1.0 SUMMARY

This Technical Report on the Idaho-Maryland Mine project has been prepared for Emgold Mining Corporation ("Emgold" or "Company") by Mr. Robert Pease, Chief Geologist for Idaho-Maryland Mining Corporation (a 100% owned subsidiary of Emgold). Mr. Pease is a Qualified Person, as defined by National Instrument 43-101, for Idaho-Maryland Mining Corporation. He is not independent but serves as the Qualified Person on the Idaho-Maryland Mine Project. The purpose of this updated Technical Report is to support information of a scientific and technical nature contained in Emgold's annual information form. This updated Technical Report has been written to comply with disclosure and reporting requirements defined in National Instrument 43-101, Standards of Disclosure for Mineral Projects, and in compliance with Form 43-101F1 (the "Technical Reports") and Companion Policy 43-101CP (BCN).

This technical report updates and relies on two prior reports prepared for the Idaho-Maryland Mine project. The first was a Technical Report completed by Stephen Juras, Qualified Person for AMEC, in November 2002 that described the geology and gold resources of the Idaho-Maryland Mine Project. The second was a Preliminary Economic Assessment completed by Stephen Juras for AMEC in November 2004 outlining an industrial mineral resource for an industrial minerals mine and ceramics manufacturing facility as part of the Idaho-Maryland Mine Project. The ceramics project and associated ceramics resource estimate have not changed since preparation of that Preliminary Assessment, and Emgold intends to treat the ceramics project separately in a future technical report. The 2004 report also described a small increase in gold resources, updating the 2002 Technical Report.

This 2009 Technical Report updates the gold resources and other aspects of the Idaho-Maryland Mine Project since the 2004 report but does not address the industrial minerals resource or the ceramics facility. Also, this Technical Report does not include an economic assessment of either the ceramics or gold resources. Since 2004, minor changes have occurred to the Idaho-Maryland Mine Project as described in this summary and in sections of this report, including a small increase in gold resources and an update of the permitting process to reopen the Idaho-Maryland Mine through its 100% owned subsidiary, Idaho-Maryland Mining Corporation. Information and data for this report were obtained from the Idaho-Maryland project site in Grass Valley California. The past technical reports are available on SEDAR and Emgold's website at www.emgold.com.

1.1 Location and Ownership

The Idaho-Maryland project is located 1.5 miles (2.4 km) east of Grass Valley, Nevada County, within the State of California. This property comprises approximately 2,800 acres (1,113 ha) of mineral rights and 145 acres (59 ha) of surface rights. The surface rights consist of37 acres (15 ha) of surface rights centered around the New Brunswick shaft (part of a lease option to purchase with the BET Group), 101 acres (41 ha) of surface rights west of the historic Idaho shaft (45 acres (18 ha) as part of a lease option to purchase with the BET Group and 55 acres (22 ha) owned), and 7 acres (3 ha) of surface rights centered around the Round Hole Shaft.

The majority of the mineral rights are defined as subparcels in a Quit Claim Deed. The mineral rights are restricted to a variable depth from surface and in general, are contiguous below 200 ft (60m) from surface. Emgold has an agreement with the mineral rights holders (BET Group) that includes a mining lease and option to purchase certain property rights and mineral rights as outlined above. The term of the lease agreement was originally five years commencing on June 1, 2002. The lease was extended by two years in 2007 and by a further two years in 2009. The current lease expires on February, 2011 at which time Emgold has the right to purchase the property with payments occurring over a four year period. During the term of the lease agreement, any production from the property will be subject to a 3% Net Smelter Royalty (NSR). After purchase of the property, the NSR no longer applies.

In 2005, through its subsidiary Idaho-Maryland Mining Corporation, Emgold acquired 30 acres of underground mineral rights adjacent to the mineral rights under the lease option to purchase agreement with the BET Group. These properties consist of the Golden Gate West and Golden Gate East claims, and the remaining interests in the Dana and Christopher Columbus Claim that the company did not already own.

1.2 Geology and Mineralization

The Idaho-Maryland project is a structurally controlled, mesothermal gold deposit situated in the northern portion of the Sierra Nevada Foothills Gold Belt. This belt averages 50 miles in width and extends for 320 miles in a north-northwest orientation along the western slope of the Sierra Nevada range.

The rock units underlying the Idaho-Maryland mine property include early Jurassic meta-sediments of the Fiddle Creek Complex; early Jurassic meta-volcanics and interflow sediments of the Lake Combie Complex; middle Jurassic ophiolitic assemblage of the Spring Hill Tectonic Mélange; later Jurassic Tectonic Mélange of

the Weimar Fault Zone; and late Jurassic dioritic intrusives. The most important of these units for gold exploration is the Spring Hill Tectonic mélange.

Emgold developed a comprehensive geological model for the Idaho-Maryland project which was reviewed by Stephen Juras, Qualified Person for AMEC, in 2002 and again in 2004. The property hosts a structurally controlled deformation zone terminated at its eastern end by a regional fault. Within this deformation corridor, large dismembered clasts of predominantly ophiolitic igneous origin are present in a foliated serpentinite melange matrix (Spring Hill Tectonic Mélange unit). These large clasts are referred to as slabs in Idaho-Maryland company reports. Identified slabs consist of albitized (sausserite) meta-gabbro, massive antigorite serpentinite, meta-diabase, meta-diorite, slates, and basaltic to dacitic meta-volcanics. The largest slab of metavolcanic rocks on the property is the Brunswick Slab, which is 1.5 miles in length, approximately 0.6 miles in width, elongated in an eastward direction, and open at depth. This slab is interpreted to be derived from the Lake Combie Complex. All of the significant gold production from the Idaho-Maryland Mine was localized within the matrix and tectonic slabs of Spring Hill Mélange unit. Gold production in the New Brunswick Mine occurred primarily in the Brunswick Slab.

The varying styles of mineralization present at the Idaho-Maryland Project are typical of those commonly found in mesothermal lode gold deposits worldwide. At least four basic types of mineralization have been recognized to contain significant gold deposits. In order of importance, these include (1) gold-quartz veins, (2) mineralized black slate bodies, (3) mineralized diabasic slabs, and (4) altered, mineralized ultramafic schists. The veins consist primarily of quartz, which is milky white, massive to banded, sheared, and brecciated. Gold occurs as native gold, ranging from very fine grains within the quartz to leaves or sheets along fractures.

1.3 Exploration

The Idaho-Maryland Mine was discovered in 1851. During the period of 1862 to 1956, the mine produced 2.4 million ounces of gold at a grade of 0.43 opt gold grade. The mine shut down in 1956 due to the fixed price of gold at U.S. $35 per ounce and rising labor and supply costs post World War II. The mine had workings to a depth of 3,280 feet. Adjacent to the Idaho-Maryland Mine is the Empire Mine, which produced 5.8 million ounces from 1850 and 1956 and had workings exceeding 5,000 feet vertically in depth. The Grass Valley District produced in excess of 17 million ounces of gold.

The gold exploration programs were reviewed by Stephen Juras for AMEC in 2002 and 2004. The initial program consisted of an extensive geologic evaluation of the

historical mine records plus additional diamond drilling from surface, made possible by the excellent and comprehensive preservation of the historical Idaho-Maryland mine and mill records. This data was used to generate a consistent, property-wide structural geology model and vein set definition and chronology. Unmined mineralization was identified along underground workings and in historical diamond drill holes. Interpretation of the updated geologic model defined new vein sets and extensions of known vein sets. These were categorized for mineral resource estimates, future exploration, and expansion. Emgold implemented many of the recommendations outlined in both AMEC reports when project funding was available.

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) as part of the historic operations. Those from diamond drill holes comprise only a minor portion of the assay database. The assay data reside as handwritten entries on assay plans (1" to 50 ft) for all mine levels along with a small number recently found in log books. Drillhole assay data accompany the intercepts on these plan maps, and copies of assay certificates also are present for the final 10 years of production.

The historic samples were fire-assayed at former mine site laboratories. No records exist of any historic QA/QC program. Sample quality was inferred by the reconciliation of historic production records to underground sample data. These studies, as well as an investigation on mill-to-resource prediction completed by AMEC showed that the resource or reserve estimates consistently underestimated the amount of gold produced by milling, a discrepancy most likely reflective of sample size influence rather than laboratory technique. High nugget value deposits with coarse gold areas are best sampled with large sizes, which was not common practice at the time. Therefore, 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”).

In 2002, Juras stated 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 were deemed suitable for use in mineral resource estimation. Juras also checked data transcription onto assay plans from copies of original assay certificates and from assay plan to mineral resource worksheets and concluded that the data are sufficiently free of error to be adequate for resource estimation.

In 2003-2004 surface exploration drilling programs were conducted to test the geologic model and explore the veins of the Idaho-Maryland Mine. The methods and results were reviewed by Juras for AMEC and disclosed in their 2004 report.

Since 2004 Emgold has continued evaluate the property geology and model historic data. The surface geology of the property was mapped and computerized for use in geologic modeling. The historic assay database was computerized to use in geostatistical modeling and further delineation of mineralized zones. A stope model of the location and shape of historic stopes was also completed. This information will be utilized in the next phase of work along with the vein model, which is in progress but not yet complete.

Also since 2004, new gold exploration blocks were delineated. These were exploration targets that did not meet all the criteria of resources but would be areas of potential exploration. A cutoff grade of 0.10 oz/ton Au was used to define these targets. No additional drilling has been conducted since the 2003-2004 surface drilling programs.

1.4 Metallurgical Testing

In 2006, preliminary gravity and cyanide tests were conducted using a composite of small samples of drill core rejects from the 2003-2004 surface drilling programs. Results suggested that gold recoveries would be consistent with historic mill recoveries, which were above 95 percent. In 2006 and 2007, preliminary gravity, flotation and cyanide leach tests were conducted on small samples of historic mine tailings. Gravity results indicated that gold recoveries of up to 25 percent could be attained from these pulverized mill tailings. The results of initial flotation tests suggested that 26 percent of the gold would be recovered. Cyanide soluble leach test results on the tailings varied from 47-53 percent. In 2004, gravity separation tests of old tailings and waste rock yielded gold recoveries of 70-80 percent.

1.5 Resources

In 2002, the gold mineral resources for the Idaho-Maryland property were estimated using traditional longitudinal sections and 3-D geologic models with commercial mine planning software. Juras validated the evidence for the 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 covering the drillhole intercepts also were felt to be sound and reasonably projected. However, the latter is hampered by the uncertainty in spatial location of the drillhole intercept due to the holes not having been down-hole surveyed. Juras also checked numerous resource blocks for correct tabulation of sample values, reasonable projection limits, and volumetric and trigonometric calculations, and stated that the checked blocks were properly constructed and calculated. Specific criteria were established for mineralized blocks to be classified as resources. Those included: a)

minimum true thickness of three feet for resource blocks, b) cutoff grade of 0.1 opt Au, c) mine call factor not applied to any blocks developed from muck car samples or drillholes (historic or recent), and d) mineral resources outlined by single drill hole intercepts as Inferred Resources.

In 2004, the gold mineral resource for the Idaho-Maryland property was increased slightly. The estimate used the same criteria that had been previously established and disclosed. Juras again reviewed the results for AMEC.

In 2007, the NI 43-101-compliant gold mineral resource was increased by approximately three percent, and it remains the same now. This estimate also used the same criteria that had been previously established and disclosed.

The current classified measured, indicated and inferred mineral resources are shown in Table 1-1. The Idaho-Maryland mineral resource was reported using a 0.10 oz/ton Au cut-off grade. All estimated resource blocks equal to or greater than 0.10 oz/ton Au are tabulated in the summary.

Table 1-1: Idaho-Maryland Project Gold Mineral Resource Summary, March 1, 2007

	True Thickness (ft)	Tonnage (tons)	Gold Grade (oz/ton)	Gold (oz)	Gold Grade (oz/ton) 1.44 MCF	Gold (oz) 1.44 MCF[1]
Eureka Group [2]						
Measured Mineral Resource	6.5	17,000	0.18	3,000	0.29	5,000
Indicated Mineral Resource	5.7	41,000	0.27	11,000	0.37	15,000
Measured + Indicated Mineral Resources	**5.9**	**58,000**	**0.24**	**14,000**	**0.34**	**20,000**
Inferred Mineral Resources A	9.0	393,000	0.21	81,000	0.30	117,000
Inferred Mineral Resources B	4.8	49,000	0.37	18,000	-	-
New Inferred Mineral Resource (A)	4.4	5,000	0.15	1,000	0.22	1,000
Idaho Group						
Measured Mineral Resource	17.5	129,000	0.24	31,000	0.34	44,000
Indicated Mineral Resource	10.6	209,000	0.42	88,000	0.60	125,000
Measured + Indicated Mineral Resources	**13.3**	**338,000**	**0.35**	**119,000**	**0.50**	**169,000**
Inferred Mineral Resources	10.0	838,000	0.25	212,000	0.37	307,000
New Inferred Resource (A)	4.1	38,000	0.71	27,000	1.02	39,000
Dorsey Group						
Measured Mineral Resource	11.6	61,000	0.23	14,000	0.33	20,000
Indicated Mineral Resource	6.4	131,000	0.33	43,000	0.46	60,000
Measured + Indicated Mineral Resources	**8.0**	**192,000**	**0.30**	**57,000**	**0.42**	**80,000**
Inferred Mineral Resources	9.5	955,000	0.30	288,000	0.43	413,000
New Inferred Resource (B)	3.0	5,000	2.05	10,000	2.05	10,000
Brunswick Group						
Measured Mineral Resource	8.0	64,000	0.17	11,000	0.25	16,000
Indicated Mineral Resource	6.2	108,000	0.28	30,000	0.40	43,000
Measured + Indicated Mineral Resources	**6.9**	**172,000**	**0.24**	**41,000**	**0.34**	**59,000**
Inferred Mineral Resources	7.3	291,000	0.23	67,000	0.33	97,000
Waterman Group						
Measured Mineral Resource	70.7	831,000	0.15	127,000	-	-
Indicated Mineral Resource	30.5	75,000	0.21	16,000	-	-
Measured + Indicated Mineral Resources	**67.3**	**906,000**	**0.16**	**144,000**	**-**	**-**
Idaho-Maryland Project [3]						
Measured Mineral Resource 1	13.3	271,000	0.22	59,000	0.31	85,000
Measured Mineral Resource 2	70.7	831,000	0.15	127,000	0.15	127,000
Indicated Mineral Resource	8.1	489,000	0.35	172,000	0.50	243,000
Measured + Indicated Mineral Resources	**41.1**	**1,666,000**	**0.22**	**375,000**	**0.28**	**472,000**
Inferred Mineral Resources	9.3	2,526,000	0.26	666,000	0.38	952,000
New Inferred Resource A	4.2	42,000	0.65	27,000	0.94	40,000
New Inferred Resource B	3.0	5,000	2.05	10,000	2.05	10,000
Inferred Mineral Resource Total	9.1	2,573,000	0.27	703,000	039	1,002,000

1. MCF = Mine Call Factor (not applicable to Waterman Group resources). **2**. Inferred resources are divided into **A** (historic data and mine call factor applied) and **B** (from 2003-2004 data and no mine call factor applied). **3**. Idaho-Maryland measured resources are split into two categories: 1. the Eureka, Idaho, Dorsey, and Brunswick Groups, and 2. the Waterman Group (stockwork/slate type ore). 4. New inferred resources included 40,000 ounces with MCF (A) and 10,000 ounces with MCF (B).

1.6 Permitting and Environmental

The project is currently in the permitting process under the California Environmental Quality Act (CEQA) and the California Surface Mining and Reclamation Act (SMARA). The scope of the project being permitted includes dewatering, rehabilitation, exploration, operation, and reclamation of the mine. The City of Grass Valley is the Lead Agency in the permitting process and is developing an Environmental Impact Report (EIR) for the project. A Draft Environmental Impact Report (DEIR) has been completed and is being revised. It is expected the EIR will be completed near the end of 2009, subject to funding and other constraints. Subsequent to completion of the EIR, the Grass Valley City Council will vote to certify the EIR as complete and vote on a Conditional Use Permit for the project.

1.7 Conclusions

The conclusions of this updated Technical Report are as follows:

1. Property and mineral rights purchases and changes occurred after release of the 2004 report. In 2005 Emgold acquired 30 acres of underground mineral rights, while the lease option agreement with the BET Group for mineral rights was modified. Seven acres of surface rights are being purchased. All of these changes should benefit the Idaho-Maryland Mine Project.
2. The Idaho-Maryland Mine Project is in the process of permitting. A predecessor company had received permits to dewater and conduct underground exploration in 1996, but was not able to start due to funding problems. Emgold applied for permits in 2005 to dewater, explore and mine the property. A draft environmental impact report was prepared in 2008, reviewed by the public, and is currently undergoing revision. Presumably it will be re-circulated for public review, so finalization of this report might take another year. Once that is done, the City of Grass Valley will vote to certify the EIR, and then vote on whether or not to approve a conditional use permit for the project, which could occur before the end of year 2010.
3. Most of the future exploration work for the Idaho-Maryland Project will take place from underground drill stations and will include geologic mapping, channel sampling of veins, and bulk sampling. Planned access for drilling would be from an exploration decline and from the New Brunswick Shaft. AMEC's review of the geology and geotechnical drilling in 2004 concluded that the rock types in the Brunswick Slab would support a decline.

4. The lode gold deposits on the Idaho-Maryland property are structurally controlled. Brittle-ductile contact zones, faults and tectonic slabs exist that have created conduits for mineralizing fluids and areas favorable to the deposition of gold. Historic data along with results of the 2003-2004 surface drilling programs suggests that additional gold mineralization exists on the property.
5. In response to a recommendation in the 2002 Technical Report, surface drilling programs were conducted in 2003 and 2004 to test the geologic model on the west end of the Idaho Deformation Corridor. The results, summarized in the 2004 Preliminary Assessment Technical Report, supported the model.
6. To assess the gold exploration potential of the Idaho-Maryland project, Juras conducted extensive reviews of pertinent geological, mining, and metallurgical data in 2002, and 2004. Unless otherwise stated, the technical conclusions of AMEC listed in the 2002 and 2004 reports remain valid for this updated Technical Report.
7. The geologic and resource model is in the process of being updated to use in future exploration and mine planning, which will encompass geostatistical modeling. Toward this goal, the assay database has been computerized, the historic stopes have been modeled, and computer modeling of veins is in progress. This work is being done with assistance and technical review by AMEC. This work is necessary to determine which veins have sufficient mineralization and volume to be explored and developed.
8. The geology of the Idaho-Maryland structurally-controlled gold mineralization is well understood. With the use of an extensive historic database, a comprehensive geological model for the project area has been defined. The Juras reviews in 2002 and 2004 confirmed the proper use of this geological knowledge in defining the vein sets, estimating the mineral resources, and outlining new target areas for exploration.
9. 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 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 had recommended that Emgold capture this assay data into electronic form (database or spreadsheet, or both) so it could be easily reproduced and/or used for comprehensive data analyses. Emgold has since completed this work.
10. In 2009 two log books of assays were found that contain assays not listed on mine maps. They would add approximately 2000 new assays (or about 5 percent of the total). One book pertained to samples taken from the Idaho-Maryland and the other was for samples taken from the Brunswick Mine. Most assays not listed on

maps appear to be footwall and hangingwall assays. The new assays have not been used in any resource calculations, however, prior to using the data, an independent review will be needed to determine if it is usable, to verify the accuracy of those specific assays listed on the maps.

11. Because high nugget value deposits with coarse gold areas are best sampled with large samples, which was not common practice at the time the Idaho-Maryland Mine was in operation, 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). Juras believed 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 supported the integrity of the assay data for the Idaho-Maryland project. These data were deemed suitable for use in mineral resource estimation. Juras checked the transcription of data onto assay plans and mineral resource worksheets and concluded that the data were sufficiently free of error to be adequately used for resource estimation.
12. It was also recommended that Emgold design and carry out a program of metallurgical testwork. Using small samples of drill cores from the 2003-2004 surface drilling programs and samples of historic mine tailings, Emgold completed preliminary tests on gold recovery using gravity concentration, flotation, and cyanide. Although of limited value due to the small sample size and not representing all mineralized areas, results were in agreement with historic mill recoveries, with overall gold recoveries using gravity, flotation and cyanide being above 95 percent. Further extensive testing will have to wait until the mine is dewatered and there is access to obtain samples for metallurgical test work.
13. AMEC had 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. This work was partially completed in 2004 using representative samples that were available. Surface drill samples of Brunswick Slab meta-volcanic rocks were analyzed and had an average bulk density value (or tonnage factor) of 11.4. However, this would not be applicable to all rock types or veins on the property. Once the mine is dewatered and there is access to obtain samples for metallurgical test work, an extensive program will be required.
14. Juras (AMEC) conducted a reconnaissance review of the distribution of gold mineralization at Idaho-Maryland. The observed distribution on cumulative probability plots showed 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 recommended 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. Emgold staff has computerized the assay database and is continuing to model the geology. Once finished, the company will be able to complete the geostatistical analyses recommend by AMEC.

15. The 2002 and 2004 mineral resource estimates were made using traditional longitudinal sections and 3-D geologic models created using commercial mine planning software (Vulcan® and MineSight®). Juras validated the evidence for pertinent vein/structural interpretation data support and consistency and stated that all examples based on the underground data demonstrated good data back-up and sound projection limits. The interpretations of the drillhole intercepts were also considered sound and reasonably projected. AMEC also checked numerous resource blocks for correct tabulation of sample values, reasonable projection limits, and volumetric and trigonometric calculations, and concluded that the checked blocks were properly constructed and calculated. The gold resources added in 2007 followed the same criteria previously established by Juras. All gold resources in this report are compliant with National Instrument 43-101.
16. Only data that could be reconciled to a geologically consistent interpretation was included in the 2002 resource estimate. As a result about 25% of the data was excluded because it was not supported by a coherent interpretation. AMEC recommended that Emgold continue to work on geological interpretations in areas hosting the excluded material, which will require an ongoing effort.
17. According to Juras (for AMEC), 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 drillhole 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 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.

1.8 Recommendations

The current phase of work on the Idaho-Maryland Mine Project consists of gold exploration and mine development planning using historic data. The following updated recommendations for the project address the needs to complete this phase of work:

1. The general geologic model of the Idaho-Maryland and New Brunswick gold deposits is well understood and will be a useful exploration and development guide. Using this model and the historic data, Emgold should assess the inter-relationships of the primary and secondary veins and other mineralized zones in more detail than has been done before. This information could then be used for mine development planning. This work may take approximately three months to complete and would be accomplished by Emgold employees.
2. Emgold's geology staff has been preparing a computerized geologic model of the Idaho-Maryland and New Brunswick gold deposits using historic data. It is estimated that the current vein model is approximately 60 percent complete. Emgold should complete this computerized geologic model to include veins, stringer zones, mineralized wall rocks, faults, lithologic units and alteration zones, for use in mine development and exploration planning. This work could take an estimated two years to complete and would be accomplished by Emgold employees.
3. The existing gold resource blocks and exploration targets that have been defined within the Idaho-Maryland and New Brunswick gold deposits will be very useful to guide future exploration but many (particularly above the Idaho 2000 level) are scattered throughout the deposits and therefore may not be contiguous enough for mine development. Emgold's geology staff has been updating and computerizing the gold resource model and is currently modeling the veins, stringer zones, and mineralized wall rocks around the veins with the intent of developing a revised NI-43101-compliant gold resource estimate. One goal of the next technical report should be to delineate new and contiguous gold resource blocks within individual vein systems for use in mine planning. This report would utilize geostatistical analysis to assign grades to the veins and stringer zones, and to classify the resources as measured, indicated, and inferred. Most work can be accomplished by Emgold employees although independent consultants would be used to review and assist with the evaluation and preparation of the resource estimate and technical report.
4. Following modeling of historic data, environmental studies and permitting, Emgold's next phase of work would be to conduct underground exploration drilling and sampling. In preparation for this, and after completion of a new gold resource estimate and technical report, Emgold should develop a Preliminary Economic Assessment Report for a potential underground gold development and mining project. Although based on historic data, this report would provide preliminary costs on project details such as construction and/or repair of shafts and development drifts, plus exploration/development drilling and sampling. Some of the work would be accomplished by Emgold employees but independent consultants would review and assist with the

preparation of the assessment. The combined reports, including both the technical report and preliminary economic assessment, would take approximately four months to complete at an estimated cost of $250,000.

5. Emgold should continue to define gold resource blocks from historic mine and drill data to use as future exploration targets. This task would be separate from the updated resource modeling described above, because that work would be used for mine planning purposes. This exploration-focused resource definition should assume the same criteria including thickness and cutoff grade that was used in the 2002 technical report. This work would be ongoing and would be accomplished by Emgold's technical staff.
6. The assay log books reviewed in 2009 contain additional data not listed on assay maps. This new data has not yet been used in any resource calculations, and prior to using this data, an independent review should be conducted to determine if it is usable. At the same time independent review would verify the accuracy of those specific assays listed on the maps. This study would take approximately 80 hours to complete at an estimated cost of $10,400.