



Case Study

Pipeline Integrity Platform Leveraging Deep Hydraulics



Client

The client is a US-based downstream major with 13+ refining stations and over 10,000 miles of crude oil, NGL, LPG, and other petroleum product pipelines.



Challenges

- ✓ **Accuracy of leak detection:** with the large geographical spread of the transportation network, it was critical to identify the point of leakage accurately.
- ✓ **Safety of personnel and the environment:** any leakage in gas transportation can lead to significant risk to human life and timely detection and prevention of leakages can help avert any adverse outcomes.



LTIMindtree Solution

- ✓ Using historical and real-time data to deploy an advanced Real-Time Transient Model (RTTM) based on hydraulic and statistical modelling to detect and locate pipeline leakages.
- ✓ Enabling improved processes and tools to automate the implementation and support of leak detection systems.
- ✓ Providing analysis related to pipeline instrumentation and operations to improve the leak detection performance.



Business Benefits

20%

Reduction in operating cost.

15%

Reduction in maintenance costs.

Reduced pipeline downtime and Improved revenue realization.

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