

CoreVault® Rock-Fluid-Pressure (RFP) Sampling Service

IT'S ALL ABOUT THE FLUIDS

OVERVIEW

Previously, fluids in tight rocks were trapped, challenging conventional downhole fluid sampling technologies. In contrast, these fluids were free to escape the cores while they were retrieved from the well and transported to the laboratory. Rock coring and fluid sampling were separate.

This all changed with the award-winning, industry-first Halliburton CoreVault® RFP (rock-fluid-pressure) sampling service. This next-generation reservoir evaluation technology targets exploration, mature and unconventional reservoirs. Building upon field-proven Halliburton rotary sidewall coring technology, it integrates 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 a comprehensive analysis of the complete reservoir.

Accurate economic evaluation of a shale well previously required drilling and completing it. Traditional coring methods allowed fluids to escape from samples as they depressurized during retrieval. As a result, analysis had to be based on estimates of fluids lost, rather than measurement of fluids in place. Also, conventional coring could take hours to days to retrieve just one core. The Halliburton CoreVault RFP technology changes all that. This unique system can capture up to 10 samples in a sealed container— in one run. The container prevents reservoir fluids from escaping during core retrieval and transport.

The CoreVault RFP service recovers large volume high-quality cores, seals them in a pressure-tight container downhole, thus preserving the fluids in the cores. The sealed chamber can be transported to a laboratory under pressure at which time the reservoir fluids in those cores can be measured and analyzed.



Rock and pore fluids are captured and retained within a sealed downhole technology system.

The Xaminer® Coring tool provides core samples that are 1.5 in. in diameter and 2.4 in. in length—more than three times the volume of other tools.



CoreVault® Fluid and Rock Sampling Service

Dimensions and Ratings			
Maximum Temperature	325°F (163°C)		
Maximum OD	6.00 in. (15.2 cm)		
Length	32.31 ft (9.85 m)		
Weight	960 lb (431 kg)		
Maximum Pressure	25,000 psi (172,250 KPa)		
Minimum Hole	6.75 in. (17.4 cm)		
Maximum Hole	17.5 in. (44.45 cm)		
Physical Strengths*			
Hardware	Tension	Compression	Torque
Tool Joints	100,000 lb (45,360 kg)	50,000 lb (22,680 kg)	600 lb-ft (815 N-m)

*Strengths apply to new tools at 70°F (21°C) and 0 psi.

Lock in Your Fluids. Find out how at [Halliburton.com/CoreVault](https://www.halliburton.com/CoreVault)

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