

Terms of Reference

Post Title:	Exploration Geologist
Duration:	3 Months (Approx. 37.5 hours/week)
Start Date and Contract Duration:	January 20 th , 2025 (3 Months and renewable, depending on budget availability and performance)
Duty station:	Lusaka, Zambia
Salary:	Will be determined by experience and qualifications and paid in local currency.
Deadline	January 10 th , 2025

ORGANIZATIONAL BACKGROUND

Based out of Victoria, Canada, the Artisanal Gold Council (AGC) is a not-for-profit organization dedicated to improving the work conditions and opportunities, as well as the environment and health of the millions of people involved in Artisanal and Small-Scale Gold Mining (ASGM) in the developing world. The AGC helps to improve the global gold sector by promoting better practices in ASGM through technology transfer, policy development and awareness raising in Africa, Asia and Latin America. The AGC consists of a core staff, associates and a council of experts (Board of Directors) in areas of ASGM, economics, sustainable development, social responsibility, human and environmental health, and gold production and extraction. For more information about the AGC and its projects please visit www.artisanalgold.org

Project description

The planetGOLD Zambia project is funded by the Global Environment Facility (GEF) and implemented by the UN Environment Programme (UNEP). Artisanal Gold Council is the executing agency for the planetGOLD Zambia project working together with the Zambia Environmental Management Agency (ZEMA). The project is designed to reduce the use of mercury in the ASGM sector in Zambia through a holistic, multisectoral integrated formalization approach and increased access to finance, leading to the adoption of sustainable mercury-free technologies and access to traceable gold supply chains. It consists of 4 Components – enhancing formalization of ASGM sector, access to finance enhanced by financial inclusion and responsible supply chains, enhanced intake of mercury-free technologies, knowledge sharing, communication and local capacity-building support.

Project implementation will contribute to the development of legislative, regulatory and policy frameworks by the government with the participation of ASGM cooperatives in selected ASGM communities, serve as a forum between ASGM community and government, develop mechanisms of accessibility to ASGM sector financial support and enhance capacity of local ASGM to create transparent and traceable supply chains, use mercury-free technologies and improved practices of gold-mining, promotes environmentally-friendly technologies and addresses gender-differentiated needs with subsequent dissemination of results (knowledge products and tools) among planet GOLD project stakeholders in Zambia and make these outputs available globally

through planetGOLD program.

MAIN DUTIES AND EXPECTED OUTPUTS/OUTCOMES

The Exploration Geologist is responsible for identifying and assessing the location, quantity and quality of potential gold resources, specifically as they relate to ASGM potential, but also in terms of, and sometimes using, generally accepted junior mining industry standards. The candidate will use a suite of geological tools and approaches to identify and assess potential project sites in the context and capacity of ASGM. He or she will also estimate quantity of accessible ore, and characterize the geological setting of the gold resources as prerequisite to key project activities such as site selection, project design, technology implementation, system planning and optimization. The work will be a mix of office and field work and will require extensive fieldwork to evaluate opportunities directly, perform sampling and testing and to connect with local stakeholders.

Tasks may include, but not be limited to, the following:

- Plan exploration programs of sites for gold and associated precious minerals;
- Undertake field visits to produce a body of knowledge needed to assess the feasibility of ASGM operations. This may involve surveying, mapping, sampling, data compilation, analysis, and documenting information from geologically promising sites; evaluating technical risk factors, and working intimately with artisanal gold miners as well as their communities;
- Provide technical support for geological investigations, testing, and monitoring programs;
- Advise and liaise with managerial and technical staff on the estimation of ore quantities and resources;
- Provide data and feedback to National Project Teams, in support of assessing the feasibility of project sites;
- Interpret a variety of complex data and analyse results;
- Write comprehensive geological reports following standard industry frameworks;
- Keep up to date with developments and new research; and,

ORGANIZATIONAL SETTING AND REPORTING

The Exploration Geologist is a self-motivated, innovative professional who loves a hands-on challenge and grassroots involvement. His or her technical expertise in environmental science, geochemical analysis, and international development is the foundation for insight into potential gold resources, deposit formation models and associated geology. They will be responsible for collecting and presenting technical data as well as a concise summary document.

This position is located in Zambia with the project office in Lusaka. The role will involve frequent fieldwork across the country for understanding of baseline information to inform selection of project sites. The role is supervised by the planetGOLD Zambia National Project Manager and will work in close collaboration with partners and technical experts at AGC headquarters.

Main Duty	Output	Timing
Collecting gold data on proposed sites within 100km radius in the areas of interest.	List of gold occurrences and type (showings, active mines, past mines) with GPS data	Ongoing
Desk study consolidating internal and Government ASM data - recording/confirming/augmenting grade and volume estimates with geological context with 100km radius of the proposed sites.	List of active ASM sites with grade and tonnage estimates with an interpretation of deposit type and geological setting	Ongoing
With the data collected use the report to key in high potential areas for planetGOLD Zambia project to setup process plants	Select high potential areas for use as planetGOLD project site.	Ongoing

DELIVERABLE(S)

The consultant is expected to produce a concise summary report with the supporting data. The supporting data should be presented in map form or organized in a way that is easily conducive to mapping. Supporting data should include site number, GPS coordinates, geology (quartz vein, alluvial) volume measurements, reported grade (if known), density estimate (alluvial or hard rock), and sample locations. The report should also include a summary of current/recent mining with volume/grade estimates (where possible).

WORKPLAN

Submission of a workplan after the contract signing will be requested by the Project.

QUALIFICATIONS

- Master of Science in Geology, mining or related field is an added advantage. Undergraduate degree in Geology or Geosciences is a must.
- Deep knowledge of artisanal gold mining in project country, including practices and mining processes
- Minimum 5 years' experience in exploration geology, common geophysical techniques, and resource estimation (particular experience with Gold is an asset)
- Experience working with the Artisanal and Small-Scale Gold Mining Sector along with relevant geoscience and technical expertise.
- Good scientific and analytical understanding of mineral deposits and effective exploration techniques.
- Excellent written communications with strong data management/presentation skills
- Knowledge of professional software such as Leapfrog, QGIS, Micromine, Vulcan is critical.
- Able to communicate effectively with a variety of stakeholders, from miners to government officials, as well as present project results.
- Strong commitment to and experience in developing effective relationships with key stakeholders

and diverse teams.

Language

- Familiar with English written and spoken and able to speak two local Zambian languages.

To apply to this position please send a cover letter and resume, in English, stating the job title in the subject line, amwailenge@artisanalgold.org ; sgryba@artisanalgold.org.

Deadline is 10th January, 2025.