

APPLICATION NOTE

October 2022



WAND Technology Applications for Remote Well Assets

Oil & Gas Producer



OVERVIEW

APPLICATION 	WAND Technology installation to monitor sand erosion of remote well assets
CLIENT	Oil & Gas Producer
ASSET	Oil Wells
TEMPERATURE	Ambient
DEGRADATION	Sand Erosion
INSPECTION FREQUENCY	Once / month - Once / year

CHALLENGES



The customer was looking to optimise personnel productivity and was therefore seeking technologies that could help their staff do more, whilst saving time and costs in the process.



Online monitoring solutions were not feasible due to the wells being remote. As a result, there was a need for technology that did not rely on wireless infrastructure.



Sand erosion rate was not being accurately monitored using the customer's conventional methods. A permanently installed solution was required to provide precise, repeatable thickness data, enabling them to accurately determine the rate of erosion.





SOLUTION

Wireless & Non-Destructive Thickness Monitoring Sensors (WAND TM Sensors) were installed at multiple locations on the customer's well assets. Thickness data was collected by maintenance technicians using the WAND, as part of their routine tasks. Data could then be downloaded from the WAND to the software, and shared with colleagues once they had access to the internet.



RESULTS

Using the WAND data collector, maintenance technicians were able to collect thickness data easily and efficiently as part of their routine tasks. This has helped to optimise productivity, whilst reducing the demand for specialist NDT personnel – saving significant costs.

Using the permanently installed WAND sensors, repeatable, high quality thickness measurements were acquired, enabling accurate internal erosion rate trending, at a fraction of the cost and hassle of conventional online systems.









WAND sensors installed at sand erosion examination points (prior to coating)