

# The Effects of Ultra-Low Sulfur Gasoline on Emissions from Tier 2 Vehicles in the In-Use Fleet

## Final Report

### Appendix C Additional Information on Emission Measurements

Assessment and Standards Division  
Office of Transportation and Air Quality  
U.S. Environmental Protection Agency

#### NOTICE

*This technical report does not necessarily represent final EPA decisions or positions. It is intended to present technical analysis of issues using data that are currently available. The purpose in the release of such reports is to facilitate the exchange of technical information and to inform the public of technical developments.*

## **Appendix C. Additional Information on Emission Measurements**

Gaseous emissions (THC, CH<sub>4</sub>, NO<sub>x</sub>, CO) were measured using a Horiba MEXA 7200SLE analyzer system. The instrument manufacturer gives the measurement accuracy as  $\pm 1\%$  of full scale or  $\pm 2\%$  of the relevant calibration point(s).

Particulate matter (PM) was collected by triplicate 47mm Teflon filters for each phase (bag) of the test cycle using a system compliant with 40 CFR Part 1065. The triplicate filter weights were averaged to form a composite result for each test phase. Filters were equilibrated overnight in a clean room environment before taking pre- and post-test weights. Weighing was done using a Mettler Toledo UMT2 microbalance.