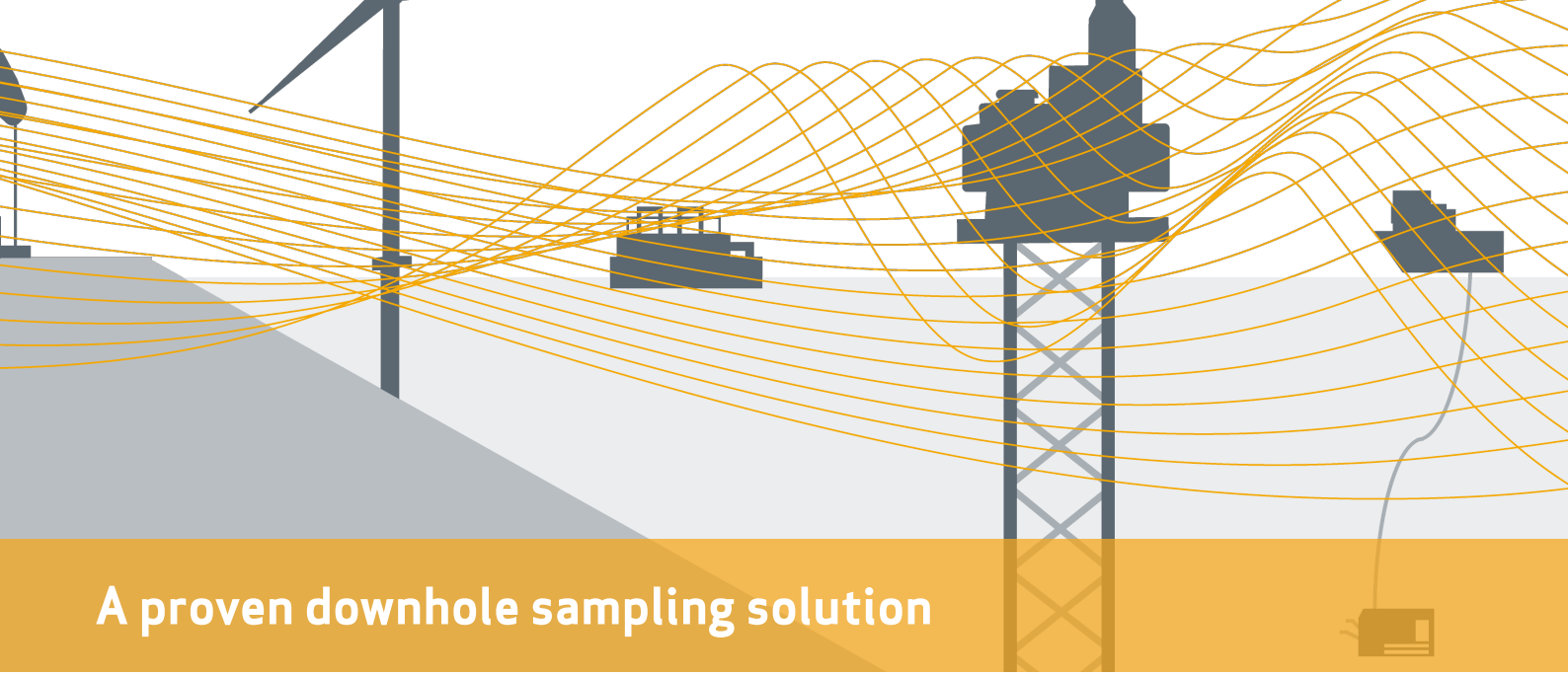
Downhole Sampling

High Quality Samples in the Field

proserv

Proserv specialises in bottom hole sampling which supports evaluation and appraisal of a reservoir. Samples are captured in the field, transferred to shipping cylinders, and transported to the laboratory where chemical and physical properties can be measured and determined.

This process needs careful management throughout to ensure sample integrity, operator safety and environmental and legal compliance. Once analysed, the samples provide data vital for the economic and technical evaluation of the reservoir.



A proven downhole sampling solution

Proserv offers a range of downhole sampling tools and supporting equipment to capture fluid samples from within the well bore. This equipment can be used to capture reservoir samples during exploration or production stages and can also be used to help sample storage vessels during decommissioning of platforms and tanks.

Bottom-hole sampling tools are available in standard or exotic materials for use in harsh environments and can also be supplied with non-reactive coatings if required.

Rental equipment

Proserv holds an extensive fleet of rental equipment for the oil and gas sampling industry. During periods of high sampling activity, special sampling projects or when cylinders or equipment are outwith serviceable operation, Proserv can offer downhole sampling rental equipment on a per day basis. Equipment can be mobilised from facilities around the world.

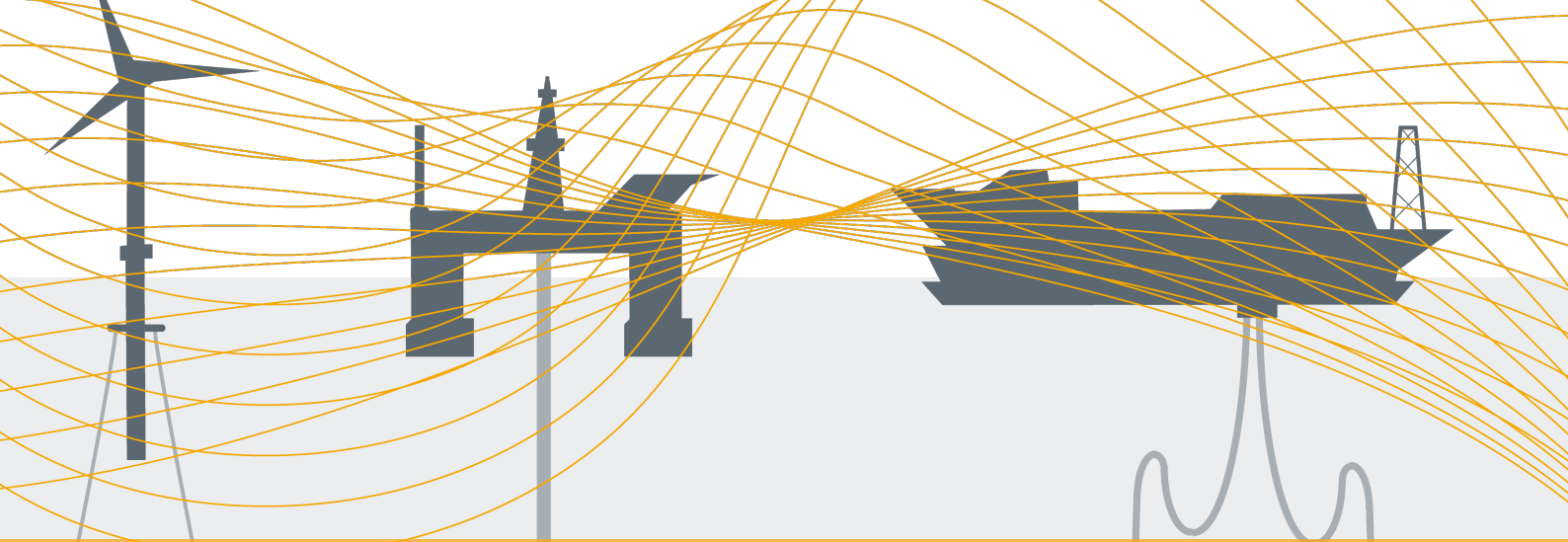
Positive displacement and single phase sampler

The positive displacement sampler (PDS) allows for the capture and isolation of conventional downhole reservoir fluid samples. The single phase sampler (SPS) captures, isolates and maintains the samples at a pressure above reservoir conditions, for analysis back at the laboratory.

Sampler conveyance is run on slickline, wireline, coil tubing or pipe and is operated via traditional mechanical clock or third party acoustic triggers when run as part of a drill stem test string.

Cylinders

For the transportation of samples, a range of cylinders (700 millilitres as standard) can be supplied with pressure ratings of 10,000 and 15,000 psi. Our cylinders are supplied with transportation boxes for shipment complete with European



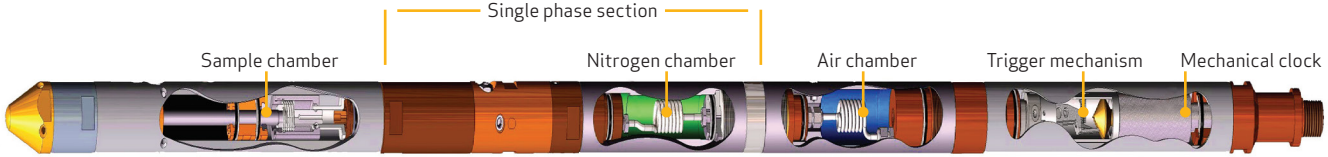
Capture high quality fluid samples in the field

PED, TPED, United States DOT, Canadian TC, Australian AS certification, where applicable.

Features and benefits

- Fast sample transfer
- Fast redress of sampler
- Mercury free sample transfer
- Positive locking and operation indicator
- Available in Inconel for hostile environments
- Multiple samplers can be run simultaneously
- Controlled sampling by positive displacement
- Non-reactive coating available to minimise H2S losses
- Proven design with many years of successful operation
- Samples can be retrieved and transferred in single phase

Operation Parameters		
Sample volume	600 ml	
Maximum working pressure	15,000 psi at 180°C	356°F
Length	PDS 3,680 mm SPS 5,054 mm	12'1" 16'7"
Weight	PDS 28 kg SPS 34 kg	61.6 lb 74.8 lb
Outside diameter	43 mm	1 11/16"
Material	17-4PH stainless steel (AISI 630) almuninium bronze CA 104	



Single phase sampler

Field Services and Training

Field Services

Proserv has extended our downhole sampling services to provide customers with sampling engineers to operate samplers in the field if required. Engineers can be mobilised from various locations worldwide and our clients benefit from the superior level of professionalism, technical ability and performance provided.

Training

Training packages can be provided on the operation and servicing of the Proserv downhole sampling equipment, either at a Proserv location or at the customers facility if required. Comprehensive training schools have been developed to ensure sampling engineers have the correct technical and practical skills to ensure successful operation of our equipment.

We improve the reliability, integrity, efficiency and productivity of critical infrastructure with industry leading controls technology.

CONTROL | MONITORING | INTELLIGENCE | OPTIMISATION

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