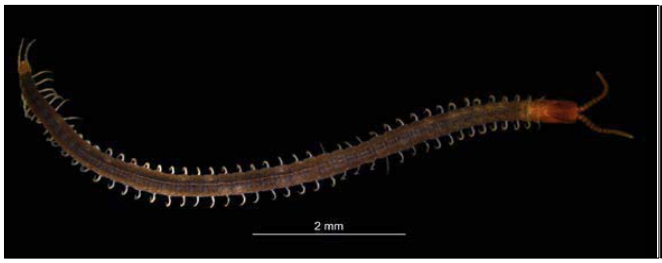
Kathleen Valley Gold Project

URS Corporation (on behalf of Glencore Xstrata)



CLIENT:

URS Corporation (on behalf of Glencore Xstrata)

LOCATION:

Goldfields region

SERVICES:

- Desktop review
- Level 2 short-range endemic invertebrate fauna survey
- Taxonomic identification
- Impact assessment

KEY ACHIEVEMENTS:

- Reduced survey scope based on the context of the project
- Molecular analysis of specimens for regional comparison
- Habitat-based management recommendations
- Comprehensive survey of reference sites provided important data on specimens from the impact area
- Impacts were modified based on presence of SREs

A baseline short-range endemic (SRE) invertebrate fauna survey was undertaken for a relatively small gold project in the Goldfields for URS Corporation on behalf of Glencore Xstrata. Based on the nature of the landscape and development, Phoenix proposed a low-level approach, surveying both disturbance and adjacent reference sites.

The project area covered approximately 82 ha and the scope of development only included open cut mines and associated infrastructure. All ore processing was to be conducted offsite. The project was expected to be assessed as a mining proposal.

An ever-changing impact footprint throughout the duration of the project required project managers and field staff to be flexible and adapt survey designs in a timely fashion.

Molecular analysis of specimens identified two conspecific centipede species, which were unidentifiable by their morphology alone. Two new centipedes, *Chilenophilidae* 'CHI001' and *Mecistocephalus* 'CHI002' did not match any prior records. The survey recorded *Mecistocephalus* 'CHI002' from inside and outside the project area, whereas *Chilenophilidae* 'CHI001' was only recorded from within the project area.

Mapping of the habitat, which correlated to the presence of these species, indicated a large degree of connectivity to broad areas of habitat outside the project area. Due to these factors, the project was likely to have a limited impact on the identified species.

Despite repeated delays to fieldwork mobilisation and changes in impact footprint, Phoenix was able to provide a comprehensive assessment for SRE endemic invertebrates for the client on time and under budget including, for the first time in WA, employing molecular tools to one of the emerging target groups for SRE surveys: geophilomorphan centipedes.

PHOENIX
ENVIRONMENTAL SCIENCES