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STATE OF ILLINOIS )
                          SS:
    COUNTY OF DU PAGE )
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      IN THE CIRCUIT COURT OF DU PAGE COUNTY
    FOR THE EIGHTEENTH JUDICIAL CIRCUIT OF ILLINOIS
    THE PEOPLE OF THE STATE
5
                                     ORIGINAL
     OF ILLINOIS,
6
                 Plaintiff,
7
                                     No. 04 DT 2848
            vs.
     KELLY CRAWFORD,
 9
                 Defendant.
1.0
                     REPORT OF PROCEEDINGS had
11
     at the hearing of the above-entitled cause
12
     before the Hon. KENNETH TORLUEMKE, recorded on
13
     the DuPage County recording system, DuPage
14
     County, Ill., transcribed by Sandra Gorajczyk,
15
     the 27th day of January, A.D. 2006.
16
     PRESENT:
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         MS. LISA MADIGAN, Attorney General for the State of Illinois, by
18
         MS. DEBORAH SIMPSON and MR. KHANG TRINH,
19
           Assistant Attorney Generals; and
         MR. MICHAEL O'DONNELL, Assistant State's
20
           Attorney,
21
               appeared on behalf of The People of
               the State of Illinois.
22
23
               Sandra Gorajczyk 084-000455
                   Wheaton, IL 60187
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1 PRESE	
	MR. DONALD RAMSELL, appeared on behalf of the Defendant
3 4	appeared on South
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1	* * * "
. 2	(WHEREUPON, the oath was
3	duly administered to
4	the witness by the
5	Clerk.)
5- 6	THE COURT: All right. Good afternoon sir.
7	All right. You may proceed.
8	JOHN EVANS
9	called as a witness on behalf of the People of
10	the State of Illinois, having been first duly
11	sworn, was examined and testified as follows:
12	CROSS EXAMINATION
13	By: Mr. Ramsell
14	Q Mr. Evans, during your previous
15	testimony I believe one of the statements you
16	made was with respect to when a machine is out of
17	calibration or an instrument the EC/IR is out
1.8	of calibration. Do you remember that topic at
19	all?
20	A I remember discussing the topic. I
21	can't remember specific questions.
22	MR. RAMSELL: Okay. Let me try and draw
23	you to where I'm trying to arrive at then.
24	BY MR. RAMSELL:

- 1 Q There -- you had a -- you were making a
- discussion about when a machine falls out of
- 3 calibration how -- how it can be re-calibrated,
- 4 and my question to you is, if -- let's say if a
- 5 machine is certified as accurate on the first day
- 6 of the month and then on the last day of the
- 7 month the accuracy check shows that the machine
 - 8 is greater than .01 off of the gas, dry gas
 - 9 simulator --
- 10 A Yeah.
- 11 Q -- what is your opinion about whether
- or not that machine was working accurately within
- 13 that one month?
- 14 A I can only say that the beginning of
- 15 the period during the -- the original
- 16 certification test was carried out, and it was
- 17 within the parameters required, it was accurate.
- I cannot estimate or define when it
- 19 went out of calibration. It's -- it's not
- 20 possible for me to do that.
- 21 MR. RAMSELL: Okay.
- 22 BY MR. RAMSELL:
- 23 Q Would you at least agree that -- the
- 24 fact that something -- that that machine was out

- 1 of calibration would be a fact that would be of
- 2 some value to experts on breath testing?
- 3 A Um, I think it's -- it's to both
- 4 experts and the Court, it would be a statement
- 5 that the instrument is -- for whatever reason --
- 6 over a period of time is no longer reading
- 7 accurately.
 - 8 The reasons why I could not explain any
 - 9 more than that without examination of the
- 10 instrument to determine what had changed.
- 11 MR. RAMSELL: Okay.
- 12 BY MR. RAMSELL:
- 13 Q Well, you're an expert to some degree
- 14 on breath testing --
- 15 A Uh-huh.
- 16 Q -- instruments; right?
- 17 A Yes, to a degree.
- 18 MR. RAMSELL: Okay.
- 19 BY MR. RAMSELL:
- 20 Q Would you consider the fact that a
- 21 machine has or has not fallen out of calibration
- 22 to be something you would want to know if you
- 23 were going to testify about the validity of that
- 24 instrument's results?

- 1 A Certainly. The accuracy -- the matter
- of record of the accuracy of the instrument
- through certification tests or whatever method is
- 4 -- is of interest to the Court and to the
- 5 experts. It's a reasonable statement.
- 6 MR. RAMSELL: Okay.
- 7 BY MR. RAMSELL:
- 8 Q Now, when a calibration or a --
- 9 let's -- let's say that -- let's say the machine
- 10 is somehow out of calibration and the -- the
- 11 qualified person were to perform a
- 12 re-calibration, if I could just choose that
- 13 word --
- 14 A Uh-huh.
- 15 Q -- for the sake of argument, the memory
- of the EC/IR will record the fact that a
- 17 calibration event has occurred?
- 18 A Yes.
- 19 Q And it -- that would be retrievable
- 20 from the internal memory, assuming all other
- 21 aspects of the machine are working correctly?
- 22 A That's correct.
- 23 Q And that would be retrievable through
- 24 what I refer to as a Shift F5 function of

- 1 retrieval?
- 2 A Correct.
- 3 MR. RAMSELL: Okay.
- 4 BY MR. RAMSELL:
- 5 Q Now, in Illinois the software version
- 6 for the Intox EC/IR or versions, if they're in
- 7 the plural, that is used for the State of
- 8 Illinois program has a mask on function; correct?
- 9 A There are a mask on -- there are
- 10 several masks, if you don't mind me explaining
- 11 briefly.
- 12 Q Well, are you familiar with the phrase
- 13 mask on as it would be found in the F-11 --
- 14 A Yes.
- Q -- diagnostics?
- 16 A There's a mask on.
- 17 Q And one of the functions that the mask
- 18 on performs is that if an air blank result was in
- 19 fact .003, by having the mask on, the air blank
- will still show and print as .000?
- 21 A Correct.
- Q Is that a fair statement?
- 23 A Correct.
- 24 THE COURT: Mr. Ramsell, if you can just

- lask him or if I can ask him to define for me what
- 2 the mask on is, what it -- it actually is --
- 3 THE WITNESS: Okay.
- 4 THE COURT: -- what the function of that
- 5 is.
- 6 THE WITNESS: This -- when you do the air
- 7 blank, which is the purging of the system in
- 8 between samples prior to a subject sample, prior
- 9 to an accuracy check, prior to any sample, the
- instrument purges itself from alcohol.
- 11 And to determine that there's zero
- 12 alcohol left in the residual alcohol left in the
- 13 system, we carry out what we call a blank sample.
- 14 We actually draw from within a sample
- of the air from within the sample chamber, which
- 16 is the infrared chamber and analyze it with a
- 17 fuel cell sensor, which is that primary sensor.
- 18 If that reading is greater than 003,
- 19 we abort that accuracy check, that air blank.
- 20 We say there's a problem.
- 21 In fact, what we do is we go back and
- 22 re-try three consecutive times, and that's the
- 23 air blank.
- 24 THE COURT: When you say we, this is

- 1 not --
- THE WITNESS: The instrument. I'm sorry.
- 3 THE COURT: Right; okay.
- 4 THE WITNESS: The instrument will
- 5 automatically purge again and say -- and will
- 6 take another sample.
- 7 The -- the -- the design of that is you
- 8 have a person with alcohol in their breath.
- 9 They may be holding the breath tube and he's
- 10 breathing alcohol in the air, and it may be drawn
- 11 -- being drawn through the system.
- And it's -- it's designed to ensure
- 13 that there's zero sample in there, but the sample
- 14 that the subject then blows out constantly.
- 15 After three attempts, if they do not
- 16 establish that there's zero air in there and when
- 17 -- Mr. Ramsell has made the point that we accept
- up to 003 as being alcohol free, and the
- 19 instrument will then abort the test on an ambient
- 20 failure.
- 21 THE COURT: All right. Thank you,
- 22 Mr. Evans. Mr. Ramsell, you may continue.
- MR. RAMSELL: Thank you.
- 24 BY MR. RAMSELL:

- 1 Q The EC/IR software for Illinois also
- 2 has a mouth alcohol minimum IR output?
- 3 A Correct.
- Q Can you tell the Judge what that means?
- 5 A The instrument is looking for a minimum
- 6 amount of alcohol being in the system before it
- 7 starts looking for -- for mouth alcohol.
- 8 You -- if you've got an insignificant
- 9 amount of alcohol in the system, you're below the
- 10 legal limit, so the design is there to not look
- 11 for mouth alcohol unless there's a significant
- 12 measurable amount of alcohol in the system.
- So we have a minimum threshold of which
- 14 the IR sensor must detect before it will say
- there's -- there is significant alcohol present.
- Now we will now look for the mouth
- 17 alcohol condition, and it's related to the
- 18 infrared sensor, not to the fuel cell sensor.
- 19 So it -- it actually -- the infrared
- 20 sensor monitors the sample that is blown -- being
- 21 blown through the system by the subject to ensure
- 22 that mouth alcohol is not present, and that's the
- 23 primary role for the infrared detector in the
- 24 EC/IR system. So it's a minimum threshold.

- 1 We're saying that unless this alcohol
- 2 level is above this level, we're not going to
- 3 look for mouth alcohol.
- 4 Q Now, if the change in the ethanol IR
- 5 output is less than two AD counts, then no mouth
- 6 alcohol will be flagged?
- 7 A I'm sorry.
- 8 Q Is that a fair statement?
- 9 A Could you repeat that again?
- 10 Q If the change in the ethanol IR output
- 11 is less than two AD counts, A as a letter, D as a
- 12 letter --
- 13 A That's A to D counts, on all to
- 14 digital, but the figure two, that's incorrect.
- MR. RAMSELL: Okay.
- 16 BY MR. RAMSELL:
- 17 Q Well, let me read this again --
- 18 A Fine.
- 19 Q -- so the record is clear.
- 20 A Uh-huh.
- 21 Q If the change in the ethanol IR output
- 22 is less than two A to D counts, then no mouth
- 23 alcohol will be flagged. Is that a correct
- 24 statement of how the Illinois EC/IR software is

- 1 set up?
- 2 A That's incorrect.
- 3 Q What would be a correct statement on
- 4 that subject?
- 5 A Um, the -- I'm sorry. I need to get
- 6 -- explain again.
- 7 The IR mouth alcohol detection is based
- 8 on several parameters, one of which is that
- 9 minimum A to D minimum output.
- 10 The other one is what we called
- 11 variance --
- 12 Q Okay.
- 13 A -- which is --
- 14 Q Just stay with the minimum for a
- 15 moment. I'm going to go to variance.
- 16 A The two A to D is not a figure that I'm
- 17 familiar with in any of our systems, one.
- 18 And if my memory serves me correct and
- 19 I have to check on this, the only one I'm aware
- of is 2000, which is the variance figure.
- MR. RAMSELL: All right. Well, let's go
- 22 back then.
- 23 BY MR. RAMSELL:
- Q Does the Illinois software for the

- 1 EC/IR have any program -- programming in it that
- 2 holds that if the change in the ethanol IR output
- 3 is less than a certain amount, then no mouth
- 4 alcohol will be flagged?
- 5 A That's correct. That's what we just
- 6 discussed.
- 7 MS. SIMPSON: Your Honor, I'm going to
- 8 object to this line of questioning.
- 9 When he started asking about the
- 10 certifications and the registering, that's
- 11 related -- that's to the issue before the Court.
- Now he's going into whether this
- 13 instrument should have been approved by the
- 14 National Board, and it's already been approved by
- 15 them --
- 16 THE COURT: Well, he hasn't --
- MS. SIMPSON: -- and he's not entitled to
- 18 question that.
- 19 THE COURT: -- asked that question yet,
- 20 Miss Simpson. I --
- MS. SIMPSON: Well, the questions that
- 22 he's getting at --
- MR. RAMSELL: For the --
- 24 THE COURT: Hold on --

- 1 MR. RAMSELL: I'm --
- THE COURT: Don, hold on. Go ahead and
- 3 finish the objection.
- 4 MS. SIMPSON: It appears that what he's
- 5 doing is questioning the numbers that the
- 6 instrument is set at to make its determinations,
- 7 and that is clearly -- goes to whether or not the
- 8 instrument itself is doing a proper -- should
- 9 have been qualified or should have been approved
- 10 by the department.
- 11 We don't --
- 12 THE COURT: Well, but --
- MS. SIMPSON: -- have any control over
- 14 this.
- THE COURT: -- if that's true, then it's
- 16 highly relevant, if that's true, and I think
- 17 that's -- as you state the objection, calling
- 18 into question whether it should even be approved
- 19 if it doesn't perform a certain function as
- 20 Mr. Evans expects the function to be performed.
- 21 MS. SIMPSON: But --
- THE COURT: But one, he hasn't even stated
- 23 that in his questions to Mr. Evans, he's --
- 24 regarding the particular function, what the

- 1 threshold is for that -- for that being dealt
- with by the machine, so overruled.
- 3 Do you want -- do you understand the
- 4 question, Mr. Evans?
- 5 THE WITNESS: Yes, I do understand the
- 6 question.
- 7 THE COURT: All right. You may answer the
- 8 question.
- THE WITNESS: I'm happy to answer as long
- 10 as the Court wishes me to so --
- 11 THE COURT: Yes, sir.
- 12 THE WITNESS: Of course, yes.
- 3 So I'm sorry, Mr. Ramsell. Could you
- 14 repeat your question?
- THE COURT: Do you remember it or do you
- 16 want it read back?
- 17 THE WITNESS: I think --
- 18 MR. RAMSELL: I am totally lost. I don't
- 19 remember what I asked.
- 20 THE WITNESS: I -- I think you asked again
- 21 is there a minimum ethanol delta required on the
- 22 EC/IR 1 in Illinois before it starts looking for
- 23 mouth alcohol.
- MR. RAMSELL: Okay. Yeah.

- 1 THE WITNESS: I answered that question
- 2 already yes.
- 3 MR. RAMSELL: Let me -- let me ask the
- 4 question --
- 5 THE COURT: That's my recollection as well.
- 6 Go ahead.
- 7 MR. RAMSELL: Thank you for refreshing the
- 8 non-witness. All right.
- 9 BY MR. RAMSELL:
- 10 Q If there is a change in the ethanol IR
- output, is the machine set up to a certain
- 12 parameter before mouth alcohol will be flagged?
- 13 A Yes. That's that minimum threshold,
- 14 minimum ethanol delta figure you -- you spoke of
- 15 just a few minutes ago.
- 16 Q So can -- can some mouth alcohol be
- 17 introduced into the EC/IR without the machine
- 18 aborting the test result?
- 19 A A very low level of alcohol, but the
- 20 design is such that it would be typically below a
- 21 050 or even less.
- 22 MR. RAMSELL: Okay.
- 23 BY MR. RAMSELL:
- Q Now -- and this information, these

- parameters if you will, are available through
- 2 accessing the internal programming inside the
- 3 device?
- 4 A We call it the settings.
- 5 MR. RAMSELL: Right.
- 6 BY MR. RAMSELL:
- 7 Q So you would agree with me?
- 8 A Yes.
- 9 MR. RAMSELL: Okay.
- 10 THE COURT: Well, I need to hear him say
- 11 yes or no.
- 12 THE WITNESS: I'm sorry. Yes.
- 13 THE COURT: Do you --
- 14 THE WITNESS: We call them the settings.
- 15 THE COURT: -- agree, right.
- 16 THE WITNESS: You can access certain
- 17 parameters.
- 18 THE COURT: Right. Okay.
- 19 BY MR. RAMSELL:
- 20 Q You told us that there are four
- 21 critical temperatures --
- 22 A Correct.
- 23 Q -- in the operation of the EC/IR
- 24 A Uh-huh.

- 1 Q Do you remember that subject generally?
- 2 A I do.
- 3 MR. RAMSELL: All right.
- 4 BY MR. RAMSELL:
- One of them you mentioned was the
- 6 temperature of the fuel cell?
- 7 A Correct.
- 8 Q Do you recall that?
- 9 A Yes.
- 10 Q And the pre -- the perfect temperature
- of the fuel cell would be 36 degrees centigrade?
- 12 A The range is 35 to 37 with target 36.
- 13 MR. RAMSELL: Right.
- 14 BY MR. RAMSELL:

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- 15 Q The fuel cell temperature, if it
- 16 dropped to 35 degrees -- excuse me -- in order
- 17 for the machine -- the instrument -- I
- 18 will gratiate (sic) you with the word instrument.
- 19 THE WITNESS: Thank you.
- 20 BY MR. RAMSELL:
- Q In order for the --
- MS. SIMPSON: Objection to that comment.
- MR. RAMSELL: -- instrument to abort --
- 24 THE COURT: It's sustained. It will be

- 1 stricken.
- 2 BY MR. RAMSELL:
- 3 Q In order for the instrument to tell the
- 4 operator that there's a problem with the
- 5 temperature of the fuel cell, the instrument
- 6 would have -- fuel cell temperature would have to
- 7 fall below 35 degrees centigrade?
- 8 A Correct.
- 9 Q Is that a fair statement?
- 10 A Correct.
- 11 Q And on -- on the opposite end in order
- 12 for it to tell an operator that there is a
- 13 problem with the temperature of the fuel cell,
- 14 the fuel cell temperature would have to exceed 37
- 15 degrees centigrade. Is that a fair statement?
- 16 A That's a fair statement.
- 17 Q And you also told us that one degree
- 18 centigrade variance would affect the true result
- 19 by approximately six percent.
- 20 A I did not say that.
- 21 Q Is there a recognized scientific
- 22 formula that tells us a deviation of a true
- 23 breath alcohol result will occur based on a
- 24 change of the temperature of the breath?

- 1 A May I --
- 2 THE COURT: Yes, sir.
- 3 THE WITNESS: I need to explain this to
- 4 Mr. Ramsell's --
- 5 MR. RAMSELL: I -- my question is very
- 6 direct.
- 7 THE COURT: Right.
- 8 BY MR. RAMSELL:
- 9 Q You're going to answer my question;
- 10 right?
- 11 A I'm answering --
- 12 THE COURT: Stop.
- 13 THE WITNESS: Sorry.
- 14 THE COURT: Both parties stop. First of
- 15 all, Mr. Evans, proffer your explanation. Then,
- 16 Mr. Ramsell, if you need further clarification or
- 17 you want to restate or re-examine the witness,
- 18 but for the benefit of the Court, I certainly
- 19 want Mr. Evans to explain to me how he is to
- 20 answer your question if he has a relevant
- 21 explanation.
- 22 So Mr. Evans, explain yourself and then
- 23 wait for the next question. Okay?
- 24 THE WITNESS: Mr. Ramsell questioned the

- one degree centigrade having a six percent change
- 2 in alcohol is associated with Henry's Law.
- 3 And Henry's Law is the law that covers
- 4 the -- the relationship between the alcohol in
- 5 the blood and then the alcohol in the expired
- 6 breath or the alveolar.
- 7 THE COURT: We talked about this earlier,
- 8 though, did we not? Didn't -- I thought --
- 9 THE WITNESS: We did talk this earlier --
- 10 THE COURT: Right.
- 11 THE WITNESS: -- but -- but what is
- 12 important and -- and I think this is where the
- 13 incorrect assumption has come -- is that that law
- 14 covers the human.
- 15 It relates to a person who is at 37
- 16 degrees centigrade is in a cold body temperature,
- and if he goes up by one degree, the ethanol
- 18 released from the blood into the air will go up
- 19 by six percent.
- 20 It does not relate or have any
- 21 relationship of any of the temperatures in the
- 22 instrument.
- The instrument is covered by a
- 24 different law, which is the -- the gas law, the

- 1 generalized gas law.
- 2 So the six percent per degree
- 3 centigrade relates to the human subject's vapor.
- 4 When it leaves the human and enters the
- 5 machine, it is no longer related to that law. Its
- 6 value is no longer dominated by that law.
- 7 It's -- it's a -- it's a -- there are
- 8 two separate systems.
- 9 There's the human system that delivers
- 10 a vapor at its mouth to the instrument, and then
- 11 there is the instrument system which then takes
- 12 and analyzes it.
- One is covered by Henry's Law. The
- other is covered by the gas law, which is why I
- 15 can say no, the one percent change in the fuel
- 16 cell sensor temperature does not have a six
- 17 percent effect --
- 18 THE COURT: You mean one degree?
- 19 THE WITNESS: Or one degree.
- 20 THE COURT: One degree, not one percent?
- THE WITNESS: One degree centigrade change
- 22 of the fuel cell temperature, does not have a six
- 23 percent change of the ethanol value read.
- THE COURT: What -- what change if any does

- 1 it have then, cause the optimum is 36. The
- 2 variance is 35 to 37.
- 3 THE WITNESS: Correct.
- 4 THE COURT: Right?
- 5 So if it's not -- if it's not within
- 6 that temperature range, the fuel cell, then what
- 7 -- what is -- is going to --
- 8 THE WITNESS: It's --
- 9 THE COURT: -- happen?
- 10 THE WITNESS: -- negligible. If I put it
- into perspective, it's three degrees over 230
- 12 degrees.
- The temperature relationship is in
- 14 absolute degrees calabin, so there's
- 15 273 degrees calabin to zero degrees calabin.
- 16 Then you add to that the 20 degrees
- 17 for ambient temperature. So we're talking about
- 18 293 degrees ambient temperature.
- 19 You then have the variation of three
- 20 degrees and 290, so those three degrees are
- 21 equivalent of somewhat less than one percent or
- 22 around one percent. Now, that's the gas law
- 23 relationship.
- 24 In terms of the fuel cell instrument

- itself, it is -- it is common knowledge that the
- temperature coefficient of a fuel cell is stable
- over a range of temperatures, typically between
- 4 15 and 35 degrees centigrade.
- 5 THE COURT: How -- how is a person to know,
- 6 either operator or examiner, that the fuel cell
- 7 temperature is -- is varying above or below the
- 8 optimal amounts?
- 9 How -- how is that determined?
- 10 THE WITNESS: The -- the instrument
- 11 determines that, and the heaters which control
- 12 those -- there are individual controlled heaters
- 13 for the fuel cell for the infrared.
- 14 They're all part of the system which is
- 15 tested and approved by the State and also tested
- 16 and approved by the Federal government.
- 17 THE COURT: Now, is that going to be stored
- 18 in the internal data if the machine makes that
- 19 adjustment?
- 20 THE WITNESS: The -- the parameters that --
- 21 the minimum and maximum operating temperatures
- 22 are in the instrument. They're in the settings.
- We do actually change them for certain
- 24 applications, for certain different instruments,

- 1 which is why when this question came up
- previously -- because I did not have exactly
- 3 those figures in mind.
- I used the word typically, because they
- 5 would -- there are no more than typically three
- 6 or four degrees operating range over which these
- 7 heaters operate.
- 8 The fuel cell, being the primary
- 9 sensor, is quite a tight parameter.
- 10 THE COURT: All right. Thank you,
- 11 Mr. Evans.
- 12 THE WITNESS: Thank you.
- THE COURT: Mr. Ramsell, you may continue.
- MR. RAMSELL: Do you remember my question?
- 15 Let me repeat it.
- 16 BY MR. RAMSELL:
- 17 Q Is there a scientific principle that
- 18 says there's a variance between a true breath
- 19 alcohol result and a reported result based on a
- 20 change of breath temperature?
- 21 A Breath temperature, yes.
- MR. RAMSELL: That's what I asked you before
- 23 and the short answer is yes.
- 24 THE COURT: You --

- 1 MR. RAMSELL: Move to strike all the other
- 2 as non-responsive.
- 3 THE COURT: -- have to say yes. You have
- 4 to say yes again. Right, Mr. Evans?
- 5 THE WITNESS: Yes.
- 6 THE COURT: You're agreeing with
- 7 Mr. Ramsell. Right.
- 8 MR. RAMSELL: Okay. And the short answer
- 9 -- then I move to strike everything else as
- 10 virtually non-responsive and unnecessary to what
- 11 I had asked, other than he wanted to make sure
- 12 that I didn't mislead you somehow and my --
- 13 THE COURT: Well, wait, wait --
- 14 MR. RAMSELL: -- question was perfectly
- 15 phrased.
- 16 THE COURT: -- wait. I don't -- I don't
- 17 take it as Mr. Evans trying to make sure that you
- 18 or anybody else is misleading me.
- 19 I take it as his response to my
- 20 invitation to tell me, and as the Trier of Fact I
- 21 consider it more relevant than you may.
- Your question is more focused than --
- 23 than my desire to know more about the machine in
- 24 the context of the discovery request, to find out

- 1 if there are any -- any factors, one, that are
- 2 recorded that affect the accuracy of the machine,
- 3 the machine's ability for its designated tasks
- 4 and a limited focus question is not going to
- 5 always answer that query that the Court may have.
- 6 So when I ask Mr. Evans to expound on
- 7 that information, it is -- it is not responsive
- 8 to your question but it's essential for the Court
- 9 to differentiate factors that have some validity
- 10 that may affect this machine or discoverable
- 11 information that is being requested since -- as
- 12 Mr. Evans indicated to me -- some of these
- 13 functions, if they are performed, will in fact be
- on the Shift 5 information.
- So it's -- it's for purposes moreso
- 16 than the Court.
- So in that context technically the --
- 18 the answer is non-responsive, but I find it is
- 19 absolutely essential, and in the spirit of this
- 20 hearing since this hearing really has taken --
- 21 taken, I think, more in the context of a Frye
- 22 type hearing on the accuracy of the reliability
- 23 of this particular machine, the safeguards, the
- 24 proper safeguards that the expert is tendering

- 1 are built into the machine.
- 2 The defense's request and questioning
- 3 from the expert, much of which he's agreed with,
- 4 is there's no harm in having that information,
- 5 that he doesn't believe maybe necessarily impact
- 6 that other parties may believe by having that
- 7 information.
- 8 But he does not disagree with that, so
- 9 to that -- to that extent in terms of the Court
- 10 and for the parties request to find out
- 11 discoverable information and the relevancy of
- 12 that information, the hearing has gone, I think,
- 13 quite, quite profoundly into the machine itself,
- 14 the absolute function of the machine as testified
- 15 to by -- and put in evidence by the -- not only
- 16 the defenses expert but by Mr. Evans as well.
- 17 So those types of objections just
- 18 are -- I guess as a guide map to both sides -- if
- 19 -- if I do that and if I stop a question or
- 20 ask -- ask the expert whether it's Mr. Evans or
- 21 anybody else to expound, it's going to be for
- 22 that purpose.
- 23 So the record should reflect that as
- 24 well. All right.

- Mr. Ramsell, next question.
- 2 MR. RAMSELL: Thank you.
- 3 BY MR. RAMSELL:
- 4 Q Are you familiar with the term M/F as
- 5 it would relate to an EC/IR?
- 6 A No; not -- I can't --
- 7 Q Did the State of Illinois ever in
- 8 writing request a software revision to your
- 9 company asking that the software be revised to
- 10 remove the indication of a term M/F?
- 11 A Not that I know.
- MR. RAMSELL: Okay.
- 13 BY MR. RAMSELL:
- 14 Q In any of the soft -- in any EC/IR does
- 15 the term M/F -- is it ever used to report a type
- 16 of malfunction?
- 17 THE COURT: Well, I think he said he
- 18 didn't know what M/F meant and --
- 19 THE WITNESS: I'm sorry. I'm actually
- 20 not familiar with the term M/F.
- 21 THE COURT: Mr. Evans, come on.
- 22 THE WITNESS: Sorry.
- THE COURT: If I say something, wait -- wait
- 24 until either Mr. Ramsell or if I ask another

- 1 question. Do you understand the reference M/F?
- 2 THE WITNESS: I do not.
- 3 THE COURT: All right. So then it's not
- 4 relevant, Mr. Ramsell, unless he tells me he
- 5 understands what you're talking about.
- 6 MR. RAMSELL: Well, that's why I wanted to
- 7 get a blank statement, if I could.
- 8 BY MR. RAMSELL:
- 9 Q In any Intox EC/IR have you ever seen
- 10 the term M/F used for the purpose of
- 11 malfunctions?
- 12 A I can't remember seeing it.
- MR. RAMSELL: Okay.
- 14 BY MR. RAMSELL:
- 15 Q Now, the -- the internal settings of
- 16 the instrument can be obtained through access of
- each machine if one has the passwords, et cetera;
- 18 right?
- 19 A Correct.
- 20 MR. RAMSELL: And you mentioned the four
- 21 critical breath temperatures. We've already
- 22 talked about the variations set for fuel cell
- 23 temperature.
- 24 BY MR. RAMSELL:

- 1 Q Is the infrared -- does that also have
- 2 a variation set -- setting of 44 degrees
- 3 centigrade to as high as 46 degrees centigrade?
- 4 A Yes.
- 5 O And if there's a variation of
- 6 temperature for the infrared within that 44 to 46
- 7 degree centigrade range, the operator would not
- 8 know that the temperature had varied off of 45
- 9 degrees. Is that a fair statement?
- 10 A Correct.
- 11 Q One of the other critical temperatures
- 12 you mentioned was for the breath hose?
- A Breath tube, yes.
- 14 Q And is the settings for the EC/IR in
- 15 Illinois set for breath hose parameters from 40
- degree centigrade to 44 degrees centigrade?
- 17 A I believe that's correct.
- 18 Q And if there was a variation of
- 19 temperature within the 40 to 44 degree
- 20 centigrade, would an operator know?
- 21 A No.
- 22 Q And PL, what does that stand for?
- 23 A Pressure line.
- 24 Q How --

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1 A It's a pressure line. It's an internal
2 heated gas line.
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- 3 MR. RAMSELL: All right.
- 4 BY MR. RAMSELL:
- 5 Q And again, if there was a variation in
- 6 the pressure line temperature from 40 degrees
- 7 centigrade to as high as 44 degrees centigrade,
- 8 would the operator of that instrument know?
- 9 A No.
- 10 Q Have I now covered all four of the
- 11 critical temperatures?
- 12 A Fuel cell, IR, breath tube, pressure
- 13 line.
- 14 Q Yes?
- 15 A That's correct.
- 16 MR. RAMSELL: Okay.
- 17 BY MR. RAMSELL:
- 18 Q Now, in Illinois -- well, first off,
- 19 what is a slope detector as it relates to an
- 20 EC/IR?
- 21 A Slope detector --
- 22 Q Yes.
- 23 A -- relates to an EC/IR is a parameter
- 24 used uniquely in the United Kingdom version of

- 1 the EC/IR to determine plateau detection of an
- 2 acceptable sample.
- 3 Q And when the breath has reached a
- 4 plateau, what does that term mean when you say
- 5 when a breath reaches a plateau?
- 6 MS. SIMPSON: Objection, that's irrelevant.
- 7 He said it's in the United Kingdom, not in the
- 8 United States. It has nothing to do with the
- 9 instruments here.
- 10 MR. RAMSELL: Actually, if I can -- I will
- 11 -- if you give me three questions, I'm going to
- 12 get there.
- 13 THE COURT: Get where?
- 14 BY MR. RAMSELL:
- 15 Q Isn't -- is the slope detector turned
- 16 off in Illinois?
- THE COURT: Okay. Well, I'll let you
- 18 ask --
- MR. RAMSELL: Yes or no?
- 20 THE WITNESS: Yes.
- 21 BY MR. RAMSELL:
- 22 Q Now, tell the Judge what it means when
- 23 -- the phrase when a breath reaches a plateau,
- 24 what do you mean by that?

- 1 A A plateau is when a person is blowing
- into an instrument. It's starts at zero.
- 3 We assume it's zero and then as you
- 4 blow in, you get in the air, the true deep lung
- air where you have the interface between the
- 6 blood, the alveoli and the inhaled air, and that
- 7 air is the air you want to deliver to the
- 8 instrument.
- 9 So the profile, you can imagine, rises
- 10 with time, rises quite sharply and then as you
- get to your true deep lung air, it comes to a --
- 12 the slope stops rising and reaches a flat or
- 13 plateau area.
- 14 It's used in the United Kingdom because
- 15 the United Kingdom type approval requires it.
- 16 It is not used in America because none
- of the -- none of the users of the EC/IR have
- 18 specified plateau detection.
- 19 They've specified minimum volume,
- 20 minimum flow rate.
- THE COURT: Well, what's the value of it
- 22 then of -- in your opinion -- the slope detector?
- THE WITNESS: The slope detector will, if
- 24 it's properly set up, it means more calibration.

- 1 It's means you put more emphasis on to
- the -- on to the infrared system.
- 3 It means that you are going to get a
- 4 true deep lung air sample, which is typically,
- 5 one, the highest, truest sample and two, if you
- 6 are doing repeated tests, which in the United
- 7 Kingdom they do repeated tests, you'll see less
- 8 variation between the two samples.
- 9 BY MR. RAMSELL:
- 10 Q And through accessing the internal
- 11 functioning of any individual EC/IR in Illinois,
- would one be able to determine whether the slope
- 13 detector has been turned on or off?
- 14 A The slope detector is disabled in
- 15 Illinois. It actually is there but it -- it
- 16 will not function.
- 17 It is not part of the integral film
- 18 way. It is actually just a setting, a leftover
- 19 from earlier versions.
- 20 Q Well, so one could access from the
- 21 internal functioning of the EC/IR, one could see
- that it would say slope detector off?
- 23 A Yeah. Always, yes.
- Q And you can find this information out

- 1 without destroying or affecting the functioning
- of the machine? Is that a fair statement?
- 3 A You can view it, yes.
- 4 Q And just like the other temperature
- 5 settings, you can get those settings without
- 6 affecting the machine's performance, wouldn't you
- 7 agree?
- 8 A Yes. You could get it. You'd have
- 9 to go there and collect the pass code and get
- 10 that -- select that function.
- MR. RAMSELL: Right.
- 12 BY MR. RAMSELL:
- 13 Q In other words, you don't have to
- 14 disassemble the machine to obtain --
- 15 A No.
- MR. RAMSELL: -- this information? Okay.
- 17 I'm almost done Judge.
- 18 THE COURT: That's fine. Thank you,
- 19 Mr. Ramsell.
- 20 MR. RAMSELL: I'm just going to parcel
- 21 through a couple items here.
- 22 BY MR. RAMSELL:
- 23 Q And does your company have any -- how
- 24 should I say it -- unwillingness to reveal the

- 1 settings of the instrument that we've just been
- 2 talking about?
- 3 A Our position at the company is that the
- 4 settings are -- contain information which would
- 5 indicate to other manufacturers or those
- 6 knowledgeable in the art, to be able to copy our
- 7 designs and we therefore, treat it as quite
- 8 confidential.
- 9 There's a lot of intellectual property
- 10 gone into the design of the instrument, EC/IR
- 11 instrument and the -- the information contained
- 12 therein one, would be of great interest to our
- 13 competitors; two, is of no use to anybody other
- 14 than those people who attended maintenance
- 15 schools and being taught at Intoximeters of the
- 16 theory of design, principles of the sensors and
- 17 of the way the circuitry is designed and the
- 18 software is structured to go about it.
- 19 So one, we would object on the
- 20 principles it's confidential and commercially
- 21 confidential.
- Two, we have a huge investment in it
- 23 and three, there is nobody we know of that --
- 24 outside Intoximeters and the design engineers --

- 1 who could make much of that information without
- 2 true training.
- 3 Q Well, then let me just walk through
- 4 a -- a limited number of settings.
- 5 A Uh-huh.
- 6 Q Do you feel that your company has any
- 7 confidentiality on whether the mask on function
- 8 is on or off?
- 9 A I --
- 10 Q Do you have any protection against
- 11 somebody knowing that?
- MS. SIMPSON: Objection, your Honor. This
- 13 was asked and answered before when we went
- 14 through --
- MR. RAMSELL: No. It was other things.
- 16 THE COURT: No. He's -- he's going into a
- 17 different area, but I'm going to sustain the
- 18 objection.
- 19 If the questions are going to be like
- 20 target area questions of what he considers to be
- 21 proprietary information, one, I think Mr. Evans
- 22 is going to be in a position of trying to
- 23 compromise himself by agreeing or not disagreeing
- 24 on selective questions that you have.

- 1 I'm much more interested to know since
- 2 he stated that -- especially as to the internal
- 3 settings and such, that there's proprietary
- 4 information -- much more interested in knowing
- 5 the type of questions you have, how does that
- 6 affect the operation of the machine, not -- not
- 7 the information that it's -- it's actually
- 8 storing but how -- how is that requested
- 9 information affecting the operation and
- 10 reliability of this particular machine?
- MR. RAMSELL: I'll re-call my experts for
- that purpose, Judge, if necessary.
- I don't -- this is not my witness.
- 14 I'm not vouching for him.

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- THE COURT: Well, here.
- 16 MR. RAMSELL: I thought -- I thought --
- 17 THE COURT: No; I'm not saying that you
- 18 are. Well, give me a proffer. You say a
- 19 limited number of questions.
- 20 Run through a proffer of that so the
- 21 witness can hear it, and I can hear it and then
- 22 I'll decide whether or not --
- MR. RAMSELL: Well, no; I'm not --
- 24 THE COURT: -- to have him answer.

- 1 MR. RAMSELL: I respect that. Judge,
- 2 I'll give you a proffer without this witness
- 3 here.
- 4 THE COURT: That's fine.
- 5 MR. RAMSELL: But I'm not -- I -- I will
- 6 not start talking in front of this witness about
- 7 what my experts might say.
- 8 THE COURT: Well, I mean -- well, you
- 9 shouldn't say you will not. You will if I order
- 10 you.
- 11 MR. RAMSELL: Well, I am --
- THE COURT: Stop, stop. You will if I
- order you to, but I respect -- I respect your
- 14 reluctance to do that.
- But don't tenor the question with I
- 16 will or I will not do this or I will or will not
- 17 do that because --
- MR. RAMSELL: Well, I won't voluntarily.
- THE COURT: Well, that's -- that's a better
- 20 way of phrasing; I won't voluntarily unless I'm
- 21 ordered to.
- But I'll -- I'll excuse Mr. Evans from
- 23 the courtroom and listen to your limited -- you
- 24 know -- questions.

- 1 You say they're limited, so I assume
- 2 there's not that many; right?
- 3 MR. RAMSELL: Honestly, I was just going
- 4 through -- after -- after they did their direct,
- 5 you asked him -- you know -- do you have a
- 6 problem with this information being divulged.
- 7 I think he said that was the crux of this.
- 8 THE COURT: Well, he's -- he's stating to
- 9 me that some of it is proprietary --
- 10 MR. RAMSELL: Right.
- 11 THE COURT: -- here.
- MR. RAMSELL: So --
- 13 THE COURT: I'm going to allow you --
- 14 Mr. Ramsell, I'll allow you to question
- 15 Mr. Evans.
- 16 If -- if -- if you hear the question
- 17 and you believe you have a concern discussing
- 18 that because of a proprietary or other
- 19 confidential areas, then tell me before you
- 20 answer it. Okay.
- 21 So why don't you go through the list
- 22 that you want --
- MR. RAMSELL: Right.
- THE COURT: -- and then -- and I'll be able

- 1 to respond. Go ahead.
- 2 BY MR. RAMSELL:
- 4 -- with revealing to any person that your minimum
- 5 and maximum fuel cell temperatures are 35 degrees
- 6 to 37 degree centigrade?
- 7 A I'm sorry. Is that a question or
- 8 statement?
- 9 Q That's a question.
- 10 A In context of all the other settings,
- 11 that would allow a person to interpret how we use
- 12 our fuel cell.
- There are three other manufacturers of
- 14 fuel cells in this business that I know of. I
- 15 worked for one of the other leading ones.
- 16 I know that information would be of
- 17 great interest to me.
- 18 Q What parameters you accept for your
- 19 errors is proprietary on the temperature of the
- 20 fuel cell?
- 21 I mean, because you told the Judge
- 22 that, when the Attorney General asked you
- 23 answered the question without any hesitation.
- 24 A If I take that with all the

- 1 settings --
- 2 MR. RAMSELL: I'm just -- this setting.
- THE COURT: Here. Let's -- so that I'm
- 4 following.
- 5 Mr. Evans, I mean, let's not -- it's
- 6 not confidential information that the setting
- 7 tolerance is 35 to 37 degrees, is it?
- 8 I mean, isn't that -- isn't that like
- 9 available in any manual, for operators manually
- 10 or technicians --
- 11 THE WITNESS: No. It's not in the
- 12 technical -- it's only trained in -- this data
- 13 and the information that is contained within what
- 14 Mr. Ramsell is referring to, the F-11 --
- THE COURT: Okay. All right.
- 16 THE WITNESS: -- is something that we go
- over with the technicians who have been through a
- 18 40 hour training course at Intoximeters.
- 19 THE COURT: Now, when you say technicians,
- 20 are you referring to technicians at -- at your
- 21 company, not field -- unless they are sent out by
- the company?
- 23 THE WITNESS: They -- the ISP breath
- 24 alcohol technicians would have come to

- 1 Intoximeters and would have been trained to that
- 2 level, and they would have been trained to
- 3 understand these because they need to, as -- as
- 4 technicians on the instrument.
- 5 THE COURT: All right. Next question,
- 6 Mr. Ramsell.
- 7 BY MR. RAMSELL:
- 8 Q Actually my question was, why are you
- 9 having a problem -- why are you saying there's a
- 10 problem revealing that the minimum and maximum
- 11 fuel cell temperatures 35 degrees to 37 degrees
- 12 centigrade when you offered that when the State
- 13 -- when the Attorney General asked you that
- 14 question, just that fuel cell temperature?
- 15 A You asked why, because one item is not
- 16 really harmful.
- 17 All the items or a cumulative number of
- 18 those items in my opinion could lead somebody to
- 19 come to some decisions on how we have designed
- 20 our system.
- 21 MR. RAMSELL: Okay.
- 22 BY MR. RAMSELL:
- Q Do you have any proprietary interest
- 24 that your infrared temperature settings are 44

- 1 degree centigrade to 46 degree centigrade, cause
- 2 you offered that on direct?
- 3 A As an isolated item, no problem.
- Q Do you have any problem with the breath
- 5 hose temperature parameter settings of 40 degrees
- 6 to 44 degree centigrade being stated in open
- 7 court?
- 8 A As I said, as an isolated item, there's
- 9 no issue.
- 10 Q How about the temperature for
- 11 the PL?
- 12 A Same.
- 13 Q And how about whether the mask on
- 14 function is operating or not?
- 15 A That's actually a common issue with all
- 16 manufacturers. They all have the mask.
- 17 Q How about the -- how about the settings
- 18 for when mouth alcohol -- when mouth alcohol will
- 19 be flagged?
- 20 A That I would prefer not to be general
- 21 knowledge.
- THE COURT: If I can, one other question
- 23 Mr. Evans.
- THE WITNESS: Uh-huh.

- 1 THE COURT: Now, all the information you're
- 2 talking about in your response to Mr. Ramsell's
- 3 temperature questions, would not that information
- 4 be or would it be discoverable in the
- 5 certification papers like submitted to the
- 6 government?
- 7 I mean, couldn't a person get that from
- 8 the government? I mean --
- 9 A The Federal government doesn't require
- 10 that -- that level of information.
- 11 THE COURT: It does not?
- 12 THE WITNESS: No.
- 13 THE COURT: All right.
- 14 THE WITNESS: And we give them an operating
- 15 manual, supervisory manual and a general
- 16 description which is just a bit more in depth
- 17 knowledge.
- 18 We would not give complete technical
- 19 information --
- THE COURT: All right.
- 21 THE WITNESS: -- on the function of the
- 22 instrument. But may I just add one thing?
- THE COURT: Yes, sir.
- 24 THE WITNESS: The reason that those --

- 1 those temperatures are not -- whilst the
- 2 propriety is not particularly harmful from my
- 3 perspective, just because I know that each and
- 4 every other manufacturer for those set assemblies
- 5 have a similar setting.
- I have worked for three of the major
- 7 companies in my time, and I've been the design
- 8 manager in one of those roles, and I know that
- 9 those are the same sort of settings that the
- 10 5000, the CMI is set at.
- I know there's a similar parameter for
- 12 the Drager Evidential device.
- 13 And I know there's a similar parameter
- on the Datamaster device, all well known
- 15 instruments used widely in America; throughout
- 16 the world, actually.
- So those -- whilst they're not
- 18 particularly harmful, if you drill down deeper
- 19 into it --
- 20 THE COURT: Well, I think that's what
- 21 Mr. Ramsell is doing --
- 22 THE WITNESS: -- you come to a point --
- THE COURT: -- are we not, Mr. Ramsell?
- 24 Drilling deeper?

- 1 MR. RAMSELL: Well, that's when my first
- 2 poorly worded --
- 3 THE COURT: And that's not a criticism.
- 4 MR. RAMSELL: No; my first poorly worded
- 5 question was, do you have a problem revealing the
- 6 setting, and he was --
- 7 THE COURT: Right.
- 8 MR. RAMSELL: -- you know, they could build
- 9 the whole machine or whatever.
- 10 THE COURT: Let me ask --
- MR. RAMSELL: That's why I've cut it down
- 12 to sub-standard.
- 13 THE COURT: Let me ask -- let me ask you
- 14 this, Mr. Evans.
- You make a point in response to
- 16 Mr. Ramsell of certain requested temperatures,
- 17 such as the breath tube and the PL and such and
- 18 isolated is not being particularly compromising,
- 19 but in context with other information, what --
- 20 what -- can you give me an example of what --
- 21 what it is that you're concerned about when you
- 22 say that -- information in context with what.
- THE WITNESS: Well, Mr. Ramsell just asked
- 24 last -- one of the last questions or maybe the

- 1 last question, the settings for the mouth alcohol
- 2 detection.
- 3 Many manufacturers use infrared -- the
- 4 infrared device to detect mouth alcohol.
- I would like to know my competitors'
- 6 settings, because it might give me some idea how
- 7 I might improve my settings and vice versa.
- 8 So I know they have a temperature
- 9 control on the infrared on the 5000, a very
- 10 commonly used device.
- I know that -- well, I used to work for
- 12 them and I knew -- my memory of the original
- 13 settings -- I do believe they've improved them
- 14 significantly in the last 10 years since I worked
- 15 with that company.
- 16 Yes; I would dearly love to know
- 17 exactly what that is, and I meet the engineering
- 18 manager on a regular basis trying to get
- 19 information.
- 20 THE COURT: All right. Thank you.
- 21 Mr. Ramsell?
- MR. RAMSELL: Just a couple more questions.
- We -- you've been shown what has been
- referred to here as Mary McMurray Exhibit No. 5.

- 1 And Judge, for the record Miss McMurray
- 2 commented on it, and then it was used in direct
- 3 by the Attorney General with this witness.
- 4 THE COURT: All right.
- 5 MR. RAMSELL: So may I approach?
- 6 THE COURT: That's No. 5?
- 7 MR. RAMSELL: Yes.
- 8 And I'll give you a second there to
- 9 just kind of see if -- I'm showing you Exhibit
- 10 No. 5 for the record.
- 11 THE WITNESS: Okay.
- 12 BY MR. RAMSELL:
- 13 Q If you remember seeing that before --
- 14 A Yes, I believe so.
- THE COURT: Are you familiar with the
- 16 document, Mr. Evans?
- 17 THE WITNESS: Yes; I'm familiar with the
- 18 document.
- 19 MR. RAMSELL: Oh, okay.
- 20 THE WITNESS: I'm sorry.
- 21 THE COURT: I could see nobody was doing
- 22 anything.
- THE WITNESS: Yes.
- 24 BY MR. RAMSELL:

- 1 Q You were asked generally --
- 2 A Uh-huh.
- $_{
 m 3}$ Q $_{
 m --}$ to review this, and this would be a
- 4 printout gathering the internal memory of a
- 5 particular instrument with the dates April 1st of
- 6 '04 to June 15th of '05 being the parameters on
- 7 the dates?
- 8 A Correct, yes.
- 9 Q And this would -- this information
- 10 would also be something that would be retrievable
- 11 perhaps in different form but the same data could
- 12 be retrievable through a Shift F5 function if you
- 13 create all the parameters on that --
- 14 A Correct, yes.
- 15 MR. RAMSELL: Okay. Great.
- 16 BY MR. RAMSELL:
- 17 Q And you pointed out that there was a 2-
- on page -- what we'll call Page 3.
- 19 A Uh-huh.
- 20 Q Page 3 there's a set of data entries,
- 21 if you will, which you were able to interpret as
- 22 being probably some work done at the manufacturer
- 23 where they were running through a variety of
- 24 different solutions, dry gas simulators at a

- 1 variety of different levels. Do you recall that
- 2 generally?
- 3 A Yeah. Yes, yes.
- 4 MR. RAMSELL: Okay.
- 5 BY MR. RAMSELL:
- 6 Q And -- and generally speaking, because
- 7 it appeared a technician was just checking
- 8 certain parameters of the machine, you did not
- 9 see that as really establishing any problem with
- 10 the functioning of the machine; probably more
- 11 supportive that it was working correct at that
- 12 time; right?
- 13 A Yes.
- 14 MR. RAMSELL: Okay. Great.
- 15 BY MR. RAMSELL:
- 16 O Now -- and that -- because you've had
- the luxury of being here when Miss McMurray
- 18 testified as well?
- 19 A No; I was not here when Miss McMurray
- 20 testified.
- 21 Q But you were allowed to learn some of
- 22 her testimony, because we don't have any bars on
- 23 that. We let everybody listen to everybody else.
- MS. SIMPSON: Objection, your Honor. We

- didn't discuss any of Miss McMurray's --
- MR. RAMSELL: Okay. Great.
- 3 MS. SIMPSON: -- testimony with this
- 4 witness, and he was not present when she
- 5 testified.
- 6 MR. RAMSELL: Objection -- the objection is
- 7 I can't ask?
- 8 THE COURT: Well, it's not really an
- 9 objection, because he's not saying that he did.
- 10 He's just saying that the opportunity was there
- 11 and that he's --
- MR. RAMSELL: All right.
- 13 THE COURT: -- so it's not really -- I
- don't consider it really an objection either,
- 15 Mr. Ramsell, but it will be noted, but I don't
- 16 consider it as such.
- 17 Have you had -- have you had the
- 18 benefit of any transcripts --
- 19 THE WITNESS: No, I haven't.
- 20 THE COURT: -- of any prior testimony
- 21 of --
- 22 THE WITNESS: No.
- THE COURT: -- Miss McMurray?
- 24 THE WITNESS: No. I was present when

- 1 Mr. Hanson was here. I -- I think that might
- 2 have been the first time I came to the court.
- 3 THE COURT: Okay.
- 4 THE WITNESS: But I didn't give testimony
- 5 at that time.
- 6 THE COURT: Sure. Okay.
- 7 THE WITNESS: Yes. Please, go ahead.
- 8 MR. RAMSELL: All right.
- 9 BY MR. RAMSELL:
- 10 Q So -- but what I'd like to address
- 11 here, if I might, is information that's contained
- 12 on Page 4 ---
- 13 A Uh-huh.
- 14 Q -- of Exhibit 5, most particularly the
- 15 circumstances or events from January 18th of 2005
- 16 and I'm using my finger --
- 17 A Yeah.
- 18 Q -- to point out the date.
- 19 A Yes. I see it, yes.
- Q And it appears at 8:54 a.m. an accuracy
- 21 check was performed.
- 22 A Uh-huh.
- 23 Q Yes?
- 24 A Correct.

- 1 Q By a person named Todd Savage?
- 2 A Correct.
- 3 MR. RAMSELL: Ask -- I'd ask the State
- 4 whether they're willing to stipulate that
- 5 Mr. Savage is an Illinois State Police breath
- 6 inspector. Debbie?
- 7 MS. SIMPSON: Judge, I don't know.
- I don't know all the inspectors, so I'd
- 9 have to check with Miss Easum to find out if --
- 10 THE COURT: Okay. Well, why don't you
- 11 check with her?
- MS. SIMPSON: Judge, we agree that
- 13 Mr. Savage is a code employee of the Illinois
- 14 State Police.
- THE COURT: A what?
- MS. SIMPSON: A code. He's not a sworn
- 17 officer. He is a --
- 18 MR. RAMSELL: I asked to stipulate whether
- 19 he's a breath alcohol inspector.
- MS. SIMPSON: Right. He is a breath
- 21 alcohol inspector. He's a code employee,
- 22 not a --
- THE COURT: Okay. No; that's fine.
- 24 That's still -- that's I believe all that

- 1 Mr. Ramsell --
- MR. RAMSELL: All right.
- 3 THE COURT: All right. The record will
- 4 reflect the stipulation then.
- 5 MR. RAMSELL: Thank you.
- 6 BY MR. RAMSELL:
- 7 Q And Todd Savage performed that accuracy
- 8 check of January 18th?
- 9 A Uh-huh.
- 10 MR. RAMSELL: I'm sorry. Hold on a
- 11 minute. I have juxtaposed a few things.
- 12 BY MR. RAMSELL:
- 13 Q January 18, 2005, 2:45 p.m. Todd Savage
- 14 performed an accuracy check. Is that what this
- 15 data --
- 16 A That's what it says.
- MR. RAMSELL: -- suggests?
- 18 BY MR. RAMSELL:
- 19 Q At that time a set solenoid error
- 20 occurred. Am I reading that accurately?
- 21 A That's correct.
- 22 MR. RAMSELL: Okay.
- 23 BY MR. RAMSELL:
- Q Then five minutes later, January 18th,

- 1 2005 at 2:50 p.m. Todd Savage performed another
- 2 accuracy check; correct?
- 3 A Correct.
- 4 MR. RAMSELL: Okay.
- 5 BY MR. RAMSELL:
- 6 Q What does set solenoid error mean?
- 7 A The set solenoid is a solenoid that
- 8 re-sets the fuel cell sampling system after a
- 9 sample has been taken.
- 10 Q How -- how would -- how would that
- 11 error have occurred?
- 12 A The -- the mechanism can sometimes
- 13 stick or when the solenoid is actuated, it -- it
- 14 doesn't have enough electrical energy -- I'm
- 15 sorry -- imagine a lever that has gone down into
- 16 that position. You want to set it back in that
- 17 position.
- We have a solenoid here, which
- 19 energizes, an electrical energized coil, and it
- 20 hits it so it sets the system back into the ready
- 21 position.
- What happened here is that after the
- 23 sample is taken, the set solenoid analyzed the
- 24 microprocessing instruction, re-set the system.

- 1 A set solenoid can stick, in which case
- it hardly moves or may not have enough energy to
- 3 push it into the -- into the correct position
- 4 where it latches.
- 5 And that's -- would result in a set
- 6 solenoid error.
- 7 MR. RAMSELL: All right. Thank you.
- 8 BY MR. RAMSELL:
- 9 O Now, on March 17th of 2005 an accuracy
- 10 check was also performed?
- 11 A I think -- did you not want to mention
- 12 the next one that --
- 13 Q No.
- 14 A I'm sorry. Okay.
- MR. RAMSELL: Don't try to do my questions,
- and I won't try to do your answers.
- THE WITNESS: All right, then.
- 18 MR. RAMSELL: Okay.
- 19 THE COURT: Is this like a private dialogue
- 20 between the two of you and --
- MR. RAMSELL: We're getting very close --
- THE COURT: -- what he expects you're going
- 23 to ask and what your response is expected,
- 24 Mr. Ramsell?

- 1 MR. RAMSELL: Right.
- THE COURT: I guess, Miss Simpson and other
- 3 parties and myself are not privy to that private
- 4 kind of conversation.
- 5 MR. RAMSELL: Okay.
- 6 THE COURT: Try not -- try not to do that.
- 7 MR. RAMSELL: Yes, your Honor.
- 8 THE COURT: All right.
- 9 THE WITNESS: Sorry.
- 10 MR. RAMSELL: I'm just going to move ahead.
- 11 I'm going to go to Page 5, same document.
- 12 BY MR. RAMSELL:
- 13 Q Todd Savage performed an accuracy check
- 14 on April 21st of 2005 at 1:34 p.m --
- 15 A Uh-huh.
- 16 Q -- according to this data. Is that a
- 17 fair statement?
- 18 A That's correct.
- 19 Q And at that time he used a 416902G dry
- 20 gas simulator according to this data; is that a
- 21 fair statement?
- A According to that data, yes.
- 23 Q The results he got at that time
- 24 was .10?

- 1 A Uh-huh.
 - O Yes?
 - 3 A Sorry. Yes.
- 4 Q Which then he -- four minutes later
- 5 performed a calibration on the instrument?
- 6 A Correct.
- 7 Q To bring it down to a .08; correct?
- 8 A Yes.
- 9 Q And then ran a subsequent accuracy
- 10 check that came back .08?
- 11 A Correct.
- 12 MR. RAMSELL: Okay.
- 13 BY MR. RAMSELL:
- 14 Q Miss McMurray said -- well, you
- 15 mentioned earlier that if a machine was out of
- 16 tolerance that -- whether a calibration occurred
- would be a fact you'd want to know or not know?
- 18 A Correct.
- MR. RAMSELL: All right.
- 20 BY MR. RAMSELL:
- 21 Q And so did Miss McMurray. Would you
- 22 agree with her on that issue?
- MS. SIMPSON: Objection, Judge. He didn't
- 24 hear Miss McMurray's testimony. He's not read

- 1 her testimony.
 - THE COURT: Well, he doesn't have to
 - 3 hear it --
 - 4 MS. SIMPSON: He can't comment on it.
 - 5 THE COURT: You understand the question.
 - 6 Overruled. Do you understand the question,
 - 7 Mr. Evans?
- 8 THE WITNESS: Yes. It's --
- 9 THE COURT: All right.
- 10 THE WITNESS: -- a record of calibration
- 11 and accuracy check, which is that.
- MR. RAMSELL: All right. Okay.
- Now, I have a letter authored by you
- 14 December 11 of 2000 to a Mr. Larry Etzkorn
- of the Illinois State Police.
- 16 BY MR. RAMSELL:
- 17 Q My first question is, do you know who
- 18 Larry Etzkorn is?
- 19 A Yes.
- Q At -- in the year 2000, was he the
- 21 Chief of the Illinois State Police breath testing
- 22 section?
- 23 A That's my understanding, yes.
- Q And you worked with him --

- 1 A Yes.
- 2 Q -- in that regard?
- 3 A Yes.
- 4 Q And I'm going to show you this letter
- 5 you sent by E-mail and the second page has John
- 6 Evans as the author?
- 7 A Uh-huh, yes, sir.
- 8 Q I ask you, is this your letter to Larry
- 9 Etzkorn?
- 10 A Correct.
- 11 MR. RAMSELL: Okay.
- 12 BY MR. RAMSELL:
- 13 Q And it was regarding changes that -- to
- 14 the functioning of the software, the EC/IR
- 15 including the Shift F5 funciton; correct?
- 16 A Correct, yes.
- 17 Q And according to your letter here, you
- 18 modified the EC/IR software for Illinois for
- 19 several issues, including the State Police's
- 20 request to change the designation of the Shift F5
- 21 function from repair log to service log. Have I
- 22 read that accurately?
- 23 A That's what it says, yes.
- 24 Q Because before that it would have been

- 1 called the repair log, the Shift F5 -- one of the
- 2 Shift F5 functions; right?
- 3 A Yes.
- 4 MR. RAMSELL: Okay.
- 5 BY MR. RAMSELL:
- 6 Q And you also changed at their request
- 7 the order of asking in the Shift F5?
- 8 A Yes.
- 9 Q Right?
- 10 A Uh-huh.
- 11 O Yes?
- 12 A Yes. Sorry; yes.
- 13 Q So that it's -- now the order that was
- 14 changed, it now would print all certification,
- 15 all service logs, all subject tests, all quick
- 16 tests, all accuracy checks, all calibrations?
- 17 A That's --
- 18 Q Am I reading that accurately?
- 19 A That's what it says there.
- 20 Q And one of the things of course besides
- 21 changing the order, it would not say all repair
- 22 logs. It would say the word, all service logs?
- 23 A That's what Larry asked for.
- 24 Q Right.

- 1 A He was --
- Q See No. 6 of the changes --
- 3 A Yes.
- 4 Q -- you itemize?
- 5 A Uh-huh.
- 6 Q It says here, change repair log to
- 7 service log and remove all references to M/F.
- 8 Do you see where I'm reading from?
- 9 A Yes, I do.
- 10 Q You authored this letter?
- 11 A Yes; six years ago.
- 12 Q How is it you don't know what M/F is if
- 13 you authored that letter?
- 14 A I said I couldn't remember it.
- 15 Q Okay.
- 16 A I wasn't --
- Q Does that refresh your recollection?
- 18 A Yes, it does. Now I see it in
- 19 context.
- Q M/F meant malfunction, didn't it?
- 21 A Correct.
- 22 Q And you removed all references in the
- 23 Intox EC/IR from the State of Illinois to the
- 24 term M/F? Isn't that what you did at the

- 1 request of the Illinois State Police?
- 2 A Correct.
- 3 MR. RAMSELL: Okay.
- 4 BY MR. RAMSELL:
- 5 Q Did you also re-set the interfering
- 6 substance base ratio after the first standard
- 7 sample of a certification test? Do you recall
- 8 doing that independently?
- 9 A I -- you have the luxury of the
- 10 letter --
- 11 Q Okay.
- 12 A -- in front of you.
- 13 Q You don't recall it independently?
- 14 A No. I don't independently
- 15 remember M/F.
- 16 Q At the request of the Illinois State
- 17 Police, did you re-set the interfering substance
- 18 base ratio?
- 19 A Yes; correct.
- Q What does -- what does that mean,
- 21 interfering substance? Let's break down the
- 22 words. What does interfering substance --
- 23 A Interfering substance is a substance
- that may be on the breath or the subject sample

- 1 that may be non-ethanol, which may cause a
- 2 variation in reading.
- 3 MR. RAMSELL: Okay.
- 4 BY MR. RAMSELL:
- 5 Q What is the -- what's -- what does
- 6 interfering substance base ratio refer to?
- 7 A It's a setting that sets a threshold
- 8 for the detection of interfering substance.
- 9 Q So would it be fair to say that some
- 10 amount of an interfering substance could be
- 11 introduced in the breath sample without the
- 12 machine letting the operator know and the amount
- 13 of -- when it would tell an operator would be
- 14 what you're calling a base ratio? Is that a
- 15 fair statement?
- Do you remember my question?
- 17 A I'm sorry. I'm trying to remember --
- 18 Q Right.
- 19 A -- in perspective what was asked six --
- 20 six years ago, and I'm trying to get in my mind
- 21 the context in which this was asked for.
- MR. RAMSELL: Okay. Well, let -- just
- 23 listen to my question and let me remove the
- 24 document then.

- 1 THE WITNESS: Uh-huh.
- 2 MR. RAMSELL: I'll make it real easy
- 3 for you.
- 4 BY MR. RAMSELL:
- 5 Q The interfering base -- interfering
- 6 substance base ratio is the parameter, if you
- 7 will, as to when the machine will notify the
 - 8 operator of interfering substances. Is that a
 - 9 fair statement?
- 10 A That refers to it but --
- 11 MR. RAMSELL: Okay.
- 12 BY MR. RAMSELL:
- 13 Q And you changed the parameter
- 14 so-to-speak, you changed when the bell or the
- 15 whistle or the error would -- the machine would
- 16 tell the operator of such an event; right?
- 17 A Correct.
- Q Which way did you change it?
- 19 A I have no memory of that. I -- I
- 20 actually -- may I just add -- I think that that
- 21 is -- that was superseded by a further change
- 22 where interfering substance is not a setting on
- 23 the instrument.
- Q Now, did you also change the

- 1 interfering substance base ratio after the first
- 2 standard calibration test would be performed?
- 3 A In the context of that letter, yes.
- 4 MR. RAMSELL: Okay.
- 5 BY MR. RAMSELL:
- 6 Q And so when you're doing a calibration
- 7 test, what did you change about the setting as to
- 8 when the interfering substance bell error code
- 9 would go off?
- 10 A I don't remember.
- 11 MR. RAMSELL: Okay.
- 12 BY MR. RAMSELL:
- 13 Q Did you change the manner in which the
- 14 I/R error message would display at the request of
- 15 the Illinois State Police?
- 16 A May --
- 17 Q Do you recall independently?
- 18 A I don't recall independently.
- 19 Q I/R refers to the word infrared?
- 20 A Yes, that's correct.
- 21 Q And what impact does an error on
- 22 infrared have on the functioning or validity of a
- 23 breath test?
- 24 A It would -- an error with the I/R would

- 1 mean -- and again, without --
- Q Would that change the functioning of
- 3 the mouth alcohol detection?
- 4 A It would.
- 5 Q Okay.
- 6 A But --
- 7 Q Now, were these changes made after the
- 8 federal government had placed the EC/IR on to the
- 9 conforming products list?
- 10 A Correct.
- 11 Q And have you submitted this instrument
- 12 back to the Federal government for approval on
- 13 the conforming products list in -- with the
- 14 software in the condition --
- 15 A No, I haven't.
- 16 Q -- in which the Illinois State Police
- 17 have now --
- 18 A The company has not.
- 19 MR. RAMSELL: Now, this is just kind of a
- 20 yes or no, so we can be very careful here for a
- 21 moment.
- 22 Are you familiar with any issue in
- 23 Illinois regarding possible certification dates
- 24 -- let me rephrase this.

- 1 BY MR. RAMSELL:
- Q Are you in any way familiar with the
- 3 possibility of an inspector not certifying EC/IR
- 4 instruments in accordance with Illinois protocol?
- 5 A Yes.
- 6 MR. RAMSELL: Okay.
- 7 BY MR. RAMSELL:
- 8 Q Are you familiar with whether or not
- 9 the use of the Shift F5 functions was employed in
- order to investigate that possibility?
- 11 A No, no.
- 12 Q Would the use of the Shift F5 functions
- 13 be one means by which a person could determine
- 14 whether a machine was certified on the same date
- 15 that a ticket proclaims it having been certified
- 16 on?
- 17 A Yes.
- MR. RAMSELL: Okay.
- 19 BY MR. RAMSELL:
- Q How long does it to take download a 400
- 21 record memory database into a laptop using a
- 22 serial cable?
- MS. SIMPSON: Objection, irrelevant.
- 24 THE COURT: I didn't hear the whole part of

- 1 the question.
- MS. SIMPSON: It's also been --
- 3 THE COURT: Would you repeat the question?
- 4 BY MR. RAMSELL:
- 5 Q How long does it take to download a 400
- 6 record memory database from an EC/IR into a
- 7 laptop using a serial cable?
- 8 THE COURT: Sustained. We've heard a lot
- 9 of information --
- 10 MR. RAMSELL: Okay.
- That's all the questions I have of this
- 12 witness.
- 13 THE COURT: Miss Simpson?
- 14 MS. SIMPSON: Thank you, your Honor.
- 15 REDIRECT EXAMINATION
- By: Mr. Ramsell
- 17 Q Mr. Evans, the series of changes that
- 18 counsel is just showing you letters regarding --
- 19 A Yes.
- 20 Q Were those changes -- do they in any
- 21 way affect the basic operation of the instrument?
- 22 A No.
- 23 Q What -- what affect would they have had
- on the instrument and the way that it operates?

- 1 A It's six years ago, so I have to say --
- 2 I have to be careful.
- Most of those changes related to words
- 4 which appeared on the display or a printout.
- 5 Mr. Ramsell raised one -- the IR
- 6 threshold, which confuses me because I don't
- 7 believe it's switched on. It's not an issue
- 8 in ISP, but no, there's nothing there that
- 9 affects the fundamental design and operation of
- 10 the instrument as it was approved by the Federal
- 11 government.
- 12 Q When the instrument was submitted to
- 13 the Federal government for approval, was there
- 14 any indication -- as far as the software was
- 15 concerned, what type of software was used?
- 16 A It would have been generic software.
- 17 Every state uses a variation of software.
- Primarily they'll use it to -- because
- 19 they have different sets of data they want to
- 20 enter, social security number in some cases,
- 21 ethnicity in another case, date of birth or age,
- 22 that will vary and some would want interfering
- 23 substance switched on or off.
- By the way, in -- in my confusion with

- 1 the interfering substance question has arisen
- 2 because I know that for Federal approval,
- 3 interfering substance is not an issue, is not
- 4 tested, and it's not turned on and neither is
- 5 mouth alcohol.
- 6 Mouth alcohol is not part of the
- 7 Federal approval process. It's an additional
- 8 feature offered by the manufacturers.
- 9 Q And what affect does turning those two
- 10 indicators off have on the instrument or on the
- 11 testing?
- 12 A Well, the changes there in that letter
- 13 were defined by Larry Etzkorn, then head of the
- 14 department and as a result of his requirements
- 15 within the ISP and his determination of how he
- 16 wanted those features to function --
- MR. RAMSELL: Well, Judge, I have to
- 18 object. He's testifying on behalf of Larry
- 19 Etzkorn, the way he's phrasing it.
- 20 MS. SIMPSON: Judge, he's testifying to his
- 21 understanding of the letters based on something
- 22 that occurred six years ago.
- I think he's entitled to explain to the
- 24 Court --

- 1 THE COURT: Well, why don't -- why don't we
- 2 do this?
- 3 THE WITNESS: Sorry.
- 4 THE COURT: I think it gets more -- gets
- 5 more to the inquiry that both parties have and if
- 6 not, I'll let you re-examine.
- 7 Mr. Evans, the changes that are
- 8 various, changes that are requested in software
- 9 programming by the respective parties or agencies
- 10 using these machines, such as the State's and
- such, is it fair to say that these are requests
- 12 that are conditioned by very specific desires of
- 13 the State agencies and not recommended changes by
- 14 the manufacturer as it relates to the accuracy of
- 15 the machine?
- 16 THE WITNESS: Correct.
- 17 THE COURT: Would that be a fair statement?
- 18 THE WITNESS: That's a correct statement.
- 19 THE COURT: So if a person like Mr. Etzkorn
- 20 or for whatever their reason comes to you and
- 21 says, we want changes and they may have reasons
- 22 that are not -- not related to the accuracy of
- 23 this machine, that ask you to re-program this
- 24 machine, is that a rare instance?

- 1 That is something you have seen before
- 2 I take it?
- 3 THE WITNESS: Yes; many times.
- 4 THE COURT: Not only in Illinois but in
- 5 other states?
- 6 THE WITNESS: Oh, absolutely.
- 7 THE COURT: All right.
- 8 And -- and if a party wishes, based on
- 9 their prior experience with the data -- again
- 10 whatever the reasons are, and I assume that
- 11 they're mostly individualized and
- 12 particularized -- the types of requests, the
- changes that we are hearing about -- again I'll
- 14 restate that -- are not ones as a result of like
- 15 recalls by the company or memorandums to the
- operators saying, you should make the following
- 17 changes?
- 18 THE WITNESS: No, no.
- 19 THE COURT: Would that be a fair statement?
- THE WITNESS: That's -- that's correct.
- 21 THE COURT: Have you done that in the
- 22 last -- to your recollection in the last --
- 23 say -- six or seven years where you actually had
- 24 such a problem with the machine where you

- notified by memorandum various agencies and
- 2 states that they needed to make software
- 3 changes --
- 4 THE WITNESS: No.
- 5 THE COURT: -- because --
- 6 THE WITNESS: No.
- 7 THE COURT: You have not. Does that kind
- 8 of answer that for both --
- 9 MS. SIMPSON: Most of it.
- 10 THE COURT: And I'm assuming that.
- I mean, and -- and you know, we want to
- 12 be candid and I think both sides are, and I'm
- 13 sure Mr. Evans is also being candid.
- 14 It's not your particular focus on why
- 15 -- why I want to change the software. I mean,
- 16 it could be for whatever reason; is that right
- 17 and --
- 18 THE WITNESS: Oh, yes. It's -- and I --
- 19 excuse me if I smile a bit -- we have been
- 20 through --
- 21 THE COURT: Smile at them.
- 22 THE WITNESS: Okay. Larry Etzkorn --
- THE COURT: I mean, at the whole audience,
- 24 Mr. Ramsell, not at you, but everybody. Go

- 1 ahead.
- 2 THE WITNESS: Larry Etzkorn had gone
- 3 through a series of changes, and my company was
- getting exasperated, and so I was told to write
- 5 that letter and get Larry to sign off on those
- 6 changes cause we were fed up with the changes.
- 7 Because each change takes time to
- 8 implement and then a very long time to test, and
- 9 the whole effort of that was to draw to the
- 10 attention of Larry that please Larry, stop
- 11 changing things for us, because we want you to
- 12 close this project cause I'm tying up resources.
- So now I remember that I was instructed
- 14 by the president of the company, John, get Larry
- 15 to sign off on it, and that's why I remember that
- 16 particular statement.
- 17 THE COURT: All right. Next question,
- 18 Miss Simpson?
- 19 BY MR. SIMPSON:
- Q With respect to the mouth alcohol
- 21 function --
- 22 A Uh-huh -- correct. Sorry, yes.
- MS. SIMPSON: Okay.
- 24 BY MS. SIMPSON:

- 1 Q What happens if the instrument
- 2 registers mouth alcohol?
- 3 A It aborts the test.
- 4 Q In the Federal version you don't have
- 5 to have a protection for mouth alcohol?
- 6 A No.
- 7 Q So in the -- the version of the
- 8 instrument that's approved, if someone had mouth
- 9 alcohol, the test would still register?
- 10 A Correct.
- 11 Q So by adding mouth -- mouth alcohol in,
- 12 we're filtering out possible interference; is
- 13 that correct?
- 14 A Correct, correct.
- Q With respect to the F functions that
- 16 you were talking about with Mr. Ramsell and
- 17 especially with the deleting information, can you
- 18 go into the instrument and delete one specific
- 19 test and leave everything else in the memory?
- 20 A No.
- 21 Q Can you go into the instrument and
- 22 delete a time period of tests --
- 23 A No.
- Q -- and leave some before and some

- 1 after?
- 2 A No.
- 3 Q In order to delete information is it an
- 4 all or nothing?
- 5 A It's all or nothing. It's what we
- 6 call the F12 function, where you erase the
- 7 database and you clear all tests from the
- 8 database.
- 9 Q When you clear all the tests, do you
- 10 clear -- can you go in and just clear all the
- 11 subject tests and leave all the accuracy checks
- 12 in there?
- 13 A No. It's all data.
- 14 Q All data?
- 15 A No selectivity at all.
- MS. SIMPSON: Okay.
- 17 BY MS. SIMPSON:
- 18 Q As far as, though, going in on the
- 19 Shift F5's and printing, you can't print all
- 20 data. You have to print it subject by subject;
- 21 is that correct?
- 22 A Yes; by category.
- Q Or category by category?
- 24 A Category of tests, yes.

- 1 Q You were talking on cross examination
- 2 about a mask function. What is the mask
- 3 function?
- 4 A The mask is a cutoff point for which
- 5 you say this is insignificant.
- 6 Imagine the instrument is tested by the
- 7 Federal government to plus or minus five percent,
- 8 so that at .100 breath alcohol level, it's 105 to
- 9 95.
- 10 At zero they don't carry out a test,
- 11 and that's true from -- in any instrument or any
- 12 sensor, sensor instrument.
- You have what is called noise, which is
- 14 basically insignificant signals, and what we're
- saying with a blank mask is that any signal from
- 16 that sensor up to and including three is
- 17 insignificant, and we're calling it zero.
- 18 Q So that would mean that it would give
- 19 it a clear reading --
- 20 A A zero reading.
- 21 Q -- at zero or 003 --
- 22 A Yes.
- Q -- in between there?
- 24 A All instruments I've worked on and all

- 1 manufacturers I've worked with have very similar
- 2 masks for the same reason.
- 3 Q And does -- is the mask only on that
- 4 particular or are there masks for each of the
- 5 readings that you told us about?
- 6 A This is a blank mask for what we call
- 7 the blank test, that -- when we purge the system
- 8 and then there's another mask on the breath test
- 9 sample, and typically that mask is 005.
- 10 Q So anything below 005 it wouldn't
- 11 print? It would show no alcohol?
- 12 A Correct.
- 13 Q And if it registered over 005, that's
- 14 when it will start to --
- 15 A You'll see 006 on the printout and
- 16 above.
- 17 Q So that doesn't affect the accuracy
- 18 then of the test, the subject test --
- 19 A No.
- 20 Q -- for an accuracy check?
- 21 A In no way.
- MS. SIMPSON: You mentioned something about
- 23 F11 functions.
- 24 BY MS. SIMPSON:

- 1 Q What were the -- what are the F11
- 2 functions?
- 3 A F11 is a function on the instrument
- 4 whereby pressing the F11 key on the keyboard and
- 5 then a password, you can set out some of the
- 6 instrument settings.
- 7 Q Which is --
- 8 A It's a list of instrument settings.
- 9 MS. SIMPSON: Okay.
- 10 BY MS. SIMPSON:
- 11 Q And are -- does the memory record at
- 12 every test what the -- what those instrument
- 13 settings were?
- 14 A Well, those settings don't vary from
- 15 test to test. Basically they are -- they are
- 16 just that. They're the settings that the
- 17 instrument runs on.
- 18 As we discussed earlier, the
- 19 instruments are set to keep the temperature of
- 20 the fuel cell between 35 and 37 degrees.
- 21 THE COURT: Well, those are the ones that
- 22 are inspected at the certification?
- THE WITNESS: Yes.
- 24 THE COURT: The checkpoints, right? The

- 1 settings --
- THE WITNESS: Yes.
- 3 THE COURT: -- to see what the variances
- 4 are about?
- 5 THE WITNESS: I believe they are. I can't
- 6 speak to exactly what Illinois does but they're
- 7 accessible --
- 8 THE COURT: Right.
- 9 THE WITNESS: -- to a trained technician,
- 10 because the password that they have access to
- 11 will allow access to that printout.
- 12 THE COURT: All right. Okay. Thank you.
- MS. SIMPSON: We've been talking about
- 14 operators and technicians.
- 15 BY MS. SIMPSON:
- 16 Q What's the difference between an
- 17 operator and a technician?
- 18 A A breath alcohol technician ISP has
- 19 been trained by the manufacturers' Intoximeters
- 20 at Intoximeters on a comprehensive maintenance
- 21 school course in which we cover all aspects of
- 22 the design, function, calibration, fault finding
- 23 of the instrument, includes the sensor
- 24 technology, the microprocessor technology, the

- 1 disassembly of the instrument, re-assembly of the
- 2 instrument and calibration of the different
- 3 sensors within it.
- An operator is a person, a uniformed
- 5 officer I assume, who has been trained by ISP at
- 6 its training school to operate the instrument or
- 7 subject test sequence.
- 8 Q But they're not able to make any
- 9 changes or go in with any codes and make any
- 10 changes on the settings of the instrument; is
- 11 that correct?
- 12 A That's correct.
- 13 Q So when -- when you're talking about
- 14 people being able to go in and make changes, it's
- only the technicians that can do that, not the
- 16 operators?

(24

- 17 A Yes.
- 18 Q You were talking about the slope
- 19 detector or the plateau?
- 20 A Yes.
- 21 Q You said that you get the -- with the
- 22 slope detector on, you get the highest, truest
- 23 sample. What did you mean by that?
- 24 A No.

- 1 THE COURT: Here. The slope detector
 - 2 determines that -- the amount of air --
- 3 THE WITNESS: That's --
- 4 THE COURT: -- at that plateau level.
- 5 THE WITNESS: Yes; that's right.
- 6 THE COURT: It shows you that you're
- 7 getting deep lung air.
- 8 THE WITNESS: If it's switched on.
- 9 THE COURT: If it's switched on.
- 10 THE WITNESS: That's right.
- 11 THE COURT: That's what it's designed to
- 12 show if it reaches that plateau.
- 13 THE WITNESS: That's correct.
- 14 THE COURT: All right. I mean --
- 15 BY MS. SIMPSON:
- 16 Q What effect does tur ning it off do?
- 17 THE COURT: Nothing.
- 18 THE WITNESS: It has no affect because
- 19 the --
- 20 THE COURT: I heard that. No. England
- 21 uses it and the U.S. doesn't.
- THE WITNESS: That's correct.
- THE COURT: And so it's irrelevant here.
- 24 Any jurisdiction you know in the United

- 1 States that use it, off the top of your head? I
- 2 understand you might not know for sure.
- 3 THE WITNESS: Not with our instrument.
- I believe other manufacturers'
- 5 instruments may use it --
- 6 THE COURT: All right.
- 7 THE WITNESS: -- but I'm not certain.
- 8 THE COURT: And are you -- you reference in
- 9 England that's because of the tube tests that
- 10 are -- that are --
- 11 THE WITNESS: Primarily for that reason.
- THE COURT: So they're comparing along with
- 13 the test results the slope.
- 14 THE WITNESS: The forensic scientists and
- 15 the courts --
- 16 THE COURT: Right. No; okay. I'm -- so
- 17 I'm following. Thanks. Go ahead, Miss Simpson.
- MS. SIMPSON: May I have a moment, Judge?
- 19 THE COURT: Sure.
- 20 MS. SIMPSON: No further questions, your
- 21 Honor.
- THE COURT: Any follow up, Mr. Ramsell?
- MR. RAMSELL: Just a very, very couple.
- 24 Very limited.

1	THE COURT: Yes, sir.
2	RECROSS EXAMINATION
3	By: Mr. Ramsell
4	Q If the slope detector is used to
5	determine when to obtain the truest deep lung
6	alveolar sample, then how would it be that
7	turning it off doesn't affect the ability to
8	obtain the truest sample.
9	A The requirement of the ISP has a
10	minimum volume of 1.5 liters and that's the only
11	requirement. We
12	Q I understand.
13	A the manufacturer supplied that.
14	Q If the slope detector is the
15	function
16	THE COURT: Well, here. Aren't you
17	asking him
18	MR. RAMSELL: that's used to obtain the
19	truest sample
20	THE COURT: why don't you ask him an
21	opinion question?
22	Do you have an opinion yourself since
23	you're familiar with the machine that it should
24	or should not that every machine should or

- should not have the slope projection.
 - Isn't that kind of what you really want
- 3 to ask him?
- 4 MR. RAMSELL: No.
- 5 THE COURT: And he says no, it doesn't.
- 6 What is it you want to ask him? I'm
- 7 not sure then.
- 8 MR. RAMSELL: Well, he said that the slope
- 9 detector doesn't really change anything, and I'm
- 10 trying to figure out how that makes sense.
- 11 THE COURT: All right. Okay.
- MR. RAMSELL: If it -- it does something,
- 13 how does turning it off now?
- 14 THE COURT: Fine, fine. Fair enough.
- 15 All right. Do you understand that, Mr. Evans?
- 16 THE WITNESS: I think I understand but --
- MR. RAMSELL: Okay. Let me under rephrase
- 18 it then so that you're following. Let me be the
- 19 lawyer and phrase it.
- 20 MS. SIMPSON: Objection, your Honor. This
- 21 is --
- 22 THE COURT: All right. We don't like
- 23 these self paradizing --
- 24 MR. RAMSELL: Let me ask --

- 1 THE COURT: -- comments, Mr. Ramsell.
- 2 I mean, I have missed that I will admit
- 3 but not in the context here today so --
- 4 BY MR. RAMSELL:
- 5 Q Does turning off the slope --
- 6 THE COURT: No. First -- the first thing
- 7 you ought to do, you ought to really apologize to
- 8 the witness. That's not the way to treat the
- 9 witness.
- 10 MR. RAMSELL: I'm sorry. I can't hear you.
- 11 THE COURT: That's not the way to treat a
- 12 witness, any witness by asking questions
- 13 sarcastically and injecting your personal --
- 14 personal commentary along with it. You ought
- 15 to -- you ought to apologize to him.
- MR. RAMSELL: For saying let me be the
- 17 lawyer?
- 18 THE COURT: Yes, sir.
- 19 MR. RAMSELL: I'm sorry.
- 20 THE COURT: And for --
- MR. RAMSELL: May I propose questions --
- THE COURT: Yes.
- MR. RAMSELL: -- before the witness offers
- 24 answers?

- 1 THE COURT: Yes, sir.
- 2 MR. RAMSELL: Thank you.
- 3 BY MR. RAMSELL:
- 4 Q Does turning off the slope detector
- 5 affect the EC/IR's ability to determine when it
- 6 can take the truest deep lung breath sample?
- 7 Yes or no?
- 8 A I can't answer yes or no. I'd have to
- 9 make an explanation.
- 10 Q What's the difference between having
- 11 the slope detector on and the slope detector off
- when attempting to obtain the truest deep lung
- 13 breath sample?
- 14 A It is of no consequence whatsoever on
- 15 that instrument which has never had a slope
- 16 detector from within it. I explained earlier.
- The setting is a -- is a leftover. It
- has never been a function or feature available on
- 19 the ISP instruments nor on any instrument that I
- 20 am aware of in North America, so it's irrelevant.
- You're asking a rhetorical question,
- 22 because it is only being used in one area of the
- 23 world that I know of and if you want to talk
- 24 about British breath analysis, I'm very expert on

- 1 that, too.
- Q From a scientific standpoint, forget
- 3 about requirements of the world, from a
- 4 scientific standpoint, the theoretical operating
- 5 of this machine, what affect does turning on or
- 6 off the slope detector have on this instrument's
- 7 ability to obtain the truest deep lung breath
- 8 sample?
- 9 A If it were available, which it is not,
- 10 it would result in a higher reading, which would
- 11 be closer to the true breath alcohol reading.
- 12 MR. RAMSELL: Okay.
- 13 And you also mentioned about the change
- 14 of the software and the effect of its approval
- 15 with the National Highway Traffic Safety
- 16 Administration, so the next few are just on that
- 17 subject.
- 18 THE WITNESS: Uh-huh. Yes, sorry.
- 19 MR. RAMSELL: California has a -- is it
- 20 called a California DOT model?
- Do you know -- let me rephrase that.
- 22 Forget about that entirely for a moment.
- 23 BY MR. RAMSELL:
- Q The interfering substances, doesn't

- 1 NHTSA use an acetone test when they're
- 2 determining whether -- doesn't NHTSA have an
- 3 acetone test when they're doing their Federal
- 4 testing protocol for whether to list a
- 5 breathalyzer on the conforming product list?
- 6 A For infrared based instruments, yes.
- 7 MR. RAMSELL: Okay.
- 8 BY MR. RAMSELL:
- 9 Q Now -- now, does your machine have
- 10 infrared? Yes or no?
- 11 A (No answer.)
- MR. RAMSELL: The answer is yes; I know
- 13 this.
- 14 THE COURT: Well, I know it, too, so why
- 15 are we asking it?
- 16 MR. RAMSELL: Okay. Again --
- THE COURT: Stop, stop.
- 18 MR. RAMSELL: Just because he struggles --
- 19 THE COURT: Stop, stop, and I'll strike
- 20 cause he struggles, because I think it's kind
- 21 of a --
- 22 MR. RAMSELL: And a --
- THE COURT: Stop a second. I'm not done.
- I mean, you say he struggles. There's

- 1 a bit of, I think, straining between the examiner
- 2 and the witness, and I wouldn't characterize it
- 3 as struggle as much as an expression of
- 4 frustration with some of the questions and some
- 5 of them are repetitive and some of them are
- 6 highly selective as to machines that maybe the
- 7 witness is familiar with but have no real bearing
- 8 in Illinois, because he's testified repeatedly
- 9 that none of -- none of the Illinois machines --
- 10 for example, has the slope projector detector on
- 11 it.
- 12 And in his opinion it is -- he's
- 13 already stated it, and I believe -- I believe his
- 14 testimony to be candid, that in the pentultimate
- 15 alcohol level, it might be better to have it.
- And I'm taking notice of that because
- 17 that's some of the information that is being
- 18 proffered by the witness.
- 19 If we look at it rhetorically or
- 20 theoretically, which is in parts what some of
- 21 these questions are directing, that in his
- 22 opinion -- and you can ask him -- I'm not going
- 23 to state it, but it may be of some preference or
- 24 may not that an Illinois machine has it.

- 1 It is clear to me, unless it's going to
- 2 be proffered by either side, that the machine
- 3 that Illinois uses is -- is subject to the
- 4 specifications and legal requirements that are
- 5 required for the machine and for it's acceptance
- 6 and that's the machine calibration and -- and
- 7 functions that are offered by the manufacturer to
- 8 Illinois.
- 9 It doesn't mean that these other
- 10 functions have no value, because it's clear that
- 11 they do, and the witness I think agrees with you,
- 12 Mr. Ramsell, that yeah, they have -- they have a
- value, and if we're searching for the
- 14 pentultimate breath sample, that it might -- it
- 15 might be more attained by having this extra
- 16 function, but it's not necessary for determining
- 17 its limited purpose in Illinois and which is an
- 18 approved purpose, and the changes that have been
- 19 requested by Illinois, at least so far to me,
- 20 have nothing to do with them being submitted to
- 21 being re-conformed, because they're not changing
- 22 the function of -- of the machine.
- They're changing the specific functions
- 24 or deletions or adjustments of functions as

- 1 dictated by the -- by the user.
- 2 And it doesn't -- it is not clear to me
- 3 that because those changes are made that it has
- 4 anything to do about them being conforming or
- 5 non-conforming merely because of changes that
- 6 have been requested by the State Police.
- 7 Now, did everything I just say -- is
- 8 that -- are you in agreement or not in agreement
- 9 with, Mr. Evans?
- 10 THE WITNESS: Yes, I agree.
- 11 THE COURT: All right. So I mean --
- MR. RAMSELL: All right.
- 13 THE COURT: -- I don't know what else --
- 14 why -- what other directions that we're going, so
- 15 go ahead.
- 16 MR. RAMSELL: I understand.
- So because their witness has now said
- 18 that --
- THE COURT: No; we're not -- we're not
- 20 dialoging.
- MR. RAMSELL: Okay.
- 22 THE COURT: I've made my statements. You
- 23 ask another question.
- MR. RAMSELL: That's what I'm testing.

- 1 THE COURT: No. Ask another question.
 - 2 MR. RAMSELL: All right. I'm testing that
 - 3 issue.
 - 4 THE COURT: Ask another question.
 - 5 MR. RAMSELL: All right.
 - 6 BY MR. RAMSELL:
- 7 Q Does your Intox EC/IR have to go
- 8 through any -- any interfering substance testing
- 9 under the Federal protocol before it can be
- 10 placed on the conforming products list by NHTSA?
- 11 A There is an exclusion in the NHTSA
- 12 requirements that instruments based on fuel cell
- 13 technology -- and the EC/IR is based on the
- 14 primary sensor which is fuel cell technology --
- 15 do not require the acetone testing.
- MR. RAMSELL: I'm not asking what's
- 17 required.
- 18 BY MR. RAMSELL:
- 19 Q I'm asking, does it undergo interfering
- 20 substance testing by NHTSA?
- 21 A No.
- 22 Q Did it?
- 23 A No.
- Q It did not?

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THE COURT: He said no.
1
       MR. RAMSELL: Okay. I have no other
    questions.
        THE COURT: Miss Simpson, do you have
    any --
5
        MS. SIMPSON: Nothing further, your Honor.
        THE COURT: All right. Thank you,
    Mr. Evans.
      THE WITNESS: Thank you, Judge.
9
                            (WHEREUPON, the witness
10
                             was excused.)
11
        MR. RAMSELL: Your Honor, I have no
12
    intention of recalling this witness or calling
    this witness, if that means anything to his
14
    ability to leave.
15
        THE COURT: Sure.
16
     MS. SIMPSON: It doesn't.
17
        THE COURT: No. I appreciate it as well
18
     I'm sure Mr. Evans. The next witness is going
19
    to be -- off-the-record.
20
21
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