JUDGE EILER: So of course it involves speculation. It's what a hypothetical is. You speculate on a story prepared by opposing counsel to ask the question. You asked hypotheticals that called for speculation.

MR. STEIN: It has no relevance to our inquiry unless we have some source or reason to believe that it is relevant to the scientific inquiry that we're involved in.

JUDGE EILER: I think he gets to ask a hypothetical.

MR. SCHWARTZ: Just to let the Court know, I will be following rebuttal to authenticate these documents.

JUDGE EILER: Overruled at this point.

MR. SCHWARTZ: Thank you.

Q. The definition that I just hypothesized to you --

A. You have read a statement from the work.

Q. Whether I did read it or otherwise, I've given it to you as a hypothetical. Is that a possible definition that may be in use in science that you're unaware of?

A. Only if you include the bottom two lines: "Process of ensuring that the accuracy of measurements can be traced."

Q. Okay. But that doesn't say anything about uncertainties either, my hypothetical including the line that you've given?

A. I cannot talk about accuracy without knowing

uncertainty.

Q. Okay. But that's you. The definition that I've given you doesn't say anything about uncertainties.

A. The definition that you've given me says nothing about uncertainty.

Q. Thank you.

Couldn't we even curry it down to the very basic, Dr. Emery, that the ability to relate back to a single standard is what traceability is?

A. The only way you can relate back is knowing the uncertainty.

Q. Says you.

A. Says right here on the report, Calibration --

Q. I'm not looking at that document.

MR. STEIN: He get's to answer the question, Your Honor.

MR. SCHWARTZ: He can't read from a document that's not been admitted.

JUDGE EILER: He can't read from a document that's not admitted. We don't do that. He just doesn't get to read from a document that's not admitted. He can answer the question, but he can't read from the document.

Do you have an answer?

A. I would not --

MR. STEIN: I'm sorry, Your Honor. He's been asked

to review the document. May he refer to it?

JUDGE EILER: He can refer to it but he can't answer quoting from it.

MR. SCHWARTZ: I'm not using it anymore.

MR. STEIN: I understand that. I'm asking that he be allowed to finish his answer based upon what he's reviewed.

JUDGE EILER: He gets to answer the question based on the question.

MR. STEIN: And his answer was -- and the question was in the argumentative form, "Says you," and his response was --

JUDGE EILER: Let's not editorialize the way the question was asked unless that's your objection.

MR. STEIN: The response was, No, says this article that he gave you, and I'd like that to be incorporated into the record.

JUDGE EILER: Overruled.

Counsel, ask a new question.

MR. SCHWARTZ: Thank you, Your Honor.

Q. Now, counsel showed you the certifications -- or the purported certifications from Bostec, and you've -- if I can find them. Do you remember those documents?

A. Yes, I do.

MR. SCHWARTZ: That be J and L?

MR. STEIN: Yes, sir.

Q. I'm showing them both to you again. Is it your testimony that those documents have absolutely no meaning to you?

A. Well, they have some meaning in a qualitative sense, yes. They do not have a quantitative sense.

Q. Okay. Explain the difference?

A. Well, it appears that the thermometer that they tested, according to what they've written here, had a reading of 33 degrees when the master thermometer had a reading of 33 degrees. That's all.

Q. And to that limited extent you're willing to acknowledge, then, that based on what's written on those documents -- and it's consistent all the way down, is it not, that they tested it -- well, they tested it using whatever procedure they used at varying temperatures, correct?

MR. STEIN: Objection; calls for speculation. Assumes facts not in evidence.

JUDGE EILER: These are admitted documents.

MR. STEIN: They are, but what they mean and what was done by the individuals who --

JUDGE EILER: Well, the question he asked is, all the way down they matched. That essentially was his question, which he can ask about a document that's admitted.

Overruled.

A. They do match all the way down, surprisingly.

Q. Okay.

JUDGE JACKE: Why do you say "surprisingly"?

THE WITNESS: I am surprised if anything matches that perfectly. They match to two decimal places. Number one, I'm amazed that they can produce a bath which is known to exactly two decimal places and that every instrument agrees to exactly. That's not my experience, that instruments agree exactly at every temperature.

Q. Dr. Emery, with regard to the definition you've given previously about calibration, as a result of a calibration, if there -- and I apologize if my terminology is imprecise -- but if during the testing for calibration, if there appears to be some incongruity -- and I don't know what the -- I guess, if as a result of the testing the numbers don't match -- let me just use the common language -- the numbers don't match, the natural result would then be to correct the item -- to recalibrate means to change the markings, would it not?

A. No. To calibrate would be to provide correction factors.

Q. To allow somebody, then, to fix it?

A. To allow somebody to correct the subsequent reading, yes.

Q. Okay.

MR. STEIN: I would say that was nonresponsive, Your Honor. The question hypotheticated that you change the scoring on the instrument. The answer was, no, you change the readings that you observe, is what I'm reading into that.

JUDGE EILER: Well, you don't get to read into his answer. His answer stands by itself.

MR. STEIN: Non-responsive.

JUDGE EILER: Counsel, ask a new question.

MR. SCHWARTZ: Will do.

Q. Dr. Emery, I'm going to show you, if I can find it, Exhibit D, which -- it's previously been admitted and you previously read a portion. If you would please turn to page 318 of that document.

A. Yes.

Q. Is this the section that you read the definition from?

A. That is correct.

Q. In fact, doesn't this definition -- it indicates that this has been accepted by the metrology community, correct?

A. Yes, that's what it states.

Q. And that's the community that you subscribe yourself to be a part of?

A. Yes.

Q. Okay. That's all. Thank you.

That article -- and if you need me to give it back to you, I'll be happy to -- doesn't say it has been accepted by any other scientific community other than metrology.

A. It's been accepted by --

Q. Dr. Emery, please listen to my question and only answer the question.

A. That article did not say it had been accepted by anybody else other than metrology.

Q. Thank you.

I'm going to show you what has been admitted as Exhibit E. Again, do you recognize what Exhibit E is?

A. Yes, I do.

Q. And just to refresh everyone's recollection, that is what?

A. That is entitled "Supplementary Materials - Traceability."

Q. And with regard to that document, is there a date on that document?

A. 8/23/01.

Q. Do you know -- well, I'll leave it at that.

If I could -- actually, I'll withdraw any further questions on that.

Dr. Emery, do you see a physician?

A. Infrequently.

Q. And when you go to the doctor, do they ever take your blood pressure?

A. Yes.

Q. Is taking of the blood pressure a form of measurement?

A. Yes, it is.

Q. And certainly one's blood pressure is important.

A. They say it is.

Q. Okay. Fair enough.

Do you make your physician or physician's assistant take your blood pressure multiple times?

A. Because I don't regard my blood pressure as being particularly important, I do not.

Q. And they don't on their own; they just take it one time.

A. They take it one time.

Q. Have you ever gotten ill to the point where you felt that you had a fever?

A. Like right now? Yes. Yes, I have.

Q. Do you have children?

A. Yes.

Q. And when they were young, did they ever have fevers?

Q. Yes, they did.

Q. And did you take their temperature?

A. Yes, I did.

Q. And particularly with children, fevers can be very important -- can be very detrimental, shall we say, if they get high enough?

A. They say that.

Q. Did you take their temperature to obtain multiple readings?

A. As a matter of fact, frequently, yes.

Q. How about yourself?

A. Myself? I don't take my temperature.

Q. When you see the doctor, have you ever had to have tests done?

A. Yes.

Q. And as part of those tests, depending on the type of test, if it's a blood test, for example, ultimately, a form of metrology would be used, would it not?

A. Yes.

Q. And to the best of your knowledge, do they run the test multiple times?

MR. STEIN: Objection. Calls for speculation, and, Your Honor, while I understand this is cross-examination, we're not talking about calibration, traceability or reference thermometers here. So I don't see the relevance of the line.

JUDGE EILER: Counsel, you've already determined that he does not have any medical background, so we've strayed from his area of expertise.

MR. SCHWARTZ: The question was if he knows whether they run the tests multiple times.

JUDGE EILER: I suppose you can ask if he knows that.

Overruled.

A. I do not know how many times they run the test. How many times they perform the measurement that they report.

Q. Okay. Now, you indicated just kind of in passing during the direct examination, that, strictly speaking, when Mr. Stein was talking to you about a digital reference thermometer that was certified to the standards that you described on March 11, 2003, whether or not one can say it's traceable for some period back, back in time. And you said your opinion was no, and that, strictly speaking, the answer is no. What do you mean about the strictly speaking? Why did you put that clarification?

A. If you calibrated on March 11th at 10:00 a.m. and asked me if I thought that it was still in calibration on March 11th at 9:59, I would say, in my opinion, it was reasonable to assume it was in calibration one minute before you did it. If you ask me a week before, my confidence

would drop. A month before, I would get shaky. I would say, Show me what's happened to the instrument; prove to me that it's been well cared for; show me the history of calibration.

Q Okay. What if we know that on day one -- I have to think out my hypothetical here. If we have a temperature taken using this thermometer on day one, temperature X, on day ten the thermometer is certified, it's calibrated, standards according to NIST, the calibration shows that it is reading true. It doesn't have to have any changes or there's no need to add or subtract anything from the readings that it has given. Assuming those facts, are thermometers self-correcting?

A. Self-correcting, meaning?

Q. Meaning if you do a calibration and find that it is -- to use a -- phrase it, and I'm sure you're familiar with "out of whack." If you find that it is not reading true, will the thermometer suddenly fix itself and read true?

A. What I will assert is that a thermometer changes constantly. If it happens to be measuring high one day and on day one it just happened to measure right, and then it went measuring low the next week and then came back high, you could possibly have gotten that. But what I would tell my students is that we have to look at it for a period of

three or four months, and if at any time during that period it showed that it was changing, we would have to go back and do all the experiments again. I don't think -- self-correcting isn't a term that has any meaning to me.

Q. Okay. Going back to the hypothetical, then, is it a reasonable hypothesis that if you have reading X on day one and the thermometer was calibrated and it was reading true on day ten, that it was reading true on day one? Is that a reasonable hypothesis?

A. If the period is short and if I know something about the thermometer, either its history or I know about that type of thermometer because I used it before and its got a published record of performance by a series of calibration so I could say this company makes a good one, then I would say it's reasonable to assume that for a short period before, it was in calibration.

Q. And you've already indicated you can't recall what type of digital reference thermometer the State Patrol uses?

A. It's Thermister.

Q. So you don't know the brand but you know the type?

A. I looked it up on the web one time. I looked it up in a catalog and saw what it was.

Q. Is that a thermometer that you're familiar with?

A. That type of thermometer, yes. I do not own that specific brand.

Q. And is there an accepted -- you've described numerous times the definition of traceable to standards maintained by NIST.

A. Yes.

Q. And you've testified that that is an accepted definition, at least within the four scientific communities that you and Mr. Stein were discussing?

A. Yes.

Q. Is there an accepted definition just within those four communities of what it means to be directly or indirectly linked to NIST?

A. Yes, there is an accepted understanding.

Q. Now, previously in your testimony, on April 29th, when asked whether you had an understanding of what being traceable to NIST was, you seemed to indicate that traceable has a meaning irrespective of NIST; is that correct?

A. It has an internationally agreed definition.

Q. Okay. So it doesn't necessarily have to go to NIST.

A. It has to go to a national standard.

Q. Okay. So it's to a standard.

A. And NIST and NPL and all the other laboratories agree upon the standard. They're all the same.

MR. SCHWARTZ: Okay. May I have just a moment?

I have nothing further, Your Honor.

JUDGE EILER: Redirect?

R-E-D-I-R-E-C-T E-X-A-M-I-N-A-T-I-O-N

BY MR. STEIN:

Q. You indicated on cross that you have discussed measurements with various chemists; is that true?

JUDGE EILER: Is that a yes?

THE WITNESS: Yes, it is. But I didn't know that was a question, Your Honor.

JUDGE EILER: Counsel, ask another question.

MR. STEIN: Thank you, Your Honor.

Q. In your experience in discussing measurements with various chemists, have you found them to use the same definition of traceability that you've given to the Court here today?

A. Yes.

Q. When you talk to these various chemists, do they have the same definition of calibration as you've given here today?

A. Yes.

Q. Does calibration, by definition, as used by you and the four fields of science that we discussed and any of your discussion with chemists, always includes a statement of uncertainty?

A. Yes.

Q. Okay. And so the definitions that Mr. Schwartz hypothecated and showed you, when they said calibration, they inferred uncertainty, did they not?

MR. SCHWARTZ: Objection. Calls for speculation. There's no possible way that he would know.

JUDGE EILER: I don't think that his testimony was that he inferred that.

MR. STEIN: No, I'm asking him because each of those definitions include the word "calibration." And so -- maybe I can rephrase it.

JUDGE EILER: I think you do need to rephrase that. I don't think you can include the word that they were inferring and ask him if he knew that they were inferring.

Q. When a definition includes the term "calibration," do you then read that definition to include the requirement or the statement of uncertainty?

A. Are you referring specifically to what he asked me to read?

Q. No. I'm going to take it out of that context.

A. Okay.

Q. In your experience and in the four fields of science that we discussed and your discussion with chemists, when you use the term "calibration" in a sentence, do you --

A. What do I include in it?

Q. Yes.

A. Uncertainty.

Q. And is it your experience that chemists and everyone that you've spoken to in your career as scientists in these four fields of chemistry and other fields of science where you may have had experience, all refer -- all include in their definition of calibration a statement of uncertainty?

A. Yes.

MR. SCHWARTZ: Objection, Your Honor, to the form of the question. Move to strike.

JUDGE EILER: Overruled.

MR. STEIN: Thank you.

Q. You indicated with regard to Exhibit L and J, the Bostec and Guth cert, you found it surprising that these measurements would read exactly the same at three levels -- at three temperature levels to the second decimal. Judge Jacke asked you why. You said, in your experience, that that just doesn't happen. How much experience have you had?

A. A lifetime.

Q. So a fair amount of measurements with digital reference thermometers for the second digit past the decimal point?

A. I remember vividly as part of my experience being at the State Patrol lab and watching the digital reference

thermometer constantly change in the second decimal place, constantly changing.

Q. When you see a report such as L or J, does it cause you any concern because it has these exact readings, the 00 and the second decimal.

A. It surprises me, and I think the probability is low. Does it cause me concern? Not if I have confidence in the people running the test and the equipment they use.

Q. Okay. Do you have any confidence in these test results in L and J?

MR. SCHWARTZ: Objection; foundation.

JUDGE EILER: Sustained. I think you have to lay a foundation.

MR. STEIN: All right.

Q. Let me ask you a hypothetical, then, with regard to Guth, which I think is L. If you knew that the individual who was performing this test had stated he does not use a laboratory, that he puts two thermometers into a Guth 34C and waits for them to simultaneously read the same temperature and then certifies the report of calibration, would you have any confidence in that report or data?

A. No, I would not.

Q. Thank you.

Why?

A. That's not an accepted way of doing it.

Q. You have expertise in thermometry, correct?
A. Yes.
Q. I'm going to ask you to do something that you may or may not be able to do. As an engineer and as an expert in thermometry, do you then rely on the metrological community's definitions?
A. Yes.
Q. And in your opinion, do other scientists in the various fields that you're familiar with also rely upon the metrological community's definitions?
A. Yes.
Q. Are the metrological community's generally accepted definitions also generally accepted in the fields of science that you are familiar with?
A. Yes.
Q. All right. And that includes bioengineering?
A. Yes.
Q. Fractal engineering?
A. Yes.
Q. Thermometry?
A. Yes.
Q. Engineering?
A. Yes.
Q. Anything else?
A. You've covered it all.

Q. Okay. With regard to digital thermometers, do they vary in their accuracy and precision over time?

A. They may.

Q. Do they go up sometimes in their readings?

A. I can't predict what they do.

Q. No, no, no.

My question is, in your experience, over time, do they sometimes tend to read higher?

MR. SCHWARTZ: Objection. The witness has already indicated that he couldn't answer that question.

MR. STEIN: I rephrased the question. It's a new question.

JUDGE EILER: I think that he did rephrase that.

So overruled at this point.

Q. Over time, in your experience, a digital thermometer such as the Thermister that you're familiar that the Washington State Patrol uses, over time, do they sometimes tend to read higher?

A. Yes.

Q. Do they sometimes tend to read lower?

A. Yes.

Q. Do they sometimes get closer to accuracy and precision over time?

A. Yes.

Q. And sometimes get less close to accuracy in

precision over time?

A. Yes.

MR. STEIN: Nothing further, Your Honor.

JUDGE EILER: Do you have any recross? This is it.

R-E-C-R-O-S-S E-X-A-M-I-N-A-T-I-O-N

BY MR. SCHWARTZ:

Q. Just -- Dr. Emery, one question. In the expertise areas that Mr. Stein talked about in terms of their acceptance of metrology definitions and whatnot, it appears to me that breathe testing and toxicology was not included; is that true?

A. I did not hear him mention those words.

Q. And you're not an expert in those areas?

A. That's correct.

Q. So you don't know whether or not the metrology definitions that we've spent a considerable amount of discussing are generally accepted in those fields. You might have an opinion, but do you know?

A. I do not know.

MR. SCHWARTZ: Thank you.

JUDGE JACKE: I have a question.

At the risk of driving you crazy, I just want to confirm something you said.

You were talking about a hypothetical that

Mr. Schwartz gave you, on day one if you have temperature X, day 10 a thermometer is calibrated and certified per NIST and it's reading true and it's temperature X, and you said a thermometer changes constantly: It could go high; It could go low.

THE WITNESS: Yes.

JUDGE JACKE: And in order for you to be confident in an accurate result, you required a continuing series of tests.

THE WITNESS: Yes.

JUDGE JACKE: Do you believe, given Mr. Schwartz' hypothetical, that that thermometer could have temperature X on day one, temperature Y on day five, and on day ten, temperature X again?

THE WITNESS: Yes.

JUDGE JACKE: All right. Thank you.

MR. STEIN: May I follow up, Your Honor?

JUDGE JACKE: Yes.

Q. Dr. Emery, when you talk about ongoing reliability or tracking of a thermometer's history, in order -- is it your opinion that in order to have -- to be able to go back from calibration at day one, that you must have had a prior calibration within a reasonable period of time, again, an unbroken chain of comparisons from the end user to NIST, if other -- in order to be able to, with confidence, say that

the instrument was traceable prior to the date of the second calibration, I guess? Does any of that make sense to anyone?

A. The more I know about the instrument, the more confident I am about the instrument. So my level of confidence will diminish as you go outside the intervals over which it was calibrated.

Q. Let me just try and do it this way, because I'm not really expressing it well.

We have, March 11th, a series of calibrations back to NIST that you said was adequate, right? And you talked about the -- hypothecated as to a minute before you might reasonably conclude, and ten days before you would want to know some stuff about where that -- and a month before, you'd start to shake. What I'm saying is that in order to be able to, let's say, go back to whether it's '01, '02, or even 11/03, in your opinion, in order to go back from this date and to say that an instrument was, in fact, traceable to standards maintained by NIST, must there be a baseline at which time there was an unbroken chain of calibrations, each stating uncertainty from the end user to NIST?

A. Yes.

Q. And that's what you call a history of the instrument?

MR. SCHWARTZ: Objection; leading.

Q. Is that what you call the history of the instrument?

A. That's what I call a history.

Q. And so you can go this way, but only for so long; is that correct?

A. That is correct.

Q. At some point, you've got to recalibrate, and that's what we were talking now with regard to GMP 11 and Exhibit T, right?

A. Right.

Q. You can't go this way unless you have that baseline back in history, correct?

A. That's correct.

MR. STEIN: Thank you. Nothing further.

JUDGE EILER: Does the State have anything on this issue?

MR. SCHWARTZ: No, Your Honor.

JUDGE EILER: You may step down. Thank you.

THE WITNESS: Thank you, Your Honor

JUDGE EILER: Any further witnesses from the defense?

MR. STEIN: Your Honor, I would like to reserve the right to recall Dr. Logan, and the right to call Mr. Morris if there's any further testimony from the State in rebuttal. I understand Your Honor's ruling, and Your Honor was clear

to --

JUDGE EILER: At this point, you have no further witnesses for your case in chief?

MR. STEIN: Correct.

JUDGE EILER: That's the question.

MR. STEIN: Yes, Your Honor.

JUDGE EILER: Rebuttal?

MR. SCHWARTZ: If I could have 30 seconds, Your honor.

No, Your Honor.

JUDGE EILER: Is the State ready for argument?

MR. SCHWARTZ: Your Honor --

JUDGE EILER: That would be a yes or a no.

JUDGE JACKE: Or a maybe.

MR. SCHWARTZ: I would ask to begin with it after lunch. I don't know -- and obviously -- I think the time line was 20 minutes each.

JUDGE EILER: Ten.

MR. SCHWARTZ: Oh, ten minutes each.

JUDGE EILER: This is the Reader's Digest version.

MR. SCHWARTZ: I would definitely ask to begin -- to take a break now until 12:30, one o'clock, so that we can get our thoughts together for any brief summation.

JUDGE EILER: Is the defense ready?

MR. STEIN: I'm ready. I'll be speaking very

quickly, but I'm ready.

JUDGE EILER: Let's do it after lunch, then. 1:15 back here.

MR. SCHWARTZ: Thank you, Your Honor. Now, there's one matter that we need to discuss, and I don't know whether this was discussed between Mr. Morris and Mr. Stein after our interview, but I anticipate at some point Mr. Morris is going to be sending somebody a bill. I think we were on the telephone for just under a half an hour, about --

MR. STEIN: Well, there's several housekeeping items that I'd like to address to the Court, as well.

JUDGE EILER: Well, the State's opened up a housekeeping item. Let's hear it.

MR. SCHWARTZ: Well, it's the State's position that an interview with a defense expert is required -- or is allowed by the rules, that it is part and parcel of the defense having an expert.

JUDGE JACKE: How much was the bill?

MR. SCHWARTZ: It's $120 an hour. So I don't know whether it's going to be $60 or if he has a minimum. I know that in the past, for depositions, he's had a minimum fee of $300, but that was never discussed with me.

JUDGE EILER: Let's wait till we see the bill.

MR. SCHWARTZ: Okay.

MR. STEIN: And you were entertaining other

housekeeping motions?

Your Honor, some of my work product has been distributed to the State. Dr. Logan and Mr. Schwartz showed me work product this morning. I'd ask it be returned. It came through an individual by the name of Robert Zell, and if you wish to hear additional information on how the State came into possession of my work product, I would be glad to present that, either under oath or by declaration.

JUDGE EILER: The State?

MR. SCHWARTZ: I'm happy to return it.

JUDGE EILER: That answers that question.

MR. STEIN: And all copies, not just what the State has, the State witnesses have it, and I think it's mine.

MR. SCHWARTZ: Well, it depends -- I can't speak for other parties, but to the extent that there are e-mails sent between parties, including Dr. Logan and Sergeant Goldberg, I don't think that's work product anymore. To the extent that the paperwork that I was given this morning includes a draft of a document from Mr. Stein, that's clearly work product, and I'm certainly going to turn it over to him, and I don't think that Dr. Logan or Sergeant Goldberg would have a problem with that either.

MR. STEIN: I would disagree with his characterization. Communications are different and have different --

JUDGE EILER: He referred to something, and then there were e-mails about this something. We're not going to go to the e-mails.

MR. STEIN: No, I understand that. But my point --

JUDGE EILER: He purpose that something we're talking about you get back.

MR. STEIN: Right. And my point is not just from the prosecuting authority but from the other state authorities who have it.

JUDGE EILER: Do the other state authorities have copies of the documents they're getting back? We don't know what they are.

MR. LOGAN: Your Honor, I was sent the material by the e-mail by a third party that Mr. Stein was consulting with that contains what he's characterizing as work product.

JUDGE EILER: And you did excise that document and copy it.

MR. LOGAN: I'd be happy to do whatever the Court directs.

JUDGE EILER: Do you have a copy of it?

MR. RODNEY: Yes, I do, Your Honor.

JUDGE EILER: You'll return it, as well? Is that clear?

MR. RODNEY: Yes.

MR. STEIN: And I just want to have --

JUDGE EILER: It's on the record, Counsel.

MR. STEIN: Yeah, but I want to have it marked for illustrative purposes. May I do that?

MR. SCHWARTZ: I would object.

JUDGE EILER: It's closed. You don't get it marked now.

MR. STEIN: All right.

JUDGE EILER: You asked for it back and you got it.

MR. STEIN: That's fine, Your Honor. We'll document the chain of custody.

MR. SCHWARTZ: 1:30 or 1:15.

JUDGE EILER: Adjourn to 1:15, I believe we said.

MR. STEIN: May we leave all our materials here, Your Honor?

JUDGE EILER: Pardon?

MR. STEIN: May we leave all of our material here?

JUDGE JACKE: At your own peril.

MR. STEIN: Yeah, I know that, but is the courtroom going to be locked?

JUDGE JACKE: We can lock it.

MR. STEIN: That would be nice. Thank you.

JUDGE EILER: We're at recess. The court is in recess.

(Lunch recess was taken from 11:45 a.m. to 1:15 p.m.)

JUDGE CHAPMAN: Now, Counsel, we scheduled this for ten minutes a side for closing arguments. We propose to warn you at three minutes and one minute. Can you try to stay as closely as you can to the timeframe?

MR. SCHWARTZ: And may I reserve -- assuming that I have any of that ten minutes left, may I reserve that for rebuttal?

JUDGE EILER: Well, let's just do ten minutes a side.

MR. SCHWARTZ: Okay.

JUDGE EILER: You got the issues out. Give us your ten minutes.

MR. SCHWARTZ: That's fine. Thank you.

May it please the Court, the initial issue that I raised during my opening statement -- actually, I take that back. It wasn't during opening statements; it was at the conclusion of the State's evidence -- has to do with a question of foundation, and that is an issue that has been raised and litigated in the court's of this state for years -- decades, truly. And the Washington State Supreme Court has made it clear that with regard to foundational challenges with -- dealing with breath tests, the State has the burden of proof by a prima facie level. Once the State has brought forth enough evidence to create the prima facie case, the evidence is admissible, per se. It is admissible,

at least on the foundational level. Any challenges go to the weight, not the admissibility.

It's the State's position that in this matter, the State, by the testimony of Dr. Logan, Sergeant Goldberg, the stipulations and the expected testimony at any trial in any of the various divisions, the breath test text would be able to give lays the proper foundation and meets the prima facie standard. As a result, any challenge that the defense has would go to the weight of the evidence, not its admissibility.

I would urge the Court -- if I had to boil what I would like the Court to look at to one thing, I would ask that the Court read and reread and reread City of Seattle versus Allison. It's the most recent case put forth by the Supreme Court, and it is so closely related to the issues dealing here, it is very instructive. As I indicated during my opening statement, City of Seattle versus Allison was, quote/unquote, the thermometer issue case taken up by the City of Seattle.

I'm going to highlight some of the issues from the Allison case, and the Allison case takes into account years and decades of decisions by the Court of Appeals and Supreme Court of this state dealing with breath testing situations.

At page 80 of the Allison decision, the Court quotes, saying, "The State toxicologist has the delegated

authority to designate proper methods for performing the analysis of a person's blood or breath," cites to RCW. It says, "In forward, this Court observed that," quote, "The legislature has mandated that the analysis of breath or blood is valid if it is performed according to methods approved by the state toxicologist. When the protocols and existing coprovisions are followed, there is sufficient assurance of accuracy and reliability of the test results to allow for general admissibility of the test results."

What's important about that quote? It makes it clear who the Court should look to. The Court should look to Dr. Logan. What did Dr. Logan write? And looking again at Allison, you look at the context in which he wrote it. You look at the Washington State Register for the comments that went along with it. And I believe that Mr. Stein may argued that there is no ambiguity, so you don't look to the register, you don't look to its intent. The Court, during our previous session, indicated you've already found sufficient ambiguity to look to the intent.

I would suggest that in Allison we had a very similar situation, something that on its face did not appear to be ambiguous. The Court found ambiguity and looked to the Washington State Register, looked to the intent. That Court specifically said at page 83, We do not believe that the toxicologist intended to promulgate a rule containing

requirements that are beyond performance abilities of the machine or that require an operator to take steps that are not included in the rule.

We have a very similar situation here.

I hope I did not give the impression that I didn't think that Dr. Emery is an expert. Clearly, he is perhaps preeminent in his field. But what is also clear is he is not the state toxicologist, he has no authority delegated to him by the legislature, and under Ford, that is the test, and he is not a toxicologist; He is not a chemist. He has basically no background in breath testing. The fact that he says that the NIST definition of traceability means X is interesting but it's not dispositive. Why? Because in -- the Court actually asked the question of Dr. Logan. Did Dr. Logan know of this definition at the time when he passed the WAC? And the answer was no. And the Court, Judge Jacke, followed it up, by saying, Could you have had that in mind, then, when you passed the WAC? And the answer was no. So the question becomes, what did Dr. Logan have in mind? And we know what he had in mind because he published it at the same time as the WAC in the Washington State Register, and it was quoted during our previous hearing. There was a comment dealing with the traceability issue --

MR. STEIN: I'm sorry to object, but it is not the legislature or the toxicologist's subjective intent that the

Court has to review. That is a misstatement of the law.

MR. EILER: Mr. Stein, this is closing, please.

MR. STEIN: I understand, Your Honor.

MR. EILER: Mr. Stein, please.

Go ahead.

MR. SCHWARTZ: The uncontroverted testimony by Dr. Logan is that -- and this is the end of that section. It says, The reference thermometer used to certify the mercury-in-glass thermometers used in this program must be compared against a thermometer which has been checked either directly or indirectly against that absolute standard and can thus be, quote/unquote, traced to it. That in a nutshell is the definition of traceability used by Dr. Logan in the context of WAC 448-13-035. It doesn't talk about calibrations. It doesn't talk about uncertainties.

And I don't dispute the fact that Guth and Bostec -- those certifications don't talk about calibrations. They didn't follow procedures that NIST would require, apparently, but they weren't required to. At the time that the protocols were designed, Dr. Logan knew what was going to occur; he knew how it was going to occur. In conjunction with Sergeant Goldberg, they set up this manner of checking the thermometers.

Now, the next question is, in a nutshell, who cares? And Allison addressed that, as well. The ultimate

question for the Court -- and this has been Ford, Strako, Whittenbarger, all through time, has been, Does this affect the tests?

JUDGE CHAPMAN: Three minutes.

MR. SCHWARTZ: The answer to that is no. The uncontroverted testimony of Sergeant Goldberg and Dr. Logan is that this really doesn't affect the breath test. In fact, the thermometers have no bearing on the actual breath sample given by a given defendant.

So the challenge brought forth today by the defendant has nothing to do with the accuracy or the reliability of the breath test, and that is the fundamental question.

I would ask that the Court, in reviewing the exhibits, take a look, not at page 7, which I think was the page testified to by Dr. Emery, but page 6 of Defense Exhibit E. That was the Internet publication allegedly from NIST.

On page 6 there is a question that talks about -- question No. 1 at the very top: What is involved in establishing traceability? And part of that definition coincides with what Dr. Emery testified to. However, it also indicates, in the last line of it: The user of a measurement result is responsible for determining what is adequate to meet their needs. It also says that an internal

measurement assurance program may be quite simple or very complex.

In this case, Dr. Logan testified -- and, again, this was not controverted by any competent testimony -- that this procedure was reasonable in his opinion; that the testing procedures used, maintained by the State Patrol, maintained by ISL, Bostec, Guth, this was a scenario, a timeframe, a chain, if you will, that satisfactorily made sure that the thermometers being used in the simulators were maintaining their accuracy.

JUDGE CHAPMAN: One minute.

MR. SCHWARTZ: Thank you.

MR. STEIN: Thank you, Your Honors, and I appreciate your patience.

JUDGE JACKE: Sit down, please. He's got one minute left.

MR. STEIN: Oh, I'm sorry. I thought you said -- I apologize.

JUDGE CHAPMAN: We'll add another 30 seconds to your time.

MR. SCHWARTZ: That's all right. I -- in conclusion, Your Honors, the bottom line is, A -- the bottom lines are, A, this challenge has nothing to do with the accuracy and reliability of the breath test.

B, Dr. Logan was the only person that you heard

from today and previously who is authorized to promulgate rules, delegated authority by the legislature.

Three, his intent was made clear at the time of the passage of WAC 448-035.

As a result of all those items, I would urge this Court deny the defendant's motion. The issue is truly a red herring in terms of the accuracy and reliability. And while we don't dispute that NIST may, in fact, make certain requirements under their definition of traceability according to Dr. Emery and the specialties that he has, there's no evidence other than what Dr. Logan has said in terms of what his definition was and what the state of toxicology is.

Thank you.

MR. STEIN: Thank you.

In Department of Licensing versus Kennan, the Court addressed this issue: Allison did not have these WACS to deal with. In Allison, the only issue was whether the operator viewed the thermometer, and there were no requirements. And as you have heard from Dr. Logan's own mouth, one of the reasons that he adopted this requirement of 448-13-035, second paragraph, is to avoid arbitrary temperatures in the field. Without a statement of uncertainty that's exactly what you get is arbitrary temperatures, anecdotal, unverified, uncalibrated, unrelated

to the national standard. And that's why it's important, because the external simulator is the only thing under the WACS that verifies the accuracy of the breath test machine in the field at the time that the defendant submits to the breath test. This is the statutory scheme that's been adopted.

Kennan says administrative rules and regulations are interpreted as a whole, giving effect to all the language and harmonizing all the provisions, this Court will not add or subtract from clear language of the statute or regulation even if it believes the legislature -- or in this case the state toxicologist -- intended something else but did not adequately express it. That's the standard. Kennan at 56.

And the intent, if you'll look at 448-13-010 is to inform the public of how this system is going to be administered and to use current scientific standards of the breath testing community. A reference thermometer traceable to standards maintained by NIST is what he required.

He acknowledges on page 33, it's a technical term; it's a phrase of art. He did not know the NIST definition when he adopted it. He did not mean or intend the NIST definition. That's unfortunate. But what I want to point out to you is, in his public comments in the Washington State Registry 0117009 in August of 2001, before 448-13-035

became permanent law, he had addressed a public comment, and he told us this on the stand. The public comment is: Is the term "traceable to standards maintained by NIST" vague? His response: No; it is a common principle in measurement science. And then he goes on to give a truncated version of the definition, completely consistent within the NIST definition, and he adopts measurement science right there.

That is what you look at to determine legislative history of WAC, not the subjective opinions of the employees of the agency. That's the report of proceedings beginning on page 35, line 20, and going to page 36, lines 13 through 18. He used that term: measurement science. He didn't use it here. He did use it here, but, I mean, he used it in his public comment. He used a technical scientific term. He used the technical area of science that is applicable, measurement science, also known as metrology, and he adopted it in the public WAC, and he adopted it in his responses to public comments. An agency's own expression of the meaning of its exercise of power is what you rely on.

And I will quote you to Sunnyside versus Fernandez, 59 Washington App. 578, at 581. Where the Court says, "The Court should give weight to an agency's interpretation of a rule. However, the interpretations given such weight should be from expressions of the agency's legislative and regulatory power and from informal rules of the agencies or

its officers.

In that case, Mr. Predmore, then the director of the tox lab, or under Dr. Rasies, said "His subjective understanding of the agency's intent. And the Court said Mr. Predmore's subjective understanding of the agency's intent is not an agency interpretation.

The Court looks to objective determinations. And in Spokane versus Department of Revenue, Judge -- the unanimous opinion the Court said; the courts look to the technical definition of a technical term of art, not the Webster's, but to the technical definition. That's Spokane 452, and that's Supreme Court unanimous decision.

So what we are saying is that, from the floors of the tox lab to the rafters of the United States Congress, the consistent interpretation of this language, "traceable to standards maintained by NIST," is what you heard from Dr. Logan. It's the law. Article 1, Section 1, paragraph 8 of the United States Constitution, USCA Title 15, Department of Commerce: NIST is charged with a duty of establishing the standards and the definitions and the policies so that we have uniform weights and measures throughout the United States.

Dr. Logan's own words tell us why his interpretation, which I never heard the definition of, don't work here. He has told us in his own words that uncertainty

is comprised of standard deviation, confidence interval or confidence factor, all meaning the same thing. And if you have a reading and you say it's the first confidence interval, then you know that 66 percent of the times you can replicate it. Second confidence interval or standard deviation, 95. Third, 99.

If you have no confidence interval, no statement of uncertainty, no standard deviation, you have no scientific reading. It is meaningless. It is anecdotal, and all you know is that one in a million readings results in this observation.

The State has offered no response, no alternative definition of traceability. And nowhere does Dr. Logan define his term. He has said: NIST definition is more than I intended and this Bosman thing looks okay.

JUDGE CHAPMAN: Three minutes, Mr. Stein.

MR. STEIN: Three minutes. Thank you.

Similarly, he has said: I believe if you were to go out and survey people in the breath testing area, they would agree with my definition. Which is not defined. And he was asked artfully by counsel, Do you believe that your definition would be acceptable in the breath testing community at large? This is the report of proceedings at 58.

The community at large is not the legal issue that

we have to look at here. If that's going to be the issue, then it has to be generally accepted amongst experts in the field because, if they are promulgating a new and novel definition of traceability, then they've got to meet prior **standard and Copeland, and they don't.**

So, please, don't be taken in or misled by what has been said. There has been no assertion of a definition that's generally accepted amongst experts or scientists within the field of breath testing. All you have is the general principle that the universal, global, United States standard and definition for this principle is the one that NIST gives. The breath testing community at large is salesmen and operators, manufacturer's reps and police. It does not mean the scientists within the breath test field. They relied on people like Mr. Bosman, who has no degree in science, does not use a laboratory, and takes a single observation in reading to try and certify the calibration of this instrument, and he was unable to do it.

If you look at the Randhawa transcript, you'll see at page 17: "Do you employ the standards of NIST in certifying a thermometer when you do the comparison between a Bostec thermometer and the digital reference thermometer supplied by you -- to you by the Washington State Patrol?

"No. We don't certify them. We're not a lab. Naturally, we cannot do that."

JUDGE CHAPMAN: One minute.

MR. STEIN: Thank you.

All right. So the only certification of calibration you have is March 11, '03, which everyone agrees is a proper certification of standards maintained by NIST, and it meets the universal, global and United States guidelines for calibration, and there is no evidence that it can be taken back to the time of Mr. Jagla's report -- or the time of his breath test, nor the time of the stipulated annual certification of the reference thermometer.

That's it.

JUDGE CHAPMAN: Thank you.

JUDGE JACKE: Thank you very much, Counsel.

MR. ROBBINS: Your Honor, I don't have any extra copies but I do have a copy of the Spokane -- you probably don't have enough reading as of yet.

JUDGE EILER: As much as I'm dying to have copies of more reading material --

MR. ROBBINS: Well, the Spokane case would be important.

JUDGE EILER: I think that we have the citations.

MR. STEIN: I have Fernandez versus Sunnyside.

MR. ROBBINS: I gave them copies of that.

JUDGE CHAPMAN: We'll be at recess.

MR. STEIN: Thank you.

MR. SCHWARTZ: Thank you, Your Honor.

C E R T I F I C A T E

STATE OF WASHINGTON)

) ss.

COUNTY OF KING)

I, the undersigned Notary Public in and for the State of Washington, do hereby certify that:

I am not a relative or employee or counsel of any of the parties to said action, or a relative or employee of any such attorney or counsel, and that I am not financially interested in the said action or the outcome thereof;

The witness, before examination, was duly sworn to testify the truth, the whole truth, and nothing but the truth; and

The transcript attached thereto is a true record of the proceedings.

In witness whereof, I have hereunto set my hand and affixed my seal this 12TH day of June, 2003.

Johanna Chapin

JOHANNA CHAPIN

CSR No. CH-AP-IJ-334MP

Notary Public in and for the State of Washington, residing at Seattle.