

# LIHIR MINE, PNG

## SOIL IMPROVEMENT AND JET GROUTING



**Client:** Lihir Mining Corporation

**Specialist Contractor:** Menard Bachy Pty Ltd

### THE PROJECT

Soil Improvement works at Lihir Island to date has included the following:

- Phase 1 – Geothermal Power Plant (Cooling tower and Power house) soil improvement in silty clay zones
- Maintenance Workshop foundation improvement
- Thickener tank project soil stability and improvement for structural support and underground chambers
- Gravity systems tank foundation improvement for structural support
- Phase 2 – Geothermal Power Plant, on-going as above

Working with a small, specialised crew and at times double shifting allowed Menard Bachy to meet the tight programmed schedules set by the client. The environmental conditions on the island set new challenges in terms of maintenance and the day to day running of the project. Plant and drilling consumables had to be adapted or modified on-site to deal with the harsh conditions above and below ground.

The various sites presented technical challenges including the extensive use of 'pre-cutting' in the silty clays. Due to this and combined with the continuous wet weather, spoil management became a high priority and was managed to the client's environmental demands.

### MENARD BACHY'S ROLE

Menard Bachy was contracted to carry out Jet Grouting work on several sites on the location of a new Geothermal Power Plant. Working as the specialised contractor and in conjunction with LMC and SMEC Australia, Menard Bachy was able to adapt its existing experience to suit the many challenges the site presented. These included technical, logistical and operational difficulties specific to the environment.