



- Lateral Slosh Durability to
  Marking Teach Supplier of the street in the stree
- Multiple Test Specifications
- Temperature, Pressure, & Resistance
- Strain Gauging & Worst Case Measurements



- · Gas/Diesel Fuel Carts
- Various Flow Rates/Temperatures
- Resistance & Pressure Readings
  Thermal Expansion
- Volume/Height/Resistance (VHR)



- Emissions Certification
- Exhaust & Evaporative
- Emissions
- Portable Emissions (PEMS)



Wide Range of Vehicle Sizes (heavy duty, vehicle, marine, aircraft, motorcycle, EV & HEV, ATV. gensets, etc.)

# **FUEL SYSTEMS & FUEL SYSTEMS COMPONENTS TESTING**

FROM COMPLIANCE TESTING TO COMPREHENSIVE PRODUCT VALIDATION PROGRAMS, WE HELP ENSURE THE SAFETY AND RELIABILITY OF YOUR PRODUCTS.

TRP offers fuel system testing services to clients in the automotive, marine, small engine, military, aerospace, agriculture, and portable fuel container markets. Our ISO 17025 accredited facility is located just north of suburban Detroit, in Lapeer, MI. Here we are equipped to help you with certification compliance testing, as well as develop and perform custom tests for individual companies and industry groups.

### **CAPABILITIES**

- Durability testing of fuel pumps, modules and level senders in gasoline, diesel and other fuels
- · Evaporative emissions measurements using SHED, weight loss, CARB or EPA
- Gas and diesel fill testing with variable dispense rates and temperatures
- · Vibration testing with temperature and pressure cycling as well as fuel recirculation
- Thermal cycling with fuel
- · Pressure-vacuum, UV, and slosh (both tilt and lateral) testing with fuel
- · Tensile, drop, and burst testing
- Complete DVP&R and PVP&R programs for fuel systems
- Fuel pump noise measurements during operation in fuel
- Canister testing for a range of parameters, such as capacity, durability, load, purge temperatures, and more
- · Our experts routinely work with clients to develop and perform custom tests







# **FUEL SYSTEMS & FUEL SYSTEMS COMPONENTS TESTING**

### **COMPLIANCE TESTING**

### **MARINE**

- · ABYC H24, H33 and H25 Standards
- 33 and 40 CFR
- ISO 10088 and ISO 21487
- CARB TP-511, TP-512, TP-1501, TP-1502, TP-1503, TP-1504, TP-1505 and TP-1505-A
- SAE J1171 Ignition Protection
- SAE J1527 Fire Resistance

### **PFC**

- ASTM F-852, F-976 Standards
- **CSA Standards**
- AS/NZS 2906
- EPA 59.600
- CARB TP-501 and TP-502

### **SORE**

- EPA 40 CFR 1051
- 1060 Regulations
- CARB TP-901 and TP-902

## **COOLANT TUBE PERMEABILITY STANDS**

- 30°C to 80°C Coolant and Cabinet Temperature
- Max Flow Rate of 25 LPM
- 100 to 250 kPa Pressure (Typically 200 kPa)
- Can Test 6 Specimens at a Time
- Dry Air Media (Carrier Gas)
- Calcium Chloride used for Trap Media



## **EVAPORATIVE EMISSIONS SHED TESTING**

- **SEALED**
- **HOUSING FOR**
- **EVAPORATIVE**
- **DETERMINATIONS**

### WHY US?

At TRP, we provide comprehensive testing services to ensure your products meet the highest safety, reliability, and compliance standards. With decades of experience, we are a trusted partner for automotive manufacturers, OEMs, and aftermarket producers.

# **EXPERTISE**

### HIGH PRECISION **LABORATORIES**

ISO accredited labs feature innovative technologies, special<u>ized</u> facilities and advanced testing equipment.

### **EXTENSIVE TESTING SOLUTIONS**

Diverse testing capabilities, from large commercial vehicles to small parts and their components.

### **CUSTOMER FOCUSED**

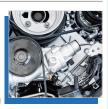
A customer centric approach with tailored solutions to meet your specific project needs.

### TRUST AND RELIABILITY

A proven track record of reliability, delivering quality results with quick turnaround times.

### **AURORA, CO**

- · High Altitude Laboratory
- Vehicle & Engine Testing
- · Emissions Cert Testing
- · PEMS Testing Services
- · Mileage Accumulation
- · Sub-Zero Cold Testing
- · In-use Verification Program
- EV & HEV Testing



### **EMPIRE, CO**

- · High Altitude Test Center
- · Elevation 8,900 ft
- · On-road Development
- Sub-Zero Cold Testing
- 700 ft Drive-away
- · On-Site Refueling
- · EV & HEV Charging



### **COLUMBUS, IN**

- Sea Level Laboratory
- · Vehicle & Engine Testing
- · Emissions Cert Testing
- · Sub-Zero Cold Testing
- Mileage Accumulation
- Motorcycle/ATV/UTV
- · In-use Verification Program
- EV & HEV Testing



### LAPEER, MI

- · Fuel Storage & Systems
- · Component Testing
- · Environmental & Durability
- Evaporative Emission
- · Fill & Refueling Testing
- · Lateral Slosh Testing • Fire Resistance Testing

### TAYLOR, MI

- · Catalyst Aging
- Equipment Design & Production (NG1/NG2, Next Gen Burners)
- · Fabrication & Machining
- · Thermal Component Testing



### TROY, MI

- · Chassis & Suspension
- · Shock Absorber Testing
- · Component Testing
- · Fatigue & Cyclic Testing
- · Vibration Testing
- · Thermal Test Conditions
- · Exhaust Systems Testing



