# Drilling and Completion Fluids

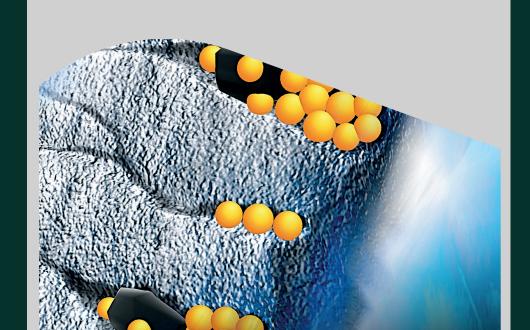
# Solutions portfolio

#### **BRIDGEFORM**

single-sack wellbore strengthening system Improve drilling efficiency with wellbore stabilizer and fluid loss reduction technology

- Improve wellbore stability while reducing fracture-induced mud losses
- Increase rate of penetration in deviated or lateral wells

• Mitigate drilling risks in extreme, overbalanced conditions



# Drilling and Completion Fluids Reporting (DCFR)

comprehensive reporting platform for intelligent fluids solutions

Ensure superior drilling performance with comprehensive fluids monitoring, reporting and management services

- Reporting platform for intelligent fluids solutions
- End of well recaps and summaries can be exported in a PDF or MS Excel format for data analysis Total pit management

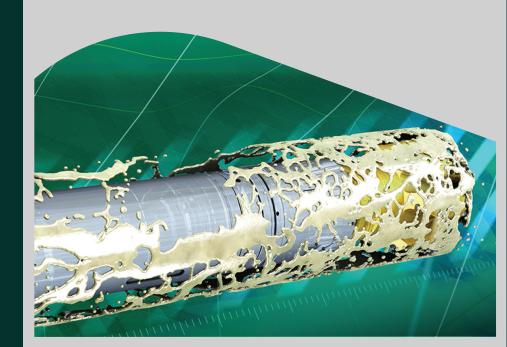


#### **DELTA-DRILL**

low-impact drilling fluid

Efficiently and reliably reduce downhole losses and hydraulic impact in land and shallow water wells

- Provides effective and reliable navigation through narrow
- pressure windows
- Reduces well construction risks and costs Manages hydraulic impact by maintaining the right viscosity in the right areas of the well



#### **DELTAFLOW**

low-impact drill-in fluid

### Optimize well construction operations without

- damaging the reservoir
- Minimizes formation damage while maximizing productivity Protects the formation against pressure spikes and surge pressure
- Reduces risks and associated costs during reservoir drilling
- Provides effective and reliable navigation through narrow pressure windows

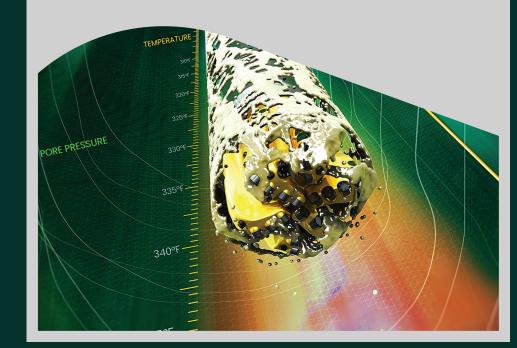


#### **DELTA-TEQ**

low-impact drilling fluid

Efficiently and reliably reduce downhole losses and hydraulic impact on formations

- Provides effective and reliable navigation through narrow
- Reduces well construction risks and costs • Improves hole cleaning, flow rate, and ROP



#### **DYNAFLOW**

reservoir drill-in fluid

Drill high pressure reservoirs with an effective, non-damaging drill-in fluid

- Designed for use in divalent brine applications that present challenges for conventional drill-in fluids • Increases low-shear-rate viscosity (LSRV) without significantly
- impacting the overall fluid viscosity profile • Provides better equivalent circulating density (ECD) control and improved drilling performance



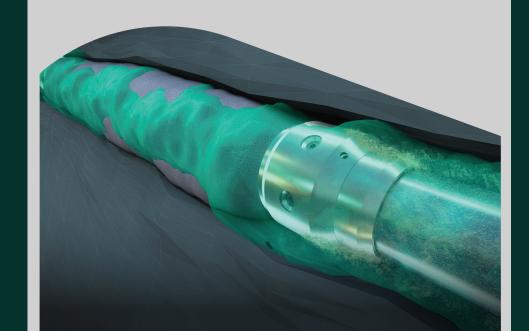
#### **GeoWASH**

and ultrafine sand formations

filter cake remover and activation fluid

Reliably remove filter cake while activating the GeoFORM conformable sand management solution

• Effectively removes mud filter cakes and protects your pay zone • Activates and expands the GeoFORM™ conformable sand management solution's Morphic™ shape-memory polymer media • Provides proven sand control for the most complex well profiles



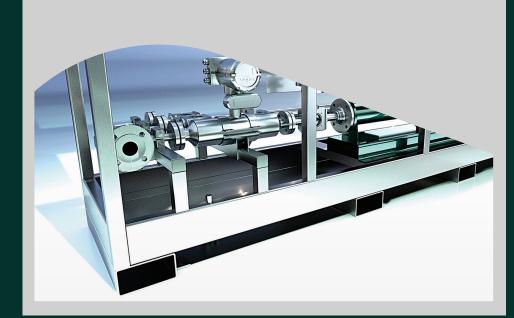
#### i-Trak<sup>™</sup> AFM

automated fluids monitoring unit

Get safe, efficient, and consistent drilling fluids performance

• Delivers consistent and repeatable quality drilling fluids performance • Supports remote operations and automated drilling applications • Provides accurate, reliable measurement of key drilling fluids properties

• Ensures real-time aggregation, monitoring, and analysis of fluids data 24/7



#### **LATIDRILL**

high-performance, water-based fluid system

Drill faster, farther, and longer in challenging well environments

• Drills more efficiently with improved lubricity and wellbore stability • Improves rig economics with simplified transportation logistics and

• Reduces post-drilling cleanup time and minimize disposal costs

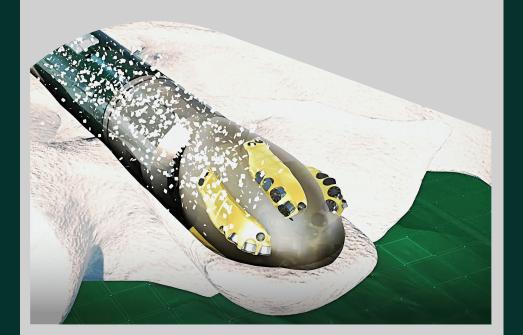


### MAX-LOCK

lost circulation material

Quickly combat severe lost circulation events

- Strengthen loss zones to enable drilling
- Deploy in place rapidly and easily, in a single trip Avoid gas migration by deploying as an isolation plug



### MICRO-CURE™ E2

post-production remediation system

Revive production in your underperforming wells

- Remediate multiple near-wellbore formation damage mechanisms • Mobilize damaging particulates and remove emulsions caused by
- drilling and completion fluids • Extends production life of older wells and improve ROI of wells with near-wellbore damage



# MICRO-PRIME™

wellbore-cleaning spacer system

Ensure effective wellbore cleanup for optimal long-term production

- Gain maximum cleaning efficiency with 100% water wetting of all
- Optimize displacement efficiency of OBM/SBM to completion brine with minimal formation damage

• Improve debris removal for proper tool setting and reduced rig time



MICRO-WASH™ invert emulsion drill-in fluid filter cake breaker

Remove synthetic- or oil-based mud filter cake and formation damage by drilling fluids in the near wellbore

- Ensure clean flow paths for optimal production or injection • Remove oil to eradicate emulsions, mobilize solids, and water-wet all surfaces
- Destroy SBM and OBM filter cakes to increase production rates while preventing screen blockage pressure windows



# Mudzyme™

downhole equipment

enzymatic filter cake breaker system

Remove damage caused by water-based drill-in fluid to maximize productivity

- Minimize formation damage with enzymatic degradation of starch and biopolymer in filter cakes
- Reduce rig time and costs with flexible deployment options • Deploy with no special handling restrictions and without corroding



# **OMNIFLOW™**

may not be effective

invert emulsion drill-in fluid

Drill payzones while protecting against formation damage that could limit hydrocarbon recovery

• Designed to be blended using any approved external-phase oil • Suitable for difficult drilling environments where a water-base fluid



# **PERFFLOW**™

water-based reservoir drill-in fluid

Optimize leak-off control and minimize

- fluid loss into formations • May be customized for specific reservoir needs
- Provides minimal formation damage with a thin filter cake • Exhibits excellent drilling and completion fluid performance



# **PERFORMAX**

high-performance water-based

drilling fluid system Optimize drilling efficiency with cost-effective,

environmentally sustainable fluid solutions • Improve wellbore stability while increasing rates of penetration

 Reduce common drilling challenges including bit balling, differential sticking, torque, and drag Minimize your environmental impact



# **PureMagic**<sup>™</sup>

single-sack oil-based mud system

Streamline fluid management to boost rigsite efficiency and safety

• Streamlines fluid preparation by minimizing the number • Provides an economic alternative to buying whole mud

• Lowers HSE risks, waste, and logistics



# JewelSuite<sup>™</sup> Well Engineering

Integrated drilling modeling & simulation software Minimizes drilling risk, delivers optimal results, and enables rigsite service automation

- Proactive risk management in job planning and during execution • Assurance of wellbore integrity including optimum well construction performance
- Continually updated with live data, including the i-Trak Automated Fluid Monitoring unit (AFM)

