

# METHANE, FLIR, AND THE FACTS

## WHAT FLIR VIDEOS DO – AND DO NOT – SHOW

For the past few years, anti-energy groups have attracted media attention with grainy videos of oil and gas operations, which they claim show things like “invisible fracking air pollution.”<sup>1</sup> But activists are **deliberately misleading** us about what these videos show.

### WHAT IS FLIR?

Forward looking infrared technology, or FLIR, is used by many industries as well as the military. For oil and gas, FLIR cameras are used to see non-visible light – steam, heat, permitted exhaust or other activities. Operators can use FLIR to identify leaks and potential repairs.

### WHAT CAN'T FLIR TELL US?

Operators use many tools to ensure their facilities are operating safely and environmentally-friendly, because FLIR only provides one part of the whole picture. FLIR technology CANNOT tell us...

#### RATE OF EMISSIONS

Activists often claim FLIR images show methane, volatile organic compounds (VOC), or other emissions. FLIR can detect emissions of some kind, but the imagery cannot definitively tell us what is being emitted.

“We can't say which VOCs or how much.”<sup>2</sup>

- Sharon Wilson, Earthworks

#### TYPE OF EMISSIONS

FLIR technology cannot tell us how much gas is being emitted, so it cannot tell us if there are violations or health concerns. That requires air quality analysis – which activists are not doing.

“No air quality tests were conducted in connection with the infrared drone photographs to quantify what amount of methane or other pollutants, if any, were being emitted at the named well sites.”<sup>3</sup>

- Kingfisher Times & Free Press

## FLIR FAKE NEWS ALERT

Earthworks shot a FLIR video<sup>4</sup> of a Karnes County facility the same day an air emissions complaint<sup>5</sup> was filed with the Texas Commission on Environmental Quality (TCEQ) against the same facility. TCEQ's investigation concluded there was no violation.<sup>6</sup>

### MISLEADING SCARE TACTIC

“ The bottom line is that they are **misleading**, and they are misleading on the **scare tactic**. Optical gas imaging is nothing more than that, it's imaging. There's a lot that can **mimic an emissions plume**. ”<sup>7</sup>

Trisha Fanning, Environmental Consultant, Eagle Environmental

<sup>1</sup> [https://earthworks.org/one\\_year\\_in\\_flir\\_exposing\\_invisible\\_fracking\\_air\\_pollution/](https://earthworks.org/one_year_in_flir_exposing_invisible_fracking_air_pollution/)

<sup>2</sup> <https://www.scientificamerican.com/article/health-effects-of-oil-and-gas-emissions-investigated-in-texas/>

<sup>3</sup> <http://kingfisherpress.net/oil-industry-calls-report-alleging-methane-pollution-misleading-scare-tactic-p3633-1.htm>

<sup>4</sup> <https://www.youtube.com/watch?v=FG6luq7uH70>

<sup>5</sup> <http://www2.tceq.texas.gov/ocel/waci/index.cfm?fuseaction=home.complaint&incid=273800>

<sup>6</sup> <http://www2.tceq.texas.gov/ocel/waci/index.cfm?fuseaction=home.investigation&invid=842592132018018>

<sup>7</sup> <http://westernwire.net/anti-fossil-fuel-groups-admit-no-air-testing-conducted-in-oklahoma-emissions-report/>