

IMPROVING OIL SPILL DETECTION AND RESPONSE ACROSS OIL FIELDS

OVERVIEW

A large energy company operating across expansive oil fields needed to strengthen its ability to detect and respond to oil spills in remote locations. With operations spread across wide geographic areas, delayed visibility into field conditions created increased environmental risk, operational disruption, and potential regulatory exposure.

CHALLENGE

Monitoring sprawling oil fields for spills presents significant operational complexity. While the company had video surveillance cameras in place, they were used only to monitor locations and were not capable of detecting spills. Instead, the company relied on truck-based field crews making continuous, scheduled rounds across sites to visually inspect each location during daylight hours.

This approach delayed the detection of oil spills and required significant time and resources to operate and maintain. As a result, the company sought a more effective way to detect spills—without the expense and disruption of replacing its existing system or interrupting ongoing operations.

SOLUTION

To address these challenges, Claro delivered advanced AI Video Analytics using cutting-edge technology, custom trained to detect oil spills as soon as they become visible. Once detected, the system alerts response teams—enabling faster containment and cleanup while helping minimize damage and cost.

Because the solution leverages the company's existing surveillance system and cameras, it was able to deliver these capabilities without requiring new infrastructure—allowing the organization to enhance monitoring and response while avoiding additional capital investment.

RESULTS

With AI Video Analytics embedded into daily operations, the company achieved more consistent monitoring across all sites and faster response times for spills—helping reduce damage, improve resource utilization, and support more efficient operations:

- **Quicker Detection:** The system now identifies oil spills more quickly, helping mitigate environmental and operational impact.
- **Improved Monitoring:** The system enables more consistent, real-time monitoring across all sites during daylight hours.
- **Optimized Resource Allocation:** Maximized existing surveillance investments while reducing resources required for regular inspections, allowing field crews to focus on other activities and respond only when alerts indicate an issue.
- **Improved Alerts:** Ensures real-time alerts are delivered to the right personnel, enabling quicker response times and improved coordination.

WHY CLARO

Claro applies advanced AI to deliver practical, outcome-driven solutions that improve safety, visibility, and operational efficiency across complex environments. By working within existing systems and partnering closely with your team, Claro enables faster response, better use of resources, and measurable improvements—without disrupting ongoing operations.