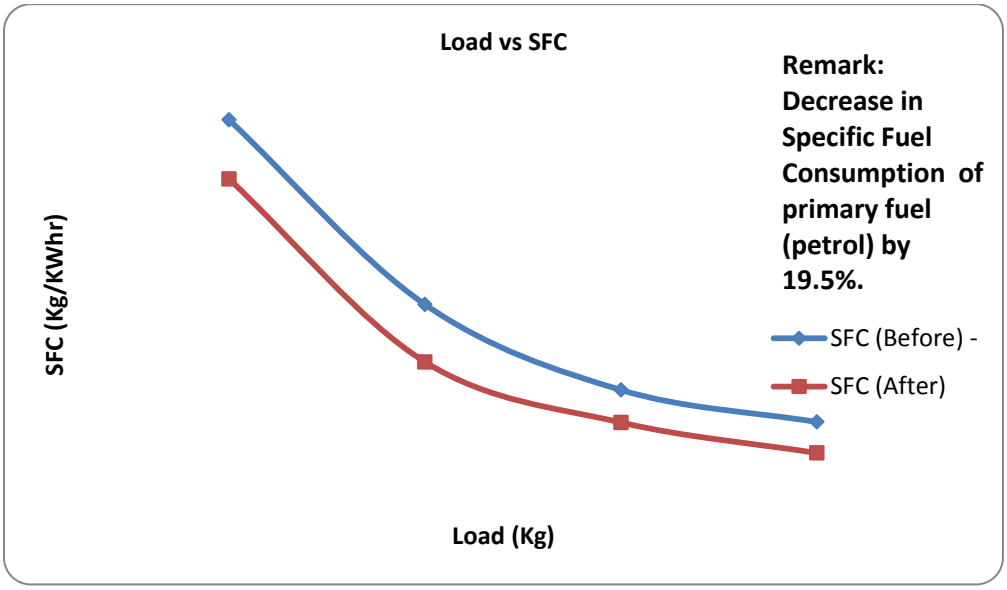
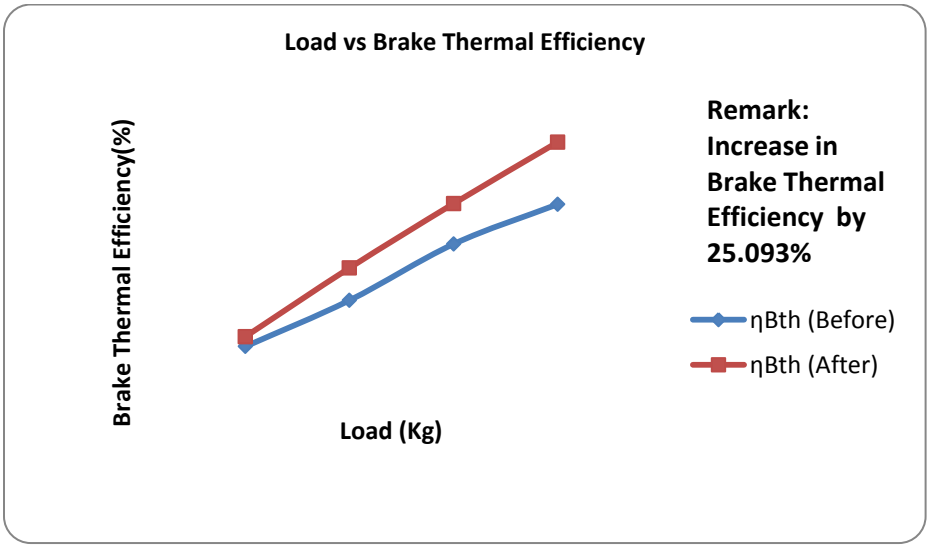
5M Mileage Boost Test Results

1) The Specific Fuel Consumption of the primary fuel (hydrocarbon) by the engine was calculated for various loads varying from 20% to 100% of full load. As shown in graph 1, the Specific Fuel Consumption of the primary fuel (hydrocarbon) has decreased by 23.3% at 100% load with an overall decrease of 19.5%.



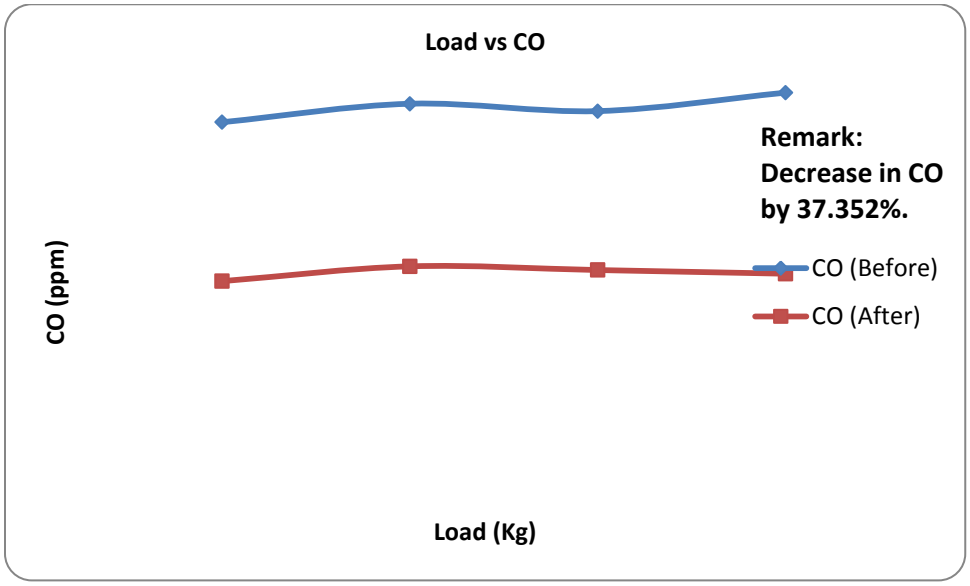
Graph 1: Load vs Specific Fuel Consumption

2) As shown in graph 2, the brake thermal efficiency is increasing with increase in load. A maximum increase of 30.34% in brake thermal efficiency was observed at 100% load, with an overall increse of 25%.



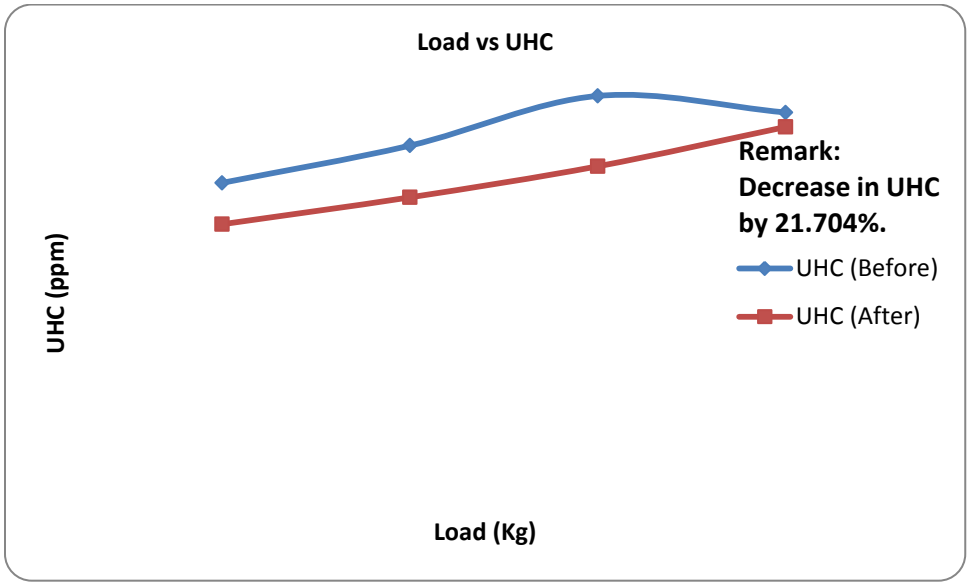
Graph 2: Load vs Brake Thermal Efficiency

3) The Carbon Monoxide emission were found to have reduced with the injection of hydro plasma. A maximum of 39.51% decrease in CO emissions has been observed at 100% load, with an overall decrease of 37.3%.



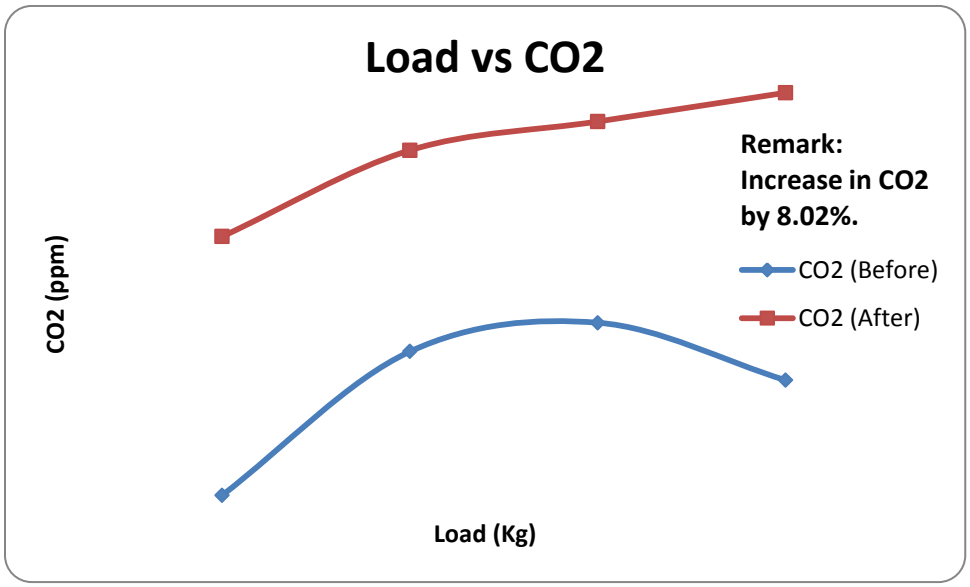
Graph 3: Load vs Carbon Monoxide

4) The Unburnt HydroCarbon (UHC) emission, as shown in graph 4, again showed a decrement. A maximum decrease of 15.45% was observed at 75% load, with an overall decrease of 10.96%.



Graph 4: Load vs Unburnt Hydro Carbons

5) Graph 5, clearly shows increment in CO_2 emissions. A maximum increase of 8.47% was observed at 100% load with an overall increase of 8.02%.



Graph 5: Load vs Carbondioxide