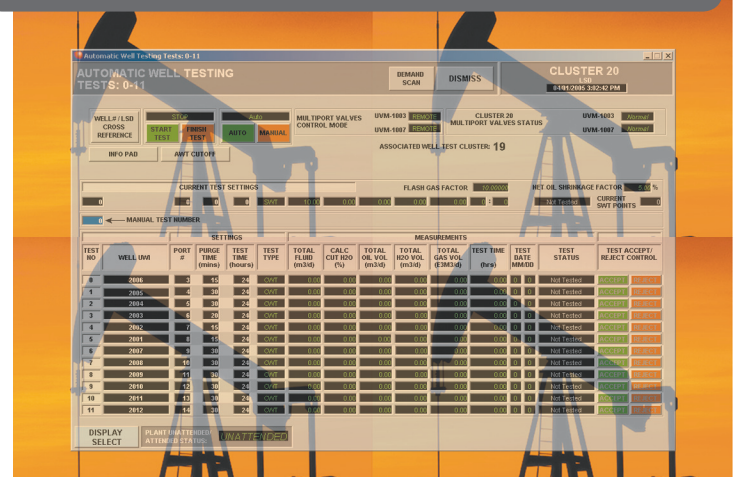


Industrial^{IT} SCADA VantageTM

Automated Well Test



designed exclusively for the oil and gas industry

Simplify automation decisions with expert support, proven technology and flexible choices

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Accurate production reporting for non-metered wells

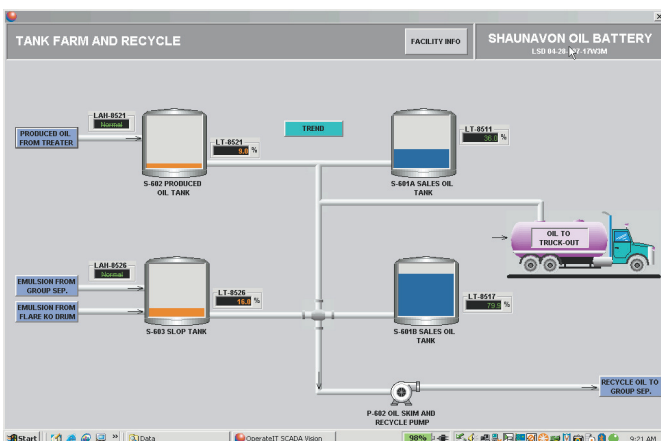
When well production is measured at a group meter rather than at the individual wells, such wells must be tested at intervals to meet Government regulations, partnership agreements and joint venture contract reporting requirements. The flow rate tests determine each well's gas, oil and water production rate.

Each well is flowed through a test separation facility for a specified time period that typically includes a purge time plus up to 24 hours of stable test time. The test results are used to prorate monthly production from the group measurement point back to individual wells and determines production from a formation or pool.

Support for Various Testing Methods

An Automatic Well Test algorithm running in a programmable logic controller located at the satellite facility automates well testing steps. The PLC allows a choice of three different well test methods that differ based on the level of automation:

- Semi-automatic valve changes requiring manual intervention from the SCADA Vantage host location.
- Fully automatic valve changes put new wells on test using an ordered list configured in the PLC.
- Statistical well testing which controls valve changes based on a calculated appropriate purge time plus a designated stable flow time.



example: Tank Farm and Recycle screen

example: Automatic Well Testing screen

PLC Interface Support

The Automatic Well Test application integrates with SCADA Vantage's Production Data History application. It provides SCADA Vantage host support interfacing with PLC based functions.

Well Test Configuration

Configuration for well testing encompasses defining oil or gas wells, field devices such as the PLC used to manage the well testing, and selecting one of the well test methods implemented in the PLC. Through configuration, the field device can be notified automatically that a test has been accepted, or rejected, thus signaling the PLC to proceed with the next test in the well sequence.

Decision Support

All test data is stored for viewing in SCADA Vantage's Production Data History database. Any authorized user can accept, or reject, a completed well test; both accepted and rejected values remain in the database. The application allows users to view which well in a list is currently being tested and to look up results by specifying either a device, unique well identifier, or a range of dates.

View/Edit Historical Well Tests

A user can view or edit automatic well test information for a specified time range and for one or more wells. The integral audit trail and security functions ensure any change to a well test value must be accompanied with a reason for change. In some circumstances, certain test values are derived by calculation rather than a measurement. In these cases, if an edit is performed, the well test history editor automatically recalculates