Assessing Emissions from the Natural Gas Distribution System Using Mobile Methane Techniques

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Methane Emissions in the Barnett Shale

- ~17,500 production well pads (2013)
- Goal: Survey > 100 randomly selected well pad to determine the distribution of methane emissions

“Barnett Coordinated Campaign”
Barnett – Distribution of Emissions

- N = 115 randomly selected well pads
- The Mean Emission Rate is 1.63 kg / hr
- 95% of well pads emit between 0.13 and 20 kg / hr

0.02 kg / hr ~ 1 SCFH
50 kg / hr ~ 2,500 SCFH
Well Pads: Skewed Distribution of Emissions

- 50% of the total emissions is from the top 6.6% of the sources.

- 80% of the total emissions is from the top 22% of the sources.

- The bottom 50% of the sources contribute less than 2% of the total emissions.
Thank You!