

New condensate recirculation process

A new condensate recirculation process now is available for low-cost hydrate control in natural gas systems with high water production.

In the past, the company says, it was necessary to have less than 0.80% water cut in natural gas wells for new generation, low dosage hydrate inhibitors (LDHI) to deliver optimum results. The new program uses platform infrastructure and proprietary application processes in combination with the FREEFLOW family of LDHI's to eliminate methanol usage in these types of wells—resulting in a 75% or higher overall cost reduction for hydrate mitigation. As part of the program, condensate is pumped through the preexisting methanol injection system, along with FREEFLOW LDHI.

The new program expands the profile of projects that can benefit from the latest developments in LDHI research and development.

Source: **Nalco Co.**, 1601 W. Diehl Rd., Naperville, IL 60563-1198.

New formation tester

The new PressureXpress combinable reservoir pressure-while-logging service provides formation pressure and fluid mobility data in typically less than 1 min.

The company says this is a substantial time improvement over conventional pressure measurements—and with less risk of differential sticking than conventional methods. As a result, companies can eliminate completing or hydraulically fracturing depleted zones, giving them an economic savings while enhancing production from aging fields, the firm points out.

The service is designed to be run as a standard addition to the Platform Express integrated wireline logging tool during the first logging pass and is also fully combinable with most openhole tools. The probability of getting successful pressure and mobility measurements is calculated in real time during the Platform Express logging pass. The new formation pressure tool also reduces overall pressure testing expenditures through increased reliability, operational efficiency, reduced potential for fishing, and associated lost-in-hole costs.

PressureXpress uses the new Smart Pretest system to control the pretest process and optimize drawdown and buildup profiles. The pressure measurement cycle—from set to retract—typically lasts less than 1 min compared with as long as 10 min or more required previously.

PressureXpress data are the basis for accurate pressure profiles and mobility measurements that integrate with petrophysical, seismic, and conventional log data to obtain a more complete picture of the reservoir. With this information, reservoir models can be fine-tuned to improve ultimate reservoir productivity, the firm notes. This combination of data can also improve the design of multilevel or stage fracturing operations in low-mobility formations and help identify depleted zones and zones to avoid during fracture stimulations.

Source: **Schlumberger Oilfield Services**, 300 Schlumberger Drive, Sugar Land, TX 77478.

New orifice plate technology

New conditioning orifice plate products deliver $\pm 0.5\%$ accuracy with only two diameters of straight pipe run.

The Rosemount 405 compact conditioning orifice plate and 1595 conditioning orifice plate enable users to extend the use of orifice plates into measurement points previously limited by existing piping configurations, the firm says.

These products promise accurate and repeatable results downstream of a variety of flow disturbances that normally cause swirl in the flow process. Technology consists of four equally spaced holes that condition the flow profile for a more stable, accurate measurement.

The company says its plates require less straight run, helping in reducing material, labor, and procurement costs. These devices can be installed virtually anywhere. The conditioning orifice plate offers an economical way to retrofit installations that have experienced poor results caused by limited straight run.

Integrating the new conditioning orifice plate primary with Rosemount transmitters as a flowmeter provides a

cost-effective and reliable measurement. The unit arrives assembled, configured, and ready to install. The 3051SFC flowmeter shown below combines the new compact orifice design with the scalable architecture of the Rosemount 3051S transmitter. This flowmeter provides advanced software capability, including user configured flow units, low flow cutoff, and customized process alerts. Installation flexibility is improved because users are able to install the flowmeter directly in the process piping and position the display and communication ports at grade level.

The Rosemount 3095MFC mass flowmeter integrates the compact orifice primary with the 3095 MultiVariable transmitter. This flowmeter enables accurate, compensated mass flow output by measuring differential pressure, pressure, and temperatures with a single device. This flowmeter is suited for gas and steam applications where a compensated flow output is required.

Source: **Emerson Process Management, Rosemount Div.**, 8200 Market Blvd., Chanhassen, MN 55317.

