

Combustion Equipment Monitoring Data Sheet

Company Name: _____ Date: _____

Emission Unit Identification (Boiler B-1, etc): _____

Make of Emission Unit: _____

Model of Emission Unit: _____

Serial Number of Emission Unit: _____

Company Performing Test: _____

Analyst: _____

Make of Instrument(s) Used: _____

Model of Instrument(s) Used: _____

Permitted NO_x Concentration _____ ppm @ _____ % O₂/CO₂ Permit Number: _____

Permitted CO Concentration _____ ppm @ _____ % O₂/CO₂ Permit Number: _____

Target/Permitted O₂/CO₂ concentration (%) _____ Permit Number: _____

Span Gas (as applicable) ⁽¹⁾	Span Gas Concentration	Pre-Test Span Gas Reading	Post-Test Span Gas Reading ⁽²⁾	Pre-Test Zero Reading	Post-Test Zero Reading ⁽²⁾
NO _(x)					
NO ₂ ⁽⁴⁾					
CO					
O ₂					

Time of Pre-Test Analyzer Response Check ⁽³⁾: _____

Time of Post-Test Analyzer Response Check ⁽³⁾: _____

⁽¹⁾ The span gas concentration must not be less than 50% of the target/permitted pollutant concentration nor more than 200% of the target/permitted pollutant concentration.

⁽²⁾ The results of the analyzer response shall not be valid if the pre and post response check results vary by more than 10% of the know span gas value.

⁽³⁾ No more than 12 hours may elapse between the pre-test and post-test analyzer response checks.

⁽⁴⁾ Calibration and use of an NO₂ cell is required if significant quantities of NO₂ are expected (i.e. after specific catalysts, afterburners, etc.) and if no NO₂→NO converter is integral or used in conjunction with the combustion analyzer.

Stack Temperature: _____ °F

Moisture: _____ %

Firing Rate: _____ MMBtu/hr

Firing Rate: _____ %

Steam Rate: _____ 1000 lb/hr

Analyzer Probe Location: _____

Source Operation Notes: Please note the operating conditions of the source including unit load, fuel flow, damper position, oxygen set point, use of flue gas recirculation, steam pressure, afterburner temperature, etc. as applicable:

Southwest Clean Air Agency

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Emissions Data Summary

Test Start Time: _____

Test Stop Time: _____

(Record at least 5 minutes of data)

Time (min)	NO _x Reading (ppm)	NO ₂ Reading (if applicable) (ppm)	CO Reading (ppm)	O ₂ Reading (%)
00:00				
00:30				
01:00				
01:30				
02:00				
02:30				
03:00				
03:30				
04:00				
04:30				
05:00				
05:30				
06:00				
06:30				
07:00				
07:30				
08:00				
08:30				
09:00				
09:30				
10:00				
Average				
Corrected				

Please correct the average pollutant concentrations to the appropriate oxygen or carbon dioxide basis listed on page 1 using one of the following equations as applicable:

$$\text{Corrected concentration} = (C - C_o) \left(\frac{C_{ma}}{C_m - C_o} \right) \left(\frac{20.9 - X\%O_2}{20.9 - Y\%O_2} \right) \quad \text{Where:}$$

- C = Average analyzer gas response
- C_o = Average initial and final analyzer zero check response (note: C_o=0 if analyzer is zeroed)
- C_{ma} = Actual span gas known value
- C_m = Average of initial and final analyzer span check response
- X = Oxygen percentage for which concentration will be corrected to
- Y = Average analyzer oxygen response

Notes: _____

Attach copy of analyzer data print out from analyzer. Submit results to SWCAA within 15 days of tune-up.

Questions? Contact the Southwest Clean Air Agency at (360) 574-3058 - fax (360) 576-0925.