



**AUTO ALLIANCE**  
 DRIVING INNOVATION®

**ALLIANCE OF AUTOMOBILE MANUFACTURERS  
 NORTH AMERICAN FUEL SURVEY®**

**SUMMARY OF SAMPLING AND TESTING**

- The Alliance of Automobile Manufacturers North American Fuel Survey® is conducted twice every calendar year. Sampling takes place in Winter (January of the CY) and Summer (July of the CY). Reports become available for purchase a few months following sampling.
- The survey is conducted by an expert independent laboratory contractor, which also oversees collection of the fuel samples tested.
- The Alliance of Automobile Manufacturers North American Fuel Survey® data reflect a single sample “snapshot” of market fuel properties from retail stations sampled in various cities.
- The number of stations varies from city to city, and cities and stations can vary from survey to survey.
- The cities and stations sampled are not selected to meet statistical criteria, or on the basis of market share.
- The survey examines the quality of commercially available gasoline and diesel fuel from selected retail service stations located in the United States, Canada and Mexico.
  - For gasoline, the survey covers two grades of unleaded gasoline (regular and premium octane grade) typically from 29 US cities, 8 Canadian cities, and 7 Mexican cities (one grade at some locations).
  - For diesel fuel, the survey covers three grades of diesel fuel, typically from 18 US cities, 6 Canadian cities, and 7 Mexican cities (No. 2D at all locations both seasons; No. 1D and 2D premium at Billings and Minneapolis/St. Paul winter only).
  - The list of cities typically sampled is included below.
  - Every effort is made to sample from the same service stations every year. No advance notice is provided to stations sampled. Certain stations do vary.
  - To date, the survey does not include greater than E10 gasoline (10% ethanol) or greater than B5 biodiesel fuels (unless >B5 is the only fuel offered) unless otherwise noted.
- Tables below list test protocols used. Some tests have been added, dropped, or modified over the years.
- Results are made available to Alliance members, and to parties wishing to purchase the reports subject to the Alliance Limited Licensing Agreement and Guidance for Use documents. Prior years’ data are also available for purchase from the Alliance.
- For a short time after tests are completed, sample “remainders” are offered, first come-first served, to members, and then any leftover can be purchased by any interested party.
- For further information, contact Sharon Roth, [sroth@autoalliance.org](mailto:sroth@autoalliance.org), 202-326-5544.

**TABLE 1: Typical Gasoline Sampling Survey by City****USA:**

Albuquerque, New Mexico  
 Atlanta, Georgia  
 Billings, Montana  
 Boston, Massachusetts  
 Chicago, Illinois  
 Cleveland, Ohio  
 Dallas, Texas  
 Denver, Colorado  
 Detroit, Michigan  
 Fairbanks, Alaska<sup>+</sup>  
 Houston, Texas\*  
 Kansas City, Missouri  
 Las Vegas, Nevada  
 Los Angeles, California  
 Memphis, Tennessee  
 Miami, Florida  
 Minneapolis/St. Paul, Minnesota  
 New Orleans, Louisiana  
 New York City, New York  
 Philadelphia, Pennsylvania  
 Phoenix, Arizona  
 Pittsburgh, Pennsylvania\*  
 Salt Lake City, Utah  
 San Antonio, Texas  
 San Francisco, California  
 Seattle Washington,  
 St. Louis, Missouri  
 Washington, D.C.  
 Watertown, South Dakota

<sup>+</sup>excluded from national summary statistics  
 \*summer only

**CANADA**

Edmonton, Alberta  
 Halifax, Nova Scotia  
 Montreal, Quebec  
 St John, New Brunswick  
 Toronto, Ontario  
 Vancouver, British Columbia

**MEXICO**

Acapulco  
 Coatzacoalcos  
 Guadalajara  
 Mexico City  
 Monterrey  
 Puebla  
 Tijuana

**TABLE 2 Tests Typically Conducted****Gasoline Tests :**

Distillation  
 Drivability Index  
 Vapor Pressure (EPA Equation)  
 V/L Calc.  
 Relative Density  
 Sulfur (Ultra Low) ASTM D5453  
 Oxygenates  
 FIA/HC  
 Octane, RON and MON  
 Existent Gum  
 Water Content  
 C/H Calc.  
 Electrical Conductivity (Winter)  
 Peroxide (Summer)  
 Subset of Samples: Manganese

**Diesel Tests:**

Flash Pt.  
 Cloud Pt. (Winter Only)  
 CFPP Cold Filter Plug Point (Winter only, starting in 2014)  
 Distillation  
 Kinematic Viscosity  
 Cetane Number  
 Cetane Index  
 Cetane Additive Improver (discontinued in 2014)  
 Rel. Density  
 Pour Pt.  
 Aromatics SFC  
 Water  
 Electrical Conductivity  
 FAME  
 Carbon Residue (Summer)  
 Nitrogen (Summer)  
 Sulfur (Ultra Low) ASTM D5453  
<sup>+</sup>Subset of Diesel Samples:  
 Rancimat  
 Lubricity HFRR  
 Peroxide

(END)