METHANE FROM FLARING



Can I identify a flare with a performance issue: Helicopter Optical Gas Imaging

Can I identify a flare with a performance issue? > Can I identify a flare with a performance issue: Helicopter Optical Gas Imaging

The use of helicopter mounted optical gas imaging (OGI) technology to identify unlit flares through the thermal signature of gas being emitted from the flare. The use of helicopters means that large areas, and large numbers of flares, can be inspected in a short period of time without the need for extended travel time between sites of interest

How it works

Gas emitted from an unlit flare reads to a localised drop in air temperature. This can be seen by as a black plume, allowing unlit flares to be distinguished from non-operational flare stacks.

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Go Deeper

Permian Map project

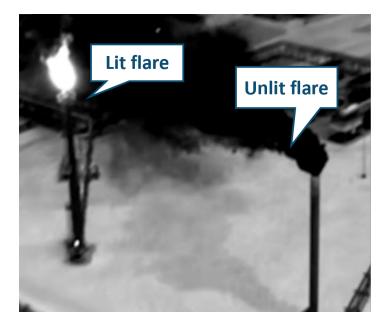
Case study

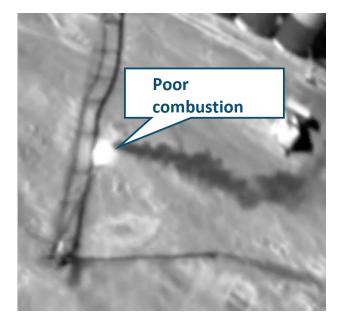
Permian Map Project

- Five surveys of over 1000 flares in 2020 2021
- Preliminary results indicate ~7% of flares are unlit and venting and another ~5% have combustion issues.

The Permian Methane Analysis Project (PermianMAP) is an initiative that combines established data collection methods with state-of-the-art technologies to pinpoint, measure and report on oil and gas methane emissions in the Permian Basin. The results are made publicly available. it includes identification and analysis of methane from a variety of sources including flares. The use of helicopter mounted OGI cameras has identified methane plumes from different locations and sources, as shown in the images below.

Images courtesy of the Environmental Defense Fund.





/nas/content/live/flaringmethane/wp-content/uploads/2022/02/methanebeforeAfter-1.mp4

OilandGasMethane (2) OilandGasMethane (1)

Can I identify a flare with a performance issue?



Can I identify a flare with a performance issue: Satellite monitoring - Wide area methane emissions monitoring



Can I identify a flare with a performance issue: Optical Gas Imaging



Can I identify a flare with a performance issue: Point Sensors and Arrays



Can I identify a flare with a performance issue: Alarm systems - Image Processing



Can I identify a flare with a performance issue: Alarm systems - Acoustic Alarms

