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Summary of emissions testing on a Ground Power Unit (I.D. GPU020) at Fleet Africa, Swissport, Johannesburg International Airport

Tailpipe Emission Testing was conducted on a Ground Power Unit GPU020 on the 2 December 2004, prior to the addition of an additive into the diesel, using an ECOM AC Analyzer. Emission Testing was again conducted on the 15 April 2005, four months after the addition of the additive. The test results in Table 12 below indicate that there is a marked decrease in the emissions of pollutants, with an average reduction of:

22% Carbon Monoxide emissions

27% Nitric Oxide emissions

30% Nitrogen Dioxide emissions

27% Oxides of Nitrogen emissions

22% Carbon Dioxide emissions

57% Hydrocarbon Compound emissions

The test results from an environmental perspective were encouraging, as reductions in diesel vehicle/equipment emissions at this level would undoubtedly reduce ambient atmospheric pollution. Hydrocarbons and Oxides of Nitrogen are converted into to Ozone at ground level this produces photochemical smog that is detrimental to human health and the environment. Oxides of Nitrogen also have a global warming potential (GWP) of 310 times that of Carbon Dioxide. In indoor environments such as warehouses or underground in mines the reduction in toxic pollutants at this rate

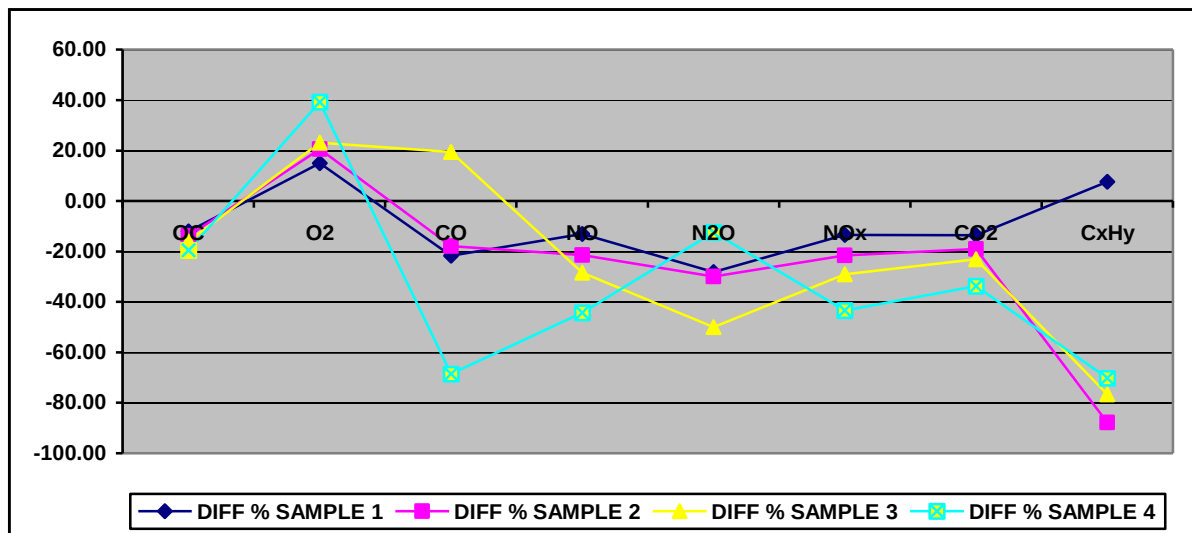
would greatly improve the indoor or underground air quality, which would in turn reduce the amount of ventilation required in such areas. Risk to employee health in these environments would also be reduced.

Table 12 - Vehicle ID: GROUND POWER UNIT GPU004 - Vehicle (Tailpipe)
Summary of % Differences in Test 1 and Test 2 at Fleet Africa, Swissport, JHI

Determinand	Chemical Formular	DIFF	DIFF	DIFF	DIFF	Unit
Date		%	%	%	%	
SAMPLE NUMBER		SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	
Gas Temperature	°C	-12.09	-13.79	-16.00	-19.52	%
Oxygen	O ₂	15.00	20.59	23.08	39.18	%
Carbon Monoxide	CO	-21.76	-17.87	19.44	-68.60	%
Nitric Oxide	NO	-13.08	-21.41	-28.46	-44.20	%
Nitrogen Dioxide	N ₂ O	-28.13	-30.00	-50.00	-12.50	%
Oxides of Nitrogen	NO _x	-13.47	-21.62	-29.02	-43.44	%
Carbon Dioxide	CO ₂	-13.58	-18.99	-23.08	-33.73	%
Total Hydrocarbons	CxHy	7.69	-87.80	-76.74	-70.21	%

GREEN - NEGATIVE (-) INDICATES THE PERCENTAGE DECREASE IN EMISSIONS

ORANGE - POSITIVE INDICATES THE PERCENTAGE INCREASE IN EMISSIONS



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