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The Manager
Rooiwal Power Station
City of Tshwane

FOR ATTENTION: MR. MARTIN SPEEK

TEST RESULTS: BOILER NUMBERS 3&4 EMISSION TESTING

Results of test work completed on 14, 15 and 16 July are summarised below. Boiler 4 was tested without a catalyst on the 14th and with a catalyst on the 16th. Boiler 3 was tested on the 15th.

1. Isokinetic Sampling

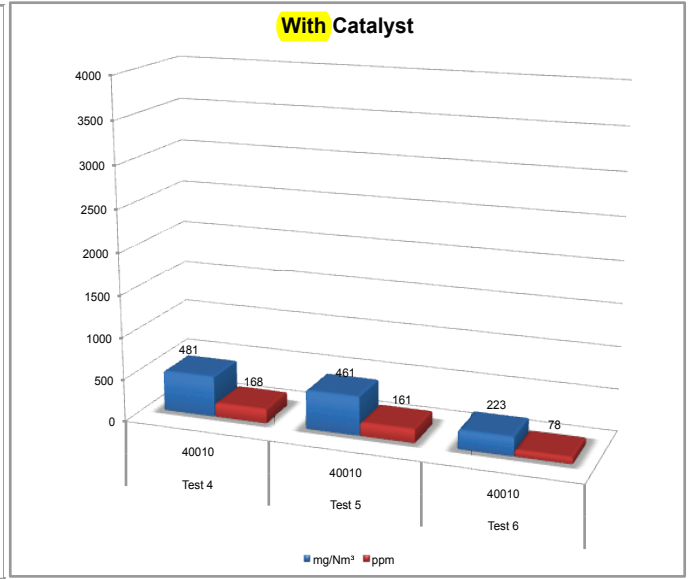
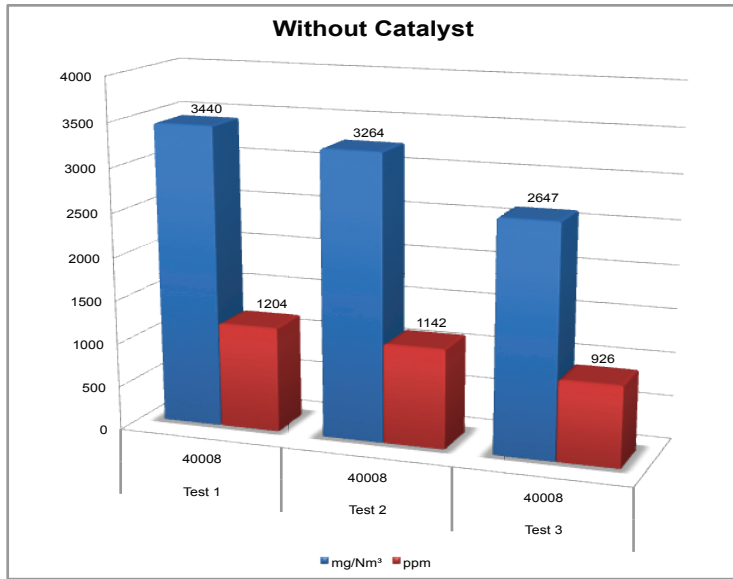
Results of test work at boiler 4 is summarised below.

Description	Unit	Without catalyst		With catalyst		
		No 1	No 2	No 3	No 4	No 5
Date of measurement		14-Jul	14-Jul	16-Jul	16-Jul	16-Jul
Average gas velocity	m/s	10.1	11.2	12.8	13.7	12.4
Average gas temperature	°C	118	125	123	123	123
Average static pressure	kPa	85.0	84.5	85.4	85.8	85.6
Average duct flow (actual)	Am ³ /s	117.0	129.0	148.0	158.1	142.9
Average duct flow (normal)	Nm ³ /s	68.5	73.9	86.0	92.4	83.4
Dust load	mg/Nm ³	72	52	38	66	75
Percentage CO ₂ measured	%	12.2	10.9	14.6	14.0	15.5
Moisture content in gas (V/V)	%	5.6	5.5	5.5	5.5	5.5
Dust load (12% CO ₂ corrected)	mg/Nm ³	71	59	31	57	58

2. Sulphur Oxide (SO_x) testing

Results of test work at boiler 4 is summarised below.

	Unit	Without catalyst			With catalyst		
		Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
Date		14/7	14/7	14/7	16/7	16/7	16/7
Gaseous SO _x concentration as SO ₂							
NTP conditions	mg/Nm ³	3440	3264	2647	481	461	223
	ppm	1204	1142	926	168	161	78



3. Nitrogen Oxide (NO_x) testing

Results of test work at boiler 4 is summarised below.

	Unit	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
Date		14/7	14/7	14/7	16/7	16/7	16/7
Gaseous NO _x concentration							
NTP conditions	mg/Nm ³	207	109	92	21	18	24
	ppm	72	38	32	7	6	8

