HIGGINSVILLE TREATMENT PLANT

SCOPE OF WORK

GR Engineering was appointed by Avoca Resources Limited to undertake the engineering, design, procurement, construction and commissioning for the new process plant facilities at Higginsville Treatment Plant.

The project required the development of a gold concentrator to treat 1.0 Mtpa of underground ore. The Higginsville Treatment Plant is designed for a nominal 123 tph milling rate, run of mine material is fed to the crushing plant at a design rate of 225 tph with crushed ore storage capacity installed to provide a break between crushing and milling operations.

The gold concentrator is designed as a conventional carbon in leach (CIL) arrangement. Underground ore is crushed to nominally minus 9 mm in a three stage hard rock crushing plant and then slurried and milled to nominally minus 0.075 mm (75 µm) in a single stage 3 MW ball mill in a closed circuit with hydrocylones. The comminution circuit includes a gravity gold circuit consisting of a gravity concentrator and an intensive cyanidation circuit. The balance of gold recovery is obtained from a seven tank CIL circuit, four tonne pressure Zadra elution circuit and electrowinning systems.

GR Engineering commenced the EPC design and construction of the gold treatment plant in May 2007, with Practical Completion achieved 7 June 2008.

Commodity: Gold
Region: Australia
Location: Approximately 50 km north of Norseman in the Eastern Goldfields region of Western Australia
Project Type: Greenfields, EPC design and construct

Client: Avoca Resources Limited
Award Date: January 2007
Completion Date: June 2008
Project Manager: Dominic Piscioneri
Process Manager: Stewart Findlay