Flexibility and Interoperability is Key for Safety with this Major Upstream Producer

Overview

Upstream oil producers use choke manifolds to control flowback during completions, and pressure during operation. Choke manifolds are a collection of high-pressure chokes, valves, and associated piping that are subject to high flow, pressure, and solids content that can cause accelerated wear and tear or wash outs on control equipment. This accelerated degradation of assets can lead to leaks of product into the atmosphere. In best cases, the producer will lose product, in worst cases, the leak can find an ignition source creating a fire or explosion. Forward thinking producers in tune with safety and environmental hazards acknowledge this risk and have agreed that the best way to monitor this type of equipment is with LEL monitoring on site.

Challenge

A well pad is hectic with constant activity from contractors, rework, and maintenance. When they are back on site to re-frac or drill, they remove the onsite assets from the wellhead so the rig can be positioned over to perform the needed operation. The proposed wired LEL monitoring would not allow the equipment the flexibility needed for the wellheads to be cleared of equipment. Monitors that are wired in place also pose an obstacle to workers on site and are often damaged during projects.

Key Results

- Eliminated delays in FEED and contractor scheduling
- Deployed in days not months
- Installed flexible solution that does not disrupt operations

Solution

For this producer, costly and inflexible wired LEL monitoring was not an option. At the recommendation of its trusted instrumentation advisor, they turned to United Electric's Vanguard WiHART Gas Detector. The impact was immediate. Using WiHART in conjunction with their existing WiHART compatible remote terminal unit (RTU), they eliminated delays associated with FEED and coordinating contractors needed to lay conduit for wired instruments. They were able to deploy an LEL monitoring solution with the flexibility needed for their production that was operational and improved safety in days, not months.