

Geological Report on the Omai Gold Property, Guyana, South America

NI 43-101 Geological Report on Property Status and Proposed Exploration Activities for the Omai Gold Property, Guyana, South America



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Appendix 1- Legal Opinion on Omai Property Title and Omai Property Status Opinion-GGMC

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Appendix 3- Legal Opinion on Omai Environmental Indemnification

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1.0 SUMMARY

AMEC Americas Ltd (AMEC) was requested by Mahdia Gold Corp (Mahdia) to prepare a geological report for submission to the Canadian National Stock Exchange on the acquisition by Mahdia of the Omai Gold Project. The report has been prepared using headings of, and guidance set out in, NI43-101F1, but is not a Technical Report as defined by NI43-101.

1.1 Property Description and Location

The Omai Gold Project is located in Guyana, South America with the centre of the property located at approximately 58°45'21"W longitude and 5°25'35"N latitude (UTM PSAD 56 Zone 21N 601,000 m N, 307,000 m E). The site is approximately 170 km southwest of Georgetown, the capital city of Guyana. The Project extends from the north from about 4.5 km above the confluence of the Omai and Essequibo Rivers, to the west bank of the Essequibo, continuing a few hundred metres downstream of the confluence of the two rivers.

On January 25, 2012, the government of Guyana granted Mahdia the Prospecting License (GS14: M-39) PL 01/2012 (the "Prospecting License"), covering an area of 7,244 acres (2,931.54 hectares).

1.1.1 Mineral Tenure and Property Title

On July 25, 2011, Mahdia submitted an application to the Guyana Geology & Mines Commission (GGMC) for a prospecting license over the former Omai Mine area, a concession of 7,244 acres located in the central part of Guyana; approximately 165 km south-southeast of the capital city of Georgetown.

As granted to Mahdia on January 25, 2012, the Prospecting License (GS14: M-39) PL 01/2012, conveys the rights for..."prospecting for gold and valuable minerals (in the course of exploration activities, Mahdia shall duly report all minerals discovered) in the underground, saprolite, and alluvial portions of the deposit.

AMEC was provided with legal opinion that supports the interpretation that Mahdia holds sole rights to the prospecting licence.

1.1.2 Permits

All activities to date have been carried out under the authorization and terms of the approved Prospecting License (GS14: M39) PL 01/2012, which grants Mahdia the "exclusive right to occupy and for the purpose of prospecting for gold and valuable

minerals....” Additional permits are not required for exploration activities, as section 32(1) of the Mining Act (Act No. 20 of 1989) confers broad rights to “carry on such operations and execute such works as are necessary” to explore for the minerals in respect of which the licence was granted.

1.1.3 Property Agreements

Two medium-scale Mining Permits including A44 MP/000 (granted February 16, 2009) and A19 MP/000 (August 25, 2010) conveying the rights to mine and process aggregate were granted to Mr. Alan Archer of Metallica Commodities Corp. Guyana (“Metallica”) (GGMC, 2011a, 2011b). The rights of these medium-scale mining licenses do not allow for the removal of or exploitation of gold. As of May 25, 2012, an MOA (Memorandum of Agreement) has been signed between the GGMC, Metallica and Mahdia regarding the use various facility buildings formerly used by Omai Gold Mines Ltd. Mahdia retains the use of all facilities except for the fabrication shop, the former laboratory and the aggregate plant station and sub stations.

1.1.4 Taxation and Royalties

The specific details and rates of Guyanese taxation of possible production revenue from the Omai Property are presently unknown. However, within the past 12 months, production and corporate revenue taxation has been established by the Government of Guyana for the Aurora and Toroparu gold projects that are under development , operated by Guyana Goldfields Inc. and Sandspring Resources Inc., respectively. Following negotiations with the Guyanese government, production revenue and corporate tax rates were finalized on Mineral Agreements dated October 5, 2011 (2011, Guyana Goldfields Inc. Press Release) for the Aurora deposit and November 10, 2011 (2011, Sandspring Resources Ltd. Press Release) for the Toroparu resource. Given royalties and taxation rate below are applicable for both Aurora and Toroparu gold projects.

- Mining royalty of 5% of gold sales at a price of gold at US\$1,000 or less.
- Mining royalty of 8% of gold sales at a price of gold at US\$1,000 or more.
- Mining royalty of 1.5% on sales of copper and other valuable commodities.
- Corporate income tax rate of 30%.

Mahdia has not completed a Mineral Agreement with the Guyanese Government, and the information on Aurora and Toroparu is included only as being indicative of the likely taxation and royalty regime under which any future mine at Omai could operate.

1.1.5 Current Environmental Studies

The Omai property has had a history of mining activity, with the former Omai gold mine located within the area defined by the prospecting licence. AMEC was provided with legal opinion that confirms Mahdia's interpretation that Mahdia is not responsible for environmental liabilities or rehabilitation associated with the former operation.

The Omai area has been the site of artisanal mining. The artisanal miners, referred to locally as "pork-knockers", were exploiting areas of alluvium and saprolite prior to Mahdia's acquisition of the Prospecting License. An assessment of the potential environmental liabilities as a result of their activities has not been carried out (e.g. use of mercury amalgam). However, there is a reasonable expectation that there will be environmental damage in the affected areas as a result of the artisanal activity. Notwithstanding the legal opinion indemnifying Mahdia from environmental liabilities which predate the acquisition, AMEC recommends that Mahdia formally establish an agreement with the GGMC regarding the extent of liabilities attributable to Mahdia and their current and future exploration activities, both in historically disturbed areas (such as those affected by artisanal mining) and in undisturbed sites within the Prospecting License, and concludes an agreement that indemnifies Mahdia from rehabilitation of areas where Mahdia is not planning exploration activities.

In February 2012, preliminary water samples were collected from the Wenot and Fennel pits and the confluence of the Omai and Essequibo rivers. Results indicated no deleterious concentrations of cyanide, arsenic, cadmium, chromium, lead, mercury, or other metals which exceeded threshold concentrations of the International Finance Corporation (IFC) Effluent Guidelines or Canadian Council of Ministers of the Environment (CCME) Water Quality Guidelines for the Protection of Aquatic Life (AMEC, 2012). This sampling should not be considered a comprehensive assessment of the entire Property. Further sampling is planned to more thoroughly characterize the water quality of the area.

Previous work (Golder, 2007) identified potentially high rates of groundwater inflow to the Fennel Pit. The current hydrogeological test program is designed to build on this work and develop a more robust understanding of the flows to any potential mine workings. The flows previously identified may negatively affect the ability to extract any potential mineral resources or mineral reserves from beneath the diabase dike at the base of the Fennel Pit in a feasible manner.

No formal environmental assessment has been undertaken by, or for, Mahdia to date with respect to the Project, and AMEC is not aware of any current or residual reclamation bonding or remediation requirements. There are no conditions with

respect to environmental bonding or reclamation included as part of the Prospecting Licence.

Commercial production from the site will require an application for a Mining Licence and submission and approval of a "feasibility study" by the GGMC. A Mineral Agreement will need to be negotiated with the Government of Guyana and the GGMC, which will set out the framework for royalties and taxation for the operation of a mine. Additional permits/approvals and an environmental impact assessment (EIA) may also be required, and will be addressed as future project development components are considered.

1.1.6 Effective Date

The effective date of the Mahdia Geological Report on the Omai Gold Property is July 12, 2012, the date at which the legal opinion supporting mineral tenure and the status of environmental responsibilities were prepared.

1.2 Geological Setting and Mineralization

1.2.1 Regional Geology

The Omai gold deposit is hosted in the Paleoproterozoic Barama-Mazaruni Supergroup, a greenstone terrane deformed and metamorphosed during the Trans-Amazonian orogeny, a tectonic-magmatic event bracketed between approximately 2.25 and 1.9 Ga. The greenstone belt sequence comprises alternating felsic to mafic and ultramafic volcanic flows interlayered with thick sedimentary units. The base of the sequence is dominated by tholeiitic basalts and associated mafic-ultramafic bodies and sills, which are overlain by intermediate and felsic volcanic rocks interlayered with immature clastic sedimentary rocks. The metamorphic grade is generally lower greenschist facies, although locally the volcano-sedimentary rocks are metamorphosed to pumpellyite-prehnite or amphibolites facies.

1.2.2 Property Geology

The lithological sequence on the Omai property consists of mafic volcanic (and genetically related sub-volcanic mafic ultramafic bodies) to felsic volcanic cycles with intercalated sediments. The volcano-sedimentary unit was intruded by a quartz monzodiorite plug (the Omai stock) and several irregularly-shaped quartz-feldspar porphyry and rhyolite dikes. Post mineralization mafic dikes and sills were intruded discontinuously from Mesoproterozoic to Triassic. The Barama-Mazaruni volcano-sedimentary sequence has been metamorphosed to lower greenschist facies.

The Omai deposits consist of two mineralized gold zones formerly exploited in open pit operations that were referred to as the Fennel and Wenot deposits. The Fennel mineralization is mainly hosted by the Omai stock and to a lesser extent, the volcanic rocks, including tholeiitic basalts and calc-alkaline andesites. The Wenot mineralization is mainly hosted by tabular quartz-feldspar porphyry dikes as well as by strongly silicified rhyolite dikes, and subordinately by andesites and metapelites.

The geological features and geochronological data of these mineralized zones suggest that they are genetically related and represent a contemporaneous metallogenic event related to the last brittle-ductile phases of the Trans-Amazonian orogeny at about 2.0 Ga.

Two types of gold-bearing veins can be distinguished at Omai: vein sets ($\pm$ stockworks) and lode veins. These veins were observed in both the Fennel and Wenot pits.

Lode veins generally overprint the stockwork veins, but the inverse situation also exists, suggesting a quasi-contemporaneous emplacement of the vein types. Lode veins strike N 200° to 220° and dip between 0° and 30° NW or SE. Relative to the vein sets, they are generally thicker (between 0.3 and 1.3 m) and cut across all rock types (except late gabbro and diabase dikes).

In stockwork-style mineralization, the increased vein density leads to an overlapping of the alteration envelopes, commonly resulting in a complete transformation of the primary mineralogy of the host rock types. Dispersion into the wallrock has resulted in the formation of alteration zones parallel to the veins, whereas diffusion has created a series of narrow alteration zones perpendicular to the main direction of fluid flow. No alteration zonation with depth has been observed.

1.3 Exploration

Mahdia is currently conducting a phase 1 exploration program including surface mapping and grab sampling, environmental orientation and baseline studies, hydrological, exploration core and Trado auger drilling on historic exploration targets to advance the Omai project. Exploration targets include the saprolite area to the east and north of the Wenot pit, known as the "Boneyard", Wenot West, Fennel East and Fennel Deep. As of July 3, 2012, a property-wide topographic LIDAR survey accurate to 1 m was completed at site. Other exploration activities include rehabilitating the historic drill core stored on site from the 2006-2007 Fennel Deep drilling.

After the completion of the exploration drilling, it is expected that the positive results will lead to a preliminary mineral resource estimate on both the Fennel underground mineralization and the mineralization along strike and below the Wenot pit.

Mahdia will also attempt to map all available outcrops and review all previous surface geochemical sampling as initial guides for secondary exploration targets outside of areas that were historically drilled.

1.4 Drilling

In late March 2012, Mahdia mobilized two core drills to the Omai project site with the intention of conducting exploration drilling with Longyear 44 drill and conducting hydrogeological drilling with the Longyear 38 drill. Mahdia has also retained two other drills for Omai at a later date, once the camp facilities are adequate for an increased number of people and additional Mahdia personnel are available to man the drills for the required core logging, sampling and supervision for the drilling program.

A 15,000 m drilling program (12,500 m exploration core drilling and 2,500 m hydrogeology drilling) has been budgeted. The 2012 exploration core drilling is planned to start with the Fennel Deep, which was discovered and investigated by IAMGOLD in 2006-2007. Mahdia will commence drilling with four angled surface holes and are targeted to intersect the deep part of the mineralization from the north, south, east and west at an average dip of between -65° to -70°. The placement of these holes is designed to develop a better understanding of the shape and size of the mineralization. The information collected will also be indispensable in confirming previous drilling results of IAMGOLD. Oriented core geotechnical information will initially be collected by Mahdia, and will give more accurate information about the attitudes of the geologic structures and the mineralization.

Mahdia will also use the Trado auger drill to investigate the saprolitic areas, specifically the area to the east and north known as the Boneyard. The Trado drill produces samples adequate for early stage exploration in developing targets for subsequent core drilling if the Trado drilling returns positive results. The auger drilling is a low cost geochemical tool and due to the small size is very mobile on the saprolite exposures.

As of July 12, one exploration core hole has been drilled in the Fennel Deep area, on the west side of the pit. Due to mechanical issues the hole had to stop (at 637 m) before planned depth (1310 m). The initial drilling at Fennel is to validate the historic drilling completed by IAMGOLD in 2006-07, resulting in the historic mineral resource discussed in Section 6.0.

As of July 12, seven exploration core holes totalling 2441 m have been drilled on the Wenot pit area, with two holes still in progress. Five holes were completed from the south side of the Wenot Pit and two holes from the north side. All holes dip 50°, with the deepest hole reaching 550 m downhole.

The core drilling at Fennel and Trado drilling were suspended in June, 2012 due to contractor equipment maintenance issues and poor production performance. Mahdia is in the process of selecting another core drilling contractor and re-evaluating the use of the Trado drilling.

As of July 12, one hydrogeology hole was initiated on the north side of Wenot Pit, but halted at 245.15 m due to complications in drilling performance.

Historical documents have eluded that low-grade stockpiles were left behind when IAMGOLD ceased operations in 2005. Historical documents state that during 2005, approximately 3.7 Mt of low-grade mineralization was processed at a grade of 0.91 g/t. Mahdia is proposing to use a reverse circulation drill to sample the stockpiles on a regularly-spaced grid pattern to provide sufficient data to potentially support estimation of mineral resources for the stockpiles.

1.5 Mineral Resource Estimates

To AMEC's knowledge, there are no current NI43-101 compliant mineral resources on the Omai gold property. AMEC is aware of a historic mineral resource model and accompanying internal report for the Fennel underground, completed by IAMGOLD in 2007. Currently, AMEC has not thoroughly reviewed the 2007 model, but has read the accompanying report. There is no reference in the report that the model is NI43-101 compliant or that the model and mineral resource estimate based on that model have been endorsed by an independent third party as being 43-101 compliant, and therefore should not be relied upon as a current mineral resource for the Fennel Deep mineralization.

1.6 Mineral Reserve Estimates

There are no mineral reserves on the Omai property.

1.7 Interpretations and Conclusions

The Omai property is located within central Guyana approximately 170 km southwest of Georgetown, the capital of Guyana. The Omai Prospecting License (GS14: M-39 PL 01/2012) comprising the Omai Property was granted to Mahdia Gold from the Guyana Geology and Mines Commission on January 25, 2012. The prospecting license, which is valid for three years, covers an area of 7,244 acres (or 2,931.54 hectares). To keep the Omai Prospecting License in good standing, Mahdia is required to expend US\$2,500,000 each year of the three year term.

Additional permits are not required, as section 32(1) of the Mining Act (Act No. 20 of 1989) confers broad rights to “carry on such operations and execute such works as are necessary” to explore for the minerals in respect of which the licence was granted.

AMEC was provided with legal opinion that supports Mahdia’s sole ownership of the Prospecting Right, and that the Prospecting Right is valid.

Legal opinion provided to AMEC also indicated that Mahdia is indemnified from liabilities and rehabilitation associated with the former Omai open pit mining operation. Pork-knockers have been active in the property area. An assessment of the potential environmental liabilities as a result of their activities has not been carried out (e.g. use of mercury amalgam).

No formal environmental assessment has been undertaken by, or for, Mahdia to date with respect to the Project, and AMEC is not aware of any current or residual reclamation bonding or remediation requirements. There are no conditions with respect to environmental bonding or reclamation included as part of the Prospecting Licence; although a work program commitment bond has been lodged.

In Guyana, the specific details and rates of taxation and royalties from production revenue on the Omai Property are presently unknown. The terms of taxes and royalties are negotiated with the Guyanese government. The following details were negotiated by Guyana Goldfields and Sandspring Resources in 2011, both gold development properties in Guyana;

- Mining royalty of 5% of gold sales at a price of gold at US\$1,000 or less.
- Mining royalty of 8% of gold sales at a price of gold at US\$1,000 or more.
- Mining royalty of 1.5% on sales of copper and other valuable commodities.
- A Corporate income tax rate of 30%.

Mahdia has not completed a Mineral Agreement with the Guyanese Government, and the information on Aurora and Toroparu is included only as being indicative of the likely taxation and royalty regime under which any future mine at Omai could operate.

Commercial production from the site will require an application for a Mining Licence and submission and approval of a “feasibility study” by the GGMC. A Mineral Agreement will need to be negotiated with the Government of Guyana and the GGMC, which will set out the framework for royalties and taxation for the operation of a mine. Additional permits/approvals and an environmental impact assessment (EIA) may also be required, and will be addressed as future project development components are considered.

The former Omai gold mine is located in the Barama-Mazaruni Supergroup, part of the paleoproterozoic greenstone belt of the north-central Guiana Shield. The lithological sequence consists of mafic volcanic (and genetically related sub-volcanic mafic ultramafic bodies) to felsic volcanic cycles with intercalated sediments. The volcano-sedimentary unit was intruded by a quartz monzodiorite plug (the Omai stock) and several irregularly-shaped quartz-feldspar porphyry and rhyolite dikes. The Omai deposit is considered to be an example of a late orogenic deposit style and its emplacement was controlled by the last brittle-ductile stages of Trans-Amazonian orogeny. It can be considered as a Paleoproterozoic equivalent of the Archean epizonal orogenic deposits described in the Yilgarn (Wiluna, Racetrack) and Zimbabwe (Shamwa, Commoner) cratons.

2006-2007: In November 2006, IAMGOLD acquired Cambior. IAMGOLD Corporation investigated the possibility of underground mining below the Fennel Pit. Two deep drillholes indicated that the Fennel Stock was present under the sill and contains gold mineralization. In 2006-2007, an additional 42 diamond drillholes were drilled totaling 27,359 m, with the deepest being 978 m. The historical Fennel Deep mineral resource estimate is discussed briefly:

- The majority of the historic Fennel Deep drillholes were drilled from inside the Fennel Pit, which is currently flooded. Therefore, AMEC will not be able to validate the location of the drill hole collars as stated in the drillhole database.
- Mineralization modeling resulted in the creation of 13 sub-horizontal zones inside a quartz-diorite stock in the host andesitic volcanics, striking at 30° N with a shallow dip of -10° NW. The 3D solids were created using polylines snapped to drillholes. There is no indication of the parameters (by grade and/or lithology) used to constrain the mineralization. AMEC has not validated the mineralization models.
- Variogram models were computed using 3m capped composites and although a high nugget (70%) and an effective range of 50 m were suggested, the results were not conclusive.
- A block model using block sizes of 10m x 10m x 5m (x,y,z) was created and the grade interpolation was done using 5m equal length capped composites and estimated with an inverse distance squared (ID2) methodology. AMEC has not validated the grade interpolation.
- The density model used for calculating tonnages was derived from more than 300 measurements using an immersion method. The following densities were used in the model; 2.85 g/cc for mineralized zones, 2.80 g/cc for quartz diorite

stock, 3.0 g/cc for diabase stock and 2.9 g/cc for andesitic volcanics. AMEC has not validated the density data.

- The density model used for calculating tonnages was derived from more than 300 measurements using an immersion method. The following densities were used in the model; 2.85 g/cc for mineralized zones, 2.80 g/cc for quartz diorite stock, 3.0 g/cc for diabase stock and 2.9 g/cc for andesitic volcanics. AMEC has not validated the density data.
- A block was considered Indicated if at least 3 composites from 2 different drillholes (max of 2 composites /drillhole) are found within a 50m x 50 m x 20m elliptical search. A block was considered Inferred if at least 2 composites (max of 2 composites /drillhole) are found within a 200m x 200m x 50m elliptical search. AMEC has not validated the classification reporting, and has no information as to which reporting code the classifications are made (CIM, JORC) and therefore classifications and classification confidence categories cannot be relied as being compliant with NI43-101 reporting.
- No discussions as to considerations of reasonable prospects of economic extraction were included in the report, and therefore AMEC is unable to determine if the parameters used to select the 1.5 g/t Au cut-off grade used to declare the historic mineral resources, or the cut-off grade are appropriate to the mineralization style and mining method contemplated.
- Using a cut-off grade (COG) of 1.5 g/t Au, the total historical mineral resource estimate that included an Indicated Mineral Resource of 11.2 Mt @ 2.49 g/t Au and an Inferred Mineral Resource of 6.3 Mt @ 2.56 g/t Au.
- One risk associated with the Fennel Deep mineralization is the suggested groundwater inflows to the Fennel pit from below the confining layer of diabase. The reported inflow is in the order of 2,700 m³/d (300 USGPM) at pressures of around 300 psi as reported by Golder (2007).
- In the opinion of the QP, sufficient work has not been completed to validate the historical estimate as a current mineral resource. Mahdia is not treating the historical estimate as a current mineral resource.
- The Fennel Deep mineral resource model is discussed in an internal report by Eve Bourgault of IAMGOLD dated January 12, 2007.

To AMEC's knowledge, there is no Technical Report supporting the Fennel Deep mineral resource estimate and therefore, the mineral resource estimate must be considered as historical and non-compliant with NI43-101 reporting standards.

The QPs consider the following work programs would be required to update the estimate to meet CIM (2010) and NI-43-101 requirements:

- Validation of Fennel Deep drillhole database
- Validation of survey data
- Validation of density data
- Validation of assay data
- Validation of solids models
- Consideration of EDA results
- Consideration of variography
- Assessment of appropriate interpolation methods
- Review of assignment of resource confidence categories based on available information
- Consideration of reasonable prospects of economic extraction
- Classification of and reporting of Mineral Resources to CIM standards

Historic reconnaissance and step-out core drilling and grid and auger sampling has indicated several exploration targets which are the focus of ongoing exploration efforts by Mahdia. Exploration targets include shallow oxide mineralization using a Trado auger drill along strike of the Wenot shear zone, including the Boneyard and Fennel East prospects. The potential for deep (+400 m) mineralization will be investigated by step-out and delineation core drilling beneath the Wenot and Fennel pits. The Fennel Deep zone is the priority core drilling target due to the positive drilling results by IAMGOLD in 2006-2007. The amount of drilling required to outline the Fennel Deep mineralization will be dependent on validating the historic drillhole database and the status of the historical Fennel Deep drill core.

From 2008 to the grant of the Omai Prospecting License to Mahdia on January 25, 2012, no authorized work was conducted on the Omai Property.

A LIDAR topographic survey was completed on the property in late May, 2012 and AMEC received a copy of the LIDAR surface in early July, 2012.

Mahdia is presently conducting a phase 1 exploration program including surface mapping and grab sampling, historic Fennel Deep drill core rehabilitation, orientation and base-line environmental sampling, compilation and validation of the drillhole database, hydrologic drilling, exploration core drilling and Trado grid auger sampling.

In late March 2012, Mahdia mobilized a Trado drill and two core drills to the Omai project site with the intention of conducting exploration drilling with a Longyear 44 drill and conducting hydrogeological drilling with a Longyear 38 drill.

As of July 12, one exploration core hole has been drilled in the Fennel Deep area, on the west side of the pit. Due to mechanical issues the hole had to stop (at 637 m) before planned depth (1310 m). The initial drilling at Fennel is to validate the historic drilling completed by IAMGOLD in 2006-07, resulting in the historic mineral resource discussed in Section 6.0.

As of July 12, seven exploration core holes totalling 2441 m have been drilled on the Wenot pit area, with two holes still in progress. Five holes were completed from the south side of the Wenot Pit and two holes from the north side. All holes dip 50°, with the deepest hole reaching 550 m downhole.

As of July 12, one hydrogeology hole was initiated on the north side of Wenot Pit, but halted at 245.15 m due to complications in drilling performance.

As of July 12, the core rehabilitation program is still ongoing. Thirty historical Fennel Deep holes were recovered, re-logging and re-sampling continues.

The core and Trado drilling were suspended in June, 2012 due to contractor equipment maintenance issues and poor production performance. Mahdia is in the process of selecting another core drilling contractor and re-evaluating the use of the Trado drilling.

Omai camp facilities are presently being upgraded to accommodate the increased number of field personnel for the phase 1 exploration activities.

AMEC concludes the Omai Property has exploration potential and warrants continued exploration activities including exploration core drilling. The prime objective of the phase 1 work is to determine gold mineralization in the primary exploration targets and perform sufficient data verification that a mineral resource estimate can be performed by the end of 2012.

1.8 Recommendations

An extensive phase 1 and subsequent phase 2 work programs are recommended to advance the Omai Property towards determination of economic viability.

AMEC recommends:

- A comprehensive environmental monitoring and baseline program be established for the Omai site. These activities will establish the current site conditions and should include water and sediment sampling, geochemical sampling of the existing tailings in both Tailings Pond #2 and the Wenot Pit as well as the mine rock stockpiles, and a hydrological assessment.
- A hydrogeological assessment be completed for the site to develop a more complete picture of the potential groundwater inflows to any mineralized workings.
- A weather station is installed at the Omai site for the collection of current climatic baseline data.
- A formal community and stakeholder (including artisanal miners) consultation plan be established and documented.
- Mahdia reorganize, salvage and rehabilitate the available historic drill core that has deteriorated over time. If there is any doubt about the location or identification of core pieces, they should be discarded.
- Mahdia conducts additional exploration activities on and around the currently known exploration targets. This component includes geological mapping of outcrop and exposed areas, including the accessible portion of the pit walls.
- Mahdia prepares site-specific standard operation procedures (SOPs) for core logging and core sampling. AMEC has provided Mahdia with preliminary logging templates to capture both geological and geotechnical data. AMEC's logging templates need to be reviewed and updated by the Mahdia geologists, as the geological data evolves during the exploration phase.
- Mahdia conducts Trado grid geochemical auger drilling on the soft rock exploration targets. The primary Trado target is the Boneyard area to the east and north of the Wenot pit.
- Mahdia conducts exploration core drilling on the Fennel Deep and the Wenot Deep as the primary DDH targets. The planned drilling includes 8,500 m at Wenot and 4,000 m at Fennel. Core drilling will provide groundwater and RQD (rock quality) data in addition to lithological, structural, and other information.
- Mahdia surveys all available historical and new drillhole collars with a differential GPS unit in order to verify the accuracy and reliability of the conversion of the collar locations from a local grid coordinate system to the PSAD56 UTM coordinate system.
- Mahdia conducts oriented core drilling to obtain adequate attitudes for structures and controls on mineralization.

- Mahdia conducts a thorough downhole surveying program on all core holes at a minimum frequency of 50 m.
- Mahdia conduct a hydrogeological test program, including instrumentation of boreholes with vibrating wire piezometers or standard piezometers (as appropriate), packer testing, slug testing, and drawdown testing (on the flooded Fennel and Wenot pits) in order to establish a better understanding of the groundwater system in the Omai area and more robust predictions of groundwater inflows to potential mine workings.
- Re-logging the historic drill core as well as re-sampling of relevant core samples from historical drill cores, if the core rehabilitation program provides adequate core sample, as analysis of the results of the QA/QC program conducted in 2006-2007 indicates insufficient analytical precision (Final Exploration Report, L. Heesterman, 2008).
- Mahdia undertakes a rock density determination program with data from all lithologies (including wet and dry densities for mineralized saprolite) and mineralized zones. A minimum of 50 determinations for each lithology type spread across the deposit is recommended.
- Mahdia commences a comprehensive QA/QC program on all new core drilling so that the quality of reported assays are of sufficient quality for use in mineral resource estimation.
- Mahdia creates written procedures, including pictures and a video to aid in understanding the Trado drilling and sampling process, if Mahdia expects to use these assays in the mineral resource estimation process.
- The historic drillhole database(s) from the 2006-07 Fennel underground drilling be reviewed and all data be compiled, organized and validated into a master Access database. In the event that the database cannot be validated with the current information, a core re-sampling program should be undertaken with the reclaimed drill core. If the reclaimed drill core cannot be adequately salvaged, additional core drilling (twin or infill) will be required to validate the historical drilling.
- Mahdia appoints a database manager at an early stage to take responsibility for maintaining the integrity of the data currently in the database and for the new data to be added by Mahdia.

The work program budget is summarized in Table 1-1.

Table 1-1: Recommended Omai Phase 1 & 2 Budget

Mahdia Gold Corp. (Guyana) Inc. - Omai Redevelopment Project Exploration, Environmental & Site Infrastructure Recommendation Budget		
Discipline	Component	Estimated Cost (US\$)
Activities to Date	Site Visit	72,000.00
	QAQC Training	25,000.00
	Hydrogeology	41,000.00
	Project Management	80,000.00
	Geology	134,000.00
	Geochemistry	19,000.00
	Tailings Management	16,000.00
	Environmental and Social Issue Scoping	25,000.00
	LiDAR Survey	24,596.80
	Mahdia Geological Supervision and Field work, allocated only to specific Omai stages disclosed	20,000.00
	Total Expenditures to date	\$456,597
Future Activities - Phase I	Site	Follow-up site visits – AMEC
	Site	New or Updated Accomodations/Kitchen Facilities
	Environmental	Stakeholder consultation planning
	Exploration	Drill Core Reconstruction-Fennel Deep
		Geological Mapping and Rock Sampling
		Trado Auger Drilling - 5,000 m @ USD\$ 50.00 per metre (all in costs)
		Exploration Core Drilling - 8,000 m @ USD\$ 200.00 per metre (all in costs)
		Density Determinations - 5 rock types x 50 samples per rock type x USD\$ 25.00/sample
		Fennel Deep Drill Hole Database Audit
		Total Future Expenditures - Phase I
Future Activities - Phase II	Environmental	Groundwater Testing and Development of a Conceptual Model AMEC
		Weather Station
		Environmental Baseline and Liability Review
		Conceptual closure strategy
	Exploration	Exploration Core Drilling - 4,500 m @ USD\$ 200.00 per metre (all in costs)
		Total Future Expenditures - Phase II
Total Expenditures		\$4,270,847



2.0 INTRODUCTION

Preparation of this Geological Report was undertaken by AMEC Americas Ltd (AMEC) as an independent Geological Report on behalf of Mahdia Gold Corporation (Guyana) (“Mahdia” or the “Company”) for submission to the Canadian National Stock Exchange on the acquisition by Mahdia of the Omai Gold Project. The report has been prepared using headings of, and guidance set out in, NI43-101F1, but is not a Technical Report as defined by NI43-101.

Mahdia Gold issued a press release on November 18, 2011 titled “Omai Update” stating their proposed exploration activities in developing the Omai property.

2.1 Terms of Reference

AMEC was retained to provide an independent assessment of the available data, identify areas that required additional validation, and, if data support is acceptable, prepare a mineral resource estimate.

All units of measure (see Figure 2-1) used in this report are in metric system, unless stated otherwise.

Figure 2-1: Metric Units of Measure and Abbreviations

Annum (year).....	a
Centimetre.....	cm
Cubic metres per day.....	m ³ /d
Day.....	d
Degrees Celsius.....	°C
Gram.....	g
Grams per cubic centimetre.....	g/cc
Grams per tonne.....	g/t
Greater than.....	>
Hectare (10,000 m ²).....	ha
Kilogram.....	kg
Kilograms per tonne.....	kg/t
Kilometre.....	km
Kilometres squared.....	km ²
Less than.....	<
Metre.....	m
Metres above sea level.....	masl
Metric ton (tonne).....	t
Millimetre.....	mm
Million cubic metres.....	Mm ³
Million tonnes.....	Mt
Million Years Ago.....	Ma
Ounce (troy).....	ozt



Parts per billion.....	ppb
Parts per million.....	ppm
Percent	%
Pounds per square inch.....	psi
Specific gravity	SG
Square kilometre	km ²
Thousand tonnes.....	kt
Tonne (1,000 kg)	t
Tonnes per day.....	t/d
United States gallon per minute.....	USGPM

2.2 Qualified Persons

The Geological Report was prepared by the following persons, who act as the Qualified Persons for the information in the report:

- Jeff K. Smith P.Geo., Principal Geologist, AMEC Oakville
- Robert A. Lunceford M.Sc., CPG, Independent Consulting Geologist

2.3 Site Visits and Scope of Personal Inspection

On January 12, 2012 Mr. Lunceford conducted a site visit to the Omai Property, accompanied by Mr. David Bending, the President of Mahdia Gold Corp. . During this visit six grab samples were collected by Mr. Lunceford from exposures around the Wenot and Fennel pits and from the waste dump.

Subsequently, Mr. Lunceford and Mr. Smith visited the Mahdia exploration office in Georgetown Guyana and the Omai Property on February 20-25, 2012, again accompanied by Mr. Bending. In Georgetown, the capital of Guyana, the Guyana Geology & Mines Commission (GGMC) was visited. The GGMC contains all of the available previous geological reports and mine archive data from IAMGOLD, the previous owner of the Omai mine and operations. The majority of the available documents were reviewed and relevant documents were scanned. The documents found at the GGMC were the primary sources of data used to prepare this Geological Report.

During the site visits, the Wenot pit, the Fennel pit, the core storage areas, the Wenot stockpile areas, and the active saprolitic surface mining areas were visited. Local gold miners, known as “pork-knockers”, have been mining the saprolitic areas for some time, but when Mahdia attained the prospecting rights from the government of Guyana on January 25, 2012, the porkknockers were asked to leave the property. For the most part, the pork-knockers have vacated the area, but they still appear at site periodically.

The GGMC has a presence at the site and have been responsible for safety and security of the site, but as of the end of February, 2012, Mahdia has been responsible for security through a cooperative agreement with the GGMC.

Several stockpiles at the site were visited. Quartz diorite, quartz veins and mineralization-associated alteration was observed at what is considered to be a low-grade stockpile on the east side of the stockpile area to the south of the Wenot pit. Reverse circulation (RC) drilling, and stockpile trench sampling were discussed as possible grade control options for the stockpile to determine if any of the stockpiles can be considered as having economic potential. This work is not budgeted in the phase 1 program (refer to Section 26), but will be included in a subsequent phase if phase 1 activities return positive results.

The Fennel-deep drilling program was agreed to be the first exploration target for core drilling. The Fennel Pit and proposed drillhole locations were visited during the site visit. The drilling program will start with drillholes from the south and west side of the pit, targeting the Fennel deep mineralization below the diabase dike. Due to rough topography on the north and east side of the Fennel Pit, more detailed topographic control will be required. Mahdia has completed a LIDAR survey and provided a digital copy to AMEC on July 3, 2012.

Mahdia has indicated they will conduct systematic, exploration grid geochemical sampling using a Trado auger drill for the lateritic and saprolitic areas referred to by Mahdia as the "Boneyard" area north of the Wenot pit. Both QPs visited the lateritic and saprolitic areas during the site visit. (Figure 2-2 a & b)

2.4 Effective Dates

The effective date of the Mahdia Geological Report on the Omai Gold Property is July 12, 2012, the date at which the legal opinion supporting mineral tenure and the status of environmental responsibilities were prepared.

2.5 Information Sources and References

All documentation regarding the Omai Gold Mine was supplied to the GGMC by IAMGOLD. The archived data at the GGMC was reviewed by Mahdia and AMEC personnel and all relevant documents were scanned and used in compiling this Geological Report. AMEC is relying on the information stored at the GGMC as this information forms the basis of this Geological Report. AMEC has not had any personal contact with IAMGOLD personnel.

Figure 2-2 a & b: Views of “Boneyard” Area, February, 2012





Williams et al., 1967, Choudhuri, 1980, Walrond, 1980, 1987; Gibbs and Barron, 1983, 1993, Gibbs, 1987a are some of the relevant documents reviewed to understand the lithostratigraphic, geochronological and tectonic settings. During the operational phase of the Omai mine, G. Voicu, M. Bardoux, M. Jebrak, R. Crepeau, and R. Stevenson published papers between 1995 and 2000. These comprehensive studies were reviewed to broaden the understanding of the geology and mineralization on the Omai property.

All discussions related to the historical ore processing at Omai have come from an anonymous paper located on a Google search, entitled "Challenges and Improvements in Milling at Omai Gold Mines" from Omai Gold Mines Limited. There is no reference to an author or a date of publication. The date of 1999 has been given to this report, as the paper discusses ore processed up to the end of 1998.

Other information sources are as indicated in Section 3.0 and Section 27.0 of this Report.



3.0 RELIANCE ON OTHER EXPERTS

3.1 Mineral Tenure

The AMEC QPs have not reviewed the mineral tenure, nor independently verified the legal status or ownership of the Project area or underlying property agreements. The QPs have fully relied upon, and disclaim responsibility for, information derived from legal experts for this information through the following document:

McKay and Moore, 2012: Re: Title Opinion On Prospecting Licence To Mahdia Gold Corporation (Guyana) Inc.: legal opinion provided to Mahdia Gold Corporation dated 12 July 2012

This information is used in Sections 4.1 and 4.4 of the report.

The QPs have viewed information from the Guyana Geology and Mines Commission in relation to the grant of Prospecting License (GS14: M-39) PL 01/2012 through the following document:

Guyana Geology and Mines Commission, 2012: Re: Prospecting Licence 01/2012 granted to Mahdia Gold Corp (Guyana) Inc.: letter addressed to Mahdia Gold Corp, dated 5 July 2012, prepared by the Deputy Commissioner – Administration, Guyana Geology and Mines Commission

This information is consistent with the information provided by the legal experts on mineral title which is used in Section 4.1 of the Report.

The QPs have viewed information from Mahdia in relation to the Memorandum of Understanding between Mahdia, the Guyana Geology and Mines Commission and Metallica Commodities Limited of Guyana through the following document:

Memorandum of Agreement Between Mahdia Gold Corporation, the Guyana Geology and Mines Commission and Metallica Commodities Limited of Guyana, dated 25 May 2012.

This information is consistent with information provided by Mahdia that is used in Section 4.4.

3.2 Surface Rights

The QPs have viewed documents supporting the statements in the Report on the status of the current Surface Rights by inspecting information in the public domain maintained by the Government of Guyana as follows:



Guyana Geology and Mines Commission, 2012: PL 01/ 2012, Prospecting Licence Granted Under Section 30 Of The Mining Act 1989 And The Mining Regulations: title grant awarded to Mahdia Gold Corp dated 31 January 2012

This information is consistent with information provided by Mahdia that is used in Section 4.2 of the Report.

3.3 Permits

The QPs have viewed documents supporting the statements in the Report on the status of the current permitting requirements by inspecting information in the public domain maintained by the Government of Guyana as follows:

Guyana Geology and Mines Commission, 2012: PL 01/ 2012, Prospecting Licence Granted Under Section 30 Of The Mining Act 1989 And The Mining Regulations: title grant awarded to Mahdia Gold Corp dated 31 January 2012

This information is consistent with information provided by Mahdia that is used in Section 4.3 of the Report.

3.4 Environmental

The AMEC QPs have not reviewed the environmental status of the Project area. The QPs have fully relied upon, and disclaim responsibility for, information derived from legal experts for this information through the following document:

McKay and Moore, 2012: Re: Liability Indemnification Of Mahdia Gold Corporation (Guyana) Inc. In Respect to Omai Gold Mines: legal opinion provided to Mahdia Gold Corporation dated 12 July 2012

This information is used in Section 4.13 of the Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Omai Gold Project is located in Guyana, South America with the centre of the property located at approximately 58°45'21"W longitude and 5°25'35"N latitude (UTM PSAD 56 Zone 21N 601,000 m N, 307,000 m E), as shown in Figure 4-1. The site is approximately 170 km southwest of Georgetown. The Project extends from the north from about 4.5 km above the confluence of the Omai and Essequibo Rivers, to the west bank of the Essequibo, continuing a few hundred metres downstream of the confluence of the two rivers.

The Omai Property covers an area of 7,244 acres (or 2,931.54 hectares) and is located on the Terra Surveys Topographic Map Sheets 44NW and 44NE (1:50,000 scale) within the Potaro Mining District No. 2.

Figure 4-1: Property Location Map (www.sitesatlas.com)





4.1 Property and Title

On July 25, 2011, Mahdia submitted an application to the GGMC for a prospecting license on the Omai Mine area, a concession of 7,244 acres located in the central part of Guyana; approximately 165 km south-southeast of the capital city of Georgetown.

As granted to Mahdia on January 25, 2012, the Prospecting License (GS14: M-39) PL 01/2012 (the "Prospecting License"), shown in Figure 4-2, conveys the rights for..."prospecting for gold and valuable minerals (in the course of exploration activities, Mahdia shall duly report all minerals discovered) in the underground, saprolite, and alluvial portions of the deposit..." under the following terms and conditions;

- The term of the Prospecting License is three years from January 25, 2012.
- During the tenure of the License, Mahdia is required to pay a rental of US\$0.50/Ac. for the first year, US\$0.60/Ac for the second year and US\$1.00/Ac for the third year. (US\$1.00 = CND\$1.06)
- The three-year term of the Prospecting License can be extended for a further three years by submission of a work program description and 12 month budge and may be further extended on comparable three year cycles with corresponding increases in fees per acre.
- Within the three-year term of the Prospecting License, conversion of all or parts of the License to a Mining License can be completed with submission of a "feasibility study" acceptable to the GGMC.
- To keep the Prospecting License in good standing, quarterly reports describing work results within the License area must be filed with the GGMC. As of this date one report, representing the quarter ending March 26 2012, has been prepared and submitted. The second quarterly report is due on or before July 26, 2012 and is in preparation at this time.
- Upon grant of the Prospecting License, legally dated January 25 2012, Mahdia is required to expend US\$2,500,000 (work program budget) within the first anniversary year, more precisely the year ending January 25 2013.
- Mahdia is required to post an annual performance bond of 10% of the approved work program budget to a maximum of US\$50,000 whichever is lesser.

The compliant expenditures include all completed land maintenance, maintenance and rehabilitation of installations, security costs, capital costs such as dedicated rolling stock, community benefits agreements and consultations, geological work, drilling, sampling engineering studies and environmental work. The expenditures to date substantially exceed those cited in the expenditure report in this report.



The Prospecting License survey boundaries as issued with the Prospecting License are shown in Figure 4-2 and described in Figure 4-3.

AMEC was provided with legal opinion that supports the interpretation that Mahdia holds sole rights to the prospecting licence through the following document:

McKay and Moore, 2012: Re: Title Opinion On Prospecting Licence To Mahdia Gold Corporation (Guyana) Inc.: legal opinion provided to Mahdia Gold Corporation dated 12 July 2012

The QPs have viewed information from the Guyana Geology and Mines Commission in relation to the grant of Prospecting License (GS14: M-39) PL 01/2012 through the following document:

Guyana Geology and Mines Commission, 2012: Re: Prospecting Licence 01/2012 granted to Mahdia Gold Corp (Guyana) Inc.: letter addressed to Mahdia Gold Corp, dated 5 July 2012, prepared by the Deputy Commissioner – Administration, Guyana Geology and Mines Commission

A copy of these letters can be found in Appendix 1.

Figure 4-2: The Prospecting License Comprising the Omai Property. Two medium scale Mining Permits (A44 MP/000 and A19 MP/000) conveying the rights to mine and process aggregate are shown in the central part of the Prospecting License (Modified after GGMC, 2010).

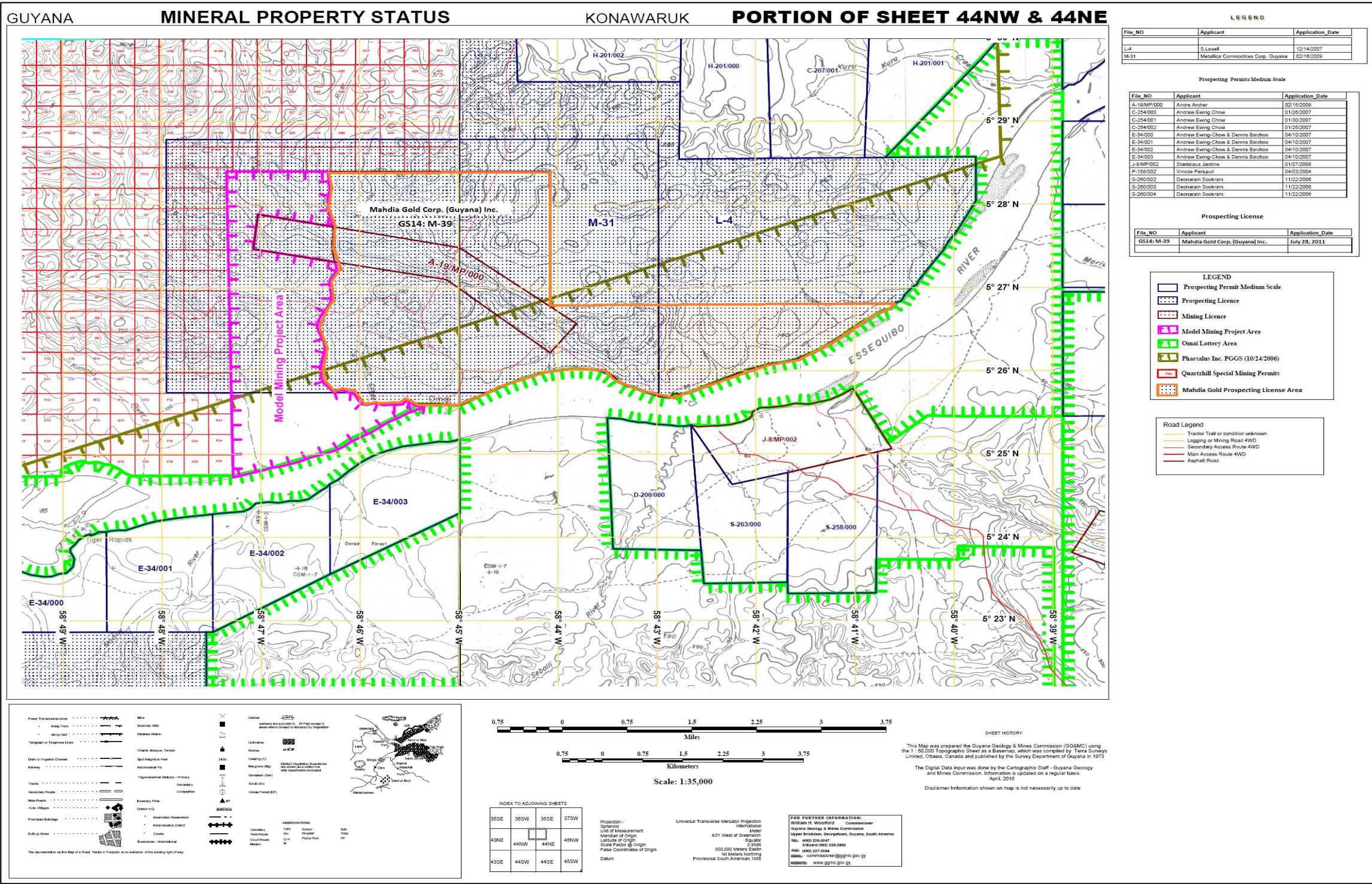


Figure 4-3: The Survey Description of the Prospecting License (GS14: M-39) PL 01/2012 as issued to Mahdia on January 31, 2012.

Annex 1

Description of Area : GS 14: M-39

Tract of state land located in the Potaro Mining District No. 2 as shown on Terra Surveys Topographic Map 44NW, at scale 1:50,000, with reference point 'X', located at the confluence of the Essequibo River and Omai River with geographical coordinates of longitude **58°45'21"W** and latitude **5°25'35"N**

Thence at a true bearing of **341°**, for a distance of **3 miles 766 yards** to the point of commencement.

Point A, located at geographical coordinates of longitude **58°46'20"W** and latitude **5°28'24"N**, thence at true bearing of **90°**, for a distance of approximately **2 miles 993 yards**, to **Point B**, located at geographical coordinates of longitude **58°44'5"W** and latitude **5°28'24"N**, thence at true bearing of **180°**, for a distance of approximately **1 mile 1509 yards**, to **Point C**, located at geographical coordinates of longitude **58°44'5"W** and latitude **5°26'47"N**, thence at true bearing of **90°**, for a distance of approximately **3 miles 1754 yards**, to **Point D**, located at geographical coordinates of longitude **58°40'36"W** and latitude **5°26'49"N**, thence along the left bank of the Essequibo River for a distance of approximately **5 miles 1130 yards**, to **Point E**, located at geographical coordinates of longitude **58°45'0"W** and latitude **5°25'35"N**, thence at true bearing of **270°**, for a distance of approximately **695 yards**, to **Point F**, located at geographical coordinates of longitude **58°45'21"W** and latitude **5°25'35"N**, thence along the left bank of the omai river for a distance of approximately **4 miles 725 yards**, to the point of commencement at **Point A**.

Thus enclosing an area of approximately **7244 acres** , save and except all lands lawfully held or occupied.



4.2 Surface Rights

All surface rights inherent to the Prospecting License are retained by the Guyana government. The Prospecting License grant document (refer to Appendix 1) stipulates that the government may grant rights of way for pipelines, power, telephone, telegraph, and waterlines, provided, however that Mahdia is duly notified in advance and that the installation does not interfere with work operations nor carry additional cost to Mahdia.

The use of the land surface for exploration purposes is documented clearly in the Prospecting License grant document and the Guyana Mining Act, and has been further clarified by the Memorandum of Agreement (MOA) between the GGMC, Mahdia (Guyana) Mining Corp. and Metallica Commodities Limited of Guyana.

The MOA grants the specific rights to use and (as may be required) rehabilitation of those surface installations which Mahdia management selected for its purposes and further grants Metallica the right to use one office installation in support of its aggregate mining and processing operations. A copy of the MOA is included as Appendix 2.

4.3 Permits

Prospecting License (GS14: M39) PL 01/2012 grants Mahdia the “exclusive right to occupy and for the purpose of prospecting for gold and valuable minerals....”

Additional permits are not required, as section 32(1) of the Mining Act (Act No. 20 of 1989) confers broad rights to “carry on such operations and execute such works as are necessary” to explore for the minerals in respect of which the licence was granted.

If the proposed Mahdia exploration activities return positive results leading to an estimate of mineral resources and subsequently mineral reserves, commercial production from the site will require an application for a Mining Licence and submission and approval of a “feasibility study” by the GGMC.

A Mineral Agreement will be required to be negotiated with the Government of Guyana and the GGMC. This agreement will set out the framework for royalties and taxation for the operation of a mine.

Additional permits/approvals and an environmental impact assessment (EIA) may also be required, and would be addressed as future project components are considered.

4.4 Property Agreements

Two medium-scale Mining Permits including A44 MP/000 (granted February 16, 2009) and A19 MP/000 (August 25, 2010) conveying the rights to mine and process aggregate were granted to Mr. Alan Archer of Metallica Commodities Corp. Guyana

("Metallica") (GGMC, 2011a, 2011b). The limits of their mining permits are shown in Figure 4-2. The rights of these medium-scale mining licenses do not allow for the removal of or exploitation of gold. As of May 25, 2012, an MOA (Memorandum of Agreement) has been signed between the GGMC, Metallica and Mahdia regarding the use various facility buildings formerly used by Omai Gold Mines Ltd (refer to Appendix 2). Mahdia retains the use of all facilities except for the fabrication shop, the former laboratory and the aggregate plant station and sub stations. As stated in the MOA, any dispute related to the agreement can be resolved by negotiation, arbitration or mediation. Either party may give written notice of their dispute or within five days of GGMC receiving such notice, the parties shall designate a representative to settle the dispute..

Metallica is currently mining dumps and rubble from surface materials including but not limited diabase dike material that outcrops to the west of the Fennel pit, which is the same dike that separates the Fennel open pit mineralization from the deep mineralization that was drilled by IAMGOLD in 2006 and 2007.

4.5 Taxation and Royalties

The specific details and rates of Guyanese taxation of possible production revenue from the Omai Property have not been defined.

However, within the past 12 months, production and corporate revenue taxation has been established by the Government of Guyana for development gold projects Aurora and Toroparu, operated by Guyana Goldfields Inc. and Sandspring Resources Inc., respectively. Following negotiations with the Guyanese government, production revenue and corporate tax rates were finalized on Mineral Agreements dated October 5, 2011 (2011, Guyana Goldfields Inc. Press Release) for the Aurora deposit and November 10, 2011 (2011, Sandspring Resources Ltd. Press Release) for the Toroparu mineral resource. The royalties and taxation rate quoted below are applicable for both Aurora and Toroparu gold projects.

- Mining royalty of 5% of gold sales at a price of gold at US\$1,000 or less.
- Mining royalty of 8% of gold sales at a price of gold at US\$1,000 or more.
- Mining royalty of 1.5% on sales of copper and other valuable commodities.
- A Corporate income tax rate of 30%.

Mahdia has not completed a Mineral Agreement with the Guyanese Government, and the information on Aurora and Toroparu is included only as being indicative of the likely taxation and royalty regime under which any future mine at Omai could operate.



4.6 Current Environmental Studies

In February 2012, preliminary water grab samples were collected from the Wenot and Fennel pits and the confluence of the Omai and Essequibo rivers. Results indicated no deleterious concentrations of cyanide, arsenic, cadmium, chromium, lead, mercury, or other metals which exceeded threshold concentrations of the International Finance Corporation (IFC) Effluent Guidelines or Canadian Council of Ministers of the Environment (CCME) Water Quality Guidelines for the Protection of Aquatic Life (AMEC, 2012). This sampling should not be considered a comprehensive assessment of the entire Property. Further sampling is planned to more thoroughly characterize the water quality of the area.

No results of hydrogeological testing or other current environmental work are available. Work planned for 2012 includes hydrogeological testing, preliminary tailings and mine waste site selection, preliminary geochemical risk investigation, installation of a weather station, and scoping of any current environmental and social issues which may affect the project.

Previous work (Golder, 2007) identified potentially high rates of groundwater inflow to the Fennel Pit. The current hydrogeological test program is designed to build on this work and develop a more robust understanding of the flows to any potential mine workings. The flows previously identified may have a material impact on the ability to extract any potential mineral resources or mineral reserves from beneath the diabase dike at the base of the Fennel Pit.

A current environmental impact assessment (EIA) has not been carried out for the project, and will need to be undertaken and reviewed by the Guyanese government prior to issuance of an Environmental Permit, one of the key permits required prior to commencement of mining operations (Figures 4-4 and 4-5). Additional permits may be required for various project components, such as those shown in Table 4-1. Timing of completion of the required baseline studies, environmental impact statement (EIS) and regulatory review may have a material impact on the timing and/or ability to commence any future mining operations.

Figure 4-4: Stages in obtaining an Environmental Permit (EIA Preparation)

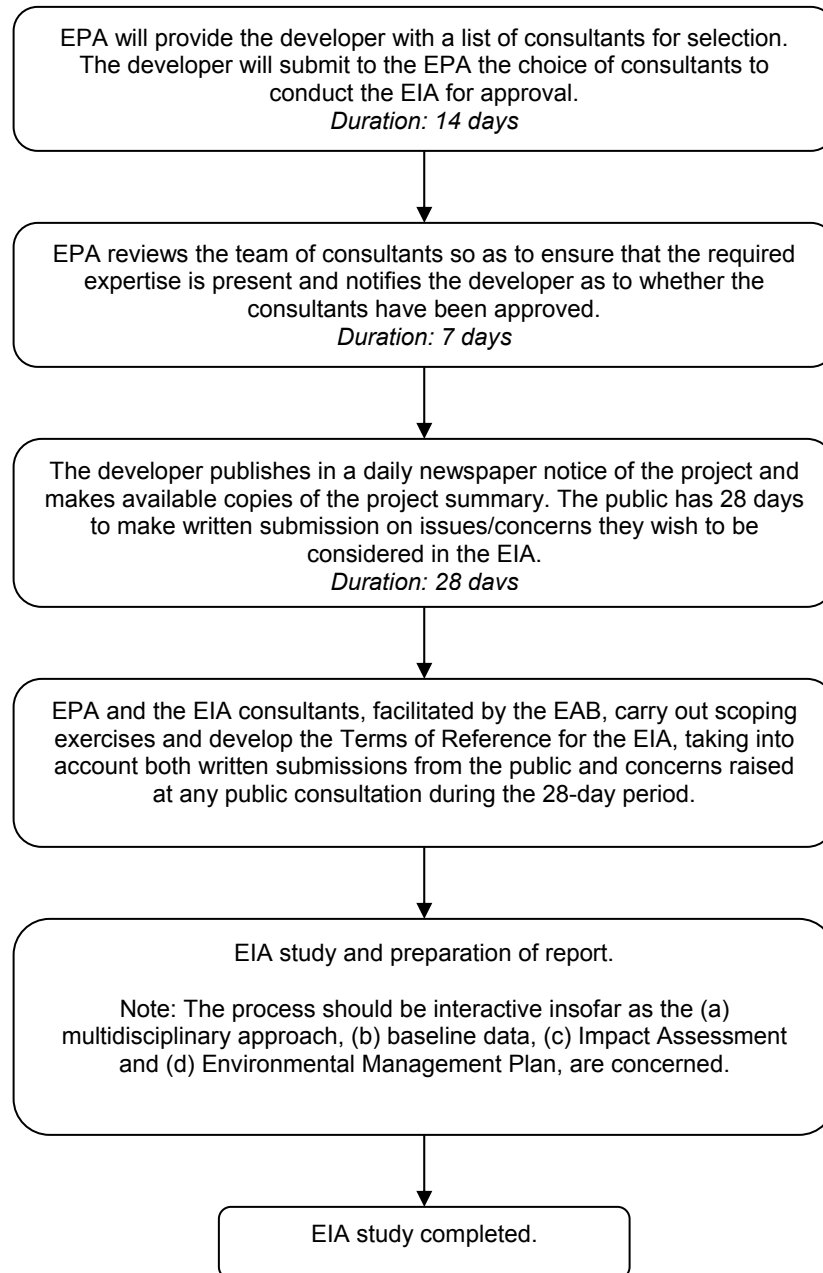


Figure 4-5: Stages in obtaining an Environmental Permit (EIA Review)

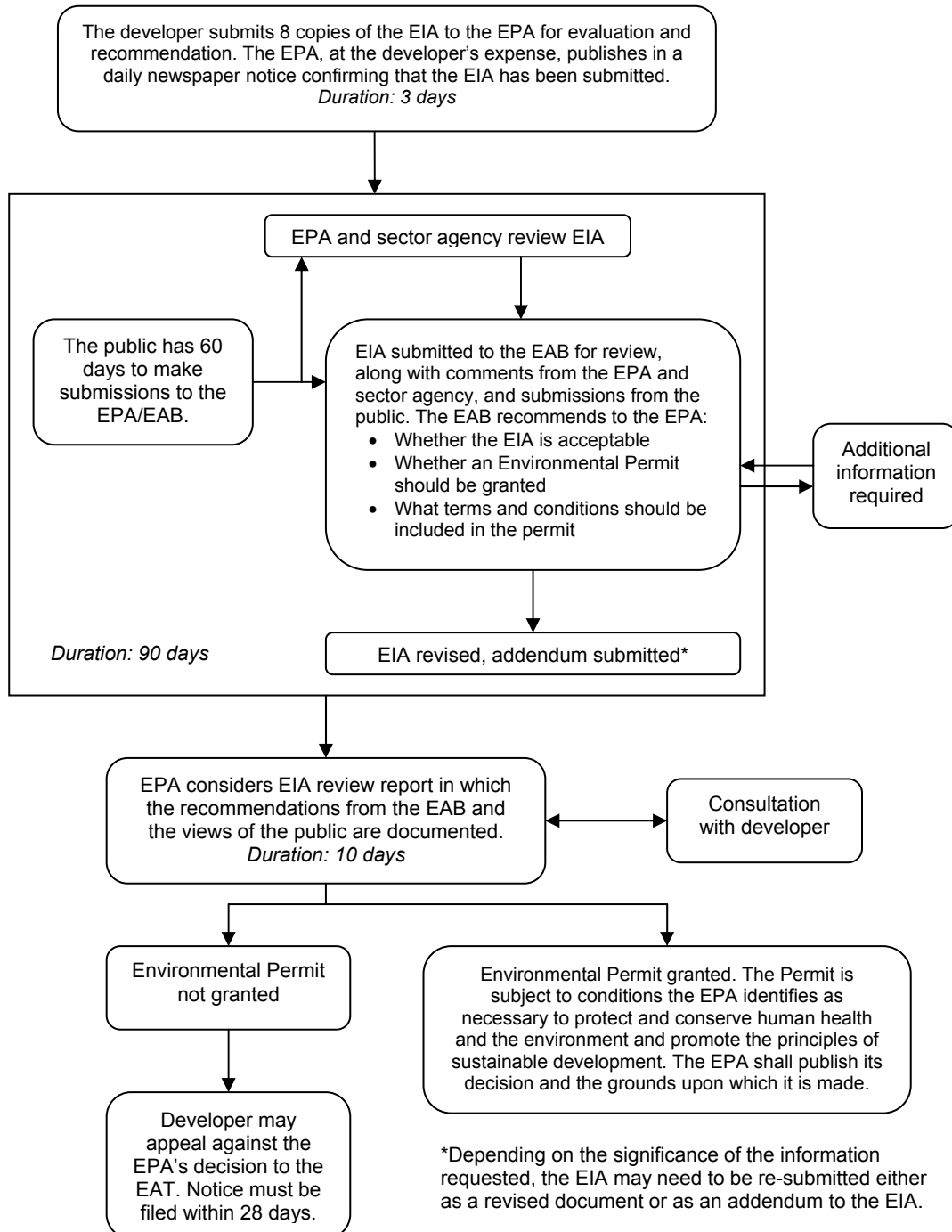




Table 4-1: Summary of Significant Permit and Licence Requirements

Name	Agency	Status	Comments
Prospecting Licence	GGMC	Valid (granted 01/31/2012; valid for 3 years)	Renewable for a total combined period of up to 5 years (i.e. an additional 2 years)
Mining Licence	GGMC	N/A	Required for commercial production
Environmental Permit	Guyana EPA	N/A	Required for any project which may significantly affect the environment
Permit To Use Cyanide	GGMC	N/A	Required for use of cyanide for extraction of Au from ore
Explosives Permit	GGMC and Guyana Police Force	N/A	Must be approved for blasting, magazine storage and mixing of explosives on-site
Permit to Operate Municipal Solid Waste Landfills	Guyana EPA, Ministry of Health, and Central Housing and Planning Authority	N/A	May be required for solid waste disposal

4.7 Mine Waste and Tailings Disposal

The former Tailings Pond #1, now called the North Waste Dump, has been overprinted by a mine waste (waste rock) pile, and is not available for use. Tailings Pond #2, northeast of the Fennel Pit, may have some capacity for future tailings storage. The Wenot Pit was used for tailings storage in the final few years of the previous operation of the Omai Mine. Preliminary studies will be undertaken to evaluate the potential for tailings storage in Tailings Pond #2, either of the open pits, or possible new locations.

Alternatives for mine waste are also planned to be evaluated.

4.8 Site Monitoring

There are currently no known requirements for routine environmental monitoring applicable to the project. It is anticipated that requirements will be established as part of the approvals/permitting process, and management plans will need to be developed for various facets of the project, including (but not limited to) overburden management, tailings management, erosion prevention, water management and monitoring, cyanide management, hazardous materials management, and spill contingency planning.

Site climatic conditions will be monitored starting in 2012 with the installation of a weather station.



4.9 Site Water Management

No water management plan has been established for the site, although it is anticipated one will need to be developed. The project is located in a tropical setting which experiences high amounts of rainfall. This plan will need to address flood protection, site runoff, and management of mine water (groundwater inflows as well as runoff and direct precipitation), as well as water quality monitoring. This management plan will require input from future hydrological studies, among other disciplines.

4.10 Project Permitting Requirements

Current exploration and environmental studies are being carried out under the authorization of the Prospecting Licence. Any future development activities will require a number of regulatory permits issued by several different government agencies. A listing of the likely main permits that may be required is given in Table 4-1.

Additional permits may be required, such as for discharge of effluent from either the mill or a sewage treatment plant, or for various types of water taking and use around the site.

4.11 Social and Community Relations

There are currently no formal community relations activities or negotiations taking place, nor are any agreements in place. It is anticipated that consultation with local communities, currently identified as the towns of Mahdia and Linden (Figure 4-1) and other stakeholders, including artisanal miners, will be required.

4.12 Closure Planning

There is not currently a closure plan in place, nor to the extent known, a requirement for one based on Mahdia's current activities on the site. The most recent closure plan available for the property was prepared in 2007 by Omai Gold Mines Limited (OGML 2007), which at the time was owned 95% by IAMGOLD Corporation and 5% by the Government of Guyana.

OGML (2007) indicates that the property was moving from a period of operation into a post-closure and monitoring phase, expected to end in December, 2009. At that point, a review of closure activities and post-closure monitoring results was to be conducted by the EPA and GGMC, and relinquishment of the property to the Government of Guyana was expected to occur, with "no further work or maintenance expected to be necessary to achieve the closure objectives."

Studies will need to be undertaken to evaluate the current and future closure requirements and liabilities, and to develop an appropriate estimate of closure costs.



4.13 Environmental Liabilities

4.13.1 Previous Mining Operations

AMEC was provided with legal opinion which states that Mahdia is not responsible for acts or omissions committed by Omai Gold Mines Limited in the areas where Mahdia's current Prospecting Licence overlies Omai Gold Mines Limited's previous operations and infrastructure. A copy of this letter can be found in Appendix 3.

A cyanide spill had occurred in the Omai area during the Omai Gold Mines Limited ownership period. The legal opinion notes that the GGMC had sent a letter to Mahdia, dated 5 July 2012, that stated:

"Mahdia Gold Corporation (Guyana) Inc has full liability indemnification from all environmental issues caused by the spillage of cyanide by previous operator, Omai Gold Mines Limited as such incidents occurred prior to Mahdia Gold Corporation (Guyana) Inc. Involvement on the said property"

Artisanal mining activity had been occurring on the property prior to the acquisition of the Prospecting Licence by Mahdia. Legal opinion provided to AMEC indicates that Mahdia is also indemnified against any artisanal mining activity that occurred prior to the Prospecting Lease grant date, in particular to any damage that may be extant in the "Boneyard" prospect area.

It is not currently known what amount of environmental liability will be incurred by Mahdia should they wish to undertake exploration activities in areas which have been previously disturbed.

4.13.2 Current Understanding

Mahdia has contracted with AMEC Environment & Infrastructure (AMEC) to provide environmental and mine waste management support to the Omai Project. Work to date has consisted of review of historical documentation related to the site, an initial site visit, preliminary water and sediment sampling, and design of a hydrogeological test program.

Previous operations used cyanide in the extraction of gold from the mined ore. Information on production rates, cyanide usage, and geochemical information on mill effluent discharge was not available to AMEC. As a result, investigations should be undertaken to characterize the tailings on site and establish the level of risk associated with historical cyanide usage. Six preliminary water grab samples collected on February 13, 2012 returned analytical values below the method detection limit for parameters including cyanide, arsenic, cadmium, chromium, lead and mercury.

The presence of artisanal miners, or “porkknockers”, is well established on the site. An assessment of the potential environmental liabilities as a result of their activities has not been carried out (e.g. use of mercury amalgam).

Based on recent site visits by AMEC personnel, there may be additional hazards on the site related to the presence of mine water in the existing open pits, mine rock stockpiles, and previous site infrastructure including ore processing facilities and fuel storage and transfer facilities.

Notwithstanding the legal opinion indemnifying Mahdia from environmental liabilities which predate the acquisition, AMEC recommends that Mahdia formally establish an agreement with the GGMC regarding the extent of liabilities attributable to Mahdia and their current and future exploration activities, both in historically disturbed areas (such as those affected by artisanal mining) and in undisturbed sites within the Prospecting License.

4.14 Comments on Section 4

- AMEC recommends that a comprehensive environmental monitoring and baseline program be established for the Omai site. These activities will establish the current site conditions and should include water and sediment sampling, geochemical sampling of the existing tailings in both Tailings Pond #2 and the Wenot Pit as well as the mine rock stockpiles, and a hydrological assessment.
- AMEC recommends that a hydrogeological assessment be completed for the site to develop a more complete picture of the potential groundwater inflows to any mine workings.
- AMEC recommends that a weather station be installed at the Omai site for the collection of current climatic baseline data.
- AMEC recommends that a formal community and stakeholder (including artisanal miners) consultation plan be established and documented.
- AMEC recommends that Mahdia formally establish an agreement with the GGMC regarding the extent of liabilities attributable to Mahdia and their current and future exploration activities, both in historically disturbed areas (such as those affected by artisanal mining) and in undisturbed sites within the Prospecting License

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

AMEC has extensively used the "Omai Site Closure Plan, Version 7, 2007" as a reference in this section of the Geological Report.

5.1 Accessibility

The project site is near the Omai River, a left-bank tributary of the Essequibo River, one of the largest rivers in the country. Although the project site is close to this major waterway, rapids on the Essequibo River and low flows during the dry season preclude river transport to and from the coast. As a result, the site can only be accessed directly via small aircraft or by a combination of road and pontoon crossings over the Essequibo River. From Georgetown, a small aircraft flight will take approximately 45 minutes while the latter form of travel will require about five hours to access to the project site.

5.2 Climate

The Omai site has a climate typical of a tropical rainforest; observations include a tendency for mean annual rainfall to exceed mean annual evaporation rates, and high humidity year around.

An estimate of annual precipitation from baseline studies documented in the 2007 closure plan was 2,600 mm with a standard deviation 420 mm. The wettest months were observed to be May, June and August followed by December and January, September and October.

It was also noted that during baseline sampling in two years of daily records (from May 1987), the heaviest storm observed was 114 mm of rain in 24 hours. The operating season is year round, but there may be periodic disruptions to exploration or eventual mining activities during the wettest month's as heavy rains may cause flooding or washout on some of the access roads.

During the two-year baseline sampling period, the maximum recorded temperature was 39°C and the minimum 20°C with monthly means ranging from approximately 26°C to 30°C.

The estimated average mean evaporation at the Omai site was 1,250 mm with the highest evaporation levels experienced from August to October.

Wind data collected at the Omai site indicated prevailing winds to be generally light with over 94% of the daily readings measured at less than 2 meters/second (m/s) with some stronger winds observed primarily from the northeast direction. Prevailing wind directions typically experienced at the site are from the northeast and north (accounting for more than 50% of wind direction), followed by south, northwest and east directions.

5.3 Local Resources and Infrastructure

Based on current knowledge, the prospecting license held by Mahdia appears to contain sufficient area to perform the planned exploration activities.

The former Tailings Pond #1, now referred to as the North Waste Dump, has been overprinted by a barren rock stockpile, and is not available for use. Tailings Pond #2, northeast of the Fennel Pit, may have some capacity for future tailings storage. The Wenot Pit was used for tailings storage in the final few years of the previous operation of the Omai Mine. Preliminary studies will be undertaken to evaluate the potential for tailings storage in Tailings Pond #2, either of the open pits, or possible new locations.

The site currently has a diesel generator to supply power for the onsite security staff and the modest early phase exploration work. The company has been active in rehabilitation and upgrade of the lodgings and other facilities and these upgrades are expected to continue beyond the effective date of this report. Although additional generators will be required in the early stages, Mahdia is also looking at biofuels as an option for some of the power requirements, assuming the project demonstrates economic potential.

There are sufficient accommodations for up to approximately 20 field personnel, but the current accommodations will require upgrading or other accommodations will be delivered to site as the project advances and the number of site personnel increases. Additional accommodations will be required, as the current camp has been severely weather damaged over time and has suffered structural damage due to termites.

Mahdia is attempting to salvage the drill core from the 2006-2007 Fennel Deep drilling campaign, which may require additional storage facilities. There may be sufficient storage space for this drill core, but as Mahdia continues to conduct diamond drilling, additional core storage space will be required.

Currently, there is sufficient cellular coverage at site, ranging from poor to good, depending on the elevation location. If the phase 1 exploration program is successful, Mahdia will investigate communication upgrades at site.

Although the Omai Mine closed down approximately six years ago, it is expected that some of the local population who worked at the Omai Mine will still be in the area and may be available if the exploration program is successful.

There are adequate sources of process water available, from the groundwater table and from the Essequibo River. Currently, bottled water is used by exploration personnel at site for drinking water.

The Omai mining concession encompasses approximately 2931.54 ha, while the total disturbed area during mining operations has been estimated at approximately 892 ha. The majority of this area was utilised for mining and related activities including barren rock dumps and tailings impoundments while a small portion of this is currently utilised for infrastructure and facilities to support the personnel on site and operations and activities (mostly non-utilised from previous production activities).

Following is a brief description of the Omai infrastructure (Figure 5-1) that remains at site. Mahdia has rights and access to all infrastructures listed below:

- **River Landings:** Three landings include Brother "B" on the east bank and No.2 Landing on the west bank of Essequibo which both have a concrete strip installed for access to the river, and No.1 Landing on the west bank of Essequibo in the camp site area without any concrete fixtures.
- **Site Roads:** All roads have an earthen base and many have been topped with crushed aggregate (manufactured at the aggregate plant) or capped with laterite; only the major roadways are described in this section as numerous small paths and ATV accesses have been utilised during over 15 years of site usage.
- **Airstrip:** A 1000 m runway at the East end of the Wenot pit.
- **Mine & Operational Facilities:** The major buildings on the Omai site (excluding sheds and small shelter facilities) are: warehouse, truck shop, administration office and core storage facilities.
- **Ya Ya Road:** This 11 km road, which is a public all-weather laterite surface road, provides the primary road access to the Omai property at the Brother "B" landing on the east side of the Essequibo River. The Ya Ya Road connects to the Mabura Road, which is the main road from the town of Linden.

Figure 5-1: Site Plan Map of the Omai Gold Project from 2007 (OGML, 2007)



- **Camp Facilities:** A camp site area is located adjacent to the No.1 Landing with accommodations for up to 600 people, but the buildings have degraded significantly since 2007. Mahdia will evaluate the possibility of refurbishing the accommodations, but are prepared to erect or bring in other accommodations as the project evolves, if the buildings cannot be refurbished.
- **Power Plant and Distribution:** A small diesel powered generator set (gen-set) is currently being used for the onsite staff (including security) and for the camp facilities.
- All of the infrastructure listed above lies within the Mahdia PL, except for the Brother "B" landing and the Ya Ya Road, both on the east side of the Essequibo River.

5.4 Physiography

The Omai concession lies at the extreme south-west corner of the White (Berbice) Sands belt (the white sand belt covers approximately a quarter of Guyana in the north-east) and is characterised by gentle undulating terrain interrupted by abrupt exposures of bedrock and development of hills. Elevations on the property rise from 15 m above sea level at Omai landing on the Essequibo River to high points approaching 137 m (at the most conspicuous physical feature) that form part of a continuous bedrock ridge striking northwest to southeast through Omai Property.

The Property is covered by tropical rainforest. Hill tops are usually free of thick underbrush but the slopes are overgrown by tangled vines, climbers and shrubs that restrict walking through the forest. Swampy floodplains and forests along rivers and creeks present particularly difficult travel. Where hills and streams have been worked by artisanal miner's vegetation is less dense. The root systems of these trees are very shallow, and the trees are apt to fall down naturally at any time, particularly during heavy rainfall and wind blasts. The forests contain many valuable wood species suitable for furniture manufacturing and for use as building and insulation materials. In denser, less disturbed forest areas, numerous monkeys, rodents, artiodactyls, birds, tortoises and poisonous snakes inhabit the licenses. One may encounter jaguars (panthers inclusive), crocodiles, sometimes tapirs or ant-eaters. Blood-suckers (various mites in particular) and poisonous insects are widespread.

The Omai River and its tributaries generally flow from north to south into the Essequibo River. Most of the project area is underlain by in-situ weathered material composed of laterite, saprolite, and transitional saprock overlying basal competent bedrock units. Some organic and fluvial deposits exist on the property; however they are very thin and localised in valleys and depressions. Soil types around the concession range from white sands and loamy soils, to peaty, lateritic, and clayey soils.

6.0 HISTORY

AMEC has extensively used the “Omai Site Closure Plan, Version 7, 2007” as a reference when compiling this section of the Geological Report.

Gold mining and prospecting have been active in Guyana since the latter part of the 19th century. These operations have been restricted almost exclusively to exploitation of alluvial and eluvial deposits by gold panning and sluicing. Operations eventually expanded with the later introduction of dredging and hydraulic methods. Gold production in Guyana has been almost exclusively small-scale and carried out by artisanal miners known locally as “pork-knockers” who work small claims utilizing suction dredges, sluicing, hand-crushing and panning to recover gold.

The Omai area has been the subject of gold exploration and production for over 100 years and the following chronology outlines the history of the project area:

- 1889-1896: During this time 1870 kg (60,000 oz) of gold were recovered by simple hand methods, primarily from the creeks draining the mineralized area by local prospectors.
- 1896-1911: A German syndicate acquired the area and continued exploration through diamond drilling and tunnelling. They produced 1,910 kg (61,200 oz) of gold prior to selling the property in 1907. From 1907 to 1911 the claims area was sub-leased to local prospectors who obtained 460 kg (14,800 oz) of gold. Thus, by 1911 approximately 4,240 kg (136,400 oz) of gold had been recovered at Omai. Since then, local prospectors have continued to work the area, but no records of production are maintained.
- 1937: Ventures Ltd. of Toronto, Canada acquired the property. No record of their program is available; however, it is expected that a tendency toward lower gold values with increasing deposit depth caused Ventures Ltd. to abandon the project.
- 1947-1950: Anaconda British Guiana Mines Ltd. (Anaconda) acquired the Omai property and completed detailed surface and underground exploration. After installing a bulk sampling plant and continuing detailed exploration for three years, Anaconda terminated their operations in 1950.
- 1985-1987: Golden Star Resources Ltd., an Edmonton-based exploration company acquired the Omai property and the data gathered during Anaconda’s exploration efforts. No information on exploration activities by Golden Star Resources was found by AMEC. Golden Star commenced programs of systematic geochemical sampling, geological mapping and diamond drilling but rapidly negotiated an agreement with Placer Dome Inc.

- 1987-1990: Placer Dome Inc. through its wholly-owned subsidiary Placer (Guyana) Ltd., entered into a joint venture agreement with Golden Star Resources Ltd. to explore and potentially develop the Omai property. On becoming project operator in March, 1987, Placer's initial efforts focused on mobilizing personnel and equipment, upgrading and expanding camp facilities, and constructing a sample preparation facility. Following that and up to 1990, Placer Dome Inc. conducted an exploration program on the property including resource evaluations and negotiations toward a mineral agreement with Placer Dome, but declined to proceed at that stage and Golden Star approached Cambior to proceed with the development of the property. To AMEC's knowledge, no reports outlining the mineral resource estimate have been located in the archived documents.
- 1990-2006: Between 1990 and 2004 Denison Mines Ltd., Cambior Inc., and subsequently Omai Gold Mines Ltd completed basic exploration consisting of stream sediment geochemistry, banka (cased auger), profile and grid auger drilling and MMI (Mobile Metal Ion) geochemical sampling in several stages around and fringing the Wenot and Fennel pits and extending to the eastern border of the Omai license. Initial shallow grids (100 m by 50 m) were tested by profile lines with sample stations spaced at 25 and 50 m centers. The grid shallow and deep auger drilling indicated several gold anomalies, apparently controlled by the Wenot shear zone, extend from the western to the eastern borders of the Prospecting License.
- Cambior Inc., (Val d'Or, Quebec) a Canada-based gold mining company, replaced Placer Dome at the Omai Project and, as project operator, completed a "bankable feasibility study" and subsequently secured a mining license. A total of 394 diamond drillholes (60,486 m) were drilled in the Fennel area up to 2006. These data were used to define the area mined in the Fennel Pit. This includes 22 holes (376 m) that were drilled for geotechnical purposes. Omai Gold Mines Ltd conducted open pit mining from two separate deposits (Wenot and Fennel) which commenced in March, 1994 and ceased in September, 2005, during which time a total of 3,800,000 oz of gold were produced (78 Mt @ 1.5 g/t Au). Omai processed approximately 21,000 tpd of both soft rock (saprolite) and hard rock (andesite, quartz diorite and rhyolite) at a ratio of 30:70 respectively, using cyanidation and carbon-in-pulp (CIP) as the process method.

The following discussion on the history of the ore processing at Omai has been taken and modified from OGML, 1999.

The flowsheet employed at the Omai treatment plant up to its decommissioning in 2006 is typical of a free milling oxide ore. This plant achieved 92% overall gold

recovery at an acceptable availability of 91% and an equally reasonable treatment cost of approximately 3 USD/ton milled.

Following a major expansion in 2006 the capacity of the plant was increased to 20,000 mtpd with approximately a quarter of the feed consisting of soft ore (saprolite, laterite) and three quarters being hard rock (andesite, quartz diorite, rhyolite). The average grade of the ROM feed was around 1.4 g/t.

A single stage primary gyratory crusher received directly-tipped ROM ore and fed onto either the main crushed ore stockpile or a dedicated saprolite stockpile. Two parallel conventional SABC grinding circuits were used to generate a circuit product with a P80 of 75 microns. Soft rock was depleted three years prior to mine closure. The original design had only one SABC circuit with the second circuit added to both increase capacity and to accommodate the gradual increase in rock hardness resulting from the depletion of the softer rock types.

The second circuit was designed to treat 8000 mtpd of hard rock. This circuit featured a 9000 hp motor with a reversible variable speed single pinion drive rotating the 32x15 ft SAG mill. A 7ft short head cone crusher was used to crush the SAG screen oversize pebbles. Undersize from this screen reported to two parallel 5400 hp driven 16.5x30ft ball mills closed out by a common cyclopac consisting of four D26 hydrocyclones.

A portion of the cyclopac underflow reported to a gravity concentration circuit consisting of Reichert cones, followed by a cleaner Knelson concentrator (circuit A) or Reichert spirals (circuit B) and a re-cleaner step (concentrating tables). Tailings from each gravity unit operation recycled back to the cyclone feed box while the final concentrate (at 70% gold by weight) reported directly to the gold furnace. Approximately 30% of total bullion production was recovered by the gravity circuits.

Cyclone overflow reported to a leach-CIP section after thickening. This train consisted of five leach tanks followed by five smaller CIP tanks. Cyanide consumption was high at around 1 kg/t. The average solids residue grade is quoted as 0.1 g/t while the solution losses is reported as 0.015 g/t, both aligning well with typical industry values for free milling oxides.

CIP tailings reported directly to the tailings pond for natural degradation of residual cyanide. The large surface area allowed for a shallow depth tailings pond, conducive to natural degradation through UV irradiation. Typical cyanide tenors quoted are 50 ppm for the Plant tailings and less than 1 ppm for the reclaim water returned to the Plant. An effluent treatment and polishing plant was used to remove any residual cyanide prior to final disposal of excess effluent to the Essequibo River. Ferric

sulphate and hydrogen peroxide was used to destroy remaining free and weak acid dissociable cyanide, followed by a clarifier, carbon columns and a final polishing pond.

Loaded carbon reported to a conventional stripping circuit with c/w acid washing and regeneration kilns. Gold was recovered from the pregnant eluate through electro winning. The cathodic gold from this operation was mixed with the gravity concentrate prior to smelting.

Having a successful full-scale track record on this deposit, the original design provides a low risk base case scenario for the future exploitation of the remainder of the deposit. Based on the historical production, a CIP plant is considered as the most appropriate process facility, but metallurgical testwork will be required if mineral resources are declared through the planned exploration activities.

2006-2007: In November 2006, IAMGOLD acquired Cambior. IAMGOLD Corporation investigated the possibility of underground mining below the Fennel Pit. Two deep drillholes indicated that the Fennel Stock was present under the sill and contains gold mineralization. In 2006-2007, an additional 42 diamond drillholes were drilled totaling 27,359 m, with the deepest being 978 m. A plan map showing all Fennel drillholes, including those used in the underground mineral resource, are shown in Figure 6-1 and a representative cross section is shown in Figure 6-2. The historical Fennel Deep mineral resource estimate is discussed briefly:

- The majority of the historic Fennel Deep drillholes were drilled from inside the Fennel Pit, which is currently flooded. Therefore, AMEC will not be able to validate the location of the drill hole collars as stated in the drillhole database.
- Mineralization modeling resulted in the creation of 13 sub-horizontal zones inside a quartz-diorite stock in the host andesitic volcanics, striking at 30° N with a shallow dip of -10° NW. The 3D solids were created using polylines snapped to drillholes. There is no indication of the parameters (by grade and/or lithology) used to constrain the mineralization. AMEC has not validated the mineralization models.
- Exploratory data analysis (EDA) of the assays within the thirteen zones is shown in Table 6-1. AMEC is in the process of validating the drillhole database.

Figure 6-1: Plan Map of the Fennel Deposit Drillhole Locations (Heesterman, 2007)

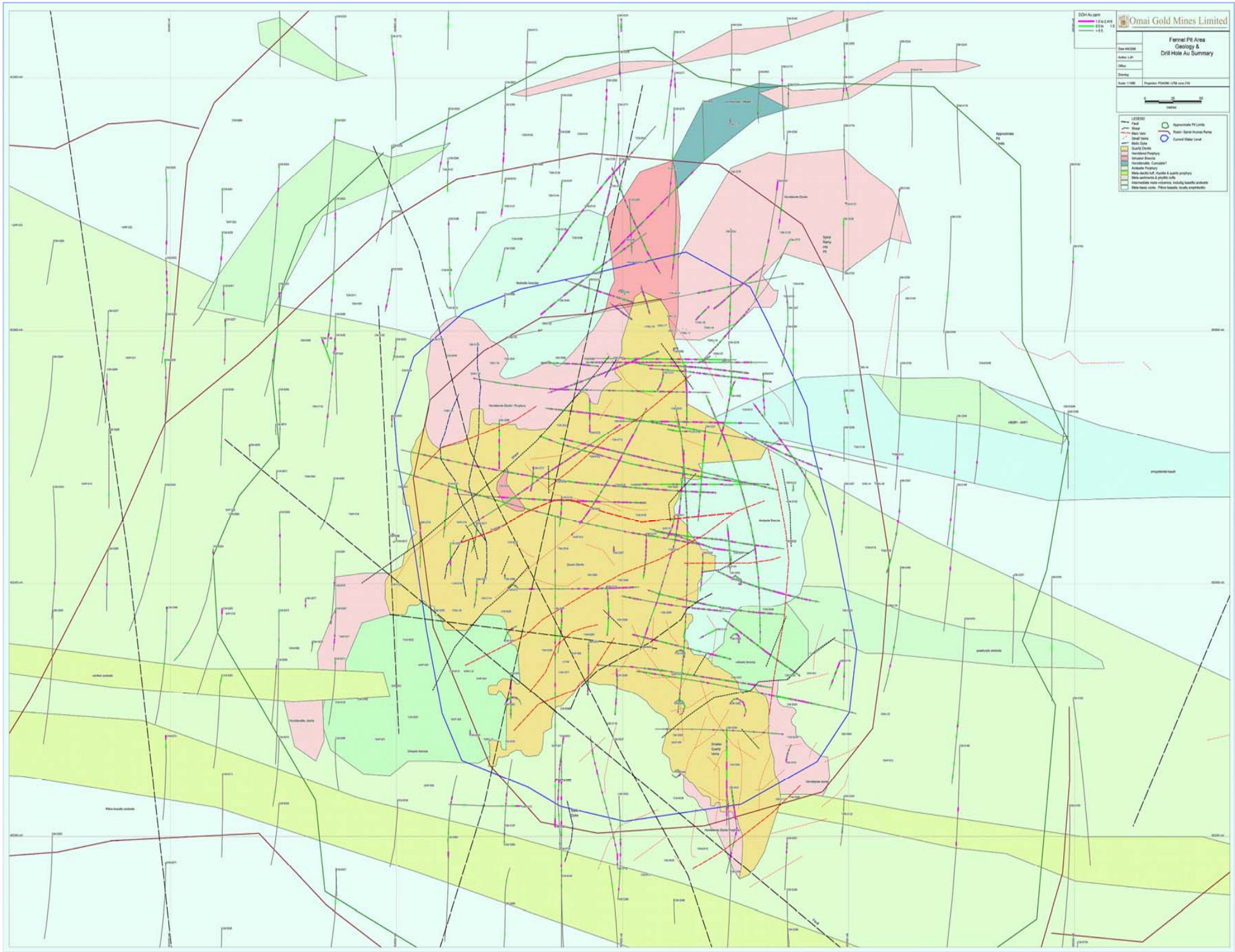


Figure 6-2: North-South Cross Section of the Omai Project-Looking West (Heesterman, 2007)

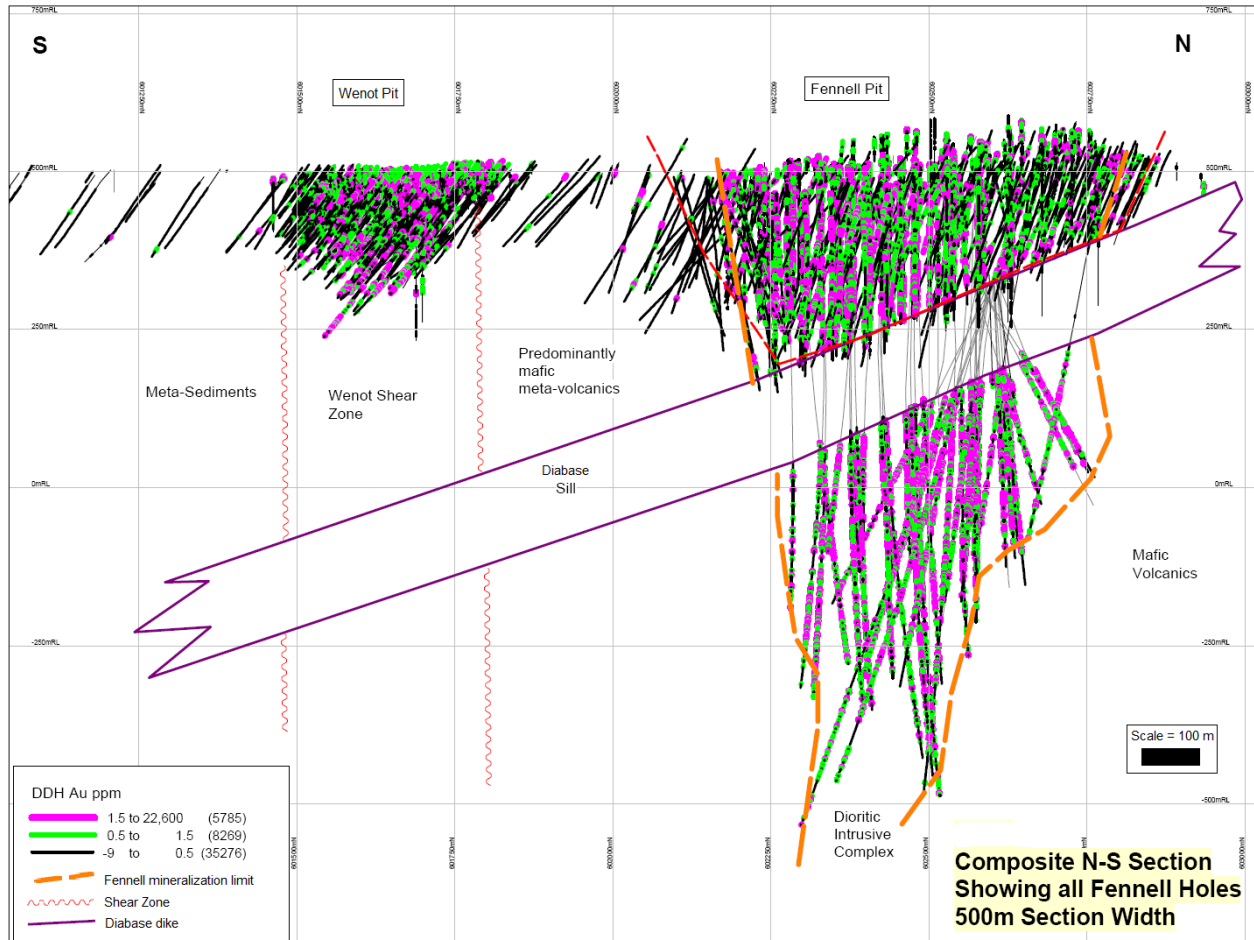


Table 6-1: EDA of the Mineralized Models for the Fennell Deep Historic Mineral Resource

Rock Type	Rock Code	n > 0	Mean (g Au/t)	Var.	C.V.*	Median (g Au/t)	Maximum (g Au/t)	Log Mean	Log Var	Capping (g Au/t)	# Capped	% Au removed
Quartz-Diorite	40	5214	1.04	392.99	19.06	0.29	1406.27	-1.43	2.45	25	10	34.0
Min'zd Zone 1	41	225	2.86	37.1	2.13	1.5	70.67	0.24	1.68	25	3	8.1
Min'zd Zone 2	42	237	2.2	22.85	2.17	1.29	61.84	0.01	1.87	10	5	12.9
Min'zd Zone 3	43	170	2.34	34.76	2.52	1.22	56.13	-0.1	2.07	15	2	17.1
Min'zd Zone 4	44	209	18.49	52527.51	12.40	1.56	3315.5	0.32	2	30	2	76.2
Min'zd Zone 5	45	178	2.61	21.42	1.77	1.63	52.73	0.35	1.44	20	1	6.7
Min'zd Zone 6	46	873	2.92	52.62	2.48	1.43	170.97	0.22	2.05	30	7	8.8
Min'zd Zone 7	47	334	3.51	116.05	3.07	1.54	157.36	0.19	2.25	35	5	12.9
Min'zd Zone 8	48	357	2.3	29.74	2.37	1.33	75.53	-0.32	2.96	20	6	7.4
Min'zd Zone 9	49	485	2.28	28.62	2.35	1.52	79.33	-0.01	1.93	25	5	6.5
Min'zd Zone 11	51	240	2.15	27.79	2.45	1.27	72.72	0.10	1.43	15	2	12.3
Min'zd Zone 13	53	168	2.87	51.6	2.50	1.22	64.41	0.11	1.93	15	5	10.4
Min'zd Zone 14	54	35	7.42	234.14	2.06	1.33	53.31	0.65	2.26	30	4	8
Min'zd Zone 15	55	5	10.1	171.13	1.30	2.53	32.47	1.67	1.5	30	1	0.7

- Variogram models were computed using 3m capped composites and although a high nugget (70%) and an effective range of 50 m were suggested, the results were not conclusive.
- A block model using block sizes of 10m x 10m x 5m (x,y,z) was created and the grade interpolation was done using 5m equal length capped composites and estimated with an inverse distance squared (ID2) methodology. AMEC has not validated the grade interpolation.
- The density model used for calculating tonnages was derived from more than 300 measurements using an immersion method. The following densities were used in the model; 2.85 g/cc for mineralized zones, 2.80 g/cc for quartz diorite stock, 3.0 g/cc for diabase stock and 2.9 g/cc for andesitic volcanics. AMEC has not validated the density data.
- The density model used for calculating tonnages was derived from more than 300 measurements using an immersion method. The following densities were used in the model; 2.85 g/cc for mineralized zones, 2.80 g/cc for quartz diorite stock, 3.0 g/cc for diabase stock and 2.9 g/cc for andesitic volcanics. AMEC has not validated the density data.
- A block was considered Indicated if at least 3 composites from 2 different drillholes (max of 2 composites /drillhole) are found within a 50m x 50 m x 20m elliptical search. A block was considered Inferred if at least 2 composites (max of 2 composites /drillhole) are found within a 200m x 200m x 50m elliptical search. AMEC has not validated the classification reporting, and has no information as to which reporting code the classifications are made (CIM, JORC) and therefore classifications and classification confidence categories cannot be relied as being compliant with NI43-101 reporting.
- No discussions as to considerations of reasonable prospects of economic extraction were included in the report, and therefore AMEC is unable to determine if the parameters used to select the 1.5 g/t Au cut-off grade used to declare the historic mineral resources, or the cut-off grade are appropriate to the mineralization style and mining method contemplated.
- Using a cut-off grade (COG) of 1.5 g/t Au, the total historical mineral resource estimate that included an Indicated Mineral Resource of 11.2 Mt @ 2.49 g/t Au and an Inferred Mineral Resource of 6.3 Mt @ 2.56 g/t Au.
- One risk associated with the Fennel Deep mineralization is the suggested groundwater inflows to the Fennel pit from below the confining layer of diabase. The reported inflow is in the order of 2,700 m³/d (300 USGPM) at pressures of around 300 psi as reported by Golder (2007).

- In the opinion of the QP, sufficient work has not been completed to validate the historical estimate as a current mineral resource. Mahdia is not treating the historical estimate as a current mineral resource.
- The Fennel Deep mineral resource model is discussed in an internal report by Eve Bourgault of IAMGOLD dated January 12, 2007.

To AMEC's knowledge, there is no Technical Report supporting the Fennel Deep mineral resource estimate and therefore, the mineral resource estimate must be considered as historical and non-compliant with NI43-101 reporting standards.

The QPs consider the following work programs would be required to update the estimate to meet CIM (2010) and NI-43-101 requirements:

- Validation of Fennel Deep drillhole database
- Validation of survey data
- Validation of density data
- Validation of assay data
- Validation of solids models
- Consideration of EDA results
- Consideration of variography
- Assessment of appropriate interpolation methods
- Review of assignment of resource confidence categories based on available information
- Consideration of reasonable prospects of economic extraction
- Classification of and reporting of Mineral Resources to CIM standards

All of the following statements regarding the former Omai processing have been referenced from the 2007 Omai Closure Plan (OGML, 2007)

The Wenot Pit was mined out in the first quarter of 2002 with the removal of approximately 100 million tonnes of material leaving the pit dimensions approximately 1.5 km long, 550 m wide and 215 m deep; the pit was converted to a Tailing Management Facility in the second quarter of 2002 and utilized for tailings disposal until the end of mining operation of the alluvial area in the third quarter of 2005.

The Fennel Pit was mined out in October 2004 after removal of approximately 150 million tonnes of material; pit dimensions at the end of the mining were approximately

825 m long (north to south), 700 m wide, and 275 m depth and from the end of 2004, it was used as a Tailings Water Management Facility to maintain the elevation in Wenot Pit below the Berbice Sands level.

The mine facility was designed to deliver ore-grade material to the mill for processing. The design provided haul roads for the movement of equipment, run-off diversions to reduce pit dewatering requirements and mine water discharge, and designs for safe drilling and blasting, as well as provision for the storage of low grade material and barren rock. Several locations, listed below, were selected for the storage of material while barren rock stockpiles were developed for barren rock and overburden stripping.

Captain Mann Dump (part of former No.1 Tailings Area) primarily contains barren rock material from surface zones of the Fennel Pit and was used from the inception of mining operations to early 1996; it is estimated to contain approximately 30 million tonnes of material and covers about 44 ha.

The South Dump contains both hard and soft barren rock from the Wenot Pit and was completed in 2002; it covers an estimated 106 ha and contains approximately 70 million tonnes of barren rock.

The North Waste Dump (part of former No.1 tailing Area) was used a barren rock dump for the Fennel Pit from June 1996 to September 2004 and approximately 27.9 million tonnes of barren rock were deposited there for an approximate surface area of 93.4 ha.

The East Dump was created to provide access between the east end of the Wenot Pit and the No.2 Tailings Impoundment to facilitate the transport of dam construction materials and contains both hard and soft barren rock; it was completed in 2000 with an approximate area of 14 ha.

In addition to these four barren rock dumps, barren rock also used as a fill material for the construction of road, dams and buildings foundations etc. around the site; rock and saprolite was confirmed as non-acid generating during all Omai operations and activities by continuous testing during mining operations.

Mine production was designed to deliver an optimal ore feed grade to the mill. Commercial gold production commenced at Omai on January 15, 1993. The Omai Gold Mine milled 78 million tonnes of ore at an approximate grade of 1.5 grams per tonne (g/t) which produced approximately 3.8 million ounces of gold up to the end of milling and mining operations in September 2005. Gold was recovered by both gravity separation and cyanide leaching processes followed by plating gold onto steel cathodes in the refinery.

Tailings disposal in No.1 Tailings Area began with the onset of milling and production operations, and ceased in August 1995 after an embankment of the main dam failed and operations at Omai were suspended. The Government of Guyana established a Commission of Inquiry (that included committees of local and international experts to investigate the circumstances related to the tailings dam failure) who concluded that there was no justifiable reason for Omai to cease production.

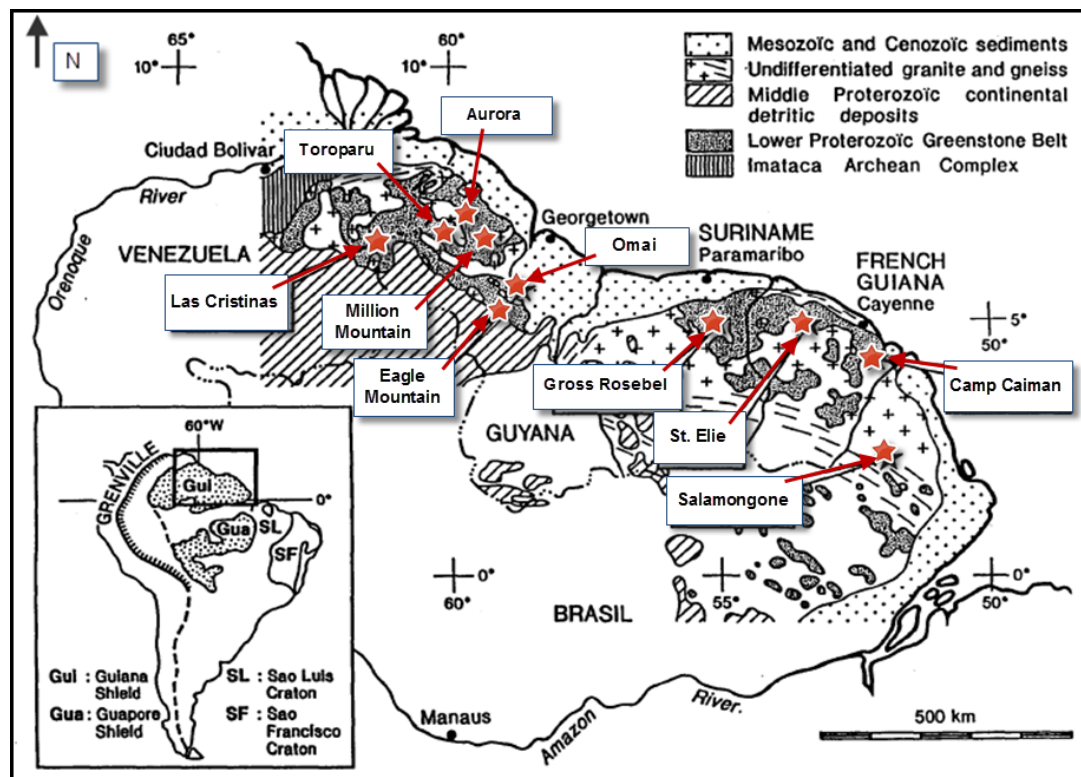
On February 4, 1996 with the approval from the Government of Guyana, Omai resumed operations. As per requirements, an Effluent Treatment Plant (ETP) was used to treat the pond water tailings surplus to the operating requirements of the mill intermittently (later decommissioned in August 2004).

Tailings from the milling operation were impounded in the No.1 Tailings Area from 1992-1995, No.2 Tailings Area from 1996-2002, and Wenot Pit Tailings Management Facility (TMF) from May 2003-2005. Approximately 11.7 million tonnes of tailing are contained in the No.1 Tailings Area (which was progressively reclaimed and later used as a barren rock dump from Fennel Pit), No.2 Tailings Area's 141 ha basin contained approximately 46.5 million tonnes of tailings at the completion of tailing deposition in May 2002, and Wenot Pit contained 21 million tonnes of tailings at the end of operations.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

Prior to 1991, very little exploration was undertaken in the Guiana Shields due to poor infrastructure, thick laterite/sand cover, and dense tropical rainforest and in part due to lack of confidence of the exploration companies in the previous 30 years. Mining was relatively active in Venezuela, notably in the El Callao area since 1880 and artisanal mining escalated in the KM 88 area during the 1980s. Noranda Mining conducted a major exploration and development program in the Marudi Mountain area during the 1940's, Coincident with work by Anaconda in the Omai area. Cominco was also active exploring for gold and base metals in Guyana during the same period. Modern exploration in Venezuela escalated rapidly subsequent to changes in mining law in 1991 which permitted control by foreign entities. South American Gold Fields, Homestake Mining and Dennison Mines conducted systematic exploration programs in Guyana during the mid to late 1980's. Golden Star Exploration commenced land consolidation and exploration in Guyana in 1987 as a corporate successor to South American Goldfields. Since 1991, when the Omai mine started operating, several exploration companies commenced extended exploration projects, which resulted in the discovery of several gold deposits (Las Cristinas, Venezuela; Gross Rosebel, Suriname; Dorlin, Yaou, French Guiana; Eagle Mountain, Guyana) (Figure 7-1).

Figure 7-1: Geological Map of Guyana Shield Showing the Principal Gold Deposits.
(Modified after Voicu et al., 1999)



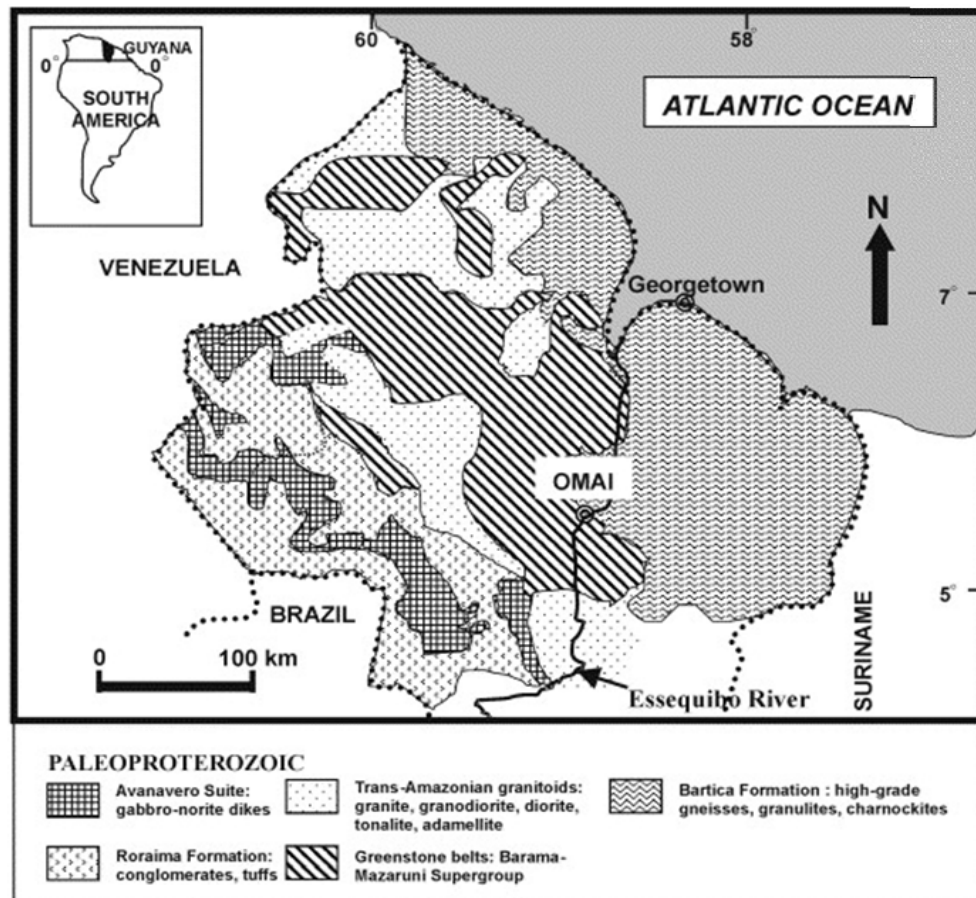
The Omai mine represents one of the few areas in the Guiana Shield in Guyana where fresh bedrock could be studied. Dr. Gabriel Voicu studied and discussed in detail the regional and property geology in his Ph.D. Thesis in 1999.

AMEC has extensively used this reference in section 7.0, verifying key lithologies and structures during site visits and literature reviews.

7.1 Regional Geology

The Omai gold deposit is hosted in the Paleoproterozoic Barama-Mazaruni Supergroup, a greenstone terrane that was deformed and metamorphosed during the Trans-Amazonian orogeny, a tectonomagmatic event bracketed between approximately 2.25 and 1.9 Ga (Gibbs and Barron, 1993). The greenstone belt sequence comprises alternating felsic to mafic and ultramafic volcanic flows interlayered with thick sedimentary units (Figure 7-2).

Figure 7-2: Simplified Geologic Map of North Guyana Showing Location of Omai Gold Deposit. (Voicu et al., 2002, Modified from Walrond, 1987; Gibbs and Barron, 1993)

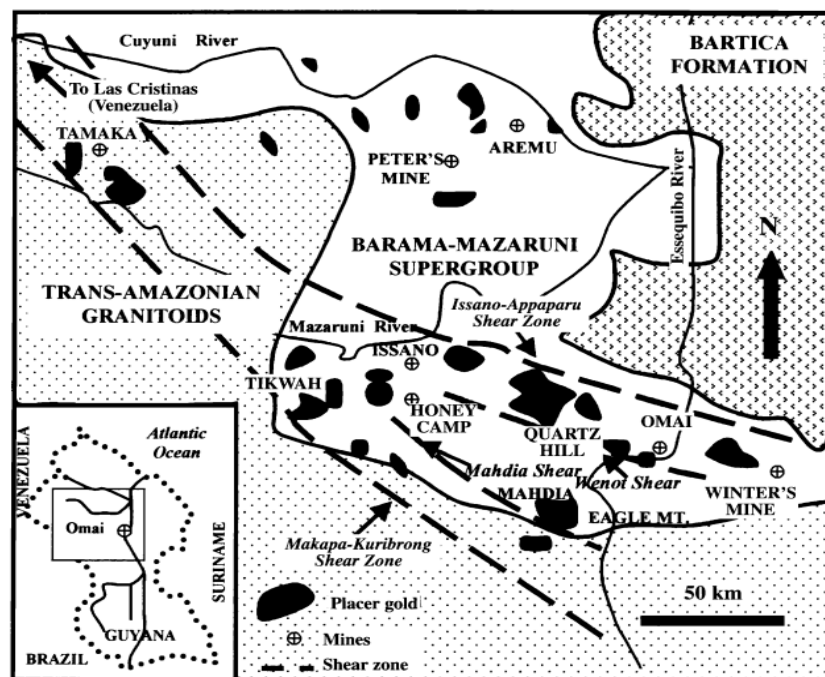


The base of the sequence is dominated by tholeiitic basalts and associated mafic-ultramafic bodies and sills, which are overlain by intermediate and felsic volcanic rocks interlayered with immature clastic sedimentary rocks (Gibbs and Barron, 1993). The metamorphic grade is generally lower greenschist facies, although locally the volcano-sedimentary rocks are metamorphosed to pumpellyite-prehnite or amphibolites facies (Gibbs and Barron, 1993; Voicu et al., 1997c).

The greenstone belt is associated with extensive calc-alkaline felsic to intermediate intrusions, collectively referred to as the Granitoid Complex or Trans-Amazonian Granitoids (Gibbs and Barron, 1993; Voicu et al., 1997c). They are syn-to late-tectonic intrusions and range in composition from granite, to granodiorite batholith, which occurs ~6 km southwest of Omai, has been dated at 1945 ± 45 Ma (K-Ar method on hornblende; Snelling and McConnel, 1969).

The majority of gold occurrences in northern Guyana show a spatial correlation with Paleoproterozoic greenstone terrane (Walrond, 1980, 1987; Elliot, 1992). Approximately 120 t of gold (mines and placers) have been produced from this terrane during the period 1885 to 1995. The overall distribution of gold occurrences is controlled by northwest-trending major structural breaks referred to as the Makapa-Kuribrong (Walrond, 1980) and Issano-Appaparu (Elliott, 1992) shear zones (Figure 7-3).

Figure 7-3: Regional Map Showing the Spatial Relationship Between Crustal-scale Shear Zones and Distribution of Gold Occurrences and Deposits in the Granite-Greenstone Belt of North-Central Guyana (Voicu et al., 1999, modified from Elliot, 1992).



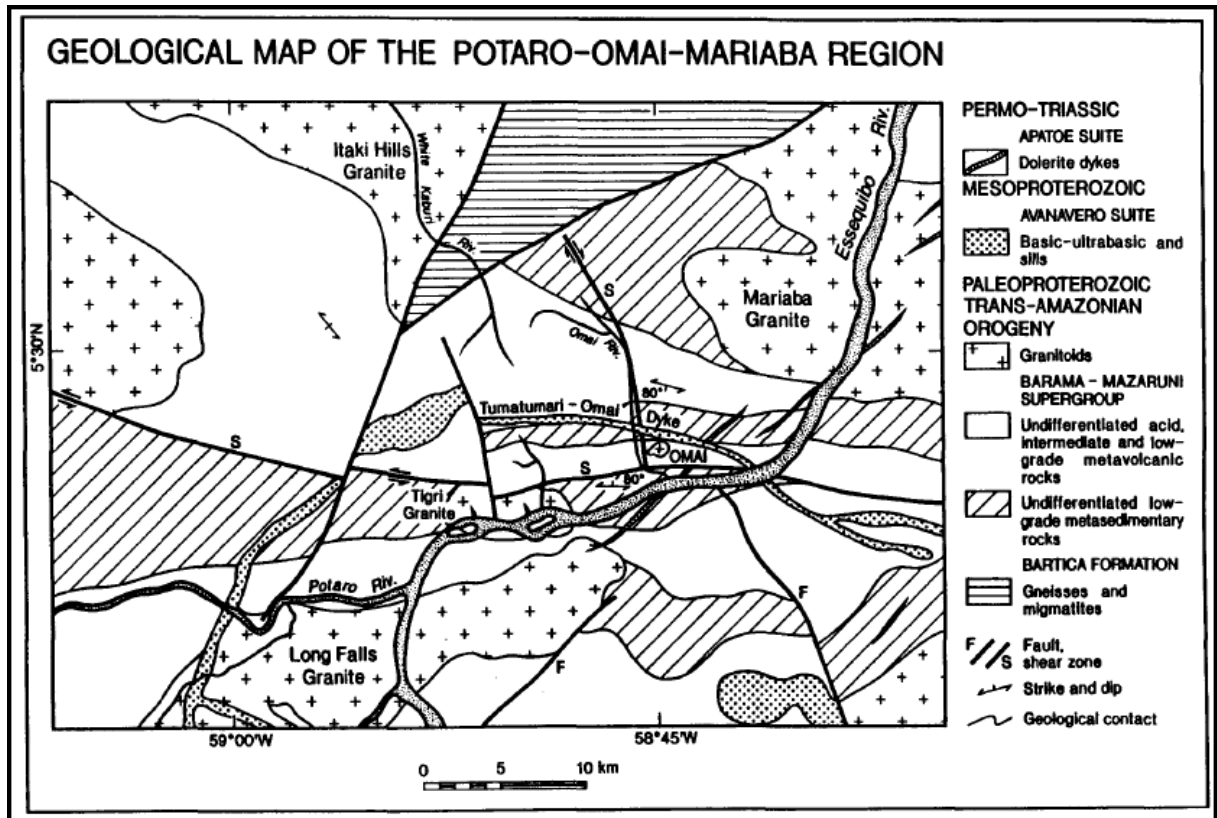
The current lithostratigraphic, geochronological and tectonic data for northern Guyana allow division of the rock types into six main assemblages. These are briefly described below, from oldest to youngest.

1. High-grade metamorphic rocks referred to as the Bartica Formation, which represent high-grade equivalent of overlying low-grade greenstone belts.
2. Low-grade metavolcanic and metasedimentary rocks of the Barama-Mazaruni Supergroup considered as representing a Paleoproterozoic equivalent of the Archean greenstone belts.
3. Paleoproterozoic syn- to late-tectonic intrusions of intermediate to acid composition termed the Older and younger Granites.
4. Small mafic/ultramafic sills and dikes referred to as the Older and Younger Basic Groups are described as being associated, respectively, with Paleoproterozoic volcanic and plutonic rocks, as well as the Mesoproterozoic Roraima Formation. The Older Basic Group has been described as gabbroic-hornblenditic bodies related to the Barama-Mazaruni Supergroup and the Granitoid Complex. At Omai, these bodies may represent sub-volcanic equivalents of the overlying mafic volcanic rocks.
5. Mesoproterozoic anorogenic felsic lavas (Iwokrama Formation) and continental sedimentary rocks of the Roraima Group.
6. Permo-Triassic mafic dike swarms of the Apatoe Suite, related to the opening of the Atlantic Ocean.

In the Omai-Potaro-Mariaba region, the Bartica Formation consists of leucocratic biotite-gneiss, amphibolitic gneiss and coarse-grained hornblende-biotite gneiss (Figure 7-4). The Barama-Mazaruni Supergroup comprise alternating felsic, intermediate and mafic metavolcanic rocks and immature sedimentary rocks (greywacke, volcanoclastic conglomerates, tuff and phyllites), metamorphosed in the prehnite-pumpellyite to lower greenschist facies. These units strike E-W to NW-SE, and dip steeply and mainly to the north.

The Granitoid Complex comprises several plutons and stocks (Omai, Mariba, Tigri, Long Falls, Itaki Hills), which range from granite to granodiorite, trondhjemite, adamellite, and quartz-monzonite.

Figure 7-4: Bedrock Geology of the Omai-Potaro-Mariaba Area. Data Compiled from Bateson (1961), Cannon (1963), Hawkes (1966), Collings (1969), Guardia (1969), Bertoni et al. (1991), Gibbs and Barron (1993), and Voicu et al. (1996).

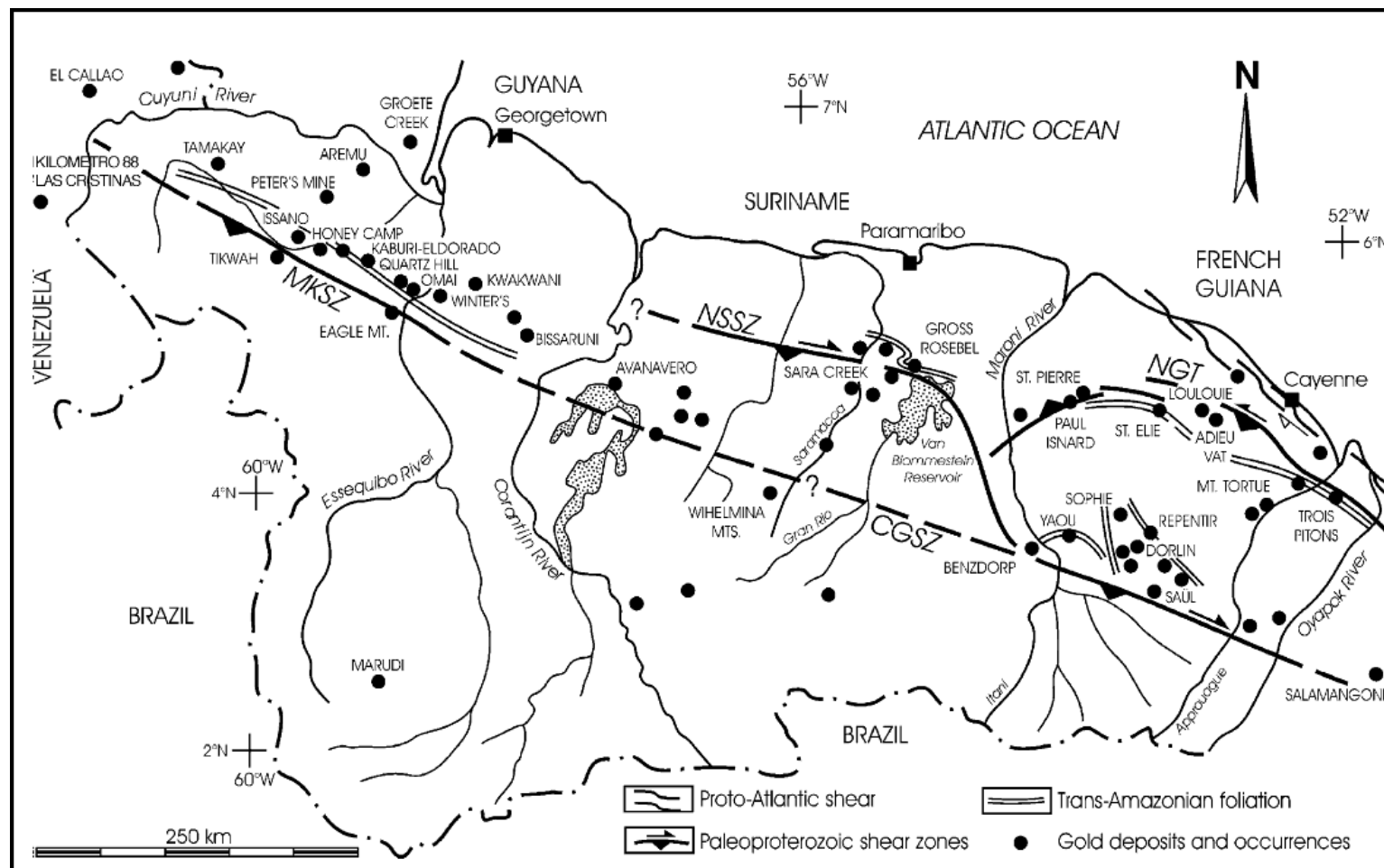


Sills and dikes of the Avanavero Suite form prominent ridges detectable on air photographs and radar images. The largest is the Tumatumari sill, an unmetamorphosed layered intrusion, which is composed of gabbro, hornblende pyroxenite and granophyres. Based on C-band synthetic aperture radar images, this sill was correlated with the gabbroic sill that outcrops north of the Omai stock.

The Permo-Triassic Apatoe tholeiitic dyke swarms are widespread in the region and cut all other lithological complexes.

Several large-scale ductile shear zones have been documented in the Guiana Shield. In north central Venezuela, the most outstanding structure documented to date, the NE-SW trending Guri Fault, juxtaposes the Archean Imataca complex against Paleoproterozoic terranes. The Central Guiana Shear Zone (CGSZ) extends from French Guiana westerly towards central Suriname and further west towards north central Guyana, where it coincides with the Makapa-Kuribrong Shear Zone (MKSZ). In French Guiana, the North Guiana Trough (NGT) is interpreted as a sinistral strike-slip formed during the Trans-Amazonian orogeny (Figure 7-5).

Figure 7-5: Schematic Map of the Northern Guiana Shield showing the Spatial Relationship between Major Tectonic Structures and Gold Deposits and Occurrences.



Abbreviations: NGT – North Guiana Through; CGSZ – Central Guiana Shear Zone; NSSZ – Northern Suriname Shear Zone; MKSZ – Makapaka Kuribrong Shear Zone. (Voicu et al., 2001)

Proto-Atlantic shear may be a Paleoproterozoic break reactivated during the opening of the Atlantic in the middle Mesozoic. The NGT occurs only in northern French Guiana and has transpressional kinematics (Milesi et al., 1995). The CGSZ is interpreted to follow a WNW-ESE direction across central French Guiana and extend laterally across central Suriname to continue further west in the direction of Northcentral Guyana, where it connects with the MKSK. Alternatively, the CGSZ may splay or bifurcate northwards parallel to the Maroni River and merge with, or extend into, the Northern Suriname Shear Zone (NSSZ). Right lateral motion along the NSSZ may post-date left lateral motion on the NGT, causing the bend in the NGT. Trans-Amazonian foliation throughout the Guiana Shield generally trends WNW-ESE. However, in central French Guiana, it tends to take a northerly direction, which may be related to the CGSZ splay (Voicu et al., 2001).

7.2 Property Geology

The lithological sequence on the Omai property consist of mafic volcanic (and genetically related sub-volcanic mafic ultramafic bodies) to felsic volcanic cycles with intercalated sediments. The volcanosedimentary unit was intruded by a quartz monzodiorite plug (the Omai stock) and several irregularly-shaped quartz-feldspar porphyry and rhyolite dikes. Post-mineralization mafic dikes and sills were intruded discontinuously from Mesoproterozoic to Triassic. The Barama-Mazaruni volcano-sedimentary sequence has been metamorphosed to lower greenschist facies (Voicu, PhD Thesis, 1999).

The Omai deposits consist of two mineralized gold zones exploited in open pit operations referred to as Fennel and Wenot (Figure 7-6). The Fennel mineralization is mainly hosted by the Omai stock and to a lesser extent, the volcanic rocks, including tholeiitic basalts and calc-alkaline andesites (Figure 7-7). The Wenot mineralization is mainly hosted by tabular quartz-feldspar porphyry dikes as well as by strongly silicified rhyolite dikes, and subordinately by andesites and metapelites (Figure 7-8) (Voicu, PhD Thesis, 1999).

The geological features and geochronological data of these two zones suggest that they are genetically related and represent a contemporaneous metallogenic event related to the last brittle- ductile phases of the Trans-Amazonian orogeny at about 2.0 Ga (Voicu, PhD Thesis, 1999).

Figure 7-6: Simplified Geologic Map of the Omai Gold Deposit (Voicu, 1999).

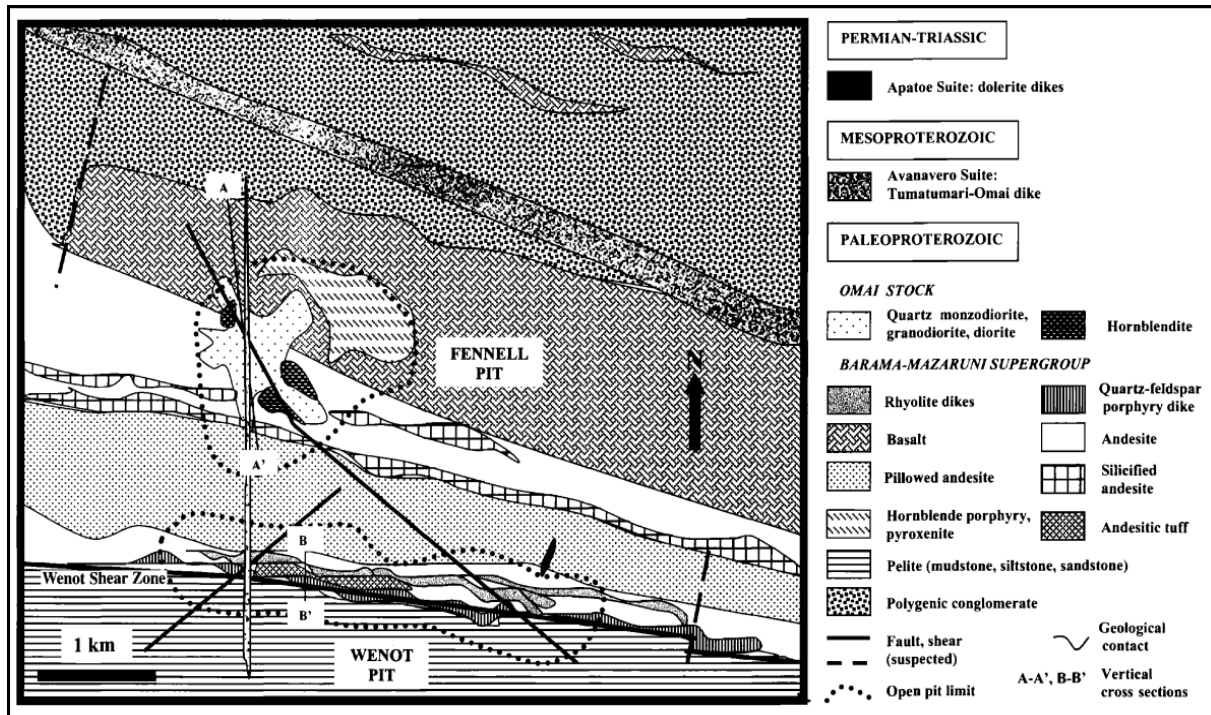


Figure 7-7: Vertical North-South Cross Section through the Fennel Pit (Voicu, 1999).

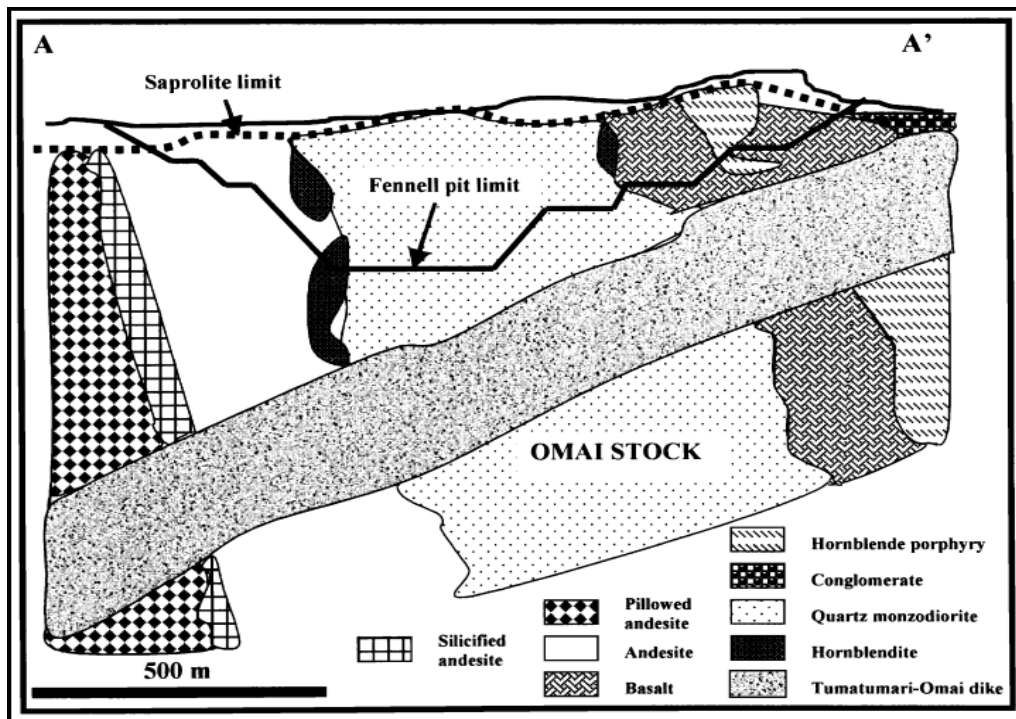
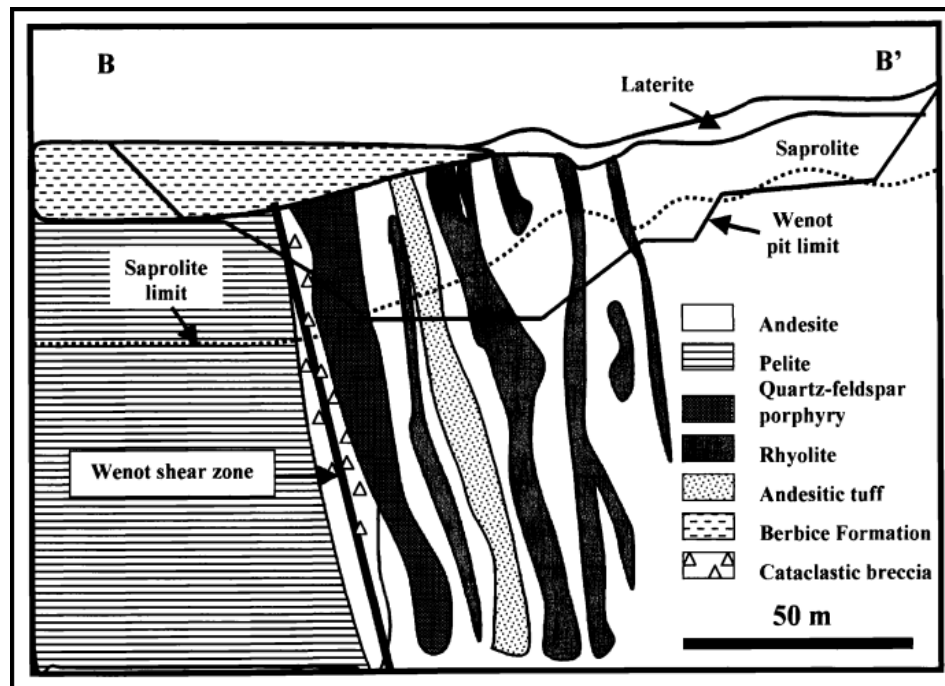


Figure 7-8: Vertical North-South Cross Section through the Wenot Pit (Voicu, 1999).



Two types of gold-bearing veins can be distinguished at Omai: vein sets ($\pm$ stockworks) and lode veins. These veins were observed in both the Fennel and Wenot pits (Voicu, PhD Thesis, 1999).

Vein sets are essentially restricted to the Omai stock, quartz-feldspar porphyry and rhyolite dikes. Even though veins are present up to 10 m beyond the intrusive margins of these rock types, their frequency diminished rapidly away from them.

Lode veins generally overprint the stockwork veins, but the inverse situation also exists, suggesting a quasi-contemporaneous emplacement of the vein types. Lode veins strike N 200° to 220° and dip between 0° and 30° NW or SE. Relative to the vein sets, they are generally thicker (between 0.3 and 1.3 m) and cut across all rock types (except late gabbro and diabase dikes).

In stockwork-style mineralization, the increased vein density leads to an overlapping of the alteration envelopes, commonly resulting in a complete transformation of the primary mineralogy of the host rock types. Dispersion into the wallrock has resulted in the formation of alteration zones parallel to the veins, whereas diffusion has created a series of narrow alteration zones perpendicular to the main direction of fluid flow. No alteration zonation with depth has been observed (Voicu, PhD Thesis, 1999).

Within the two mineralized zones, six gold-bearing, undeformed, sub-horizontal and sub-vertical vein sets can be distinguished. On the basis of their internal structures

and textures, the veins can be classified as crack and seal, laminated, breccias, and open-space filling veins. The geometrical and textural relationships between the vein sets suggest that they are broadly contemporaneous. The formation of most veins can be summarized by two filling stages and a late fracture-filling stage related to a protracted hydrothermal process. Although the metallic minerals represent less than 1 percent of the vein volume, their mineralogy is complex and consists of various sulphides together with tungstates, native elements, tellurides, and sulfosalts. The metallic paragenesis is defined by Au-Ag-Te-W-Bi-Pb-Zn-Cu-Hg-Mo assemblage. The non-opaque gangue minerals include mainly quartz and carbonates, albite, sericite, chlorite, tourmaline, rutile, and epidote (Voicu, PhD Thesis, 1999).

The six main gold bearing undeformed vein sets can be divided in sub-horizontal and sub-vertical with the following attitudes (Voicu, PhD Thesis, 1999):

- Sub-horizontal Veins:
 1. H1 - 205°-215° / 15°-35° NW: Represents the main mineralized vein system at the Omai mine
 2. H2 - 120°-140° / 15°-35° SW: Occurs locally in Fennel pit. The intersections of H1 and H2 sets are strongly enriched in gold.
 3. H3 - Variable strike / 5°-15°: Occurs in the tholeiitic basalts north of Fennel pit and roughly follows the northern contact of the Omai stock.
- Sub-vertical Veins:
 4. V1 - 330° / 75°-85° (in either direction): Occurs only in the Omai stock.
 5. V2 - 200° - 220° / 70°-85° NW: Occurs in the rhyolite/porphyry dikes, andesites, and pelitic rocks in the southern Wenot pit.
 6. V3 - 240°-260° / 70°-90°: Occurs only in the Wenot pit. It occupies the central part of the brittle shear zones.

The gold-bearing veins are generally restricted to felsic rock types (the Omai stock, quartz-feldspar porphyry and rhyolite dikes), except the third vein set that occurs only in the tholeiitic basalts of the Fennel zone. Commonly, these veins pinch out abruptly at the contact with more ductile intermediate/mafic volcanic and/or sedimentary country rocks. The vein thickness ranges from a few millimetres up to 0.8 m. In the Fennel zone, the sub-horizontal veins display little structural variation, whereas in the Wenot zone the veins display random strikes and dips, which results in a typical stockwork environment (Voicu, PhD Thesis, 1999).

The sub-vertical veins are not confined to certain rock types, but they cut across all stratigraphic contacts. They are less frequent than the sub-horizontal veins. The relationships between all vein types suggest that they are contemporaneous. The vein systems at the Omai mine can be classified as extensional (including crack and seal tensional and shear veins) and brecciate veins. Some features of Omai vein textures

are comparable to those described in Archean orogenic gold deposits, whereas others resemble the vein textures described in the circum-Pacific Tertiary epithermal deposits.

Vein mineralogy includes mainly quartz, carbonates (ankerite, calcite), scheelite, native gold, and various sulphide/tellurides. The bulk of the mineralization and gangue minerals precipitated at low temperatures (between 120 and 260°C) from hydrothermal fluids characterized by a gradual transition from oxidizing to reducing conditions. The early hydrothermal fluids were CO₂, W, and Na-rich, whereas subsequent S-rich fluids played an important role in gold transport and deposition. Possible mechanisms of gold deposition include (Voicu, PhD Thesis, 1999):

1. Fluid cooling
2. Chemical composition of the wall rock and
3. Wallrock permeability

High efficiency of fluid/rock interaction and gradual decrease of fO_2 (fugacity (f) is equal to the pressure of an ideal gas which has the same chemical potential as the real gas) and H₂S content in the hydrothermal solutions have directly influenced gold and sulphide ± telluride deposition (Voicu, PhD Thesis, 1999).

The radiogenic and stable isotopes suggest the presence of two different fluid sources:

1. Mantle and/or lower crustal origin, which interacted with the local mafic volcanic rocks
2. Surface-derived (seawater or meteoric water).

The physicochemical conditions of mineral deposition at Omai (low temperature, pressure, salinity, low CO₂ content, slightly acidic to natural pH, moderate O and S fugacities, and high Te fugacity), surface-water involvement, presence of dominant brittle ore-hosting structures, and location in low metamorphic terranes are more like those of epithermal deposits. Other major features (alteration style, geodynamic setting, late orogenic / syn- to late-tectonic emplacement, the presence of deeply sourced fluids, and partially the mineral paragenesis) are interpreted to be characteristic of deeper-level mesothermal deposits. These overlapping features between epithermal and mesothermal correspond to the upper part of the continuum model proposed for the Archean "gold-only" deposits, which was defined as epizonal. The Omai deposit represents a first example of a paleoproterozoic granitoid and greenstone-hosted equivalent of the Archean epizonal orogenic gold deposits that have been described from the Yilgarn (Wiluna & Racetrack) and Zimbabwe (Shamwa & Commoner) cratons (Voicu et al., 1999).

The Fennel and Wenot deposits display a similar alteration paragenesis. Extensive zones of pervasive alteration associated with the stockwork-style mineralization were noted, especially in the Omai stock (Fennel pit) and quartz-feldspar porphyries/rhyolites (Wenot pit). In basalts, the gold-bearing lode-type veins display narrow (few mm to 1 cm) alteration zones and mineral pseudomorphs. The hydrothermal alteration includes carbonatization, phyllitization, silicification and sulfidization. Within the Omai deposit, lateral alteration zonation around veins is on a scale varying from a few centimetres to metres (Voicu, PhD Thesis, 1999).

7.2.1 Structural Relationships and Geological Evolution of Omai Area

The geological evolution of the Omai zone is summarized in Table 7-1. The mafic volcanic rocks, porphyry and rhyolite dikes, and the metapelitic rocks display a regional foliation which strikes 100-110° and steeply dips in either direction. Facing directions can be interpreted from sedimentary structures and pillow shapes. Statistical data on the asymmetry of re-entrants in pillow lobe outlines yield a younging direction to the south. As the dip is frequently steeply to the north, the volcanic units may be locally overturned. The volcanic sequence has been tilted to its current vertical position and has not experienced polyphase deformation.

The local structure is relatively simple and consists of two deformational phases; D1 and D2. The D1 phase resulted in the ESE-WNW trending/steeply dipping regional scale foliation and ductile shear zones, whereas the D2 event caused brittle ±ductile fracturing with moderate dips, oriented perpendicularly to the D1 shear zones. The D2 structures provided the main pathways for the mineralizing fluids.

The ductile shear zone occurs only in the Wenot pit, where a 100 m wide shear corridor consists of several 1-2 m wide shear zone. Shear planar fabric is parallel to the regional foliation and crosscuts the volcano-sedimentary and porphyry/rhyolite dikes, suggesting that both structural effects were induced by a single, contemporaneous event, which post dates the emplacement of the volcano-sedimentary unit and the felsic dikes. The ductile shear zones do not contain mineralized veins.

Table 7-1: Geological Evolution of the Omai Deposits (Voicu, PhD Thesis, 1999).

Geological events	Age (Ga)
Intrusion of Apatoe doleritic dikes	0.3 ⁽⁴⁾
Intrusion of the Omai-Tumatumari gabbro sill (Avanavero suite)	1.79 ⁽¹⁾
Emplacement of gold-bearing vein swarms (+ stockworks) and lode gold mineralization	1.99 ^{(2), (3)}
Development of brittle fractures (mainly N20-40°/10-40°NW) between the main shear zones during a NW-SE tectonic compressional event (D2)	2.10 - 1.99
Intrusion of Omai stock	2.09 ⁽¹⁾
Regional deformation (D1), resulting in a general WNW-ESE striking and steeply dipping structures; development of ductile shear zones, broadly oriented WNW-ESE, accompanied by low grade (prehnite-pumpellyite to lower greenschist) metamorphism	2.12-2.09
Intrusion of quartz-feldspar porphyry and rhyolite dikes	2.12 ⁽¹⁾
Strong spilitic alteration of the mafic rocks, associated with hydrothermal pipes cemented with disseminated pyrite	>2.12
Emplacement of the tholeiitic basalts and mafic/ultramafic subvolcanic bodies, calc-alkaline andesites associated with sedimentary sequences	>2.12

⁽¹⁾ - U-Pb on zircon from Norcross et al., 1998; ⁽²⁾ - Pb-Pb on hydrothermal rutile and titanite from Norcross et al. 1998; ⁽³⁾ Sm-Nd data on scheelite (Voicu et al., 1997a); ⁽⁴⁾ K-Ar age from Gibbs and Barron (1993).

The Omai stock was intruded after the Barama-Mazaruni lavas were tilted and the contact with the host volcanic rocks is undeformed. Furthermore, the chlorite-albite-sericite-carbonate assemblage in the stock formed the hydrothermal alteration due to frequency of veins, but not a metamorphic mineral assemblage. Therefore, the Omai stock post-dates the regional foliation and peak metamorphism. A late phase of brittle deformation affected the Omai stock and country volcanic rocks. This fracture network has represented the pathway for the emplacement of alkali basalt dikes and followed by the mineralization fluids.

7.3 Prospects/Exploration Targets

Historic reconnaissance core drilling and geochemical grid and auger sampling has indicated several significant exploration targets which will be the focus of continued investigation. The current exploration work program now being conducted by Mahdia includes investigation of two principal exploration targets fringing and located along the Wenot structural zone. These will be tested initially by Trado auger grid programs.

Core drilling will test the potential for shallow (to 200 m) oxide-hosted mineralization along the Wenot shear zone, known as the Wenot West and deep (+400 m) mineralization with step-out and delineation drilling beneath the Wenot and Fennel pits and known as Fennel Deep and Wenot Deep.

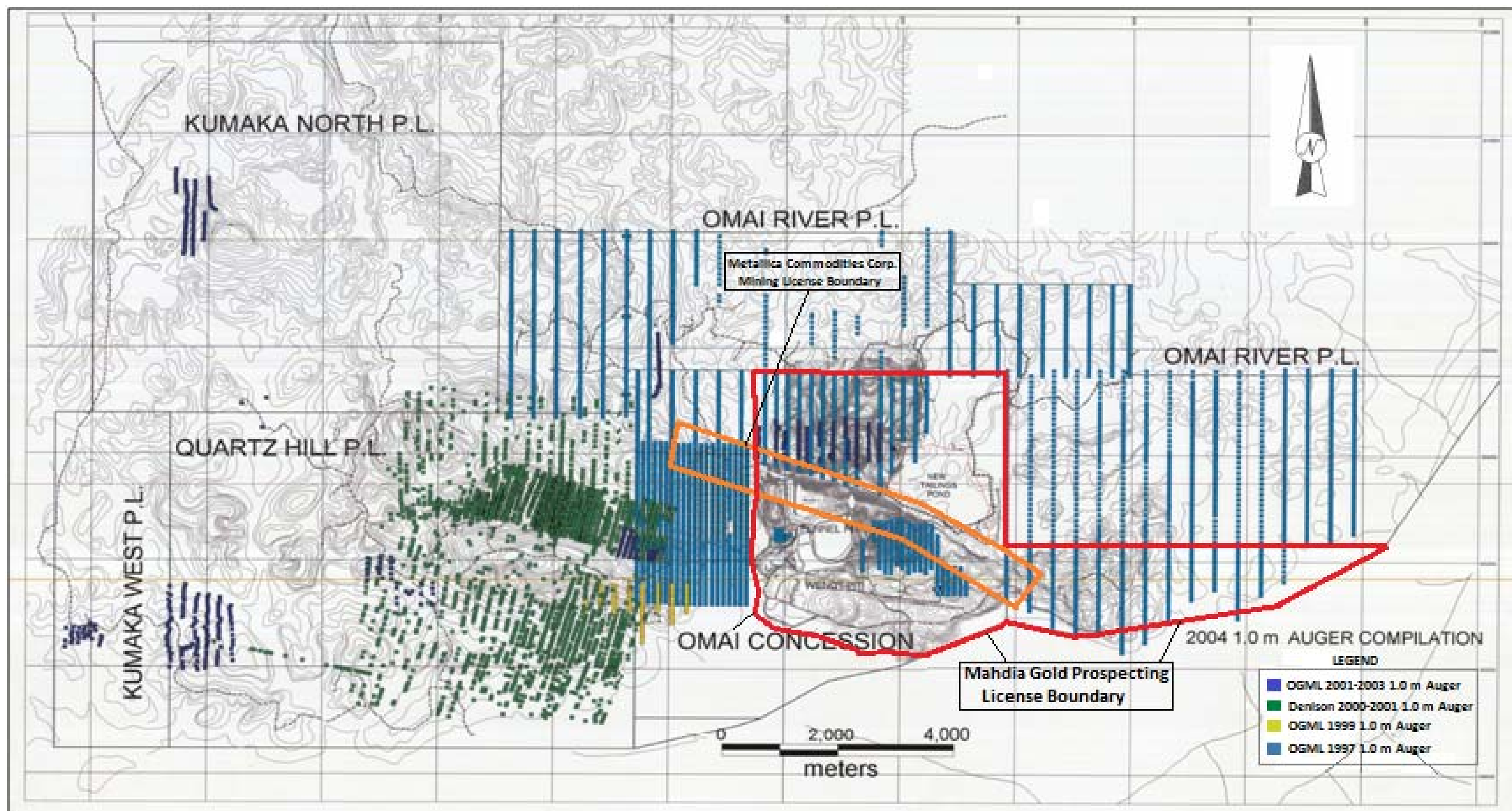
As discussed in Section 6.0, Denison Mines Ltd., Cambior Inc., and subsequently Omai Gold Mines Ltd completed basic exploration consisting of stream sediment geochemistry, banka (cased auger), profile and grid auger drilling and MMI (Mobile Metal Ion) geochemical sampling in several stages around and fringing the Wenot and Fennel pits and extending to the eastern border of the Omai license. Initial shallow grids (100 m by 50 m) were tested by profile lines with sample stations spaced at 25 and 50 m centers. The grid shallow and deep auger drilling indicated several gold anomalies, apparently controlled by the Wenot shear zone, extend from the western to the eastern borders of the Prospecting License.

Figure 7-9 shows the location of the grid auger sampling programs from 1997 to 2004 consisting of both shallow (1 m) and deep auger (8 m) results to the east of the Fennel and Wenot pits (Figure 7-10). Two principal clusters occur – one to the east and adjacent to the Fennel pit and a second target over an approximate 1,000 m by 2,000 m area located east of the Fennel and north-east of the Wenot pit. The gold anomalies located north and east of the Wenot pit are currently being investigated by auger (Trado) drilling.

Historic core drilling has provided Mahdia with at least three exploration targets. As discussed previously in Section 6.0, the Fennel Deep mineralization drilled by IAMGOLD in 2006-2007 is a primary target and is the first location for core drilling by Mahdia. A second target is the Wenot Deep under the current Wenot pit. To AMEC's knowledge, there is no core remaining from the Wenot pit, but it is possible that some of the core that is being reviewed and reorganized by Mahdia may be from the Wenot area. A third target exists directly west of the Wenot pit and to the south of the former main mine infrastructure area (process plant).

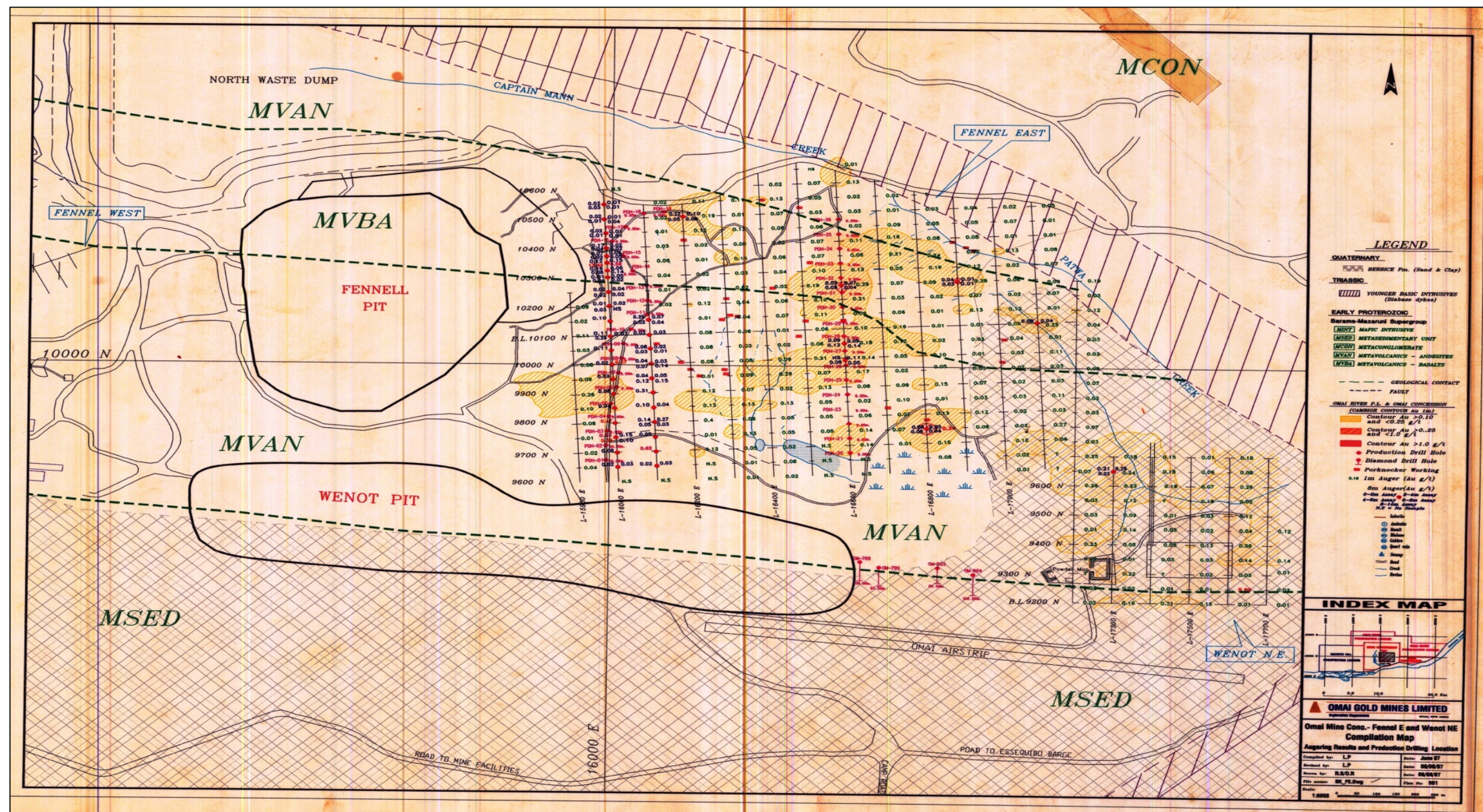
The location of the auger and core drilling targets are shown on Figure 7-11.

Figure 7-9: Historic (1997-2004) Shallow (1 m) Auger Sampling Grids on and around the Omai Concession.



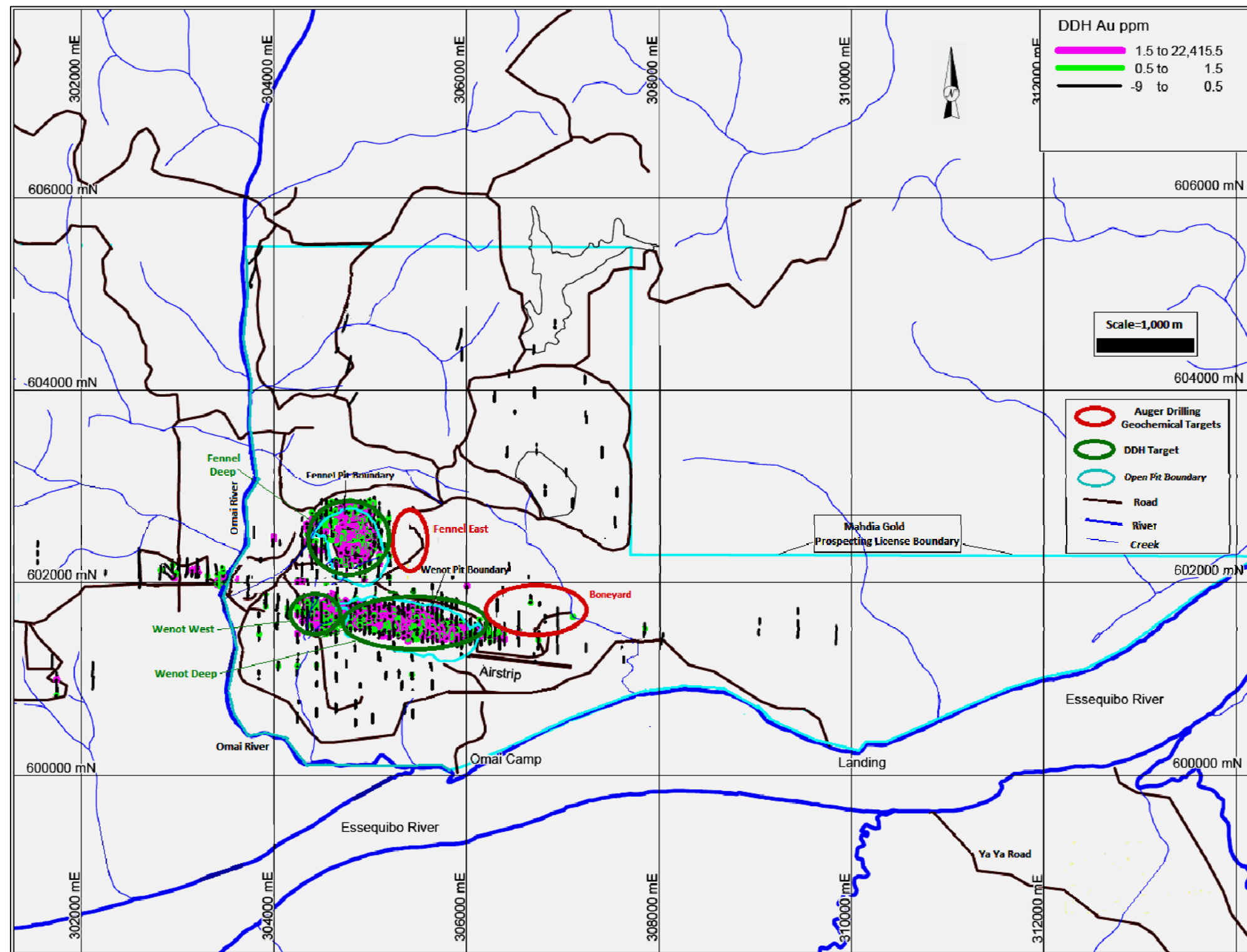
This compilation map by Omai Gold Mines Ltd. includes earlier grids completed by Cambior Inc.

Figure 7-10: Historic (2004) Shallow (1m & 8m) Auger Compilations and Grid Gold Anomaly Contours for East Fennel.



The orange (faded to yellow) contours are >0.10 to <0.25 g/t Au and the red contours are >0.25 to <1.0 g/t Au.

Figure 7-11: Mahdia Gold Exploration Targets based on Historic Auger and Core Drilling (Modified after Heesterman, 2007)



Artisanal mining has been extensive within the east Fenel-North Wenot anomaly. Recent artisanal activity was focused on the northwest bank of the Wenot pit and the eastern “Boneyard” target (Figure 7-11); both areas were examined by the authors during the January and February site visits. The northwest Wenot site contains numerous shallow pits which were excavated by miners seeking coarse gold using metal detectors (Figure 7-12).

One of six samples collected on the project by the author (R. Lunceford, see Table 12-1) included a surficial panel (0.5 m by 1.0 m) consisting of stockwork-veined saprolite material collected just below this locality returned 0.952 g/t Au confirming the presence of elevated gold. A second author sample here collected from a 0.4 m quartz vein directly adjacent to the panel sample contained almost no gold (0.008 g/t Au). Both samples represent apparent width, not true width.

Figure 7-12: Shallow Pits and Excavations along the Northwest Bank of the Wenot Pit.
The excavations are a result of recent artisanal miners seeking coarse gold nuggets using metal detectors.



8.0 DEPOSIT TYPES

The Omai deposit represents a typical example of granitoid (Fennel pit) and greenstone-hosted (Wenot pit) orogenic gold deposit.

AMEC has extensively used the following reference in this section of the Geological Report. "Orogenic gold and geological time: a global synthesis" published in Ore Geology Reviews in 2001, authored by R.J Goldfarb, D.I. Groves and S. Gardoll.

Orogenic gold deposits have formed over more than 3 billion years of the Earth's history, episodically during the Middle Archean to younger Precambrian, and continuously throughout the Phanerozoic Eon. This class of gold deposit is characteristically associated with deformed and metamorphosed mid-crustal blocks, particularly in spatial association with major crustal structures. A consistent spatial and temporal association with granitoids of various compositions indicates that melts and fluids were both inherent products of thermal events during orogenesis.

Orogenic, or the so-called "mesothermal", gold deposits are a distinctive class of mineral deposit that has been a primary source of global gold production. The deposits are widely recognized in both Phanerozoic mobile belts and older cratonic blocks (Figure 8-1). Consistent geological characteristics include deformed and variably metamorphosed host rock; low sulphide volume; carbonate-sulphide $\pm$ sericite $\pm$ chlorite alteration assemblages in greenschist-facies host rocks; low salinity, CO₂-rich ore fluids with $\delta^{18}\text{O}$ values of 5-10‰; and normally a spatial association with large-scale compressional to transpressional structures. The orogenic gold deposits normally consist of abundant quartz $\pm$ carbonate veins and show evidence for formation from fluids at supralithostatic pressures. The mineralized lodes formed over a uniquely broad range of upper to mid-crustal temperatures and pressure between about 200 – 650 °C and 1 – 5 kbar, respectively. Orogenic gold shows a spatial association with collisional orogens (Figure 8-2).

Figure 8-1: Distribution of Precambrian Cratons and Shields, and Phanerozoic Mobile Belts (Goldfarb et al., 2001).

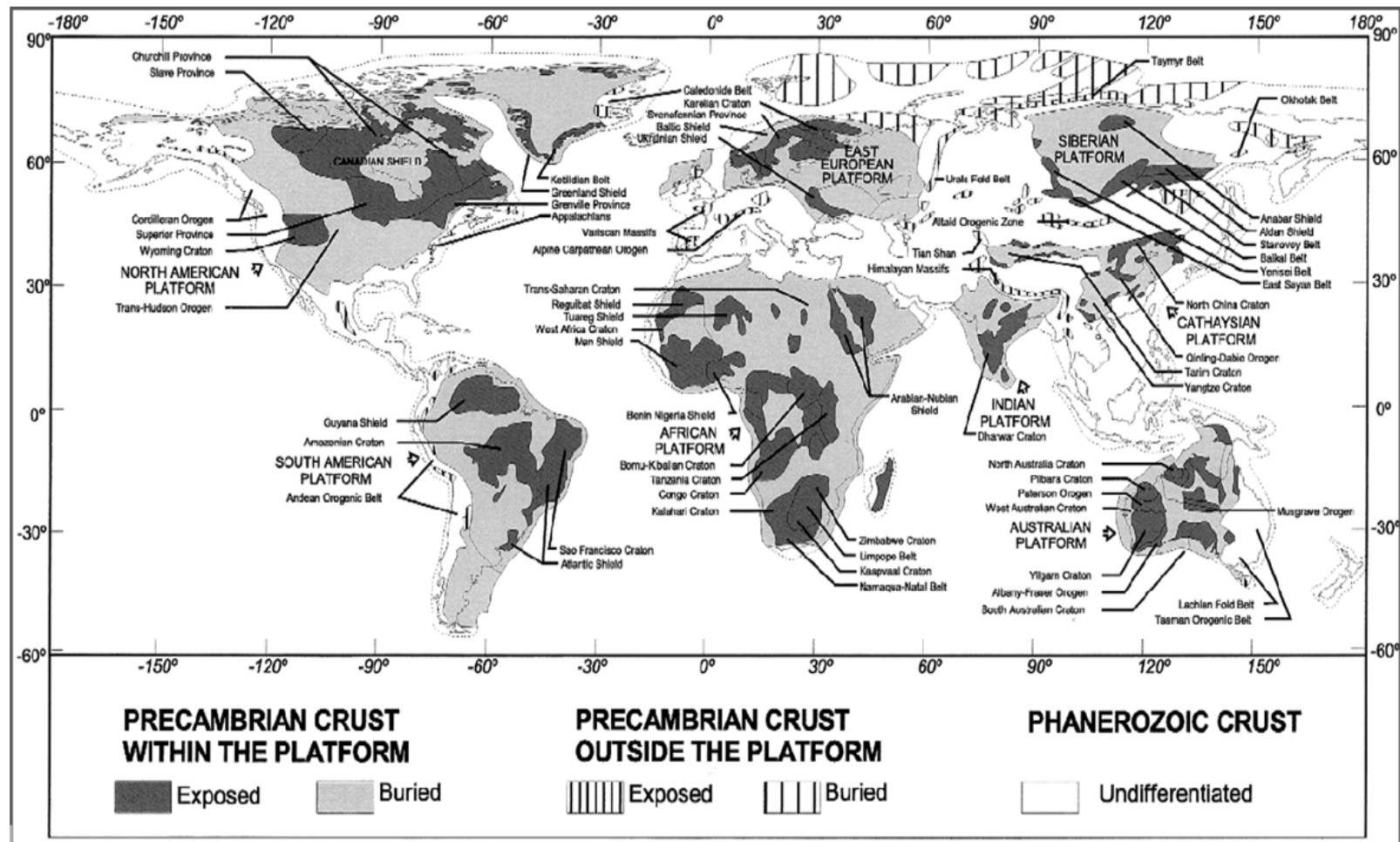
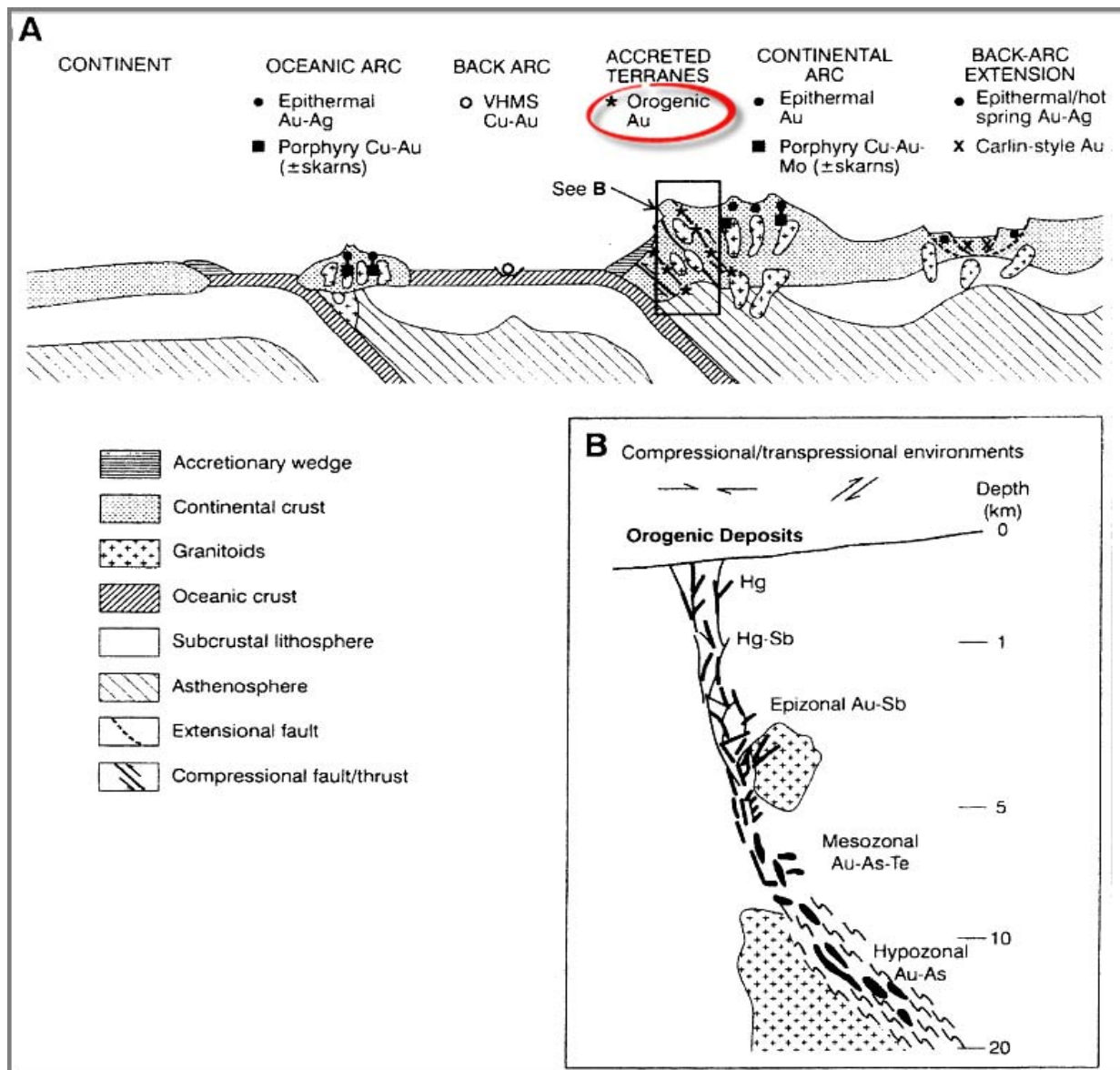


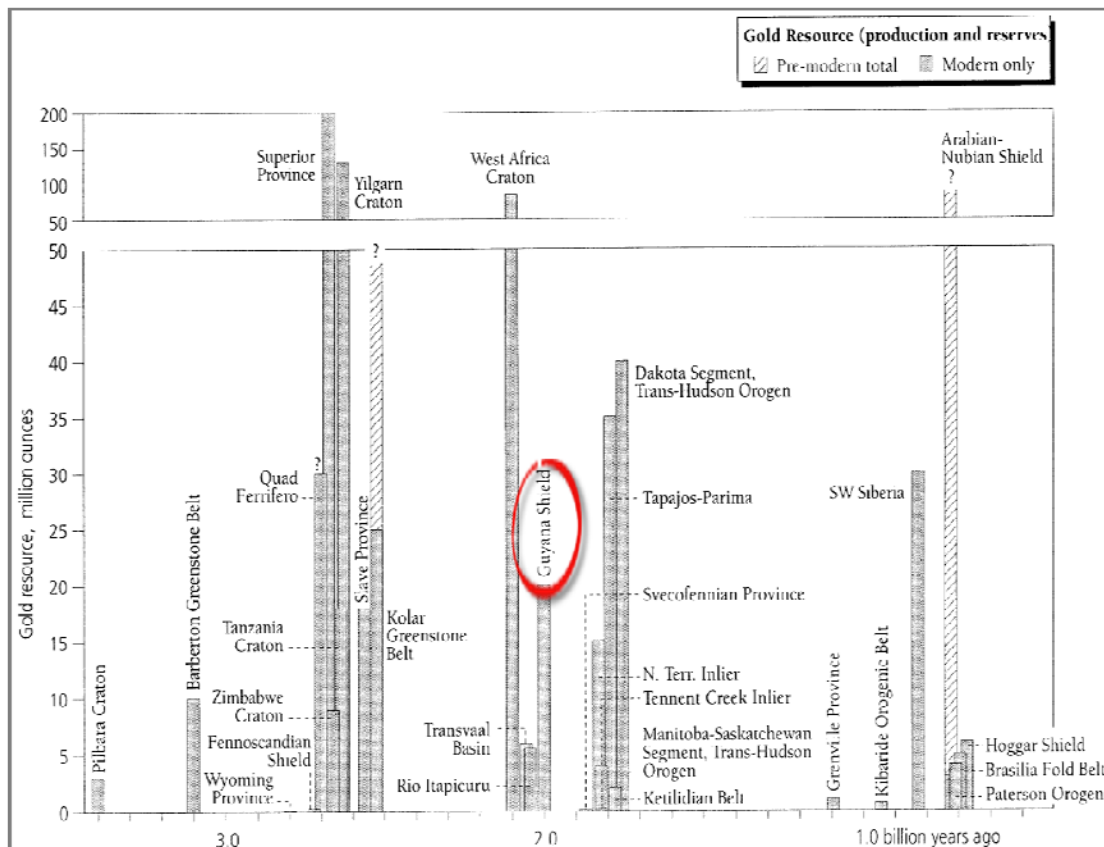
Figure 8-2: The Tectonic Settings of Gold-rich Epithermal Mineral Deposits. (Goldfarb, 2001. Modified after Groves et al., 1998)



Epithermal veins and gold-rich porphyry and skarn deposits, from in the shallow (≤ 5 km) parts of both island and continental arcs in compressional through extensional settings. The epithermal veins, as well as the sedimentary rock-hosted Carlin-like ores, are also emplaced in the shallow regions of back-arc crustal thinning and extension. In contrast, orogenic gold deposits are emplaced during collisional events throughout much of the middle to upper crust.

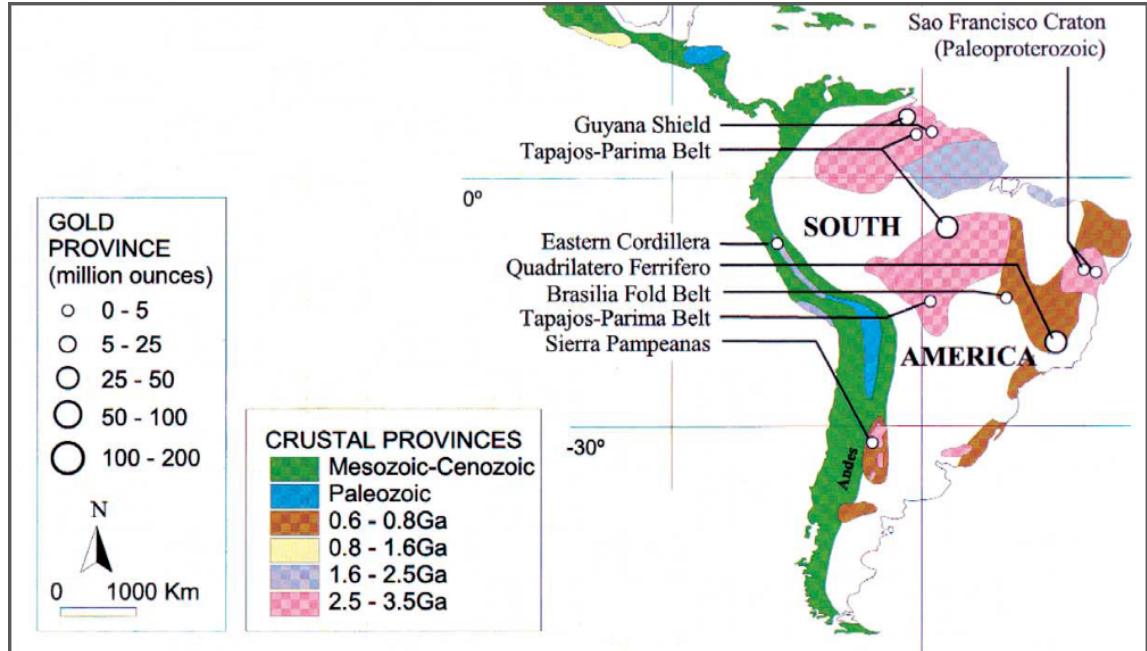
Since the mid 1980s, one of the main advances in the current knowledge of orogenic gold deposits has been the abundance of high-precision geochronological studies (Figure 8-3).

Figure 8-3: Gold Production vs. Best Approximation for the Age of Gold Vein Formation for Precambrian Orogenic Gold Deposits (Goldfarb et al., 2001).



Significant growth of continental masses continued until 1.9-1.8 Ga, a time by which about 75-80% of the present-day stable continental crust was established. This growth involved the continued generation of Archean-type greenstone belts and an increased importance of supracrustal metasedimentary rocks. Resulting Paleoproterozoic sequences are now most widely exposed in cratonic regions of interior Australia, north-western Africa, to northern South America to northern South America (Figure 8-4), Svecofennian Province, Greenland and the Canadian Shield.

Figure 8-4: Map showing the distribution of crust of a given age and the distribution of significant gold lodes hosted within South American crust (Goldfarb et al., 2001).



In the Paleoproterozoic (2.5-1.6 Ga) gold deposits developed throughout these new crustal blocks prior to their final cratonization (Table 8-1).

Table 8-1: Summary Characteristics of Proterozoic Orogenic Gold Deposits (Goldfarb et al., 2001)

Summary characteristics of Proterozoic orogenic gold deposits

Gold province	Host area	District (deposits)	Associated structures	Production (Moz Au)
Birimian greenstone belts	West Africa craton	Obuasi (Ashanti), Prestea, Bogosu, Konongo (Sadiola Hill, Damang)		50
Ubendian belt	SW Tanzanian craton	Mpanda, Lupa (Ntumbi Reef (New Saza))	Saza shear zone, Magamba	0.8 (much in placer)
Rio Itapicuru G.B.	NE Sao Francisco craton	Weber (Fazenda Brasileiro) (Fazenda Maria Preta, Ambrosio), Serra de Jacobina		2
Eteke G.B.	Congo craton	Eteke (Dondo–Mobi, Ovala, Dango)	Ogoulou–Offoue	minor
Guyana shield	N. Amazonian craton	(El Callao, Las Cristinas, Omal, Gross Rosebel, Camp Cayman, Paul Isnard, Villa Nova)	Makapa–Kuribrong, Issano–Appaparu	uncertain, but at least 4 Moz in Guyana
Tapajos–Parima orogenic belt	W. Amazonian craton	Alta Floresta, Tapajos, Parima		uncertain
Flin Flon G.B. (Manitoba–Saskatchewan segment)	Trans-Hudson orogen	(Rio, Tartan Lake, Snow Lake)	Tartan Lake shear zone	1.25
Dakota segment	Trans–Hudson orogen	(Homestake)		> 40
Svecofennian province	Baltic shield	Tampere, Rantasalmi (Osikonmaki), Seinajoki (Kalliosalo), Haapavesi (Klimala), Skellefte	Raaheladoga deformation zone	0.3
Ketilidian mobile belt	North Atlantic craton	(Nalunaq, Nuaqoarsuk, Igutsait, Ipatit, Kutseq)		none
Transvaal basin	Kaapvaal craton	Sable-Pilgrim's Rest		6
Northern Territory Inliers	North Australian craton	Arunta (Callie, Granites, Tanami), (Tennant Creek), Pine Creek (Cosmo Howley)		9
Paterson province	Paterson orogen	(Telfer)	Telfer lineament	> 4
Arabian shield	African platform (Pan-African orogen)	(Sukhaybarat East), Al Wajh (Umm al Qurayyat)	Najd, Yanbu	0.5
Nubian shield	African platform (Pan-African orogen)	Luxor in Egypt to N. Sudan, SE Egypt to N. Ethiopia (Umm Rus, El Sid, Lega Dembi)		100(?) by ancients
Hoggar (or Tuareg) shield	African platform (Pan-African orogen)	(Amesmesa, Tirek), Bin Yauri	East Ouazzal, Anka	minor
Brasilíia fold belt	South American platform	(Luziania, Morro do Ouro, Bossoroca, Mina III)		0.5
Borborema province	South American platform	(Sao Francisco, Cachoeira de de Minas), Itapetim	Patos, Pemambuco	
Yenisei fold belt	Angara craton	(Olympiada, Sovetsk, Uderey), Gerfedskeye		0.6

The genetic model for the Omai deposit must integrate several geological constraints including:

1. The close special relationship between gold mineralization and felsic-intermediate intrusive/sub-volcanic rocks, as well as the presence of gold-bearing veins in the basalt/andesite and pelite sequences
2. Low grade metamorphism of the country rocks
3. Several gold-bearing vein sets, characterized by crack-seal, breccias, and fracture-filling textures
4. Syn- to late-tectonic mineralization controlled by shallow crustal brittle to brittle-ductile structures
5. Mineralization spatially hosted within a regional structural break (Makapa-Kuribrong shear zone-MKSZ-See Figure 7-3 and 7-5), but, at local scale, associated with subsidiary rather than major structures
6. A complex vein mineralogy precipitated during several hydrothermal pulses, and characterized by a paragenesis characteristic of both orogenic and epithermal gold deposits
7. A possible deeply-seated source of the fluids, which have interacted with local mafic volcanic rocks and surface-derived waters. (Voicu, 1999)

The features of the Omai deposit are compared to several gold deposits hosted by Paleoproterozoic-greenstone terranes of the northern Guiana Shield in Table 8-2.

Table 8-2: Principal Geological and metallogenic features of several gold deposits hosted by the Paleoproterozoic granitoid-greenstone terranes of the Northern Guiana Shield (Voicu et al., 1999).

	Omai	Eagle Mountain	Gross Rosebel	St-Élie	Dorlin	Kilometro 88 (Las Cristinas)
References	1, 2, 3, 4, 5	unpublished reports, this study	6, 7, 8, reports	9, 10, 11	12, 13, 14, 15	16, 17
Associated rocks	Fennell orebody: quartz-diorite; minor andesite, basalt Wenot orebody: rhyolite, quartz porphyry, sedimentary rocks; minor in andesite	EM orebody: granodiorite, granite porphyry; Minehaha zone: andesite, sedimentary rocks	sediment, mafic ± felsic volcanic rocks, volcanoclastics	rhyolite, granite, mafic volcanic rocks	granitoid, quartz porphyry, various volcanic and sedimentary rocks	mafic ± felsic volcanic rocks, sedimentary rocks, granitoids
Metamorphic grade of host rocks	lower greenschist; unmetamorphosed granitoid	lower greenschist; unmetamorphosed granitoid	middle to upper greenschist	middle to upper greenschist	greenschist	greenschist
Structural setting	brittle shear zones, stockwork	EM orebody: stockwork Minehaha: shear zone	brittle-ductile shear zones; lithological contacts; fold closures	brittle-(ductile) shear zones	ductile-brittle shear zones, stockwork	brittle-ductile shear zones, stockwork
Structural timing of mineralization	late- to post-tectonic	late- to post tectonic	syn- to late-tectonic	syn- to late-tectonic	syn- to late-orogenic	syn- to late- tectonic (?)
Age of host rocks	2094 Ma—Fennell quartz-diorite; > 2120 Ma—Wenot	no data, probably similar to Omai	no data	2146 Ma	2110 Ma	2154 Ma
Age of mineralization Major ore and gangue minerals	2002 Ma native gold, pyrite, galena, chalcopryrite, pyrrhotite, sphalerite, tellurides, molybdenite, scheelite, quartz, carbonate, sericite, tourmaline, chlorite, epidote	no data pyrite, magnetite, molybdenite, chalcopryrite, scheelite, cassiterite, quartz, biotite, chlorite, epidote	no data native gold, pyrite, pyrrhotite, chalcopryrite, quartz, carbonates, feldspar, tourmaline	1983–2002 Ma native gold, pyrrhotite, pyrite, chalcopryrite, tellurides, galena, molybdenite, greenockite	2067 Ma tourmaline, quartz, carbonates, chlorite, white mica	no data pyrite, chalcopryrite, covellite, molybdenite, hematite, quartz, carbonate
Hydrothermal alteration	sulfidation, carbonatization silicification, sericitization, chloritization, albitization	silicification, sulfidation, sericitization, argillic, chloritization, saussuritization	potassic, sulfidation, carbonatization	potassic, sulfidation, carbonation, silicification	tourmalinization	sericitization, tourmalinization, argillic alteration
Fluid temperature	170–260 °C	no data	no data	> 350–400 °C (?)	200–300 °C	no data
Depth (inferred)	< 5 km	shallow level	5–10 (?) km	5–10 km	5–10 km (?)	no data
$\delta^{34}\text{S}$ (‰ CDT)	–5.9 to –4.5	no data	no data	+0.8 to +5.9	–0.5 to +2.6	no data
$\delta^{18}\text{O}_{\text{quartz}}$ (‰ SMOW)	+13.2 to +14.0	no data	no data	+9.5 to +11.7	+12.2 to +14.0	no data
$\delta^{18}\text{O}$ (‰ SMOW)	+11.7 to +15.3 (calcite, ankerite) +3.8 to +4.3 (scheelite)	no data	no data	+11.0 to +11.7 (calcite)	+10.8 to +15.7 (calcite, ankerite, siderite)	no data
$\delta^{13}\text{C}_{\text{carb}}$ (‰ PDB)	+1.4 to +4.7	no data	no data	–3.5 to –2.1	–5.2 to –0.8	no data

References: 1—Bertoni et al. (1991a); 2—Elliott (1992); 3—Norcross et al. (2000); 4—Hallbauer and Voicu, (1998); 5—Voicu et al. (1999a,b, 2000); 6—Bardoux (1997a,b); 7—Wasel et al. (1997); 8—Smith (1987); 9—Lafrance et al. (1997); 10—Lafrance et al. (1999); 11—Ellis (1986); 12—Marcoux and Milési (1993); 13—Milési et al. (1995); 14—Vanderhaege et al. (1998); 15—Lerouge et al. (1999); 16—Gray et al. (1993); 17—Bernasconi (1997).

9.0 EXPLORATION

Mahdia is currently conducting a phase 1 exploration program as a prelude to extensive environmental and geochemical sampling, hydrological and exploration drilling, and other studies necessary to advance the Omai Property as described within the Recommendations section of this Geological Report. Presently, the exploration activities by Mahdia include the following.

9.1 LIDAR Survey

A contract was finalized with Altius Geometrics (of Winnipeg, Canada) to produce a LIDAR survey of the complete Omai Mining License. LIDAR (Light Detection and Ranging) is an optical remote sensing technology that can measure the distance to, or other properties of, a target by illuminating the target with light, often using pulses from a laser. The equipment utilized for this project was a Leica ALS50-II airborne LIDAR system. The system was flown at the flight altitude of approximately 1,200 - 1,500 feet above ground level (AGL) at a flight speed of 120 knots, suitable to acquire data at a point density of approximately one point per square meter with a typical vertical accuracy of 15 cm in open areas and approximately 50 cm in areas of heavy vegetation. Each flight strip of data overlapped the adjacent flight strip by 50% to ensure complete coverage and data redundancy on the outer edges of each strip. The geo-positioning of the data was based on the NovaTel airborne GPS antenna / receiver and a Leica GeoSystems IMU (Inertial Measurement Unit) system. Deliverables from the survey included a 1.0 m topographic map, satellite imagery, and ortho-photos of the work area.

AMEC received a digital copy of the final LIDAR survey on July 3, 2012.

9.2 Drill Core Reconstruction & Rehabilitation

Portions of the diamond drill core generated from previous drill campaigns are in varying states of disorganization and disruption due to deteriorating core boxes, and from looters seeking pieces of visible gold from remnant core (Figure 9-1). When the core is re-organized, a statistically-based program of re-sampling will be necessary to validate select previous assay intervals prior to any incorporation of drill data into a new mineral resource study. This forensic core organization and sampling program is currently underway, and is being supervised by an experienced geologist and four technicians (Figure 9-2).

Figure 9-1: 2006-2007 Fennel Deep Core Storage Condition (February 2012).



Figure 9-2: Core organization, reclogging and sampling program (April 2012)



If the drill core cannot be revived with a high degree of confidence, then AMEC will have to rely on the validation of the database and a thorough review of the QA/QC. Additional core drilling is planned for the Fennel Deep, but the additional meterage of drilling required will be dependent on the core rehabilitation and the validation of the database.

As of July 12, the core rehabilitation program is still ongoing. Thirty historical Fennel Deep holes were recovered, re-logging and re-sampling continues.

9.3 Compilation of Drillhole Database

All historic geologic, exploration drilling, and other data generated prior to, during, and following the cessation of Omai mine production is in the process of being compiled and validated by AMEC.

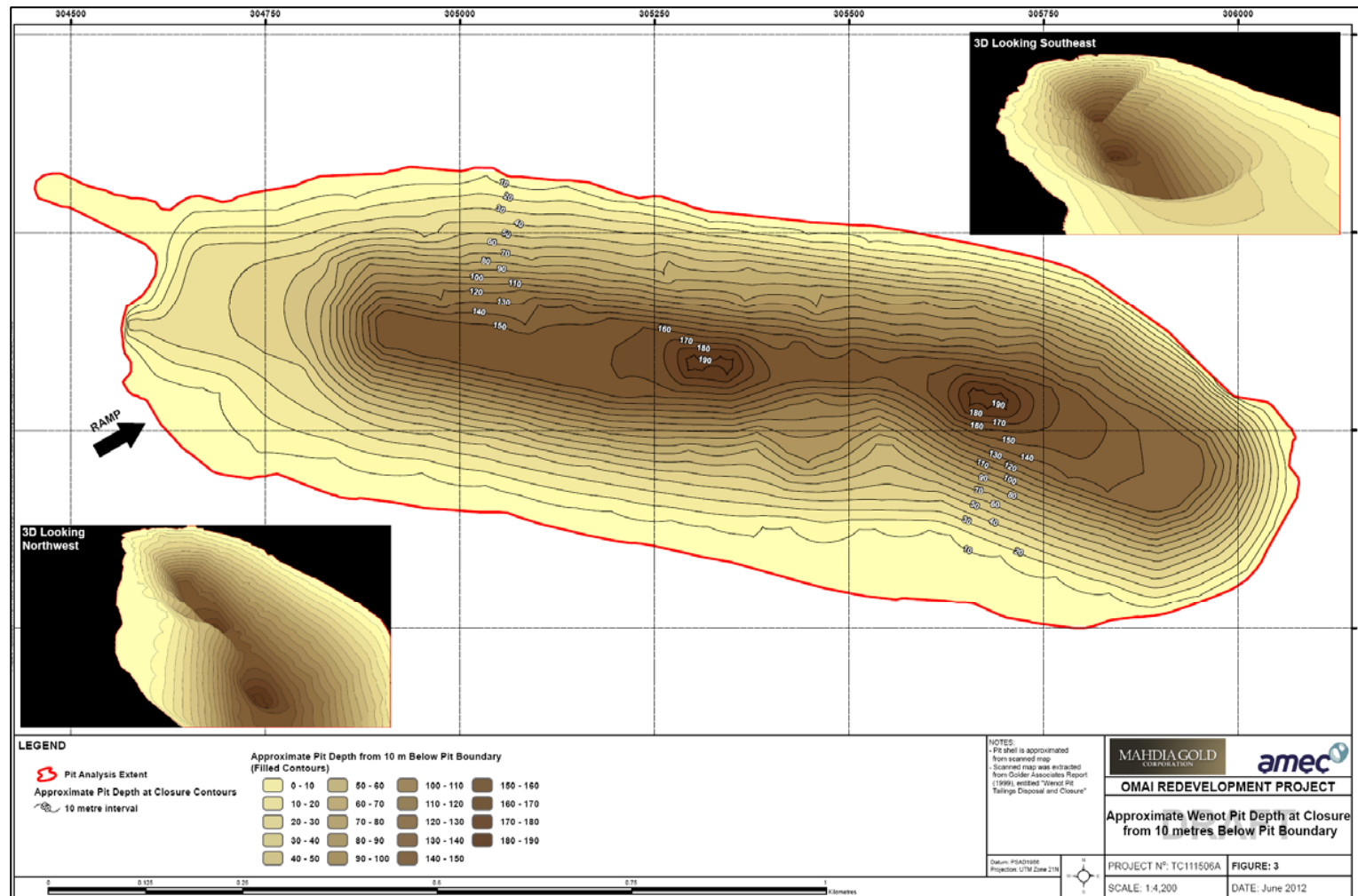
9.4 Bathymetry Survey-Wenot Pit

It is AMEC's current understanding that the Wenot Pit was mined out in the first quarter of 2002 and was subsequently used as a tailings management facility from the second quarter of 2002. None of the information available indicates the exact pit shape of the mined out Wenot Pit. The Closure Plan update of 2005 indicates that the Wenot Pit was approximately 1,300 m long and 500 m wide with a depth of 150 m at completion of mining. It is also indicated that some waste rock was deposited at the west end of the pit in early 2000, where mining had been completed. The existing information indicates that the tailings slurry was discharged over a rock ledge at the west end of the pit. According to the available documentation, a total of 21.6 million tonnes of tailings were deposited between 2002 and 2005. The documentation also indicates that the tailings were kept under approximately 15 m of water cover until the water quality met the discharge criteria set by the Environmental Protection Agency, and the pit was then allowed to flood at closure. Based on similar scale gold projects, a density of 1.33 tonnes/m³ is used to estimate the volume of tailings. The known amount of tailings deposited in the Wenot pit would therefore represent a volume of 16.2 Mm³.

A bathymetry survey was conducted by AMEC on May 3, 2012. A total of 1,753 waypoint spot depth records and 2,426 track log spot depth records were downloaded. The data was reviewed internally for QA/QC purposes resulting in the removal of 426 spot depth points. These points were removed from the dataset due to not having a depth recording or having obvious erroneous depth values. The remaining 3,753 spot depth points were then mapped into the UTM Zone 21 north projected coordinate system using the Provisional South American Datum of 1956 (PSAD1956) using ArcGIS 10.0 software.

An interpolation algorithm was employed to generate a 1 m by 1 m interpolated grid surface for the entire survey area. This grid surface was then contoured using the depth values (metres depth from water surface) into 5 m contour intervals. The interpolation procedure and contouring were done using ArcGIS 10.0 Spatial Analyst extension. The result of the bathymetry survey, including a 3D visualization of the pit pond bottom is presented in Figure 9-3. The approximate volume of water contained in the pit lake based on the bathymetry result is 23.5 Mm³. The pit lake depths range from 0 to 70 m deep. In general, the west end of the pit is shallower and the deepest points are found at the east end of the pit.

Figure 9-3: Approximate Wenot Pit Depth-Bathymetry Survey



This pit shell was digitized by AMEC (Figure 9-3) and the approximate volume of the pit shell based on digitalization of the map is 41.3 Mm³. Therefore, the volume of tailings in the pit is estimated at 17.8 Mm³. This is in the same order of magnitude as the 16.2 Mm³ of tailings known to have been deposited in the pit according to the Closure Plan of 2005. The difference can be explained by the unknown quantity of waste rock having been deposited in the west end of the Wenot pit in early 2000. The results indicate that the thickness of tailings ranges from 0 to 130 m. It seems that the majority of the tailings deposited in/settled in the deepest points of the former pit.

A complete copy of the bathymetry survey memo can be found in Appendix 4.

9.5 Orientation and Baseline Environmental Studies

Environmental studies have commenced on the property. In February 2012, preliminary water samples were collected from the Wenot and Fennel pits and the confluence of the Omai and Essequibo rivers. Results indicated no deleterious concentrations of cyanide, arsenic, cadmium, chromium, lead, mercury, or other metals which exceeded threshold concentrations of the International Finance Corporation (IFC) Effluent Guidelines or Canadian Council of Ministers of the Environment (CCME) Water Quality Guidelines for the Protection of Aquatic Life (AMEC, 2012). While the samples described in the sampling are spread across various locations on the Omai property, these initial results should not be considered a comprehensive assessment of the entire Property.

9.6 Recommendations

Based on a preliminary review of the available data and discussions with Mahdia personnel, AMEC recommends the following exploration activities:

- AMEC recommends Mahdia reorganize, salvage and rehabilitate the available historic drill core that has deteriorated over time. If there is any doubt about the location or identification of core pieces, they should be discarded.
- AMEC recommends Mahdia conduct additional exploration activities on and around the currently known exploration targets. This component includes geological mapping of outcrop and exposed areas, including the accessible portion of the pit walls.

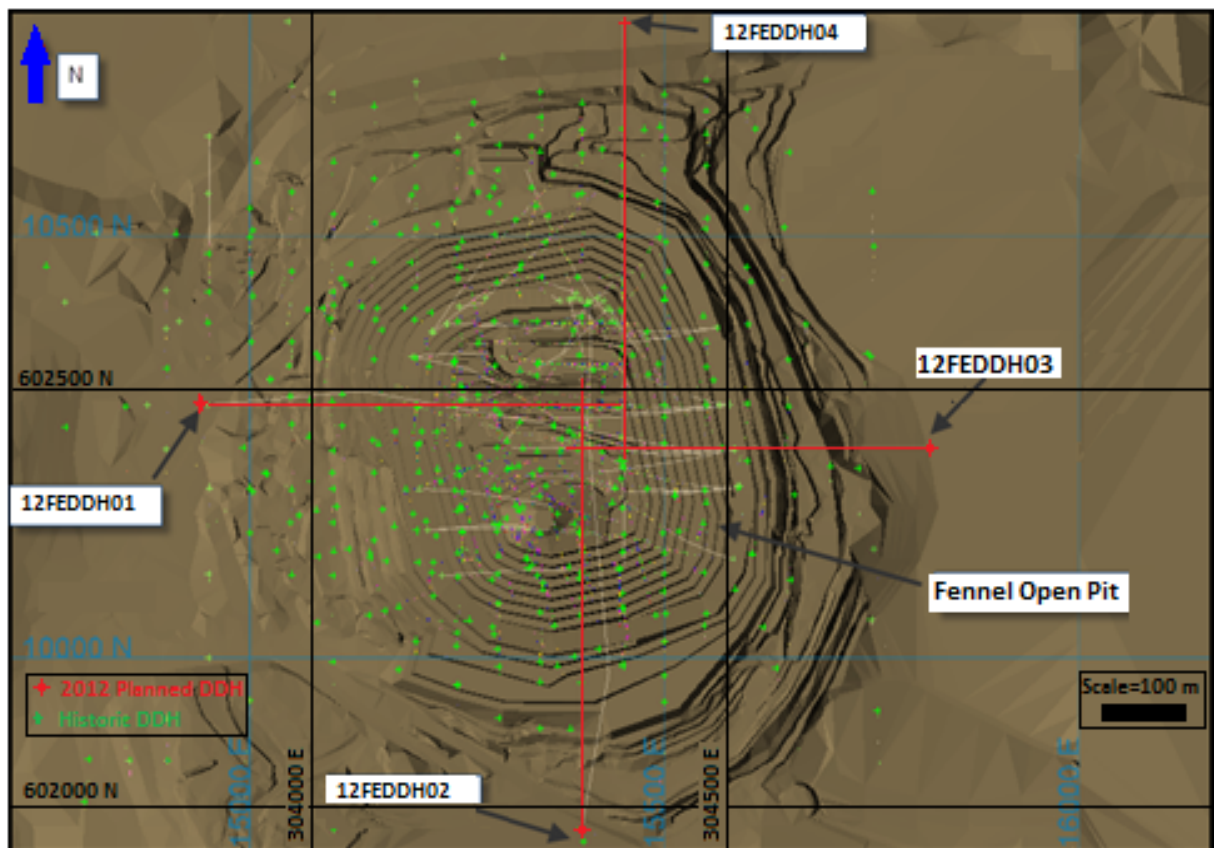
10.0 DRILLING

10.1 Diamond Core Drilling

In late March 2012, Mahdia mobilized two core drills to the Omai project site for conducting exploration drilling using a Longyear 44 drill with NQ core (47.6 mm) and hydrogeological drilling with a Longyear 38 drill. A total of 15,000 m of drilling is planned, 12,500 m of core and 2,500 m hydrogeological drilling. Mahdia has also retained two other drills for Omai at a later date, once the camp facilities are adequate for an increased number of people and additional Mahdia personnel will man the drills for the required core logging, sampling and supervision for the drilling program.

The 2012 exploration core drilling is planned to start from the deep Fennel deposit which was discovered and investigated by IAMGOLD in 2006-2007. The first four angled surface holes will be targeted to intersect the deep part of the Fennel deposit from the north, south, east and west at an average dip of between -65° to -70° (Figure 10-1).

Figure 10-1 : Planned Fennel Deep Exploration DDH Locations.



The placement of these holes is designed to develop a better understanding of the shape and size of the mineralized zones. The first exploration hole is 12FEDDH01 which started on 1 April 2012.

As of July 12, one exploration core hole has been drilled in the Fennel Deep area, on the west side of the pit. Due to mechanical issues the hole had to stop (at 637 m) before planned depth (1310 m). The initial drilling at Fennel is to validate the historic drilling completed by IAMGOLD in 2006-07, resulting in the historic mineral resource discussed in Section 6.0.

The drilling information collected will be indispensable in confirming previous drilling results of IAMGOLD. Oriented core geotechnical information will initially be collected by Mahdia, and will give more accurate information on the related structures and the controls on mineralization. The amount of drilling required to develop an updated compliant mineral resource for the Fennel Deep will depend on the results of the database audit, the results of the four planned drillholes and the rehabilitation of the historic drill core.

Mahdia will also conduct exploration core drilling on the Wenot Pit area, both along strike to the east (Boneyard), based on positive results of the Trado drilling, to the west (Wenot West) based on historic core drilling and at depth (Wenot Deep) below the current pit, as historic drilling was inadequate to identify consistent deeper mineralization. The geographic location of the Wenot West, Boneyard and Wenot Deep can be seen in Figure 7-11.

The majority of the Wenot drilling will be generated from the south side of the pit, as it is relatively flat. Some drillholes from the north will be considered, but the topography is uneven and drill pads will need to be built for proper drill access. The proposed drilling will be done at a dip of -50° to -60° in a northerly and southerly direction from the south and north of the Wenot pit, respectively. With positive drill results, Mahdia is expecting to complete a mineral resource model by the end of 2012.

As of July 12, seven exploration core holes totalling 2441 m have been drilled on the Wenot pit area, with two holes still in progress. Five holes were completed from the south side of the Wenot Pit and two holes from the north side. All holes dip 50° , with the deepest hole reaching 550 m downhole.

The core drilling on the Wenot pit was suspended in June, 2012 due to contractor equipment maintenance issues and poor production performance. Mahdia is in the process of selecting another drilling contractor.

10.2 Trado Auger Drilling

Mahdia will also use the Trado auger drill to investigate the saprolitic areas. The Trado drill produces samples adequate for early stage exploration in developing targets for subsequent core drilling if the Trado drilling returns positive results. The auger drilling is a low cost geochemical tool and due to the small size is very mobile on the saprolite exposures.

Trado drills (Brazilian manufactured) are portable, mechanical augers used to collect shallow (up to 25 m) samples within soft rock and regolith. Trado drill crews have been mobilized to begin investigation of the gold anomalies defined by previous auger sampling programs (see Section 7.3) located east of the Fennel and north and east of the Wenot pits. Grid spacing of 200 m lines with 50 m sample stations is planned as an initial confirmation of previously-defined anomalies and discovery of previously unknown gold anomalies. The geographic location of the planned Trado drilling is shown in Figures 7-10 and 7-11, which shows the historic auger drilling results and the location of the Fennel East and the Boneyard areas, respectively. As of the date of this Geological Report, no geochemical assay data has been generated.

The Trado drilling were suspended in June, 2012 due to and poor production performance. Mahdia is re-evaluating the use of the Trado drilling.

The Trado drilling is not expected to be used in the estimation of mineral resources, but is expected to provide additional confirmation of gold mineralization in the soft saprolitic rock from historic auger drilling.

10.3 Geological Core Logging

Geological logging will be performed at the site by Mahdia geologists. AMEC has provided Mahdia with preliminary core logging templates and recommended QA/QC practices for core sampling.

10.4 Collar Surveys

Historical drillhole collar coordinates were conducted in a local grid system. The new drilling program planned will collect data in the UTM coordinate system (PSAD56 / UTM zone 21N). AMEC has completed the co-ordinate conversion in the historic drillhole database with UTM coordinates.

10.5 Geologic and Mineral Resource Modeling

AMEC personnel will be conducting mineral resource modeling pending positive results of the proposed exploration activities and core drilling. AMEC will review the historic mineral resource model on the Fennel underground mineralization from 2006-07. This will include a comprehensive audit of the drillhole database, a review of the geological and lithological interpretation, including the adequacy of the lithology solids, and the parameters used in the model. The review of the block model parameters will include, but will not be restricted to:

- Density values of the lithology units
- Cut-off grade determination
- Estimates of process recovery
- Assessment of potential mining method
- Assay data selection
- Composite length and method
- Variography
- Search strategy
- Estimation methodology
- Mineral resource classification

10.6 Down-hole Surveys

Down-hole survey measurements were conducted on the 2006-07 Fennel deep drillholes. Measurements were taken on approximately 50-60 m intervals. AMEC is not aware of which survey instrument was used by IAMGOLD.

10.7 Hydrogeological Drilling

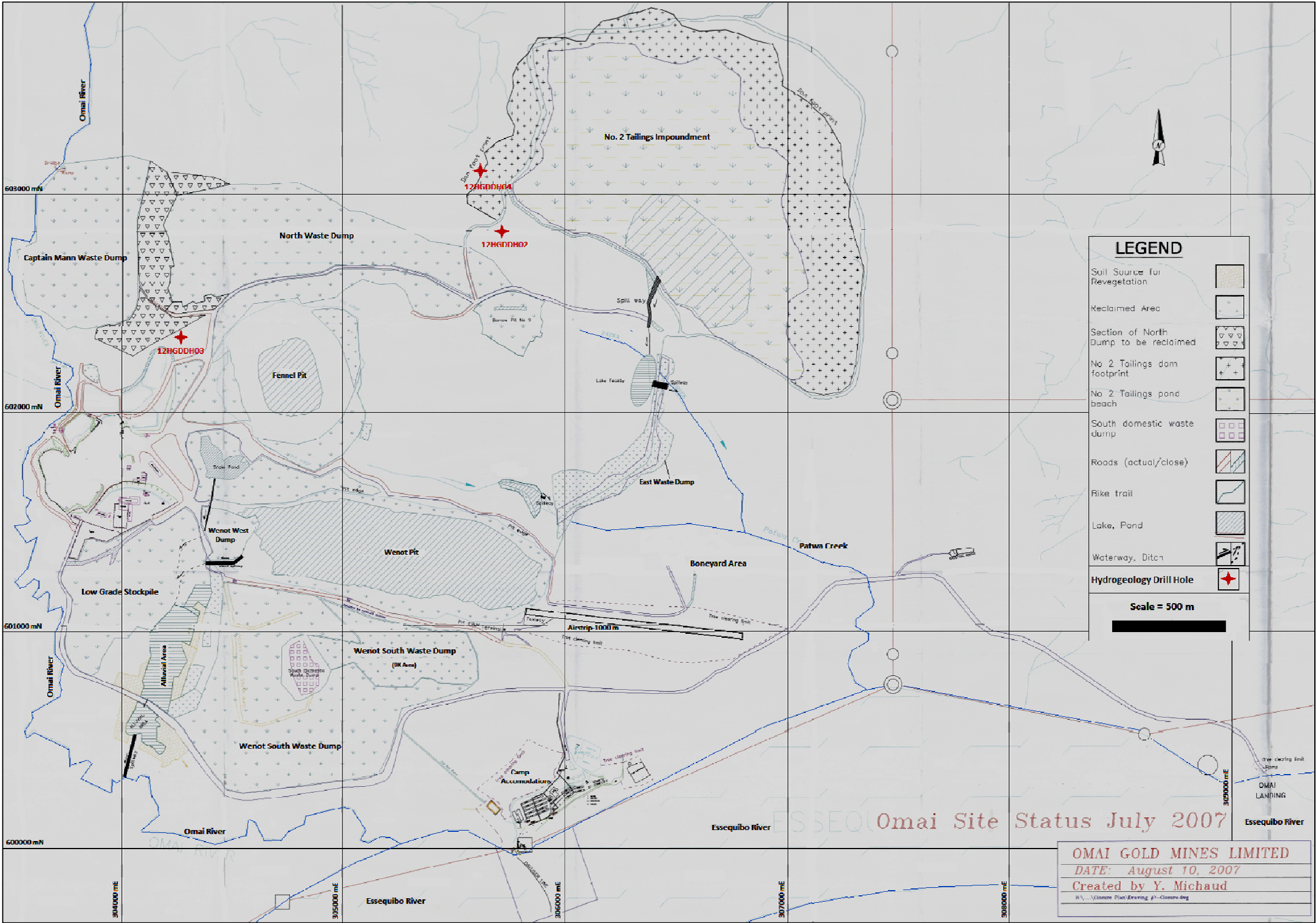
Hydrogeological drilling is being undertaken at several locations in the areas of both the Wenot and Fennel pits, with the aim of characterizing the groundwater system underneath the regional diabase dike. Historical work in the Fennel Pit suggested groundwater inflows to the pit, from below the confining layer of diabase to be in the order of 2,700 m³/d (300 USGPM) at pressures of around 300 psi (Golder 2007).

These holes will be drilled vertically to facilitate the installation of instrumentation to help characterize the groundwater system in the area of the Omai Project. Additional tests, consisting of single packer tests, will be conducted at approximately 50 m



intervals during the course of drilling, to collect information on the hydraulic conductivity of the units being tested. Several of the holes will be drilled varying depths across the property, targeting the base of the diabase dike. Additional shallow and intermediate holes are also proposed to be drilled and fitted with standard piezometers in order to gather information from the saprolite. The preliminary hydrogeological drillholes are located on Figure 10-2.

Figure 10-2: Preliminary Hydrogeological Drillhole Locations (modified after OGML, 2007).



10.8 Recommendations

Based on the AMEC site visit and with discussions with Mahdia personnel, AMEC has the following drilling recommendations:

- AMEC recommends that Mahdia prepare site specific standard operation procedures (SOPs) for core logging and core sampling. AMEC has provided Mahdia with preliminary logging templates to capture both geological and geotechnical data. AMEC's logging templates need to be reviewed and updated by the Mahdia geologists, as the geological data evolves during the exploration phase.
- AMEC recommends Mahdia conduct Trado grid geochemical auger drilling on the soft rock exploration targets. The primary Trado target is the Boneyard area to the east and north of the Wenot pit.
- AMEC recommends Mahdia conduct exploration core drilling on the Fennel Deep and the Wenot Deep as the primary DDH targets. The planned drilling includes 8,500 m at Wenot and 4,000 m at Fennel. Core drilling will provide groundwater and RQD (rock quality) data in addition to lithological, structural, and other information.
- AMEC recommends Mahdia survey all available historical and new drillhole collars with a differential GPS unit in order to verify the accuracy and reliability of the conversion of the collar locations from a local grid coordinate system to the PSAD56 UTM coordinate system.
- AMEC recommends Mahdia conduct oriented core drilling to obtain adequate attitudes for structures and controls on mineralization.
- AMEC recommends Mahdia conduct a thorough downhole surveying program on all core holes at a minimum frequency of 50 m.
- AMEC recommends Mahdia conduct a hydrogeological test program, including instrumentation of boreholes with vibrating wire piezometers or standard piezometers (as appropriate), packer testing, slug testing, and drawdown testing (on the flooded Fennel and Wenot pits) in order to establish a better understanding of the groundwater system in the Omai area and more robust predictions of groundwater inflows to potential mine workings.



11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

To AMEC's knowledge, Mahdia will be using Acme Analytical (Laboratories) Guyana Inc (Acme), as the primary laboratory for gold assaying. Currently, Acme only has a sample preparation facility available in Guyana, as the pulps are sent to Santiago, Chile or Vancouver, Canada for gold assaying. During AMEC's site visit to Acme sample preparatory facility in February, 2012, the facility was found to be extremely clean and well organized.

In 1996, the Acme laboratory in Vancouver gained its International Standards Organization (ISO) 9001 Model for Quality Assurance and ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories. It was the first laboratory in North America to gain these accreditations.

In 2005, the Santiago, Chile full-service laboratory gained its accreditation and in 2006, the Georgetown, Guyana sample preparation facility gained its accreditation and is certified for the mechanical preparation of mineral samples and has implemented and maintains a management system which fulfills the requirements of the ISO 9001:2008 standard.

In October 2011, the Vancouver laboratory received formal approval of its ISO/IEC 17025:2005 accreditations from Standards Council of Canada for the tests listed in the approved scope of accreditation. The Santiago hub laboratory is also working toward ISO 17025:2005 accreditations and is expected to complete the accreditation process by the end of 2012.

AMEC also toured the facilities of Actlabs Guyana Inc. (Actlab) during the site visit in February, 2012. Actlab offers both a sample preparation facilities and assaying capabilities at the Georgetown laboratory. Actlab could act as a secondary laboratory for Mahdia as a check for the primary laboratory.

11.1 Sampling Methods

Mahdia had started systematic sampling (50 m x 200 m x 10 m deep) at the Boneyard lateritic and saprolitic surface deposit by Trado drill. The property LIDAR survey has been completed and therefore a geological mapping program can now be undertaken to evaluate exposed outcrops and roadcuts.

Quartz diorite, quartz veins and mineralization associated alteration was observed at what is considered to be the low-grade stock pile on the East side of the Wenot stockpile area during the site visit. RC drilling, trench sampling from the side pit faces and grade control for top surface of the stockpile have been discussed as sampling

options to confirm the grade of the stockpile material. After the LIDAR survey, the stockpile sampling method and approach will be reviewed.

11.2 Density Determinations

From the 2006-2007 Fennel Deep drilling program, 197 density determinations were done on drill core (Heesterman, 2008). There is no discussion on the density determination method in the documents reviewed by AMEC. In the mineral resource model for the Fennel underground, the following densities were used:

- 2.85 g/cc for mineralised intervals
- 3.0 g/cc for diabase (dolerite-U.K. equivalent)
- 2.8 g/cc for quartz diorite stock
- 2.9 g/cc for the andesite host rock

AMEC will review the data used for the SG determinations. AMEC recommends that Mahdia perform additional SG work on the 2012 drilling. The 2006-07 drilling contains no SG work on the saprolite unit, which will be a key unit for Mahdia, as they will be exploring the saprolite potential in the Boneyard area to the east of the current Wenot pit area. Both wet and dry densities will be required for any future mineral resource model. Dry densities are necessary for the estimation of mineral resources, while the wet densities will be necessary for any future mine planning and life of mine (LOM) plans.

11.3 Sample Preparation and Analysis

Mahdia will initially send drill core samples (inclusive of proposed 2012 drilling and any re-sampling of the existing drill core, if required, to aid in the verification of the historical data) to the Acme sample preparation facility in Georgetown. The proposed sample preparation procedure will include weighing the sample as received, drying the sample at 60°C until dry, crush 1 kg to 80% passing 10 mesh, split 500 g and pulverize to 85% passing 200 mesh.

The sample pulp will then be sent to the Acme assaying facilities in either Vancouver or Santiago for assaying using a lead-collection fire assay of a 30g / Ag inquart fire assay fusion / ICP-ES. The detection limit is 2 ppb Au.

AMEC and Acme will assess the gold assays from the initial drilling and determine if coarse gold or high grade gold samples exist on the property that may require metallic gold assaying procedures. Historical production data shows that approximately 30% of the gold in the original resource was recovered using gravity concentration. This

suggests that coarse gold should be relatively abundant in the remainder of the deposit, indicating that metallic gold assaying may be required.

11.4 Quality Assurance and Quality Control

The QA/QC program will involve the insertion of sample blanks and standard reference material (SRM) to evaluate contamination, precision and accuracy of the sampled material. These should be blind samples so that the QA/QC samples will be treated the same as the core samples by laboratory personal. The initial insertion rate should be one in 10 samples (10%) for each QA/QC sample, but after adequate and acceptable results over an acceptable time frame, the insertion rate can be lowered to approximately one in 20 samples (5%). The insertion rate of all QA/QC samples should not be lower than 5%. Mahdia should also include pulp check samples and coarse reject check samples on a regular basis as additional QA/QC measures. It may be beneficial to use a second laboratory for analyzing the pulp and coarse reject check samples as a comparison to the primary laboratory.

11.5 Recommendations

Based on the AMEC site visit and with discussions with Mahdia personnel, AMEC has the following recommendations:

- AMEC recommends re-logging the historic drill core as well as re-sampling of relevant core samples from historical drill cores, if the core rehabilitation program provides adequate core sample, as analysis of the results of the QA/QC program conducted in 2006-2007 indicates insufficient analytical precision (Final Exploration Report, L. Heesterman, 2008).
- AMEC recommends Mahdia undertake a rock density determination program with data from all lithologies (including wet and dry densities for mineralized saprolite) and mineralized zones. A minimum of 50 determinations for each lithology type spread across the deposit is recommended.
- AMEC recommends Mahdia commence a comprehensive QA/QC program on all new core drilling so that the quality of reported assays are of sufficient quality for use in mineral resource estimation.
- AMEC recommends that Mahdia create written procedures, including pictures and a video to aid in understanding the Trado drilling and sampling process, if Mahdia expects to use these assays in the mineral resource estimation process.

12.0 DATA VERIFICATION

On January 12, 2012 Mr. Robert A. Lunceford conducted a site visit to the Omai Property and collected six audit samples consisting of saprolite, and saprock from exposures around the Wenot and Fennel pits and one rock sample from the waste dump. Subsequently, Mr. Lunceford and Mr. Smith visited the Mahdia exploration office in Georgetown Guyana and the Omai Property on February 20-25, 2012. In Georgetown, the GGMC offices were visited. The authors obtained and reviewed extensive historical published and non-published data generated by Omai Gold Mines Ltd. and previous companies and evaluations. All documentation regarding the Omai Gold Mine was supplied to the GGMC by IAMGOLD. The archived data at the GGMC was reviewed by Mahdia and AMEC personnel and all relevant documents were scanned and used in compiling this Technical Report. AMEC is relying on the information stored at the GGMC and this data and information is the basis of this geological report. AMEC cautions that independent confirmation of assay data has not yet been completed.

Mr Lunceford's sample locations, descriptions, and results are summarized below (Table 12-1). All samples described below represent apparent width, not true width. Mr Lunceford collected and transported the rock samples in his custody directly to the preparation facility of Acme Analytical (Laboratories) Guyana Inc. in Georgetown, Guyana. The Acme preparation facility was subsequently responsible for sample custody. Rock samples were submitted for gold determination by fire assay with an AA (Atomic Absorption) finish.

Table 12-1: Independent Sample Descriptions and Locations.

Sample #*	UTM N	UTM E	Description	Au ppm
57811	601875	305054	<u>rock chip 6 m.</u> metavolcanic (andesite?), EW + 90, 0.7 m quartz vein, weathered saprock, oxide at base of saprolite	0.036
57812	601878	305045	<u>panel 0.5 X 1.0 m.</u> stockwork. quartz veins in saprolite	0.952
57813	601873	305037	<u>chip 0.4 m.</u> brecciated , massive to sheared texture quartz vein, tourmaline along seams, occasional iron-oxide	0.008
57814	601929	304971	<u>chip.</u> Fine grained andesite., with occasional small dikes iron-carbonate, albite, occasional quartz bx,	0.018
57815	602705	304639	<u>Rock chip.</u> iron-carbonate, andesite?, equigranular, brecciated	0.072
57816	600769	304774	<u>dump.</u> Chip of boulder qtz, tourm, py, in granodiorite, stkwrk	0.508

* Jan 12, 2012; Zone 21 PSAD56



12.1 Drillhole Database

As of July, 2012, AMEC has performed some validation work on the data stored in the historic drillhole database, as supplied by Mahdia. AMEC will continue to validate the Fennel Deep drillhole database.

It is the opinion of the QPs that the database pertaining to the exploration, development and production of Omai requires a comprehensive audit which will be conducted prior to conducting a mineral resource estimate in late 2012, assuming positive results from the proposed 2012 exploration activities and data verification programs.

Assuming the audit of the historic drillhole database cannot be sufficiently verified with the current information, AMEC recommends that check samples from the 2006-2007 Fennel Deep drilling program be sent for confirmation of historic assaying. These check samples will use the same sample preparatory and assaying procedures for the 2012 core samples. In the event that the core from the 2006-2007 drilling cannot be adequately restored for additional assaying, AMEC recommends that additional drilling will be required to validate the historic mineral resources for the Fennel Deep mineralization.

12.2 Recommendations

At this early stage of Mahdia's exploration activities on the Omai property, AMEC has only reviewed portions of the historical data. The following recommendations are provided to aid in moving the project forward:

- AMEC recommends that the historic drillhole database(s) from the 2006-07 Fennel underground drilling be reviewed and all data be compiled, organized and validated into a master ACCESS database. In the event that the database cannot be validated with the current information, a core re-sampling program will be undertaken with the reclaimed drill core. If the reclaimed drill core cannot be adequately salvaged, additional core drilling will be required to validate the historical drilling.
- AMEC recommends Mahdia appoint a database manager at an early stage to take responsibility for maintaining the integrity of the data currently in the database and for the new data to be added by Mahdia.



13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

As the Omai Project is currently not classified as an advanced project, this section is not relevant to the Geological Report. Discussions on the historical mineral processing at Omai can be found in Section 6.0.



14.0 MINERAL RESOURCE ESTIMATES

There are no current Mineral Resources estimated for the Omai Project.



15.0 MINERAL RESERVE ESTIMATES

There are no current Mineral Reserves estimated for the Omai Project.



16.0 MINING METHODS

As the Project is currently not classified as an advanced project, this section is not relevant to the Geological Report.



17.0 RECOVERY METHODS

As the Project is currently not classified as an advanced project, this section is not relevant to the Geological Report.



18.0 PROJECT INFRASTRUCTURE

As the Project is currently not classified as an advanced project, this section is not relevant to the Geological Report.



19.0 MARKET STUDIES AND CONTRACTS

As the Project is currently not classified as an advanced project, this section is not relevant to the Geological Report.



20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

As the Project is currently not classified as an advanced project, this section is not relevant to the Geological Report.



21.0 CAPITAL AND OPERATING COSTS

As the Project is currently not classified as an advanced project, this section is not relevant to the Geological Report.



22.0 ECONOMIC ANALYSIS

As the Project is currently not classified as an advanced project, this section is not relevant to the Geological Report.



23.0 ADJACENT PROPERTIES

Ownership of lands adjacent to the Omai Prospecting License is based on mineral status ownership sheets 44NE and 44NW published by the GGMC (GGMC, 2011a, 2011b).

Several medium-scale prospecting permits are located adjacent to the Omai Prospecting License on the western boundary and the south side of the Essequibo River. The northern and eastern boundaries of the Omai PL border adjoin a large scale prospecting license (L-4). Several small miner lots occupy the north-western corner of the Omai PL. All lots, permits, and licenses adjoining the Omai PL of Mahdia are noted in Figure 4-2 and valid as of July 2011. (GGMC, 2011a, 2011b)



24.0 OTHER RELEVANT DATA AND INFORMATION

To AMEC's knowledge, there is no other relevant data or information on the Omai project.



25.0 INTERPRETATION AND CONCLUSIONS

The Omai property is located within central Guyana approximately 170 km southwest of Georgetown, the capital of Guyana. The Omai Prospecting License (GS14: M-39 PL 01/2012) comprising the Omai Property was granted to Mahdia Gold from the Guyana Geology and Mines Commission on January 25, 2012. The prospecting license, which is valid for three years, covers an area of 7,244 acres (or 2,931.54 hectares). To keep the Omai Prospecting License in good standing, Mahdia is required to expend US\$2,500,000 each year of the three year term.

Additional permits are not required for exploration activities, as section 32(1) of the Mining Act (Act No. 20 of 1989) confers broad rights to “carry on such operations and execute such works as are necessary” to explore for the minerals in respect of which the licence was granted.

AMEC was provided with legal opinion that supports the interpretation that Mahdia holds sole rights to the prospecting licence.

The Omai property has had a history of mining activity, with the former Omai gold mine located within the area defined by the prospecting licence. AMEC was provided with legal opinion that confirms Mahdia’s interpretation that Mahdia is not responsible for environmental liabilities or rehabilitation associated with the former operation.

The Omai area has been the site of artisanal mining. The artisanal miners, referred to locally as “pork-knockers”, were exploiting areas of alluvium and saprolite prior to Mahdia’s acquisition of the Prospecting Licence. An assessment of the potential environmental liabilities as a result of their activities has not been carried out (e.g. use of mercury amalgam). However, there is a reasonable expectation that there will be environmental damage in the affected areas as a result of the artisanal activity. Notwithstanding the legal opinion indemnifying Mahdia from environmental liabilities which predate the acquisition, AMEC recommends that Mahdia formally establish an agreement with the GGMC regarding the extent of liabilities attributable to Mahdia and their current and future exploration activities, both in historically disturbed areas (such as those affected by artisanal mining) and in undisturbed sites within the Prospecting License, and concludes an agreement that indemnifies Mahdia from rehabilitation of areas where Mahdia is not planning exploration activities.

In Guyana, the specific details and rates of taxation and royalties from production revenue on the Omai Property are presently unknown. The terms of taxes and royalties are negotiated with the Guyanese government. The following details were negotiated by Guyana Goldfields and Sandspring Resources in 2011, both gold development properties in Guyana. The royalties and taxation rate quoted below are applicable for both Aurora and Toroporu gold projects.

- Mining royalty of 5% of gold sales at a price of gold at US\$1,000 or less.
- Mining royalty of 8% of gold sales at a price of gold at US\$1,000 or more.
- A Mining royalty of 1.5% on sales of copper and other valuable commodities.
- A Corporate income tax rate of 30%.

Commercial production from the site will require an application for a Mining Licence and submission and approval of a “feasibility study” by the GGMC. A Mineral Agreement will need to be negotiated with the Government of Guyana and the GGMC, which will set out the framework for royalties and taxation for the operation of a mine. Additional permits/approvals and an environmental impact assessment (EIA) may also be required, and will be addressed as future project development components are considered.

The Omai gold mine is located in the Barama-Mazaruni Supergroup, part of the paleoproterozoic greenstone belt of the north-central Guiana Shield. The lithological sequence consists of mafic volcanic (and genetically related sub-volcanic mafic ultramafic bodies) to felsic volcanic cycles with intercalated sediments. The volcano-sedimentary unit was intruded by a quartz monzodiorite plug (the Omai stock) and several irregularly-shaped quartz-feldspar porphyry and rhyolite dikes. The Omai deposit is considered to be an example of a late orogenic deposit style and its emplacement was controlled by the last brittle-ductile stages of Trans-Amazonian orogeny. It can be considered as a Paleoproterozoic equivalent of the Archean epizonal orogenic deposits described in the Yilgarn (Wiluna, Racetrack) and Zimbabwe (Shamwa, Commoner) cratons.

2006-2007: In November 2006, IAMGOLD acquired Cambior. IAMGOLD Corporation investigated the possibility of underground mining below the Fennel Pit. Two deep drillholes indicated that the Fennel Stock was present under the sill and contains gold mineralization. In 2006-2007, an additional 42 diamond drillholes were drilled totaling 27,359 m, with the deepest being 978 m. The historical Fennel Deep mineral resource estimate is discussed briefly:

- The majority of the historic Fennel Deep drillholes were drilled from inside the Fennel Pit, which is currently flooded. Therefore, AMEC will not be able to validate the location of the drill hole collars as stated in the drillhole database.
- Mineralization modeling resulted in the creation of 13 sub-horizontal zones inside a quartz-diorite stock in the host andesitic volcanics, striking at 30° N with a shallow dip of -10° NW. The 3D solids were created using polylines snapped to drillholes. There is no indication of the parameters (by grade and/or lithology) used to constrain the mineralization. AMEC has not validated the mineralization models.

- Variogram models were computed using 3m capped composites and although a high nugget (70%) and an effective range of 50 m were suggested, the results were not conclusive.
- A block model using block sizes of 10m x 10m x 5m (x,y,z) was created and the grade interpolation was done using 5m equal length capped composites and estimated with an inverse distance squared (ID2) methodology. AMEC has not validated the grade interpolation.
- The density model used for calculating tonnages was derived from more than 300 measurements using an immersion method. The following densities were used in the model; 2.85 g/cc for mineralized zones, 2.80 g/cc for quartz diorite stock, 3.0 g/cc for diabase stock and 2.9 g/cc for andesitic volcanics. AMEC has not validated the density data.
- The density model used for calculating tonnages was derived from more than 300 measurements using an immersion method. The following densities were used in the model; 2.85 g/cc for mineralized zones, 2.80 g/cc for quartz diorite stock, 3.0 g/cc for diabase stock and 2.9 g/cc for andesitic volcanics. AMEC has not validated the density data.
- A block was considered Indicated if at least 3 composites from 2 different drillholes (max of 2 composites /drillhole) are found within a 50m x 50 m x 20m elliptical search. A block was considered Inferred if at least 2 composites (max of 2 composites /drillhole) are found within a 200m x 200m x 50m elliptical search. AMEC has not validated the classification reporting, and has no information as to which reporting code the classifications are made (CIM, JORC) and therefore classifications and classification confidence categories cannot be relied as being compliant with NI43-101 reporting.
- No discussions as to considerations of reasonable prospects of economic extraction were included in the report, and therefore AMEC is unable to determine if the parameters used to select the 1.5 g/t Au cut-off grade used to declare the historic mineral resources, or the cut-off grade are appropriate to the mineralization style and mining method contemplated.
- Using a cut-off grade (COG) of 1.5 g/t Au, the total historical mineral resource estimate that included an Indicated Mineral Resource of 11.2 Mt @ 2.49 g/t Au and an Inferred Mineral Resource of 6.3 Mt @ 2.56 g/t Au.
- One risk associated with the Fennel Deep mineralization is the suggested groundwater inflows to the Fennel pit from below the confining layer of diabase. The reported inflow is in the order of 2,700 m³/d (300 USGPM) at pressures of around 300 psi as reported by Golder (2007).
- In the opinion of the QP, sufficient work has not been completed to validate the historical estimate as a current mineral resource. Mahdia is not treating the historical estimate as a current mineral resource.



- The Fennel Deep mineral resource model is discussed in an internal report by Eve Bourgault of IAMGOLD dated January 12, 2007.

To AMEC's knowledge, there is no Technical Report supporting the Fennel Deep mineral resource estimate and therefore, the mineral resource estimate must be considered as historical and non-compliant with NI43-101 reporting standards.

The QPs consider the following work programs would be required to update the estimate to meet CIM (2010) and NI-43-101 requirements:

- Validation of Fennel Deep drillhole database
- Validation of survey data
- Validation of density data
- Validation of assay data
- Validation of solids models
- Consideration of EDA results
- Consideration of variography
- Assessment of appropriate interpolation methods
- Review of assignment of resource confidence categories based on available information
- Consideration of reasonable prospects of economic extraction
- Classification of and reporting of Mineral Resources to CIM standards

Historic reconnaissance and step-out core drilling and grid and auger sampling has indicated several exploration targets which are the focus of ongoing exploration efforts by Mahdia. Exploration targets include shallow oxide mineralization using the Trado auger drill along strike of the Wenot shear zone, including the Boneyard and Fennel East. The potential for deep (+400 m) mineralization will be investigated by step-out and delineation core drilling beneath the Wenot and Fennel pits. The Fennel Deep zone is the priority core drilling target due to the positive drilling results by IAMGOLD in 2006-2007. The amount of drilling required to outline the Fennel Deep mineralization will be dependent on validating the historic drillhole database and the status of the historical Fennel Deep drill core.

From 2008 to the grant of the Omai Prospecting License to Mahdia on January 25, 2012, no authorized work was conducted on the Omai Property.

A LIDAR topographic survey was completed on the property in late May, 2012 and AMEC received a copy of the LIDAR surface in early July, 2012.



Mahdia is presently conducting a phase 1 exploration program including surface mapping and grab sampling, historic Fennel Deep drill core rehabilitation, orientation and base-line environmental sampling, compilation and validation of the drillhole database, hydrologic drilling, exploration core drilling and Trado grid auger sampling.

In April 2012, Mahdia mobilized a Trado drill and two core drills to the Omai project site with the intention of conducting exploration drilling with a Longyear 44 drill and conducting hydrogeological drilling with a Longyear 38 drill.

As of July 12, one exploration core hole has been drilled in the Fennel Deep area, on the west side of the pit. Due to mechanical issues the hole had to stop (at 637 m) before planned depth (1310 m). The initial drilling at Fennel is to validate the historic drilling completed by IAMGOLD in 2006-07, resulting in the historic mineral resource discussed in Section 6.0.

As of July 12, seven exploration core holes totalling 2441 m have been drilled on the Wenot pit area, with two holes still in progress. Five holes were completed from the south side of the Wenot Pit and two holes from the north side. All holes dip 50°, with the deepest hole reaching 550 m downhole.

The core and Trado drilling were suspended in June, 2012 due to contractor equipment maintenance issues and poor production performance. Mahdia is in the process of selecting another core drilling contractor and re-evaluating the use of the Trado drilling.

Omai camp facilities are presently being upgraded to accommodate the increased number of field personnel for the phase 1 & 2 exploration activities.

AMEC concludes the Omai Property has exploration potential and warrants continued exploration activities including exploration core drilling. The prime objective of the phase 1 work is to determine gold mineralization in the primary exploration targets and determining the economic potential through a preliminary mineral resource estimate by the end of 2012.

26.0 RECOMMENDATIONS

An extensive phase 1 and subsequent phase 2 work programs are recommended to advance the Omai Property towards determination of economic viability.

AMEC recommends:

- A comprehensive environmental monitoring and baseline program be established for the Omai site. These activities will establish the current site conditions and should include water and sediment sampling, geochemical sampling of the existing tailings in both Tailings Pond #2 and the Wenot Pit as well as the mine rock stockpiles, and a hydrological assessment.
- A hydrogeological assessment be completed for the site to develop a more complete picture of the potential groundwater inflows to any mineralized workings.
- A weather station be installed at the Omai site for the collection of current climatic baseline data.
- A formal community and stakeholder (including artisanal miners) consultation plan be established and documented.
- Mahdia reorganize, salvage and rehabilitate the available historic drill core that has deteriorated over time. If there is any doubt about the location or identification of core pieces, they should be discarded.
- Mahdia conducts additional exploration activities on and around the currently known exploration targets. This component includes geological mapping of outcrop and exposed areas, including the accessible portion of the pit walls.
- Mahdia prepares site-specific standard operation procedures (SOPs) for core logging and core sampling. AMEC has provided Mahdia with preliminary logging templates to capture both geological and geotechnical data. AMEC's logging templates need to be reviewed and updated by the Mahdia geologists, as the geological data evolves during the exploration phase.
- Mahdia conducts Trado grid geochemical auger drilling on the soft rock exploration targets. The primary Trado target is the Boneyard area to the east and north of the Wenot pit.
- Mahdia conducts exploration core drilling on the Fennel Deep and the Wenot Deep as the primary DDH targets. The planned drilling includes 8,500 m at Wenot and 4,000 m at Fennel. Core drilling will provide groundwater and RQD (rock quality) data in addition to lithological, structural, and other information.
- Mahdia surveys all available historical and new drillhole collars with a differential GPS unit in order to verify the accuracy and reliability of the

conversion of the collar locations from a local grid coordinate system to the PSAD56 UTM coordinate system.

- Mahdia conducts oriented core drilling to obtain adequate attitudes for structures and controls on mineralization.
- Mahdia conducts a thorough downhole surveying program on all core holes at a minimum frequency of 50 m.
- Mahdia conduct a hydrogeological test program, including instrumentation of boreholes with vibrating wire piezometers or standard piezometers (as appropriate), packer testing, slug testing, and drawdown testing (on the flooded Fennel and Wenot pits) in order to establish a better understanding of the groundwater system in the Omai area and more robust predictions of groundwater inflows to potential mine workings.
- Re-logging the historic drill core as well as re-sampling of relevant core samples from historical drill cores, if the core rehabilitation program provides adequate core sample, as analysis of the results of the QA/QC program conducted in 2006-2007 indicates insufficient analytical precision (Final Exploration Report, L. Heesterman, 2008).
- Mahdia undertakes a rock density determination program with data from all lithologies (including wet and dry densities for mineralized saprolite) and mineralized zones. A minimum of 50 determinations for each lithology type spread across the deposit is recommended.
- Mahdia commences a comprehensive QA/QC program on all new core drilling so that the quality of reported assays are of sufficient quality for use in mineral resource estimation.
- Mahdia creates written procedures, including pictures and a video to aid in understanding the Trado drilling and sampling process, if Mahdia expects to use these assays in the mineral resource estimation process.
- The historic drillhole database(s) from the 2006-07 Fennel underground drilling be reviewed and all data be compiled, organized and validated into a master Access database. In the event that the database cannot be validated with the current information, a core re-sampling program should be undertaken with the reclaimed drill core. If the reclaimed drill core cannot be adequately salvaged, additional core drilling (twin or infill) will be required to validate the historical drilling.
- Mahdia appoints a database manager at an early stage to take responsibility for maintaining the integrity of the data currently in the database and for the new data to be added by Mahdia.

The work program budget is summarized in Table 26-1.

Table 26-1: Recommended Omai Phase 1 & 2 Budget

Mahdia Gold Corp. (Guyana) Inc. - Omai Redevelopment Project Exploration, Environmental & Site Infrastructure Recommendation Budget		
Discipline	Component	Estimated Cost (US\$)
Activities to Date	Site Visit	72,000.00
	QAQC Training	25,000.00
	Hydrogeology	41,000.00
	Project Management	80,000.00
	Geology	134,000.00
	Geochemistry	19,000.00
	Tailings Management	16,000.00
	Environmental and Social Issue Scoping	25,000.00
	LiDAR Survey	24,596.80
	Mahdia Geological Supervision and Field work, allocated only to specific Omai stages disclosed	20,000.00
	Total Expenditures to date	\$456,597
Future Activities - Phase I	Site	Follow-up site visits – AMEC
		New or Updated Accommodations/Kitchen Facilities
	Environmental	Stakeholder consultation planning
	Exploration	Drill Core Reconstruction-Fennel Deep
		Geological Mapping and Rock Sampling
		Trado Auger Drilling - 5,000 m @ USD\$ 50.00 per metre (all in costs)
		Exploration Core Drilling - 8,000 m @ USD\$ 200.00 per metre (all in costs)
		Density Determinations - 5 rock types x 50 samples per rock type x USD\$ 25.00/sample
		Fennel Deep Drill Hole Database Audit
		Total Future Expenditures - Phase I
Future Activities - Phase II	Environmental	Groundwater Testing and Development of a Conceptual Model AMEC
		Weather Station
		Environmental Baseline and Liability Review
		Conceptual closure strategy
	Exploration	Exploration Core Drilling - 4,500 m @ USD\$ 200.00 per metre (all in costs)
		Total Future Expenditures - Phase II
Total Expenditures		\$4,270,847

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APPENDIX 1:

- (1) *Status letter addressed to Mahdia Gold Corp prepared by Guyana Geology and Mines Commission (G GMC): Prospecting Licence 01/2012 granted to Mahdia Gold Corp (Guyana) Inc.*
- (2) *Legal Opinion on Omai Property Title for Mahdia Gold Corp.*



GUYANA GEOLOGY & MINES COMMISSION

Upper Brickdam, Georgetown, Guyana, South America.

Tele.: 592-225-3047, 225-2274; S/board: 22 5-6691, 2862/56691

Fax.: 592-227-0084; E-mail: commissioner@ggmc.gov.gy

Mahdia Gold Corporation (Guyana) Inc.

72 Barrack Street

Kingston

Georgetown

Guyana.

Date: 5th July, 2012

Att: Business Administrator, Mr. Dan Ens

RE: PROSPECTING LICENCE 01/2012 GRANTED TO MAHDIA GOLD CORP. (GUYANA) INC.

Dear Mr. Ens,

Referenced to your letter dated 5th July 2012; To Whom It May Concern.

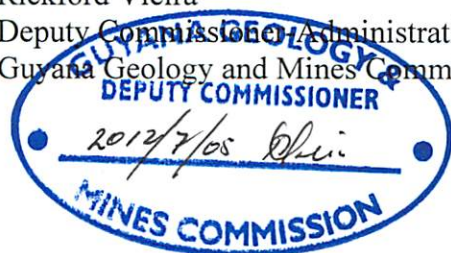
This to confirm that PL number 01/2012 covering the Omai deposit, in Essequibo, Mining District number 2, Potaro, is in good standing with the Guyana Geology and Mines Commission.

Regards,

Rickford Vieira

Deputy Commissioner Administration

Guyana Geology and Mines Commission



Robert H. O. Corbin, LL.B, L.E.C.,

Attorney-at-Law

Mc Kay & Moore

Legal Practitioners

Dennings Chambers

Lot 1 Croal Street, Stabroek

Georgetown, Guyana, SA

Tel: 592-225-8370; 227-2317, 225-7457,

Fax: 592 233 5835

Email: rhoc50@yahoo.com

July 12, 2012

TO WHOM IT MAY CONCERN

Re: TITLE OPINION ON PROSPECTING LICENCE TO MAHDIA GOLD CORPORATION (GUYANA) INC.

We have been requested by Mahdia Gold Corporation (Guyana) Inc, a wholly owned subsidiary of Mahdia Gold Corp. Canada, (hereinafter "the client"), to provide a Legal Title Opinion on their prospecting Licence to Prospect for gold at the Omai Gold Mining site that was formerly worked by OMAI Gold Mine Limited.

The Client has delivered to us for examination in this Legal Title Opinion the following documents:

1. Prospecting Licence PL 01/2012, in the name of the client, granted on the 31st day of January, 2012 by the Guyana Geology and Mines Commission, (hereinafter "GGMC"), and recorded on the 1st day of February, 2012 with Annex 1 and a Map of the identified area attached.
2. Letter to the Client from the GGMC dated, December 30, 2011 formally advising that their application for a prospecting Licence was approved;
3. Letter to client from the Minister of Natural Resources and the Environment, dated January 23, 2012 advising that modification of their prospecting Licence to include Surface Rights in the said Licence had been approved;
4. Letter to client from GGMC dated July 5th, 2012 confirming that Prospecting Licence PL 01/2012 is in good standing; and,

The writer is an Attorney-at-Law, admitted to practice in Guyana, Trinidad and Tobago and other countries in the Caribbean and served as a member of the Guyana Parliament for over thirty five years. Over the past twelve

years he has practiced law as a member of the Chambers of the Law Firm of McKay and Moore, in the Criminal and Civil Jurisdictions of the Supreme Court of Judicature, Guyana. During this period, he has represented several Foreign Companies investing in Guyana, including, drafting Joint Venture Agreements and Applications for various permits and Licenses, particularly in the mining sector. As a consequence, he has interacted with the Geology and Mines Commission, GGMC, which is the Authority established under the Geology and Mines Commission Act, Chapter 65:09 for Administering the Mining Act of Guyana , Chapter 65:01 as provided for in Sections 3 and 14 of the said Act.

On February 1, 2012 Mahdia Gold Corp (Guyana) with registered Office at 72 Barrack Street, Kingston, Georgetown, Guyana, was awarded a **Prospecting Licence, No: PL 01/2012** granted under Section 30 of the Mining Act 1989 Chapter, 65:01 for the Omai Gold Mine Property, Area GS 14: M-39, located in the Potato Mining District No.2, Essequibo, as shown on Terra Surveys Topographic Map 44NW, Guyana and as more fully described in Annex 1 of the said Licence, (hereinafter "the property").

The Licence grants Mahdia Gold (Guyana) Inc. the exclusive right of occupation and exploration of the tract of State Land, described in Annex 1 of the Licence, for the purpose of prospecting for Gold and Valuable minerals in the underground, saprolite and alluvial portions of the deposit of the aforesaid area. The said Licence also conveys the right to occupy and conduct all aspects of exploration of the property, including but not limited to road and trail construction, drilling, trenching and other excavations for the purpose of exploration without the need for further permits or permissions. This Licence is also conditional to completion of approved work programmes and annual licence fees. These rights are also guaranteed by Section 32 (1) of the Act, 65:01

The above exclusive rights have been modified to include surface rights to the said area. I have also verified and have seen a letter signed by the Minister of Natural Resources and the Environment, the Honourable Robert Persaud, dated January, 23rd 2012, that the above mentioned Licence has been modified to include all surface rights associated thereto and including surface prospecting for Gold and Precious Minerals,[File GS14: M-39; Acreage 7244 (the property)].

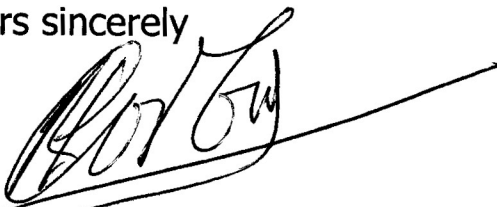
The period of the said Licence is for three years from the 25th January, 2012 in consideration of certain payments by the client to the GGMC as specified in the said Licence subject to the client observing the conditions of the said Licence. The said licence provides for renewal, providing the client follows certain procedures at least three months prior to the Anniversary of the grant. Section 33 (1) and 34 (1) of the Act guarantees any holder of a prospecting Licence the right of two renewals for periods not exceeding one year on each occasion.

The Licence permits the client to apply at any time during the existence of the Prospecting Licence for a Mining Licence over any part or parts of the area for a period to be agreed with the GGMC not exceeding 20 twenty years or for the life of the deposit, whichever is shorter. Renewal rights of the said Mining Licence are also guaranteed for a period not exceeding seven years or the remaining life of the deposit, whichever is shorter. Sections 40, 41, 42 and 43 (1) of the Act, guarantees a Mining Licence to any holder of a Prospecting Licence who discovers minerals on lands within his Prospecting area and who fulfils the conditions of his Licence and the Act.

I am satisfied that all the requirements of the Act were fulfilled by the client and have verified with the Guyana Geology and Mines Commission that the said Licence is in good standing. I have also seen a letter to the client from the GGMC, dated July 5th 2012, confirming this fact.

It is therefore my considered opinion that the Prospecting Licence PL 01/2012, is in good standing and confers the benefits described herein to Mahdia Gold Corporation (Guyana) Inc.

Yours sincerely

A handwritten signature in black ink, appearing to read 'R. H. O. Corbin', written over a horizontal line.

.....
Robert H O Corbin



APPENDIX 2:

*Memorandum of Agreement (MOA) between Mahdia Gold Corp., GGMC
and Metallica Commodities Inc.*

REPUBLIC OF GUYANA

COUNTY OF DEMERARA

MEMORANDUM OF AGREEMENT

BETWEEN

GUYANA GEOLOGY AND MINES COMMISSION

AND

MAHDIA GOLD CORPORATION (GUYANA) INC

25th
This Memorandum of Agreement (MOA) hereinafter referred to as 'the/this Agreement' is made this 14th day of May, 2012 by and among **GUYANA GEOLOGY AND MINES COMMISSION**, a body corporate established under the Guyana Geology and Mines Commission Act No. 9 of 1979 and whose headquarters are situate at Upper Brickdam, Stabroek, Georgetown, Guyana and represented herein by the Commissioner (hereinafter referred to as "GGMC") of the FIRST PART and **MAHDIA GOLD CORPORATION**, a company duly incorporated under the Companies Act 1991 and whose registered address is 72 Barrack Street, Kingston, Georgetown and represented herein by the Project Administrator (hereinafter referred to as "MGC") of the SECOND PART.

WHEREAS GGMC has ownership and possession of land, buildings and other facilities situate at Omai (formerly Omai licensed mine site, Essequibo River) (hereinafter referred to as "the Buildings");

Metallica Commodities Corporation hereinafter referred to as "MCC"

AND WHEREAS^y MCC had acquired a lease from GGMC on the 1st day of September, 2010 to utilize two of the Buildings situate at Omai as an Assay Laboratory and Fabrication Shop.

AND WHEREAS on the 26th day of January, 2012, MGC was granted a Prospecting Licence to operate the Omai gold mine concession.

AND WHEREAS the purpose of this Memorandum of Agreement is to identify which of the Buildings GGMC shall hand over to MCC and MGC after the Parties have executed an Agreement of Sale and Purchase in relation to the said Buildings and the requisite payments referred to in the said Agreement of Sale and Purchase have been made by MCC and MGC. Hence, the transfer of the Buildings identified in Clauses 5 and 6 herein shall be governed by the Agreement of Sale and Purchase to be executed by the Parties.

NOW THEREFORE THE PARTIES HEREBY AGREE AS FOLLOWS:

1. Definition

In this Agreement and in the recitals hereto, the following words and expressions shall have the following meanings:

“Agreement” means this Agreement (including Schedules One and Two) and any amendments to it from time to time;

“Encumbrance” means any claim, restriction, charge, mortgage, pledge, security, interest, lien, option, right of pre-emption or first refusal, equity, power of sale, hypothecation, servitude or other third party right of whatsoever nature or kind;

“EPA” refers to the Environmental Protection Agency established under the Guyana Environmental Protection Act, 1996 and any reference thereto shall include a reference to any successor body, organization or agency;

“MMC” refers to Mekdeci Mining Company, a company duly registered under the laws of the Co-operative Republic of Guyana;

“Party” means either one of the Parties;

“Parties” refers to GGMC and MGC;

“Written” or **“in writing”** includes a hand-written, type-written, facsimile, printed or electronically made document (conclusive of e-mail communication and attachments) which results in a permanent record.

2. Interpretation

In this Agreement and in the recitals hereto, except to the extent that the context requires otherwise:

- A reference to a “judgment” includes any order, injunction, determination, decree or other judicial or arbitral tribunal measure in the jurisdiction of Guyana, which is final and binding;
- A reference to a “law” includes common law, the Constitution of Guyana and any decree, judgment, legislation, direction, order, ordinance, regulation, by-law, statute, notification, circular, guideline, rule, statutory instrument or other legislative measure with which both Parties are required to comply (and “lawful” and “unlawful” shall be construed accordingly);
- References in the singular shall include references in the plural and vice versa;
- The headings are inserted for convenience and are to be ignored for the purposes of construction;

- The Schedule to this Agreement forms part of this Agreement and will be in full force and effect, as though it was expressly set out in the body of this Agreement;
- Any reference in this Agreement to a "Clause" or a "Schedule" is a reference to a clause hereof or a schedule hereto.
- The words "include" and "including" are to be construed without limitation;
- A provision of this Agreement shall not be construed to the disadvantage of a party merely because that party was responsible for the preparation of the Agreement or the inclusion of the provision in the Agreement;
- Any obligation on any Party not to do or omit to do anything is to include an obligation not to allow that thing to be done or omitted to be done.

3. Handing Over of the Buildings

3.1 GGMC hereby undertakes and agrees to deliver vacant and peaceful possession of the Buildings mentioned in Clauses 5 and 6 to MCC and MGC after the Parties have executed an Agreement of Sale and Purchase in relation to the said Buildings and the requisite payments referred to in the said Agreement of Sale and Purchase have been made by MCC and MGC.

3.2 GGMC hereby declares and confirms that the Buildings are free from all encumbrances and it has all rights and power to transfer same to MCC and MGC after the Parties have executed an Agreement of Sale and Purchase in relation to the said Buildings and the requisite payments referred to in the said Agreement of Sale and Purchase have been made by MCC and MGC.

4. Maintenance of the Buildings to be retained by GGMC

4.1 GGMC shall retain the Buildings represented as Codes CS1, CS2, CS3, CS4, A10 and A6 in Schedules One and Two.

4.2 Although GGMC shall retain ownership of the buildings referred to in clause 4.1, MGC shall be permitted to utilize these buildings. Hence, MGC shall furnish, maintain and upkeep the said buildings referred to in clause 4.1

4.3 GGMC shall also retain an area of 1000 ft by 1000 ft in the vicinity of the existing tower structure to accommodate telecommunication apparatus for cellular communication.

5. Buildings to be handed over to MCC

5.1 GGMC shall hand over to MCC the Buildings represented as Codes CO 9, CO10 and AP 1 in Schedules One and Two.

6. Buildings to be handed over or assigned to MGC

6.1 GGMC shall hand over to MGC the Buildings represented as Codes A1, A2, A3, A4, A5, A7, A8, A9, A10, A11, A12, A13, A14, A15, A16, MO1, MO2, MO3, MO4, MO5, NL1, NL 2, NL 3, CO 1, CO 2, CO 3, CO 4, CO 5, CO6, CO 7, CO8, CO11, OR 1, OR 2, OR 3 and OR 4 in Schedules One and Two and also the following: the camp registration building, the camp fitness centre, the two camp water storage tanks and the camp water filtration system.

6.2 For the duration of this agreement GGMC shall assign to MGC the rights to use of Core Sheds 1 to 4 depicted in Schedule 2 as CS1, CS 2, CS 3 and CS 4. For greater certainty, GGMC shall retain ownership of the said CS 1 to 4.

6.3. With respect to the core sheds referred to at Clause 6.2 above, the MGC shall only be permitted to study the cores in the said CS 1 to 4 and shall not remove, split or compromise the said cores without the written approval of the GGMC which must first be obtained.

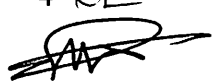
7. Taxes and Fees

7.1 The Parties shall respectively bear their liability of the relevant taxes and fees resulting from the transfer hereof according to applicable laws and local policies.

7.2 However, if any taxes and fees according to relevant laws and regulations are GGMC's responsibility before the Buildings to be transferred are handed over to MCC and MGC, GGMC shall bear such taxes and fees.

8. Force Majeure

8.1 In the event that a Party is unable to perform any of its obligations under this Agreement or to enjoy any of its benefits because of any Act of God, strike, fire, flood, governmental acts, orders or restrictions, Internet system unavailability, system malfunctions or any other reason where failure to perform is beyond the reasonable

4 KL


control and not caused by the negligence of the non-performing party (a "Force Majeure Event"), the Party who has been so affected shall give notice immediately to the other Party and shall use its reasonable best efforts to resume performance.

8.2 Failure to meet due dates resulting from a Force Majeure Event shall extend the due dates for a reasonable period.

9. Condition of the Buildings

9.1 GGMC shall hand over the Buildings to MCC and MGC in their current status and conditions. After MCC and MGC take possession of the Buildings, unless otherwise agreed herein, GGMC shall immediately not be liable to MCC and MGC for any subsequent defect or damage.

10. Maintenance and Security

10.1 MGC shall maintain and provide security for the Buildings which have been handed over to it by GGMC in addition to the airstrip within the vicinity of its operations.

10.2 MCC shall maintain and provide security for all the Buildings at Omai which have been handed over to it by GGMC. Further, MCC undertakes to provide their own facilities for their operations including provision of generators, a filtration system, water supply services and catering services.

10.3. Failure by MCC and MGC to utilise any one or more of the Buildings handed over to them by GGMC shall not exempt them from their duties to maintain and provide security for such Buildings.

10.4 It is agreed and understood among the Parties that the public roadway traversing the Omai site may cause certain security concerns. As a result, it is agreed that MCC may, at its own cost, install control points on the ingress and egress to the property. It is further agreed that the Parties shall have further discussions concerning the installation of a toll system and finalization of additional security related mechanisms and procedures as soon as practicable.

11. Right of First Refusal

11.1 If either MCC or MGC no longer wishes to take possession of any one or more of the Buildings on April 1, 2012, this must be communicated in writing to the Ministry of Natural Resources and the Environment by the 30th day of April 2012, before being

made known by either MCC or MGC to a third party. The said Ministry shall then make a determination with respect to the ownership and use of the Building(s).

11.2 Similarly, if after the Buildings are handed over to MCC or MGC, either one of them wishes to surrender their rights and interests in such Buildings, this must be communicated in writing to the Ministry of Natural Resources and the Environment before being made known by either one of them to a third party. The said Ministry shall then make a determination with respect to the ownership and use of the Building(s).

12. Prohibited Acts

12.1 MCC and MGC are prohibited from engaging in hunting and fishing activities within the Omai concession, unless written permission has been obtained from the Ministry of Natural Resources and Environment.

13. Access Road Linking Yaya to Mabura Road

13.1 MCC is permitted to use the access road linking Yaya to Mabura Road. MMC shall continue to charge its normal fees for transport services rendered. However, MCC shall carry on its private operations using independent barges and thus shall not be subject to those fees.

13.2 Any other arrangement with respect to the access road shall be determined by the two Parties after consultation with GGMC.

13.3 MGC shall have the right to establish docking and port facilities at its expense and to operate barges and conduct transportation incidental thereto and shall not be subject to fees relating to same.

14. Solid Waste Management

14.1 The Parties shall maintain a clean, healthy and aesthetically pleasing environment at Omai and ensure the safe disposal of biodegradable and non-biodegradable waste, in accordance with EPA's laws and regulations.

15. Corporate Social Responsibility

15.1 MCC and MGC undertake to perform their corporate social responsibilities to the Omai and adjacent communities.

16. Entry into Force

16.1 This Agreement shall come into force on its signing by the Parties.

17. Entire Agreement

17.1 This Agreement constitutes the entire rights and obligations among the Parties and shall supersede any prior expressions of intent, understanding, discussion, representation, warranty or promise (whether express or implied, oral or written) made by a Party or its agent to the other Parties or their agents with respect to this transaction.

17.2 This Agreement may be modified only by a further writing that is duly executed by the Parties.

18. No Agency

18.1 This Agreement is not intended to directly or indirectly constitute, create, or give effect to or to otherwise imply a joint venture, corporation, partnership, contract or any form of formal business entity. Each entity signing this Agreement is acting as an independent contractor. Neither Party to this Agreement is intended to have, or is granted by the other Party, any authority or control over the other Party nor shall either Party have the power to bind the other Party.

19. Compliance with Law

19.1 The Parties shall comply with all laws, orders, ordinances and other public requirements now or hereafter pertaining to their use of the Buildings.

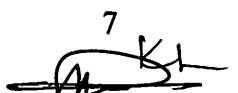
20. Notices

20.1 Any notice required or permitted under this Agreement shall be deemed sufficiently given or served if sent by registered mail, return receipt requested, delivered by hand or courier and signed for and addressed as follows:

If to GGMC to:

The Commissioner

Guyana Geology and Mines Commission

7


Upper Brickdam, Stabroek,
Georgetown,
Guyana

If to MCC to:

The Secretary
Metallica Commodities Corporation
3C Public Road
McDoom
East Bank Demerara
Guyana

If to MGC to:

Chief Executive Officer
72 Barrack Street
Kingston
Georgetown
Guyana

20.2 Each Party shall have the right from time to time to change the place notice is to be given under this clause by written notice thereof to the other Parties.

21. Dispute Resolution

21.1 Any dispute relating to the interpretation or performance of this Agreement shall be resolved at the request of any Party through negotiation, arbitration or mediation.

21.2 One Party may give the other Parties a written notice that it wishes to enter into negotiation with those Parties. The notice shall include a detailed description of the issues subject to the dispute and a proposed resolution.

21.3 Within five (5) business days after the written notice has been received by the other Parties, the Parties shall designate representatives to settle the dispute.

21.4 The designated representatives shall consult and negotiate with each other in good faith and attempt to reach a just and equitable resolution satisfactory to all Parties within fifteen (15) business days after the deadline for designation of the representatives.

21.5 If those designated representatives do not timeously resolve the Dispute through negotiation, the dispute may be resolved by one of the other methods of alternative dispute resolution or with the assistance of the Mediation Centre in Guyana.

21.6 During a dispute resolution procedure, the Parties shall, to the extent possible, continue to implement those parts of this Agreement, unrelated to the issue which is subject to the dispute resolution procedure.

22. Public Announcement/ Press Release

22.1 No Party shall make any public announcement or issue any press release concerning the terms of this Agreement without the approval of GGMC. The Party who seeks to make the public announcement must furnish GGMC with a copy of such announcement or press release. However, no Party shall be prohibited from issuing or making any such public announcement if it is necessary to do so to comply with the law.

23. Governing Law

23.1 This Agreement shall be governed, construed and interpreted by, through and under the laws of the Co-operative Republic of Guyana.

24. Jurisdiction

24.1 The Parties hereto submit to the exclusive jurisdiction of the proper courts of the Co-operative Republic of Guyana for the hearing and determining of any action or proceeding arising out of or in connection with this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first above written.

Karen Livan

for The Guyana Geology and Mines Commission

(Commissioner)

GGMC



for Mahdia Gold Corporation



.....
MGC

Witnesses:

1. *Myan Chelbe*

2. *Sam Hahn*

SCHEDULE 1

Code	Facilities		Mahdia Gold Inc	Metallica Commodities Corp. Guyana
A1	Accommodations		*	
A2	B Unit Metal Frame 1		*	
A3	B Unit Metal Frame 2		*	
A4	Benab		*	
A5	Cabin B4 Unit		*	
A6	Cabin A1 Unit (11 Units for GGMC)			
A7	Cabin B3 Unit		*	
A8	Cabin B2 Unit		*	
A9	Cabin B1 Unit		*	
A10	Camp Office		*	
A11	Sec Building		*	
A12	Fuel tank unit		*	
A13	Generator Room		*	
A14	Transformer area		*	
MO1	Kitchen and Dining Room	Main Office area	*	
MO2	Recreational Hall 1		*	
MO3	Recreational Hall 2		*	
MO4	Laundry Room		*	
A15	Wood Cabin 1		*	
A16	Wood Cabin 2		*	
MO5	Number 1 landing mechanic shed		*	
NL1	Water treatment station	Number 1 landing	*	
NL2	Number 1 landing storage room		*	
NL3	Number 1 landing watch station		*	
CO1	Fire station	Central Omai	*	
CO2	Med Section		*	
CO3	Administration Building		*	
CO4	Warehouse		*	
CO5	Mine Office		*	
CO6	Truck shop		*	
CO7	Wash bay		*	
CO8	Fuel tanks		*	
CO9	Fabrication shop	Central Omai		*
CO10	Laboratory			*
CO11	Mill Administration		*	

	SCHEDULE 2			
	Facilities		Mahdia Gold Inc	Metallica Commodities Corp. Guyana
CS1	Core Shed 1 (GGMC)	Central Omai	*(assigned)	
CS2	Core Shed 2 (GGMC)		*(assigned)	
CS3	Core Shed 3 (GGMC)		* (Assigned)	
CS4	Core Shed 4 (GGMC)		*(assigned)	
OR1	Pump Station	Omai River	*	
OR2	Electrical Room		*	
OR3	Trans Base		*	
OR4	Hoist Base		*	
AP1	Aggregate plant station and sub stations			*





APPENDIX 3:

Legal Opinion on Environmental Indemnification for Mahdia Gold Corp.

Robert H. O. Corbin, LL.B, L.E.C.,
Attorney-at-Law

Mc Kay & Moore
Legal Practitioners
Dennings Chambers
Lot 1 Croal Street, Stabroek
Georgetown, Guyana, SA
Tel: 592-225-8370; 227-2317, 225-7457,
Fax: 592 233 5835
Email: rhoc50@yahoo.com

July 12, 2012

TO WHOM IT MAY CONCERN

Re: LIABILITY INDEMNIFICATION OF MAHDIA GOLD CORPORATION (GUYANA) INC. IN
RESPECT TO OMAI GOLD MINES

We have been requested by Mahdia Gold Corporation (Guyana) Inc, a wholly owned subsidiary of Mahdia Gold Corp. Canada, (hereinafter "the client"), to provide a Legal Opinion on their indemnification from liability for any acts or omissions by their predecessor in mining operations at Omai Gold Mines as a consequence of the client being granted prospecting Licence PL 01/2012 to prospect for gold in the same location.

The client, not being a successor to the previous Licensee of the Omai Gold Mines, cannot be held liable for any acts or omissions committed by the predecessor mining Company that operated in the area covered by the client's current prospecting Licence. The previous Licensee, Omai Gold Mines Limited is a separate and distinct Corporate body which entered into an Agreement with the Government of Guyana when they were awarded their Prospecting and Mining Licence. Mahdia Gold Corp. (Guyana) Inc. is not in any way associated with Omai Gold Mines Limited and has independently acquired a distinct Prospecting Licence from the Government of Guyana with its own terms and conditions. The Client cannot therefore in law be vicariously liable for any acts and /or omissions of Omai Gold Mines Limited.

I have also seen a letter, dated July 5. 2012 from the GGMC to the client confirming as follows, "Mahdia Gold Corporation (Guyana) Inc has full liability indemnification from all environmental issues caused by the spillage of cyanide by previous operator, Omai Gold Mines Limited as such incidents occurred prior to Mahdia Gold Corporation (Guyana) Inc. Involvement on the said property.

It is therefore my considered opinion that the client has no liability for and is indemnified from all environmental issues caused by the slippage of cyanide by the previous operator, Omai Gold Mines Limited. Further, the letter of assurance from the GGMC provides an added guarantee upon which the client can, if needed, also rely.

Yours sincerely



.....
Robert H O Corbin



OMAI GOLD PROPERTY
GUYANA, SOUTH AMERICA
NI 43-101 GEOLOGICAL REPORT

APPENDIX 4:

Bathymetry Survey Memo

Technical Memorandum

To: **David Bending**
Alan Zaakir
From: **Sophie Bertrand**
Kenneth Brookes
Tel: **(905) 568-2929**
Email: sophie.bertrand@amec.com
Date: **June 19, 2012**

Project: **TC111506A, Phase 8100**
File : **8100_061912_Bathymetry**
Memo
cc: **Dan Russell**
Stephan Theben

Subject: Wenot Pit Bathymetry Survey

1.0 INTRODUCTION

AMEC Environment & Infrastructure was retained by Mahdia Gold Corp. to provide exploration, environmental and mine waste management support for the Omai Project, located in Guyana. Prior to a planned site visit, it was requested that AMEC conduct a preliminary survey of the bathymetry of the Wenot Pit lake for use in ongoing activities of the Project's exploration and subsequent planning phase. The objectives of the bathymetry survey include determining the depth of the Wenot Pit Lake and ultimately determine the location of the tailings within the Wenot Pit.

It is AMEC's current understanding that the Wenot Pit was considered mined out in the first quarter of 2002 and was subsequently used as a tailings management facility since the second quarter of 2002. None of the information available indicates the exact pit shell of the mined out Wenot Pit. The Closure Plan update of 2005¹ indicates that the Wenot Pit was approximately 1,300 m long and 500 m wide with a depth of 150 m at completion of mining. It is also indicated that some waste rock was deposited at the west end of the pit in early 2000, where mining had been completed. The existing information indicates that the tailings slurry was discharged over a rock ledge at the west end of the pit. According to the available documentation, a total of 21.6 million tonnes of tailings were deposited between 2002 and 2005. The documentation also indicates that the tailings were kept under approximately 15 m of water cover until the water

¹ OGML (2005). Mine Site Closure Plan. Rev.6. File 432-A Closure Plan. October 2005.

quality met the discharge criteria set by the Environmental Protection Agency, and the pit was then allowed to flood at closure.

Based on similar scale gold projects, a density of 1.33 tonnes/m³ is used to estimate the volume of tailings. The known amount of tailings deposited in the Wenot pit would therefore represent a volume of 16.2 Mm³.

2.0 BATHYMETRY SURVEY

The bathymetry survey was conducted on May 3, 2012 using the GARMIN GPS 188 Sounder Unit. A total of 1,753 waypoint spot depth records and 2,426 track log spot depth records were downloaded from the GARMIN unit once the survey was complete. The spot depth data was transferred into a spreadsheet software. The data was then reviewed internally for QA/QC purposes resulting in the removal of 426 spot depth points. These points were removed from the dataset due to not having a depth recording or having obvious erroneous depth values. The remaining 3,753 spot depth points were then mapped into the UTM Zone 21 north projected coordinate system using the Provisional South American Datum of 1956 (PSAD1956) using ArcGIS 10.0 software. The spot depth points collected are presented in Figure 1. The raw data points were provided to Mahdia Gold Corporation electronically on Thursday May 24, 2012 and through a USB key to David Bending on Monday May 28, 2012.

An analysis extent was developed by generating the convex hull polygon of the point dataset and minor manual adjustments were used to eliminate areas with no data. The natural neighbour interpolation algorithm was employed to generate a 1 m by 1 m interpolated grid surface for the entire survey area. This grid surface was then contoured using the depth values (metres depth from water surface) into 5 m contour intervals. The interpolation procedure and contouring were done using ArcGIS 10.0 Spatial Analyst extension. The result of the bathymetry survey, including a 3D visualization of the pit pond bottom is presented in Figure 2. The approximate volume of water contained in the pit lake based on the bathymetry result is 23.5 Mm³. The pit lake depths range from 0 to 7.0 m deep. In general, the west end of the pit is shallower and the deepest points are found at the east end of the pit.

3.0 TAILINGS IN THE WENOT PIT LAKE

As previously indicated, no information has been found regarding the final Wenot pit shell. A conceptual final pit shell was found in a report by Golder Associates², which is the most recent

² Golder Associates (1999). Wenot Pit Tailings Disposal and Closure – OGML. Report No. 971-3046, June 1999

final pit shape which could be located amongst the existing information. It is noteworthy to point out that this final conceptual pit shell was based on data known in 1999, which may not represent the exact final shape of the mined pit. This pit shell was digitized by AMEC (Figure 3). The approximate volume of the pit shell based on digitalization of the map is 41.3 Mm³.

Therefore, the volume of tailings in the pit is estimated at 17.8 Mm³. This is in the same order of magnitude as the 16.2 Mm³ of tailings known to have been deposited in the pit according to the Closure Plan of 2005. The difference can be explained by the unknown quantity of waste rock having been deposited in the west end of the Wenot pit in early 2000.

The results indicate that the thickness of tailings ranges from 0 to 13.0 m. It seems that the majority of the tailings deposited in/settled in the deepest points of the former pit.

A rendering of the approximate location and quantity of tailings within the Wenot pit is presented in Figure 4. This rendering was created with the bathymetry survey data presented in Section 2.0 as well as with the conceptual pit shell.

Please do not hesitate to contact the undersigned if you have any questions.

Prepared by:

Reviewed

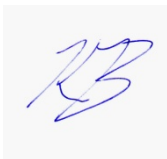
by:



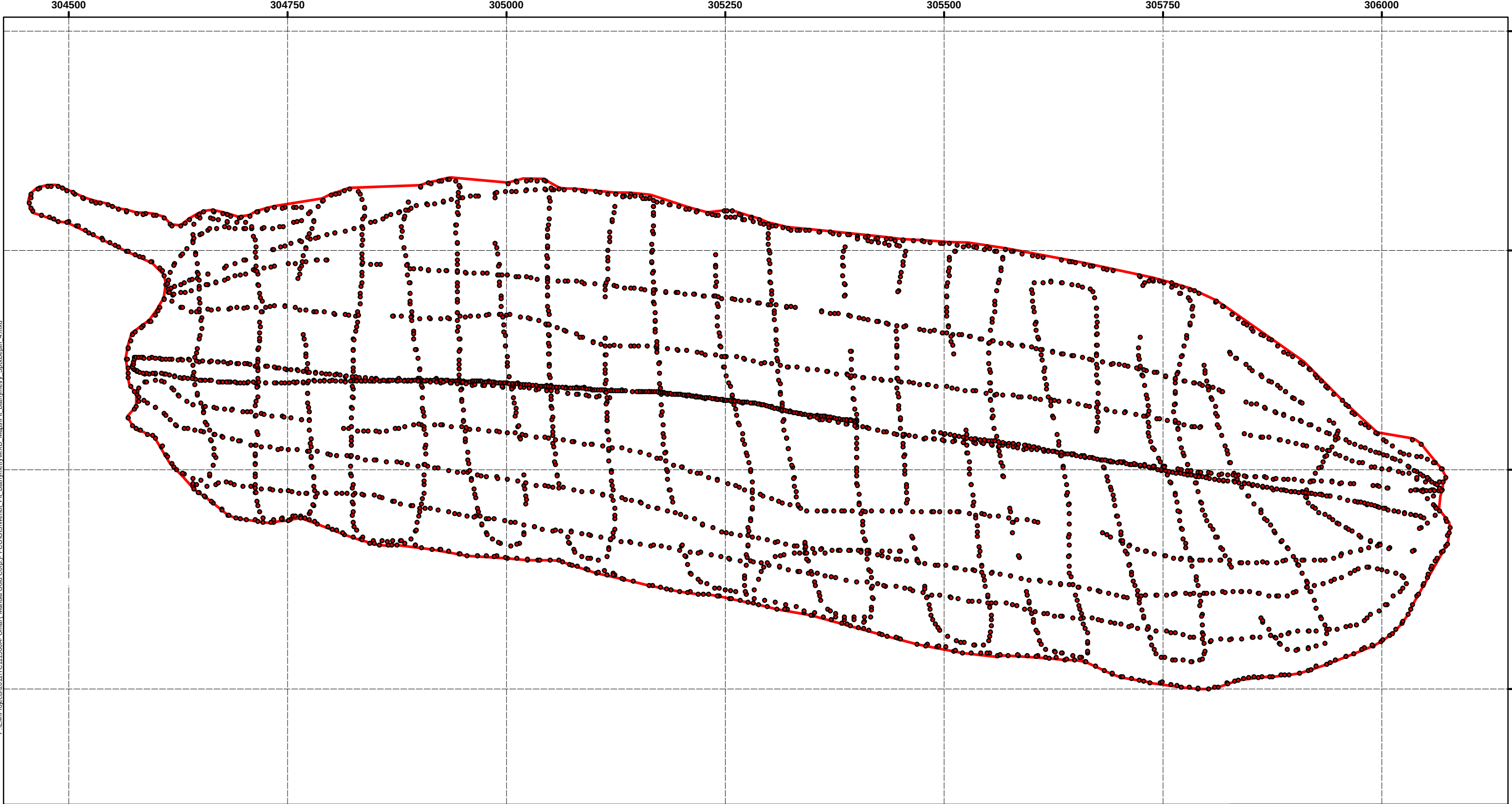
Sophie Bertrand, B.A.
Environmental Specialist



David Simms, Ph.D.
Principal, Environmental Assessment and
Resource Development



Kenneth Brookes, BA, Adv. Dip. GIS
GIS Analyst



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LEGEND

-  Bathymetry Analysis Extent
-  Spot Depth Collected from GARMIN Unit (Waypoint and Track data combined)

NOTES:
- Bathymetry spot depth data collected using a GARMIN 188 Sounder Unit on May 3, 2012
- Pit surface is approximated using 3,753 spot depth recordings.

Datum: PSAD1956
Projection: UTM Zone 21N



OMAI REDEVELOPMENT PROJECT

**Wenot Pit Bathymetry
Spot Depth Locations**

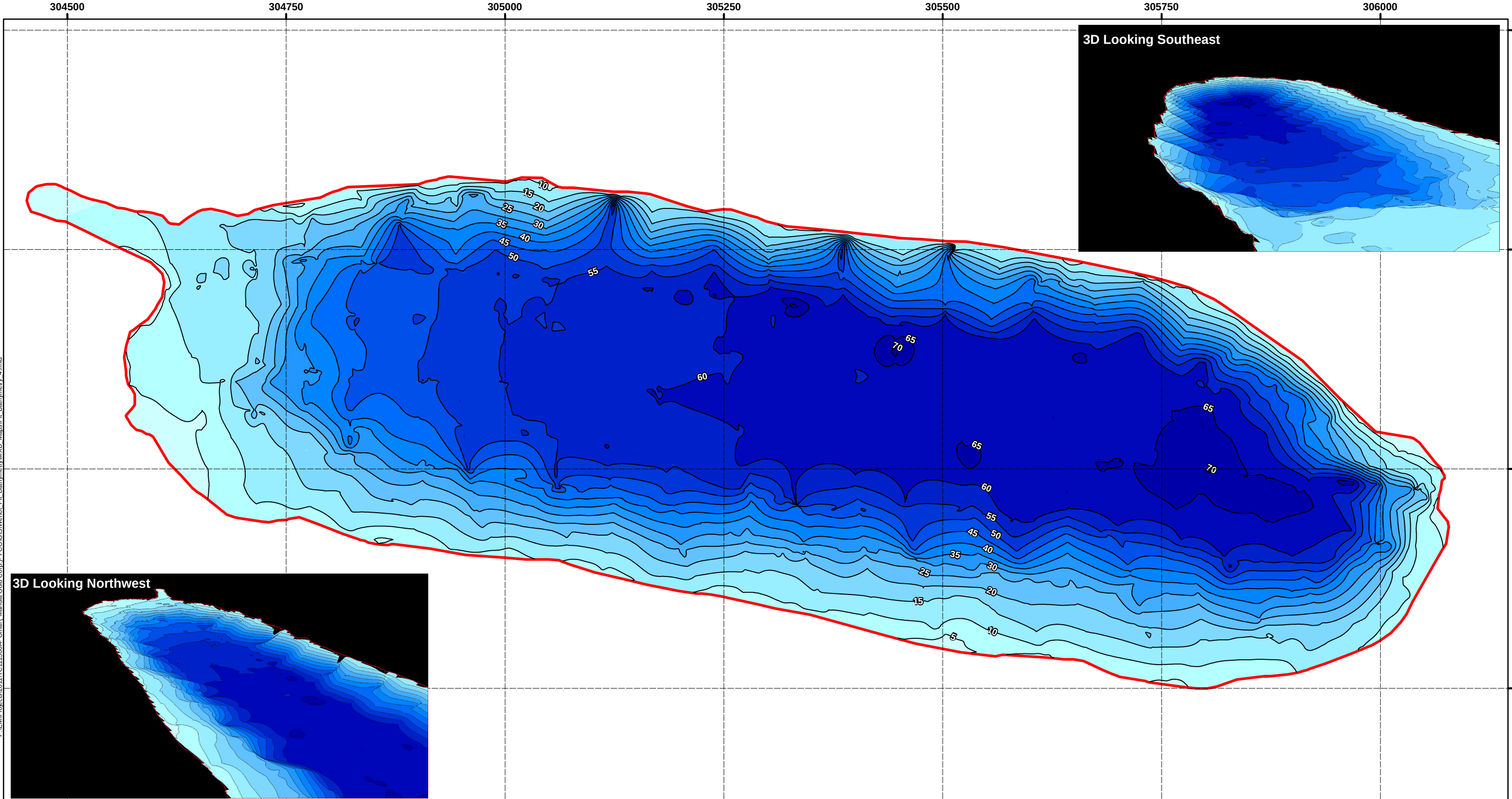
PROJECT N^o: TC111506A

FIGURE: 1

SCALE: 1:4,200

DATE: June 2012





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LEGEND

-  Bathymetry Analysis Extent
-  Bathymetry Contours
-  5 metre interval

Water Depth (metres) (Filled Contours)		
 0 - 5	 25 - 30	 50 - 55
 5 - 10	 30 - 35	 55 - 60
 10 - 15	 35 - 40	 60 - 65
 15 - 20	 40 - 45	 65 - 70
 20 - 25	 45 - 50	 70 - 75

NOTES:
- Bathymetry spot depth data collected using a GARMIN 188 Sounder Unit on May 3, 2012
- Pit surface is approximated using 3,753 spot depth recordings.



OMAI REDEVELOPMENT PROJECT

Wenot Pit Bathymetry
Survey Results

Datum: PSAD1956
Projection: UTM Zone 21N



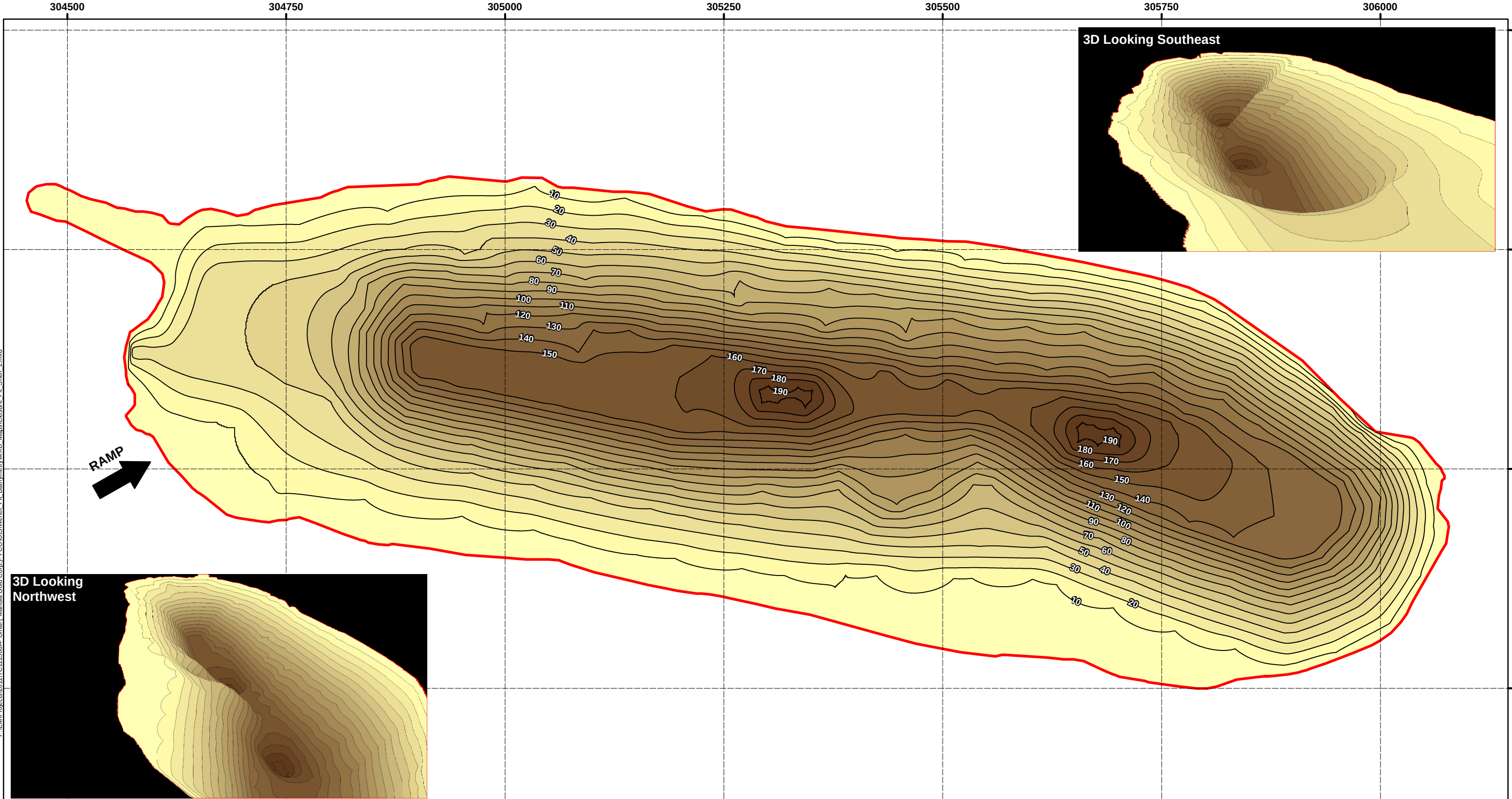
PROJECT N^o: TC111506A

SCALE: 1:4,200

FIGURE: 2

DATE: June 2012





LEGEND

Pit Analysis Extent

Approximate Pit Depth at Closure Contours

10 metre interval

Approximate Pit Depth from 10 m Below Pit Boundary (Filled Contours)

0 - 10	50 - 60	100 - 110	150 - 160
10 - 20	60 - 70	110 - 120	160 - 170
20 - 30	70 - 80	120 - 130	170 - 180
30 - 40	80 - 90	130 - 140	180 - 190
40 - 50	90 - 100	140 - 150	

NOTES:

- Pit shell is approximated from scanned map
- Scanned map was extracted from Golder Associates Report (1999), entitled "Wenot Pit Tailings Disposal and Closure"

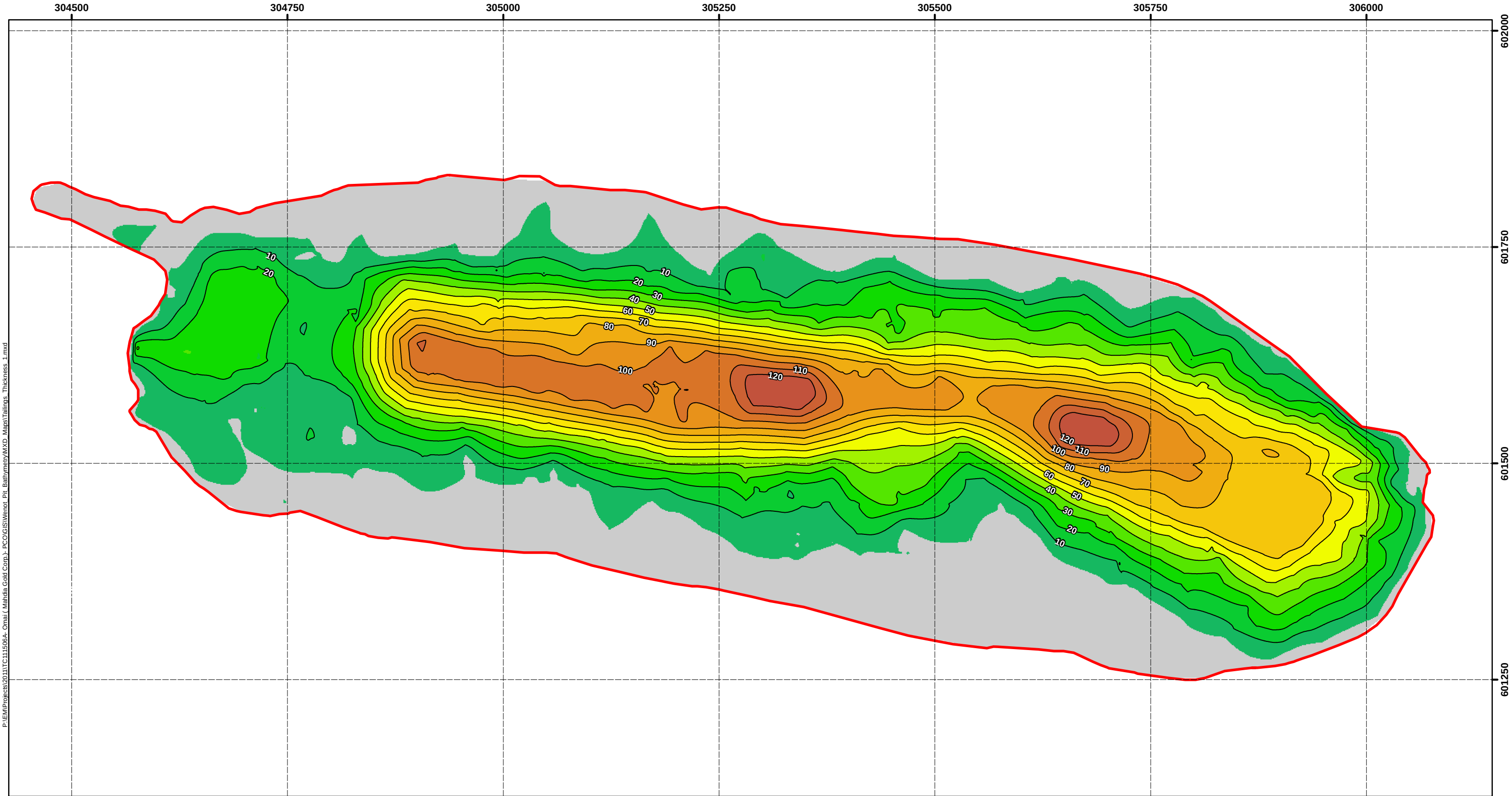
Datum: PSAD1956
Projection: UTM Zone 21N

OMAI REDEVELOPMENT PROJECT

Approximate Wenot Pit Depth at Closure from 10 metres Below Pit Boundary

PROJECT N^o: TC111506A **FIGURE: 3**

SCALE: 1:4,200 DATE: June 2012



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LEGEND
 Pit Analysis Extent
Approximate Thickness of Tailings Deposition
 10 metre interval

**Approximate Thickness of Tailings Deposition (m)
(Filled Contours)**

Very Little Tailings Deposition	40 - 50	90 - 100
< 10	50 - 60	100 - 110
10 - 20	60 - 70	110 - 120
20 - 30	70 - 80	120 - 130
30 - 40	80 - 90	

NOTES:

- Pit shell is approximated from scanned map
- Bathymetry spot depth data collected using a GARMIN 188 Sounder Unit on May 3, 2012
- Pit surface is approximated using 3,753 spot depth recordings.

Datum: PSAD1956
Projection: UTM Zone 21N

OMAI REDEVELOPMENT PROJECT

Approximate Wenot Pit Tailings Deposition Thickness

PROJECT N ^o : TC111506A	FIGURE: 4
SCALE: 1:4,200	DATE: June 2012