plateau topographic setting. At BOGP, the hydrogeological setting is favourable for achieving high levels (e.g., >80%) of seepage collection. The following site conditions indicate this:

- Groundwater data presented in KSL (2025) and EGL (2025a) show the high elevation ridges have higher hydraulic head than the valley bottoms (e.g., Shepherds Creek).
- Vertical gradients from VWP² data in EGL (2025b) generally show downwards gradients on valley sides and upwards gradients in valley bottoms. See Figure A1 in Attachment A of this letter report for presentation of these data. Both these conditions support the interpretation of the valley bottoms, where MWSFs will be placed, to be zones of groundwater discharge.
- Alluvium within the valley bottoms, the likely main seepage groundwater transport pathway is typically shallow (less than 5 m deep in the vicinity of MWSFs). See Figure A2 in Attachment A of this letter report for presentation of this data sourced from EGL (2025b).

In addition, seepage control elements are planned to ensure enhanced seepage collection, including:

- At the TSF: underdrains, a chimney drain, and a cutoff drain. These drains will convey collected seepage to a lined sump. See EGL (2025a).
- At the MWSF: underdrains and a toe sump. See EGL (2025c)

In summary, given the hydrogeological conditions at the BOGP and the planned seepage collection elements included in the MWSF designs, it is reasonable to expect high levels of seepage collection (or low rates of bypass). Contaminant transport modelling will be completed to support detailed design of these seepage collection systems to achieve appropriate levels of seepage collection.

Once in operation, performance monitoring is proposed (see the Water Management Plan; MGL, 2025a) to confirm collection systems are functioning as planned. If it turns out they are not, then the favourable hydrogeological conditions and long flow paths mean secondary seepage collection systems can be implemented to manage unexpected bypass. Global experience has shown that systems such as interception trenches and/or wells, possibly along with barrier walls if needed, have been successful in achieving high levels of seepage collection from MWSFs.

² *Vibrating wire piezometers*

The following consent condition is proposed to address this further information request:

Prior to the final detailed design of Mine Waste Storage Facilities (MWSF), including the TSF and engineered landforms (ELFs), the Consent Holder must commission contaminant transport modelling studies to support the design of seepage collection elements to achieve appropriate levels of seepage collection to ensure downstream receptors are not adversely affected. The contaminant transport modelling studies must be made available to the Otago Regional Council on request.

RFI#6

Question:

Please undertake sensitivity analysis to understand the potential adverse effects of uncaptured mine-impacted seepage on the downgradient freshwater receiving environment. This purpose of this analysis is to understand the amount of uncaptured seepage (as a percentage of total seepage) from mining features that would result in a measurable adverse effect on water quality within groundwater (the Lindis Alluvial Ribbon Aquifer or Ardgour Valley Aquifer or Bendigo Aquifer) or surface water (Lindis or Clutha Rivers) and any flow-on effects on aquatic ecology in the surface water environment.

Response:

As noted in response to RFI#5, high levels of seepage collection are expected. The reader is referred to that RFI for the basis of that conclusion.

Despite the high levels of seepage collection anticipated, screening level sulfate mixing calculations for the Ardgour Valley Aquifer³ for varying levels of seepage collection are calculated as follows (Table 1 summarises the basis for the calculations):

$$\text{Aquifer Conc.} = \frac{\text{MIW Load Bypass} + \text{Surface Water Load}}{\text{Aquifer Throughflow}}$$

Table 1: Calculation term descriptions.

CALCULATION TERM	DESCRIPTION
MWSF load bypass via groundwater	An average sulfate load of approximately 250 t/y was estimated within the Shepherds Creek catchment by MWM (2025b). Note that the load decays over time to approximately 150 t/y. Various levels of seepage bypass are evaluated. For example, a bypass proportion of 10% would be 25 t/y.
Load in surface that reports to groundwater	MWM (2025b) estimated that during operations the average SC01 creek flow would be 12.6 L/s. The maximum monthly average sulfate concentration was estimated to be 86 mg/L, giving an annual load of 34 t/y.
Ardgour Valley Aquifer through flow	Calculated as Transmissivity*Hydraulic Gradient*Aquifer Width: <ul style="list-style-type: none"> • Transmissivity between 1,000 and 5000 m²/d (KSL, 2025). • Hydraulic gradient of 3.8x10⁻³ m/m, based on Lindis River hydraulic drop between 320 and 360 m RL over 10.5 km (estimated from NZ Topo50 contours). • Aquifer width of 1 km (KSL, 2025). • Calculation resulted in 44 to 200 L/s aquifer through flow.

³ Only load leaving Shepherds Creek are calculated as the overall sulfate load from Bendigo Creek catchment is an order of magnitude less (~20 t/y on average).

Results are presented in Figure 1 for Shepherds Creek load reporting to the Ardgour Valley Aquifer. Calculations suggest even for relatively high levels of uncaptured seepage bypass (e.g., 50%) reporting to the Ardgour Valley Aquifer, sulfate concentrations are less than half the drinking water guideline value of 250 mg/L. For lower levels of bypass (or high seepage capture rates), say 15% bypass or less, calculated sulfate concentrations are approximately 50 mg/L or less, or lower than the drinking water guideline value by a factor of 5 or more.

Other constituents of mine-impacted water would be more reactive and would be attenuated along groundwater flow paths under natural groundwater conditions (compared to sulfate, which is typically conservatively transported). As such, their levels would be lower than by conservative mixing alone.

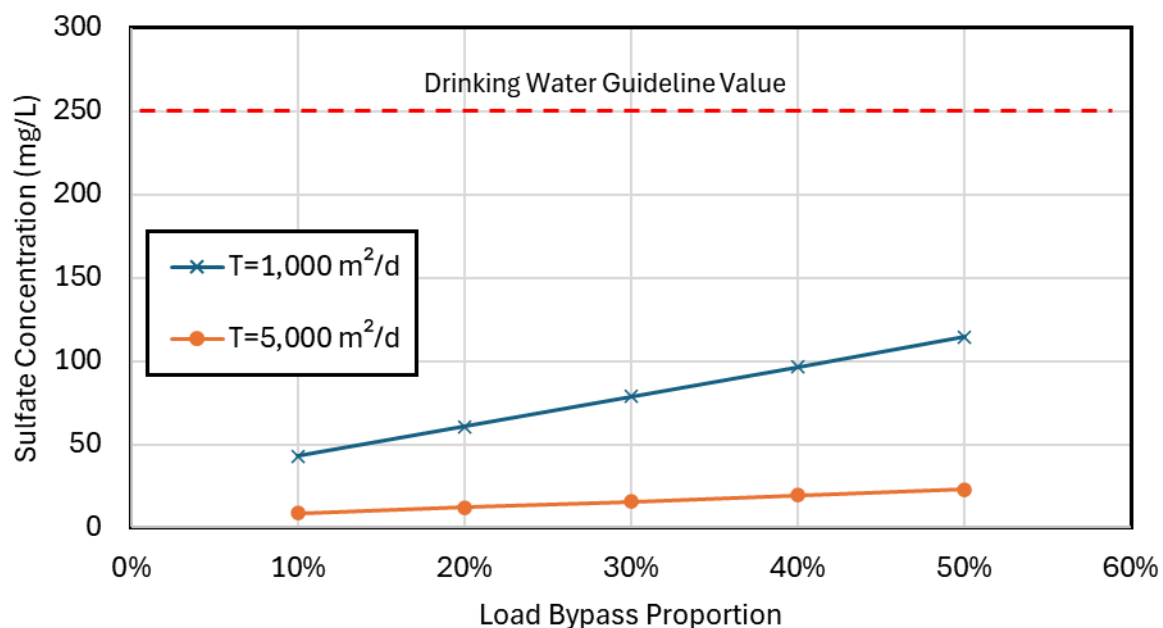


Figure 1: Ardgour Aquifer mixing calculations.

RFI#7

Question:

Please discuss potential locations for downgradient/downstream freshwater receiving environment monitoring that would be suitable as an indicator of uncaptured seepage entering the receiving environment, both in groundwater and surface water. Please also discuss a suitable parameter or suite of parameters that would be indicative of uncaptured mine impacted water entering the freshwater environment and suggest appropriate action limits. These action limits would not be effects-based limits; rather, they would be indicators that uncaptured mine-impacted water is entering the downstream environment and trigger appropriate remedial actions. Your answer should consider an appropriate timescale for this monitoring based on the contaminant transport timeframes that would result from the groundwater contaminant modelling.

Response:

As documented in the BOGP Water Management Plan (MGL, 2025a; see Section 7.4.3), eight groundwater monitoring locations are proposed, some of which are relevant to this question. Given the hydrogeologic setting described earlier in this document, primary seepage groundwater pathways will

be shallow and discharge to valley bottoms. The following groundwater monitoring locations have been proposed with this in mind to enable monitoring detection of potentially uncaptured seepage:

- GW01, in the Shepherds Creek valley bottom, immediately downstream of the seepage collection sump (subject to access constraints). This location will allow monitoring for potential uncaptured seepage bypass from the Shepherds ELF and TSF.
- GW02, in an unnamed tributary valley, immediately downstream of the Western ELF, allowing for monitoring of potential uncaptured seepage bypass from this MWSF.
- GW08, in the Rise and Shine Creek valley bottom, allowing for monitoring of potential uncaptured seepage bypass from the Srex ELF.
- GW04 and GW05, will also allow for secondary detection of uncaptured seepage bypass in the Rise and Shine Catchment and Shepherds Creek Catchment.

In addition, given the upwards vertical gradients noted in the valley bottoms, proposed surface water monitoring sites will also allow for monitoring of potential uncaptured seepage bypass that discharges to surface water.

In summary, the proposed surface and groundwater monitoring locations cover the expected seepage pathways to effectively monitor for potential uncaptured seepage bypass.

RFI#8

Question:

The modelling of engineered landforms uses a net percolation rate of 20% which is at the lower end of the values predicted in the net percolation report (Report B.06C, Appendix K). This is very significant as engineered landforms are expected to have the largest potential adverse effect on water quality and the percolation rate has the largest effect on contaminant mobilisation. The net percolation rate will have the greatest effect on solute load, and hence effects on water quality. Please undertake uncertainty analysis of the effect of higher net percolation rates on ELF seepage water quality during active mine water management.

Response:

If net percolation (NP) were higher during closure, the result would be higher active treatment capacity requirements, which can be managed with a larger water treatment plant and potentially for a longer duration.

However, it is noted that it is theoretically possible for cover systems to achieve a NP value of 20% of mean annual precipitation (e.g., INAP, 2017). Ultimately it comes down to the design of the cover system.

MGL have committed to initiating cover system trials early in mine life to validate model results and demonstrate that cover system designs can achieve an acceptable NP.

The following consent condition is proposed to address this further information request:

Within the first year of the Operations Phase (i.e., after 2 years of the BOGP commencing), once sufficient materials have been placed to undertake a trial, the Consent Holder must initiate cover

system trials to understand expected net percolation rates within ELFs as part of the BOGP. Details on these trials must be made available to the Otago Regional Council on request. These details will include trial design, trial results, and recommendations informed by the results.

RFI#9

Question:

Water balance calculations suggest that the site will be in a water deficit condition up to Year 8 (MWM B.06C Appendix N). The summary of the water balance calculations provided in Kōmanawa (Table 19, B.04) indicate that the site would only be in water deficit if some of the water make (mine-impacted water) is used for dust suppression. However, water quality load modelling relies on bore water being used for dust suppression to maintain water quality below compliance limits. If the water balance modelling has assumed that mine-impacted water will be used for dust suppression, please re-run the water balance model to confirm the operational mine water balance.

Response:

Water balance modelling completed by MWM assumed that bore water was used for dust suppression. In other words, dust suppression was not used as a sink term in the water balance calculations. As such, no updates are required.

RFI#10

Question:

The site needs to be maintained in a water balance deficit for a length of time sufficient to test net percolation rates and treatment train efficacy if the proposed water quality compliance limits are to be met. Further analysis should be completed to determine the risk of water surpluses.

Please undertake additional transient water balance modelling to account for greater values of groundwater dewatering (Kōmanawa suggested increasing peak dewatering rates by a safety factor of 2), and modelling with a range of rainfall and evaporation values.

Response:

MGL are initiating workstreams to develop a site wide transient water balance model to support detailed design of the TSF and site water infrastructure. The purpose of this modelling is to support detailed design rather than assess potential effects as these have already been assessed. This model will provide a more detailed understanding of the site water balance with variable climatic and seasonal conditions that will be used to inform the detailed design with regards to management of the water balance at the BOGP.

It is also noted that other engineering controls are available to manage water surpluses if they occur, such as evaporation cannons and/or additional on-site mine impacted water storage (as documented in MWM, 2025b and MGL, 2025a).

The following consent condition is proposed to address this further information request:

Prior to the start of the BOGP Development Phase (i.e., within 6 months of the BOGP commencing), the Consent Holder must commission the development of a site wide transient water balance model to

assess effects associated with site water surpluses and deficits against anticipated effects. The site wide transient water balance model must be made available to the Otago Regional Council on request.

RFI#11

Question:

Please provide any additional ground investigation or groundwater monitoring (level or quality) data that has been collected since the MWM and Kōmanawa assessment were undertaken. Please also indicate whether ongoing groundwater investigations and monitoring are occurring, particularly in the vicinity of planned mine waste storage facilities. These data would assist in understanding whether mine waste storage facility seepage collection systems will achieve the anticipated collection requirements. It is noted that MWM recommended that two years of baseline data be collected for a robust data set.

Response:

Additional ground investigations have been completed by EGL (2025b). Figure A1 and A2 in Attachment A of this letter report presents salient hydrogeological data from this work that support understanding the hydrogeological setting at the BOGP.

RFI#12

Question:

In calculating the source terms for the RAS⁴ underground workings, it has been assumed that water quality is dominated by RAS pit lake quality; however, this does not consider the impact of tailings paste on water quality, nor does it consider the relative volumes that the RAS pit and RAS underground workings will contribute. Accordingly, please:

- a. Compare the expected RAS pit lake water discharge volumes with the expected contribution from the RAS underground workings.
- b. Assess the effect of the discharge of tailings paste into the underground workings on the quality of water in the underground workings.
- c. Recalculate source terms, and update any assessments that rely on these, if necessary.

Response:

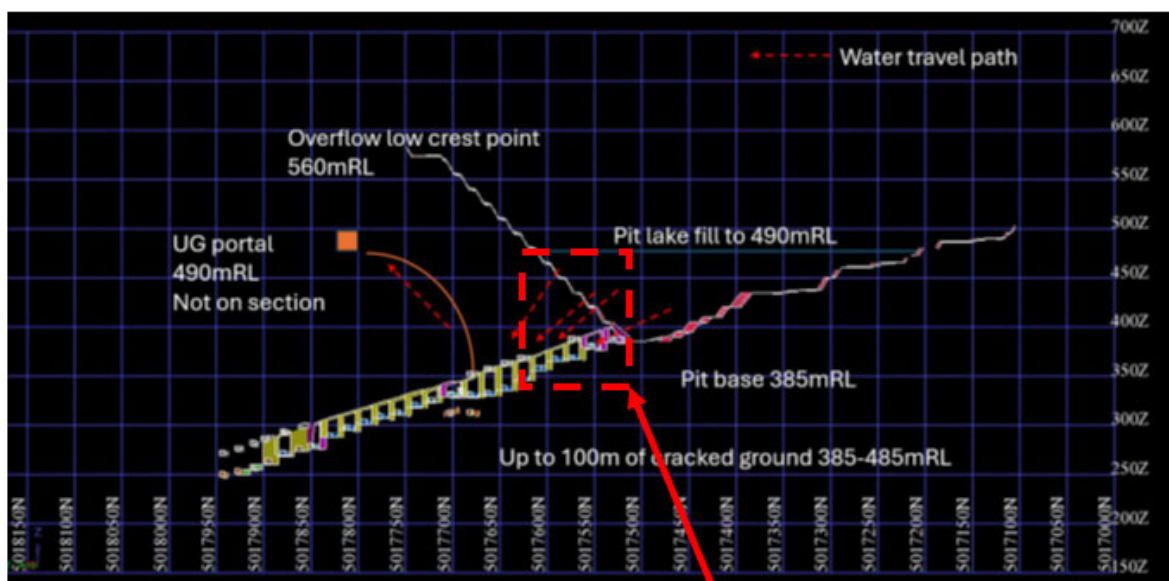
MWM has reviewed this question and have provided a response for the Closure Phase and the Operational Phase of the BOGP and the mechanisms:

Closure Phase

We do not expect to see significant effects of the paste backfill on water quality of underground seepage during the Closure Phase.

Paste backfill is likely to have a permeability that is several orders of magnitude lower than the permeability of the (fractured) Crown Pillar that connects the underground to the RAS Pit Lake. Conceptually the water quality will be dominated by the RAS Pit lake water. This is shown in Figure 2.

⁴ *Rise and Shine*



As the Crown Pillar is robbed, K of overlying rock mass will increase, providing hydraulic connection.

Figure 2: RAS Pit Conceptual Model

A comparable analogue (Golden Point Adit) is available at Macraes and conceptually, the mechanisms will be comparable to the RAS Underground discharge (i.e., the flow is dominated by the pit lake water quality). The Golden Point Adit discharge is presented in Figure 7 of the MWM (2025a) Source Term Report: J-NZ0475-001-R-Rev2 but is reproduced below as Figure 3.

At Macraes, the historic golden point underground workings intersect the Golden Point Pit. With filling of the pit there is a significant change in water quality from the Golden Point Adit from the 1990’s to the 2000’s as the pit water quality dominates the adit seepage water quality. Pertinent available data are presented in Figure 3.

Data indicates that there is a decrease in arsenic and iron concentrations across this time period, with the adit discharge being similar to the Golden Point Pit after the pit commenced draining through the workings, although sulfate is slightly lower. Given the hydraulic connection of the adit to the pit void, only earlier data would be representative of adit seepage water quality (e.g., pre-2002) prior to the Golden Point Pit filling.

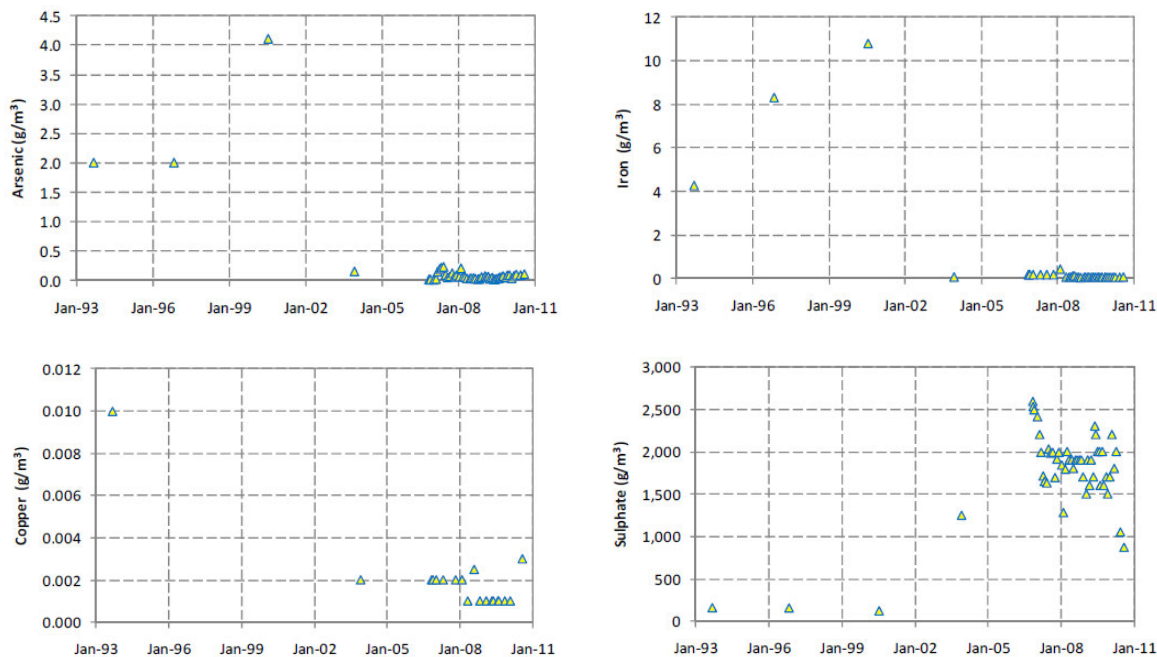


Figure 3: Golden Point Adit water quality

Source: Golder (2011).

At the BOGP, the effects of paste backfill and also the effects of underground seepage due to groundwater inflow are expected to be minor, with water quality dominated by RAS pit water quality.

Operational Phase

During the Operational Phase all water will be pumped back to the mine water circuit for reuse in the ore processing circuit. A source term for underground seepage water quality was developed (MWM, 2025a) but this source term does not consider the effects of paste backfill. The use of cement to generate paste fill could contribute to higher pH, alkalinity, Ca, Al, etc but this will decrease with time as the cement strengthens.

This source term for underground water quality could be updated for the operational site wide transient water balance model that is being developed (see RFI#10) if a load model is required. However, effects are likely to be minor compared to the quantity/quality of process water.

RFI#13

Question:

Outflow from RAS pit through the mine underground workings is modelled using groundwater flow equations – it is unclear whether this actually makes sense of how this portal will operate and the final connection between the underground workings and the RAS Pit Lake. There is also variation in the portal elevation between the Kōmanawa and MWM reports, which may also explain the contradiction in Pit Lake filling and discharge times (documented as 50 years and 25 years, respectively). It is not clear how this discharge will operate or connect to Shepherds Creek. Please clarify how the RAS pit will be connected to the underground portal and how the underground workings will ultimately discharge to the environment. Diagrams may be useful.

Response:

See response to RFI#12 for a description of the conceptual model of the RAS Pit – Underground hydraulic connection.

RFI#14

Question:

Please provide Dumont, M., & Rekker, J. (2025). Post Closure Impacts of Bendigo Ophir Gold Deposit on the Ardour Aquifer (Client Report for Matakaniui Gold Ltd Z24002.2; p.50). Kōmanawa Solutions Ltd. This is referenced as the source of information for predicting the effects on the Ardour Aquifer summarised in B.03. However, this report has not been provided. Without the full report it is not possible to determine whether the modelling is appropriate nor understand the limitations and assumptions.

Response:

MWM understand MGL have now provided this document.

RFI#15

Question:

The hydrology of wetlands across the site has not been well described to understand their catchments and dynamics of their loss. Empirical calculations were completed to assess the drawdown caused by pumping and the likely impacts on wetlands (Report B.42.). These calculations are based on values of storage with no justification and no sensitivity analysis. The impacts on wetlands were assessed based on the drawdown disturbance footprint, but the radius of drawdown is very sensitive to the storage value used.

Response:

There is no explicit request here. However, the following is noted for context and to support the response to RFI#16:

- A specific yield of 0.01 was adopted for calculations, based on studies reported by GHD at Macraes Mine (see page 5 of B.42 (HGG, 2025a). The adopted value is in line with what one would expect in a fractured rock hydrogeological setting (e.g., see Freeze and Cherry, 1979).
- Although the radius of influence may be sensitive to storage property values, in hydrogeological settings such as at the BOGP (where groundwater discharges to surface water), capture of groundwater discharge tends to limit the cone of depression expansion long before theoretical radius of influences are reached.
- Furthermore, potential effect pathway monitoring and flow augmentation in both main creeks is proposed to minimise impacts to valley bottom wetlands (see MGL, 2025a).

RFI#16*Question:*

The hydrological understanding of wetlands, including uncertainty analysis based on unknown storage values or the assessment of wetland hydrology (catchment and flows), and the effects of increased flows on the wetland. The radius of drawdown is very sensitive to the storage value used. The impacts on wetlands were assessed based on the drawdown disturbance footprint. No assessment has been completed regarding the effects of long-term higher flows on the wetlands. To better understand the hydrology of the onsite wetlands, please:

- a. Complete further investigations to understand wetland hydrology (catchment and flows); or undertake uncertainty analysis based, given the unknown storage values; and
- b. Assess the effects of increased baseflows on wetland hydrological function in the post-closure scenario.

Response:

The responses to RFI#15 are relevant here so should be read for context.

Further investigations into wetland hydrology are proposed, see Report B.42 and B.44 (HGG, 2025a) and the Water Management Plan (MGL, 2025a). Investigations will include review of creek flow data, creek water levels, and installation of drive point piezometers to understand wetland groundwater-surface water interactions.

MWM understand separate response will be provide by a qualified Ecologist to comment on the potential effects of increased baseflows on wetland hydrological function.

Document 2: Geotechnical Engineering, River Engineering, Erosion and Sediment ControlRFI#7*Question:*

Report B.04 states that an estimated period of 50-60 years will elapse prior to the RAS pit lake and underground workings would connect to the surface water system. Please provide an assessment from a suitably qualified and experienced person that addresses the following matters:

- a. The margin of error in this 50-60-year estimate.
- b. Whether this margin of error has been incorporated into any other assessments that have relied on this estimate, including but not limited to dam⁵ (pit) safety, contaminant transport, downstream ecological assessments, and monitoring and maintenance requirements across the mine site.
- c. ~~How any proposed underdrains have been taken into account in the time estimate~~⁶.
- d. If stream depletion effects are anticipated for 50-60 years post-closure, please explain the reasoning behind Kōmanawa's statement that surface water flows in both arms of Shepherds and Bendigo catchments would increase.

Response:

MWM note that Report B.04 uses outdated pit lake filling estimates of 50 to 60 years related to a previously considered portal elevation. The current portal elevation planned is 490 m RL, and modelling completed by MWM (2025b) estimated the filling rate to be 25 years based on this elevation.

Sensitivity analysis of the model developed by MWM is shown in Figure 4 that considers the following scenarios:

- Base Case (as reported by MWM, 2025b).
- Groundwater inflow is doubled (GW_Inflow*2).
- Groundwater inflow is halved (GW_Inflow*0.5).
- Pit wall runoff coefficient is 0.8 (Base Case value was 0.6).
- Pit wall runoff coefficient is 0.8 (Base Case value was 0.8)

As can be seen from the presented analysis, model results suggest the pit lake filling time could vary between 25 to 40 years.

Discussions between Ryan Burgess and the Pit Geotechnical Expert for the BOGP on the associated risk of pit lake filling times for pit wall safety (Peter O'Bryan, personal communications, 16 January 2026) concluded that overall, the margin of error in this context poses a low risk to pit wall stability. Theoretically, during early phases of pit void filling pore pressures will increase temporarily, but in the

⁵ The term dam was used in the original RFI, but the supporting peer review document by Geosolve was updated to correctly reference the RAS Pit. For the purposes of this response, MWM have assume the pit safety is the intended assessment to make reference to.

⁶ The revised peer review document by Geosolve removed this comment, it is expected that a response to this element of the RFI not required.

long-term pit lake formation has a ‘stabilising effect’ on pit walls with the mass of water filling the void. On balance, the stabilising effect is typically more prevalent for pit voids that are allowed to fill. Attention is also drawn to the fact that globally, many (if not most) pit voids are allowed to fill as an industry standard closure (and relinquishment) strategy. For a New Zealand example, one needs to look no further than Globe Progress Mine near Reefton.

As documented in response to RFI#12 in Document 1, the hydraulic connection between the pit void and underground workings provides hydraulic control on water leaving the pit lake. The time to filling does not greatly influence the transport capacity of potential contaminants.

Post-closure, creek flows are expected to increase as a result of (treated) seepage from MWFS being discharged to the receiving environment. The expected NP value of 20% for MWSFs is higher than catchment wide groundwater land surface recharge, so the catchment water balance is increased (offset by lower actual evapotranspiration). Any temporary reduction in creek flow from the RAS Pit will be offset by creek flow augmentation and/or post-closure increases in the catchment water balance.

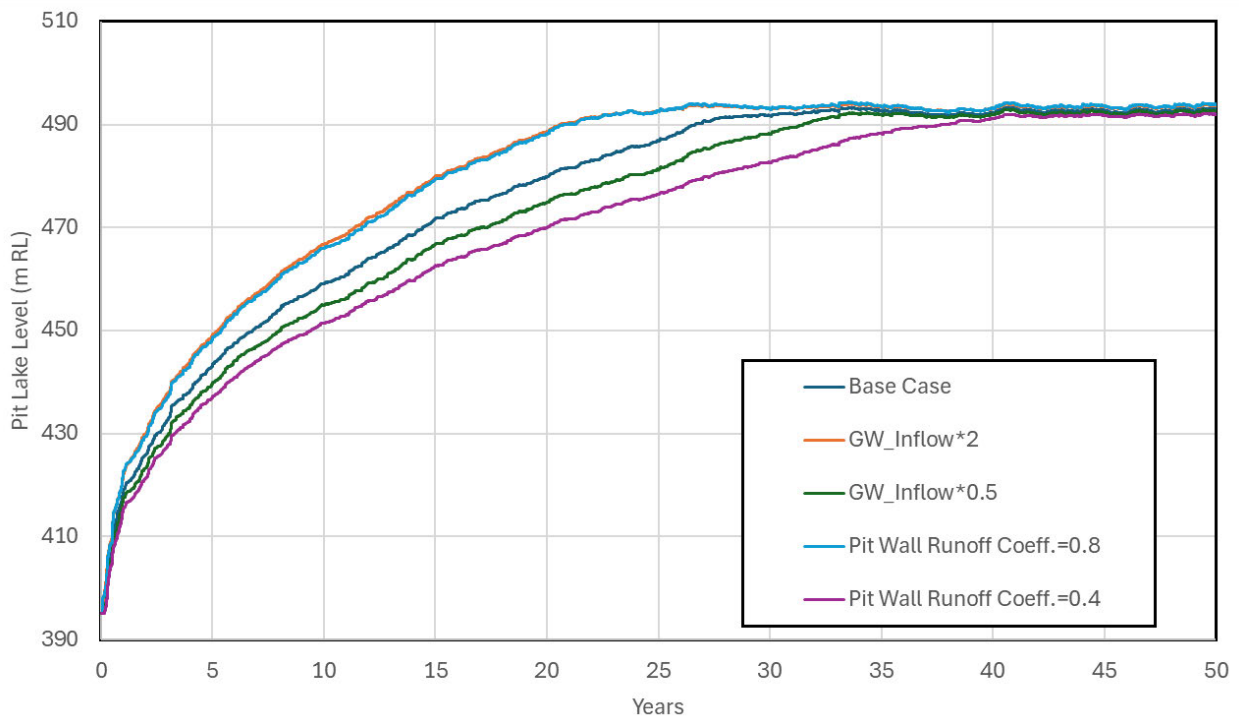


Figure 4: Pit lake filling sensitivity analysis.

CLOSING REMARKS

Please do not hesitate to contact Paul Weber at +64 3 242 0221 or paul.weber@minewaste.com.au should you wish to discuss this letter report in greater detail.

MINE WASTE MANAGEMENT LIMITED

Paul Weber, Ph.D. FAusIMM CP(Env)
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HYDRO GEOCHEM GROUP LIMITED

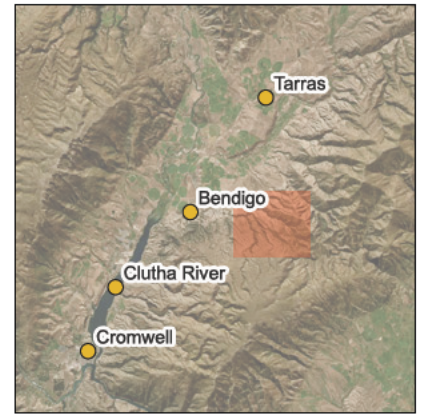
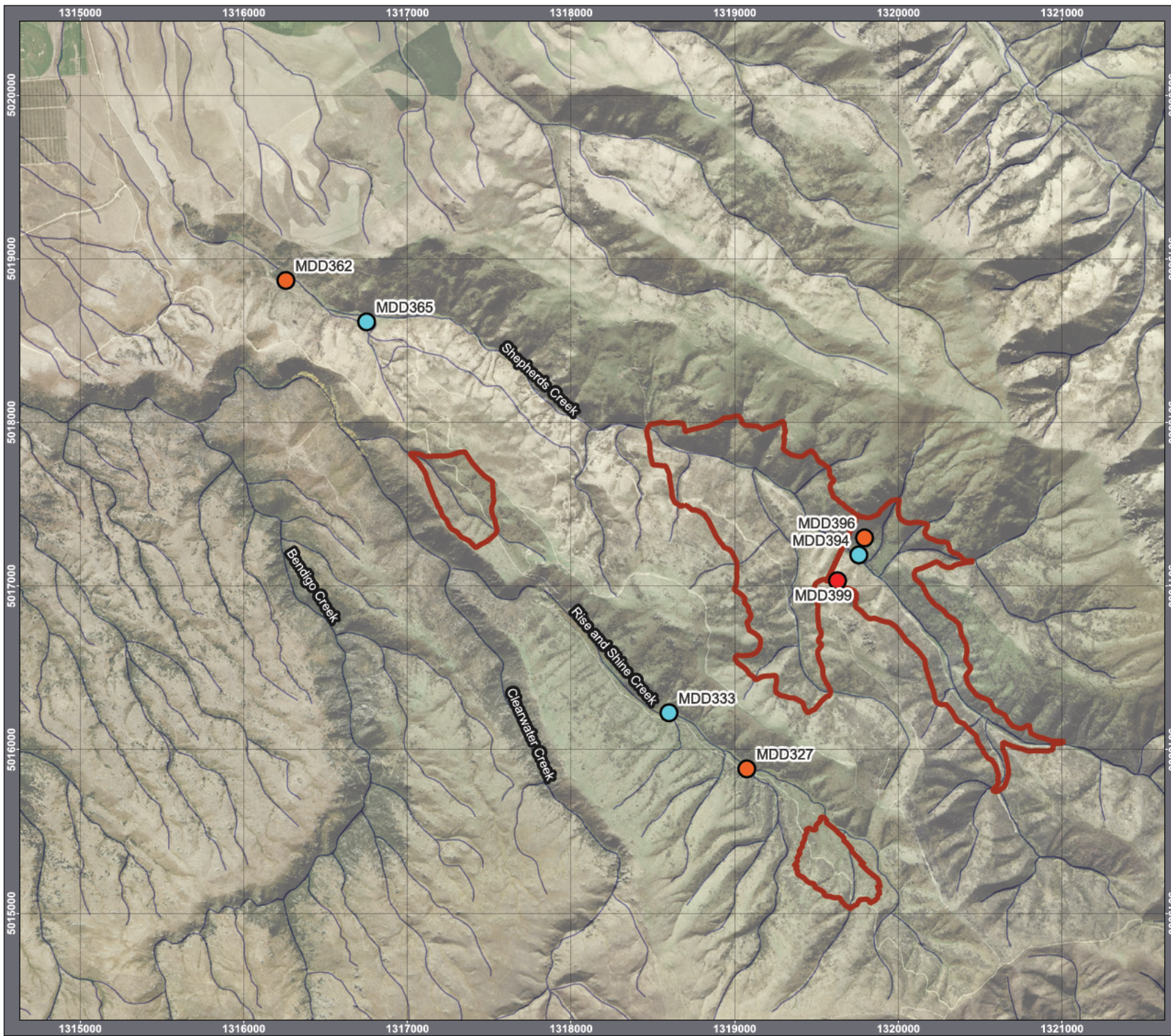
Ryan Burgess, MSc., MIAH, MAusIMM
Principal Consultant

Attachments: Attachment A – Supporting Maps






REFERENCES

- EGL, 2025a. Matakaniui Gold Limited Bendigo-Ophir Gold Project Shepherds Tailings Storage Facility Technical Report. EGL Ref: 9702. Dated 15 July 2025.
- EGL, 2025b. Matakaniui Gold Limited Bendigo-Ophir Gold Project Site Geotechnical Factual Report. EGL Ref: 9702. Dated 8 August 2025.
- EGL, 2025c. Matakaniui Gold Limited Bendigo-Ophir Gold Project Shepherds, Western, and Srex Engineered Landforms, and Come in Time Pit Backfill Technical Report. EGL Ref: 9702. Dated 25 September 2025.
- Freeze, A. and J. Cherry, 1979. Ground Water. Prentice-Hall, Inc. Englewood Cliffs, NJ.
- KSL, 2025. Bendigo – Ophir Gold Mine Project – Groundwater Existing Environment & Effects Assessment. KSL Ref: Z24002BOG-1. Dated 1 September 2025
- Golder, 2011d. Macraes Phase III Project Environmental Water Quality Data Summary Report. Report 0978110-562-R012vC, 124 pp. Appendix 15. <https://www.orc.govt.nz/consents-and-compliance/current-notified-applications/archived-applications/oceana-gold-new-zealand-limited-application-rm10351>
- INAP, 2017. Global Cover System Design Technical Guidance Document. Dated November 2017.
- MGL, 2025a. Water Management Plan. Rev0 dated 23 October 2025. Prepared by Mine Waste Management for Matakaniui Gold Limited, 85 pp.
- MGL, 2025b. Matakaniui Gold Limited Soil Management Plan. Rev1 dated 3 June 2025. Prepared by Geocontam Risk Management for Matakaniui Gold Limited, 29 pp.
- MWM, 2025a. Source Term Definition Report – Bendigo-Ophir Gold Project, Mine Waste Management Report J-NZ045-001-R-Rev2 for Matakaniui Gold Limited.
- MWM, 2025b, Water and Load Balance Model Report – Bendigo-Ophir Gold Project, Mine Waste Management Report J-NZ0233-016-R-Rev1 for Matakaniui Gold Limited.

ATTACHMENT A - SUPPORTING MAPS



LEGEND

-  Mine Waste Storage Facilities
- Vertical Hydraulic Gradient**
-  Downwards
-  Upwards
-  Variable
-  Waterways

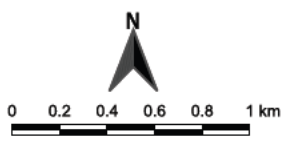
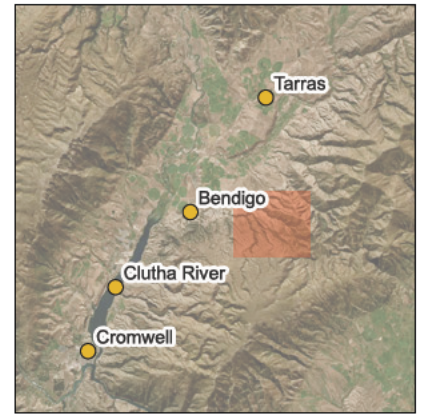
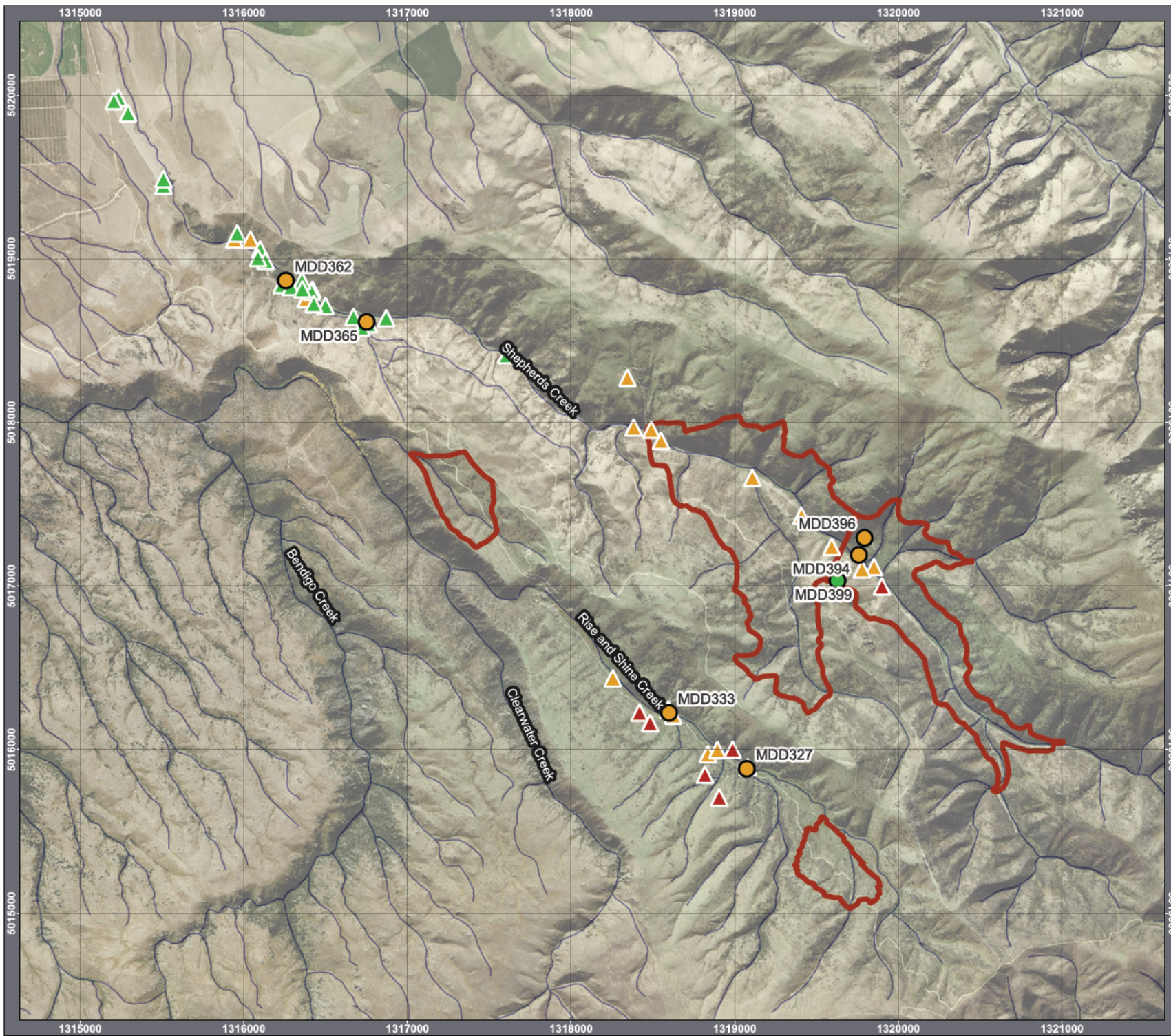


Figure A1: Groundwater - Vertical Hydraulic Gradients
Bendigo-Ophir Gold Project

Scale: 1:31811
 Coordinate System: EPSG:2193
 Reference:
 Date: 29/1/2026
 Size: A4

Project #: J-NZ0488
 Figure: A1
 Revision: RevA
 Prepared: LM
 Reviewed: RB

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- LEGEND**
- Test Pits - Depth to Bedrock (m bgl)
- ▲ 0 - 2
 - ▲ 2 - 5
 - ▲ >5
- Boreholes - Depth to Bedrock (m bgl)
- 2 - 5
 - >5
- ▭ Mine Waste Storage Facilities
 - Waterways

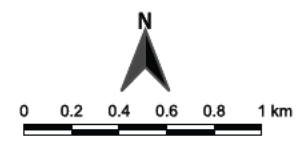


Figure A2: Depth to Bedrock
Bendigo-Ophir Gold Project

Scale: 1:31811
 Coordinate System: EPSG:2193
 Reference: 29/1/2026
 Date: 29/1/2026
 Size: A4

Project #: J-NZ0488
 Figure: A2
 Revision: RevA
 Prepared: LM
 Reviewed: RB

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