



EMGOLD MINING CORPORATION

TECHNICAL REPORT

20.0 CONCLUSIONS & RECOMMENDATIONS

AMEC reviewed pertinent geological, mining, and metallurgical data from the Idaho-Maryland project to assess its exploration potential and 2002 mineral resource estimate. The following is a list of general conclusions and recommendations made by AMEC during its review:

1. The geology of the Idaho-Maryland structurally-controlled gold mineralization is well understood. With the use of an extensive historic database, a revised, comprehensive geological model for the project area was defined. AMEC's review confirmed the proper use of this geological knowledge in defining the vein sets, estimating the mineral resources, and outlining new target areas for exploration.
2. The database to support the Idaho-Maryland mineral resource estimate contains over 36,000 gold assays, the majority of which were taken from underground samples (mostly channel samples). Those from diamond drill holes comprise only a minor portion of the assay database. The assay data reside as handwritten entries on scale assay plans (1" to 50 ft) for all mine levels. AMEC recommends that Emgold capture this assay data into electronic form (database or spreadsheet, or both) so it can be easily reproduced and/or used for comprehensive data analyses.
3. Because high nugget value deposits with coarse gold areas are best sampled with large sizes, which was not common practice at the time, any estimates made using this historic data should include comparisons with values unadjusted and adjusted for the regular underreporting of grade (i.e., call factor). AMEC believes that the comprehensive set of assay plans, supported by records of muck car stope samples and mapped geology data, as well as the detailed historical production records, all support the integrity of the assay data for the Idaho-Maryland project. These data are deemed suitable for use in mineral resource estimation. AMEC checked the transcription of data onto assay plans and mineral resource worksheets and concluded that the data are sufficiently free of error to be adequately used for resource estimation.
4. AMEC reviewed the mill operating statistics for 1934, 1936, 1937, 1938, 1941, and 1947. Results indicate stable overall gold recoveries and metallurgical response to gravity, flotation, and cyanidation. AMEC believes that the use of modern technology will result in gold recoveries that are consistent — and likely higher — than those achieved in the early milling circuits in the 1930s and 1940s. AMEC recommends that Emgold design a program of testwork to determine the maximum gold recovery potential using gravity separation and concentration.
5. Bulk density was assigned a tonnage factor of 12 for all stopes, resources, and historic production. AMEC believes that locally the bulk density is too low,



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particularly around the Brunswick veins, where scheelite is a ubiquitous component, and for diabase-hosted mineralization in the Idaho systems. It has been recommended that Emgold initiate a program to obtain bulk density measurements of various lithologic types and ore types as part of any planned exploration work.

6. AMEC conducted a reconnaissance review of the distribution of gold mineralization at Idaho-Maryland. The observed distribution on cumulative probability plots show typical lognormal trends. Each vein system does appear to have a unique grade distribution, and the higher-grade distributions (greater than 1 oz/ton (34 g/t) Au values) are an integral part of a system's population. AMEC recommends that Emgold conduct a more detailed statistical review of the gold assay data. The review, by vein system and mineralization type, would assist in future grade interpolation and in the selection of appropriate gold capping levels. Until such an analysis is undertaken, the resource estimates should be reported using uncapped grades. Exposure to extreme grades was evaluated by resource block and managed through classification protocol.
7. The 2002 mineral resource estimates were made using traditional longitudinal sections and 3-D geologic models created using commercial mine planning software (Vulcan®). AMEC validated the evidence for pertinent vein/structural interpretation data support and consistency. All examples based on the underground data demonstrated good data back-up and sound projection limits. The interpretations of the drill hole intercepts were also sound and reasonably projected. AMEC also checked numerous resource blocks for correct tabulation of sample values, reasonable projection limits, and volumetric and trigonometric calculations. The checked blocks were properly constructed and calculated.
8. Only data that could be reconciled to a geologically consistent interpretation was included in the resource estimate. About 25% of the data identified as remaining and undeveloped was excluded because it was not supported by a coherent interpretation. AMEC supports this approach as being consistent with best practice guidelines in resource estimation. Furthermore, AMEC recommends that Emgold continue to work on geological interpretations in areas hosting the excluded material.
9. The mineral resource classification of the Idaho-Maryland deposits used logic that is consistent with the CIM definitions referred to *National Instrument 43-101*. The mineral resources were classified into measured, indicated and inferred resource categories. AMEC assessed the criteria used by Emgold for this classification and generally agreed with them. Emgold's classification protocol was amended to classify mineral resources outlined by single drill hole intercepts as inferred mineral resources and to downgrade any resource blocks that demonstrate a degree of uncertainty in the grade estimate due to the presence of numerous +1 oz/ton Au



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assayed samples (mostly originally measured mineral resources downgraded to indicated mineral resources). In the case of the latter condition, those blocks will remain in the downgraded resource category until such time that a proper investigation is carried out on setting appropriate grade capping levels at Idaho-Maryland.

10. The revised geologic model for the Idaho-Maryland site should be tested for new areas of mineralization. AMEC strongly recommends that Emgold test their deposit model by a surface-based diamond drill program on three to six priority targets in and around the Idaho Structural Corridor. Each target will require several drill holes, approximately 600 ft (200 m) to 1,400 ft (425 m) in length. Eventually the exploration work will need to continue from underground stations. Plans for this phase are currently being evaluated in a preliminary assessment study. Best areas for relatively shallow, higher-grade gold mineralization occur around the Idaho shaft, in and around the Idaho Structural Corridor. Access for drilling would be from an exploration decline. AMEC supports this exploration concept and planning efforts.
11. Emgold is in the process of modifying its plans to exploit and develop the Idaho-Maryland property. New permit applications and documents will have to be prepared. Two aspects that will need to be addressed in the permitting process are: 1) requirements for a surface-based exploratory phase to confirm the near-surface mineral resources, and 2) requirements for developing the mineral resources. The exploratory phase may be exempt from certain regulatory requirements required for the full-scale development of mineral resources. Such an alternative may allow surface-based exploration activities to proceed while work is in progress to permit the mining operations within six months of project initiation. Together, these processes indicate a schedule of between 12 and 24 months to meet the necessary environmental and permit requirements.
12. Permitting strategy will entail working closely with the County and City as they may be the Lead Agency for the exploratory and full mineral resource developments, respectively, and are stakeholders in both CEQA processes. As cooperating agencies, they have the authority to run the permit processes simultaneously or sequentially. Because of the importance of developing a coordinated, collaborative, and informed CEQA process with project stakeholders, as well as government and public arenas, it has been recommended that Emgold develop an outreach strategy to encourage public support and feedback on draft project and operational mine plans. Such a program may take between three to six months to plan and complete.

This independent review by AMEC supports the 2002 Idaho-Maryland project mineral resource estimate and its positive exploration potential for additional gold mineralization.