Paper Number: 1838

Geostatistical drill hole spacing analysis for coal resource

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Geostatistical drill hole spacing analysis (DHSA) for resource classification using the global estimation variance technique has been used across BHP Billiton Mitsubishi Alliance (BMA) Coal Operation's various mines and projects since 2004. Analysis of the results points to the emergence of possible patterns in the results for projects pertaining to specific coal measures being mined by BMA. This correlation may be a useful guide to assist in developing resource classifications for projects based on the coal measures in which they occur. Comparison of the results of classification using the Coal Guidelines versus classification using the geostatistical DHSA method for a selection of BMA's operating mines in Queensland's Bowen Basin indicates that the non-geostatistical approach leads to level of uncertainty that does not always agree with the complexity of the geology. The paper was published in the 2012 special edition of the International Journal of Coal Geology dedicated to geostatistics. This version integrates updated results and an analysis of how the patterns identified in the earlier version have fared the test of time.