CASE STUDY

HALLIBURTON

Woodford Shale, Oklahoma

Halliburton CoreVault® RFP system impacts economic decision making and reduces risks

Unique technology helps provide optimum value and return on investment

CHALLENGE

- Gain a comprehensive understanding of a new reservoir geographic region within an unconventional play

SOLUTION

- Deploy the CoreVault® RFP system to gather necessary data to enable economic decision making

RESULT

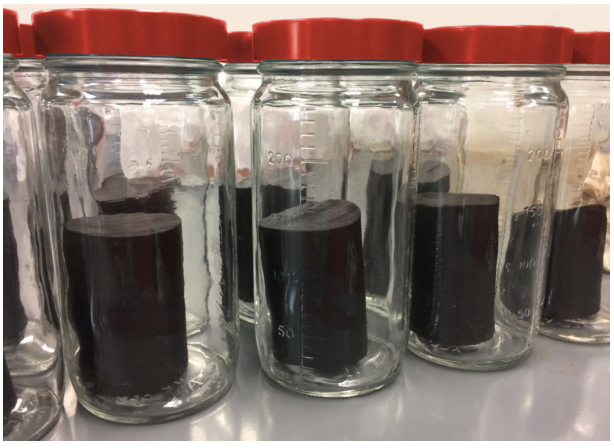
- Provided an enhanced understanding of the reservoir characteristics and development risks involved, enabling a revision of economic development plans

Overview

A major E&P operator entering an established unconventional play had unexpected results on its first well and required improved understanding of the subsurface reservoir. Halliburton was selected to analyze the reservoir and provide a solution. The CoreVault® RFP (rock–fluid–pressure) system, integrated with additional petrophysical measurements, acquired samples efficiently and time effectively through flawless wellsite operations. The technical analysis and findings offered guidance and helped reduce risk for future E&P operational planning in the area.

Acquire better understanding of reservoir characteristics in unconventional play

Unconventional E&P projects are capital intensive. It is critically important to establish reservoir understanding before proceeding with wellsite completion operations to minimize risk and optimize production. In the Woodford Shale play in Oklahoma, an operator found itself in an unsatisfactory position. Having experienced unexpected and poor results on an initial well, the operator wanted to develop a comprehensive understanding of the reservoir's expected production performance before taking the next steps to ensure lower overall cost per BOE.



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Core samples collected on this project yielded valuable information about the reservoir's economic development risk

The CoreVault® RFP system offers a direct view into well productivity

Halliburton listened and responded to the operator's requirements to maximize asset value. To gain better subsurface insight, a recommendation was made to deploy the CoreVault® RFP system, which integrates wireline rock coring with fluid sampling and measurement of pressures and temperature downhole, while preventing fluids from escaping during the acquisition of high-quality rotary sidewall cores. This unique solution provides an analysis of the complete reservoir. It captures and retains reservoir fluids, and delivers pressuretemperature measurements with the rock samples to the surface, enabling volumetric measurement of hydrocarbon properties. Additionally, the CoreVault RFP system yields immediate data at surface prior to full laboratory analysis, providing answers directly at the wellsite. With the CoreVault RFP system, operators are better able to predict production, manage their assets, and understand the economics of their reservoir, particularly in unconventional reservoirs. The data obtained can significantly enhance economic value and reduce exploration/development risk.

CoreVault RFP findings enrich understanding of the reservoir's economic value

Wellsite surface analysis after running the CoreVault RFP system showed very little pressure, indicating that this particular wellsite would not be favorable for production. By combining the CoreVault RFP data results with regional and specific subsurface information on the well, Halliburton was able to transfer to the client conclusive analysis of the reservoir characteristics, a better understanding of its economic value, and the risk associated with its reservoir. The operator is currently reevaluating its plans for future work in the area.

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com