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LeachWELL™ GC

LeachWELL™ GC is a technical grade catalyst that has been formulated for intensive cyanidation of Knelson and other gold concentrates.

Recoveries above 99.9% within a few hours are common when using LeachWELL™ GC. Residues can therefore be safely discarded.

ADVANTAGES

Intensive cyanidation of concentrates offers far greater security. Both solids and pregnant liquors can be handled in fully enclosed systems at all times. Electrowinning of the smeltable product can be carried out in the gold room.

Very high recoveries can allow the residues to be discarded. Recoveries of 99.9% have been achieved. The removal of tramp iron from the circuit is beneficial to the concentrator and to cyanide consumption.

Batch and fully automated systems already exist or can be easily adopted. Batch treatment of concentrates (using the Acacia Reactor for example) is very simple and efficient.

TREATMENT

The rate of reaction is dependent mainly on reagent concentration and temperature. Reagent costs are between AUS\$20 to AUS\$60 per kilogram of gold recovered. Six-hour residence time seems to be sufficient in most cases. Solids with 2% gold should be leached at 20% solids (or less) to prevent saturation of the liquor.

TESTWORK

Add one kilogram of concentrate to a jar suitable for rolling and add to this: -

10g Sodium Hydroxide;

5L water;

65g Sodium Cyanide;

25g LeachWELL™ GC.

Agitate by rolling and sample and assay the liquor hourly until the gold concentration stabilises. Wash the residue thoroughly with warm salty water and repeat the procedure. If significant gold is recovered from the second bottle roll then it is likely that insufficient cyanide was available on the first bottle roll or the liquor became saturated with sodium aurocyanide.

EXAMPLES

LeachWELL™ GC has successfully been employed at mine-sites including Union Reefs (NT), KCGM, Sunrise Dam and the Gwendolyn mine in WA, Penjom (Malaysia), Ravenswood (QLD), and Kelian in Indonesia.

LeachWELL GC Cyanidation of Gravity Concentrates

