


## Test Report

<b>Ref No</b>	: ET/GMSCKIL/EPT-A/15-152
<b>Enterprise</b>	: GMS Composite Knitting Ind. Ltd.
<b>Factory Address</b>	: Shardagonj, Kashimpur, Gazipur, Bangladesh.
<b>Sample Description</b>	: Air Emission (Indoor Assessment)
<b>Sampling Time</b>	: 04.00 PM - 06.00 PM
<b>Sampling Date/Date of Test</b>	: 1 <sup>st</sup> April, 2015
<b>Reporting Date</b>	: 5 <sup>th</sup> April, 2015
<b>Sampling Meter Description</b>	: TESTO 340 - FLUE GAS ANALYSER


### Machine Description:

Key Information	Boiler 1	Boiler 2
Location	Shed	Shed
Registration No.	Ba. Bo.7399	Ba. Bo. 2006
Capacity	3 Ton	350 Kg
Supplier Name	Modern	Modern
Made in	U.S.A	Bangladesh
Model/Brand	S1000.150.307	NF
Installation Date	03/12/2013	21/03/2002
Operating Pressure	6 Kg	6 Kg
Machine maintenance/ Repair Status	Good	Good
Fuel type	Gas/Diesel	Gas/Diesel
Last service date	13/03/2015	13/03/2015

**NF = Not Found**

  
**Report Analyzed By:**  
 Sonia Sultana  
 LAB Analyst  
 Enviro-Tech



  
**Report Reviewed By:**  
 Md. Alim Miah  
 LAB Analyst  
 Enviro-Tech

## **Result of air emission monitoring:**

Serial No.	Test parameter	Result		Remarks	ECR 1997 standards (mg/Nm <sup>3</sup> )	World Bank 2006 –IFC Standard (mg/Nm <sup>3</sup> or as indicated)
		Boiler 1 (in mg/Nm <sup>3</sup> or as indicated)	Boiler 2 (in mg/Nm <sup>3</sup> or as indicated)			
1	O <sub>2</sub> (%)	2.90%	2.98%	Acceptable	NYS	3%
2	CO <sub>2</sub> (%)	1.15%	2.20%	-	NYS	NYS
3	NO <sub>x</sub>	35.82	32.05	Acceptable	150	320

### **Note:**

O<sub>2</sub>: Oxygen

CO<sub>2</sub>: Carbon di Oxide

(NO+NO<sub>2</sub>): Nitrogen oxides

NYS: Not Yet Set

**Comments:** The air emission from the stack point of boiler has been analyzed for the parameter of O<sub>2</sub>, CO<sub>2</sub> and NO<sub>x</sub> to evaluate the plants emission while running on 100% natural gas on the environment. It is observed that the emission of these parameters is within the standard range except CO<sub>2</sub>. DoE/World Bank does not set the standard of CO<sub>2</sub>. So that emission of this parameter does not provide harmful effect on the air environment but cautious to human health when exposed for long time. So it is recommended that gas mask should be provided to related workers to avoid occupational health hazard.



### **Report Analyzed By:**

Sonia Sultana  
LAB Analyst  
Enviro-Tech




### **Report Reviewed By:**

Md. Alim Miah  
LAB Analyst  
Enviro-Tech

## Graphical Presentation of Result:

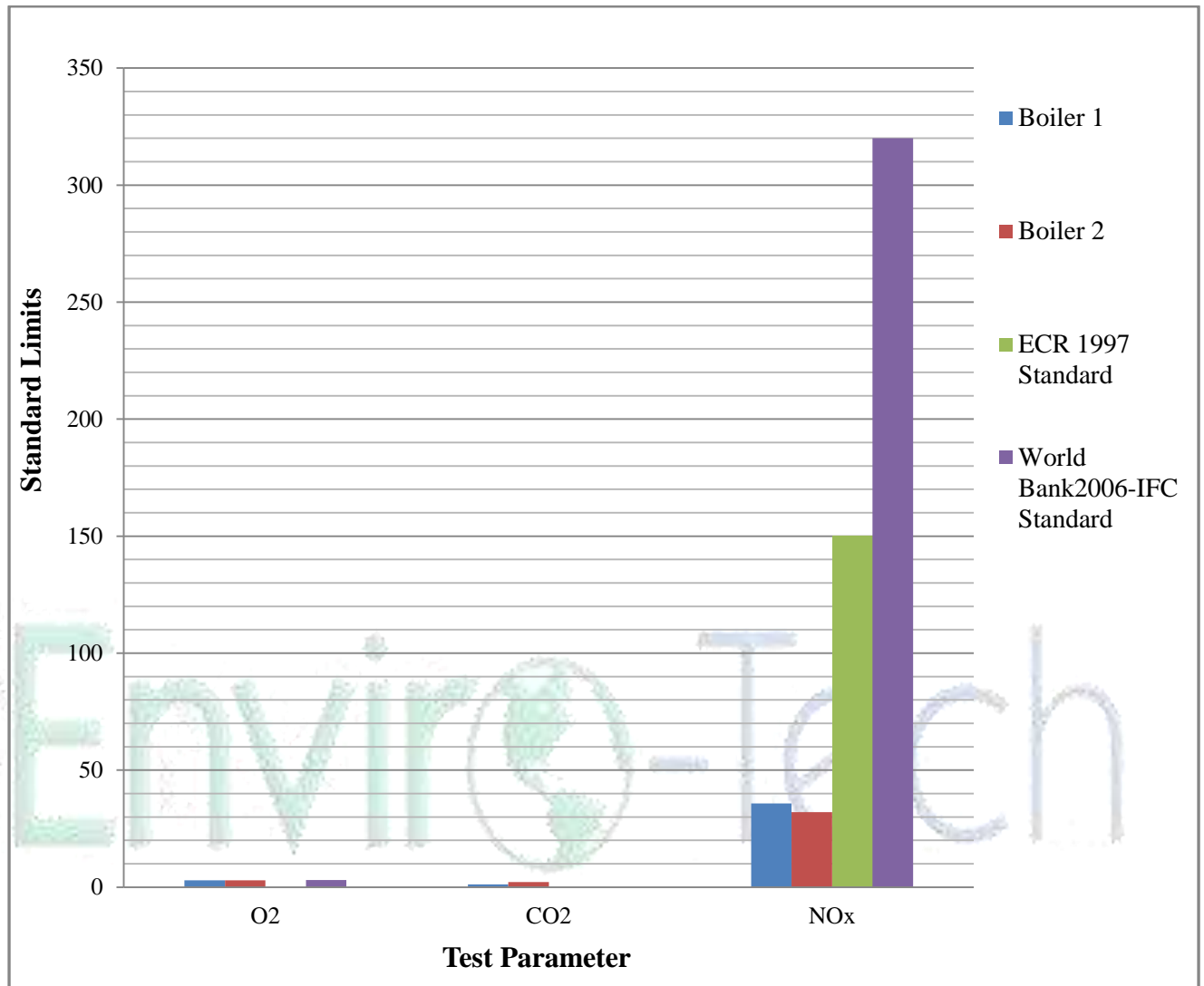


Figure: Graphical presentation of the air emission test result from boiler

*Sonia*

**Report Analyzed By:**

Sonia Sultana  
LAB Analyst  
Enviro-Tech



*Md. Alim Miah*

**Report Reviewed By:**

Md. Alim Miah  
LAB Analyst  
Enviro-Tech