Based in Perth, Australia, Regis Resources is a publicly-listed gold production and exploration company with operations in the North Eastern Goldfields of Western Australia and the Central Western region of New South Wales. Dassault Systèmes’ GEOVIA Surpac™ is used at Regis Resources’ head office in Perth, and three mining operations located within the Duketon Project, located 130 kilometers north of Laverton, Western Australia.

Jarrad Price, Senior Resources Geologist at Regis Resources, has been using Surpac for 8 years for geological resource estimation. Recent upgrades to Surpac, particularly in geostatistical tools, have further improved the firepower for resources estimations, saving the company time and effort – and may even remove the need for a separate geostatistical program.

“Surpac’s improved geostatistics capabilities provide me with greater confidence in my exploration data and block model validation, enabling more accurate estimations. Improved charting and data processing means my workflow is more streamlined and faster, in particular its declustering feature that generates a representative data distribution through sample weighting,” says Jarrad.

Surpac supports declustering in the software, removing the need to locate the after-market declustering macro each time Jarrad needs to create a swath plot. Swath plots are a tool used to validate a resource estimation by comparing the average grade of the estimate versus the grade of the data over a range of northings, eastings and elevations.
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— Jarrad Price, Senior Resources Geologist

Additionally, Surpac can perform resource estimation into different cell sizes within the same model; useful for instances when a deposit has differing mineralization thicknesses, well-drilled or poorly drilled areas.

“We can see this being used at our Moolart Well operation in Duketon, which has densely drilled flat-lying laterite mineralization underlain by moderately dipping primary mineralization that is not as well-drilled,” says Jarrad.

“Estimations are commonly completed in passes, from a first pass that searches distances, to suit better drilled areas, to second or third passes that suit broader spaced data. Surpac has an added option in the estimation form that enables passes to be assigned with each estimation; thereby reducing the size and complexity of macros and reducing the potential for errors.”

These geostatistics capabilities are also available in GEOVIA GEMS.”

For more information email GEOVIA.Surpac@3ds.com or GEOVIA.GEMS@3ds.com or visit www.3ds.com/GEOVIA

Surpac drillholes with block model orebody constraint.