

## 2.0 SUMMARY AND DISCUSSION OF RESULTS

The Combustion Turbine (CT) and Duct Burners were found to be operating in compliance with emissions limits for all parameters measured.

Table 1 (CT Emissions only) and Table 2 (CT with HRSG Duct Burner Emissions) summarize the emissions results.

Actual emissions versus allowable emissions are tabulated below:

<b><u>Pollutant</u></b>	<b><u>Actual Emissions</u></b>	<b><u>Allowable Emissions</u></b>
<b>Natural Gas</b>		
<i><u>CT with Duct Burners</u></i>		
CO	2.76 lbs/Hr	25.0 lbs/Hr
SO <sub>2</sub>	0.036 lbs/Hr	1.2 lbs/Hr
NO <sub>x</sub>	66.32 lbs/Hr	annual average 77.0 lbs/Hr, peak 112.0 lbs/Hr
NO <sub>x</sub> at 15% O <sub>2</sub>	50.39 ppmvd	annual average 58 ppmvd @ 15% O <sub>2</sub> , peak 74.0 ppmvd @ 15% O <sub>2</sub>
<i><u>Duct Burners</u></i>		
NO <sub>x</sub>	4.26 lbs/Hr 0.189 lbs/MMBTU	4.6 lbs/Hr 0.2 lbs/MMBTU

In accordance with Specific Condition Number A.48 of the Operating Permit, the CT with HRSG Duct Burners demonstrated compliance at 380.2 MMBTU/Hr (gas). This allows unlimited operation during the next year at a total heat input of 418.2 MMBTU/Hr (380.2 MMBTU/Hr plus 10%). All values are based on the higher heating value (HHV) of the fuel.

The Sulfur Dioxide (SO<sub>2</sub>) emission rate was calculated from the fuel analysis in Appendix D (see Table 2).

Full load CT and HRSG testing was conducted using EPA Method 20 simultaneously at both the CT exhaust and the HRSG exhaust. Maximum test point traverses were conducted at each test location. The HRSG (duct burners) NO<sub>x</sub> contribution was determined as agreed in an FDEP test protocol through use of the following equation found in 40 CFR, Part 60, App. A, Method 19, 2.8.1: