

## Plato Array Tools Solutions for Horizontal and Highly Deviated Wells

## Array production logging

In deviated and horizontal wells, multi-phase flow conditions significantly affect the measurements provided by conventional production logging tools. Multi-sensor array tools provide the capability to measure properties across the wellbore cross-section and deliver a detailed picture of fluid distribution, temperature, pressure and flow-rates. for interpretation. Being able to interpret the array data to account for the significant flow-related conditions present in deviated or horizontal wells and determine the production profile is a complex challenge that demands software capable of handling the variances between tools and measurement capabilities.

With increasing numbers of high-value, horizontal and highly deviated wells, the importance of deriving production profile using array tools has never been greater. In order to build a comprehensive understanding of complex flow regimes, operators must ensure they have access to tools capable of solving the intricate series of data that array tools provide.

## **Plato Array Tools**

As a modular add-on to Plato, Array Tools calculates accurate multi-phase production profiles. Multiple spinner and holdup data is profiled along with traditional data and where the tool geometry permits, Plato Array Tools takes advantage of the tool rotation to compute more accurate results.

Highly sophisticated calibration methods including Rotation angle (RTA) optimization are employed, coupled with the probabilistic Plato global optimization technique to ensure the most accurate results possible.

Powerful visualization capability allows all spinner sample data to be viewed at once.

Plato Array Tools can calibrate the array tool data whether the tool rotates or not. A layered, multi-phase profile is calculated to provide a more accurate determination of the production profile.





