CLIENT: Red Hill Iron Ltd

LOCATION: Pannawonica Tenements (West Pilbara)

SERVICES:
- Desktop reviews
- Level 2 flora and vegetation survey
- Level 1 vertebrate fauna survey
- Targeted Northern Quoll survey
- Baseline SRE invertebrate fauna survey
- Subterranean fauna survey
- Baseline botanical survey

KEY ACHIEVEMENTS:
- Identification of likely large Northern Quoll population
- Comprehensive short-range endemic invertebrate baseline data
- Conspecific invertebrate species identified by molecular comparison of previous Pilbara data

In 2013, Phoenix was awarded the full suite of biological surveys required to conduct a comprehensive environmental impact assessment. After desktop reviews were completed, the following surveys were undertaken: Level 2 flora and vegetation; Level 1 vertebrate fauna; targeted Northern Quoll; baseline SRE invertebrate fauna; subterranean fauna. The presence of Northern Quoll, Pilbara Olive Python, Pilbara Leaf-nosed Bat and Grey Falcon were identified and a number of new invertebrate species were identified, principally by molecular analysis.

The surveys commenced with single-season, low-level surveys in order to identify the environmental values of the study area and, in particular, determine whether conservation significant species or short-range endemic fauna species do, or are likely, to occur. Vertebrate fauna and SRE surveys were completed concurrently to maximise efficiencies.

The mesa formations that comprise the study area represent unique habitats for a number of flora and fauna groups and species. These include two Priority flora species (Triodia sp. Robe River P3 and Rhynchosia bungarensis P4), but the TEC “Triodia sp. Robe River assemblages of mesas of the west Pilbara” was not found to occur; a number of troglobitic species; and Northern Quoll, Pilbara Olive Python, Pilbara Leaf-nosed bat and Grey Falcon.

The troglofauna communities of mesas associated with the Robe River for example are known to be highly endemic and diverse. The results here confirm previous findings in this regard.

The study area and surrounds to date have been found to contain a rich assemblage of endemic and conservation significant fauna species and therefore strong environmental values appear to exist. Red Hill plans to work with Phoenix to develop minimisation, mitigation and management options (in line with O EPA expectations) that reflect the environmental values of the area.