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Assay Tabs™

Introduction

Assay Tabs have been formulated for fast cyanide leach gold assaying. Each Assay Tab contains the appropriate amount of cyanide and LeachWELL to facilitate a 1-hour leach when used according to our instructions. The leach rate for gold for example is approximately 1 micron per minute!

Large samples can now be assayed accurately and very quickly (same time frame as Aqua Regia).

Poor reproducibility (scatter) when coarse gold is present is minimised - meaningful results can be consistently produced.

Implementation

Laboratories already performing 24-hour bottle roll assays need only purchase some Assay Tabs.

Small laboratories doing mill assays in CIP/CIL plants usually have an AAS and appropriate glassware. A bottle roll or tumbler is also required.

Large on-site laboratories or commercial laboratories intending to do hundreds of assays per day would benefit from using specially designed orbital tumblers and solution dispensing equipment or even one of our PAL1000 machines.

Benefits

Large samples can be assayed quickly.

Gold, silver and copper can be read from the same sample.

Preg-robbing by organics or clays is practically eliminated.

The procedure is simple and requires no special skills.

Coarse gold is dissolved quickly.

Each Assay Tab has built in oxidising agents so that sealed jars can be used when leaching.

Standard Procedure

Samples are dried, pulverised and 200g weighed into jars or bottles in the normal way. 200mL of water (at normal room temperature) plus 1 Assay Tab is then added to the jar or bottle.

The bottle or jar is then rolled or tumbled for at least an hour then allowed to stand for approximately ten minutes until a layer of clear solution is available for sampling and reading by Atomic Absorption Spectrometry. The grade of the original solid is calculated from the solid/solution ratio and the AAS reading.

Costs

The cost of implementing LeachWELL Assay Tabs™ assaying into existing laboratories is very low. Assay Tabs cost \$0.27 each.

The assay cost is proportional to sample size. For example, a 200g sample at 50% solids would have a reagent cost of \$0.275. A 200g sample at 33% solids would have a reagent cost of \$0.55.

For very large samples the Assay Tabs™ concentration can be reduced, and the leach time extended to keep the assay cost even lower. Each Assay Tab weighs approximately 10 g and contains ~7.5g NaCN and ~2.5g LeachWELL.