Exploration Rehabilitation in Native Woodland

Close-spaced drilling in heavily timbered environments can cause significant disturbance to soil, shrub and tree habitat layers. Alkane Resources Ltd has demonstrated successful woodland rehabilitation on its mining lease at Peak Hill.

Background

Exploration activities should always aim to minimise impacts on biodiversity. However, removal of whole trees can be unavoidable when close-spaced drilling is required.

Rehabilitation of disturbed areas can be rapid provided care is taken with handling and stockpiling of woody material and topsoil during vegetation clearing. It should be remembered that major disturbance of woodlands does occur naturally, usually as a result of fire or wind storm.

Preparation in Woodland Area

Alkane consulted landholders from the planning stage right through to rehabilitation and provided clear information regarding the anticipated level of disturbance.

The Company's drill lines were planned and clearing carefully undertaken in the minimum area needed for safe access and working area. The equipment was matched to the task and the smallest and least surface disturbing equipment was used in the native woodland. The timber was stockpiled and topsoil stored separately. A bobcat or traxcavator effectively stacked timber when clear working space was scarce.

Alkane installed erosion control structures on steep land. Contour banks diverted storm waters into the more stable undisturbed woodland.

Rehabilitation in Woodland Area

Once drilling was completed, the land surface was restored as soon as possible. Soil and topsoil were returned and the trunks and crowns that had been stockpiled were spread over the disturbed area. Again, the equipment was matched to the task.

As for any native woodland rehabilitation project, introduced pasture species were avoided. Adequate native species were naturally contained within the topsoil, which had been stockpiled correctly for the minimum period necessary. Roughing the surface created microhabitats for native plants and animals to re-establish.

Drilling in this woodland required complete removal of trees. Trunks and crowns were spread over the disturbed area.

Regular monitoring was carried out. Where introduced pest, plant and animal species occurred in the area, control measures were implemented to improve biodiversity outcomes. Thanks to effective fencing and rehabilitation strategies across the whole minesite, two additional species of macropods were recorded in the area following the operation.

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Grasses, trees and shrubs naturally regenerate through the tree trunks and crowns