

PILOT PROJECT

PARTNERSHIP OPPORTUNITY

Open December 2021 – April 2022

Purpose

To test the advancement of ecological purification of tailings. Evaluation based on mineralogy and chemical composition.

Objectives

- Evaluate the potential of removing toxic waste from tailings without the formation of sulfuric acid.
- Evaluate the removal of cyanide residues or acid drainage.
- Evaluate the potential for more revenue streams.

Potential Results:

- Purified minerals rich in silica for repurposing (construction, ceramic and glass industries etc.)
- Recovery of valuable metals and metalloids from leachate.
- Leachate – liquid biofertilizer for organic agriculture.

Participation Qualifications

Chemical and mineralogical analyses of the tailings

Description on volume and current situation of mining waste

Representative sample for Small Scale experiment (25 kg)

Chemical analyses of cleaned mineral residue and liquid leachate with dissolved metals

Process

Customer to send evaluation of chemical and mineralogical composition

Customer to send small scale sample to the ekolive laboratory

Tailings potential will be evaluated by experts with over 30 years of experience in Biotechnology, Biomining and Bioremediation. Tested by patented ecological bioleaching process through bacteria consortia microlive®. Purified solid sample and leachate sent to customer with report, preliminary assessment of potential metals and metalloids recovery range and minerals purity Customer to send their analyses for evaluation to ekolive. Ekolive to perform Market research on purified minerals and metals including bio-fertilizer potential. Partners set meeting date to review findings with Pilot Partner.



Pilot Implementation Plan	Timelines	Stage
Evaluation of chemical and mineralogical composition	February 2022	Sent by customer, evaluated by ekolive
Small Scale bioleaching test with metals recovery test	February – March 2022	Sent by customer, conducted by ekolive
ekolive analyses and results evaluation, including report photographs	March – April 2022	Solid (purified minerals) and leachate (with dissolved metals) samples shipped to customer
Customer analyses and results evaluation	April – May 2022	Customer analyses results sent to ekolive by customer
Market research on purified minerals potential	May – June 2022	Conducted by ekolive

Timelines

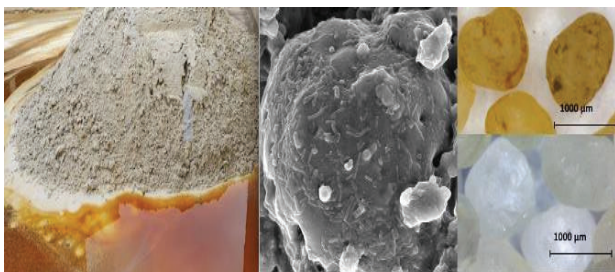
February – June 2022

Investment

Range: \$8K - \$10K

Getting Started

Initial exploratory conversation with pilot partner decision maker
 Define, agree on and sign statement of work.
 Commence testing program



Artemis