



## RESULTS MIDDLE-AGE CAR VEHICLE

COMMENTS from the Car repair work-shop and the car-owner

The emissions are steadily improving; the HC trend confirms a lesser use of engine oil  
Vibration and Noise reduce significantly

**FUEL CONSUMPTION REDUCES around 13%**

VEHICLE	OPEL ASTRA	AH 353 HG		
LUBRICANT OIL CONSUMPTION BEFORE THE TEST 700 GR. / 1200 KM				
KM (TOTAL)	106540	106632	106900	107870
KM (FROM BEGINNIG OF TEST)		92	360	1330
DATE	27\10\2004	30\11\2004	04\11\2004	03\12\2004
ENVINRONMENT TEMPERATURE	16°C	15°C	15°C	14°C
LUBRICANT OIL LEVEL	MAX	MAX	MAX-0.2 kg	MAX-0.5 kg
COMPRESSION				
1°	9.00	14.40	14.9	14.9
2°	6.50	14.40	14.8	15.3
3°	12.50	14.40	14.8	15.2
4°	14.40	14.40	14.9	15.3
EXHAUST GASES				
GAS TEMPERATURE	55°C	55°C	55°C	55°C
LIQUID TEMPERATURE	90°C	90°C	90°C	90°C
CO	1,2-1,7%VOL	0,06%VOL	0,06%VOL	0,00%VOL
CO2	14%VOL	14%VOL	13,7%VOL	14%VOL
HC	332 PPM VOL	195 PPM VOL	223 PPM VOL	132 PPM VOL
O2	0,48%VOL	0,25%VOL	1,20%VOL	0,51%VOL