Oil & Gas · Global

A pipeline operator cut overdue PM by 42% and found a high-risk corrosion segment early

A national pipeline operator brought pigging records, corrosion readings, preventive maintenance and patrol findings into one system, and caught a corrosion-prone segment before it could fail.



42%
less overdue preventive maintenance within the first 90 days

0
operational interruptions during deployment

AT A GLANCE

INDUSTRY
Oil and gas pipelines

NETWORK
Hundreds of kilometers

LINES
Crude, refined product, natural gas, multi-product

PREVIOUSLY
Manual logs, spreadsheets, emails

FEATURES USED
Maintenance · Insight

01 The client

The client is a national pipeline operator running hundreds of kilometers of crude, refined product, natural gas and multi-product transmission lines.

The network crosses remote terrain, high-risk zones and industrial corridors. Corrosion, pressure integrity, pigging cycles and right-of-way patrols all need close watching, because a single failure has severe environmental, financial and safety consequences.

02 The challenge

Risk was rising on high-priority sections, and the information that could show it was spread across paper logs, spreadsheets, lab reports and emails. Nobody could see when several warning signs lined up on the same segment.

- Pigging runs, anomalies and cleaning output were logged by hand, inconsistently.
- Corrosion data sat in spreadsheets, lab reports and emails.
- Preventive maintenance was overdue on block valves, cathodic protection stations, pumps and relief systems.
- Patrol findings were not linked to pipeline sections, so early warnings were missed.
- Thickness readings, cathodic protection data and hotspots were hard to compare.

03 What they set up in Asset Infinity

The operator brought pigging, corrosion monitoring, preventive maintenance and patrol inspections into Asset Infinity, with every record tied to the pipeline section it belongs to.

Maintenance

Preventive plans with escalation

PM plans cover block valves, relief systems, booster pumps, compressor and metering stations and CP systems. Missed PM escalates straight to area managers, as do overdue pigging cycles.

Maintenance

Pigging and corrosion records

Each pigging run is recorded with launch and receive times, pressure, debris, cleaning results and anomalies. Thickness and CP readings are logged with photo evidence.

Maintenance

Patrol inspections by section

Patrollers record encroachments, leaks, exposed pipe, vegetation and third-party activity in the mobile app, against the pipeline section and kilometer marker.

Insight

One pipeline health view

Dashboards combine pigging, corrosion, patrol findings and PM compliance by section, so engineers can see where risks line up.

04 How it works day to day

Here is how integrity work on a pipeline section runs now.

RIGHT-OF-WAY PATROLLER

Records findings on patrol

In the mobile app, the patroller records encroachments, leaks or exposed pipe with photos against the section and kilometer marker.

PIGGING CREW

Logs each run

Launch and receive times, differential pressure, debris, cleaning results and anomaly flags are entered against the line.

CORROSION ENGINEER

Records thickness and CP readings

Ultrasonic thickness readings and CP station outputs go into inspection checklists with photo evidence. A reading out of tolerance fails the check and raises corrective work.

SYSTEM

Raises and escalates PM

Preventive plans create work orders for valves, pumps, relief systems and stations. Missed PM and overdue pigging escalate to area managers.

TECHNICIAN

Completes the maintenance

The technician completes the PM checklist with readings and signs it off, and the section's history updates.

INTEGRITY ENGINEER

Looks for risks that line up

Dashboards by section show where low CP output, thinning, repeated debris, hotspots or missed PM coincide.

AREA MANAGER

Orders the intervention

High-risk sections get a work order for reinforcement or repair before the risk becomes a failure.

05 Before and after

	BEFORE	WITH ASSET INFINITY
Pigging records	Manual, inconsistent	Every run logged digitally
Corrosion data	Spreadsheets, lab reports, emails	Readings with evidence, by section
Preventive maintenance	Overdue on critical equipment	42% less overdue in 90 days
Patrol findings	Not linked to sections	Recorded against section and kilometer marker
Combined risk	No way to see it	One view of risks by section
Outcome	Exposed to a major failure	A high-risk segment found and repaired early

06 How it rolled out

1

Critical corridors first. The system went live on critical pipeline corridors first, then expanded to the full network.

2

History migrated. Existing corrosion and pigging logs were migrated, so trends could be read from the start.

3

Field teams trained. Technicians, patrollers, corrosion engineers and integrity teams were trained on the mobile workflows.

07 The results

- A major line failure prevented by identifying a high-risk corrosion segment early
- Integrity logs in one place, supporting better engineering decisions and earlier intervention
- Timely reinforcement and repair at high-risk hotspots
- Faster pigging documentation, better operational readiness and audit compliance
- Stronger coordination between integrity, maintenance and field teams
- Lower safety risk and repair cost from proactive interventions

08 Why it worked

Everything by section

Pigging, corrosion, PM and patrol records all point to a pipeline section, so risks on the same segment can be seen together.

Escalation built in

Missed PM and overdue pigging reach area managers straight away, which is how overdue PM fell so quickly.

Critical corridors first

Starting where risk was highest meant the system paid off early, before it covered the full network.

09 Looking ahead

By putting pigging logs, corrosion monitoring, preventive maintenance and patrol findings in one place, the operator saw a corrosion-prone segment early enough to act, and prevented a major line failure.

The same records now support a stronger integrity program across the network, with overdue maintenance down and every finding tied to the section it describes.

See it on your own assets

A 30-minute demo, set up for a pipeline or midstream operator.

The client's name is withheld for confidentiality. Results are as reported by the client.

Book a demo

Start a 14-day free trial