



CAPABILITY STATEMENT OPEN-CUT COAL MINING SERVICES

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MINING ONE GROUP

Mining One was established in August 2005 to provide technical expertise in the fields of geotechnical engineering, resource geology and mining engineering to the mining industry. The group is led by Gary Davison, Kevin Dugan and Bill Frazer who collectively have over 90 years of technical experience. Their main criteria is to actively manage and provide quality, high performance services which will enable Mining One to deliver excellent results for their clients.

Our group has grown rapidly since its formation and now boasts of team of 60+ experienced and highly professional personnel. We have been involved in a wide variety of mining projects internationally including extensive work in South East Asia, Africa, South America and China.

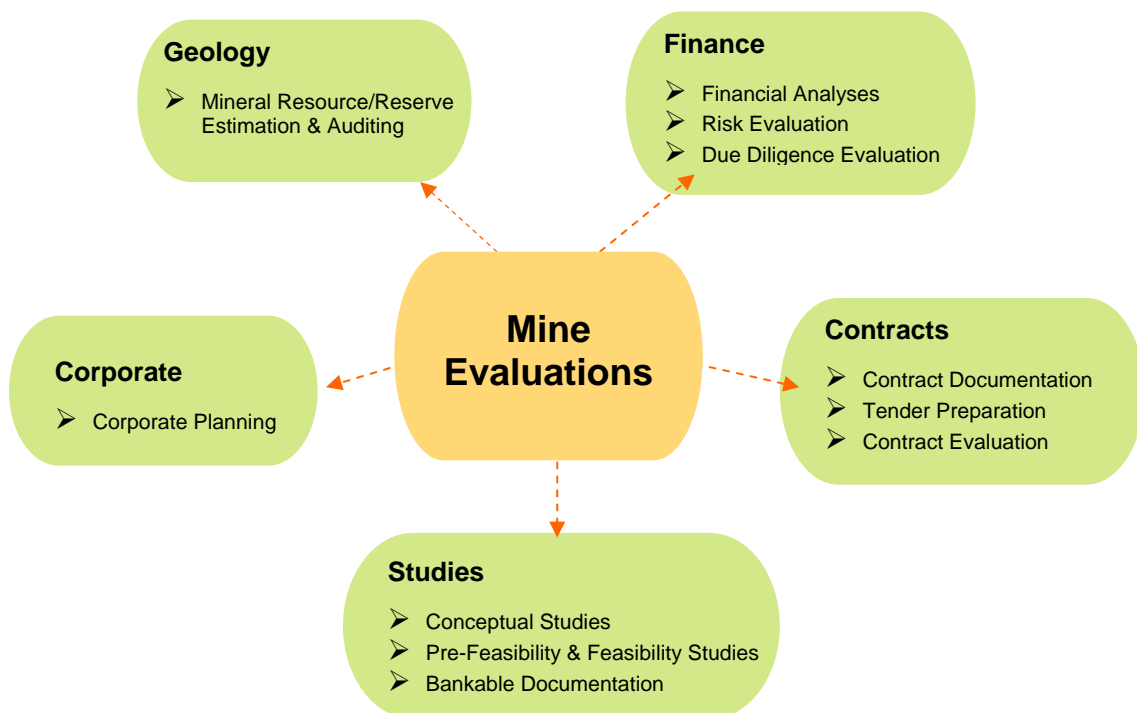
We offer long term value to our clients by keeping up to date with new technologies and pride ourselves in being innovative with our designs and recommendations for new and existing mining operations.

Mining One strives to provide excellence and commitment to our clients with services ranging from high level strategic to hands on practical design and implementation. Our well respected team has extensive industry knowledge and experience in a diverse range of disciplines.

Mining Services

The mining group provides a diverse range of services in the fields of mine design, mine planning, mine operation and mine evaluation.

Mine Evaluations



Studies

- Conceptual studies, pre-feasibility and feasibility examinations
- Due Diligence examinations
- Mining method assessment
- Underground mine design and scheduling
- Open pit mine optimisation, design and scheduling
- Geotechnical examination of mine excavation and slope stability
- Assessment of ground support requirements
- Mine services design, haulage, filling, pumping and ventilation
- Mine infrastructure design

Contracts

- Contract documentation
- Tender evaluation
- Contract supervision
- Contract auditing
- Labour Hire

Finance

- Financial modelling
- Financial analyses
- Financial risk analysis
- Project costing
- Valuing mining prospects and projects
- Economic assessment

Corporate

- Independent technical audits
- Due diligence studies
- Independent mine valuation and expert reports
- Advice and assistance for corporate strategies

Geology

- Geological mapping and interpretation
- Preparation and management of drilling programs
- Structural geology

- Geochemical interpretation
- Resource and reserve estimation and auditing

MINE OPERATIONS

Mining One personnel have extensive experience working with operating mines and are able to assist mining operations in a wide range of areas as summarised below:



Implementation

- Implementation of planning procedures and designs
- Implementation of work procedures
- Geotechnical training including ground support training for operators and professionals

Workplace risk assessments and risk assessment training

- Mine emergency preparedness training
- Implementation of team based solutions to operational problems
- Relief mine management

Geotechnical Monitoring

- Installation of ground support monitoring systems
- Monitoring of rock mass movement

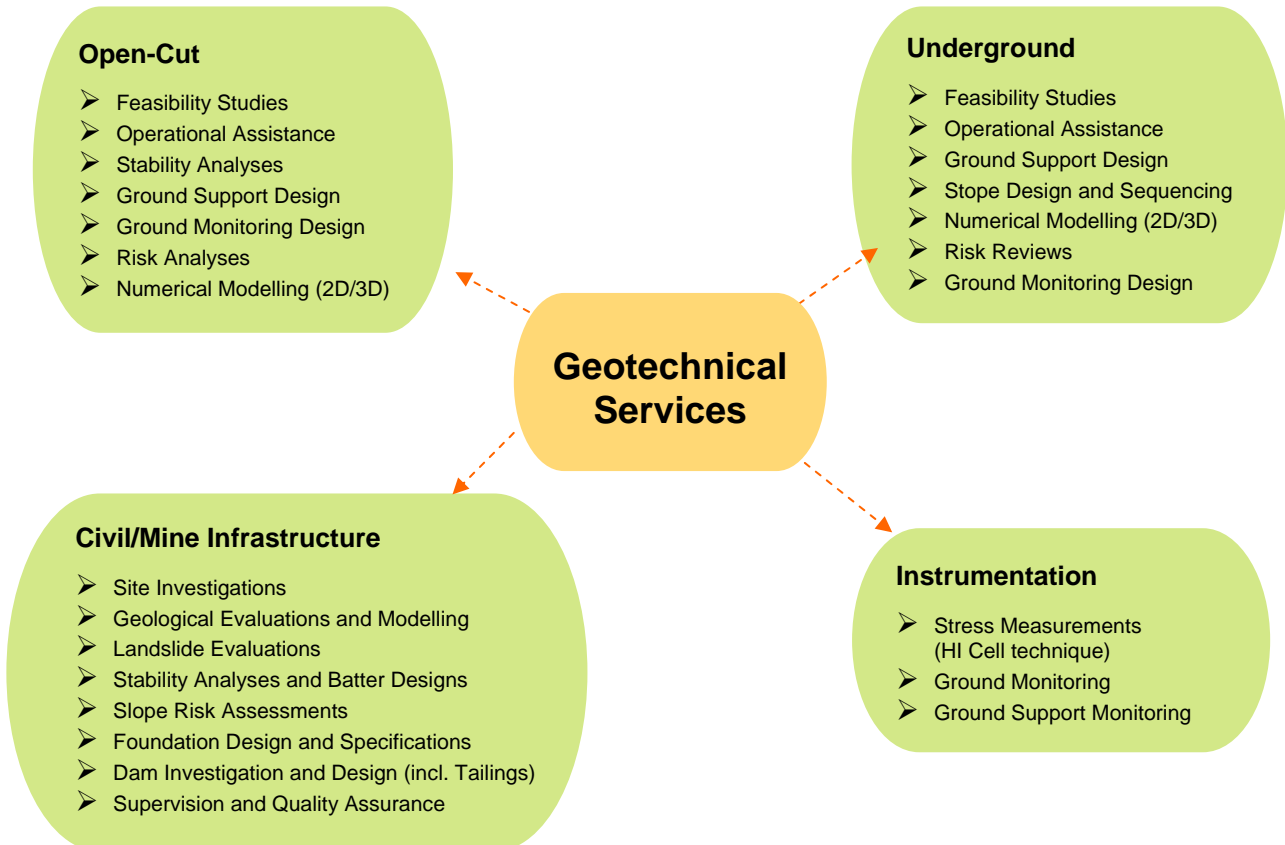
- Checking the performance of ground support and the application of correct installation procedures
- Monitoring of working systems and procedures
- Stress measurement and modelling (2D and 3D)

Review of Operations

- Reviews and audits of operations
- Safety audits
- Insurance audits
- Cost reviewing and auditing

GEOTECHNICAL SERVICES

Mining One personnel have completed extensive geotechnical work for Australian and overseas mines. Our work extends to both underground and open pit mines, which has enabled us to cover a broad range of services to the mining industry. We also carry out civil geotechnical work which covers designs for infrastructure foundations, tunnels, geotechnical hazard risk assessments, construction supervision, tailing dam investigations and landslide assessment.



OPEN-CUT GEOTECHNICAL EXPERIENCE

Mining One personnel have worked on an extensive range of open-cut geotechnical and slope stability design projects in both coal and metals, including:

- Lihir gold mine (Papua New Guinea) - Geotechnical assessment following a major landslide of their main access road in October 2005 in which there were two fatalities.
- Chatree and Chatree North (Thailand) - Geotechnical pre-feasibility studies for numerous pits as well as reviews, investigations and training.
- Siana Gold Project (Philippines) - Scoping, pre-feasibility and bankable feasibility study of a proposed 200m deep pit in a seismically active, high rainfall area.
- Peak Hill gold mine (NSW) - Several open pits in weak rock have been mined near the town of Peak Hill in Central NSW, Australia. Water supply reservoirs and various access roads near the completed open pits near the town were investigated for long term stability.
- Kidston gold mine (QLD) - Onsite operational assistance in the last (difficult) years of the open pit. Work included assistance to site on a critical north wall failure on the haulroad prior to pit closure. Work covered investigations, slope stability analysis, ground support design and slope monitoring.
- Woodlawn mine (NSW) - This open pit/underground mine site is located near Canberra in NSW. A detailed investigation of the completed open pit was performed while the underground was still operating. The project involved converting the open pit to a waste repository for Sydney, to operate for a period of 40-50 years, requiring long-term stability of the open pit. The waste project was approved by the State Government after the technical issues have been approved by the various regulatory authorities.
- Southern Oxide and New Cobar open pit (NSW) - Investigation and design of open pits above old underground mines and close to town infrastructure.
- Alcoa Australia, Anglesea coal mine (VIC) - Investigation, design and installation of ground and groundwater instrumentation, including inclinometers and piezometers in a 100m high slope, 20-25m from a public road and look out areas.
- Yallourn coal mine (VIC) - Southern Batters slope stability geotechnical review, and a review of factors leading to a major failure of the Latrobe River Batters.
- Savage River iron ore mine (TAS) - Long term involvement including major works on river diversions, conveyor re-alignment, slope stability analyses including numerical stress modelling of large-scale slope instability using Itasca UDEC software.
- Century mine (QLD) - Regular reviews, slope designs of long-term mining options to optimise ore extraction sequence while maintaining interim and final wall stability, including numerical stress modelling using Itasca UDEC software.
- Leigh Creek coal mine (SA) - Investigations and stability analyses of large-scale open-pit wall failure, including numerical stress modelling. The failure proved to be due to an unusual stress-related mechanism. Subsequent designs for future mining were modelled and implemented to result in successful continuation of mining.

COAL EXPERIENCE

Our Mining One personnel have extensive experience in geotechnical investigations and designs for both open-cut and underground coal mines. Recent coal mining geotechnical projects completed by Mining One include:

- Bengalla (NSW) - Reviews and stability analyses of life-of-mine dragline spoil designs
- Loy Yang mine (VIC) - Depressurisation and geotechnical strategic review
- Loy Yang mine (VIC) - Review of waste dump procedures, including stability assessment
- Loy Yang mine (VIC) - Long term mine planning study at Loy Yang
- Eaglefield mine (QLD) - Regular geotechnical review of open cut mine
- Yallourn mine (VIC) - Review of major failure of Latrobe River Batters
- Leigh Creek mine (SA) - Regular geotechnical reviews and stability analyses

In addition, our Principal Geotechnical Engineer, David Lucas, has worked in site-based roles in coal mining operations from 1995 to 2005. As a consultant, since 2005, he has carried out geotechnical reviews and stability assessments for Bengalla (NSW) and Leigh Creek (SA). David's input at Bengalla enabled the mine to optimise their spoil dump designs according to the specific floor conditions that influence stability.

Our Senior Geologist Rob Gaulton, managed a team of earth scientists and technical specialists providing a wide range of geological services to SECV mining operations (4 open cut coal mines). He was involved in general resource delineation and exploration. He also managed SECV drilling activities (6 rigs, 25 personnel) between 1984 and 1987, and managed various scientific investigations and coal sampling projects.

Other examples of major coal mine geotechnical projects and operations assistance provided by Mining One personnel include:

Bengalla Mine (NSW)

- Geotechnical reviews
- Geotechnical investigation of a spoil dump failure, highlighting operational practices that contributed to the failure which assisted the mine in preventing re-occurrences
- Spoil dump stability assessments involving: input into drilling investigations and testing, assessment of floor conditions and analysis of spoil dump designs

Cameby Downs (QLD)

- Geotechnical investigation and design of proposed open cut coal mine in Surat Basin

Anglesea Coal Mine (VIC) - Alcoa

- Regular inspections, reviews and reports
- Geotechnical investigations including downhole geophysical testing
- Slope stability investigations and analyses (limit equilibrium and finite difference, FLAC)
- Piezometer and inclinometer installations and slope monitoring reviews/advice
- Laboratory testing (soil and rock) at our NATA registered laboratory in Melbourne
- Slope de-pressurisation design and supervision
- Long term mine planning and 3D visualisation (using the SURPAC and MicroLYNX packages)
- Piezometer and inclinometer installations, slope monitoring and dewatering
- Regular inspections, reviews and reporting
- Mine planning and scheduling (conceptual and long term)
- 3D visualisation and fly-arounds

Yallourn Energy (VIC)

- Supervision, logging and instrumentation contract (piezometers, extensometers), 1999
- Review of geotechnical and hydrogeological issues at Eastfield
- Peer reviews
- Data collection for drilling and instrumentation:
 - Geotechnical
 - Aquifer stratigraphy, water pressure control in deep aquifers
 - Resource definitions
- Northern Extension Project – Evaluation of re-opening options
- Southern Batters slope stability geotechnical review
- Latrobe River Batters slope failure investigation – peer review

Maryvale Project 1999/2000

- Comprehensive review and documentation of about twenty two (22) previous geotechnical reports on Eastfield, the Eastfield buffer, the north-east surcharge area and the Maryvale buffer
- Detailed stability analyses using the UDEC/FLAC packages
- Design and costing work for the stability and support of the Maryvale channel excavation

Aims of our geotechnical work at Maryvale were to provide innovative ideas and this included:

- Reducing the proposal buffer widths at Eastfield to extend the mine life
- Examining the cost benefits versus increased risks for the various options available
- Reducing the Maryvale buffer width and steepening slope angles to mine additional coal

Loy Yang Mine (VIC)

- Geotechnical support to daily operations on open pits and waste dumps (i.e. inspections, stability reviews, etc.)
- Quarterly and annual geotechnical reviews of batter stability
- Hydrogeological support to pit dewatering operations
- Supervised coal resource and fault drilling program
- Annual reviews of power station structures

Hazelwood Coal Mine (VIC)

- Annual dam safety inspections
- Major dam safety review and investigation (Cooling Pond) and remedial design
- Liquefaction investigation
- Foundation investigation of Ash pond for future raising
- Annual geotechnical review of open pit batter stability

Rolleston (QLD)

- Geological Engineering assessment for proposed railway route through Bowen Basin for new mine at Rolleston
- Cuts/fill stability assessment and design in coal etc.

Collie (WA)

- Hydrogeological assessment of Collie region for SRWC
- Developed regional groundwater model for area which focused on 3 open pit coal mines

Mt Owen (NSW)

- Geotechnical & Production review of blast patterns for legal proceedings

Driffield Mine (VIC)

- Expert review on Morwell River diversion and stand-off distances
- Expert witness at Tribunal hearings

BHP, Utah Mines (Goonyella and Blackwater) (QLD)

- Highwall and spoil pile stability analysis and redesign

Lalat Prospect, Mindanao Coalfield (Philippines)

- Feasibility Study

Leigh Creek Coalfield (SA)

- Geotechnical management and reviews
- Data collection and database management
- Designs, probabilistic analyses, stability analyses and groundwater assessments
- Investigations into a major lowwall failure (May 2001) which occurred due to a previously unforeseen stress-related mechanism, including numerical stress modelling using Itasca UDEC software
- Designs of future mining cuts using the same approach as the failure investigation, resulting in successful continuation of the mining operation
- Management of Slope Stability Radar for continued mining after the lowwall failure
- Workforce technical presentations on key issues including geotechnical hazard awareness

Other notable open pit mine work completed by Mining One personnel includes reviews and analyses at the Mae Moh lignite mine in Thailand and geotechnical analyses for the American consulting company, Call and Nicholas at El Cerrejon in South America.

HEALTH, SAFETY AND ENVIRONMENT POLICY

All Mining One Pty Ltd operations are carried out in a manner that will protect the health and safety of employees, contractors, customers and the community. Mining One Pty Ltd's services will conform to this policy, and adequate advice will be provided to encourage a safe and responsible service.

To achieve this, Mining One shall:

- Provide and maintain healthy and safe work places and ensure that equipment is in a safe condition
- Keep reviewing areas, equipment and work methods, to further improve safety and health in the belief that all occupational injuries and illness can be prevented
- Provide systems of work to prevent accidental spillages and releases, and seek to minimise discharges to air, water and land that may harm the environment or cause harm to the health of employees, contractors and others living and working in the vicinity of our operations
- Provide health and safety training to employees and our sub contractors
- Implement an effective return to work policy for ill or injured workers
- Provide services that are safe, without endangering the health of employees, users and others
- Co-operate with clients to ensure that our policies and work methods are consistent with their requirements for site access

All managers, supervisors, operations personnel and sub contractors are accountable for health and safety performance in their areas.

Mining One's OH&S Manual can be provided upon request.

INSURANCES AND WORKCOVER

Mining One has the following current insurance:

- Professional Indemnity Insurance
- Public Liability Insurance
- WorkCover Insurance

Certificates of Currency for each of the above can be supplied upon request.