

## New publications address well test analysis and phase behavior

Just published: 'Dynamic Flow Analysis' (Kappa) and 'Phase Behavior of Petroleum Reservoirs,' Calsep.

Kappa Engineering has just released an online resource 'Dynamic Flow Analysis' (DFA) as a free, downloadable set of pdf documents. DFA, which includes well test interpretation and pressure transient analysis, is well-illustrated with screen shots from Kappa's software. But the material is largely software independent, teaching techniques rather than software usage. The introduction traces DFA's evolution from the Horner plots of yore to today's compute-hungry

algorithms. Later chapters include up to date information on permanent downhole gauges, formation testers and DTS. Highlighted sections indicate optional reads for those seeking full equation development. For us, the only downside was the awkward multiple PDF format.

### Calsep

In the context of Petroleum Engineering training we have also received a review copy of Karen Pedersen and Peter Christensen's new book, Phase Behavior of

Petroleum Reservoir Fluids. The authors are also founders of Danish software house Calsep. *Phase Behavior* is a thorough textbook treatment of the subject with an up to date account of modern petroleum engineering techniques applied to producing oil and gas in 'challenging conditions.' Kappa's book can be downloaded (after registration) from [www.kappaeng.com](http://www.kappaeng.com). *Phase Behavior* is published by Taylor and Francis—ISBN 0824706943. ☒

## Yokogawa control system passes Wurldtech's cyber security test

Rigorous testing now mandatory as process control deperimeterization sees more open IT.

Process control and engineering house Yokogawa commissioned Vancouver-based Wurldtech to test the resistance of its Centum CS 3000 R3 production control system and ProSafe-RS safety instrumented system to cyber attack. The tests were performed in February 2007 using Wurldtech's Achilles Assurance Platform (AAP). The tests determined the controllers' robustness to a variety of Ethernet, TCP/IP and Vnet/IP hacks.

### Ethernet

Yokogawa's controllers are deployed in oil and natural gas infrastructure which is increasingly migrating from traditional closed process control systems to more open IT and Ethernet-based systems in a process is known as 'deperimeterization' (OITJ Jan 06). The move to internet technologies brings a potential threat of cyber attack—hence the need for rigorous testing.

### Pass

The Wurldtech tests determined that the Yokogawa controllers had stable and robust network stacks and that they passed all Achilles V1.2 tests. Wurldtech's Achilles offers security and quality assurance tests that address network vulnerabilities in control systems. ☒

## Marathon awards Program Framework Brae asset IT project

Contract involves design and implementation of enterprise project management system.

Marathon Oil UK has awarded project management consultants Program Framework a contract for the design and implementation of an enterprise project management (EPM) solution to assist in scheduling, tracking and execution of maintenance and engineering activities across its North Sea Brae Asset. Brae comprises three production platforms and multiple onshore engineering teams.

### Revamp

The deal is a component of a larger revamp

of Marathon's Brae planning process including new planning software interfaced to Marathon's SAP-based management, scheduling and reporting tool.

### Microsoft Project

The EPM solution is based on Microsoft Project Server 2003 and provides users with visibility of schedule and resource information across multiple project plans in a variety of locations. Program Framework will also provide training in Microsoft Project and the EPM solution.

### Major

Program Framework director Paul Major said, 'EPM is a critical component of the programmed maintenance that assures uninterrupted functioning of multi-billion pound assets. But EPM solutions are powerful and highly complex—tuning them to a company's needs is critical to a successful implementation.' More from [christine.stone@programframework.com](mailto:christine.stone@programframework.com). ☒

## SolArc's 'RightAngle' gets SAP NetWeaver seal of approval

Trading and risk management solution now allows for advanced interaction with SAP back end.

Houston-based trading and risk management specialist SolArc has received SAP's NetWeaver certification for its RightAngle deal capture, inventory management, accounting, reporting and risk analysis package. RightAngle now leverages the NetWeaver Exchange Infrastructure (SAP NetWeaver XI) to communicate with the mySAP Business Suite. The certified integration promises faster implementations and lower integration costs.

### Haynie

SolArc CTO Cynthia Haynie said, 'Customers require flexible ERP integration strategies. By working with SAP we have leveraged our SAP integration experience to develop a standard suite of scenarios certified for the NetWeaver platform.' ☒

### Process integration

The system can be extended with the NetWeaver process integration functionality. Certified content integration lets users settle RightAngle transactions within SAP and enables other advanced interactions between RightAngle and SAP back-end systems. RightAngle users include Chevron and ConocoPhillips. ☒