Leica Geosystems

navigates sites to profit

Resource rich Western Australia has carved out a global reputation as a world-leading supplier of high quality commodities. Digging away into 2009, how are some of Western Australia's leading sites maintaining their successful track record in a time of economic turbulence?

Figure 1

Figure 2

Jigsaw360 replicates information across sites in real-time to provide:

- Improved mining machine utilisation
- Tracking of material movement
- Production monitoring
- Operator management
- 'Best path' assignment routes
- Machine-to-machine position awareness

Regularly referred to as the "powerhouse of the Australian resources industry, Western Australian (a.k.a. WA) is one of the world's most industrious and diversified mineral and petroleum regions. As the largest contributor to the state's gross product, at more than 27%, the WA mining sector employs in excess of 51% of the state's labour force (Australian Bureau of Statistics, 2007) and is home to more that 770 operating mine sites which span open pit, underground and quarries.

Supporting Western Australia, and the mass-production of their prime resources, is a number of key providers who specialise in mine site optimisation software and hardware. Paving the way and setting new standards in this constant technological revolution, with their proven and pioneering technologies, are world renowned Leica Geosystems Mining Systems. With a deliberate focus on further increasing market share—and cementing their commitment to the WA mining industry—Leica Geosystems opened a satellite office in Perth last year, to act as an extension of the Company's Brisbane-based global technical centre.

As a result of Leica Geosystems' expansion into Western Australia, a burgeoning client base has organically developed and the Company's WA sites include an array of mining disciplines such as gold, alumina and iron ore producers. This has inturn called for additional project bases and an increase in local field technicians to provide support coverage to their customer's sites—which are spread from the south-west of the state, through to the remote Pilbara region.

Speaking with Michael Stockbridge (Account Manager, Leica Geosystems) as to why sites are choosing Leica Geosystems for their operations, he said that: "There are several primary goals that sites consider when selecting a mine management solution: an increase in the tonnages being produced, improved fleet utilisation and better production control. The review processes that our customers are guided by compares all major fleet management systems. The outcome of their findings position Leica Geosystems' Jigsaw360 Mine Management Solution as being the most advanced and stable technology currently available within the mining industry."

He further added that one of Leica Geosystems' rapid developing Western Australian owner-operator sites selected the Jigsaw360 Mine Management Solution last year "…due to its ability to deliver improved performance in an out-of-the-box solution."

The Jigsaw360 Mine Management solution that Mr Stockbridge is referring to is the overarching product suite name given to the latest high-tech fleet optimisation, GPS navigation, production monitoring and reporting solution from Leica Geosystems. By using this proven technology to improve productivity and lower operational costs, mine sites can better meet their production targets and implement improvements. Harnessing real-time information, Jigsaw360 works to automatically provide optimised truck and shovel assignments; monitor and report key performance indicators (KPIs), and increase overall productivity. In economically unstable times, such as those that we have witnessed of late, sites are now more than ever facing increased challenges as they aim to meet critical targets and deadlines. Looking to the future, it's scalable and incrementally upgradable optimisation solutions, such as Jigsaw360, that have become a critical part of site planning and projection.

According to Mr Stockbridge another integral reason as to why Western Australian mining operations are selecting Leica Geosystems is for their ability to deliver a financial return on their investment. "The production increases and improved equipment efficiency generated by our mining solution provides a direct return on invested capital in as little time as six months, depending on the site's current processes. Specific improvements are seen in site awareness and safety, decreased labour requirements, improved fuel usage, fewer engine hours against output, and TKPH (tonnes per kilometre per hour) for enhanced tyre management."

Highlighting the way in which Leica Geosystems work closely with their customers to resolve site inefficiencies and challenges in order to gain tangible benefits from their mine management solution, Mr Stockbridge closed by saying, "I've had extensive experience with a number of fleet management, low precision GPS, and high precision GPS suppliers in the past and I'm continually impressed by the commitment that Leica Geosystems give to their customer base by constantly improving and providing practical working solutions for sites."

Figure 1 LeicaWA_01 – "Leica Geosystems' Jigsaw360 Increases productivity at a WA gold mine

Figure 2 LeicaWA_02 – "Improved machine utilisation with Jigsaw360"