



Rapid grade control results anywhere using detectORE™

Executive Summary

Knowing the gold concentration of blocks of ore in an operating mine is essential for a profitable operation. No rocks should be moved without knowing if they are ore or waste; with ore further categorised as high, moderate or low grade. Economic grade material can then be sent to the mill while lower grade material either stockpiled or rejected. detectORE™ can be used for grade control for same day turnaround of results to ensure the correct classification and blending of ore for cartage and throughput at the processing plant.

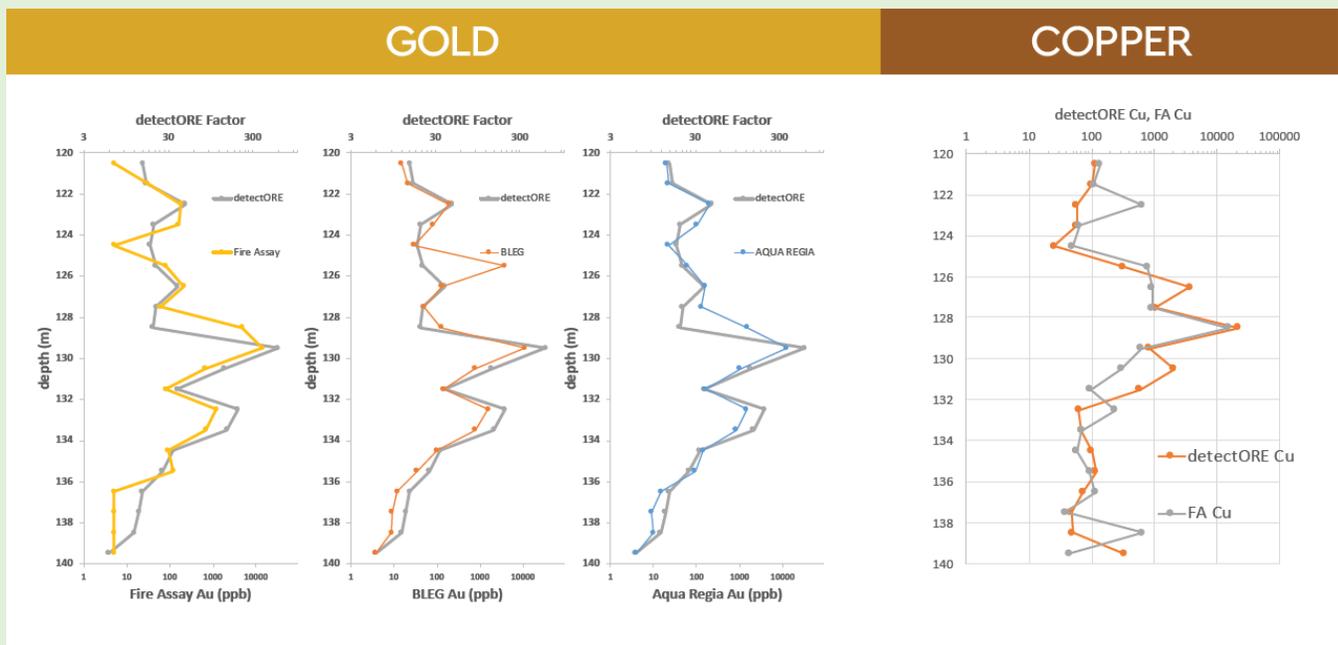
Problem

Successful mining operations depend on knowledge of the grade of material that is being mined. If too much high-grade ore is put through the mill then there is a risk that some of the gold will be lost as leaching conditions may be compromised. If too much low-grade ore is transported and/or processed at a distant mill, then mine profitability may be compromised. Striking the right balance depends on accurate and timely knowledge of gold concentrations in the material going to the mill.

“No rocks should be moved in a mine without knowing if they are ore or waste”

Background

Grade control samples were provided to us from a West Australian mining operation. The RC drill samples were sieved to <1 mm on-site and put through the detectORE™ Technology. The gold and copper results were provided to the geologist the same day. Sub samples were taken and submitted to a laboratory for a series of comparisons with other analytical techniques. Good agreement was found between all methods indicating that grade control samples could be analysed for gold and copper using detectORE™.



Grade control samples were analysed for gold using detectORE™, aqua regia, fire assay and cyanide leach.

Conclusion

Grade control is essential for efficient running of a mining operation. The detectORE™ results compared favourably with other gold analytical methods. The fast turnaround of results by detectORE™ would ensure that timely gold concentration data was received by the grade control operations and that profitability of the operation was maintained. By analysing smarter the grade control geologist, using detectORE™, can determine the gold grades faster.

Contact Us

Portable PPB Pty Ltd

W: portableppb.com

P: +61 8 6248 7714

E: info@portableppb.com.au

A: 42 Tulloch Way, Canning Vale, 6155 Western Australia