



Largest Ever Subsea Pipeline Pressure Intervention Averts Major Disruption to Natural Gas Supply in Indonesia

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Pipeline Re-routed Without Interrupting Production Offshore Jakarta

Singapore – April 9, 2014 – T.D. Williamson, Inc. (TDW), a leading supplier of pipeline services and equipment, announced that as a result of a complex subsea pipeline pressure intervention carried out in record time offshore Indonesia, it helped to prevent a major gas supply interruption for millions of residents and businesses in Jakarta.

The operation made company history as the largest subsea pipeline pressure intervention that TDW has ever executed. The challenging hot tap and STOPPLE® plugging operation was carried out for main contractor Timas Suplindo in cooperation with Offshore Construction Specialists on behalf of Pertamina EP, on sections of the pipeline network attached to the Lima Flow Station in the North West Java Sea. Work was carried out as part of the Lima Subsidence Remediation Project. The initiative aims to raise the Lima Flow Station that has been slowly subsiding into the seabed since 1997. The flow station consists of compression, service and process platforms, as well as a platform bridge, flare bridge and tower.



Subsidence remediation works threaten gas supply to Jakarta

Stabilizing the L-PRO platform on the seabed by lifting and consolidating it made it necessary to shut down several lines connected to it. A complete shutdown would have severely disrupted the flow of natural gas from the Lima field. “Nine million live in Jakarta; half of whom rely upon natural gas supplied from Lima field, so the stakes were extraordinarily high,” said Edward Sinaga, Execution Lead for Pertamina EP. “Without gas from Lima field, much of the city would have been thrown into chaos, without power and in some cases, electricity, which was utterly unacceptable. It was critical that supply to the city remain steady while jacking operations took place.”

To ensure that production and supply would continue uninterrupted during remediation works, several lines were to be installed to bypass the 14-inch and 20-inch MGL pipelines that extend from the TLA and TLD platforms to the L-PRO platform and the 24-inch MGL pipeline that extends between the L-PRO and Cilamaya, where the pipelines make landfall. Pertamina EP engaged TDW to isolate the affected lines so that temporary



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bypass lines could be installed through which gas would flow, ensuring uninterrupted supply to Jakarta.

Precise planning + speedy execution produce results

The Lima intervention would prove to be TDW's largest, most demanding subsea hot tap and STOPPLE® plugging operation. The operator afforded TDW only five months to plan, gather resources, and execute this subsea project. Each phase – preparation, engineering assessment, fabrication, simulation, mobilization and execution – had to be carried out to perfection in order to meet the demanding deadline.

To maintain flow and facilitate the installation of the bypass lines, TDW developed a solution that required an intricate series of subsea activities: nine hot taps followed by simultaneously executing STOPPLE® plugging operations in six different locations. Because Pertamina EP required that all intervention work be completed within three months, TDW quickly mobilized equipment from North America, Europe and Asia Pacific, accompanied by a team of experienced technicians, to the hot tap and STOPPLE® plugging operation site.

Following the installation and commissioning of the temporary bypass lines upon the successful completion of nine hot taps, the TDW team could commence with setting the STOPPLE® plugs in six different locations. Working from the dive support vessels (DSVs) at depths up to 131 ft. (40 meters), the five-member team used a full complement of specialist machines to hot tap the pipelines, and STOPPLE® plugging systems with Lock-O-Ring® Plus fittings to plug them for final completion. Once the line has been safely isolated, cold-cutting of the isolated pipeline for the installation of sub-sea in-line ball valve commenced. In just 25 days, all of the lines were hot tapped, STOPPLE plugs set and successfully isolated, making it the fastest such operation in TDW history.

For 22 days, the lines remained safely isolated at a pipeline pressure of 13.78 bar (200 psig). The entire operation was completed in just 63 days, from late July through September 2013. Natural gas flowed continuously through the temporary bypass lines to Jakarta, allowing the city to function without missing a beat.

“The sheer scale and complexity of this subsea operation posed many challenges for Pertamina EP, so we are very pleased that it was completed so quickly and effectively,” said Edmund Ang, Operations Manager – Asia Pacific for TDW. “The fact that we were able to simultaneously carry out six STOPPLE® plugging operations at different subsea locations meant that every step of the process had to be precisely orchestrated. But our efforts paid off. By completing them in a matter of days instead of weeks, the lines were properly isolated in time for Pertamina EP to divert flow through the temporary bypass lines to Jakarta.”

“The success of this operation on Lima field underscores the trust that Pertamina EP places in TDW to deliver critical pipeline intervention services, reliably and professionally,” said Sinaga.

Pipeline Performance™



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About T.D. Williamson

A world leader in pressurized pipeline equipment and services, TDW delivers a comprehensive portfolio of integrity pipeline system solutions for onshore and offshore applications, including hot tapping and plugging, pipeline cleaning, integrity inspection, pigging and non-tethered plugging pig technology for any pressurized piping system, anywhere in the world.

Note to editors: Photos of the hot tap and STOPPLE® plugging operation in Indonesia may be obtained by contacting Sharon Roe below.

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