

TI WEST MINERAL SANDS DEVELOPMENT WET PLANT, DRY MILL AND OUTLOADING FACILITY PROJECT

Client: Cooljarloo Management Services

Location: Mine Site – Cateby, 170km north of Perth
Dry Mill – Muchea, 50km north of Perth
Port Facility – Kwinana, south of Perth
Western Australia

Capacity: Mine Site Wet Plant
– 1 800 t/h sand slurry
Dry Mill –
95 t/h heavy mineral sand concentrate

Product: Mine Site – Minerals Sands Concentrate
Dry Mill – Ilmenite, Rutile, Zircon and Leucosene

GRD Minproc Office: Perth, Western Australia

Start Date: July 1988

Completion Date: December 1989

Project Duration: 72 weeks

Contract Basis: Reimbursable

Project Value: A\$89 million – Wet & Dry Plant
\$3 million – Port Facility

Scope of Work

Process design, detail engineering, procurement and construction management of plants up to mechanical completion of the two mills, including supply of dredge, floating process facilities, power, borefield water supply, staff accommodation, plant infrastructure and the development of warehousing and interconnection to existing outloading facilities at Kwinana.

Flowsheet

Wet dredging, gravity separation of heavy mineral via spirals on a floating treatment facility. Heavy mineral concentrate is road hauled to Dry Mill approximately 120 km.

Dry Mill incorporates drying, electromagnetic and electrostatic separation, product stored in rail load out bins. Rail unloading and distribution in Port storage facility, for batch reclamation onto ship loading equipment.

