

**MIDSTREAM GAS OPERATOR**

Condition monitoring in a zone-rated environment

Certified wireless vibration and thermal monitoring on pumps and compressors replaced quarterly manual rounds with continuous condition data.

-38%

Unplanned shutdown hours

6 wks

Average fault lead time

-27%

Manual inspection rounds

0

Hazardous-area exceptions

WHAT WE DEPLOYED

- Ex-certified wireless vibration and temperature sensors on critical assets
- Intrinsically safe gateways with segregated OT network design
- Anomaly models trained per asset class with engineer-reviewed thresholds
- Integration into the existing maintenance planning workflow

WHAT CHANGED

- Bearing and misalignment faults caught weeks before failure
- Fewer man-hours spent inside hazardous areas for routine data collection
- Maintenance shifted from fixed intervals to asset condition

STARTING POINT

Rotating equipment was checked on a quarterly route with handheld analysers. Between rounds, developing bearing faults were invisible, and hazardous-area rules limited what could be installed.

“We now plan interventions during scheduled windows instead of reacting to trips.”

Reliability Engineering Lead

Client names are withheld under commercial confidentiality; figures are drawn from post-deployment reviews agreed with each client.