

XACT drives short term mine scheduling excellence

"XACT is a perfect tool for GRC. It does such a great job and is very well suited to the size and dynamic nature of our mine. There is simply no comparison between XACT and excel."

Ricardo Garcia
Corporate Chief Engineer

Overview

Gold Resource Corporation (GRC) is a progressive gold producer targeting projects that feature low operating costs and high returns on capital. The Company's primary focus is on increasing cash flow through effective operating processes and technologies amidst an ever-changing operating environment.

The gold mine forming the basis of this case study is located in GRC's 'Oaxaca Mining Unit', based in the southern state of Oaxaca, Mexico. Mexico boasts a 500 year history of mining and is one of the leading mining regions in the world.

Case Study

Company	Gold Resource Corporation
Commodity	Gold
Solution	XACT
Location	Nevada, United States



Challenge

GRC's vision is to deliver top quartile performance. Together with constant fluctuations in commodity prices and complex geological conditions, achieving top quartile performance without the right tools in place was challenging. Prior to April 2016, GRC relied upon multiple excel spreadsheets as the vehicle to produce mine schedules. This process would typically take up to 3 weeks and was without the ability to respond to fluctuating market conditions. GRC required a powerful, graphical scheduling solution that would enable them to rapidly respond to fluctuating market conditions in real time.

"XACT is the single source of truth for our entire reserve database."

Ricardo Garcia
Corporate Chief Engineer

The specific objectives of GRC's initiatives were straightforward:

- A solution that could easily take the mine's entire reserve database and present the most appropriate schedule based on a specific commodity price in real time
- Improve productivity and efficiency in the workflow requirements of mine planning and scheduling
- Increase production levels as a result of optimal mine plans
- Improve visibility and transparency
- Provide an audit trail and robust data integrity
- A solution that, in future, could be transferable across multiple sites with multiple mining methods
- A solution that was simple to use and easy to on-board new recruits

To meet these objectives, GRC assessed three vendors in total.

Solutions

RPMGlobal's XACT solution addressed all of GRC's challenges. Benefits of the solution were realised immediately and XACT was rapidly recognised as a dynamic and robust technology platform that would take GRC's scheduling outputs to the next level. XACT was implemented within 3 days and produced an optimised mine schedule within a week. Engineers are now able to assess multiple mine plans and adjust mining parameters based on fluctuating commodity prices in real time.

No longer are mining engineers spending up to 3 weeks in manually inputting detail of each reserve. Using XACT, engineers can input their entire reserve database and turn non-economic blocks 'on' and 'off' based on findings presented in the schedules in real time. It was this dynamic and robust nature of XACT that made users of the solution, as well as head office, consider it technology that would remain at the core of GRC's success moving forward.

Impact

A dynamic, high-performing and cost effective solution that is a key component of GRC's overall mining operation. Since implementation, XACT has delivered significant value to GRC's bottom line including:

- **Single source of the truth database.** XACT works as a complete database encompassing GRC's entire body of reserves. GRC can now strategically plan their mine within seconds and respond to market fluctuations in real time.
- **Significant reduction in time to produce mine schedules.** Mining engineers are now producing schedules within 3 days as opposed to 3 weeks.
- **Decreased Lost Production Revenue.** GRC is able to apply best-practice scheduling plans to optimise the mine's production levels.
- **Increased Reliability and Accuracy.** XACT's proven capabilities allows for constant changes in production environments to be readily and easily reflected in schedules.

