

PIG TRACKING TRANSPONDERS ‘WAKE UP’ ON TIME, AUSTRALIAN LNG PLANT ON SCHEDULE

T.D. Williamson SmartTrack™ system aids pre-commissioning of one of Australia’s largest resource projects

#OILANDGAS

MELBOURNE, AUSTRALIA, NOVEMBER 30, 2016—When the timetable for a new liquefied natural gas (LNG) project in Western Australia called for pre-commissioning pigs to be pre-loaded inside a subsea launcher nearly two years in advance, a critical requirement was for the pig tracking system to retain its battery life over such a long period. The field services firm was tasked with finding an environmentally friendly pig tracking system that had a proven track record, including a demonstrated ability to remain in a ‘dormant state’ and then reactivate when each pipeline was ready for commissioning activities.

To ensure the pig tracking transponders would be reliable and ready on demand — and that the eventual pig tracking process would be effective — the firm turned to global pipeline solutions provider T.D. Williamson (TDW) and its SmartTrack™ pig tracking system.

The SmartTrack system is a unique two-way communication system devised for tracking inline tools and pigs as they travel inside pipelines — onshore, topside, and subsea. Based on extremely low frequency (ELF) signals, the system offers an alternative to the traditional use of isotopes for inline pig tracking operations. The system has been used extensively to track specially designed pigs used during dewatering, cleaning, and gauging of pipelines during pre-commissioning works. For subsea operations, the system’s transceivers can operate in depths of up to 2,500 m (8,200 ft).

Of critical importance in this instance, SmartTrack transponders are known for their long battery life and have a demonstrated history of reliably reactivating after lengthy idle periods. According to Thomas Hans Barlaug Bergsland, TDW engineering manager, the company had calculated that the SmartTrack transponders could remain in dormant mode for up to 767 days; on-going testing by TDW indicates a 100 percent success rate in reactivating the transponder from the dormant state. In addition, the transponders could be easily mounted on the pigs without affecting their design or functionality.

After a 21-month dormant period, the SmartTrack transponders that had been fitted onto the pre-commissioning pigs reactivated as needed, allowing dewatering and other pipeline commissioning activities to proceed on schedule.

Participating in the future of Australian LNG

The new LNG plant will gather and partially process gas and associated condensate from various offshore fields in the West Carnarvon Basin and deliver it to an onshore facility. There, two trains with a combined annual capacity of 8.9 million tonnes (9.8 million tons), will make the LNG commercially viable. The site also includes a domestic gas plant. First delivery of LNG is expected in 2017.

In 2014 — well before the pipe connecting the onshore and offshore infrastructures was scheduled to be laid — the operator fitted the SmartTrack equipment into the bodies of eight bi-directional pigs intended for use in dewatering, drying, and purging the two 24-inch production lines, and two 14-inch utility lines. The pigs were then loaded into the subsea launcher connected to the pipes, and the entire assembly was transported to Australia. After the lines were laid and the transponders successfully

reactivated, pigging operations commenced. The pigs were retrieved from the lines in 2016, 21 months from the 2014 start date.

To track the pigs fitted with the SmartTrack transponders, TDW also supplied a subsea remote transceiver, for confirmation of pig launching and a topside transceiver for tracking pigs from the platform side.

TDW trained the field service firm's personnel to handle the SmartTrack equipment, which included understanding how to install and commission the transponders within the pig body and to correctly interpret the results during tracking.

By using the SmartTrack system, the field service firm was able to keep pre-commissioning activities on schedule, contributing to the LNG project moving successfully toward first delivery.

###

About T.D. Williamson

Drawing upon a 96-year history of industry leadership, TDW delivers a comprehensive portfolio of solutions for onshore and offshore applications, including pipeline cleaning, pigging, integrity inspection, non-destructive evaluation, hot tapping, and intrusive and non-intrusive isolation.

www.tdwilliamson.com

For further information or imagery, contact:

Emily Williamson Perkins
Director, Corporate Communications
T.D. Williamson, Inc.
Tulsa, Oklahoma, U.S.A
Phone: +1 918-447-5339
Email: Emily.perkins@tdwilliamson.com
web: www.tdwilliamson.com