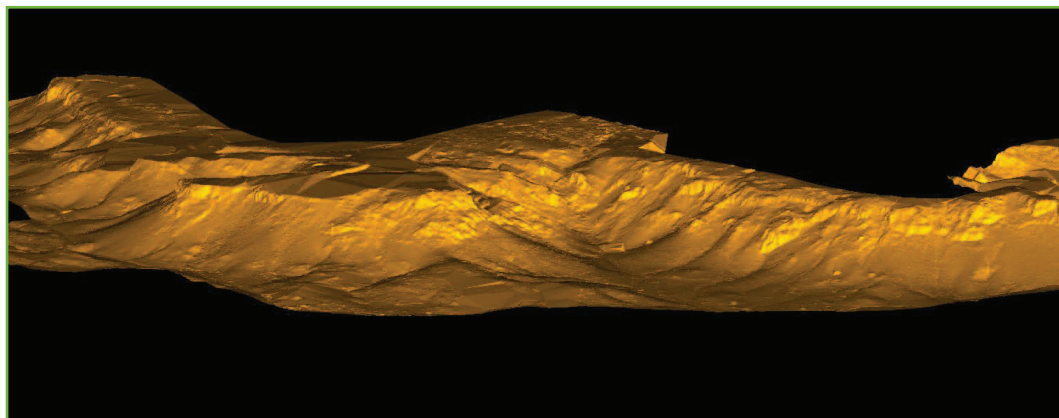


## Scanning the Pilbara

Atlas Iron has realised the benefits of using the Maptek I-Site™ 8800 laser scanner to acquire detailed topographic data for new mining projects in the Pilbara.



Model of Wodgina mining area

### LASER SCANNING ADVANTAGES

- Higher resolution data
- Up to date data when you need it
- Massive saving in field time
- More cost effective than aerial mapping
- More accurate pit designs

Atlas Iron is committed to the exploration and development of iron ore projects throughout Western Australia. As an emerging producer of iron ore, Atlas Iron has an extensive portfolio of projects which cover an area of more than 15,000 km<sup>2</sup> in the northeast Pilbara, Newman area and Midwest of Western Australia.

The company has recently expanded its footprint around Newman and will target large scale orebodies in the southeast Pilbara as it looks to expand its resource and reserve base. Two key operations in this expansion are Mount Dove and Wodgina.

The I-Site 8800 laser scanner was commissioned by Atlas to provide up-to-date, detailed surface topography data of these two emerging mining operations. Existing aerial survey data from the 1960s was not detailed enough or reliable for Atlas Iron to use in mining preparations.

I-Site Sales and Technical Consultant, Luke Holdcroft and Atlas Iron Senior Surveyor Gary Johnson were able to capture all the data needed from both sites in two days.

**All of the data and 3D models were available to Atlas immediately, something that is simply not possible with conventional methods such as aerial or GPS surveying.**

Scanning at Mount Dove involved surveying almost 600,000 m<sup>2</sup> of undulating terrain. The portability of the I-Site 8800 laser scanner was greatly appreciated, especially when climbing the summit of Mount Dove.

At the Wodgina operation, 13 scans of the area and surrounding hills were captured.

As Gary explains, 'With mining already underway at Wodgina, we wanted accurate topographic data of the operation to assist with future mine development and planning.'

'Maptek provided us with an effective solution to acquire and process spatial data. It was safe, cost effective and unparalleled in accuracy.'

'In less than 4 hours at Mount Dove we observed 21 million points. Capturing this number of points would take 210,000 hours with conventional equipment which generally rates at 100 points/hour.'



Modelled topographic data for Mount Dove (left) Maptek and Atlas Iron staff with I-Site 8800 laser scanner at Wodgina (right)

Triangulations, contour files and gridded point files at 1 metre and 5 metre spacings of the two areas were modelled from the scan. This data can now be exported to Maptek Vulcan™ software for further geotechnical analysis and mine planning.

**‘MAPTEK PROVIDED US WITH AN EFFECTIVE SOLUTION TO ACQUIRE AND PROCESS SPATIAL DATA. IT WAS SAFE, COST EFFECTIVE AND UNPARALLELED IN ACCURACY.’**

*Gary Johnson*

The spatial data acquired using the I-Site 8800 laser scanner has provided Atlas Iron with a sound foundation for mine development.

Atlas Iron now has topographic data of the area with points every 1 metre. When you consider the only data the company had before undertaking this work was points every 20 metres, the benefit is clear.

*Thanks to  
Gary Johnson  
Senior Surveyor  
Atlas Iron*



Scanning at Wodgina