



Underground Development

Macmahon Underground Mining



With more than two decades of underground contract development experience, Macmahon has gained extensive knowledge and experience to deliver solutions for a range of operating conditions, contractual frameworks and project sizes.

The combination of a flexible, reliable mining fleet with extensive in-house operational experience allows Macmahon to deliver quality development outcomes on jobs ranging from small, single heading tasks to large scale, complex multiple jumbo projects.

Supported by our in-house raisedrilling operations and specialist ground support, Macmahon can undertake all tasks in-house, reducing interface and logistical risks to its clients.

Macmahon conducts all maintenance and maintenance planning works, supported by our state of the art workshop facilities in Perth. The current Macmahon development fleet includes:

- 7 x Atlas Copco M2D 18sp Twin boom Jumbos
- 4 x Jacon Maxijet Spray Rigs
- 2 x Jacon Transmixer 5000 Agitator Trucks
- 6 x Elphinstone LHDs
- 9 x Sandvik Trucks

Macmahon has established an enviable reputation as the contractor of choice where industry leading safety and quality outcomes are required.

Key development contracts

Olympic Dam Mine (SA) – BHP Billiton

Located at Roxby Downs in central South Australia, Macmahon employed more than 200 personnel at BHP Billiton's Olympic Dam Mine. Macmahon has been associated with the project since 2003 and has completed development and associated works, in addition to providing complete fibrecreting, cablebolting and raisedrilling services. Macmahon also completed Olympic Dam's A-Block Decline, including full portal establishment.

Ranger 3 Deeps Exploration Decline (NT) – ERA (subsidiary of Rio Tinto)

Macmahon completed the development of a single heading exploration decline for ERA's Ranger 3 Deeps project, located about 245km east of Darwin in the Northern Territory. This work included a boxcut and Armco tunnel installation, surface infrastructure and about 2200m of underground development

Argyle Diamond Mine (WA) – Argyle Diamonds Pty Ltd (subsidiary of Rio Tinto)

Macmahon undertook underground development and engineering construction works at Argyle, located about 170km south of Kununurra in Western Australia. Macmahon employed about 350 people at Argyle, operating and maintaining the primarily client owned fleet. The project consisted of about 30km of lateral development and the establishment of drawpoints and undercutting for an underground block caving operation.

George Fisher Mine (QLD) – Xstrata

Macmahon was retained by Xstrata to undertake expansion works at the George Fisher Mine, with the scope encompassing all aspects of development, in addition to vertical development solutions of shaft sinking and the raiseboring of up to four shafts. Macmahon was also responsible for all mechanised cablebolting at George Fisher.

Cadia/Ridgeway (NSW) – Newcrest

Development works, including establishment of two portals, production drilling, production load and haul and specialist underground ground support work.

Renison Tin Mine (TAS) – Metals X

Full development and production contract.

Savannah (WA) – Panoramic Resources

Decline and level development.

Rasp Decline (NSW) – CBH Resources

Portal establishment, fibrecreting, cablebolting and decline development in close proximity to a residential area, requiring special attention to blast vibration and noise.

Mt Isa N3500 (QLD) – Xstrata

Decline and level development, including operational impacts of working in elevated temperatures and adverse ground conditions.

Daisy Milano (WA) – Perilya

Decline refurbishment and development.

Leinster Nickel Operations (WA) – BHP Billiton

Decline and capital development.

Emily Ann (WA) – LionOre

Establishment of primary decline in addition to a ventilation decline, both requiring the installation of steel sets.

Bendigo Gold (VIC) – Bendigo Mining

Decline and level development, involving significant interactions with remnant mining areas guided by a comprehensive water management plan. Development was carried out directly beneath densely populated areas, requiring particular attention to community relations and cautious blasting practices and surface noise attenuation. Push pull secondary ventilation systems were used due to the significant distance between primary vent intakes.

Elura Mine (NSW) – Pasminco

Shaft access decline and level development.

Peak Gold Mine (NSW) – Rio Tinto/Wheaton River Gold

New Occidental decline and level development from Peak operation, in addition to level development at Peak Gold Mine. Secondary push pull ventilation system was utilised to achieve projected ventilation raise location.

Selwyn Mine (QLD) – Selwyn Mines

Decline and level development at the Mt Elliot operation.