

INSTRUMENTS, EQUIPMENT AND EXTERNAL STANDARDS APPROVED FOR THE  
QUANTITATIVE MEASUREMENT OF ALCOHOL IN PERSON'S BREATH IN  
WASHINGTON STATE

I, Fiona J. Couper, affirm under penalty of perjury under the laws of the State of Washington that the following is true and correct:

I am the Forensic Laboratory Services Bureau Director and currently serving in the role of State Toxicologist. I am authorized under RCW 46.61.506 to approve methods for breath alcohol testing within the State of Washington.

The instruments approved for the quantitative measurement of alcohol in a person's breath are:

- a) The DataMaster
- b) The DataMaster CDM
- c) The Draeger Alcotest 9510

Although there are three approved instruments, the Draeger Alcotest 9510 is the only instrument deployed for evidential breath testing.

The Draeger Alcotest 9510 only uses a dry gas external standard as part of the evidential breath test as defined by WAC 448-16-050. Gas standards are not susceptible to temperature variations under normal environmental conditions, therefore, a thermometer is not applicable to the external standard on this instrument.

The Draeger Alcotest 9510 calculates whether the breath test results are within plus or minus 10% of their mean (inclusive) using the following formula – the sum of the four breath test results divided by four (4) to obtain the mean result, which is truncated to four decimal places. To calculate the acceptability range (+/- ten percent of mean), the mean is then multiplied by 0.9 and 1.1, truncated to three decimal places – this method is approved. If a breath sample is outside this parameter, no breath test result is generated.

EXECUTED this 20<sup>th</sup> day of January, 2022, at Seattle, Washington

  
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Dr. Fiona J. Couper, FLSB Director/State Toxicologist