9 September 2023

Rod Smith
Study Manager
De Grey Mining Ltd
2 Kings Park Road
WEST PERTH WA 6005

Dear Rod,

SUBJECT: TECHNICAL REVIEW – DEFINITIVE FEASIBILITY STUDY - CONCEPTUAL AND NUMERICAL GROUNDWATER MODELLING – HEMI GOLD PROJECT – DE GREY MINING LIMITED

Jurassic Groundwater are pleased to provide the following letter report with respect to our technical review of the conceptual and numerical modelling of the Hemi Gold Project, undertaken by Geowater Consulting for De Grey Mining Ltd.

Scope of Work

Jurassic Groundwater were engaged by De Grey Mining to undertake a technical review of Geowater's conceptual and numerical groundwater modelling report, as part of the Definitive Feasibility Study for De Grey Mining's Hemi Gold Project.

The key objectives of the Geowater's modelling work and reporting are to:

- Develop and refine a groundwater numerical model of the Hemi Gold Project and adjacent areas, based on a conceptual model developed and validated from ground and surface water investigated across the site. Ultimately, the groundwater numerical model will be utilised as a management decision-making tool throughout the project's mining life and closure;

- Provide an estimation of dewatering and water supply requirements to a suitable technical standard to support a DFS-level of accuracy for water system designs and costings being undertaken by De Grey Mining; and

- Provide a robust and technically valid groundwater assessment of De Grey's planned use of the local groundwater resources at Hemi and the possible impacts of this use on surrounding water users and the environment. The assessment is to be of a 'H3 level' to adequately support the submission of a 5C Groundwater Well Licence application to the Department of Water and Environmental Regulation (DWER) in the latter stages of 2023.

Provided Information

Previous background reports were provided to Jurassic Groundwater entitled:

- Geowater Consulting – "Mallina Gold Project, Scoping Study – Groundwater Report", prepared for De Grey Mining Ltd, May 2021. DEG-REP-001.

- Geowater Consulting – “Hemi Gold Project – Pre-Feasibility Study – Groundwater and Surface Water Field Investigations Report”, prepared for De Grey Mining Ltd, August 2022. DEG-REP-002.
- Geowater Consulting – “Hemi Gold Project – Pre -Feasibility Study – Conceptual and Numerical Groundwater Modelling – Operational Phase”, prepared for De Grey Mining Ltd, August 2022. DEG-REP-003.
- Geowater Consulting – “Hemi Gold Project – Feasibility Study Report – Groundwater and Surface Water Assessment”, prepared for De Grey Mining Ltd, April 2023. DEG-REP-004.
- Geowater Consulting Memo – “Groundwater Closure Modelling and Revised Dewatering – Reinjection Model” prepared for De Grey Mining Ltd, 23rd November 2022.

The key document of this technical review was entitled:

- Geowater Consulting – “Hemi Gold Project – Definitive Feasibility Study – Conceptual and Numerical Groundwater Modelling – Operational Phase”, prepared for De Grey Mining Ltd, August 2023. DEG-REP-005.

Technical Review Methodology

Jurassic Groundwater’s approach to undertaking this technical review involved the following actions:

- Reading and reviewing all the provided reports;
- Understand the work undertaken to date and assess its validity with respect to the conceptualisation of the groundwater and surface water regime at the Hemi Deposit;
- Review the documents with respect to both the requirements of the DWER and Australian Modelling Guidelines; and
- Provide feedback with respect to:
  - Compliance to the guidelines;
  - Potential additional sources of valid information that could improve the outcomes from the modelling; and
  - Identify any key concerns and risks to the project that will need to be considered or addressed.

General Comment

Jurassic Groundwater would like to express its appreciation for the excellent quality and well planned and presented reports provided by Geowater Consulting for the Hemi Gold Project.

The methodology and logical layout of the reports are in line with the requirements of both the Western Australian government DWER “H3” level guidelines (2009) as a detailed hydrogeological assessment including drilling, test pumping and a groundwater model; and are consistent with the Australian Modelling Guidelines issued by the National Water Commission of the Australian Government (Barnett et al, 2012).

The key groundwater related issues for the success of the project are principally:

- Water management, dealing with a large dewatering requirement; the assessment of disposal options (both river discharge and re injection options) when the initial water

supply is surplus to demand; and ultimately the recovery and utilisation of groundwater to meet the project water demands in the later part of the project life;

- Evaluating, mitigating and managing the potential third party impacts resulting from the dewatering activities throughout the mining life of the project; and

- Water quality management related to elevated dissolved arsenic levels in groundwater adjacent to the orebodies.

The groundwater model development and results for the DFS are broadly similar to the PFS model, with the following key changes and additions:

- Re-interpretation of the base of the alluvium surface in outer areas of the model based on borelogs near the Yule River and by updated mapping and interpretation of bedrock outcrop and subcrop by De Grey geologists;

- Steady state calibration to the mapped November 2022 water table surface;

- Inclusion of 2 years of observed groundwater level data in the transient calibration; and

- Application of revised pit designs and a new mine schedule.

Specific Comments

The re-interpretation of the bedrock surface and its hydraulic properties has resulted in the regional drawdown of the water table in the DFS groundwater modelling being more elongated along the northwest trending axis of the main palaeochannel aquifer. This is more in keeping with the conceptual model of regional groundwater flow.

An area of uncertainty and risk remains concerning the reinjection of large quantities of surplus water. We recognise that reinjection trials are planned in the near future. The results of these trials will be critical to the water management for the project.

A further area of uncertainty, that is currently under investigation, is the hydrogeological nature of the bedrock and shear zones within the bedrock and their hydraulic linkage to the adjacent hydrogeological units. A drilling, construction of targeted bores and testing program is understood to be currently underway. Findings from these investigations may have significant impacts to the overall water balance of the dewatering activities.

Another area of uncertainty exists around the elevated arsenic levels in some of the groundwaters in the vicinity of the orebodies. However, the plan to provide a dual header and pipeline system to enable transfer of water to separate water storages at different stages of the bore life, dependant on arsenic levels, is considered a robust and pragmatic solution.

The extensive groundwater and surface water monitoring, which is either already in place or is recommended for installation prior to mining operations commencing, will provide excellent background data on the water regime in the area. This will be crucial in the assessment of potential impacts to water users and the environmental values during the operational phase of the project.

We note that the DFS report does not include any assessment of impacts on the water regime during the Closure phase of the project. However, we understand that this work is currently underway, and will be presented in a separate report in the near future.

We trust that these review comments meet your requirements. We are available to meet to discuss further if required.

Yours sincerely,

Gary Clark
Director/Principal Hydrogeologist
Jurassic Groundwater
Mobile: 0409 115 104
Email: gary@jurassicgw.com.au

Jim Campbell
Director/Principal Hydrogeologist
Jurassic Groundwater
Mobile: 0439 697 249
Email: jim@jurassicgw.com.au

cc Todd Hodgkin (Geowater)