



CASE STUDY

Stuck Smart Tool

An Alberta oil and gas provider called FourQuest Energy with a crisis.

Highlights:

- > FQE personnel called out to help remove a stuck smart tool.
- > Through persistent pumping, and significant volume and pressure changes, FQE personnel were able to free the trapped tool.
- > Utilizing FQE's nitrogen pumper, a successful smart tool run was achieved.

They had tried to perform a smart tool run on 17km of 24" line, propelled with air, but the smart tool was stuck in the line. The air compressor can only push the tool with an injection pressure of 150psi, which was not enough for this scenario. FourQuest Energy mobilized to site with a high rate nitrogen pumper – capable of up to 350m³/min at up to 10,000psi, and 75,000m³ of bulk deliveries – with staggered arrivals as required by the pump rate.

Once the onsite rig in and required safety checks were performed, our personnel slowly began to inject nitrogen into the line to propel the smart tool. Starting with an initial injection rate of 50 m³/min our personnel ramped up to 100m³/min before finding an inline valve that was restricting flow. The valve was secured open, and pumping continued. Pumping at a rate of 160m³/min at 200-275psi, everything appeared to be on track and as per procedure. After 9 hours of pumping, the rates were increased to 200-220m³/min at 450-550 psi for an additional 6 hours. Both the nitrogen injection rate, and injection pressure were increased to 225 m³/min at 610psi respectively. These rates were maintained over the course of 2 x 12-hour shifts. Our experienced personnel were able to free the stuck tool and ensure the smart tool was received safely and without further incident.

The next day, FourQuest Energy performed a smart tool run on the same line, this time without the tool getting stuck.



Visit our website for more Case Studies and Insights at:

fourquest.com/case-studies
fourquest.com/insights

Contact Us



EDMONTON, AB

9304 39 Avenue Northwest
Edmonton, AB T6E 5T9
Office: +1 780-485-0690



CALGARY, AB

Suncor Energy Centre, West Tower
#5100, 150 6th Avenue, S.W.
Calgary, AB T2P 3Y7
Office: +1 403-538-2140



FORT MCMURRAY, AB

136 Macmillan Road
Fort McMurray, AB T9H 5L4
Office: +1 780-750-2829



FORT ST. JOHN, BC

Graywest Office Centre Ltd.
10704 97 Avenue
Fort St. John, BC V1J 6L7
Phone: +1 250-785-1706



CONNECT WITH US:



fourquest.com