



Methodology of the stratigraphical partitions of wells sections, based on the application of spectral analysis of the well-log data.

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At the stratigraphical partition and correlations of the wells sections can arise the certain difficulties, because of the big territory of researched regions and as strong facial variability of rocks and presence of a plenty of breaks and disconformity's both on lateral and on vertical, it is especial in continental parts of section.

As objective material for specification stratigraphic units in the geological closed areas, alongside with researches of the core, data of geophysical researches of wells, continuously describing sections in geophysical parameters, and their display serve in view of mathematical processing of well-log date. Thus the complex of the geophysical researches of the wells, consisting of electrical logging, cavern-metric, radioactive and acoustic methods are used.

According to the listed above methods the researched section can be partitioned on stratigraphical complexes thus the maximal, minimal and average values of geophysical parameters, and also configurations of logging records, including variability of the diagrams, expressed by quantity of anomalies on the certain deep interval are used.

With the purpose of confirmation and specification stratigraphical borders in the section of wells, it is possible to use the spectral analysis of logging diagrams. This application is necessary at the insignificant distinctions in geophysical parameters selected stratigraphical complexes that results in the big divergences in the partition and correlation of sections by various authors. There of it is necessary to expand diagnostic criteria separate section of cuts at the expense of the attributes contained in spectral representation of logging diagrams. Investigated logging diagrams represent different frequency record, which spectral characteristics depend on character of sed-

imentation and other geological factors. Certain stratigraphic complexes there should be correspond the frequency characteristics of logging diagrams. Thus, for everyone stratigraphical complex it is possible to allocate the diagnostic attributes in frequency area. The spectral analysis in the given application will characterize two parameters: difficult, often different frequency rhythm of a complex, and thickness of layers inside it. It is necessary to mean, that as a time base at the calculation of spectra serves the axis of depths corresponding to depths on the logging diagram along a section of wells. The periods of fluctuations in this case will be equivalent to thickness of layers or rhythmic packets, characterizing conditions of sedimentation. For example, for Bukhara-Khivan region, sediment of lower Jurassic, generated in conditions of continental genesis, at the expense of fast supply a sedimentary material, and accordingly accumulation coarse-grained terrigenous deposits formed rhythmical packets of layers which thickness is more in comparison with overlying layers of sea genesis. In the last, at the expense of low-energy conditions sedimentation are formed more thin-laminated layers, mainly clay, carbonaceous and chemogenic structure.

To simplify a problem of stratigraphical partitions of wells sections, for the certain regions can calculated reference spectral characteristics along all section on the areas where the given section is most full submitted and stratigraphic borders are precisely determined. By the joint analysis of the spectral characteristics, a reference and investigated section, it is possible to determine or specify position stratigraphic borders.

Thus, the spectral analysis of logging diagrams can be serve as additional criterion at allocation stratigraphic units, and also studying of conditions of sedimentation and their changes on territory during the certain periods of time.