



Shoreline AI

Leading Global Energy Company Avoids Production Stoppage with Cloud Managed AI/ML Predictive Maintenance

Early Diagnosis of Bearing Damage
Caused by Misalignment
Prevents Unplanned Downtime



Customer Background

This global energy company manufactures, transports and markets products that drive the global economy. The diversified energy company's portfolio includes Midstream, Chemicals, Refining, and Marketing and Specialties businesses. Headquartered in Houston, the company has employees around the globe who are committed to safely and reliably providing energy and improving lives while pursuing a lower-carbon future.

The company's goal was to automate the health monitoring of remote, distributed pumps and compressors by collecting data in real time, detecting anomalies, providing actionable insights, allowing early intervention, and ultimately predicting maintenance needs before failure.

They deployed Shoreline AI's industrial asset performance management (APM) solution to gain real-time visibility, eliminate manual inspections, and enable early detection of maintenance needs.

// *Asset performance management is a critical capability for oil and gas companies to optimize their operations and achieve their business goals. By leveraging data and analytics to improve visibility into asset health and performance, companies can make informed decisions about maintenance and replacement, reduce downtime, and extend asset life. This can lead to significant cost savings, improved productivity, and reduced environmental impact.*



– Analyst, Forrester

Customer's assets being monitored by Shoreline AI



Shoreline AI's predictive maintenance analytics identifies parallel misalignment

One of the critical elements of maximizing oil and gas production is ensuring alignment across bearings, pumps and motors. Any misalignment can cause unplanned downtime and costly production stoppages.

Shoreline AI's predictive model was deployed to compare detailed operational dynamics of the bearings, pumps and motors with normal operating characteristics to reveal specific performance anomalies of the machines. Recently, Shoreline's solution detected a critical parallel misalignment anomaly, quickly generating an alert. The root cause was determined to be bearing damage on a pump, likely caused by the misalignment. Shoreline AI's solution provided a rapid, detailed diagnosis and for maintenance and asset performance improvements to avoid production stoppage.

Shoreline AI's Intuitive Alarm Dashboard with advanced insights



Shoreline AI's advanced analytics highlights behavior indicating parallel misalignment



Results

As a result of implementing the Shoreline AI's solution, this energy company is expected to eliminate unplanned downtime, reduce maintenance costs by 40%, and prevent millions of dollars in production losses. The expectation is this investment will also improve the quality of its products and increase customer satisfaction.

About Shoreline AI

Shoreline AI's plug-and-play asset performance management delivers breakthrough simplicity and cost efficiencies. Completely self-installed by non-experts, smart sensors automatically connect to the cloud and are auto-provisioned via a rich library of 30,000+ pre-built asset physics models.

This cloud-native approach requires no new CapEx, on-site experts or data scientists, operationalizing in days and delivering powerful machine-specific analytics. This highly secure, 100% subscription approach creates unprecedented industrial APM economics and scales easily for new applications such as emissions monitoring.

Shoreline AI helps clients in asset-intensive industries maximize the performance and profitability of their operations, create a proactive and predictive approach to asset management, and accelerate sustainability initiatives. The company's solutions are designed for machinery serving the energy, manufacturing, pharma and data-center cooling industries.