



RECOVERY OF GOLD



from tailings

Onirik's partner, **Advanced Materials Processing Inc. (AMPI)** commissioned **American Assay Laboratories (AAL)** in September 2017 to conduct an independent report on their process for **recovery of gold from mine waste sites**, specifically focusing on the Plymouth, California area. Data used for this report was extracted from proprietary AMPI documents. All AMPI and vendor reports presently cited are available for inspection by request upon execution of a non-disclosure agreement.



Currently

Traditional gravity methods used by original miners are ineffective for recovering microscopic gold particles remaining in tailings waste.

These tiny gold particles are dispersed within crushed rock, making them undetectable by traditional methods.

AMPI's Solution

AMPI's process utilises a water-based leaching solution with non-toxic chemicals (mainly thiosulfate salts) to dissolve gold from the rock particles.

This method is a well-established technology, typically used with cyanide, but AMPI's approach eliminates the environmental hazards of cyanide.

Tailings Gold Recovery

A pilot using Virginia City mine waste achieved a 47% gold recovery efficiency.

Independent laboratory analysis confirmed the presence and amount of gold extracted.

Result

Initial assays of Plymouth mine waste samples revealed gold content ranging from 0.079 to 1.223 troy ounces per metric ton (t.oz/m.T).

AMPI plans to analyse additional samples from various depths across the entire Plymouth site.