

Luna's Fiber Optic Sensing Products Enhance the Safety of Oil and Gas Pipelines

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ROANOKE, Va.--(BUSINESS WIRE)--Sep. 12, 2019-- Luna Innovations Incorporated (NASDAQ: LUNA), a global leader in advanced fiber optic-based technology, today shared that its fiber optic sensing technology is becoming adopted for safety and integrity monitoring in the oil and gas industry.

A continuous monitoring system allows early detection and warnings of defects before they reach the magnitude of a major disaster. While pipelines are designed to withstand many conditions, they are naturally susceptible to operational, ecological and man-made issues, including internal erosion and corrosion, mechanical deformation, leaks and encroachments. Yet, detecting and localizing these types of complications in pipelines can be very difficult, expensive and imprecise. Fiber optic sensors installed along pipelines have proven to be successful in mitigating these risks by providing valuable data about accumulating strains.

"This is a great example of Luna's expanding applications in the oil and gas industry," Scott Graeff, President and CEO of Luna Innovations, said. "Our sensors detect, identify, and localize the conditions that can lead to leaks and breaks in real-time allowing potential emergencies to be addressed immediately, enhancing safety, reducing downtime and lowering maintenance costs."

A Columbian pipeline transport company that was experiencing mechanical deformations due to local soil and geohazard effects is now using Luna's sensors to diminish these risks by providing the information necessary to perform preventative maintenance in a more precise way. Outfitted with more than 1,000 Luna strain sensors, Luna's Hyperion optical sensing interrogator provides data that allows pipeline operators to gain an understanding of the mechanical behavior of buried pipelines under diverse soil conditions. This information is critical as a predictive measure for the overall integrity of a pipeline installation, which not only helped the customer establish new maintenance protocols, but also created significant savings in prevented pipeline ruptures and associated environmental remediation costs.

About Luna

Luna Innovations Incorporated (www.lunainc.com) is a leader in optical technology, providing unique capabilities in high-performance, fiber opticbased, test products for the telecommunications industry and distributed fiber optic-based sensing for the aerospace and automotive industries. Luna is organized into two business segments, which work closely together to turn ideas into products: a Technology Development segment and a Products and Licensing segment. Luna's business model is designed to accelerate the process of bringing new and innovative technologies to market.

Forward-Looking Statements

These statements include Luna's expectations regarding market acceptance and adoption, technological accomplishments, technological capabilities, cost effectiveness and savings of products and technological solutions, market demand and product capabilities and advantages. Management cautions the reader that these forward-looking statements are only predictions and are subject to a number of both known and unknown risks and uncertainties, and actual results, performance, and/or achievements of Luna may differ materially from the future results, performance, and/or achievements as a result of a number of factors. These factors include, without limitation, changes in market needs and acceptance and adoption, technological challenges and variance in cost savings effectiveness and efficacy in safety improvement.

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