

# Omega Case History

## High Expansion Gauge Carrier Data Gathering During Well Clean Up.

### ■ Operators Challenge

A North Sea Operator required accurate well data to be gathered during a well cleanup operation. To achieve this, pressure & temperature monitoring would have to be installed during a perforation acid wash and the subsequent well cleanup. An Isochronal Modified back pressure test would then be carried out.

Issues surrounded the installation of reliable pressure & temperature gauges, as a retrievable anchoring device that can be positioned anywhere within the 7.00" 42.7lbs/ft liner or in 5.00" 23.2lbs/ft Tbg was needed.

In addition to these challenges the well had a previously recorded max SIBHT of 183°C and a BHP of 9,613psi. These factors would require a HPHT setting tool for the installation of the selected anchoring device.

### ■ Omega's Solution

An Omega 2.00" OD High Expansion Gauge Hanger was selected to provide the reliable anchoring device for the P&T gauges. The HEGH can be easily fitted with conversion kits to allow greater deployment flexibility in various sizes/weights of tubing.

Deployed on the Omega 3.00" OD HPHT Hydrostatic Setting Tool, the design of the HEGH provides a minimal flow restriction, which results in vastly more accurate data being gathered.

In addition debris build up around a set HEGH is almost eliminated due to the maximized flow bypass around the tool, ensuring ease of retrieval.

The Omega 3.00" HPHT Hydrostatic Setting Tool, is qualified for use in environments up to 15,000psi and 200°C.

### ■ Value To Client

- The 3.00" OD HPHT Hydrostatic Setting Tool successfully set the 200-500 HEGH complete with THQR gauges in 5.00" 23.2lbs/ft at 4,995.5mtrs.
- The well perforations were successfully acid washed, subsequently cleaned up and a 72 hr PBU.
- Deployment duration for the High Expansion Gauge Hanger complete with the P&T Gauges was 15 days.
- Good data was retrieved from the survey upon the retrieval of the HEGH system to surface.
- All intervention work was carried out using slickline, enabling minimal intervention costs for the client.

"...availability of a reliable setting tool capable of deploying intervention devices such as the High Expansion Gauge Hanger in HPHT well environments, greatly reduces industry risks commonly associated with mechanical wire manipulation, has again allowed our project goals to be met..."

