

ABSTRACT ONLY

HOW TO EXPLORE FOR HYDRODYNAMIC TRAPS

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Structural, stratigraphic and hydrodynamic components are present for the entrapment of oil. They can occur singly or in combination. Examination of oil accumulations, in grain supported basins, indicates that traps which are hydraulically assisted hold more oil and have more recoverable reserves. Exploration strategies for oil are dominated by geophysical and geological techniques to define only the structural and stratigraphic components. Recent advances in petroleum hydrodynamics have occurred allowing for the definition of specific sites for hydraulically assisted oil traps.

When properly applied, petroleum hydrodynamics can be used as a predictive oil exploration tool which can be used in advance of other techniques. A procedure for the interpretation of the data and their integration with geophysical, aero-magnetic and surface geochemical surveys, are addressed.