

Affordable

- Cost effective to install
- No need to hire additional operations personnel for continuous monitoring
- Integrates with your existing SCADA system
- No extra field instrumentation required

Accurate

- Accuracy demonstrated through repeated physical fluid-withdrawal testing by customers
- Has located actual leaks within 100m
- Exceptional batch-tracking capability

Reliable

- In continuous operation on many major North American pipelines since 1994
- Self-tuning capability of parameters which compensates for “instrumentation drift”

Robust

- Operates throughout all normal pipeline operations, such as:
 - Start-up and shutdown
 - Intermediate pump starting and stopping
 - Flows into or out of laterals
 - Slack or column separation

Sensitive

- Single result for leak location, regardless of pipeline geometry or fluid type
- Exceptional balance between sensitivity and false alarms

Features

- Provides the following leak windows to meet CSA Z662 annex E:
 - Continuous Alarm Point (CAP)
 - “pre alarm” for long leak windows
 - 5 minute window for large leaks
 - 1 hour window to medium leaks
 - 24 hour window for small leaks
 - 1 week window (compliance)
 - 1 month window (compliance)
- Displays, logs, alarms, and data retention are all SCADA functions within the client’s system, under the client’s control, leaving the leak-engine free to focus on detection and location
- Remote troubleshooting via RAS/VM’s can be utilized for low-cost support
- Equally reliable on gas pipelines

Operating Experience and Testing

- Major Canadian integrated oil company has 26 licensed installations
 - Withdrawal acceptance testing demonstrated a 3% leak in 10 minutes with a location accuracy of 1% of the overall pipeline distance
- Major U.S. integrated oil company has 6 licensed installations; including crude oil, NGL’s and seawater
 - Withdrawal acceptance testing demonstrated a 0.7% leak in a little over 23 hours

- Canadian / U.S. operator has a single license for a gas gathering and transmission system
 - Pipeline is a NEB system transporting sales-quality (sweet) NG from Alberta into the U.S.
- Other operators include: refiners shipping to mainline carriers; jet fuel supply to major airports with offsite storage

Line Sentinel Simulations

- In-house tool for testing new topologies, system algorithms and applications

Continuous Development

- Ongoing improvement program in place to ensure industry and regulator needs are met
- Examples include:
 - Leak detection in slack locations
 - Drag-reducing agents
 - Dense phase gas

Complete Pipeline Services

Available

- Talented employees with exceptional pipeline operational expertise within the industry
- Operators and consultants alike are encouraged to collaborate with us, ensuring a successful deployment of leak-detection systems the first time

LineSentinelInc
Robust & Reliable Pipeline Leak Detection
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