Attorney of Record:
Ted Vosk

IN THE MUNICIPAL COURT OF THE CITY OF KENT

STATE OF WASHINGTON

CITY OF KENT, Plaintiff, vs. MCDANIEL, MARK RITH, JEFFREY STRAIGHT, HERBERT Defendants.	Case No. K81862 K81680 K77149 ORDER SUPPRESSING DEFENDANT'S BREATH-ALCOHOL MEASUREMENTS IN THE ABSENCE OF A MEASUREMENT FOR UNCERTAINTY

THIS MATTER having come before the Court on a defense motion to suppress the admissibility of the BAC breath test readings absent the uncertainty measurement in the above and other cases, the Court having heard argument of counsel in the above entitled matters on November 18, 2010 and having considered the records and files herein, exhibits, and applicable case law, hereby enters the following:

FINDINGS OF FACT

1.1 On January 30, 2008, King County District Court suppressed all breath test results pursuant to an Order in State v Ahmach, et.al. C627921 (hereinafter referred to as Ahmach) based on a finding that the Washington State Toxicology Laboratory (WSTL) had engaged in practices and methods that rendered all breath test results unreliable and therefore inadmissible under ER 702. [1]

1.2 Subsequent to the Ahmach decision, the new State Toxicologist, Dr. Fiona Couper, began an extensive overhaul of the personnel, protocol and procedures of the Washington Toxicology Laboratory Division (WTLD), formerly known as the WSTL, to specifically address these issues of systemic failure. [2]

[1] To wit: software and programming errors, manipulation of data, failure to follow established protocol, failure to follow accepted scientific principles and methods, coupled with significant and troubling ethical lapses of various employees of the WSTL breath test program. See Ahmach, generally.

[2] Specifically: 1) hiring of a Quality Assurance Manager, Mr. Jason Sklerov, to assist in the development and implementation of quality assurance procedures, 2) implementation of a three tier peer review of all laboratory analysts in the testing and certification of simulator solutions, 3) implementation of a three tier system of review of Breath Test technicians who perform quality assurance

1.3 On August 2 through August 6, 2010, a motions hearing was heard in King County District Court in State of Washington v. Fausto, et.al. C76949 (hereinafter referred to as Fausto), to determine : 1) whether the WTLD had remedied the systemic procedural and forensic failures that resulted in the Ahmach Order suppressing all BAC test results and, if so, 2) whether a BAC breath test was admissible absent an uncertainty measurement.[3]

1.4 Both parties in the cases herein stipulated to the admissibility of the transcript and all exhibits in the Fausto Hearing involving the issue of uncertainty measurement.

1.5 This Court adopts by reference the findings of fact in the Fausto's Court's September 21, 2010 Order regarding the definitions, scientific principles, measurement standards in the scientific community, and calculations of the confidence interval developed and utilized at the WTLD breath testing program at issue in this case. [4]

1.6 On November 16, 2009, the WTLD received accreditation from the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB).[5] The ASCLD/LAB utilizes the strict requirements for testing competence and calibration for laboratories under standards set by the International Organization for Standardization (ISO) to accredit forensic laboratories. [6] All organizations seeking accreditation for forensic testing must meet the requirements of ISO standard 17025. [7]

1.7 The ISO 17025 requires that uncertainty measurements be included in all forensic reports. Compliance with ISO 17025 is required to receive forensic laboratory accreditation – but currently extends only to instrument calibration- not individual breath tests.[8]

1.8 In September 2009, and prior to receiving laboratory accreditation from the ASCLD/LAB, the State Toxicologist reviewed, revised and formally approved its "Procedure for Calculation of the Confidence Interval" in determining measurement uncertainty for biological sampling in breath testing and in conformance with the standards set by ISO 17025. [9]

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procedures of breath test instruments, 4) formulization of detailed manuals articulating all protocols and procedures of the WTLD, 5) implementation of proficiency testing for simulator solution analysts and breath test technicians, and 6) implementation of scheduled supervisory reviews and annual internal audits of the department personnel and work product to assure compliance with these strict standards. See Fausto Order Lifting BAC Suppression under State v Ahmach, pg. 2-4.

[3] The Fausto court subsequently issued two (2) separate rulings. On September 20, 2010, it lifted the stay suppressing breath tests under Ahmach. On September 21, 2010, the Court suppressed admissibility of BAC test results absent the identification of an uncertainty measurement on September 21, 2010.

[4] Fausto Order, pg. 2 – 10.

[5] It must also be noted that internationally there are presently only four breath test programs that have earned accreditation at the instrument level: WTLD, the Virginia Department of Forensic Science, the Ventura County Sheriff's Office, and a laboratory in New Zealand. Fausto Transcript, testimony of Sklerov, at 62.

[6] Fausto transcript, testimony of Sklerov, at 60-61.

[7] Fausto transcript, testimony of Sklerov, at 152, 222-223.

[8] Fausto transcript, testimony of Gullberg, at 467.

[9] Fausto transcript, testimony of Couper, at 265.

1.9 The WTLD is currently believed to be the only breath test program in the United States to calculate measurement uncertainty involving biological sampling.[10] I

1.10 In voluntarily adopting and complying with ISO standards for biological sampling, the WTLD Breath Calibration Program has demonstrated compliance with the most rigorous qualitative, programmatic and management standards for breath testing. [11]

1.11 Pursuant to accepted scientific reporting standards, the methodology and algorithm for determining this uncertainty measurement is known and available from the WSP breath test section[12]. Calculation of the confidence interval for every breath test for each Datamaster can be determined at the time of the QAP using individual data and validated software developed by the WTLD.[13]

1.12 At the time of the Fausto hearing, the WTLD would only calculate the bias and uncertainty associated with a specific breath test, incorporating its own confidence interval, upon specific request.[14]

1.13 All three (3) of the State's expert witnesses who testified at the Fausto hearing were unable to accurately determine a true BAC reading at the critical legal level of .08 without an uncertainty measurement.[15]

1.14 With the confidence interval, as approved by the methodology and procedures approved by the State Toxicologist and in accordance with ISO 17025, the BAC results were deemed to be within 99% accuracy. [16]

ANALYSIS

UNCERTAINTY MEASUREMENT (CONFIDENCE INTERVALS)

The City concedes that every instrument and result has an uncertainty measurement – but argues that the uncertainty measurement at issue herein is not a foundational requirement for admissibility under the RCW or the relevant provisions of the WAC so any challenge to the test result goes to weight not admissibility.

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[10] Fausto transcript, testimony of Couper, at 264.
[11] Fausto transcript, testimony of Couper, at pg.320-322 and Order Lifting BAC Suppression under Ahmach, pg. 4, September 20, 2010
[12] Fausto transcript, testimony of Couper at 279, 283.
[13] Fausto transcript, testimony of Couper, at 305-309.
[14] Fausto transcript, testimony of Gullberg, at 473-474.
[15] See testimony of Jason Sklerov, Quality Assurance Manager, WTLD, pg. 133-134, pg. 159, pg. 184; testimony of Fiona Couper, State Toxicologist, WTLD, pg. 270-272, and testimony of Rod Gullberg, Breath Test Section Research Analyst of WTLD, pg. 396-398
[16] See testimony of Gullberg, pg. 364, 380-381, 398 and 475.

To be considered valid, analysis of a person's breath must be performed according to methods approved by the state toxicologist. RCW 46.61.506 (3). To be considered admissible, a breath test must be performed by a breath test instrument approved by the state toxicologist and meet the foundational requirements of RCW 46.61.506(4) and WAC 448-16-050.

In Washington, the Court has consistently held that once the State presents prima facie evidence of the foundational requirements, challenges to the admissibility of the breath test goes to the weight of the test result, not its admissibility. See State v. Allison , 58 P.3d 85, 148 Wash 2d 75 (2002) where an amendment to the WAC to change the temperature range to recognize thermometer variances did not require suppression since it was determined that minor variances in the thermometer did not affect the reliability of the test results. [17] However, failure to conform to the protocols established by the state toxicologist has resulted in suppression. City of Seattle v. Clark-Munoz 93 P.3d 141, 152 Wash 2d 39 (2004) In Clark Munoz, the BAC was suppressed based on failure of thermometer to be certified under WAC 448-13-035 because it was not tested on reference thermometers traceable to standards maintained by NIST as required.[18] "*Traceability requires that uncertainties be noted at each level of removal – so that ultimate uncertainty is known*". Id, at 144. *Emphasis added*

In the case herein, and in response to the systemic failures of the breath test program as identified in Ahmach, the new state toxicologist developed and implemented new protocols and procedures to insure strict conformity to scientific principles and testing accuracy as required of a competent forensic laboratory. This action was pursuant to express legislative authority.

> "The state toxicologist will review, approve and authorize such protocols of procedures and methods (of the toxicologist's own promulgation or submitted by outside agencies or individuals for consideration) required in the administration of the breath test program. These protocols will be updated as necessary to maintain the quality of the breath test program". WAC 448-16-070, RCW 46.61.506(3)

Pursuant to those extensive and proactive efforts, the WTLD Breath Calibration Program subsequently applied for and received accreditation from the American Society of Crime Laboratory Directors, Laboratory Accreditation Board (ASCLD/LAB) in November 2009. The ASCLD operates under the International Organization for Standardization (ISO) standard 17025.

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[17] See also:

[18] It is acknowledged that in response to Clark-Munoz , the state toxicologist repealed chapter 448-13 WAC in 2004 and with it the requirement that certifying thermometers comply with NIST standards. Chapter 448-16 WAC does not currently require a certifying thermometer to be traceable to NIST standards.

[19] After the troubling issues identified in Ahmach, the WTLD should only be commended by this demonstrated commitment to scientific principles, forensic accuracy and recognized standards of accountability and reporting.

According to the express provisions of ISO 17025:

> **Testing laboratories shall have and shall apply procedures for estimating uncertainty measurement.** In certain cases, the nature of the test method may preclude rigorous metrological and statistically valid calculation of uncertainty of measurement. In these cases, the laboratory shall at least attempt to identify all components, all components of uncertainty and make a reasonable estimation and shall ensure that the proper reporting of the result does not give a wrong impression of the uncertainty. ISO 17025 5.4.6.2.
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> **The results of test calibration or series of tests or calibrations carried out by the laboratory shall be reported accurately, clearly, unambiguously and objectively, and in accordance with any specific instructions in the test or calibration methods.** ISO 17025 5.10.1
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> **"[I]nformation on uncertainty is needed in test reports when it is relevant to the validity or application of the test results..." and when uncertainty affects compliance to a specification link.** ISO 17025 5.10.3.1

See Defense Exhibit 54, ISO 17025, General Requirements for the Confidence of Testing and Calibration Laboratories. Emphasis added.

Compliance with the methodology and reporting standards under ISO 17025 is critical to the accreditation process. In May of 2009, the WTLD was originally denied accreditation by the ACLD – based on an audit that identified, among other issues, a level one issue of non-conformity regarding pre-test expanded uncertainty. Specifically, because the lab failed to report this uncertainty measurement appropriately- "*the result was not accurate, clear, unambiguous of objective*". [20] See ISO 17025 5.10.1 This deficiency was immediately corrected for records maintained in the lab in order to receive accreditation in November 2009.

Compliance with ISO 170125 is required for forensic accreditation – but currently only extends to instrument calibration – not individual breath tests. However this is not a determination that uncertainty measurements are not critical. In fact, ASCLD policy originally required that

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[19] Pursuant to same, the Fausto Court lifted its prior suppression Order under Ahmach finding that "[a]s opposed to the culture of compromise, ethical lapses, systematic inaccuracies, negligence and violation of scientific principles,...the current WTLD culture appears geared toward rigorous science and leadership in the area of forensic toxicology. " Fausto Order, September 20, 2010, pg. 4-5.

[20] Exhibit 4: S -4: The ASCLD assessment report identifying the issues of non-conformity. See also ISO 17025 5.10.1 and Fausto, testimony of Sklerov, pg.

pursuant to ISO 17025, all applicant and accredited laboratories complete estimating uncertainty of measurement for all reported measurements by December 31, 2008.[21] ASCLD subsequently delayed mandating implementation and compliance of this requirement due to the practical inability of most forensic laboratories to comply with this higher scientific standard. [22]

However, the WTLD methodology to calculate the confidence interval based on biological sampling and the recognized research of Rod Gullberg does comply with that higher standard of scientific testing under ISO 17025. The process was reviewed, the formula revised and the procedure was subsequently approved by the State Toxicologist in September 2009.[23] This was done to insure that there was a system in place where there was peer review – and a technical and administrative review of the protocol and procedures.[24]

The biological component is the largest and most significant source of uncertainty in an individual's breath test result – contributing anywhere from 50 – 80% of uncertainty.[25] Knowledge how this uncertainty measurement "affects compliance to a specification link" (e.g. .08 or .15) is therefore critically relevant to any DUI prosecution. [26] The WTLD confidence interval, which addresses the uncertainty measurement of this biological component, enhances the probative value of an individual breath test, and gives an interval and percentage of probability (99%) that the true result is within those limits.[27]

As noted, compliance with ISO 170125 is required for forensic accreditation – but currently only extends to instrument calibration – not individual breath tests. As of August 2009, the WTLD had calculated confidence intervals on only 650 individual breath tests compared to the 35-40,000 tests performed annually.[28] The State Toxicologist has taken the position that confidence intervals will only be produced and reported "upon request" and "this service will not be provided for breath test results between 0.120 and 0.149 g/210L or for results above .0210

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[21] Plaintiff's Exhibit 11: Updated Approach to Uncertainty of measurement Requirements.
[22] Fausto transcript, testimony of Sklerov, at119, General factors that were considered in delaying the mandate for every laboratory was a recognition of budget constraints , a poor understanding of the labs on how to apply the standard, lack of training for the laboratories to get in compliance.
[23] Fausto transcript, testimony of Sklerov, at 9g. 117.
[24] Transcript , testimony of Couper, pg. 261
[25] Transcript of Fausto, testimony of Gullberg, at 376.
[26] See: ISO 17025 5.10.3.1
[27] Fausto transcript, testimony of Gullberg, at 364. And see Exhibit 64.
[28] Fausto transcript, testimony of Sklerov, at 246.

g/210L"[29] By engaging in selective practices that, while technically compliant, ignore the clear reporting directive of ISO 17025 5.10.1 and 5.10.3.1, WTLD's position is contrary to their commitment to forensic excellence by seeking and receiving accreditation from the ASCLD under ISO 17025.

This Court recognizes that Washington courts have consistently held that once the State presents prima facie evidence of the foundational requirements, any challenges to the reliability and accuracy of the test go to the weight of the test result, not its admissibility. State v Allison, 148 Wash.2d 75, at 86, 59 P.33d 85 (breath test satisfies foundational requirements; "arguments as to the reliability of the particular test results are questions for the jury"); State v. Wittenbarger, 124 Wash.2d 467, 476, 880 P.2d 517 (1994)(defendant may challenge reliability of breath tests through cross-examination, expert testimony, and independent tests); State v. Straka, 116 Wash.2d 859, 875, 810 P.2d 888 (1991) (procedure for evaluating and certifying the machines, and for mixing the simulator solution, may be introduced to refute the accuracy and reliability of the test results but do not bar its admissibility); State v. Brayman, 110 Wash.2d 183, 192, 751 P.2d 294 (1988) (the defendant may introduce evidence refuting the accuracy and reliability of the test reading");

But this Court is not addressing the accuracy or reliability of the breath test instrument or reading. Despite the foundational and admissibility requirements of RCW 46.61.506 and Title 448 -16 of the WAC – it is clearly established that the trial judge can still use its discretion to exclude an otherwise admissible breath test ***under the rules of evidence.*** City of Fircrest v. Jensen, 158 Wn.2d 384, 398-399, 143rd P.3rd 776, at 784 (2006), cert denied, 549 U.S. 1254 (2007).

ER 702

If a scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education may testify thereto in the form of an opinion or

[29] February 5, 2010 notice on the Washington State Patrol Forensic Laboratory Services discovery website

otherwise. ER 702. Expert opinion may be based upon facts or data "reasonably relied up by experts in the particular field in forming opinions or inferences upon the subject". ER 703.
ER 702 requires a 2 part analysis: (1) whether the witness qualifies as an expert and 2) whether the expert testimony would be helpful to the trier of fact. State v Cauthron, 120 Wn.2d 879,890 (1993).

In Cauthron, the Court considered the admissibility of DNA typing and the use of population statistics in DNA analysis. While the Court found that the science of DNA typing was admissible under Frye, the case was remanded for additional expert testimony pursuant to ER 702 to determine whether the empirical evidence relied on by the State accounting for the possibility of population substructuring was valid. Critical to the application to the case herein, is the Cauthron court's ruling that the trier of fact needed to be informed of valid probability statistics. Cauthron at 906-908.

Based on the State's own evidence, the confidence interval at issue herein provides the scientific probability that an individual test result is actually above or below the mean of the two breath samples. When the trier of fact must determine that issue at a critical level of legal significance (e.g. .08 and .15) it is clear that the confidence interval will "assist the trier of fact to understand the evidence or to determine a fact in issue ". See ER 702. Absent that information, even the State's own expert witnesses herein were unable to testify with any confidence as to a true result of an individual breath test. [30]

While Washington courts have not formally addressed the issue of uncertainty measurement, a brief discussion of State v. Keller, 36 Wn.App 110, 672 P.2d 412 (1983) is still informative.
In Keller, the issue was whether the State could obtain a conviction under RCW 46.61.502(1) which required that the State prove a *blood* alcohol content of .10 percent or greater, when the evidence before the trier of fact was a *breath* reading of .10 and a margin of error of.01 percent[31] The Defendant argued "that a breath reading of .10 is insufficient to prove a violation of the statute because it established only that the blood alcohol level was between .09 and .11. The Keller court found that a rational trier of fact, considering all of the evidence, including the Breathalyzer's test reading, the margin of error, and other evidence admitted at trial could

[30] See FN 15.
[31] In 1983, the relevant legal limit under RCW 46.61.502(1) was .10 rather than the current .08.

support a conviction under the law.[32] The weight to be given the reading is left to the trier of fact, as is the weight to be accorded other evidence. Keller at 114. The Court also suggested that the margin of error in the Breathalyzer should be considered by the trier of fact in deciding whether the evidence sustains a finding of guilt. Keller at 113, citing State v. Franco, 96 Wn.2d 816, 639 P.2d 1320 (1982)

The City cites Keller to support its argument that the uncertainty measurement does not affect admissibility but the weight to be given by the trier of fact. While the Court agrees with this position in general, it is unclear how a trier of fact could properly evaluate or understand a valid breath test reading without the attendant confidence interval / "margin of error" as discussed under Keller.

The City also relies on State v. Ford, 110 Wn. 2d 827 (1988) – but Ford can be distinguished on a critical point. In Ford, the issue was whether the state toxicologist abused his discretion by selecting a particular instrument (the Datamaster) over another device (the Intoxylyzer) that was alleged to provide a more precise result.[33] The Court found that the state toxicologist did not abuse his discretion by selecting a device that also produced an accurate and reliable reading.

> "It is not our function to substitute our judgment for that of the state toxicologist, nor was such the function of the trial judge... that the toxicologist might have used a methodology more precise or might have used a different procedure of evaluation reflects upon his administrative judgment, but does not make his decision arbitrary or capricious... Ford, at 832.

But in the case herein, the Court is not attempting to substitute our judgment for that of the state toxicologist. The confidence interval is not a methodology advanced from outside the agency; this is an uncertainty measurement that was specifically developed, revised and formally adopted by the State Toxicologist pursuant to its acknowledged authority, legislative mandate and in accordance with acknowledged scientific principles. The relevant issue is why the toxicologist should not routinely calculate and report the confidence interval for all breath

[32] Keller, at 114: the defendant also admitted consumption of six beers and two tequilas.
[33] In Ford, Rod Gullberg recommended the Intoxlyzer but agreed that the Datamaster provided an accurate and reliable result under the selection criteria.

test readings – especially when their own reports show that this measurement can significantly impact the level of accuracy on critical issues of legal fact (e.g. .08, .15). [34]

Pursuant to ER 702, and the clear evidence before this Court, we find that without the confidence interval – a trier of fact would have difficulty understanding the evidence and determining a critical fact at issue. The confidence interval is critical in determining not only whether a particular defendant reaches a level of legal significance (.08 and/or .15) but is essential in evaluating and understanding any individual breath test reading

ER 403

ER 403 states in relevant part: Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury. While it is acknowledged that the provisions of ER 702 generally control issues of scientific and expert testimony, it is also clear from the record and persuasive evidence before this Court, that the Court should consider this issue under ER 403.

Even if expert testimony satisfies the requirements of ER 702, the trial court still has the discretion under ER 403 to exclude evidence if there is danger of unfair prejudice. State v. Ciskie, 110 Wn. 2d 263, at 279, 715 P2d 1165 (1988). (Testimony re: battered women's syndrome was deemed admissible under ER 702 – but was excluded under ER 403 if expert were to present a diagnosis of victim as "rape victim". [35] Evidence is inadmissible under ER 403 if unfairly prejudicial – if it has the capacity to skew the truth or prejudice the truth finding process itself. See generally State v. Read, 100 Wash. App 776, 998 P 2d 897 (2000) citing State v. Hudlow[36].

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[34] Whether the toxicologist's failure to incorporate the confidence interval into the QAP, or to comply with the reporting provisions of ISO 17025 is "arbitrary and capricious" is not an issue before this Court.

[35] In Ciskie: Expert was allowed to diagnose victim as suffering from post-traumatic stress – but not allowed to testify as to what the stressor might be for the alleged victim. At 279.

[36] In Hudlow, the issue was whether introduction of a rape victim's prior sexual conduct in a particular case prejudiced the trier of fact as to the issue of consent. The Court upheld the trial court's exclusion of that evidence under the rape shield act – and found that it had engaged in the proper balancing of competing issues. The Rape shield Act, under then RCW 9.79.150(3) codified many of the evidentiary considerations of ER 403. To wit: evidence is admissible on the issue of consent only if (1) it is relevant; 2) its probative value substantially outweighs the probability that its admission will create a substantial danger of undue prejudice; and 3) it's exclusion will result in denial of substantial justice to the defendant. (The Rape Shield Act in Washington is now codified under RCW 9A.44.020.)

In Reese v Stroh, 74 Wn. App. 550, 874 P.2d 200 (1994), the plaintiff challenged the inadmissibility of their expert's testimony in a medical malpractice case under ER 702. (Negligent failure to treat patient with a specific protein replacement therapy). The trial court excluded the plaintiff's expert finding that his testimony lacked the necessary scientific foundation under ER 702: it was based on a limited clinical study (35-40 patients) and was not supported by a study yielding statistical proof that it would be therapeutic. The defendant argued that the expert testimony was properly excluded under ER 403 because the "glamour" of the expert was likely to mislead the jury and "shroud the evidence". Reese, at 565. The Court reversed the trial court's decision to exclude the plaintiff's expert witness under its analysis of ER 702 and Frye – and remanded for a new trial. The Court denied the defendant's argument under ER 403 finding that the expert's testimony "was not based on an apparently *sophisticated technology that carried with it an aura of infallibility*". Reese at 565. *Emphasis added.*

> When a witness gives his personal opinion on the stand – even if he qualifies as an expert – the jurors may temper their acceptance of his testimony with a healthy skepticism born of their knowledge that all human beings are fallible. But the opposite may be true when the evidence is produced by a machine: like many laypersons, jurors tend to describe an inordinately high degree of certainty of proof derived from an apparent scientific mechanism, instrument, or procedure. Yet the aura of infallibility that often surrounds such evidence may well conceal the fact that it remains experimental or tentative.

Reese at 558, citing People v. McDonald, 37 Cal.3d 351, 690 P.2d 709, 208 Cal. Rptr. 236 (1984). Emphasis added.

This Court is not asserting that the technology or methodology behind the Datamaster is "experimental". But a breath test result is demonstrably "tentative" and therefore misleading without the knowledge of the uncertainty measurement at issue herein. All three (3) of the State's expert witnesses who testified at the Fausto hearing were unable to accurately determine a true BAC reading at the critical legal level of .08 without an uncertainty measurement.[37] With the confidence interval, as approved by the methodology and procedures approved by the State Toxicologist and in accordance with ISO 17025, the BAC results were deemed to be within 99% accuracy. [38] "The major danger of scientific evidence is its potential

[37] See testimony of Jason Sklerov, Quality Assurance Manager, WTLD, pg. 133-134, pg. 159, pg. 184; testimony of Fiona Couper, State Toxicologist, WTLD, pg. 270-272, and testimony of Rod Gullberg, Breath Test Section Research Analyst of WTLD, pg. 396-398

[38] See testimony of Gullberg, pg. 364, 380-381, 398 and 475.

to mislead the jury; an aura of scientific infallibility may shroud the evidence and thus mislead the jury to accept it without critical scrutiny." Reese at 558.[39]

As noted in Jensen, " depending on the facts of a particular case, a trial court could still exclude, otherwise admissible evidence, if it's probative value were substantially outweighed by the dangers of unfair prejudice, confusion of the issues, or misleading of the jury under ER 403[40]." Jensen, at 384, citing State v. Long 113 Wash 2d 266, 778 P.2d 1027 (1989) (court may still exclude refusal evidence to infer guilt despite the express provisions of RCW 46.61.517).

Clearly, an otherwise admissible breath test is relevant and probative to the trier of fact in a DUI prosecution. But this Court finds that the probative value of a breath test result without an uncertainty measurement would be substantially outweighed by the danger of unfair prejudice to a defendant and misleads a trier of fact/jury as to the accuracy and true value of an individual breath test result under ER 403.

FRYE ANALYSIS

The City concedes that "measurement uncertainty" is generally accepted in the scientific community; however, they argue that evidence of a valid technique to implement that theory in breath testing, toxicology and in biological testing case is virtually non-existent and therefore inadmissible under Frye.[41]

Admissibility of evidence based on novel scientific procedures is settled under the standards set forth in Frye v. United States, 293 F. 1013, 1014, 34 A.L.R. 145 (D.C. Cir. 1923). Specifically: evidence deriving from a scientific theory or principle is admissible only if that theory or principle has achieved general acceptance in the relevant scientific community. State v. Cauthron 120 Wn. 2d 879, 886 (1993), 846 P.2d 502, citing State v. Martin, 101 Wn. 2d 713,

[39] Citing Paul C. Giannelli, *The Admissibility of Novel Scientific Evidence: Frye v. United States, a Half Century Later*, 80 Columbia L. Rev. 1197 (1080), at 1237.

[40] The only other Court known to have addressed the issue of breath test admissibility under ER 403 and Jensen, is State v. Rosalez, Court of Appeals, 3rd Div. (2010). But the Court did not address the issue on its merits since it was determined that the Defendant had not adequately raised the issue at the trial level to preserve the issue for appeal under RALJ 9.1. Rosalez, at 4-6.

[41] This Court concedes that admissibility under Frye is generally a predicate to the Court's analysis of admissibility under ER 702 and ER 403.

719, 684 P.2d 651 (1984). Core concern of Frye is whether the evidence is based on an established scientific methodology. This involves both an accepted theory and a valid technique to implement that theory. Cauthron at 879,

In the case herein, Gullberg's methodology and protocol was specifically reviewed and validated by the State Toxicologist pursuant to her delegated statutory authority under RCW 46.61 506(3) the provisions of WAC 448-16-070 and, in accordance with the stricter scientific compliance provisions of ISO 17025 for forensic testing.[42]

The City contends that the existence of competing methodologies to calculate uncertainty measurement (e.g. the Wallace method[43]) proves that the WTLD method is not accepted in the general scientific community and therefore inadmissible under Frye. But the Court does not require unanimity under Frye. As noted in Copeland:

> We are aware that unanimity does not exist. However, we have not held that unanimity among scientists is required before we find general acceptance in the relevant scientific community. Copeland, at 1319.

In Copeland, the Court found that the product rule in establishing statistical probabilities of genetic profile frequencies was generally accepted despite prior challenges. At 1319.

It must be noted however that the ASCLD does not require a specific formula for estimating uncertainty of measurement. "[L]aboratories should consider available references and consult with their own statistician or metrology expert to determine the most applicable method for developing an estimation of uncertainty of measurement." Defense Exhibit 44, ASCLD/LAB Estimating Uncertainty of Measurement Policy, March 2007, pg. 2.

ISO 17025 5.4.6.2 requires:

> ***Testing laboratories shall have and shall apply procedures for estimating uncertainty measurement.*** In certain cases, the nature of the test method may preclude rigorous metrological and statistically valid calculation of uncertainty of measurement. In these cases, the laboratory shall at least attempt to identify all components, all components of uncertainty and make a reasonable estimation and shall ensure that the proper reporting of the result does not give a wrong impression of the uncertainty.

[42] Fausto transcript, Couper at 265.
[43] See Fausto transcript, testimony of Gullberg, at 449 regarding Wallace method. OTHER CITES????

The Court acknowledges that the WTLD is currently believed to be the only breath test program in the United States to calculate measurement uncertainty involving biological sampling. Arguably, its premiere and singular status makes its methodology, by definition, generally "unaccepted". But this Court does not intend to ignore the WTLD's demonstrated commitment to forensic excellence by being the first forensic lab to comply with the higher methodological standards of ISO 170125 and GUM (Guide to the Expression of Uncertainty in Measurement)[44] That accomplishment and the recognized variance in estimating uncertainty measurement in the relevant accrediting and forensic standard community resolves this issue to the satisfaction of this Court.

We therefore find that the WTLD "Procedure for Calculation of the Confidence Interval" is admissible under the Frye standard.

RULING

Admissibility of an otherwise valid breath test result will be predicated on the calculation, identification and production of the WTLD "confidence interval" for an individual breath test pursuant to ER 702 and ER 403.

Dated this 4th day of April, 2011

Judge Robert B. McSeveney

Judge Glenn Phillips

Judge Pro Tem Karli Kristine Jorgensen

[44] Fausto transcript, testimony of Couper, at 265.