Monitor gas flow for testing of production capability

APPLICATION C198

When a natural gas well is in the production stage and the rigs used to drill and complete the well have moved off the wellbore, the top is outfitted with a collection of valves called a production tee (typically referred to as a christmas tree). A “packer leakage test” must be commenced on each completed well within seven days after actual completion and annually thereafter. These tests must also be done whenever remedial/repair work has been done on a well during which the tubing has been disturbed. All pressures through the entire test must be continuously measured and recorded with pressure gauges.

The Engineering Issue

- The accuracy of the gauges must be checked at the beginning of the test and at the end of the test with a deadweight pressure gauge to verify accuracy.
- The engineer requires a high-accuracy, portable digital gauge that can be used as an “electronic deadweight” for accuracy verification and as a backup (ready spare) gauge for the test procedure. Ruggedness is an absolute must for this application.

The engineer used a Cecom DPG2000B-D4 with the high accuracy (0.1%) option, which provides the engineer an accurate visual indication. The ruggedness of the gauge ensured that calibration was maintained even in harsh conditions.

Problem. Solved.