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13.3.2003

Astroek Oy has contracted down hole logging for Outokumpu Mining Oy since 1995. Astroek Oy is a specialist in the design of advanced borehole logging probes, such as a new generation gamma spectrometer and a borehole wall scanner.

The acquisition of in-situ petrophysical data has been one of the corner stones of Outokumpu's geophysical modeling and interpretation. Astroek Oy has provided a versatile selection of logging parameters for nickel and gold exploration for example. Radioactive minerals being a characteristic feature for several types of gold deposits, are usually the most indicative in terms of geophysical response.

The most recent experiment has been carried out at Orivesi Gold Mine. Outokumpu has applied Astroek's down hole spectrometer both for the exploration of gold and also for some preliminary tests in order to use spectrometer as a grade control tool in mining operations. It has been found that recording just the total counts does not provide adequate information in order to detect the essential parts of the alteration zone rich in gold. Results have been remarkably encouraging although the total amount of radiation is rather low. Assuming that the ongoing tests of using down hole spectrometry for grade control proves to be a success, that would improve the economy of the mine in lower assay costs for example.

It is not only the flexibility and reliability in timing and completing the contracts that Astroek Oy has demonstrated for Outokumpu's projects but also company's state-of-the-art design of equipments has been of great importance.

Co-operation between Astroek Oy and Outokumpu Mining Oy is going to continue in future also.



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