

# Rocklea Iron Ore Project

Dragon Energy Ltd



## CLIENT:

Dragon Energy Limited

## LOCATION:

Pilbara (Tom Price)

## SERVICES:

- Level 2 subterranean fauna Survey
- Environmental impact assessment
- Taxonomy and DNA barcoding

## KEY ACHIEVEMENTS:

- All surveys completed within set timelines and budgets
- Identification of two discrete populations of troglodfauna, separated from each other by the Hardey River
- Low level impact inferred using risk-based model for environmental impact assessment
- Phoenix has subsequently been contracted to manage Dragon's Mining Proposal submission in 2014

Phoenix completed a comprehensive subterranean fauna survey for the Rocklea Iron Ore Project to define subterranean fauna values of the project area, assess environmental impacts and develop appropriate mitigation strategies.

A Level 2 survey was undertaken inside and outside the proposed mining area, which was comprised of a channel iron deposit. Bores were surveyed using current best practice methods to maximise potential for categorising stygofauna and troglodfauna communities.

This included bore scraping, a progressive method not written into current EPA guidance. However, it has been demonstrated to increase both survey effectiveness (number of species, and numbers generally) as well as survey efficiency (greater number of samples per survey effort) when compared with standard methods.

Twenty-four troglodfauna species were recorded, 21 of which were new species and categorised as short-range endemics (SREs). Nineteen stygofauna species were recorded, eight of which were new species and SREs.

Challenging species level identifications were resolved using DNA barcoding analyses, allowing for more complete characterisation of subterranean fauna. DNA barcoding demonstrated the presence of two separate communities of troglodfauna, separated by the Hardey River.

The stygofaunal assemblage was shown to consist of more widespread species than the troglodfauna communities, and represented a single community throughout the survey area.

High quality service provision and client focus has led to Phoenix being awarded the contract to manage Dragon's Mining Proposal submission in 2014, including the management of subcontracts to complete all outstanding investigations.



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