

Pioneer Energy's Emission Control Treater Featured in the Journal of Petroleum Technology

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LAKEWOOD, Colo.--(BUSINESS WIRE)-- Pioneer Energy, a leading innovator in the energy sector, has unveiled a groundbreaking solution in the pursuit of zero-emission crude oil production. This new technology, the Emission Control Treater™ (ECT), has been detailed in a case study published in the October 2023 issue of the Journal of Petroleum Technology. The ECT promises to transform the landscape of oil and gas production, significantly reducing emissions while also increasing operational efficiency.

The oil and gas industry is facing unprecedented challenges today due to stringent emissions regulations imposed by the EPA and various states. Pioneer Energy recognized the urgency of the situation and in response developed the ECT, an active separation process that promises to revolutionize oilfield production. Recently deployed on a well pad in Weld County, Colorado, this skid-mounted production facility demonstrated remarkable results, eliminating emissions, enhancing operational efficiency, and boosting crude yield by an impressive 11.3%.

Several populated areas in the United States, including the Denver Metro and Front Range areas and the Denver-Julesburg (DJ) Basin, are designated as Severe Ozone Non-Attainment Zones by the EPA. Oil and gas producers in these areas are under pressure to reduce pad-level emissions significantly. Existing strategies offer only incremental improvements, but none address the core issue of incomplete separation leading to fugitive emissions.

Pioneer Energy's Emission Control Treater™ (ECT) offers the answer to this challenge. Unlike passive separation methods, the ECT employs an active separation process using heat and gravity in a closed-loop system. This technology efficiently separates wellhead fluid into water, oil, and gas, leaving no flash gas in the crude. By preventing crude molecules from escaping into the gas, the volume of stabilized crude is increased, positively impacting the producer's bottom line. Moreover, the ECT's process electrification eliminates pad emissions entirely,

paving the way for zero-emission crude oil production.

“We are very happy that the Society of Petroleum Engineers has selected our case study of the pilot deployment of the Emission Control Treater to be featured in the Journal of Petroleum Technology. It is a testament to the success of the pilot and the importance of the topic of decarbonizing oil production,” said Eyal Aronoff, CEO of Pioneer Energy. By eliminating emissions and increasing crude yield, the ECT technology not only meets current regulatory requirements but also aligns with the industry’s commitment to decarbonize operations and reduce carbon footprints. Pioneer Energy’s achievement showcases the power of innovation in addressing complex environmental challenges.

About Pioneer Energy:

Pioneer Energy, Inc. is a provider of technologies that help to decarbonize the oil and gas industry. The company’s product lines include the Emission Control Treater (ECT), a zero-emission oil production system that also increases crude production volumes; the Pegasus field gas conditioning system which reduces emissions and fuel costs from hydraulic fracturing operations; and flare gas capture and processing equipment. Pioneer’s systems eliminate oilfield emissions, helping oil producers to be good stewards of the environment while converting the emissions to resources that help to support domestic energy security. To learn more, visit <http://pioneerenergy.com/>.

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Source: Pioneer Energy, Inc.