



MICHAEL NEILSON

Senior Mining Engineer

BEng (Mining) Hons – University of NSW
MAusIMM



Michael has over 8 years’ experience as a Mining Engineer. He is a highly motivated and skilled mine planner and expert level Spry user. He is a strategic thinker; a creative problem solver; a considered decision maker; adept in the complex situations; and someone who always holds the best interest of the business at heart. Michael has worked on a wide range of projects, largely in open cut coal, both domestically and abroad. During this time, Michael has demonstrated excellent proficiency in deposit characterising, ROM modelling, pit optimising, pit designing, pit and dump scheduling, haulage modelling, equipment selection, and cost modelling. More recently, Michael has had experience training Clients in Spry software and helping to implement mine planning processes on site. To add to this, Michael has excellent written and communication skills.

Apart from his technical competence, a key strength of Michael is his ability to ask and answer the “so what?” question to address the key project issues. Whilst Michael’s expertise has largely been focussed on open cut coal, he has also worked on a number of metalliferous projects and has spent time working on-site at Savage River magnetite mine in Tasmania.

Expertise

- **Deposit Characterisation:** Assessing the deposit for mining in terms of its quality and layout
- **ROM Modelling:** Applying working section logic on the insitu geology to develop a workable ROM model
- **Optimisation:** Using the Lerchs Grossman technique to identify mining development zones
- **Design and Scheduling:** Detailed mine design and scheduling including the development of life of mine plans
- **Fleet Selection:** Optimising equipment selection based on economic, design and operating considerations
- **Strategic Mine Planning:** Maximising the resource value, focussing on generating strategic alternatives
- **Feasibility Studies:** Full-spectrum mine planning to produce definitive outcomes and recommendations
- **Project Valuations:** Constructing economic model outputs from assumptions and results of mine planning studies
- **Due Diligence and Independent Expert Reports:** Involvement in appraisal of projects for third parties
- **Software and Process Implementation:** Training mine-site staff in mine planning software and processes
- **Computer Proficiency:** Deswik CAD, Deswik Interactive Scheduler, Spry, Geovia Minex, XPAC, Talpac, and Microsoft Suite.

Career Highlights

- **Xenith Consulting:** Vale Mozambique mentoring, spry implementation, and strategic mine planning; Baramulti Sumatra mine plan and JORC Reserves; Katingan Ria Life of Mine Plan and feasibility study; due diligence and valuation of Hunter Valley coal assets; BHP Mt Arthur ROM model and spry implementation
- **Minarco-Mineconsult:** Involvement in a broad range of projects including pre-feasibility and feasibility studies, LOM plans, option studies, DD studies, technical reports, and project valuations.

Professional Experience

Senior Mining Engineer	2018 – Current	Xenith Consulting Pty Ltd
Mining Engineer	2012 – 2018	
Mining Engineer	2010 – 2012	Minarco-Mineconsult
Mining Technical Assistant	2009 – 2010	
Geotechnical Assistant	2007 – 2008	Savage River Mine, Grange Resources
Vacation Student	2006	Angus Place Colliery, Centennial Coal