CASE STUDY

Jump-starting reliability in midstream oil & gas with Octave Attune APM

Key facts:

Industry: Midstream oil & gas

Region: North America

Octave products used: Attune APM *(HxGN APM)*

Key benefits:

- Prevented costly equipment failures
- Enabled proactive, data-driven maintenance
- Accelerated ROI through agile implementation

Balancing urgency with precision

A North American midstream oil and gas company was experiencing repeated compressor failures due to lubrication contamination, putting uptime and profits at risk. Seeking quick, measurable improvements without a major digital overhaul, its reliability team implemented Attune APM. The solution delivered a focused, data-driven approach that improved reliability, closed data gaps, and built a scalable foundation for proactive asset management.

Costly failures, complex decisions

Despite its commitment to operational excellence, the midstream oil and gas operator experienced repeated compressor breakdowns caused by lubrication contamination. Each incident carried an estimated US$30,000 - US$70,000 in direct losses. A review revealed:

- Preventive maintenance tasks varied widely between similar assets and often didn't address known failure modes.
- Condition monitoring was fragmented, inconsistent and in some cases, absent.

Leadership faced a decision. They wanted measurable results but were reluctant to commit to a multi-year, resource-heavy digital transformation, having seen others bogged down by:

- Lengthy deployments and rigid planning processes
- Delays getting results
- The belief that perfect data was needed before taking action

Instead, they sought a smarter, more agile approach. One that could deliver quick wins, build momentum and evolve over time without unnecessary disruption.

Modern tools, targeted execution

After evaluating multiple options, the company chose Attune APM to focus on its critical compressors—the source of repeated lubrication failures. Starting small to demonstrate value, the team built asset twins to monitor key metrics such as temperature, vibration, flow, and pressure in real time, and added lubrication analysis to detect contamination early. Preventive maintenance plans were standardized and aligned to actual failure modes, improving consistency and reliability. Data gaps found during implementation were quickly addressed, strengthening decision-making. This agile approach delivered quick wins, prevented costly failures, and created a scalable foundation for proactive asset management.

Clear ROI, executive momentum

Within months, the Attune APM rollout delivered measurable results. Unplanned downtime fell, major compressor failures were avoided, and maintenance strategies aligned more closely with real asset behavior. Real-time monitoring enabled earlier intervention, shifting maintenance up the PF curve and preventing costly shutdowns.

Key outcomes included:

- **Failure Prevention:** Avoided multiple lubrication-related compressor failures, saving US$30K–$70K each.
- **Smarter Maintenance:** Standardized PMs, eliminated unnecessary tasks, and aligned with actual failure modes.
- **Earlier Detection:** Assets signaled when conditions required attention.
- **Data-Driven Confidence:** Teams acted on accurate, timely data for better decisions.

These quick, visible wins built executive trust, proved clear ROI, and created momentum to expand Attune APM across other asset classes—turning a reactive reliability issue into a foundation for scalable, proactive asset management.

Reliability without the risk of overreach

By starting small and targeting its most critical compressor assets, the company used Attune APM to prevent failures, align maintenance with failure modes, and improve data confidence—without the disruption of a large-scale rollout. The project showed that digital transformation can start with focused, agile steps that deliver measurable performance, safety, and cost benefits while laying the groundwork for long-term, scalable asset management.

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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