How an Oil & Gas Tool Company Improved Downhole Sampling Worldwide

A SILCOTEK® CASE STUDY

This case study was created with one of the world's largest oil and gas tool companies, who wish to remain anonymous.

"SilcoTek coatings allowed our company to obtain consistent well sample results without costly expedited or on-site analysis."

SUMMARY:

Oil and gas companies sample oil and gas wells for product quality and sulfur contamination. Oil or gas sulfur levels above 100 ppm are considered sour wells. The more sour the well, the less valuable the oil or gas; so it is vital for oil companies to accurately measure H_2S and other sulfur compounds. If they get the measurement wrong, it could cost the company millions in additional processing costs. SilcoTek® listened to the customer and developed Dursan®, an inert high durability coating ideal for oil and gas sampling.

CHALLENGES:

One of the world's largest oil and gas tool companies had a problem. Interference in their downhole sampling tool was wearing the inside of the sample cylinder, causing loss of the inert coating surface and increasing surface activity.

HOW SILCOTEK HELPED:

The SilcoTek team listened to the customer, our R&D team worked closely with the customer's engineering staff to refine a high durability coating then under development. The result was Dursan, a wear resistant, low friction, inert and corrosion resistant coating.

GAME-CHANGING BENEFITS:

Dursan offers 2x wear resistance, improved lubricity, impressive corrosion resistance and low part per-billion H_2S inertness; enabling precise and reliable well sampling. Dursan also offers near 100% H_2S recovery; assuring accurate well characterization and preventing potential costly errors in H_2S well testing. SilcoTek coating will significantly improve wear resistance compared to uncoated stainless steel; improving downhole sampling durability and reducing tool maintenance cost.

SilcoTek now coats a significant percentage of the world's downhole sampling tools. Our technology enables oil and gas companies to accurately and reliably assess sulfur/H₂S concentration in oil and gas wells. As the world moves toward unconventional oil and gas extraction, Dursan will continue to play a major role in oil and gas development.





