ABSTRACT

The McArthur River deposit, located in the Northern Territory, was discovered by Mount Isa Mines geologists in 1955 (Logan, Murray and Williams 1990). The extremely fine grained nature of the ore was quickly recognised and the difficult separation of the minerals was soon obvious. The geographical, metallurgical and economic factors resulted in the orebody not being developed until the technologies for the mineral separation had been developed. The development of the IsaMill allowed for an economic mineral separation flowsheet to be developed and ore treatment commenced in May 1995 (Nihill, Stewart and Bowen 1998). The development of technologies has enabled improved exploitation of this resource and others with complex mineralogy. The application of the Albion leach process and Jameson Cells to this difficult orebody and processing plant will be discussed as well as other examples where these technologies have been enablers.