

Objective

Xenco was engaged to support the Mine Management team in identifying and addressing inefficiencies within their open-pit nickel mining operation. The objective was to improve operational intensity, optimise planning processes, and deliver sustainable production improvements. By providing specialised mine planning expertise, Xenco aimed to uncover high-value opportunities that would enhance short-and long-term mine performance while ensuring practical, actionable solutions for implementation.

The Challenges

During the engagement, several key challenges were identified:

Recurring inefficiencies – The mine faced ongoing operational inefficiencies that impacted production performance.

Limited visibility on opportunities – The management team needed expert support to pinpoint areas for improvement.

Planning misalignment – Ensuring the operational plan aligned with sustainable production goals required detailed analysis.

Operational constraints – Existing mining methods, equipment usage, and contractor management practices posed limitations.

Data accuracy and integration – Effective decision-making was hindered by inconsistencies in planning cycle data and operational reporting.

AT A GLANCE

Challenges

- Operational inefficiencies
- Limited visibility on optimisation opportunities
- Misalignment in planning
- Constraints in mining methods, equipment usage, and contractor management
- Data inconsistencies affecting decision-making

Benefits

- 10 high-value recommendations to improve operational efficiency and profitability
- Optimised planning alignment for enhanced operational performance
- Data-supported decision-making through detailed analysis and scenario modelling
- Report providing actionable insights for sustainable improvements

Xenco is a multi-disciplined, specialist service group that delivers executive and operational level support to businesses seeking significant improvements in productivity, efficiencies and company profitability.



Our Approach

To address the client's operational inefficiencies and identify optimisation opportunities, Xenco deployed a systematic, data-driven approach. During a 5-day visit, our team conducted pit observations and engaged with key personnel across planning and operational teams to gather insights and validate findings.

The process included:



Pre-site Analysis

Review of planning cycles, operational data, and key documentation to understand existing practices and identify initial areas for improvement.

On-site Engagement

Conducted detailed observations and discussions with mine planning and operational teams to validate data and uncover further insights.

Collaborative Review

Identify and assess potential recommendations and opportunities with the client's team, ensuring alignment with operational realities and strategic goals.

Data-backed Recommendations

Deliver optimised scenarios supported by solid data analysis, providing actionable insights and a comprehensive, serviceable report.



Our Results

Through a structured analysis and on-site engagement, Xenco delivered actionable insights that addressed key inefficiencies and optimised mine performance.

Some **key results** were:

- 10 high-value recommendations delivered to improve operational efficiency and profitability.
- Optimised planning alignment to enhance operational performance.
- Identified opportunities in grade control, mining methods, pit design, and contractor management.
- Data-supported decision-making enabled through detailed analysis and scenario modelling.
- Practical, serviceable report provided, offering actionable insights for sustainable improvements.







