

# Well Flow Management

## Fluids Sampling and Analysis

### 15K TCS Carrier - Acoustic Trigger Including Fail-Safe and PVT

The 15K TCS Carrier is a tool for bottom hole sampling of petroleum reservoirs. The 15K tubing conveyed carrier can provide up to 1.12l of single-phase reservoir fluid. Carrier sections can be added if additional samples are required.

#### Features

- **HP/HT:** the working pressure and temperature of the carrier are 15,000 psi and 400°F
- **Triggered by acoustic communication:** each sampler can be activated individually at the operator's chosen point/time
- **Non-reactive:** the carrier and samplers provide service in the most hostile well environments with extreme H<sub>2</sub>S levels
- **Positive displacement operation:** a slow positive displacement of the floating piston ensures no pressure differential across the sample entry ports when using single-phase samplers
- **Full bore:** the carrier ID is full bore 2.25", 23mm offset, max. wireline tool OD: 1.75"

#### Benefits

- Can be operated in HP/HT wells without compromising safety
- The samples are pressure compensated and single-phase which is excellent for trace element sampling in highly corrosive hydrocarbon fluids containing CO<sub>2</sub>, H<sub>2</sub>S and brines
- The material of the PVT sampler provides insignificant loss of H<sub>2</sub>S
- In the event of an acoustic trigger malfunction, our fail-safe system will activate the sampling by rupture disc
- No requirement for re-establishing single-phase at surface, therefore the sample transfer is performed rapidly and without jeopardising the integrity of the sample





# Well Flow Management

## Fluids Sampling and Analysis

### 15K TCS Carrier - Acoustic Trigger Including Fail-Safe and PVT

Technical specifications		
Sample capacity	PVT sample 1.12 liters (2 x 560 cc)	
Full bore	2.25"	
OD / ID	5.5" / 2.25"	
Main internal bore offset	23mm	
Max. temperature (limited by Metrol)	192°C / 377°F	
All fluid exposed parts according to	NACE MR-175 / ISO 15156	
Max. differential pressure internal	15,000 psi @ 400°F (test pressure: 16,500psi)	
Max. differential pressure external	15,000 psi @ 400°F	
Design specification	API 5C3	
Tensile rating	300,000 lbf @ 400°F and 0 psi	
Make up length	28ft with PCS samplers	
Total weight	550 kg including samplers	
End connections	3.75" – 6 T.P.I. STUB ACME	Upon request Hydril 3.5" PH6

For more information contact your local Expro representative or email [fluids@expro.com](mailto:fluids@expro.com)