OleumTech®

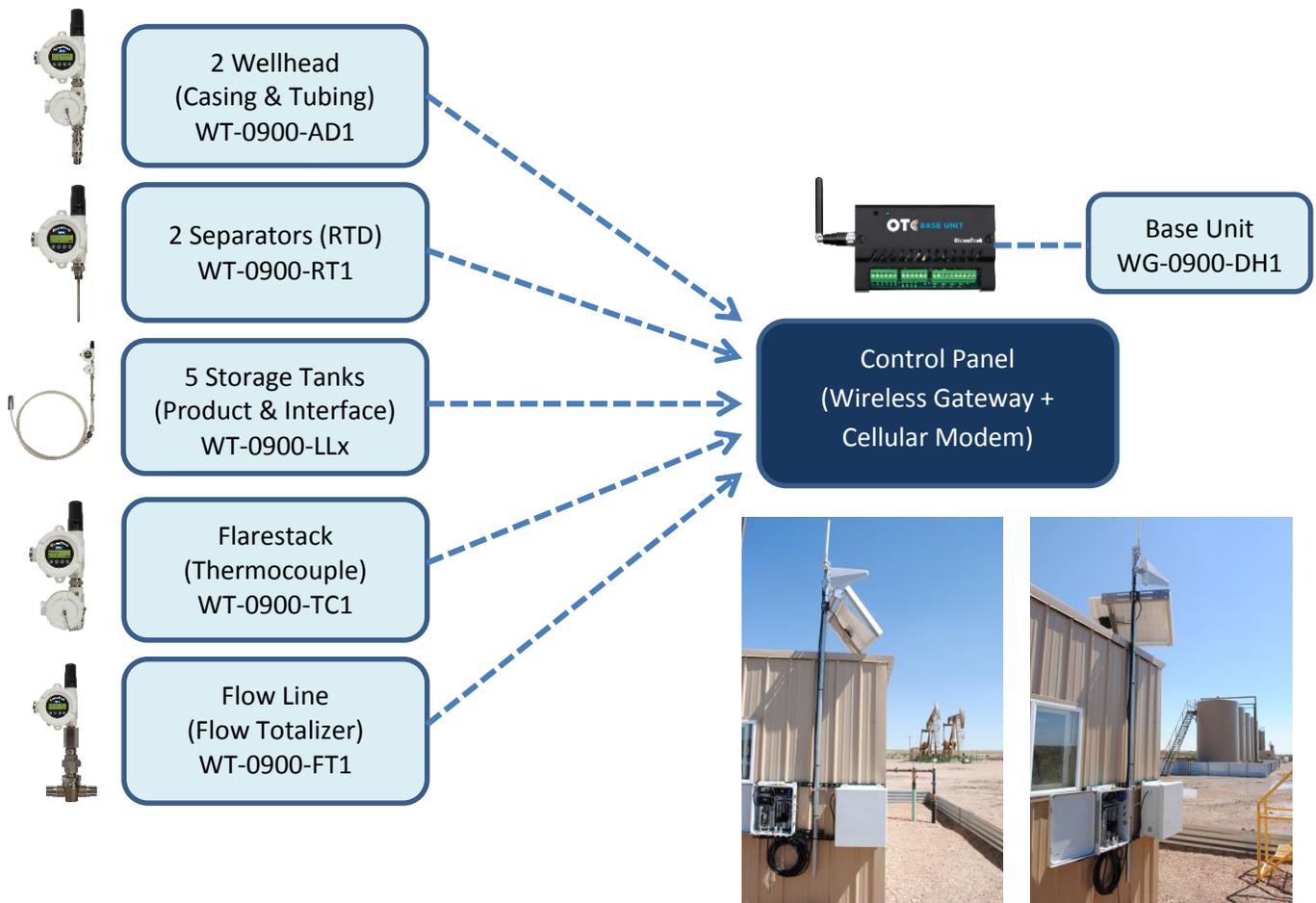# Complete Oilfield Wireless Automation in Less Than Half-a-Day

CHALLENGE

A major producer of oil and gas in the US had very low visibility to their critical and operational process data from remote production pads since data was only being captured once a day by a field technician. They were seeking an automated solution for multiple applications that was cost-effective, safe, low-maintenance, reliable, and easy to install that would minimize labor, time, and cost of field visits. The producer also preferred instruments that could locally display data for on-site verification.

SOLUTION

After evaluating the cost and time of installation between hardwired and wireless system, the producer chose to go with the latter for ease of installation. In addition, since no trenching or permitting is required, the expected time to complete the project was reduced to less than one day.

The OleumTech™ Wireless 900 MHz System was selected for the project. The equipment consisted of 4 Pressure Sensor Transmitters (casing and tubing), 2 RTD sensor Transmitters (heater treaters), 5 Level Sensor Transmitters (storage tanks), 1 Thermocouple Transmitter (flare stack), and 1 Flow Totalizer Transmitter. The Base Unit Wireless Gateway was utilized to collect data from these field units. The Gateway was connected to a cellular modem via RS485 and then relayed that data to the main facility. The installation was completed in less than half-a-day.

2 Wellhead
(Casing & Tubing)
WT-0900-AD1

2 Separators (RTD)
WT-0900-RT1

5 Storage Tanks
(Product & Interface)
WT-0900-LLx

Flarestack
(Thermocouple)
WT-0900-TC1

Flow Line
(Flow Totalizer)
WT-0900-FT1

Base Unit
WG-0900-DH1

Control Panel
(Wireless Gateway +
Cellular Modem)

CASING AND TUBING PRESSURES:

Each well tree received two **Pressure Transmitters**, one for casing and the other for tubing pressure.

5 STORAGE TANKS:

To monitor both product and interface levels of five 20 ft. storage tanks, five **Liquid Level Transmitters** with Ultra-flex Sensors were deployed for ease of installation.

FLARESTACK:

A **Thermocouple Transmitter** was installed.

2 **RTD Transmitters** were installed to monitor to temperature of the heater treaters.

FLOW LINE:

A **Flow Totalizer Transmitter** was installed to count raw volume, flow rate, today and yesterday's totals.