Smoke Reduction Test City of Leesburg December 1992

A qualitative smoke reduction test was performed during the City of Leesburg test. This was done by attaching a 25 micron filter to the exhaust gas sampling train. The filter traps un-burned fuel exhausted from the engine as visible smoke or particulate.

A new filter was installed at the beginning of each test segment. The baseline filter trap was subjected to engine exhaust for fifty-one minutes. The treated segment filter was subjected to exhaust from the same engines for fifty-four minutes.

A photograph of both filters is below. The treated filter is considerably cleaner than the baseline filter. This visual comparison shows the drastic particulate emissions reduction normally associated with the use of "FEROX".



In addition to the reduction of visible particulates seen above, there were also significant reductions in harmful gaseous emissions. They were: CO by 49% and HC by 51%. A Sun Electric SGA-9000 non-dispersive infrared analyzer (NDIR) was used to measure the exhaust gas constituents.