



Present Day Stress in Sedimentary Basins - A World Stress Map Project Initiative

Goal

There is a growing recognition of the important role of present-day stress in petroleum exploration and development. For example, the present-day stress field is a major control on:

- borehole stability;
- reservoir drainage and flooding patterns;
- fluid flow in naturally fractured reservoirs;
- hydraulic fracture stimulation, and;
- seal breach by fault reactivation.

A primary goal of the World Stress Map is to determine the present-day state field in sedimentary basins worldwide and its implications for petroleum exploration and production.

The World Stress Map Project

The World Stress Map (WSM) Project provides the scientific and engineering communities with a free and publicly accessible database of over 13,800 present-day stress measurements throughout the Earth's crust (available on our website: www.world-stress-map.org). The WSM project is continuously trying to improve and expand the service to the hydrocarbon industry by providing support and assistance on present-day stresses and associated geomechanical issues.

Proposed Work

As part of our service to the petroleum industry, the WSM project offers to undertake free analysis of horizontal stress orientations from four- or six-arm caliper log (HDT or SHDT-type) and resistivity or acoustic image log data, provide a detailed report on the stress results and discuss their implications for petroleum geomechanics issues. In return, we ask that the stress orientation data be included in the WSM database - after a short confidentiality period if necessary.

Benefits to Data Suppliers

Any company that supplies appropriate data to the WSM project will receive the detailed results of our expert stress field analysis and suggestions on how this data can be applied to a wide range of petroleum exploration and development issues – at no financial outlay.

Required Data Format

Unprocessed HDT/SHDT data as paper logs or in digital format (dlis, lis, las) or processed image log data (e.g. FMI, FMS, STAR, BHTV).