

News Release - Autonomous Project

Titan Division

Hunting’s Titan Division and ExxonMobil Upstream Research Company move to the next phase of the Autonomous Project for field testing.

The Autoumous Project is:

- Autonomous tool technology for the reduction in well completion operations risk, cost, and time.
- Wireless, portable, and easily deployable tools with applications in perforating, pipe cutting, plug setting, gauge deployment, and other well completion and intervention operations.

HOUSTON - Hunting’s Titan Division and ExxonMobil Upstream Research Company entered into a joint agreement in 2015 to develop autonomous tool technology that creates a revolutionary step change in well completion and P&A. After meeting several development milestones, Hunting and ExxonMobil Upstream Research Compnay announced that field trials for the autonomous tools will begin in late 2018. Commercialization is expected to follow shortly thereafter.

The autonomous tools have proprietary anomaly detection and depth correction algorithms verified in a 5,200-foot long horizontal flow loop at Hunting’s Milford Texas facility, constructed with 5-1/2 in. OD, 20 lb/ft, P110 HC Casing with Hunting’s SEAL-LOCK HT Premium Connections technology. The flow loop was designed to simulate well conditions in horizontal well applications. This flow loop allows the autonomous tool to be accelerated to velocities of up to 35 feet per second depending on the pump configuration.



Figure 1
Hunting’s Milford Texas Facility’s 5,200 ft. (1,585 m) Flow Loop

Simulated autonomous tool detection and error correction algorithms provide a high degree of confidence in the accuracy of perforation placements and other “on-the-fly” deployments at velocities of up to 50 feet per second. Verification of the tool’s positional accuracy at randomly chosen points along the flow loop will be performed using nondestructive testing techniques. Field confirmation will be done at one of ExxonMobil’s locations by using a tubing punch fired from an autonomous tool in a vertical well.

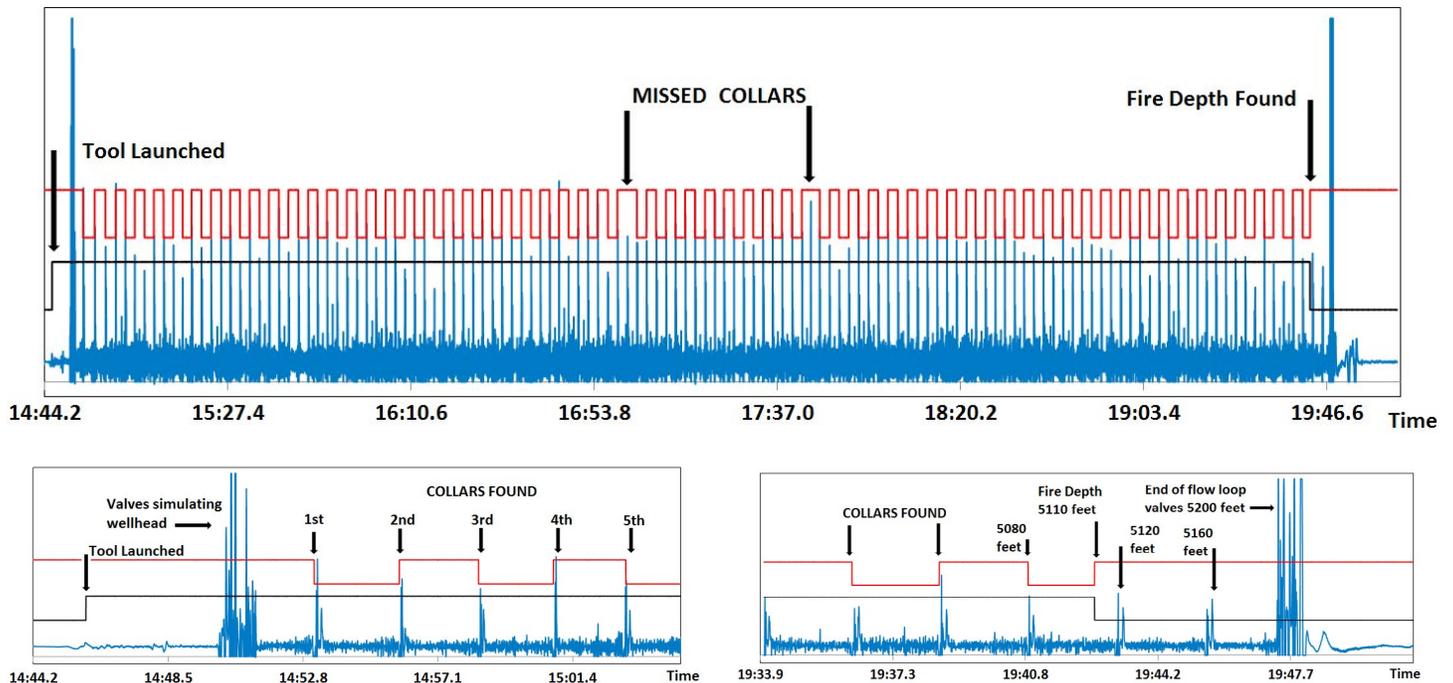


Figure 2

Tool Detection and Error Correction Algorithms Provide High Degree of Confidence

Methods, procedures, hardware, and energetics are being developed concurrently with refinements to the autonomous tools to ensure a safe assembly and launch. Tests are currently underway on different tool configurations including jet cutters and setting tools and plugs. The Titan Division’s Energetics team is currently developing hardened jet cutters with other applicable energetics for autonomous P&A operations. The hardware designed to launch autonomous tools will be furnished by Hunting’s Well Intervention Division. Simulated tool handling and launching will be carried out at Hunting’s Milford Texas facility through a test well configured with a common North American wellhead.

Hunting’s goal for the Autonomous Project is to provide the industry a new innovative, cost-saving, and safe method of performing well completion and P&A operations.

Media Contacts: Hunting: Heath Bentley (800) 692-4486 | ExxonMobile: Aaron Stryk (832) 625-4000

Hunting PLC is an international energy services provider to the world’s leading upstream oil and gas companies. Established in 1874, it is a premium listed public company traded on the London Stock Exchange (LSE: HTG). The Company maintains a corporate office in Houston and is headquartered in London. As well as the United Kingdom, the Company has principal operations in Canada, China, Indonesia, Mexico, Netherlands, Singapore, South Africa, Thailand, United Arab Emirates, and the United States of America.