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EMECO
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Reference No.: 09-0304-192633
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Test Report For:

EMECO

CALIFORNIA TB-133
FURNITURE SEATING FIRE TEST

Nine-O Collection

Dorian Bako
Project Manager

James Jantz
Reviewer/sI

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CALIFORNIA TB-133 TEST PROCEDURE

Flammability Test Procedure for Seating
Furniture for use in Public Occupancies

Test Procedure:

The submitted sample was tested according to the procedure outlined in the Bureau of Home Furnishing's Technical Bulletin Number 133, dated January, 1991.

Test Ignition Source:

Square Gas Burner as described in Appendix C.

Test Sample Conditioning:

Pre-conditioned 48 hours at $70 \pm 5^\circ\text{F}$ and relative humidity of less than 55%.

Test Criteria:

Seating furniture fails to meet the requirements of Technical Bulletin 133 under Group A if any of the following criteria are exceeded:

Criteria Group A:

1. Temperature increase of 200°F or greater at the ceiling thermocouple.
2. A temperature increase of 50°F or greater at the four (4) foot thermocouple.
3. Greater than 75% opacity at the four (4) foot smoke opacity monitor.
4. Carbon monoxide concentration shall not continuously exceed 1000 ppm for five (5) minutes.
5. Greater than 3 lbs. weight loss in the first ten (10) minutes of test.

Seating furniture fails to meet the requirements of Technical Bulletin 133 under Group B if any of the following criteria are exceeded:

Criteria Group B:

1. A maximum rate of heat release of 80 kW or greater.
2. A total heat energy release of 25 MJ or greater in the first 10 minutes of the test.
3. Greater than 75% opacity at the four (4) foot smoke opacity monitor.
4. Carbon Monoxide concentration shall not continuously exceed 1000 ppm for five (5) minutes.

Date Received: 03/08/09
Date Tested: 03/12/09

Test Sample Description (per EMECO):

Product: Nine-O Collection
Model Number: NINO-3
Condition of Samples: Production
Fabric Type: N/A
Fabric Color: Gray
Blocking Description (if present): N/A
Filler Description (order of layering): PU
Seat Cushion Dimensions: 15" x 18" x 1"
Back Cushion Dimensions:
Arm Description (if present): N/A
Aluminum tube, no cushion on armrest.
Additional Comments: None Stated

Test Procedure:

Conduct the California TB-133 Seating Product Burn Test on the **Nine-O Collection**. Determine if the submitted sample meets the test requirements.

Acceptance Criteria:

The acceptance level criteria are listed in the summation table on the following page.

Conclusion:

The test results show that the **Nine-O Collection** passed both Criteria A and Criteria B of the California TB-133 Burn Test.

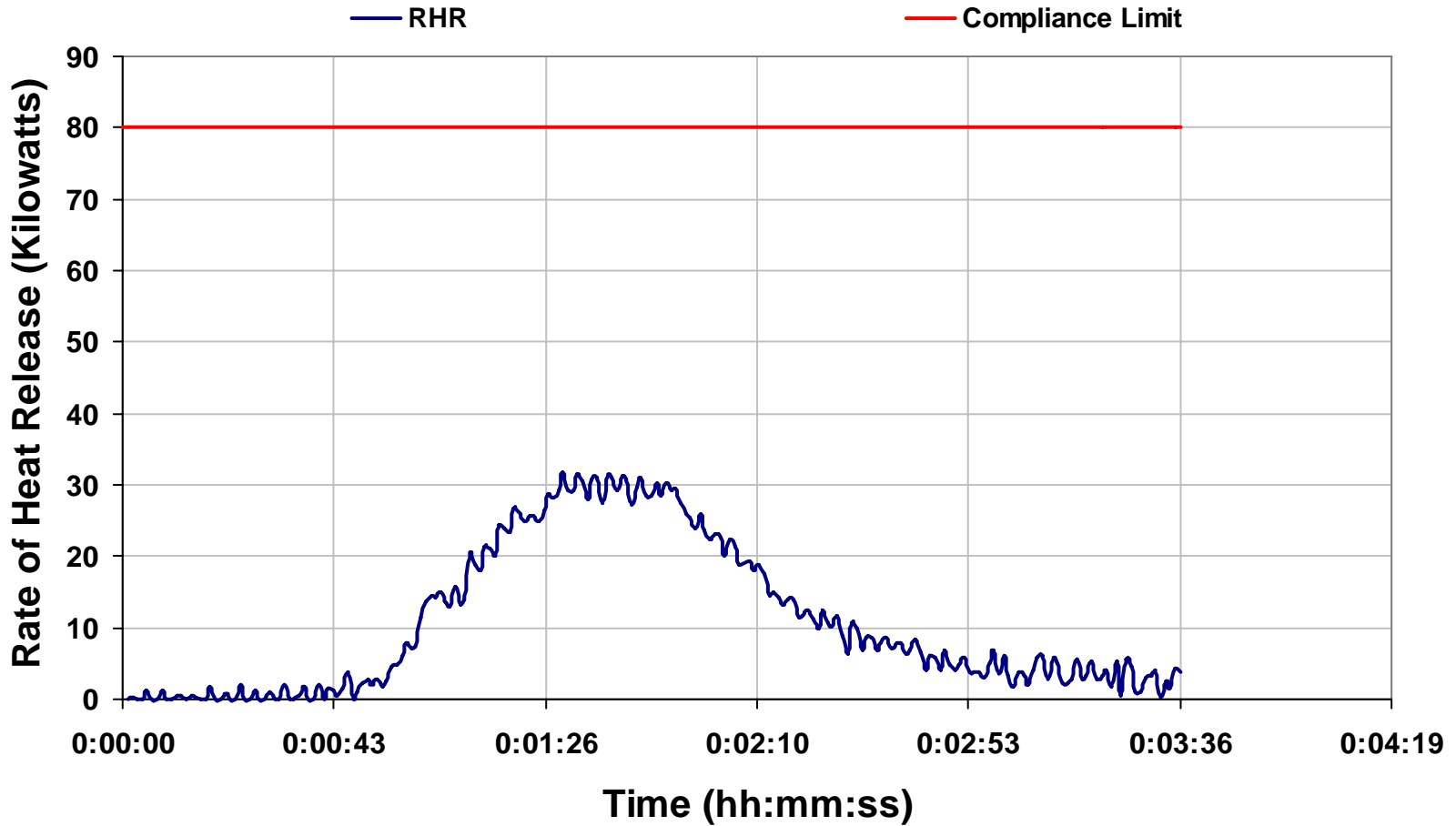
Test Equipment:

Asset No.:	Description:	Cal Due:
138051.23	SCALE	08/22/2009
138051.9	SMOKE DENSITY MONITOR 0-100%	VBU
138051.26	CARBON MONOXIDE / DIOXIDE ANALYZER	VBU
138051.22	OXYGEN ANALYZER	06/12/2009
138181	DPI DIFFERENTIAL PRESSURE TRANSDUCER	03/23/2009
138112	GRADUATED RULE 36"	07/24/2009
138001	FLOW METER 0-14 SLM PROPANE	07/08/2009
138227	STOPWATCH	12/02/2009

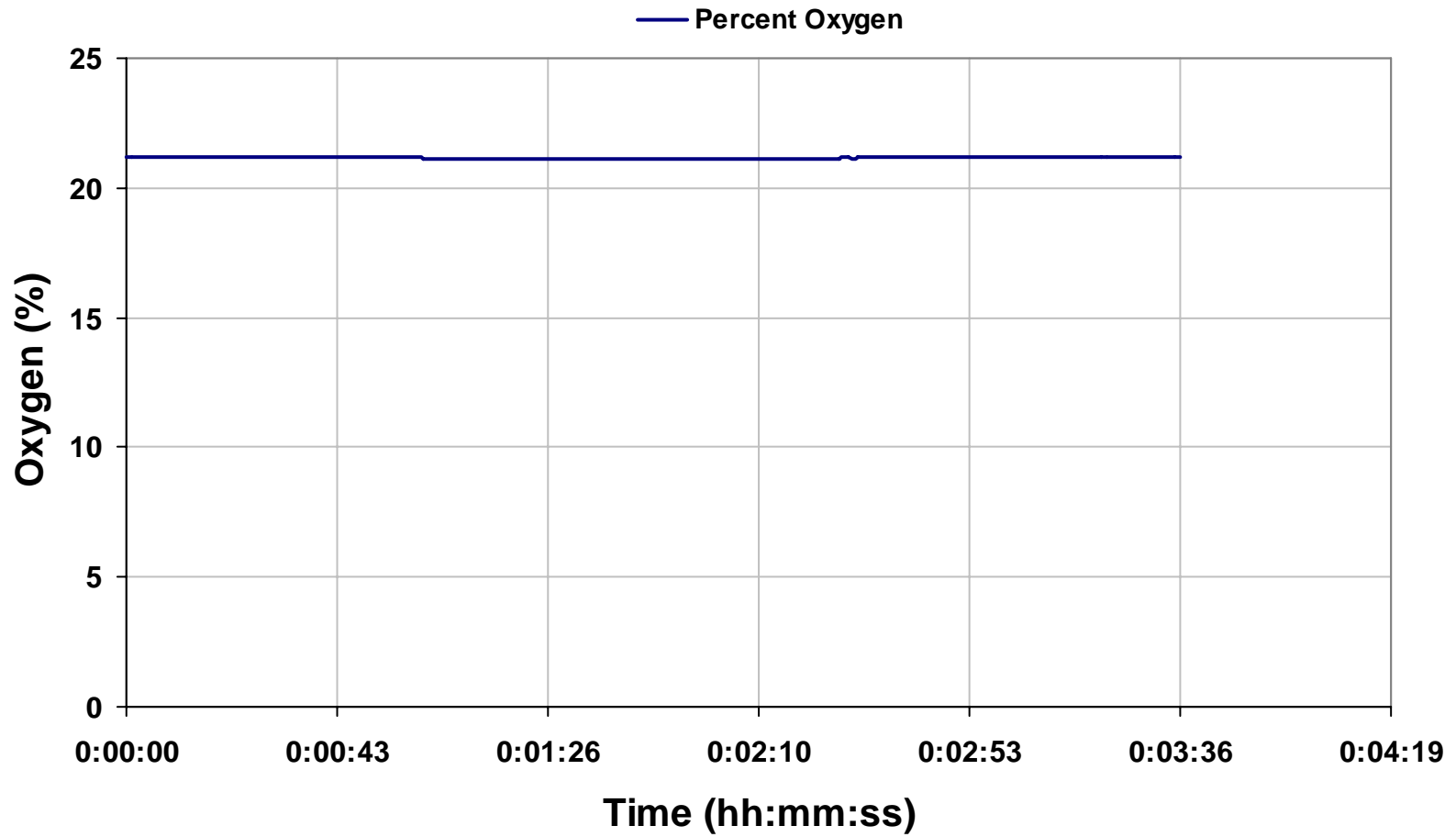
CALIFORNIA TB-133 FIRE TEST SUMMATION

	Criteria	Actual Value	Pass/Fail
8' Temp. Increase, (maximum), °F	$\leq 200^{\circ}\text{F}$	106 °F	Pass
4' Temp. Increase, (maximum), °F	$\leq 50^{\circ}\text{F}$	16 °F	Pass
4' Smoke Opacity, (maximum), %	$\leq 75\%$	6 %	Pass
CO concentration (maximum), ppm	N/A	265 ppm	N/A
Time CO is greater than 1,000 ppm (min:sec):	< 5:00	0:00	Pass
Pre-test weight of chair	N/A	11.40 lb	N/A
Weight loss at 10 minutes	$\leq 3\text{ lbs}$	0.05 lbs	Pass
Post-test weight of chair	N/A	11.35 lbs	N/A
Flame out (min:sec)	N/A	2:57	N/A
Max. Rate of Heat Release (kW)	$\leq 80\text{ kW}$	32 kW	Pass
Total Heat Energy Release in 1 st 10 mins. (MJ)	$\leq 25\text{ MJ}$	2.3 MJ	Pass

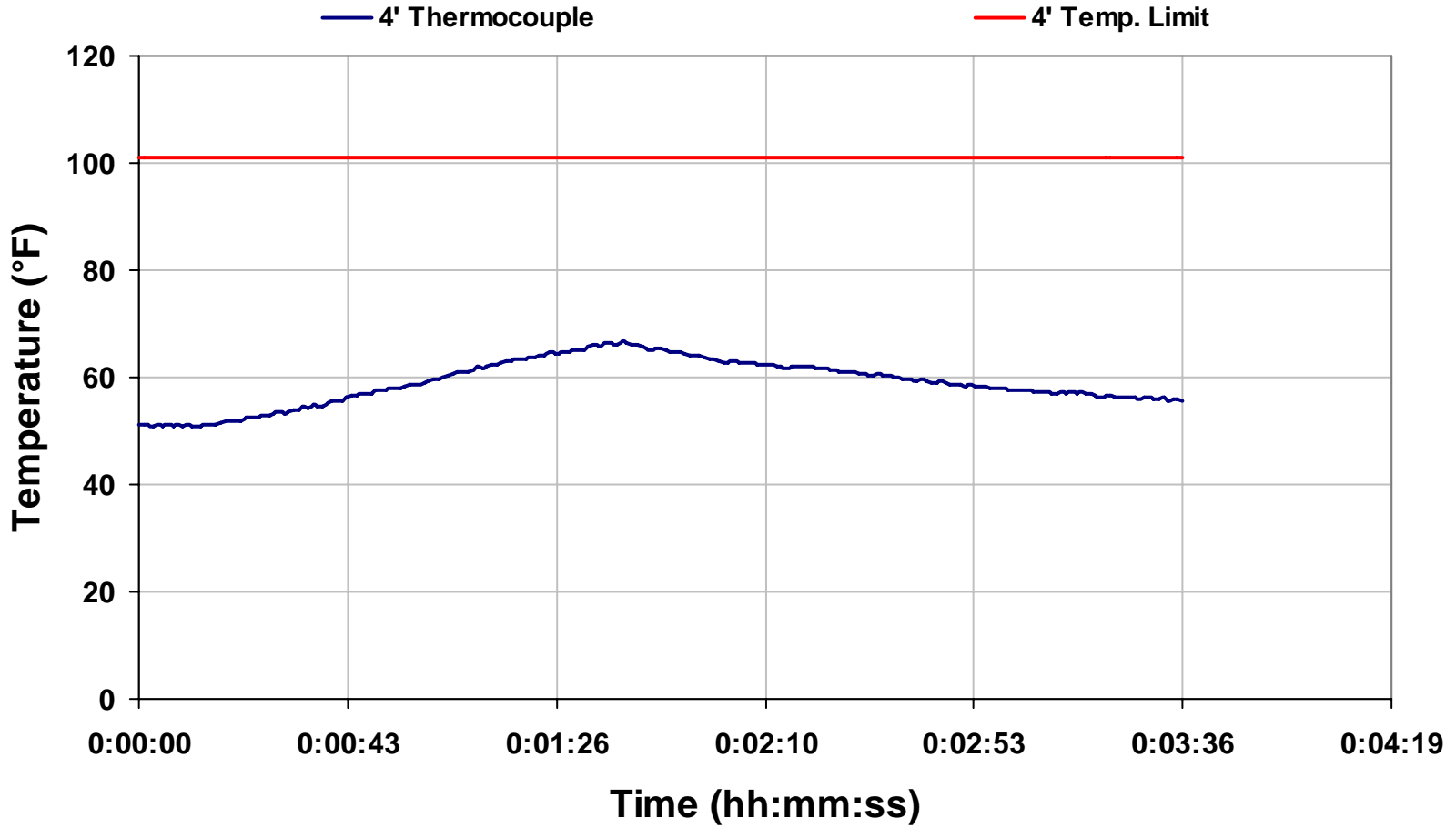
Rate of Heat Release



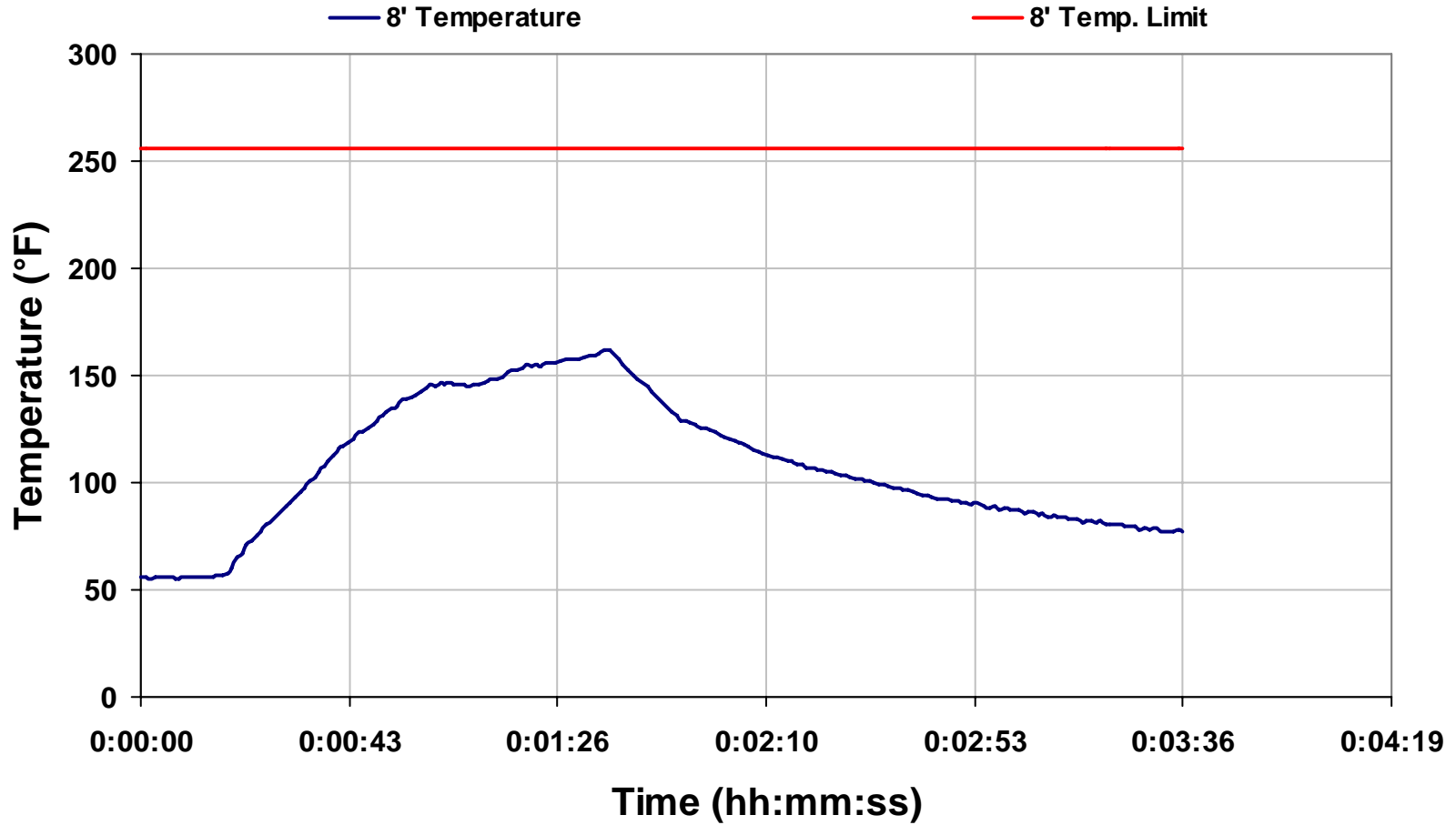
Percent Oxygen



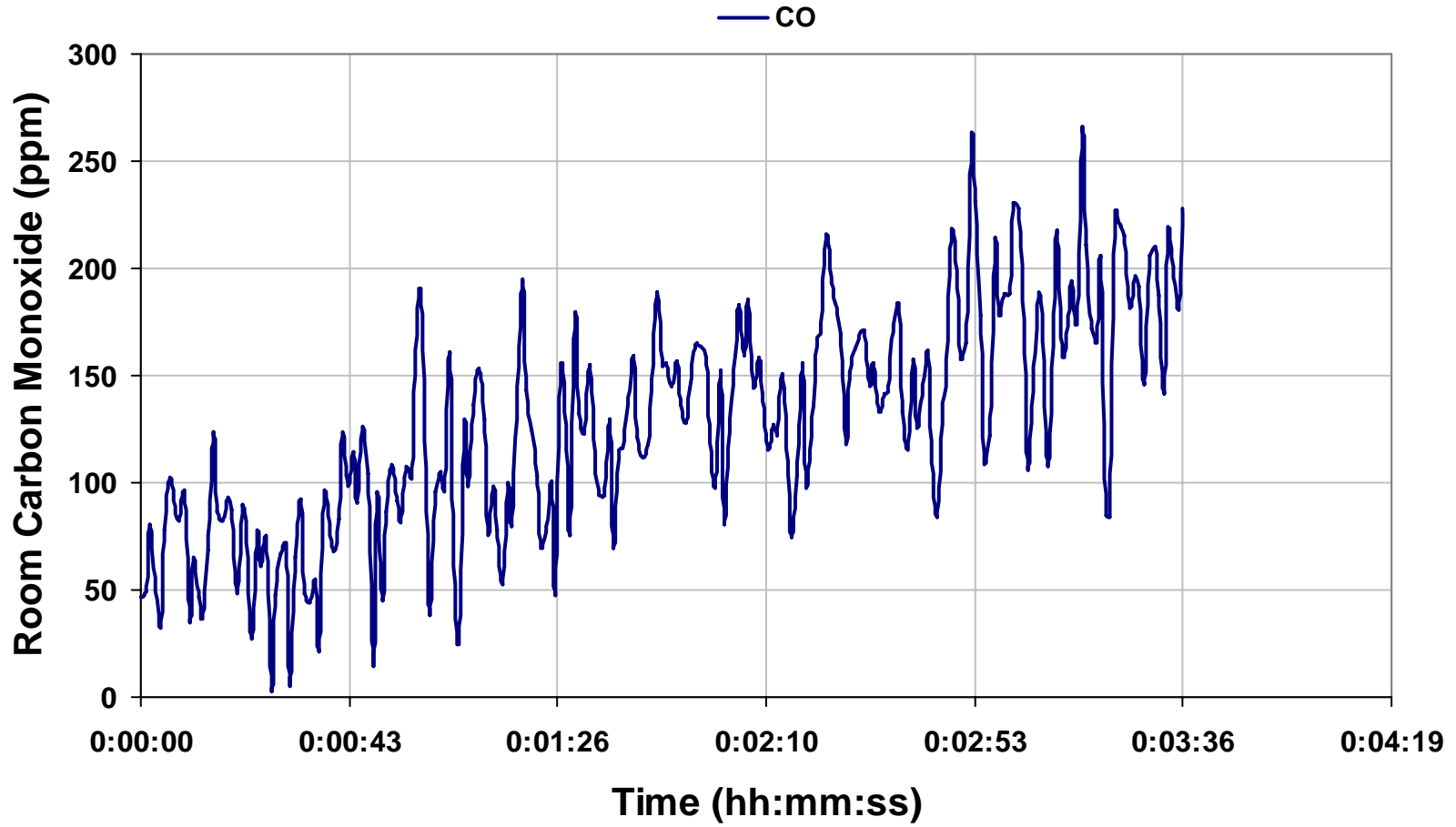
4' Thermocouple Temperature



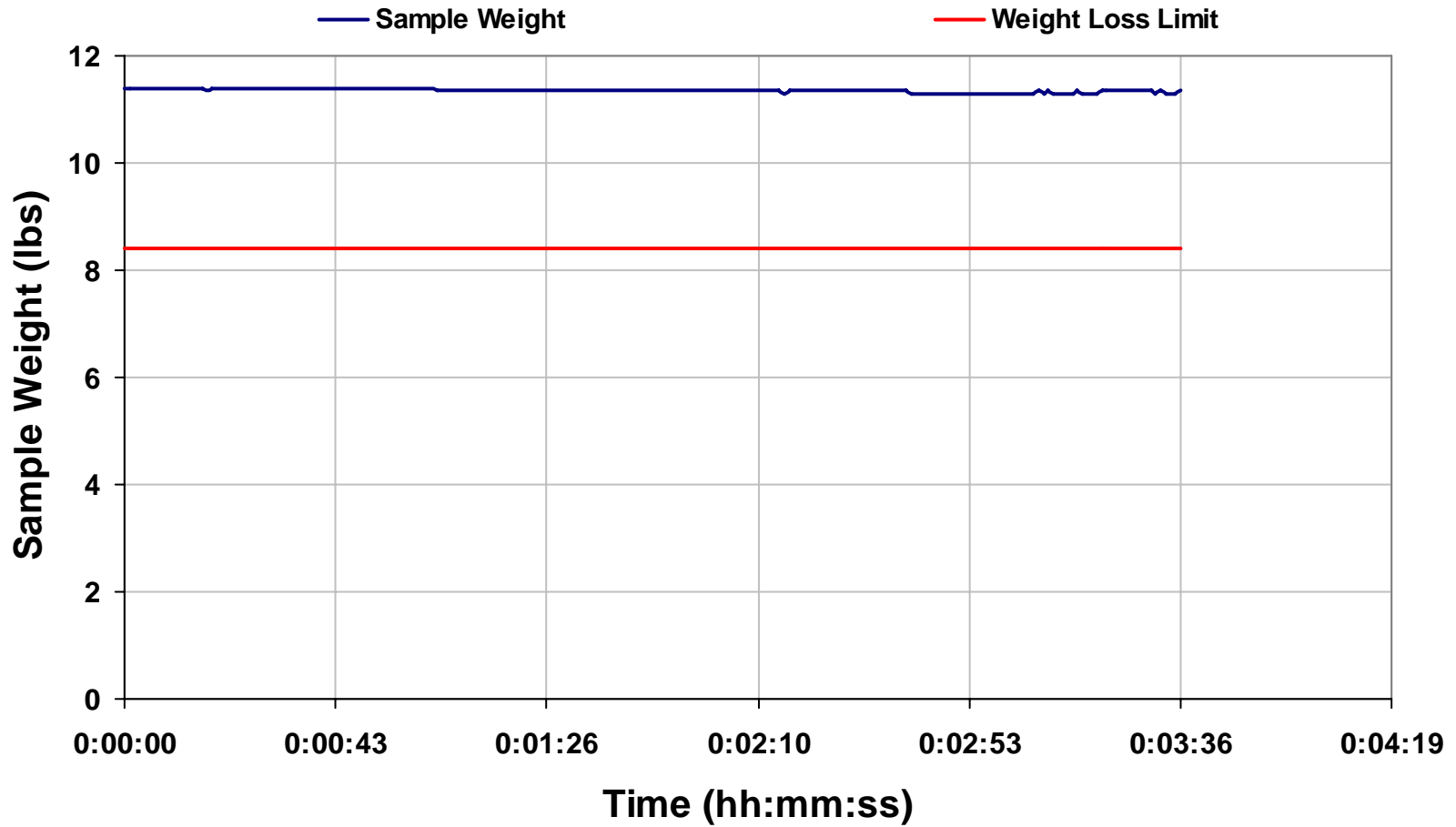
8' Thermocouple Temperature



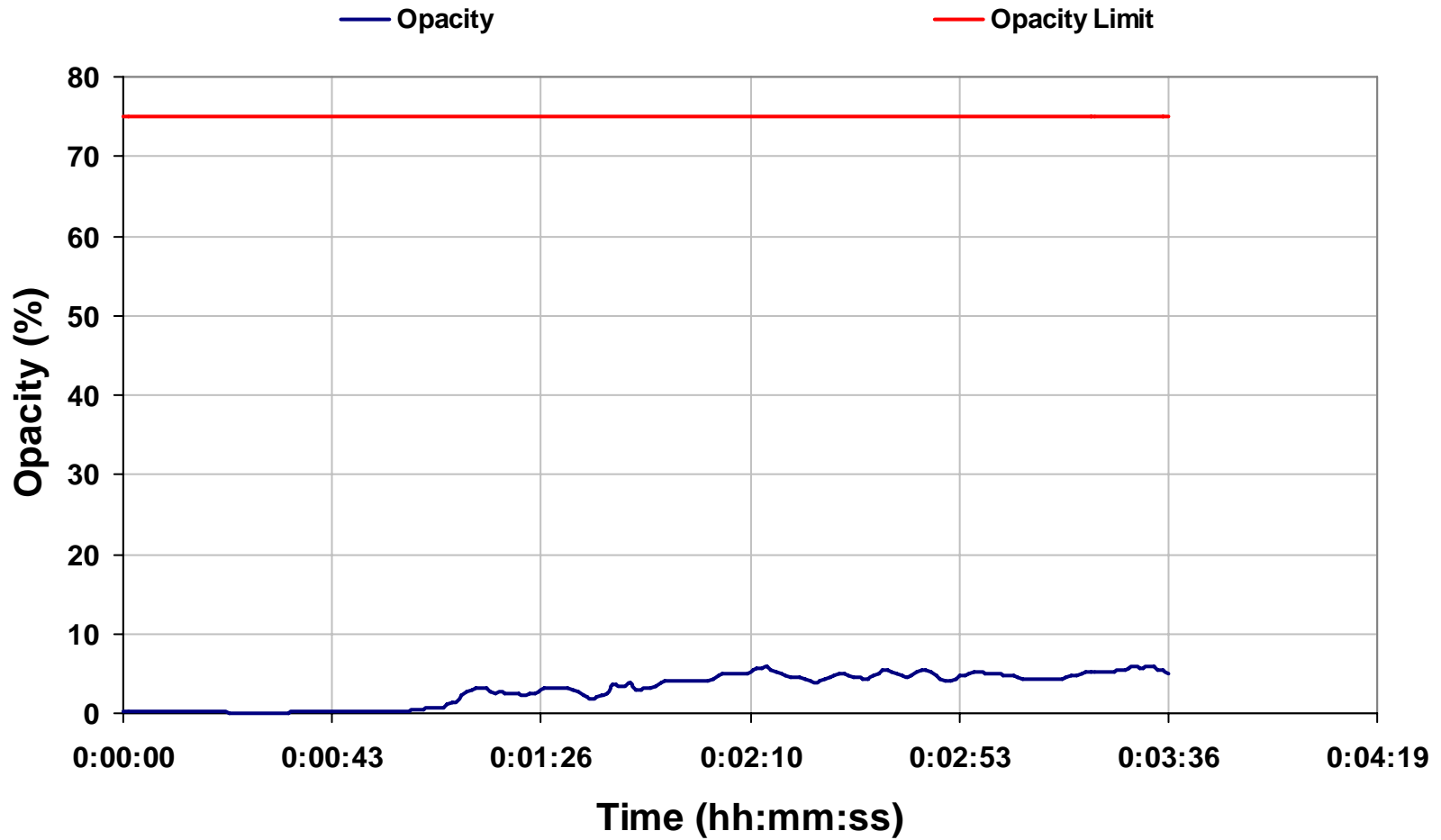
Room Carbon Monoxide



Sample Weight (scale reading)



Opacity



TERMS AND CONDITIONS

1.0 INTRODUCTION

These Terms and Conditions are incorporated into the Intertek proposal made and submitted to you. The party executing this document ("Client") indicates acceptance of this proposal as a contract between Client and Intertek which governs the performance of the stated services and the rights and obligations of the parties and that Intertek may proceed with the work.

2.0 PROPOSAL TERM

Unless otherwise stated in the proposal, this offer shall remain valid until accepted, but in no event for a period longer than thirty days from the date of the proposal.

3.0 CLIENT INFORMATION

Client represents that the information supplied by it or its agents to Intertek is accurate and complete and samples are representative, and Client has informed Intertek concerning any dangerous or potentially dangerous characteristics of such samples which could cause injury during the performance of the work or in the transporting of such samples and Client also acknowledges that Intertek is relying upon such information and samples or data in the preparation of this proposal without further verification by Intertek as to its accuracy or completeness. The Client agrees to hold Intertek harmless and indemnify Intertek from any liability of whatever kind or nature, including but not limited to court costs and reasonable attorneys fees if information provided by the Client is inaccurate or incomplete or samples are not representative. Intertek agrees that information received from the Client shall remain the property of the Client and will be returned to the Client upon demand, except for that which is necessary as a basis for the Intertek Reports. Client may designate in writing any information provided by Client to Intertek as confidential and proprietary. If Client has done so, Intertek will not release to third parties any such information without the prior written consent of the Client or only in response to a proper court order or process. As to that information, Intertek may make and retain copies. Client shall designate in writing to Intertek if it does not wish to have Intertek transmit any information, including test data and Reports, via electronic means.

4.0 PROPOSAL, PRICE AND SCHEDULE

Intertek will work diligently to provide the services according to the costs and schedule stated in the referenced proposal. Client recognizes and agrees that the proposal is a good faith estimate of the costs for the services to be provided and times of completion, but such estimate is not a guarantee of the total costs or time that may be involved in completing the proposal. Intertek will not exceed the authorized estimate of costs without written authorization of Client. Samples will be shipped by Client to Intertek prepaid and will be returned collect or disposed of at Client's expense within thirty (30) days after testing is completed, unless alternative arrangements are made by Client. Additional fees will be charged for unanticipated assembly or preparation of samples. Test services will not be initiated until satisfactory credit has been established with Intertek's accounting department.

5.0 INVOICING

Invoices will generally be issued upon project completion. In certain instances, interim invoices may be issued. Invoices are due and payable to Intertek at its offices, within thirty (30) calendar days after receipt of invoice, and Client agrees to pay reasonable collection costs if necessary in the event of non-payment.

6.0 INSURANCE

Intertek declares that it maintains workers' compensation and employer's liability insurance on Intertek employees in a form and amount as required by applicable laws. This insurance does not cover any employees of Client or third parties who may be involved with the work to be performed, whether on property of Intertek, Client or third parties.

7.0 REPORTS

The Client agrees to waive any claim against Intertek and defend, indemnify, and hold Intertek harmless from any and all causes of action, lawsuit, proceedings or claims, including legal fees and expenses incurred by Intertek, allegedly arising as a result of unauthorized use of Intertek's Reports. The term Reports includes all reports, laboratory test data, calculations, estimates, notes and other documents prepared by Intertek in the course of providing services to the Client. All technical determinations of compliance arising from product, material or system evaluation shall not be considered final until issuance of a written report, reviewed and signed by an Intertek qualified Reviewer. All final decisions on product certification are made by the Certification Manager. Intertek retains any and all rights of ownership of Intertek's concepts, ideas, inventions, patents or copyrights used by Intertek in preparing Intertek's Reports and the provision of services to the Client. Only the Client is authorized to copy or distribute Intertek's Reports and then only in their entirety, and the Client shall not use the Reports in a misleading manner. Client further agrees and understands that reliance upon the Reports is limited to the representations made therein. Any use of the

Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. If Intertek becomes directly or indirectly involved in litigation as a result of misuse of its Reports, the Client agrees to compensate Intertek for its fees and expenses, including legal costs, in accordance with Intertek's prevailing fee schedule and expense reimbursement policy.

8.0 LIMITED WARRANTY

Intertek warrants that if any of its completed services fail to conform to professional standard, Intertek will, at its own expense, perform corrective services of the type originally performed as may be reasonably required to correct such defects, of which Intertek is notified in writing within six months of the completion of services. No other representation, express or implied, and no warranty or guarantee is included or intended in this Agreement, or in any report, opinion, document or otherwise.

9.0 LIMITS OF LIABILITY

Intertek's liability is limited as follows:

9.1 The Client agrees to limit Intertek's liability arising from Intertek's professional activity, errors, or omissions, such that the total aggregate liability of Intertek shall not exceed Intertek's total fee for the services rendered on the project in question, except in the case of a finding of gross negligence or willful misconduct on the part of Intertek by a court of competent jurisdiction.

9.2 Intertek shall be discharged from all liability to the Client for all claims for loss, damage or expense unless a claim is made within three (3) months of the date at which the damage, defect or alleged non-performance became apparent to the Client, and the process of law served no later than two (2) years from the provision of services by Intertek.

9.3 Intertek shall not be liable to the Client for any consequential damages incurred by Client due to the fault of Intertek, regardless of the nature of this fault, whether it was committed by Intertek, its employees, agents or subcontractors. Consequential damages include, but are not limited to, loss of use and loss of profit.

9.4 The Client agrees to extend any and all limitations, indemnifications, and waivers provided by the Client to Intertek to those individuals and organizations Intertek retains for proper execution of the work. These shall be deemed to include but are not necessarily limited to Intertek's officers and employees and their heirs and assigns, as well as Intertek's agents, subcontractors and their officers, employees, heirs and assigns.

9.5 Client acknowledges that testing, including sample preparation and transportation, may damage or destroy Client's product. Client agrees to hold Intertek harmless from any and all responsibility for such alteration.

9.6 The Client agrees Intertek shall not be responsible for any injuries to the Client's representatives while attending to or observing testing at Intertek's facility. If testing takes place at the Client's facility, Client agrees that Intertek will not operate and shall not be responsible for any of Client's equipment and that although Intertek agrees to abide by Client's safety procedures, Intertek shall not be responsible for injury to any of Client's personnel.

10.0 GOVERNING LAW

This proposal, and any work performed pursuant to this proposal, shall be governed by the laws of the jurisdiction within which the Intertek facility making the proposal is located. Any action brought hereon shall be venued in said jurisdiction.

11.0 SEVERABILITY

Any provision of this proposal that may be held invalid, void or unenforceable for any reason, shall not affect any other term or condition of this proposal, and such term or condition shall be replaced or interpreted to accomplish the intent of the parties.

12.0 MODIFICATIONS

No modification, waiver or amendment of any of these terms and conditions, including any assignment of Client's rights and responsibilities hereunder, shall be binding upon Intertek unless agreed to in a writing signed by an agent of Intertek.