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A Five-Channel, Single Detector, Emission Remote Sensor (Presentation)

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Recommended Citation

Williams, M. J.; Stedman, D. H.; Bishop, G. A.; Quine, R. J., A Five-Channel, Single Detector, Emission Remote Sensor, presented at the 13th Coordinating Research Council On-Road Vehicle Emissions Workshop: San Diego, 2003.

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A Five-Channel, Single Detector, Emission Remote Sensor (Presentation)

Publication Statement

Public Domain

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A Five-Channel, Single Detector, Emissions Remote Sensor.

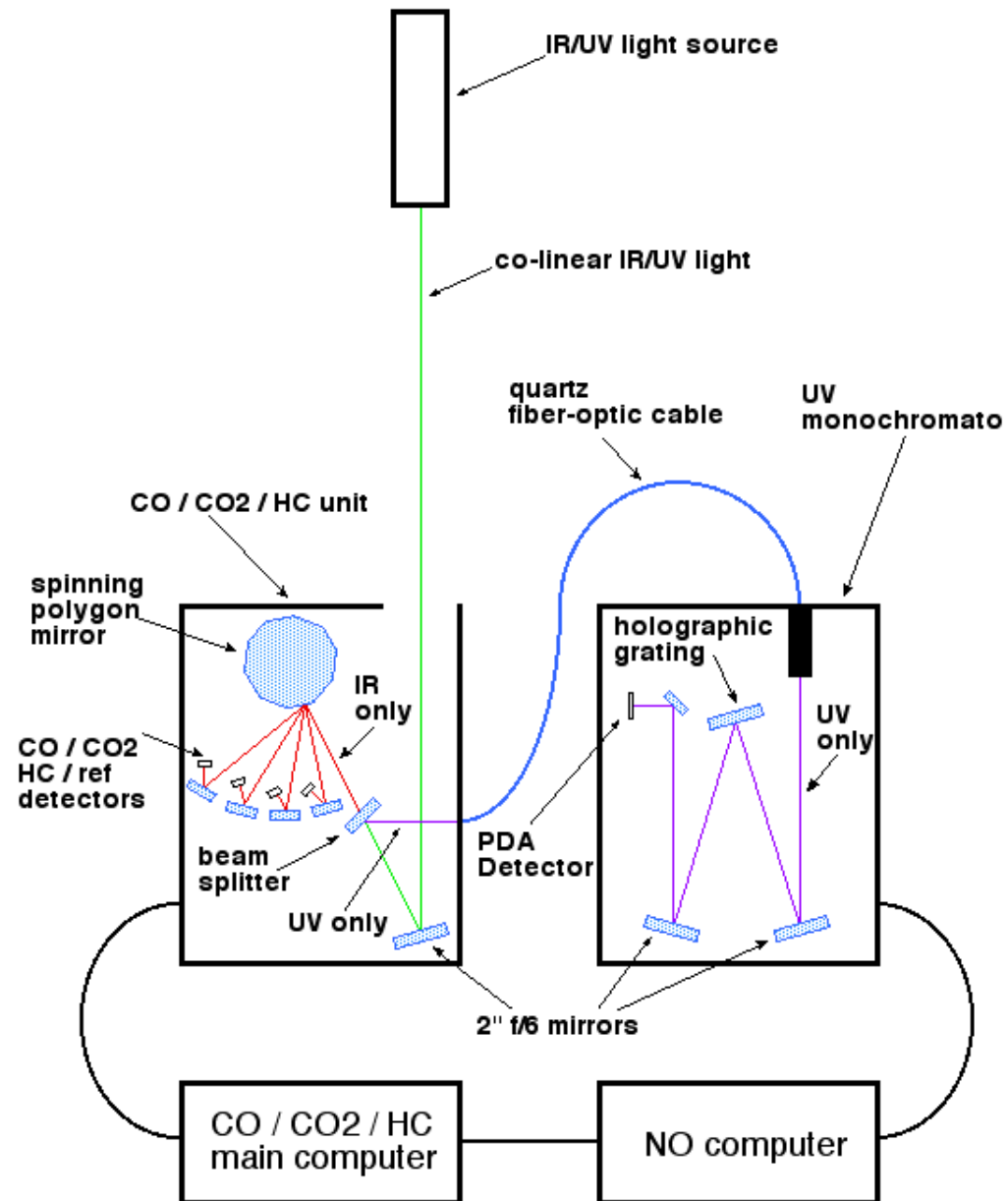
Mitchell J. Williams, Donald H. Stedman, Gary A. Bishop, University of
Denver, Department of Chemistry & Biochemistry, Richard J. Quine Dept.
of Engineering, Denver, CO. 80208-2436.

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Schematic Diagram of the new University of Denver UV/IR Remote Sensor

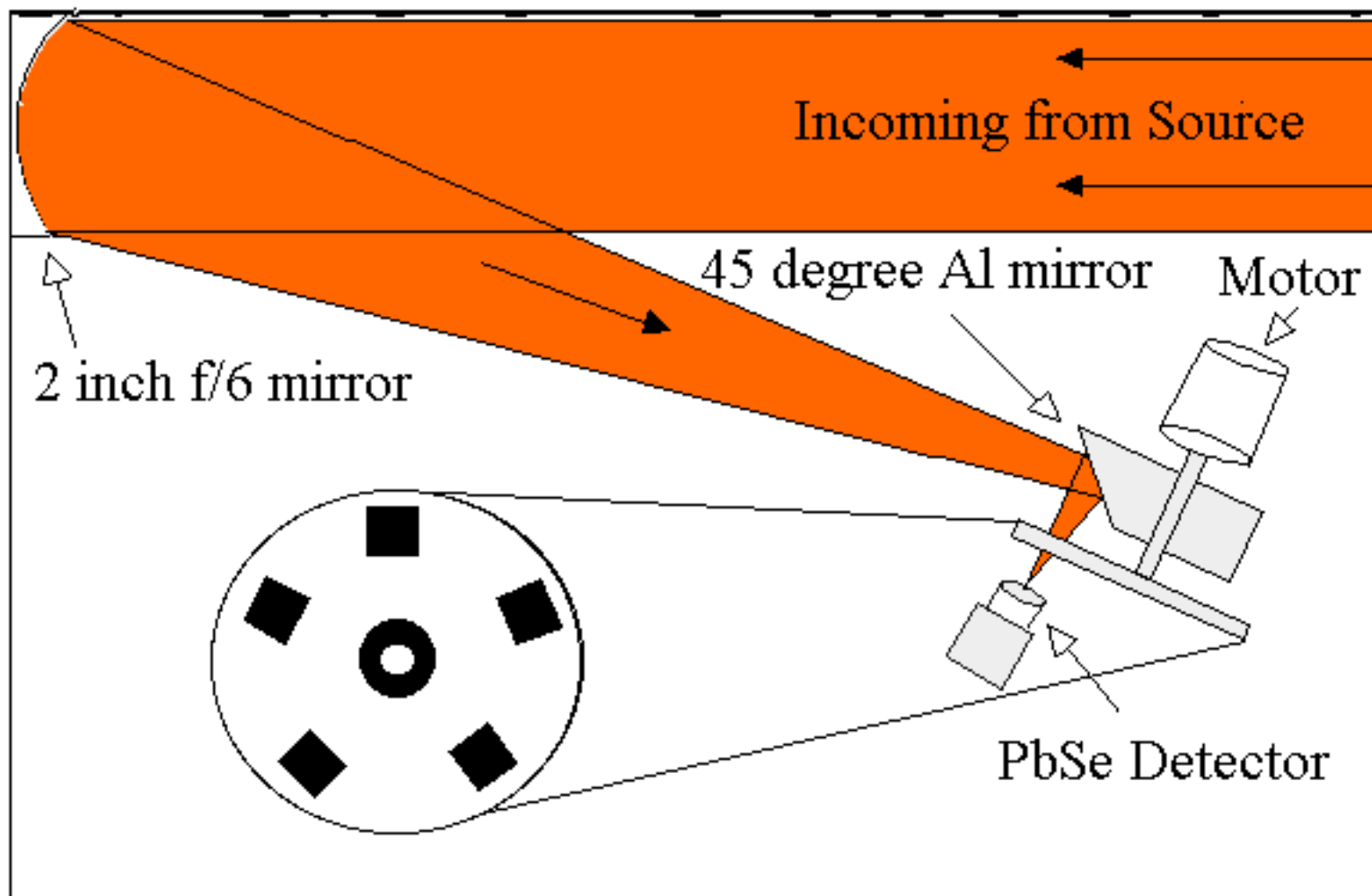


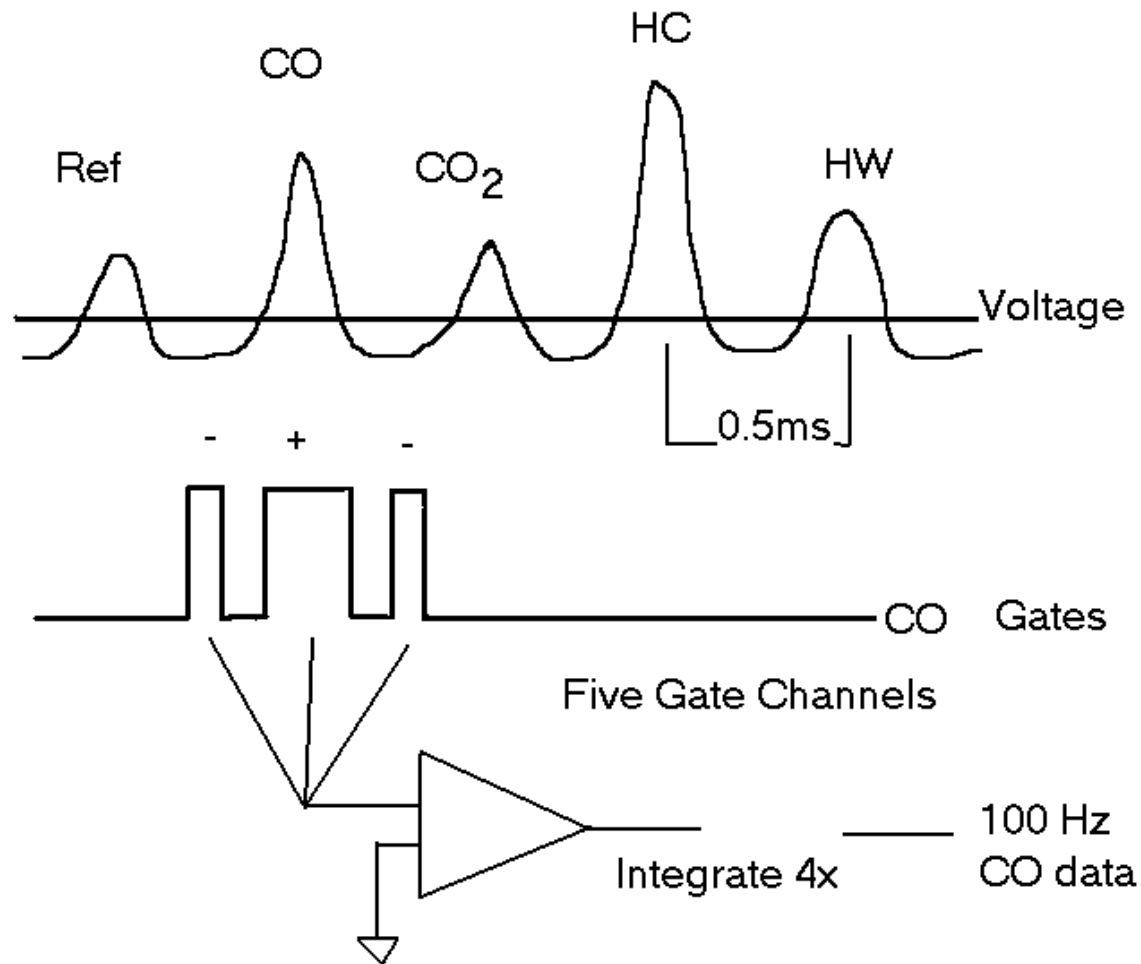
The New System Should:

Agree with the old

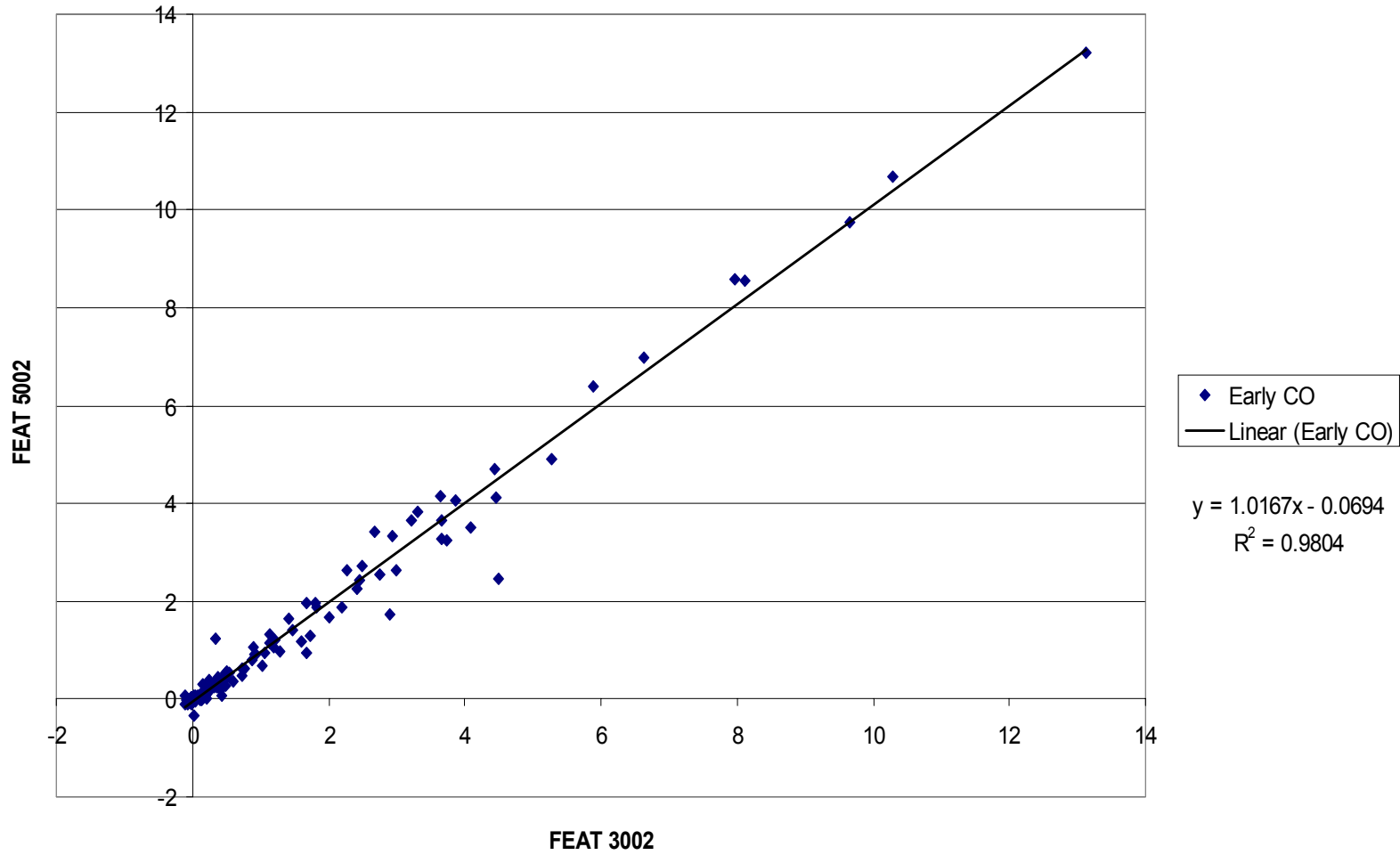
Self correct for CO₂ variation

Distinguish “Steamers” from high HC
Vehicles

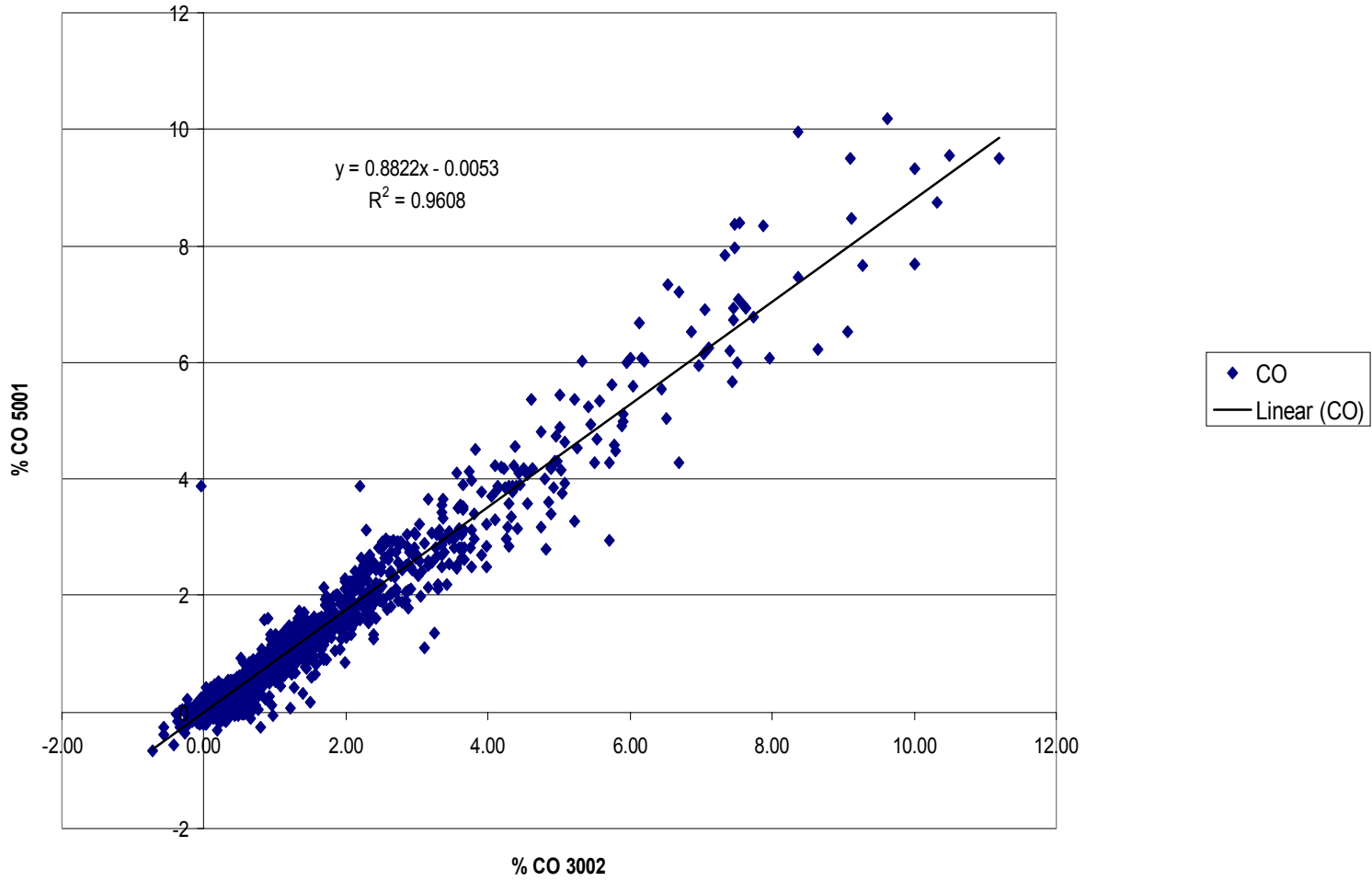




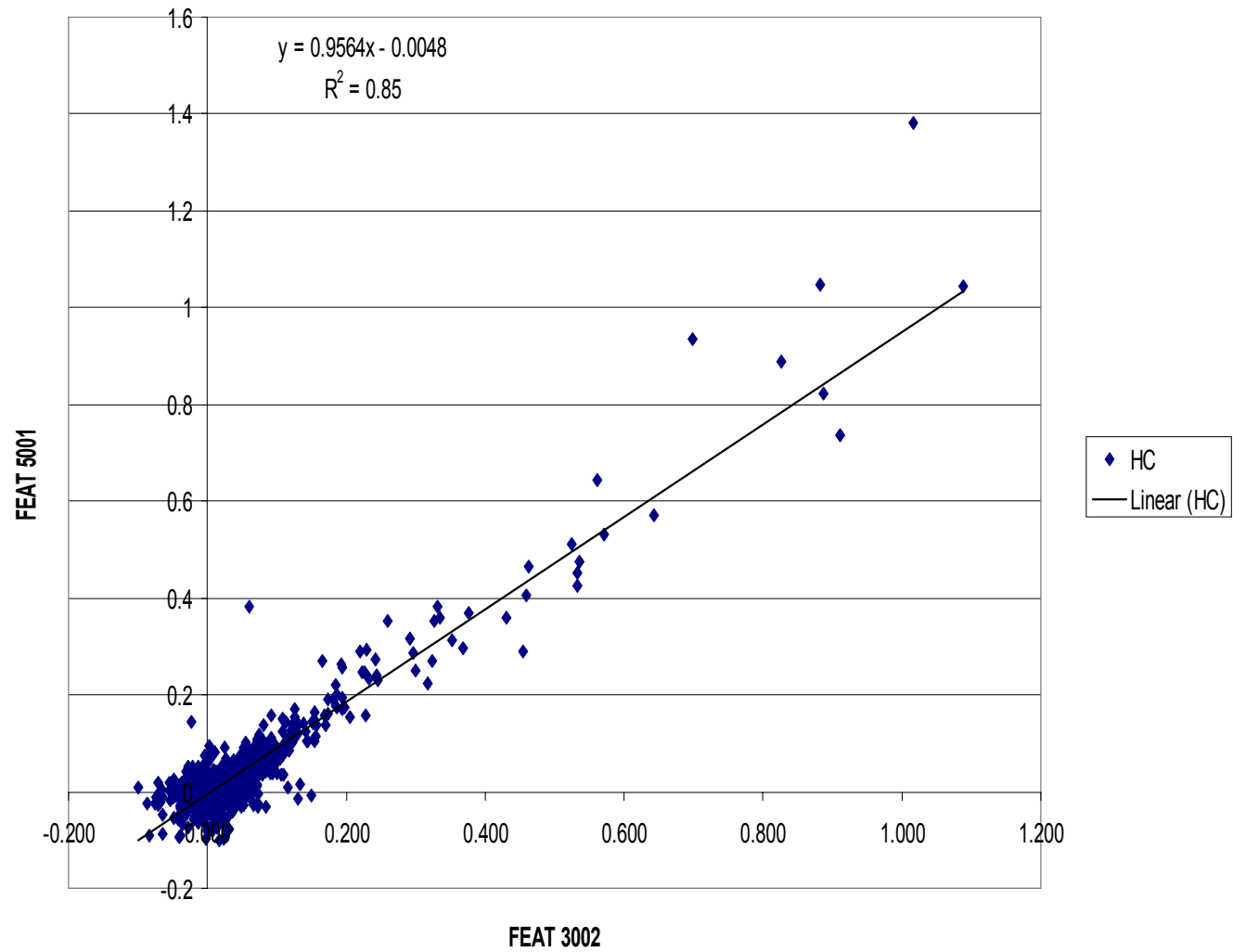
February 2003
SGM Parking Lot
CO Correlation
110 Measurements



North I-25 onto West 6th Ave
January 2003
CO Correlation
7293 Measurements

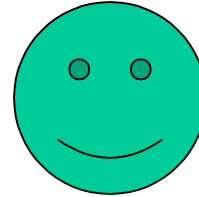


HC Correlation 7433 vehicles



The New System Should:

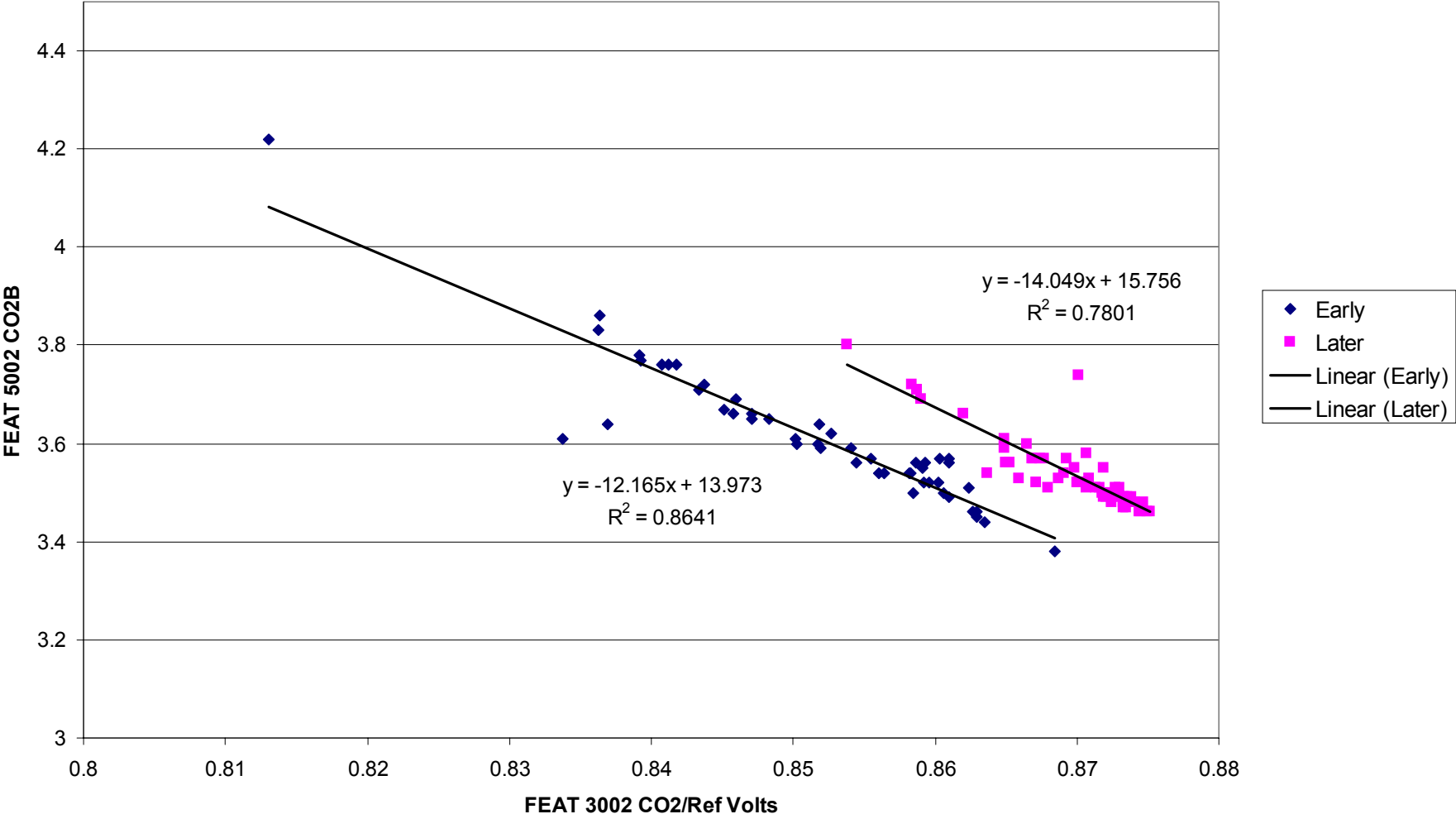
Agree with the old

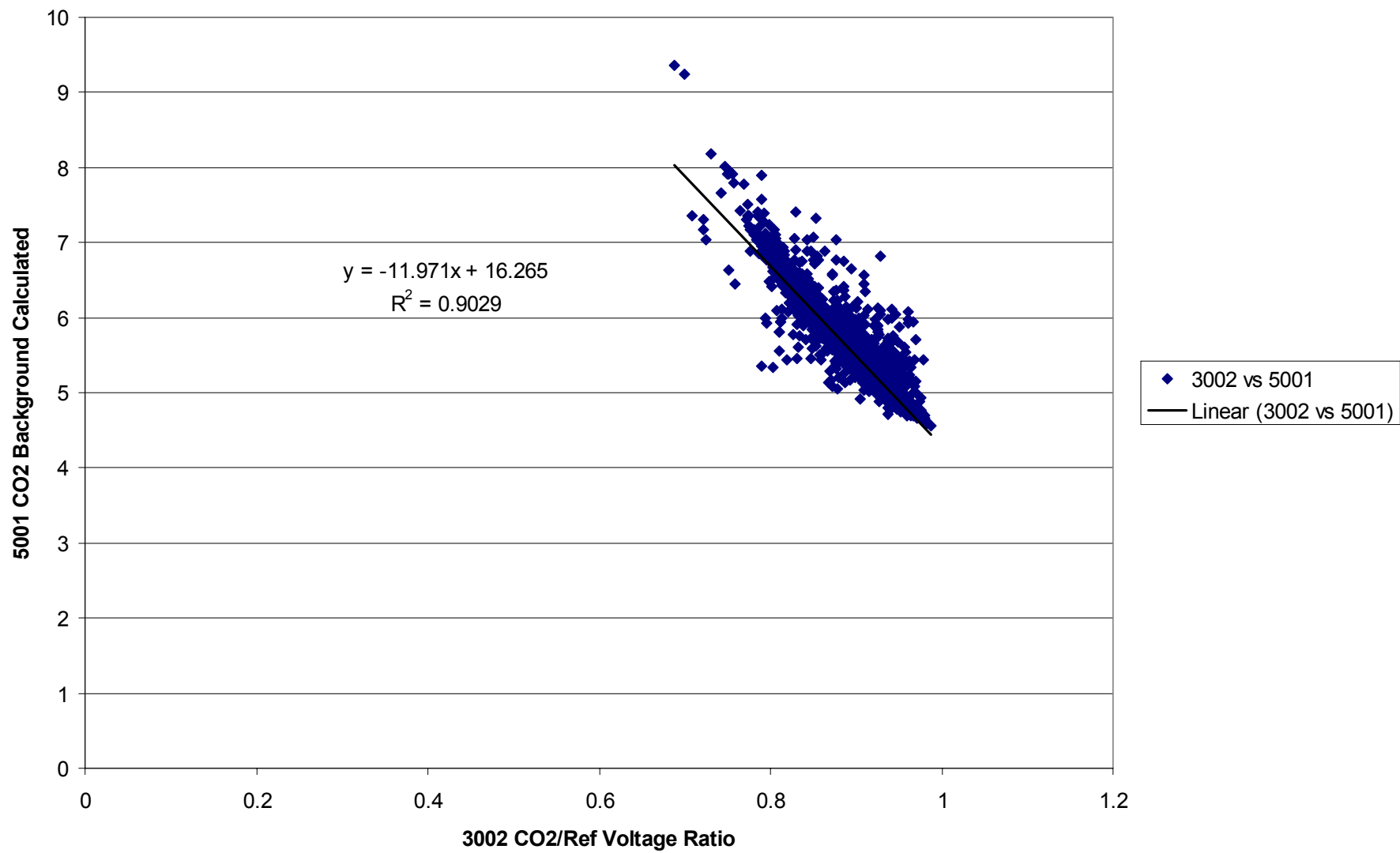


Self correct for CO₂ variation

Distinguish “Steamers” from high HC
Vehicles

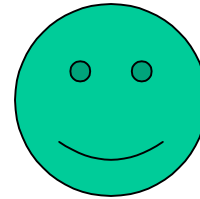
SGM Parking Lot
February 2003
Self-Calibration Test



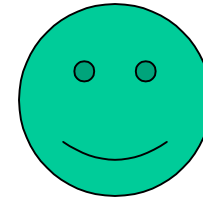


The New System Should:

Agree with the old



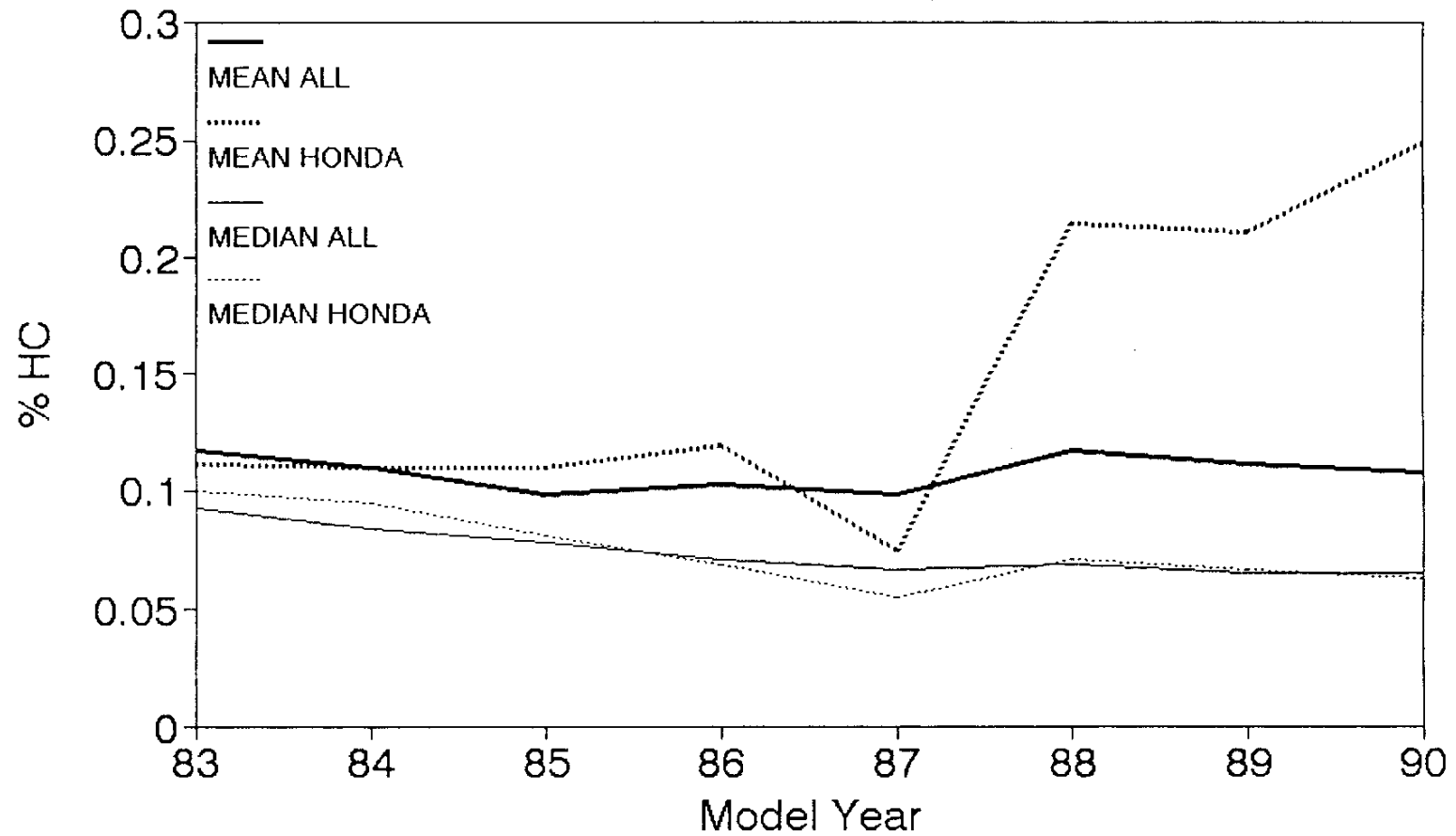
Self correct for CO₂ variation

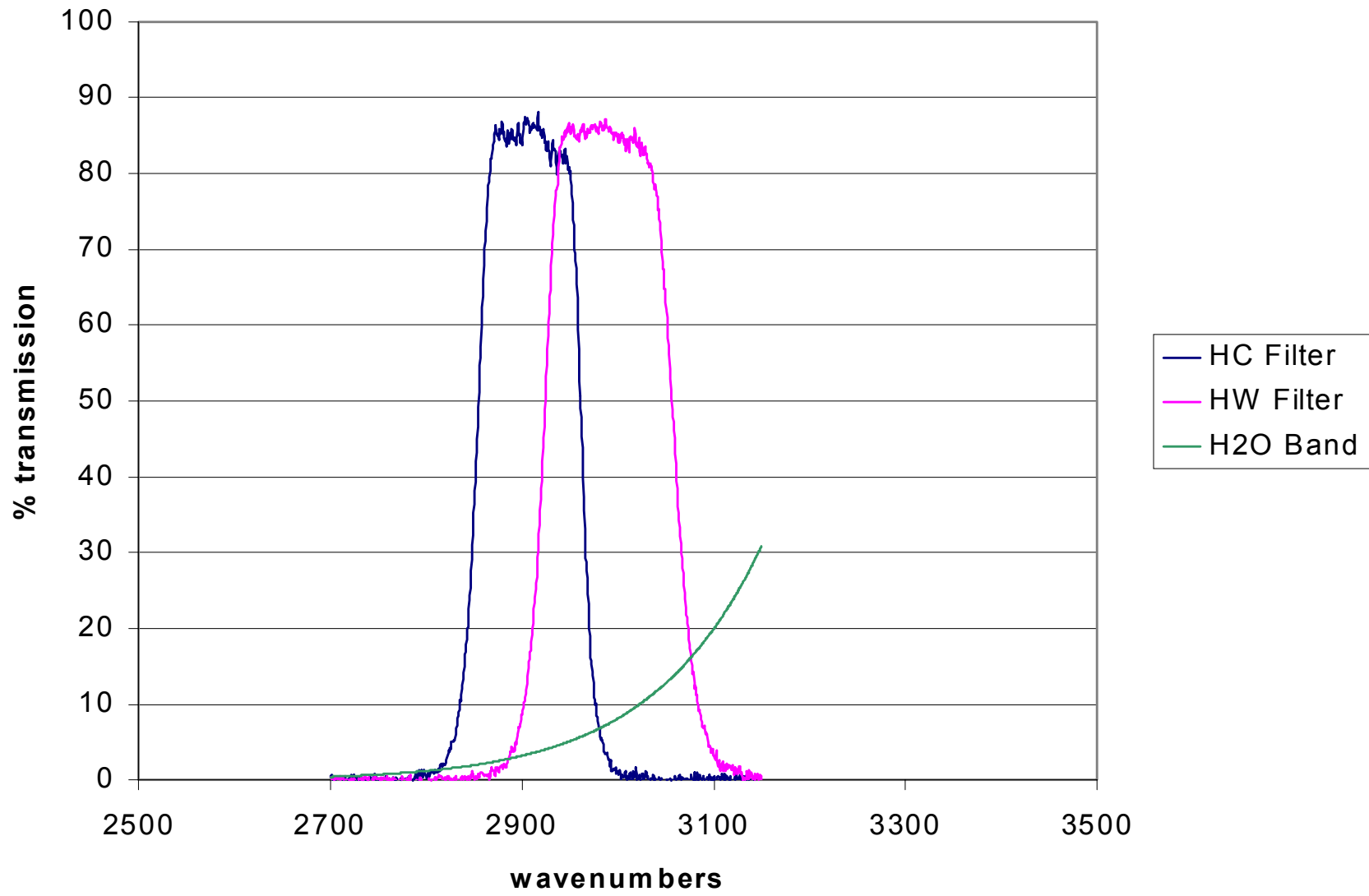


Distinguish “Steamers” from high HC
Vehicles

CHICAGO 1990

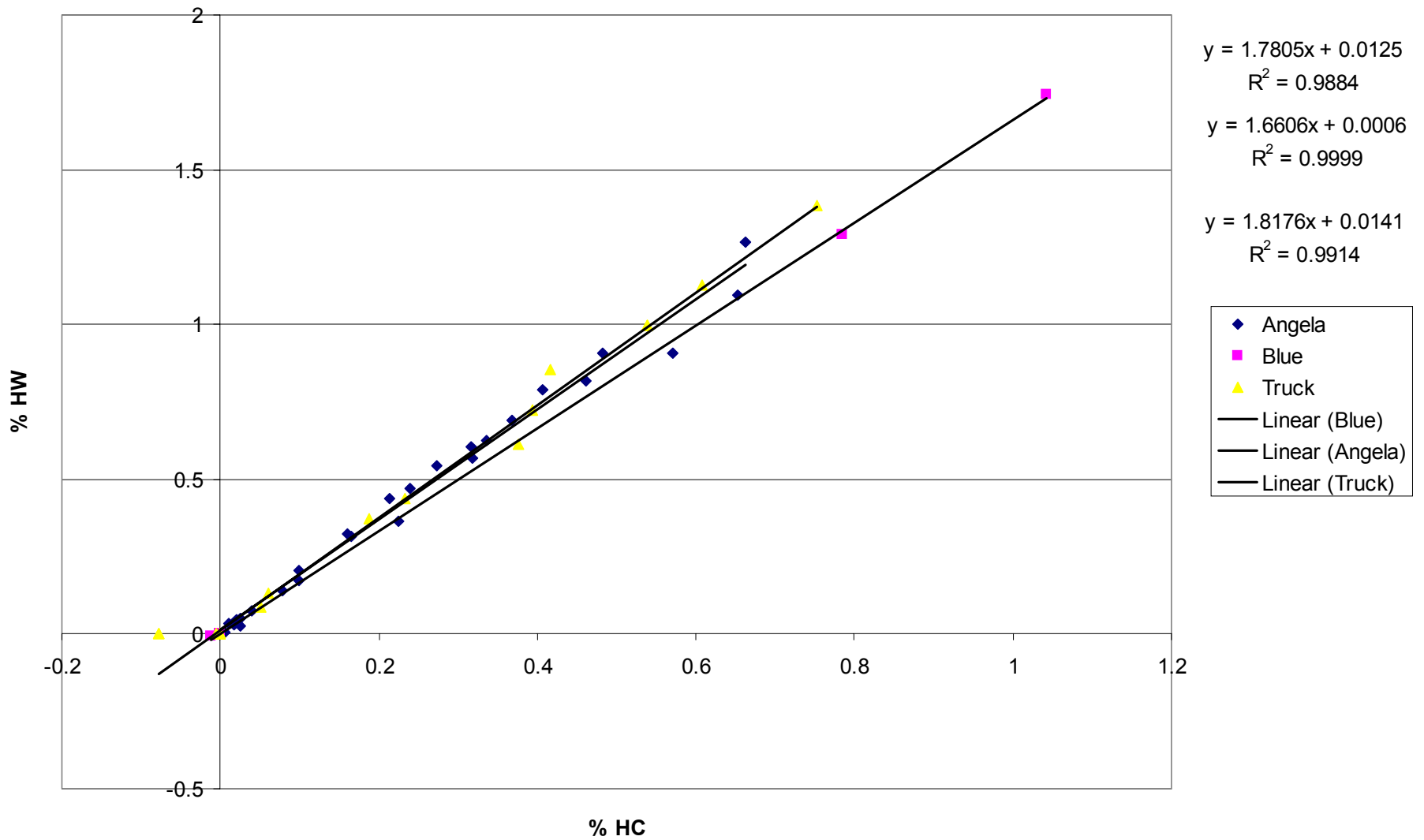
Eisenhower On Ramp before 9:30AM





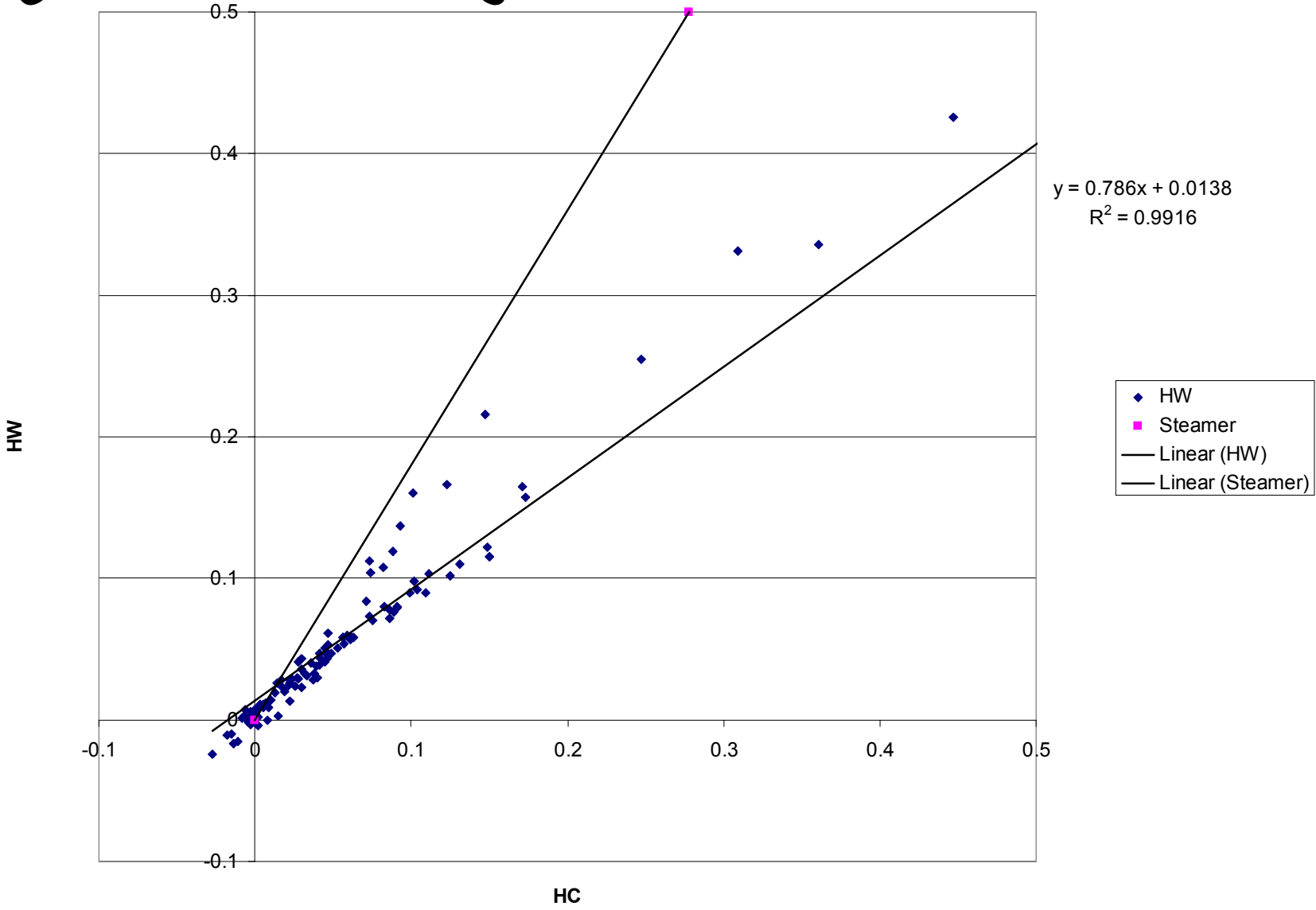
Steamers

HW vs. HC



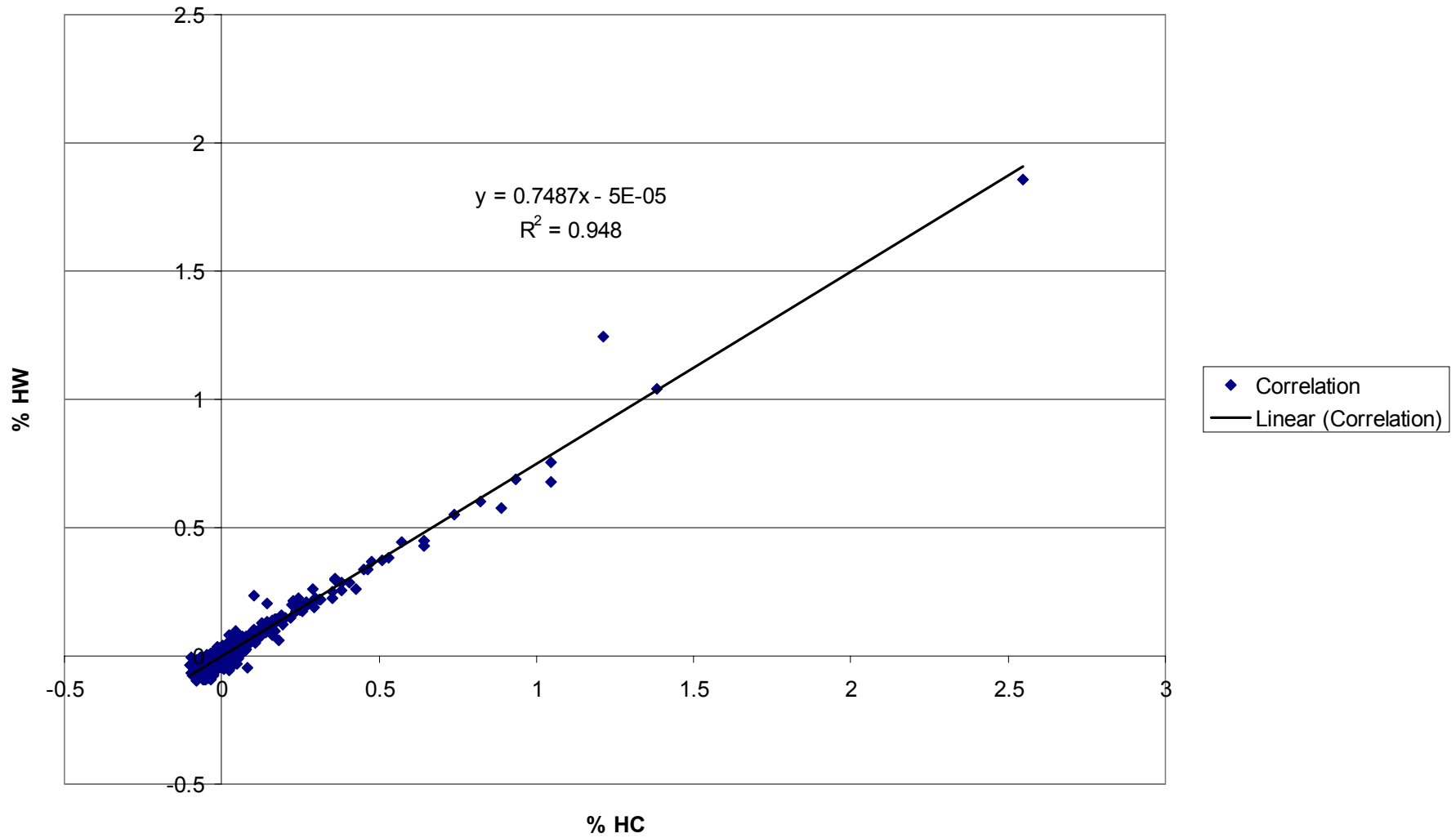
Some Steamers

HW vs. HC

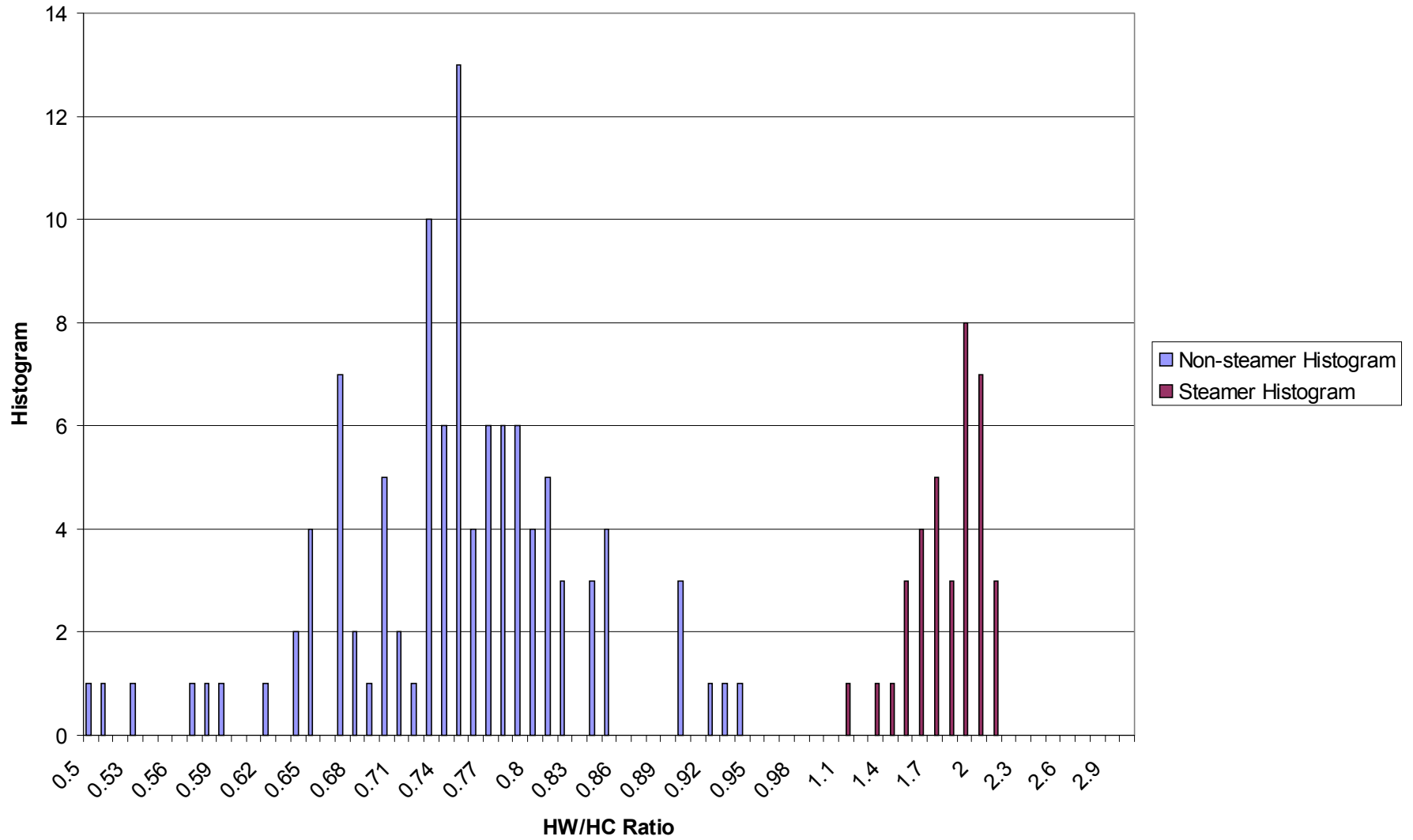


No Steamers

HW vs. HC Correlation 5001
7376 Measurements

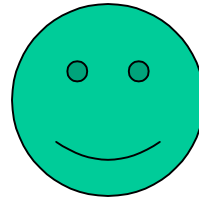


All readings > 1000 ppm Propane

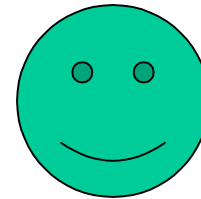


The New System Should:

Agree with the old



Self correct for CO₂ variation



Distinguish “Steamers” from high HC
Vehicles

