

## Expro Excellence

# Open hole sample characterisation in Gulf of Mexico

## Fluids



### Objectives and background

- Expro was contacted by the customer to carry out the transfer, validation and onsite analysis of their fluid samples which had been taken during open hole logging
- This was the first time, this third party had worked with us on open hole sample chambers in the Gulf of Mexico
- Our customer was particularly interested in our online fluid identification capability, TurboPVT™ following a presentation we had given to their team

### Expro Excellence

- Our customer's objectives were to capture:
  - Reservoir hydrocarbon samples for PVT, flow assurance, fluid compatibility and geochemistry
  - Formation water samples in wet zones for water properties
  - Formation fluid samples for H<sub>2</sub>S/ Hg measurement
- Expro transferred the open hole samples which had been retrieved by a major logging company during the logging period into shipping cylinders
- We have the ability to measure critical properties of the reservoir fluids obtained during the open hole sample transfer using TurboPVT™. Our SmartLab™ also enables us to flash the pressurised samples to determine GOR, API, OBM and whole fluid compositional analysis to C<sub>36+</sub>
- Expro's solution provides validation and detailed characterisation of the captured fluid with minimal sample loss
- Expro and the customer worked collaboratively to develop a protocol for the project

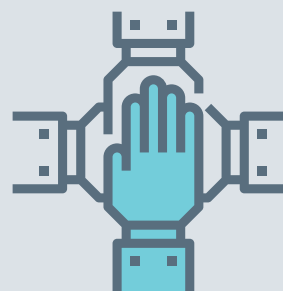
### Value to the client

- Using Expro's TurboPVT™ and SmartLab™ our customer was able to ensure that the samples collected for further analysis were good quality and the detailed compositional analysis allowed early modelling of the fluids properties
- The customer was able to quickly learn if the sample met the parameters they expected, allowing a decision to be made on whether to carry out another wireline run to obtain further samples
- Expro's main differentiator is our ability to measure permittivity, density and viscosity whilst the sample is being transferred into the transport cylinder, allowing significant gas/ fluid properties and phase changes to be monitored in real time with TurboPVT™
- Expro technology is independent of the logging provider and is used to optimise decision making re sample quality
- Substantial cost savings were made by minimising the requirement for rig days and by producing crucial reservoir fluid parameters for time-sensitive decision making
- Typically, a partial PVT analysis onshore in a laboratory would take in the region of 5-10 days but Expro's team provided quality data at the wellsite within hours from when the samples were recovered to the surface
- Expro is the only supplier of independent, inline fluid property measurement during sample transfer from sampling tools to shipping cylinders

### Reduction in rig time



### Partnership



### Contact

For further information please contact:  
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