

## Taking Science on the Road

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In 2011, NOAA/GMD and CSD upgraded a passenger van into a Mobile Laboratory that could go in the field and measure point sources plume composition and local and regional variability in several trace gases. The first version of the Mobile Laboratory was deployed in the Uintah oil and gas Basin in northeastern Utah in November 2011 and February 2012 and then in the Denver-Julesburg Basin in northeastern Colorado on different occasions in 2012. Over the past few months, a few upgrades have been installed into the Mobile Laboratory to acquire better wind measurements and enable new instruments to be added to the payload. The upgraded Mobile Laboratory was deployed in the Barnett Shale in Texas in May 2013. We will give an overview of the recent changes to the Mobile Laboratory and highlight some of the scientific results we have garnered over the past three years in three unconventional oil and gas plays.



**Figure 1.** Photo of Mobile Laboratory.