



TROPICANA SITE WIDE TECHNICAL SURVEY

GOLD FIELDS, WA

TECHNICAL CONDITION SURVEY

PROJECT

Tropicana Mine Site Wide Technical Survey

CLIENT

AngloGold Ashanti Australia

DURATEC CONTACT

Damian Ryan 0437 697 007

DESCRIPTION

Duratec Australia was engaged by AngloGold Ashanti Australia to undertake a condition assessment of the reinforced concrete and steel structures at the Tropicana Gold Mine.

The crushing and processing plant was originally commissioned in 2013 and comprises many steel structures set on, and enclosed within reinforced concrete plinths and bunds. Due to the harsh environment and aggressive chemicals used on site the structures are showing varying signs of deterioration.

A visual inspection of the concrete and steel elements was undertaken with the type, extent and location of all defects observed photographed and recorded on a numbered schedule and sketch plan. Additionally, random cover meter readings were taken across the site to determine if the observed deterioration has an increased risk of corrosion of the reinforcement.

The condition of the elements was found to vary across the facility and as such risk ratings were assigned to the individual assets to aid in the formulation of an order of priority for any required remediation works.

All findings were presented in a concise report including plain language explanation of the root causes of deterioration, remediation options and realistic budget estimates to repair the structures in each individual area.

HIGHLIGHTS

- ▶ All works were completed with no disruption to site operations.
- ▶ Risk ratings were assigned to individual assets to formulate an order of priority for remediation.
- ▶ The client received a formal report which clearly explained the issues identified across the site and how they may be addressed to extend the life of the building.



IMAGES (FROM TOP TO BOTTOM)

- ▶ Overview of the plant.
- ▶ Steel inspection on conveyor system.
- ▶ Observed deterioration of a concrete slab.