

Computer Definition of Uranium Mineralization Parameters in Sandstone Type Deposits

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In reconnaissance and exploration of sandstone type uranium deposits the mineralization parameters and resource estimation for further underground leaching in Uzbekistan fulfil on the base of borehole gamma logging. Program DIG (Differential Interpretation of Gamma) is created for differential interpretation of borehole gamma logging.

The program destination:

- downhole ore interval identification by gamma logging taking into account lithology and geochemical characteristics;
- ore interval classification by mining characteristics;
- uranium average grade definition in the ore interval distinguished.

The program possibilities:

- visual correction of lithologic and geochemical boundaries (correction, inserting, deletion);
- visual definition core interval and sample depth;
- visual presentation source data and interpretation results in table and diagram forms along the borehole (geological-geophysical log);
- interactive printing of the geological-geophysical log.

Compulsory input data: gamma logging (with 0.1 m quantization step), lithology (rock permeability), geochemistry (rock oxidation), some factors necessary for quantitative definition of uranium mineralization parameters.

Optional input data: sampling results (U, Ra, Se, Re) and stratigraphy.

Output data – file of ore intervals.

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