



## **NCAT – National Center for Advanced Technology**

*National Vehicle and Fuel Emissions Laboratory*

*Office of Transportation and Air Quality*

*U.S. Environmental Protection Agency*

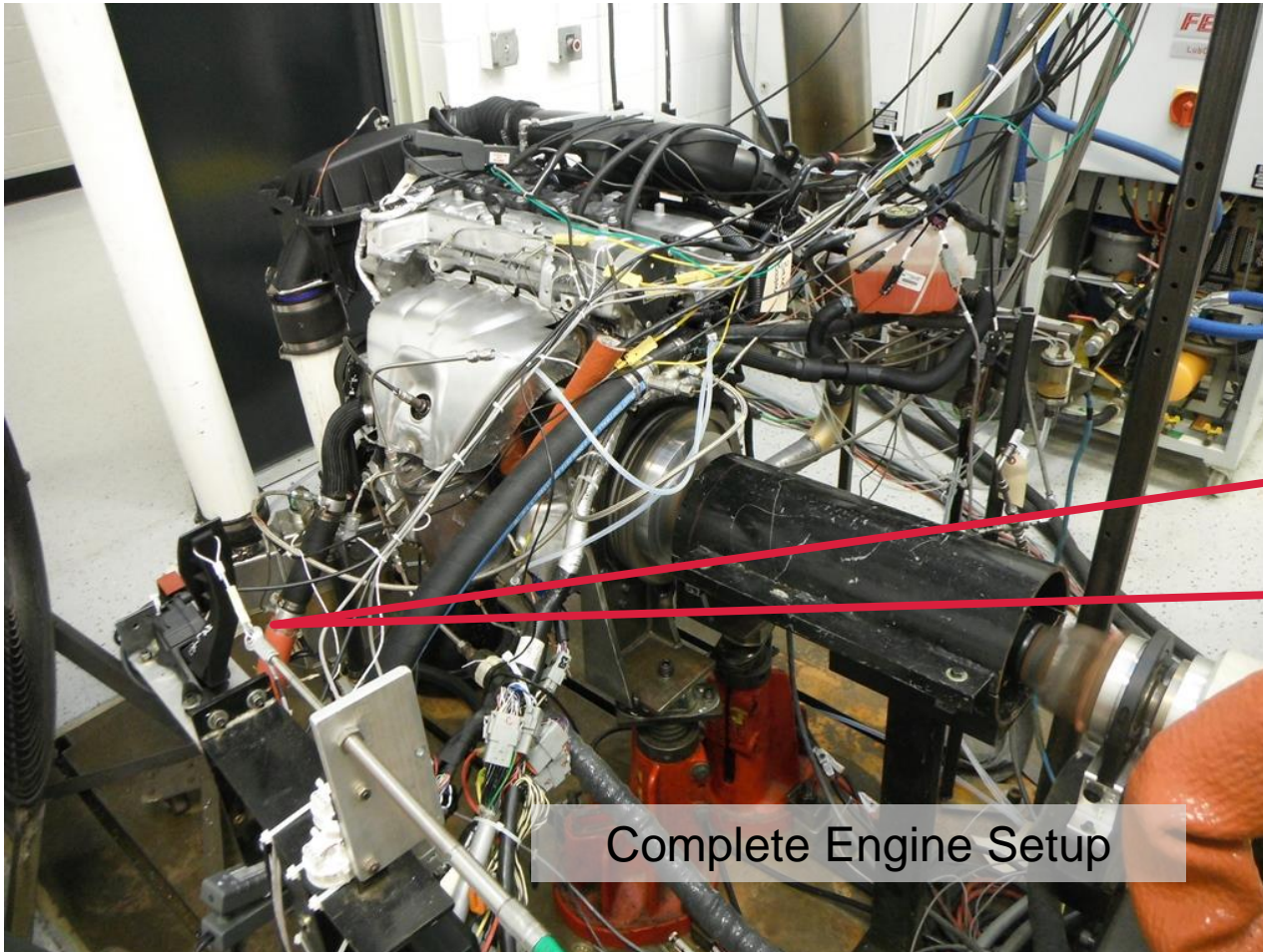
The following material was prepared by FEV Engine Technology under EPA Contract EP-C-12-014 and describes the test procedures performed by FEV on the 2.5L Ecotec LCV engine. Use of any NCAT material provided below, included as part of the complete test data package, should reference the suggested citation provided.

**SUGGESTED CITATION:** *2013 Chevrolet 2.5L Ecotec LCV Engine Reg E10 Fuel – Test Data Package*. Version 2018-02. Ann Arbor, MI: US EPA, National Vehicle and Fuel Emissions Laboratory, National Center for Advanced Technology, 2018.

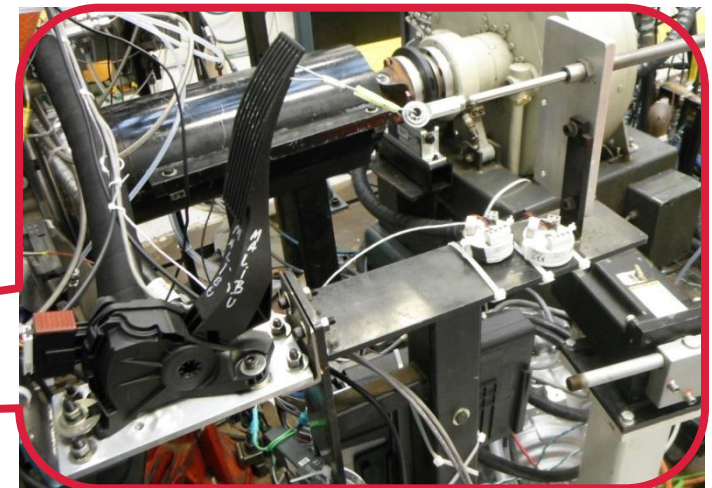
# EPA Benchmarking 2013 Chevy Malibu 2.5L – Project Status Update

Contract No. EP-C-12-014, Work Assignment 1-5  
April 9, 2013

## Test Cell Setup



Complete Engine Setup



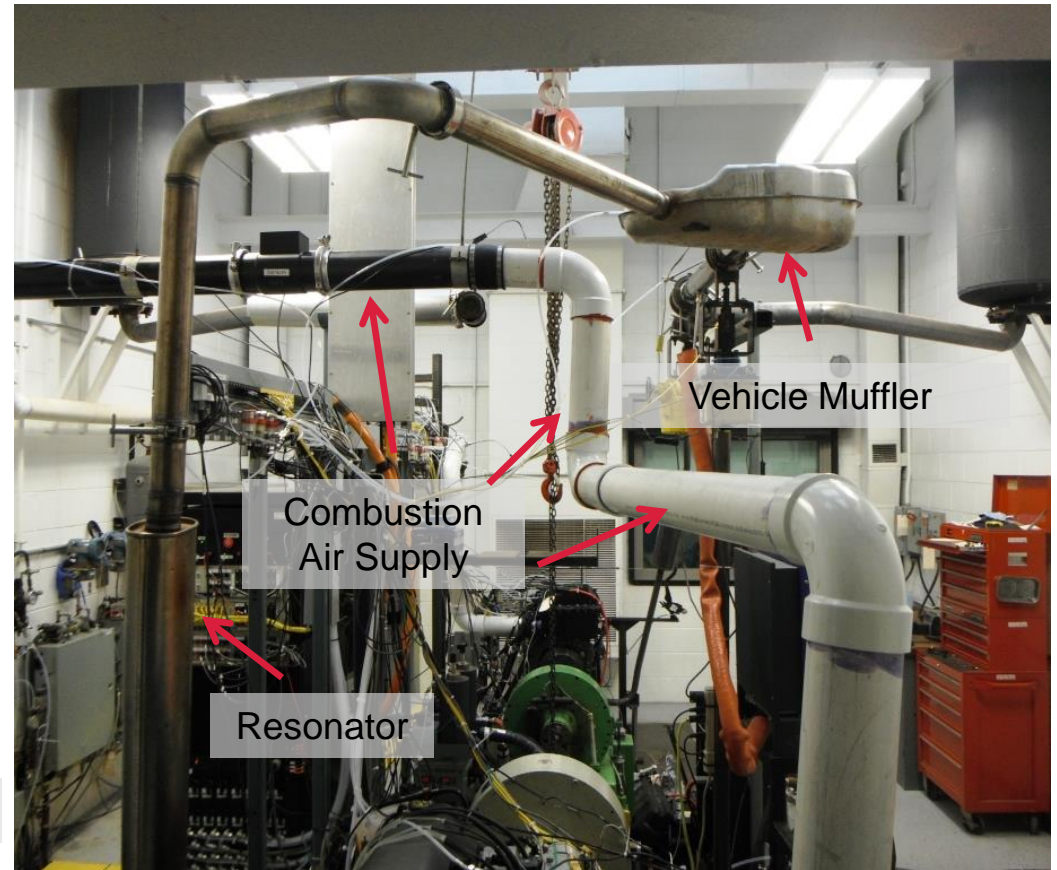
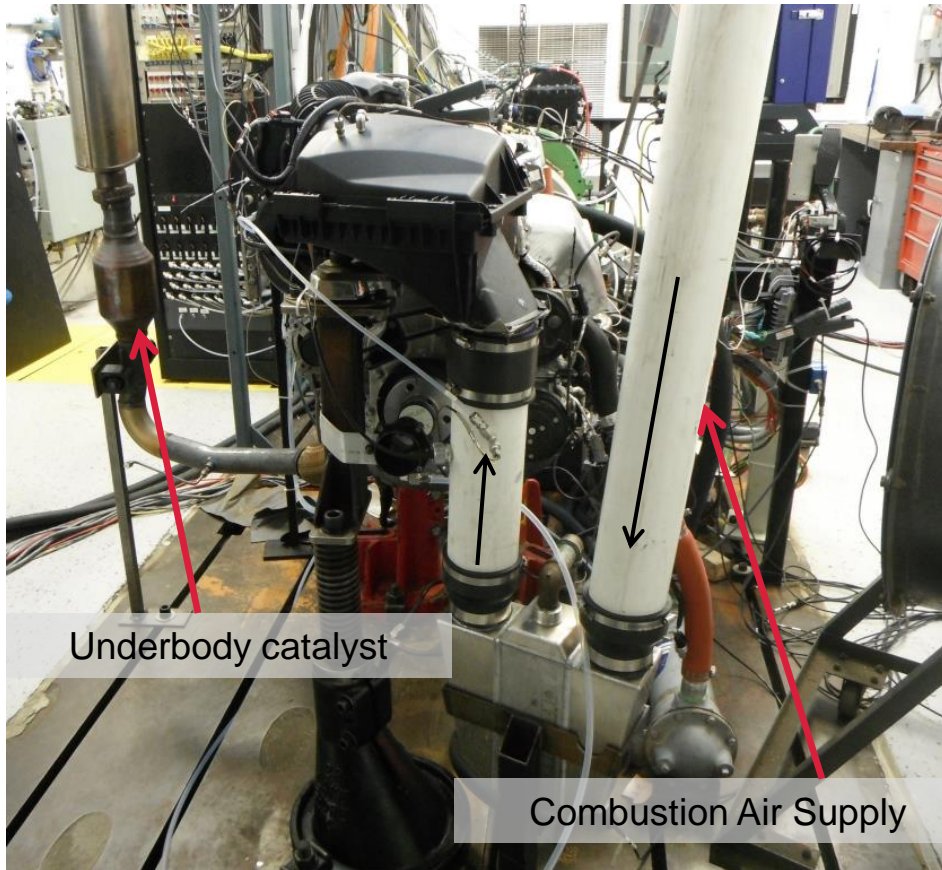
Accelerator Pedal & Controller



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## Test Cell Setup

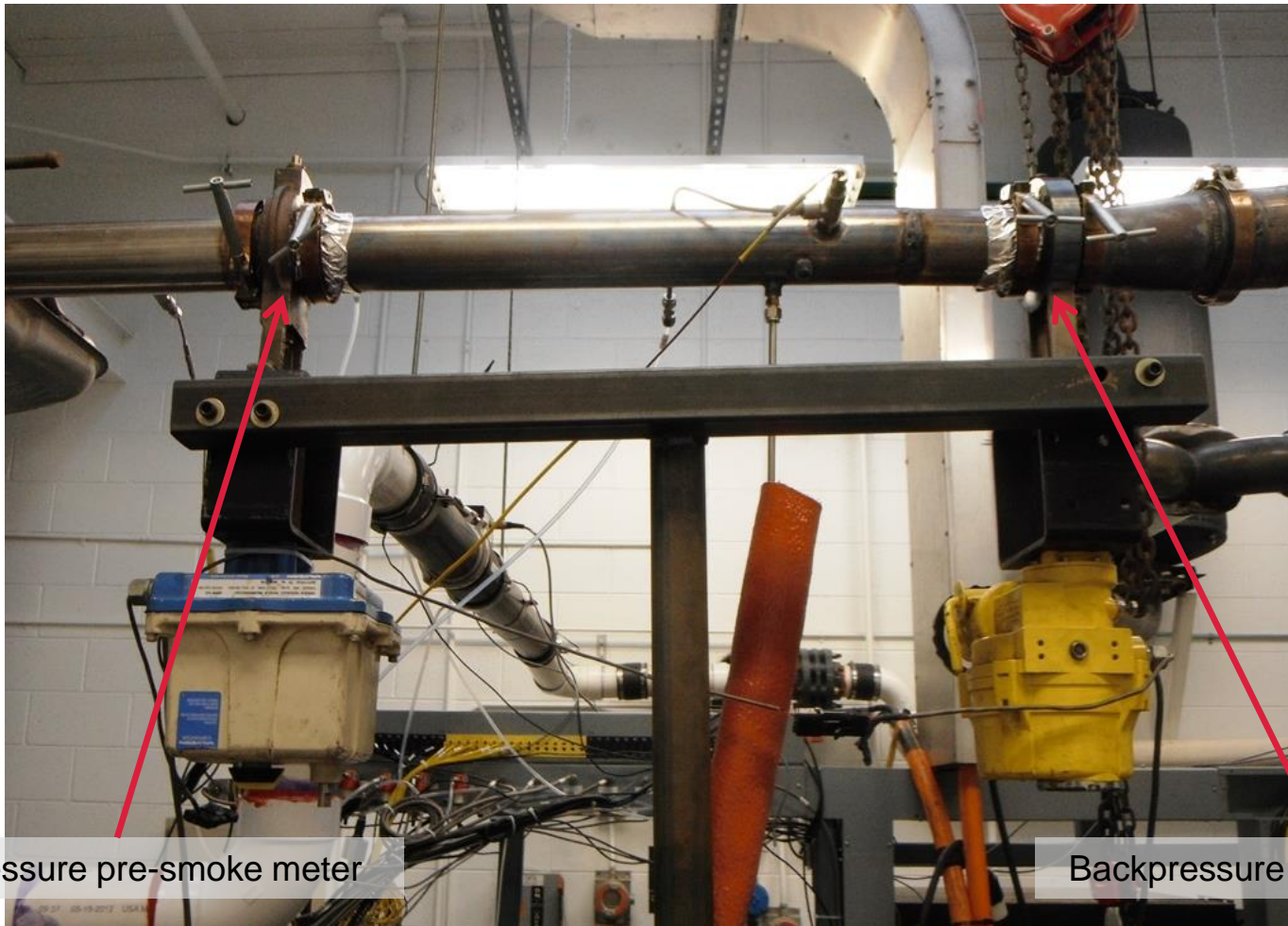


Induction and Exhaust Systems

# EPA Benchmarking 2013 Chevy Malibu 2.5L – Project Status Update

Contract No. EP-C-12-014, Work Assignment 1-5  
April 9, 2013

## Test Cell Setup



Backpressure pre-smoke meter

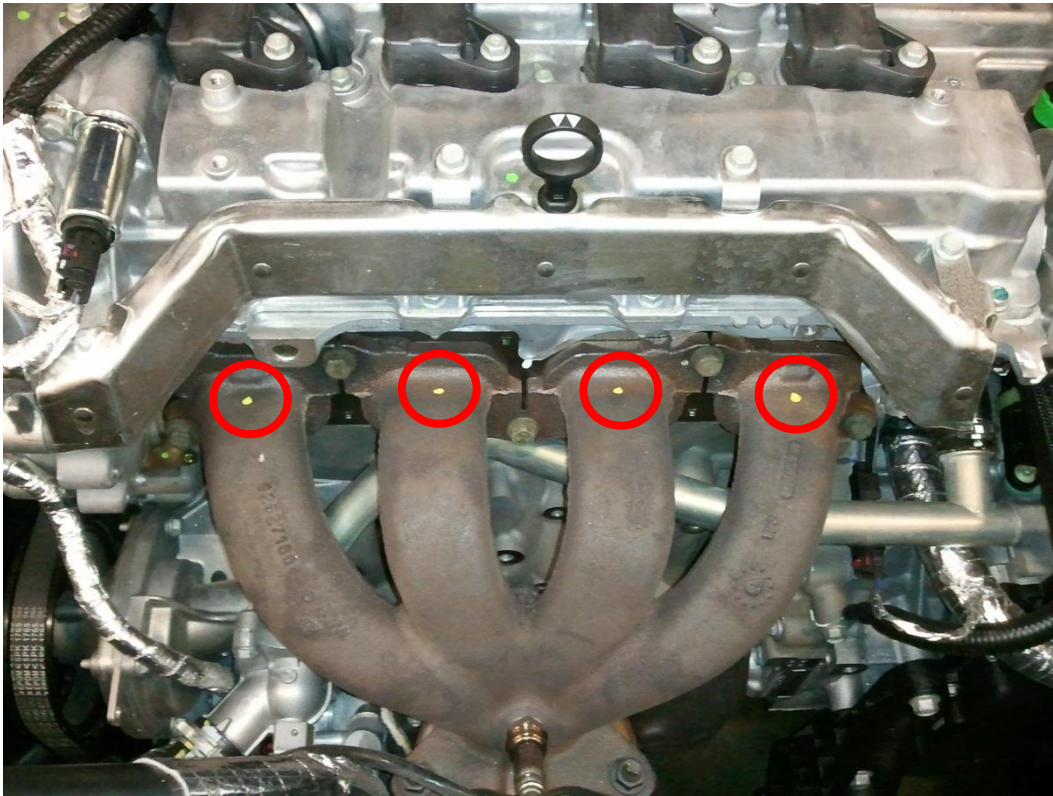
Backpressure post-smoke meter

Exhaust Backpressure Valves

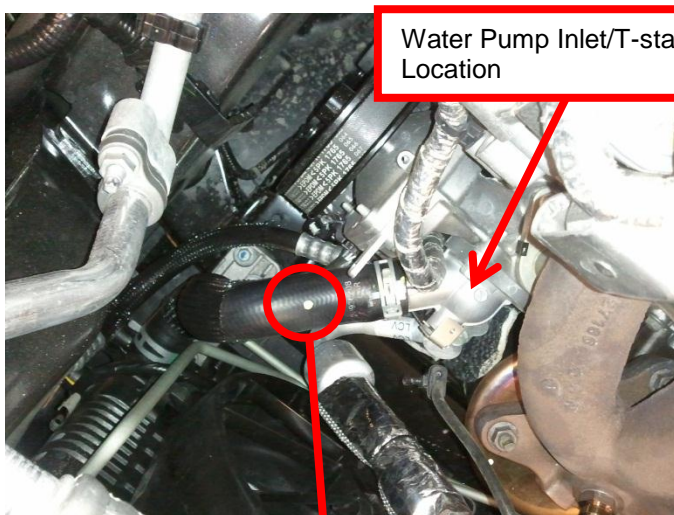


## 2013 Chevy Malibu 2.5L Thermocouple Installation Points

### Exhaust Gas Temps:

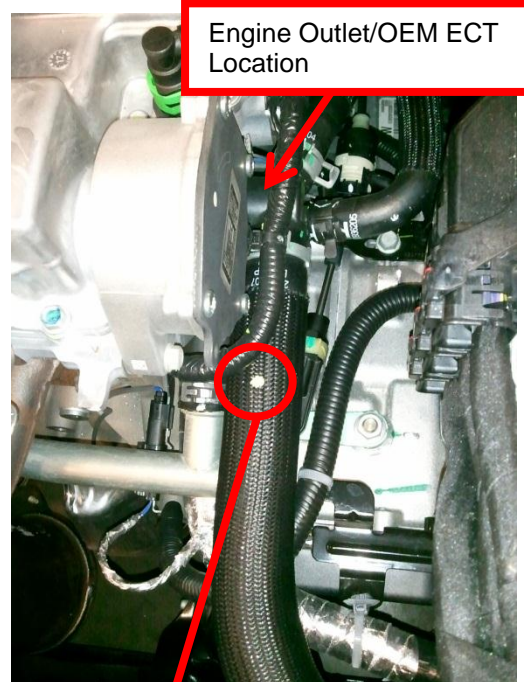


### Engine Coolant Inlet/Outlet Temps:



Water Pump Inlet/T-stat  
Location

Radiator Outlet Temperature Location



Engine Outlet/OEM ECT  
Location

Radiator Inlet Temperature Location