

Attorneys for Defense:
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SKAGIT COUNTY DISTRICT COURT

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STATE OF WASHINGTON,)
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 Plaintiff,) Case No.: XY181244
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 vs.) ORDER DENYING MOTION TO SUPPRESS
)
 BRETT HERBOLSHEIMER,)
)
)
 Defendant)

THIS MATTER was heard by the undersigned Judges of the above entitled Court on Defendant's motion to suppress and having reviewed the records and files herein and further considered the arguments presented by the parties, the Court makes the following

FINDINGS OF FACT

1. The measurement of breath alcohol concentration utilizing Datamaster or Datamaster CDM machines approved by the Washington State Toxicologist is a scientific process and the results of such process are a scientific measurement.
2. The measurement of blood alcohol utilizing a gas chromatograph is a scientific process and the results of such process are a scientific measurement.
3. In considering the introduction of scientific evidence, courts in Washington utilize the *Frye* standard for purposes of establishing a foundation that the proposed evidence represents evidence that is generally accepted as reliable in the relevant scientific community.
4. The Washington State Legislature has adopted a foundation for introduction of breath testing results set forth in RCW 46.61.506 which

cc: Howson
PA

1 requires the pertinent court to "assume the truth of the prosecution's.....
2 evidence and all reasonable inferences from it in a light most favorable to
3 the prosecution." Challenges to the reliability or accuracy of the test, the
4 reliability or functioning of the instrument or any maintenance procedure
5 shall not preclude the admissibility of the test provided the legislatively
6 stated foundation has been laid but shall only go to the weight given the
7 test result.

8 5. In considering RCW 46.61.506, the Washington Supreme Court recognized the
9 legislature's "intention to make BAC test results fully admissible" once the
10 prosecution has laid the foundation set out by the legislature. The Court
11 also recognized that "the trial court may still utilize the rules of
12 evidence, including ER 702, to determine if the BAC test results will be
13 admitted." Further the Court recognized that a trial court could exclude
14 such test results under ER 403 "if its probative value were substantially
15 outweighed by the danger of unfair prejudice, confusion of the issues, or
16 misleading the jury." Fircrest v. Jensen, 158 Wash. 2d 384, 398-99 (2006).

17 6. No scientific measurement is absolutely precise. When measuring a thing,
18 one can only obtain an approximation of the true value which can then be
19 properly stated in terms of the uncertainty of the measurement and to a
20 certain degree of confidence. The true value of the thing measured can be any
21 one of an infinite number of values lying within this continuum.

22 7. The field of Metrology involves the principals of measurement. Metrology
23 is an emerging field that has been embraced by the scientific community and
24 its principals involving the statement of scientific measurements expressed
25 in terms of uncertainty with a degree of confidence have been generally

1 accepted as reliable in the scientific community including the subset of
2 forensic scientists.

3 8. There are recognized methods for estimating uncertainty when stating
4 breath test results. The Washington State Toxicology Laboratory has utilized
5 a method for estimating such uncertainty based on the work of Rod G.
6 Gullberg. (See Exhibit 12, *Estimating the measurement of uncertainty in*
7 *forensic breath-alcohol analysis* (2006)). The Washington State Toxicologist
8 has not promulgated any rules or protocols adopting the method above
9 referenced. The Washington State Toxicology Laboratory has instituted an
10 informal procedure where, upon request of an interested party, the Lab will
11 estimate the uncertainty associated with a particular set of Breath test
12 results to a ninety nine percent degree of confidence using said method and
13 provide its results to the requesting party. The lab has done this in
14 response to at least four hundred requests.

15 9. The Toxicology Laboratory has not undertaken estimation of uncertainty
16 associated with blood testing. Defendants introduced evidence of methods for
17 estimating uncertainty in measuring blood alcohol using a gas chromatograph
18 (See Exhibit 9, *An Uncertainty Budget for the Measurement of Ethanol in Blood*
19 *by Headspace Gas Chromatography*, by Jesper Kristiansen and Henning Willads
20 Petersen (2004)) but even the defendant's expert witness acknowledged that
21 this methodology was not directly transferable to Washington State. Further,
22 defendants have only identified one State Toxicology Lab (Virginia) that has
23 adopted procedures for estimating uncertainty when testing blood samples for
24 alcohol using headspace gas chromatography.

25 Based upon these Findings of Fact the Court makes the following

1 CONCLUSIONS OF LAW

2 1. When reasonably possible, the results of scientific measurement should be
3 stated in terms of the estimated level of uncertainty associated with said
4 measurement and the degree of confidence utilized in estimating such
5 uncertainty.

6 2. Breath test results obtained utilizing machines approved by the
7 Washington State Toxicologist should be stated in terms of the estimated
8 level of uncertainty associated with said measurement and the degree of
9 confidence utilized in estimating such uncertainty.

10 3. While it would be preferable to state blood test results in terms of the
11 estimated level of uncertainty associated with said measurement and the
12 degree of confidence utilized in estimating such uncertainty, the court is
13 not convinced that a recognized methodology for arriving at such estimation
14 exists.

15 4. The court is mindful of the Supreme Court's decision in State v.
16 Cauthron, 120 Wash 2d 879 (1993) concerning the admissibility of DNA evidence
17 wherein the Court noted:

18 Once this court has made a determination that the *Frye* test is met as
19 to a specific novel scientific theory or principal, trial courts can
20 generally rely upon that determination as settling such theory's
21 admissibility in future cases. However, trial courts must still
22 undertake the *Frye* analysis if one party produces new evidence which
23 seriously questions the continued general acceptance or lack of
24 acceptance as to that theory within the relevant scientific community.
25 State v. Cauthron, *supra* at page 888, footnote 3.

1 The evolution of the science of breath testing has reached a point where it
2 is no longer acceptable within the relevant scientific community to admit the
3 results of such testing without also including an estimate of the uncertainty
4 associated with the measurement of breath alcohol.

5 5. In light of the foregoing conclusions this court also concludes that
6 introduction of breath test results in the absence of an estimation of the
7 uncertainty of measurement associated with it would not assist the trier of
8 fact in understanding the evidence or determining a fact in issue and would,
9 further, result in a situation wherein the probative value of the evidence
10 would be substantially outweighed by the danger of unfair prejudice,
11 confusion of the issues, or misleading the jury.

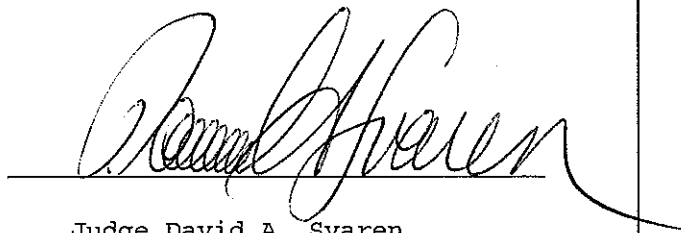
12 **RULING**

- 13 1. Defendant's motion to suppress is denied.
14 2. To be admissible, breath test results for alcohol must be stated in terms
15 that include an estimate of uncertainty associated with the measurement.
16 3. At this juncture, admission of blood test results does not require an
17 estimate of uncertainty.

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19 Dated this 4th day of June, 2010
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24 Judge Warren M. Gilbert

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24 Judge David A. Svaren