

Early Results from the Efforts to Commercialize Seafloor Massive Sulphides.

Abstract

Nautilus Minerals', the world's leader in exploration and development of deep ocean seafloor resources, has located a number of Seafloor Massive Sulphide (SMS) deposits in the Bismarck Sea, within the Territorial Waters of Papua New Guinea. Nautilus' business model is based on the notion of ongoing resource accumulation and "aggregating" numerous high grade SMS systems and to sequentially develop them using a "floating" production system. The notion is in keeping with the land based Volcanic Hosted Massive Sulphide (VHMS) systems occurring in "camps" and has been supported by Nautilus' strong record of discovery of new SMS systems in the Bismarck Sea and in Tonga.

Nautilus' development plan is to commence production at its Solwara 1 site located within Mining Lease ML154, granted by the government of Papua New Guinea on the January 13, 2011.

The Bismarck Sea Development Project will involve the extraction and recovery of SMS deposits in expected water depths of between 1,500 to 2,500 m.

The development project comprises the following elements:

- Seafloor Production Tools (SPTs).
- Riser and Lifting System (RALS).
- Production Support Vessel (PSV) with dewatering facilities.

This paper summarises a progress update of this development project which will provide a new source of minerals for the world and creates a clear benchmark in environmental and community standards for this emerging new frontier.