

MOUNT CARLTON 132kV / 22kV POWERLINE CONSTRUCTION PROJECT

PROJECT OVERVIEW

Evolution Mining is the owner of the new Mount Carlton gold, silver and copper mine, located approximately 180 km southwest of Townsville in north Queensland Australia.

The mine is open cut with an onsite ore processing plant which includes crushing, grinding and bulk sulphide flotation to produce a polymetallic concentrate.

The Mount Carlton processing plant will have a throughput capacity of 800,000 tonnes.

SCOPE OF WORK

The scope included for the installation of 18.5km of 22kV overhead power supply and poles along with a 132kV connection from the main Substation to the ERGON Switchyard.

The scope also included the installation of 4 pole mounted transformers and underground cabling, OPGW, ADSS cabling and fibre splicing.

The crew also carried out the installation and termination of both the 22kV and 132kV lines to the Substation.

PROCUREMENT AND INSTALLATION

The poles and conductors for the project were purchased by the Client, **PAN PROCESS** in conjunction with its subcontractor Coast to Coast Power provided all other materials, plant and equipment necessary to complete the installation.

The remote site was managed on a 14/7 roster over an 18 week period with a crew of 23 personnel.

PAN PROCESS successfully managed and completed the project on time even though the project encountered significant rain delays and site access problems due to the rough terrain and muddy ground which at times left plant and delivery trucks completely bogged.

Client

Evolution Mining

Principal Contractor

Pan Process

Total Value

\$5.96 Million

Project Completion

September 2012.

Summary

Installation of 18.5 Km of overhead 22kv power supply and associated connection to the mine's main substation including 132kV overhead connection to local Ergon Switchyard.



EQUIPMENT

The poles were erected using a 35 tonne excavator with rock auger and pole erection attachments, all pole holes and trenching were carried out in hard rock conditions which proved the machines capabilities

Stringing of the conductors and OPGW was completed using the Helicopter stinging method due to the tight schedule, rough terrain and associated time constraints.

Other equipment utilise onsite to complete the work included a Franna crane, 3 x Light trucks, 3 x 4X4 utilities, 6 x Elevated Work Platforms and 2 x Hiab trucks.

SAFETY

A total of 16,632 manhours worked with no injuries was a great result considering the challenges of the terrain, the general work environment and considerable amount of work carried out around operating machinery.

PROJECT MANAGEMENT SERVICES

The Project Management Services provided by PAN PROCESS included:

- Preparation and submission of project documentation and deliverables;
- Project Scheduling, HSE and Risk Management Plans, Quality Plan along with specific ITP's for work packages;
- On and off site construction activities associated with procurement, fabrication, inspection, testing, and delivery to site and subcontractor management;
- Preparation and submission of Commissioning Plans and procedures for pre-commissioning, load and no load commissioning and submission of commissioning reports.
- Managing the Staff on a FIFO roster and other logistical problems that need to be overcome when working on a remote site.

