

Tulsa, OK 74116 Tel: 918-437-8333 Fax: 918-437-8487 Report No.: FT97-0033 Date: 6/2/97

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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.

bk

Signed for the Company

Member of the SGS Group

Member of the SGS Group

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#### RESULTS:

REPORT OF TEST

## 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

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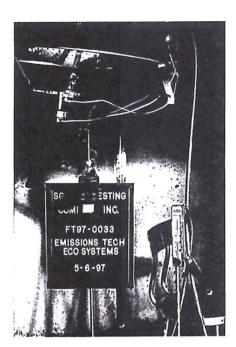
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#### CONCLUSION:

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.

# EVALUATED TEMPERATURE POINTS

Sample	Temperature (°C)	Flow Difference (ft³/min / BTU/hr)	Efficiency Difference (%)
1	925	.0150 / 990	11.2
2	1110	.0298 / 1967	9.6
3	1150	.0530 / 3490	12.7
	А	VERAGE - 2150 BTU/hr	11.2 %



Standard Brooder with ECO System Installed



Standard Brooder without ECO Set-up

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