

Casestudy - Use Of Design Projects Boomer To Define Offshore Heavy Mineral Resources

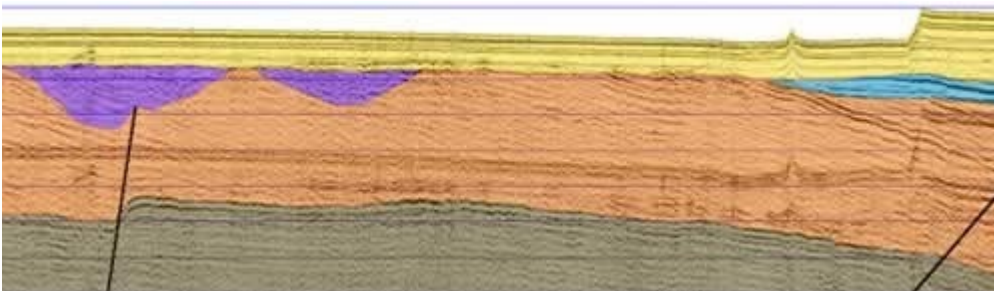
One of the largest heavy mineral mining companies in the world recently appointed Marine GeoSolutions as the sole consultants to manage and conduct an extensive offshore heavy mineral exploration programme in southern Africa.

Marine GeoSolutions (Pty) Ltd is a specialist marine geophysical survey company with its core business being offshore mineral exploration for mining companies. One of the largest heavy mineral mining companies in the world recently appointed Marine GeoSolutions as the sole consultants to manage and conduct an extensive offshore heavy mineral exploration programme in southern Africa.

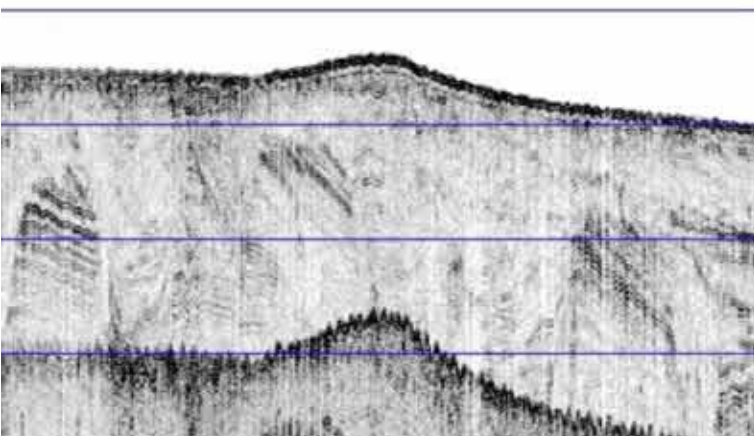
The thickness and complexity of the mineral occurrence meant that pingers & chirp systems were deemed inadequate for the desired penetration required. The Maxipulse 500 J boomer was used to define the regional stratigraphy of the area. This system was able to provide sub-bottom profile information through compact sands to a depth of 80m. The 280 J boomer was used with great success to define the base of the ore body and classify various stratigraphic units within the ore body. This small boomer obtained 40m of penetration and good resolution in compact fine-grained sands.

Data Examples

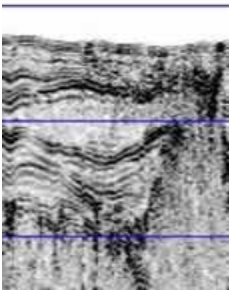
These data were collected in the open ocean in swells of 1.5 m - 2.5 m. The horizontal blue lines are 10 m apart.



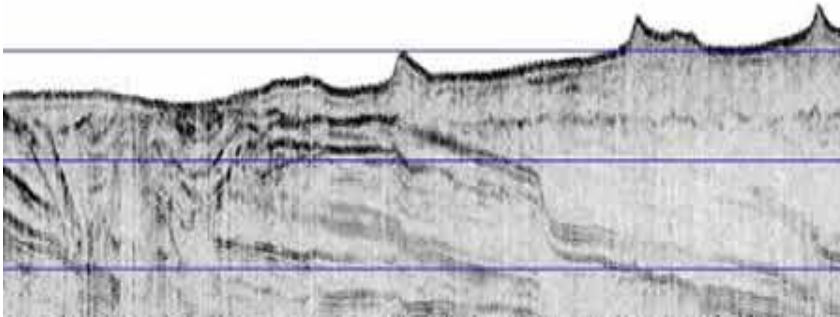
500 J boomer profile showing the regional stratigraphy of the area (image coloured for ease of interpretation).



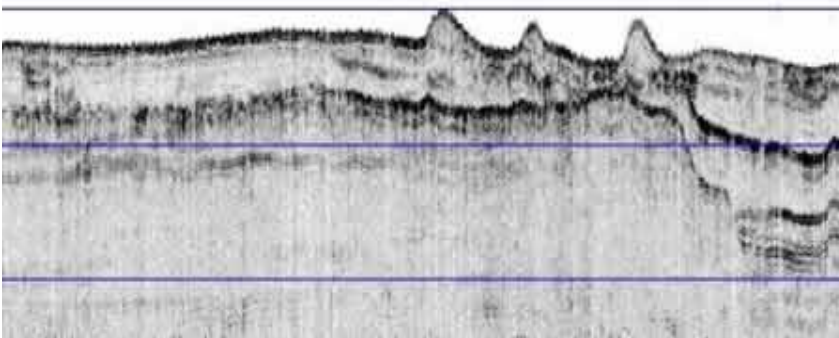
280 J boomer profile showing complex channel development in the ore body.



280 J boomer profile of a buried channel



280 J boomer profile showing channel development and complex stratigraphy and faulting.



280 J boomer profile showing a channel margin.

For more information see: <http://www.marinegeosolutions.com>

