



*Add value
to your operation.
Add confidence to
your investment
decision.*

**Xenith**

COAL INDUSTRY CONSULTING



Project, Concept & Feasibility Studies
Resource Evaluation & Geological Modelling
Operations Planning, Design & Scheduling
Due Diligence & Technical Reviews
Coal Industry Consulting
Valuation & Corporate Advisory
Metals & Minerals Industry Consulting
Business Optimisation, Financial Modelling & Cost Review
Infrastructure & Project Management
Exploration Management
Land Rehabilitation
Environment & Approvals



COAL INDUSTRY CONSULTING

XENITH PROVIDES A FULL MULTI-DISCIPLINARY CONSULTING SERVICE FROM RESOURCE TARGET GENERATION AND EXPLORATION MANAGEMENT THROUGH TO GEOLOGICAL MODELLING, MINE OPERATIONAL SUPPORT, FEASIBILITY STUDIES AND DETAILED MINE PLANNING, INCLUDING SPECIALIST FINANCIAL ANALYSIS, INFRASTRUCTURE DESIGN AND CORPORATE ADVISORY FUNCTIONS.

Expertise

Our team offers expertise in:

- Exploration planning, cost estimation and execution in the field
- Full turnkey exploration and tenement management
- Geological modelling and audits of models
- Concept, Prefeasibility and Feasibility studies
- Mining method selection and optimisation
- Equipment selection, benchmarking and cost estimation
- Mining pit, production rate and product optimisation
- Mining roster and labour options analysis
- Excavate, dump and haul scheduling and simulation
- Detailed short-term designs and 3D simulations for execution in the field
- VALMIN Code Valuations and JORC Resource and Reserve Estimation

- Capital and operating cost estimation
- Closure, Rehabilitation & Final Landform Planning
- Onsite and offsite infrastructure
- Tenure and approvals management
- Brownfields project tollgating eg. expansions, equipment replacement
- Due Diligence studies and Merger/ Acquisition advisory.

Technology

Our team has expertise in, and utilises the following software:

- Deswik, Vulcan, Minex, Minescape
- Spry, XPAC, Dragsim, Talpac
- 3d-Dig Plus
- Xeras, RuleFour
- ArcGIS
- Global Mapper
- Microsoft Office products
- AutoCAD
- Leapfrog.

CASE STUDY

Our client had recently acquired a coal asset. We were initially asked to produce a Budget schedule with given input assumptions. We noticed that the dragline system and dragline planning in general left room for optimisation, so we worked closely with our client to examine options for implementing modern dragline methods which use bulk dozer push and bench

configurations that maximise coal uncover rate and minimise overall cost. We engaged with stakeholders from senior management to site supervisors to gain acceptance of the changes and monitored implementation of the new approaches. We are now trusted members of our client's trusted Technical Services team and deliver "Short Range Forecast" schedules,

dragline dig plans supported by detailed 3D simulations and a range of other short-term dig and dump designs for execution on site.

We have also been able to assist our client with major asset-level decisions to arm them with the right information with which they have confidently navigated the difficult path through the Covid-19 pandemic.

