

Title (en)  
Downhole probe assembly

Title (de)  
Bohrlochsensoranordnung

Title (fr)  
Ensemble sonde de fond

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Application  
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Abstract (en)  
This application relates to a downhole formation testing tool having an extendable sample apparatus and methods of use. In one embodiment, the extendable apparatus includes a piston that extends toward a borehole wall (49), the piston having an inner sampling member that is also extendable. The sampling member may be further extended to engage the borehole wall and penetrate the formation. The sampling member may also include a screen and an inner scraper (278) that frictionally engages the screen and reciprocates to remove debris from the screen. The piston may comprise a seal pad having an internal cavity for receiving a volume of fluid. In another embodiment, the extendable apparatus comprises multiple, concentric pistons for extending the sampling member further toward the borehole wall than is possible with a single piston. In one embodiment, the formation testing tool includes a hydraulic circuit and controller for operating the extendable sample apparatus; the tool may also include hydraulic accumulators and a regenerative hydraulic circuit.

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