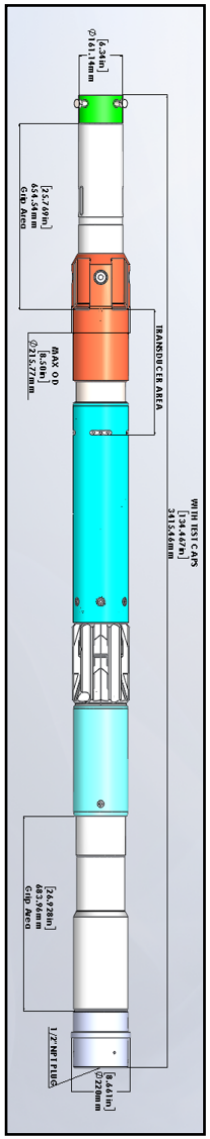
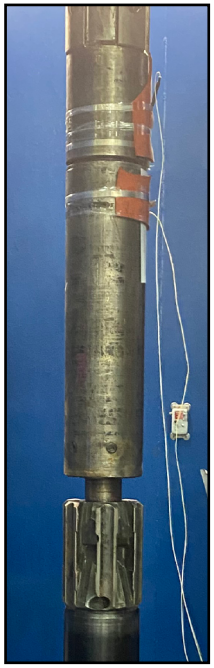
Case Study - 2020US029

DE-RISKING OPERATIONAL EFFICIENCY

Tested to 27,000 psi, 302° F 14.35 PPG drilling fluid

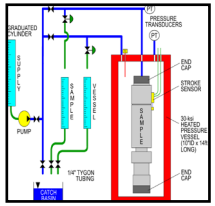


TRIDENT Anchor



TRIDENT Anchor

Setup Sketch
Click to view



THE CHALLENGE

Today's operators are drilling to unprecedented depths and operating in ultra-deep waters providing for an exponential relationship between costs and depth. Risk mitigation is key throughout the well lifecycle. Performing Slot Recovery/Re-entry and Well Abandonment operations in this environment requires extreme levels of focus on quality, reliability and cost efficiency.

THE SOLUTION

Next-Generation Casing recovery using Ardyne Engineered solutions in the form of the TRIDENT® and TITAN® systems combined with Extreme Hyperbaric Deep Water qualification testing conducted at Stress Engineering Services® in Houston simulating downhole tool functioning. Ardyne tools are designed and manufactured in accordance with:

- API Specification 7-1 – Specification for Rotary Drill Stem Elements
- API Specification 7-2 – Threading and Gauging of Rotary Shouldered Connections
- NS-1 Specification
- DS-1 Volume 3 Drill Stem Inspection Cat 3/5
- DS-1 Volume 4 - Drilling Speciality Tools

THE RESULTS

Both systems performed flawlessly throughout all testing even at the combined challenging extremes of simultaneous **27,000 psi, 302° F 14.35 PPG drilling fluid**.

TRIDENT	Internal / External Pressure (psi)	Temperature	Tool Function Test
Test 1	13,500	212 °F / 100 °C	Successful
Test 2	20,000	212 °F / 100 °C	Successful
Test 3	27,000	302 °F / 150 °C	Successful

DHPT	Internal / External Pressure (psi)	Temperature	Tool Function Test
Test 1	27,000	302 °F / 150 °C	Successful

DHPT

DHPT Anchor

Tested to 27,000 psi