

**RESULTS OBTAINED ON TEST No. EOE-4330 ON BUNKER FUEL OIL
TESTY CONDUCTED BY MEXICAN OIL COMPANY
ENERGY CONTROL DEPARTMENT**

EMISSIONS

**Xp3 was formulated to significantly reduced the PARTICULATE EMISSIONS
CO, Nox, SO2 and OPACITY**

TEST: Conducted on boiler to show the effects of using Xp3 with fuel oil # 6

Source: Technical Report issued by Energy Contral Department from
Instituto Mexicano del Petroleo (November 1995)

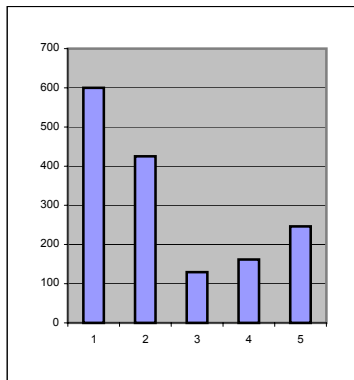
RESULTS:

SUSPENDED PARTICULATES (1)

	w/o	with Xp3	Reduction
Particulate Concentration (mg/m ³ N)	230.09	161.65	29.74%
Particulate Emissions (kg/h)	0.2925	0.1799	38.50%
Opacity	5	3	40.00%

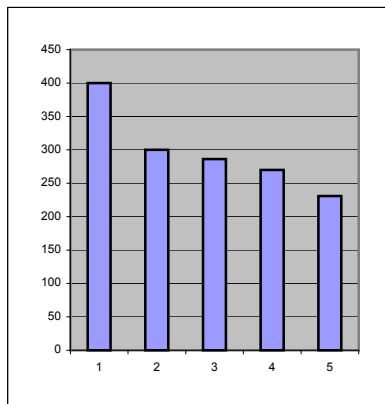
(1) Results with 5% oxygen on chimney gases

TOTAL SUSPENDED PARTICULATES



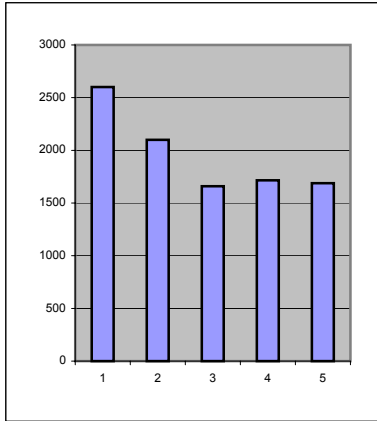
- 1) 600 Ecological Norma for the Mexican Republic
- 2) 425 Ecological Norma for Critical Zone in Mexico
- 3) 129.32 With Xp3 (7% of O₂ in combustion gases)
- 4) 161.65 With Xp3 (5% of O₂ in combustion gases)
- 5) 246.35 With Xp3 (3% of O₂ in combustion gases)

NO_x EMISSIONS CORRECTED AT 5% OF O₂



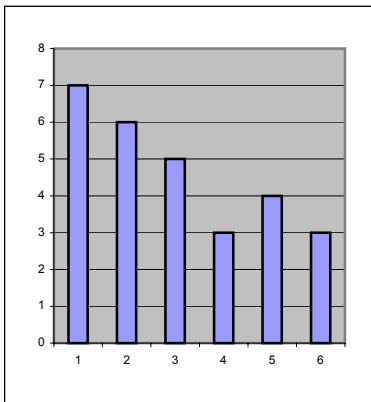
- 1) 400 Ecological Norma for the Mexican Republic
- 2) 300 Ecological Norma for Critical Zone in Mexico
- 3) 286.1 With Xp3 (7% of O₂ in combustion gases)
- 4) 270 With Xp3 (5% of O₂ in combustion gases)
- 5) 230.8 With Xp3 (3% of O₂ in combustion gases)

SO2 EMISSIONS CORRECTED AT 5% OF O2



- 1) 2600 Ecological Norma for the Mexican Republic
- 2) 2100 Ecological Norma for Critical Zone in Mexico
- 3) 1659 With Xp3 (7% of O2 in combustion gases)
- 4) 1716 With Xp3 (5% of O2 in combustion gases)
- 5) 1688 With Xp3 (3% of O2 in combustion gases)

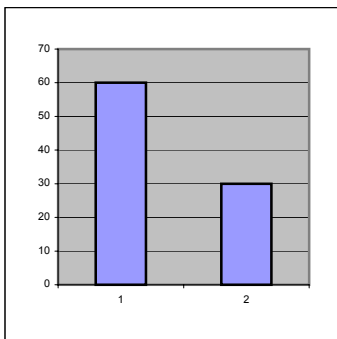
OPACITY



- 1) 7 With Xp3 (3% of O2 in combustion gases)
- 2) 6 W/O Xp3 (3% of O2 in combustion gases)
- 3) 5 With Xp3 (5% of O2 in combustion gases)
- 4) 3 W/O Xp3 (5% of O2 in combustion gases)
- 5) 4 With Xp3 (7% of O2 in combustion gases)
- 6) 3 W/O Xp3 (7% of O2 in combustion gases)

TEST CONDUCTED ON BUSES DIESEL No. 2 FUEL

SMOKE OPACITY



60 W/O 40
30 With Xp3 25

STARTING TIME

