Background & aims

CRC ORE has demonstrated preferential grade by size deportment in several deposits; however, on-going test programs have highlighted that the grade-size correlation is weak or non-existent in some mineralised systems. The underlying geological properties that give rise to a positive grade by size fractionation are not defined. For this preferential grade by size deportment to be economically exploited, a predictive understanding of the effect is required, providing input into spatial models and mine evaluation tools.

This project aims to improve understanding of preferential grade-by-size deportment and develop a standard test work protocol to identify why grade-by-size correlations exist in some mineralisation styles and not in others.

Focus on outcomes

- Development and refinement of standard test work protocols.
- Multi-deposit testing and analysis of the grade-by-size effect identifying mineralogy, texture, alteration and ore genesis drivers.
- Development of predictive tools for classifying mineralised systems in terms of likely grade-by-size fractionation performance.
- Development of predictive tools for grade-by-size fractionation strength as input in to spatial and economic models.