

WellWatcher Connect System Saves USD 28,000–36,000 Annually for Well Data Collection

Self-contained system transmits data to operator in Lagos, Nigeria, improving reservoir management and accuracy of back-allocation data

CHALLENGE

Monitor and control a remote onshore well with a three-zone intelligent completion, minimal infrastructure, no permanent power supply, and a high risk of theft or vandalism.

SOLUTION

Deploy WellWatcher Connect* wellsite data transmission system as a compact solution to deliver continuous real-time data to the operator's office.

RESULTS

- Reduced wellsite visits for data collection from 6 to 2 times a year, reducing HSE risks and saving USD 7,000 to 9,000 per trip.
- Enabled back allocation of production to meet regulatory requirements.



Collect data from a remote intelligent well

An independent operator developing a remote onshore oil field had deployed a modular intelligent well completion to simplify monitoring and control of pressure, temperature, and flow data from three production zones. To retrieve the data from the system, the operator initially planned to send a technician to the wellsite every 2 months for manual data retrieval. Employing a conventional automated collection system with a large presence at the wellsite was considered too risky due to theft and vandalism concerns, and too difficult to power.

Visits to the location required permits, transportation, and fuel and took resources away from other more valuable tasks. In addition, the periodic data collection meant that production managers were not alerted to problems until after they had occurred—and in some instances this could be weeks or months later.

After just a few collections, management realized they needed to be given early warning of downhole events before they occurred and without the need for human intervention. They asked for a compact, self-powered system to permanently collect data from the three production zones and transmit it to the operator's office in Lagos via a secure network, with regular data updates throughout the day.

Transmit data securely

The WellWatcher Connect system integrates fit-for-purpose components that store, aggregate, encrypt, and automatically transmit data across a secure satellite network to the customer. System components are chosen to suit the requirements of each well or location. Each end user, with the help of a simple computer application, can remotely access, view, and download the data from the intelligent completion without a physical visit to the wellsite.

Reduce wellsite visits, risks, and costs

The WellWatcher Connect system was designed to suit the data stream, limited location infrastructure, and requirement to not draw attention to the wellsite equipment. The resulting compact but fully functional system was then installed at the location, complete with solar panels to power the equipment. The resulting data enables proper back allocation of production in line with government regulations. Collecting the data more frequently improves back-allocation accuracy and reservoir management.

The streaming data also significantly reduced wellsite visits—once in 6 months compared with once every 2 months—and eliminated the associated travel and resource costs totaling USD 7,000 to 9,000 per trip.



A compact, self-powered WellWatcher Connect system collects data and transmits it to the operator's offices, reducing wellsite visits and improving reservoir management.