

Oil classification in a Cuban oil-bearing deposit

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As a result of the importance of studying the vertical and horizontal compartmentation of the oil into the deposit, the fingerprinting technique of the C_{15}^- fraction was decided to use as an additional method.

In the obtained graphics were selected relationships of compounds, which can be reflected in polar plots or star graphs. Their comparison permits to define easily similarities and/or differences among the samples.

A cluster analysis with a group of the mentioned relationships was made, as one of the methods used in the multivariate statistics, which is usually proposed to solve this type of problem. Further an exhaustive study of the primary data was carried out. Then the analysis of the principal compounds was used and finally the rising hierarchic classification was obtained.

The classification of oils using these methods confirms the results achieved with the star graphs. A relationship among the different groups and the factors that influence the composition of oils can be established.