Measurement of methane leakage from abandoned oil and gas wells

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Overview

Measure methane leakages from abandoned, plugged, and active natural gas wells in West Virginia, as well as gas infrastructure.

Build upon previous study by Mary Kang in Pennsylvania.

Understand the scalability of emission estimates and influence policy.
Methods

Measured active, abandoned, and plugged wells throughout West Virginia by two methods:

- Chamber analysis
- Inverse dispersion model

Gas Chromatography analysis
Policy comparison

West Virginia vs. Pennsylvania policies

Well records, legislation

Is it scalable on a national level?
Infrastructure

Gathering Pipeline

Metal v. Plastic
Fracking and Subsurface Measurement Tools
Fracking Relationship Analysis
Database and Tool Development
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