

REPORT OF TEST



SGS U.S. Testing Company Inc.

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Report No.: FT97-0033  
Date: 6/2/97  
Page 1 of 5

**CLIENT:** Emissions Technology, Inc.  
P.O. Box 471916  
Tulsa, OK 74174  
  
Attn: Clark Daywalt

**SUBJECT:** Efficiency testing of ECO Systems by use of a methane source.

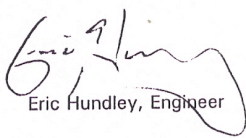
**REFERENCE:** Verbal 5/2/97.

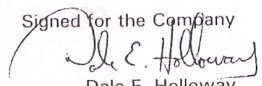
**SAMPLE ID:** Client refers to the sample as "ECO System, Model ECO-2".

**PROCEDURE:** The testing procedure used a flow meter, monitoring methane flow, to measure the temperature of a gas brooder. With a thermal couple located in the brooder, the temperature of the flame was evaluated in comparison to methane flow. Tests were recorded with and without the sample ECO System in line with the brooder.

**RESULTS:** The results are on the following pages.

**TEST DATE:** 5/06/97.

  
Eric Hundley, Engineer  
bk

Signed for the Company  
  
Dale E. Holloway  
Tulsa Branch Director

Member of the SGS Group

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Client: Emissions Technology, Inc.

**RESULTS:**

**Brooder Temperature Test Standard Installation**

Sample Number	Measurement (SCFH air)	Temperature (°C)	Flow Rate (ft <sup>3</sup> /min)	Flow Rate (BTU/hr)
1	6.0	900	0.134	8840
2	10.0	1050	0.224	14800
3	14.0	1110	0.313	20600
4	18.0	1145	0.403	26600

**Brooder Temperature Test With ECO System**

Sample Number	Measurement (SCFH air)	Temperature (°C)	Flow Rate (ft <sup>3</sup> /min)	Flow Rate (BTU/hr)
1	6.0	925	0.134	8840
2	10.0	1060	0.224	14800
3	14.0	1135	0.313	20600
4	18.0	1160	0.403	26600

REPORT OF TEST

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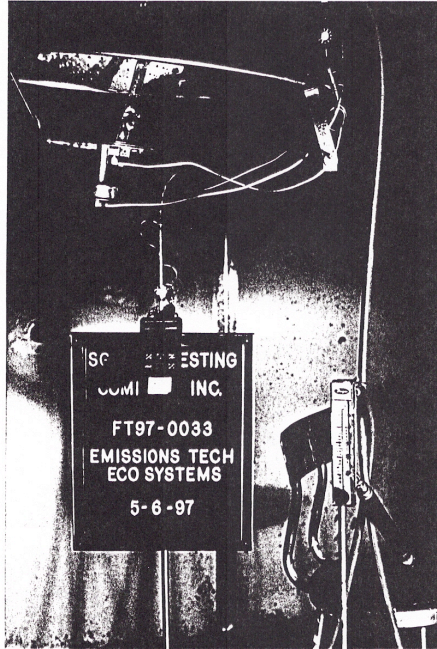
**CONCLUSION:**

Three temperature points were evaluated for flow differences made with the ECO System and without. These points are evaluated in terms of flow difference and percent efficiency difference.

REPORT OF TEST

**EVALUATED TEMPERATURE POINTS**

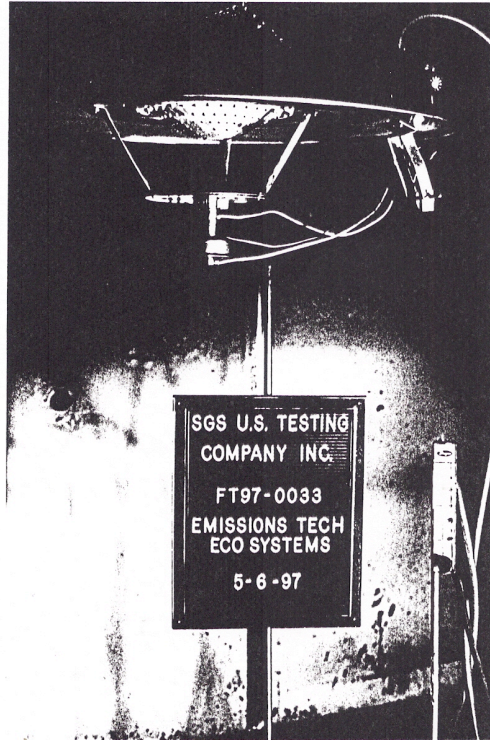
Sample	Temperature (°C)	Flow Difference (ft <sup>3</sup> /min / BTU/hr)	Efficiency Difference (%)
1	925	.0150 / 990	11.2
2	1110	.0298 / 1967	9.6
3	1150	.0530 / 3490	12.7
AVERAGE - 2150 BTU/hr			11.2 %



Standard Brooder with ECO System Installed

Client: Emissions Technology, Inc.

REPORT OF TEST



Standard Brooder without ECO Set-up

\*\*\*\*END OF REPORT\*\*\*\*