Karamay Drilling Company branching out of northwest China, builds 3,000-hp land rig

IN THE EARLY 1950s, China discovered oil in the Zhun'gur Basin, located in far northwest China in the Xinjiang Uigur Autonomous Region. Before long, the Karamay Oilfield had been established – in the region's native Uyghur language, "Karamay" means "Black Oil Hill." Since discovery, the field has attracted thousands of engineers and workers to the region, transforming it from a sparsely populated wilderness to the an urban city with a population of more than 330,000.

Founded in 1956, Karamay Drilling Company (KDC) is celebrating its 50th anniversary this year. Over the past 5 decades, it has built up a fleet of 103 onshore rigs, with capacities ranging from 650 hp to 3,000 hp. It employs more than 6,400 workers – including 69 senior engineers and experts, 519 engineers and 2,430 technicians. Together, they work to produce 12 million tons of crude oil and natural gas a year, and the company has completed more than 19,000 oil and gas wells with a total footage of more than 27 million meters.

IADC VISIT

Ken Fischer, IADC vice president–Middle East & Asia, recently toured Karamay Drilling Company. The visit followed a UBO/MPD workshop held by the IADC Underbalanced Operations & Managed Pressure Drilling Committee in Urumqi, China, on 23-24 August. More than 100 professionals from China National Petroleum Corp (CNPC), China National Offshore Oil Corp (CNOOC), Sinopec and China's Petroleum University attended. Mr Fischer facilitated the workshop, which was conducted by Gavin Humphreys of Stena Drilling and Steve Nas of Weatherford.

"We were very happy to have the opportunity to visit Karamay Drilling," Mr Fischer said. "In addition to its drilling divisions, the company includes workshops and other facilities to support their operations, including UBO."

In Karamay City, one of the first KDC facilities he visited was the company's well control training center, known as Western China Well Control Center. The school received its IADC WellCAP accreditation in October 2000. It has a model DrillSIM-5000 simulator and 16 instructors, and it provides well control training services for employees involved in drilling, workover, production, mud logging and well logging.

"Western China Well Control Center teaches students how to improve well control through respect, communication, cooperation and knowledge," said **Wang Yuewen**, senior engineer and deputy manager for KDC's international branch.

Mr Fischer also visited KDC's Drill Tools Service Division, which provides equipment and services for downhole and pipe-handling equipment and services for KDC's rig operations. It also provides easing running services in Kazakhstan.

KDC recently took delivery of a new model BS ZJ9000, 3,000-hp land drilling rig, the first Chinese-made onshore rig with such capacity. The rig was built by **Baoji Oilfield Machinery Company** (BOMCO) and can drill up to 9,000 m. It recently went into the field drilling an exploration well in the central region of Zhun'gur Basin for CNPC.



Gavin Humphreys (from left) of Stena Drilling shares a laugh on the rig floor with Zhou Lao, field HSE supervisor; Wang Yuewen, senior engineer and deputy manager of Karamay Drilling Company's international branch; David Yu of Weatherford; and Tian Fu Lin, general manager of Karamay Drilling.



A Western China Well Control Center trainer (back right) shows off the facility's drill floor simulator to Gavin Humphreys (left) of Stena Drilling, Ken Fischer (center) of IADC, and Steve Nas (front) of Weatherford during a recent tour.

GOING OUTSIDE CHINA

With its presence in China firmly established, KDC has been branching out into the international drilling market. It started its international drilling services division in 1998, working in Egypt with Great Wall Drilling Company and 2 Egyptian partners. Now, KDC's international division has 10 rigs providing drilling and workover services for clients in Egypt, Syria, Iran, Pakistan, Oman, Kazakhstan and Venezuela. Over the past 5 years, the division has drilled and completed 168 wells in 11 countries, with a total footage of more than 448,000 m.

"Karamay Drilling Company has now become one of the leading drilling contractors in China," Mr Wang said. "It hopes to work with IADC to perfect its operational performance and also to communicate with drilling contractors around the world and build up new cooperation."