



[PASSED THE TEST]

Fangmann's Laboratory – Cementing

Our commitment to technology and experience also applies to the laboratory. It is fitted with the state of the art equipment and testing is performed in accordance with API/ISO and client internal standards.

[HTHP-CONSISTOMETER]



Thickening Time

The following tests can be performed:

- Pumpability of cement systems
- Slurry stability under borehole conditions

Test parameters:

- Max. temperature: 200°C
- Max. differential pressure: 22,000 psi

[RHEOMETER]



Low-temp Viscosity

The following tests can be performed:

- Compatibility between cement and mud systems
- Effectiveness of viscosifying agents
- Selection of different bobs

Test parameters:

- Max. temperature: 80°C

[ULTRASONIC CEMENT ANALYZER]



Compressive Strength

The following tests can be performed:

- Non-destructive measurement
- Comparison with destructive tests via crushing apparatus

Test parameters:

- Max. temperature: 200°C
- Max. differential pressure: 20,000 psi



FANGMANN

ENERGY SERVICES



[PASSED THE TEST]

Fangmann's Laboratory – Stimulation

Our commitment to technology and experience also applies to the laboratory. It is fitted with the state of the art equipment and testing is performed in accordance with API/ISO and client internal standards.

[PERMEABILITY TESTER]



Core Flooding under Borehole Conditions

The following tests can be performed:

- Clay compatibility of fluids
- Acid response curves
- Effectiveness of water shut-off fluids

Test parameters:

- Suitable for 1.0 and 1.5" cores
- Max. temperature: 200°C
- Max. confining/drive pressure: 5,000 psi

[HT - RHEOMETER]



High-temp Viscosity Measurement

The following tests can be performed:

- Effectiveness of viscosifying agents
- Breaker selection
- Carrying capacity via oscillation mode
- Selection of bob #1 or bob #5

Test parameters:

- Max. temperature: 200°C
- Max. differential pressure: 1,000 psi

[ROLLER OVEN]



Corrosion Testing

The following tests can be performed:

- Effectiveness of corrosion inhibitors
- Proppant stability
- Carrying capacity of viscous fluids
- Dynamic or static conditions

Test parameters:

- Max. temperature: 200°C
- Max. differential pressure: 1,500 psi

Fangmann Energy Services GmbH & Co. KG

Brietzer Weg 10
29410 Salzwedel
Germany
Tel.: +49 (0)3901 8363-0
Fax: +49 (0)3901 8363-28
fes@fangmanngroup.com

Hohe Tannen 14
49661 Cloppenburg
Germany
Tel.: +49 (0)4471 98008-0
Fax: +49 (0)4471 98008-18
fes@fangmanngroup.com



www.fangmanngroup.com