

DOWNHOLE TEST FACILITY

With the growing need for deepwater exploration and production and future plans for ultradeep wells, the reliability of subsea and downhole equipment is of vital concern to the sector.

In hostile downhole environments, long service life and reliability is crucial for equipment that can be extremely costly to repair and maintain. Assuring reliability and avoiding costly intervention is a prime concern for operators. Realistic downhole testing of subsea components is therefore a critical part of product development, testing and approval.

BHR's downhole test facility provides companies with an easily-accessible, onshore facility that accurately reproduces downhole conditions to achieve your test objectives economically.

OVERVIEW

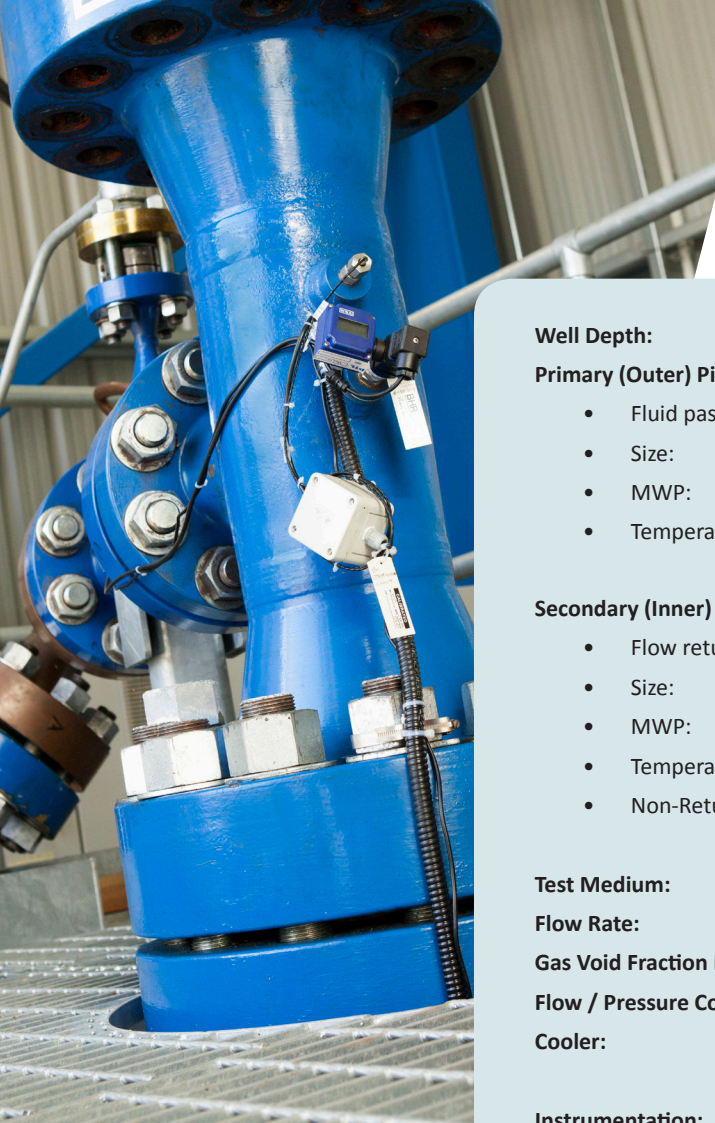
With the capacity to achieve 40bar at the base of the well, BHR's facility can simulate a 400m fluid depth with representative well conditions for development, performance and reliability testing of components and systems. It is able to test with a variety of fluids in single or multiphase flow at elevated pressure and temperature for extended durations. The facility incorporates accurate, high speed measurements of downhole pressure, temperature and flow ensuring that product performance can be mapped under a range of conditions and providing a comprehensive equipment testing capability.

APPLICATIONS

The facility can be used for product development and qualification testing / type approval of downhole equipment, such as:

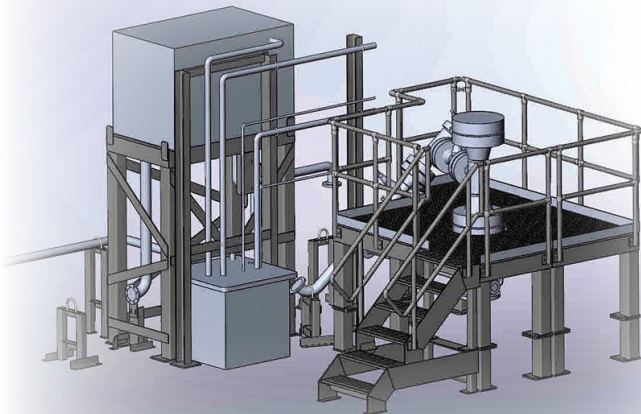
- Pumping equipment
- Jet pumps
- Separators
- Instrumentation
- Drilling fluids





TECHNICAL SPECIFICATIONS

| | |
|--|--|
| Well Depth: | 43m |
| Primary (Outer) Pipe (PV1): | |
| • Fluid passed down through outer pipe to inlet of casing string | |
| • Size: | 10" ID (254mm) x 43m Depth |
| • MWP: | 40 Bar |
| • Temperature: | Up to 125°C |
| Secondary (Inner) Casing String (PV2): | |
| • Flow returns up through the inner casing string | |
| • Size: | 7" OD (178mm), 6.12" ID (155mm) x 42m Depth |
| • MWP: | 260 Bar |
| • Temperature: | Up to 125°C |
| • Non-Return Valve | Fitted to Inlet of PV2 |
| Test Medium: | Water or fluids/slurries having higher viscosity |
| Flow Rate: | 0 to 10,000 bpd+ (20 ltr/sec) |
| Gas Void Fraction Injection: | 0 to 100% |
| Flow / Pressure Control: | Manually operated Masterflow Choke Valve |
| Cooler: | 200kW Air Blast Cooler |
| Instrumentation: | Pressures, temperatures, flow rates |
| Data Acquisition Software: | Labview Compact RIO |
| Data Access: | VPN secure link over internet - 24hrs, 7 days a week |
| Facility Electrical Power: | 186kW, 415V 3 Ph. can be expanded to 450kW |
| Crane: | 5 Tonne SWL Electric Overhead Gantry Crane |
| Crane Hook Height: | 0 to 9 metres above Finished Floor Level (FFL) |
| Well-Head Platform: | Bespoke galvanised steel working platform |
| Security: | 24hr Surveillance Camera system, viewable over secure VPN link |



ABOUT US

BHR Group is an independent technology organisation providing engineering consultancy, industrial research and product development services based on our core expertise in fluids engineering.

We apply our knowhow to develop or improve innovative designs, processes and products for industrial clients around the world.