



T.D. Williamson, Inc.  
Corporate Office

6120 South Yale  
Suite 1700  
Tulsa, Oklahoma, 74136-4235  
ph: 918-447-5001  
fax: 918-447-5050

www.tdwilliamson.com  
ISO 9001 Certified

## PIPELINE ISOLATION HOLDS FOR 70 DAYS, KEEPING TOKYO BAY SAFE

*First T.D. Williamson STOPPLE® isolation in Japan avoids service interruption during pipeline section replatement*

### #OILANDGAS

**TULSA,OK, OCTOBER2016** – Operating a subsea crude pipeline in the environmentally sensitive Tokyo Bay region of Japan involves unique challenges, including complying with the rigorous safety and marine preservation regulations of the nation’s Coast Guard. And those same restrictions can make the complex job of pipeline repair even more daunting.

When a typhoon damaged the elbow joint of a 24-inch subsea crude pipeline located 4 km (2.3 miles) offshore Tokyo Bay in May 2015, the operator acted immediately to mitigate the situation. In addition to clean-up, the operator took the line out of service and made a temporary repair. However, that was just a stop-gap measure: the next step was evaluating how to remove and replace the damaged elbow joint and pipeline end manifold (PLEM) under the Coast Guard’s watchful eye.

Because the pipeline connects the loading single buoy mooring to the 40-inch main subsea crude pipeline supplying an onshore refinery, keeping the system in service during the replacement project while ensuring zero spillage in the highly environmentally-controlled waters were priorities.

To achieve those goals, the operator contracted global pipeline solutions provider T.D. Williamson (TDW) to create a safe subsea work zone using its proven hot tapping and STOPPLE® isolation system. The STOPPLE® system provides a temporary isolation of the damaged section so that repairs and maintenance can be performed effectively even under the most demanding environmental and safety conditions.

This was the first subsea application of STOPPLE® isolation technology in Japan.



### **Coast Guard requirements nearly triple project timetable**

Any subsea intervention is demanding, but in this case, there were additional challenges, chiefly the Coast Guard limiting diver access to the work zone to daylight hours and mandating the use of an air diving wand rather than the preferred method of saturation diving. That restriction meant daily set-up and close-out of driving equipment took nearly 90 minutes out of a short, six-or seven-hour work day. Combined with inclement weather, the Coast Guard requirements extended the project to 70 days, about three times the duration of a typical hot tapping and plugging (HT&P) operation.

To ensure a safe and efficient isolation without additional delays, prior to deployment TDW prepared and tested the subsea tapping machines and STOPPLE® isolation equipment, conducted divers' training, and completed a mock-up to confirm the STOPPLE® machine would be completely compatible with the subsea mechanical clamp. According to Project Manager Rakesh Shetty, those steps safeguarded performance and helped the operator avoid cost overruns.

“All equipment is specified and tested for each unique STOPPLE® isolation,” Shetty says. “Because the equipment, the vessel, and the diving teams are all on standby, the isolation has to be flawlessly executed to avoid huge standby charges.”

Using the STOPPLE® methodology, TDW achieved a successful first-time isolation just 5 meters (16 feet) from the damaged elbow. The isolation remained secure for the entire 70-day project timeframe, allowing the operator to safely complete the replacement with no product loss or interruption of service.

####

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](http://www.tdwilliamson.com)

For further information or imagery, contact :

**Emily Williamson Perkins**

Director, Corporate Communications

T.D. Williamson, Inc.

Tulsa, Oklahoma, U.S.A

+1 918-447-5339

[emily.perkins@tdwilliamson.com](mailto:emily.perkins@tdwilliamson.com)