

COMMISSION OF INQUIRY
INTO FORENSIC DNA TESTING IN QUEENSLAND

Brisbane Magistrates Court
Level 8/363 George Street, Brisbane

On Wednesday, 12 October 2022 at 9.30am

Before: The Hon Walter Sofronoff KC, Commissioner

Counsel Assisting: Mr Michael Hodge KC
Ms Laura Reece
Mr Joshua Jones
Ms Susan Hedge

1 THE COMMISSIONER: Ms Hedge?

2
3 MS HEDGE: Thank you, Commissioner. You have heard that
4 the current module of hearings relates to those scientific
5 issues and how they are raised and dealt with in the FSS
6 laboratory in Queensland. One of the scientific issues
7 that your Commission is investigating is the validations
8 performed by the laboratory.
9

10 A validation is a process for determining that
11 a method, process or device is fit for the specific purpose
12 for which it is intended. The lab must validate all new
13 instruments and processes that it seeks to introduce to
14 ensure they provide accurate and reliable results and fit
15 into the wider process of the lab. That must be done
16 before any new process or instrument is implemented.
17

18 Validations are carried out at the laboratory
19 generally by internal staff. They usually consist of an
20 experiment or collection of data and then a report which
21 analyses the data or experiment and concludes whether the
22 instrument or process may be implemented or not. Sometimes
23 the result is that it is not, and further work is done.
24

25 The report is considered and needs to be accepted by
26 the management committee of the laboratory. Those people
27 are said to endorse the validation report.
28

29 If not done properly, the lack of a proper validation
30 can mean that the laboratory cannot rely on the instrument
31 or process to provide accurate and reliable results.
32

33 The process of validation raises questions for this
34 Commission both about whether validations conducted by the
35 lab have been carried out in accordance with best practice
36 and also whether there was sufficient oversight from the
37 management team of what was decided and what was reported.
38

39 Some of the scientists you will hear from this week,
40 in particular Rhys Parry and Emma Caunt, who will give
41 evidence today, raised concerns about validations that have
42 been completed, both as to whether the experimental design
43 was sufficient to complete a validation and also whether
44 the statistical analyses in the reports were appropriate.
45

46 The Commission engaged an expert in this field,
47 Dr Duncan Taylor, from Forensic Science South Australia, to

1 review 15 validation reports prepared by the laboratory,
2 which deal with instruments or processes that are currently
3 in use.

4
5 Dr Taylor is the chief scientist in forensic
6 statistics in biology in South Australia. He has doctorate
7 degrees in both biological science and statistics and so is
8 well placed to review the validations, both as to their
9 design and their reporting.

10
11 Dr Taylor was asked to determine whether those
12 validations were conducted in accordance with best practice
13 and, if not, whether that would result in unreliable or
14 inaccurate results.

15
16 In many of the validations, Dr Taylor identified that
17 the statistical analyses used in the validation reports
18 were not appropriate or could have been better analysed.
19 In many cases, that did not affect the reliability of the
20 results obtained, and Dr Taylor could identify from the
21 data that the instrument or process had been sufficiently
22 validated and can continue to be used with confidence.

23
24 However, in two significant cases, Dr Taylor concluded
25 that the experimental design was lacking in such a way that
26 the validation performed by the laboratory was not
27 conducted in accordance with best practice and requires, in
28 his view, rectification.

29
30 The first of those relates to the quantitation
31 instrument and software called the QuantTrio and Quant
32 Studio 5. That instrument and software work together to
33 give the quantitation result that you have heard plays
34 a significant role in the lab in terms of further testing
35 or reporting results as "DNA insufficient for further
36 processing", when that phrase was in use, and "no DNA
37 detected".

38
39 While the general part of that validation was
40 appropriately performed and Dr Taylor does not raise
41 a concern about the experimental design that tests the
42 reliability of the actual quantitation results, the limit
43 of detection was not properly determined. As we heard in
44 the first week of hearings, the limit of detection is the
45 point below which the quantitation instrument can reliably
46 detect DNA. As you know, the FSS lab has set that value as
47 0.001 ng/ μ L.

1
2 Could I have on the screen Dr Taylor's report, which
3 is [EXP.0003.0001.0001]. This is Dr Taylor's report, which
4 is dated 7 October, and I tender that document.
5

6 **EXHIBIT #69 REPORT OF DR DUNCAN TAYLOR DATED 7 OCTOBER**
7 **2022, BARCODED [EXP.0003.0001.0001]**
8

9 MS HEDGE: Can we turn, please, operator, to page 32, and
10 zoom in on the middle paragraph. You will see there that,
11 as Dr Taylor states in the first sentence, a limit of
12 detection, or LOD, which is the acronym he uses, is the
13 lowest amount that an analyte in a sample can be detected
14 with a stated probability. You will see at lines 1057 and
15 1058 that generally that probability of detecting DNA is
16 0.95, or 95 per cent.
17

18 Dr Taylor explains that the way that limit should be
19 determined is to test a series of solutions with known
20 concentration of DNA and see what quant value is returned
21 by the machine. Those different values are called
22 concentration steps. For example, a series of
23 concentration steps would be 0.0001 ng/μL, 0.0002 ng/μL,
24 0.0003 ng/μL, and so on.
25

26 THE COMMISSIONER: That is to say, you put in samples in
27 which there is a known quantity of DNA?
28

29 MS HEDGE: Yes.
30

31 THE COMMISSIONER: And you put them through the
32 instruments, QuantTrio, Quant Studio 5, and you see if you
33 get the known number as a result --
34

35 MS HEDGE: That's right, yes.
36

37 THE COMMISSIONER: -- to determine that the system is
38 working correctly in your laboratory?
39

40 MS HEDGE: That's right, or to see what variation you
41 have - for example, if you always get a result that's
42 5 per cent above the known quantity, then you know that
43 your instrument is telling you a number 5 per cent above
44 the known quantity. And you buy that range of samples with
45 known concentration; they are commercially available, so
46 you can purchase them to do this experiment.
47

1 THE COMMISSIONER: Yes.

2
3 MS HEDGE: The experiment must test enough solutions at
4 different concentration steps to see what concentration
5 results in DNA being detected by the instrument, and it
6 must test enough samples at each concentration step to
7 enable the 95 per cent figure to be identified.

8
9 At line 1067, Dr Taylor identified that the FSS
10 validation did not test solutions with concentration of DNA
11 below 0.001 ng/ μ L. For every concentration that was
12 tested, which was 0.001 ng/ μ L and above, DNA was detected.
13 So the validation did not test any concentration level that
14 did not result in DNA being detected.

15
16 For that reason, the validation did not allow the lab
17 to set the limit of detection, because it may have been
18 lower than 0.001 ng/ μ L.

19
20 In addition, the experiment only did two replicates at
21 each concentration step, which makes it difficult to work
22 out a probability like 95 per cent, 95 per cent being of
23 course 19 out of 20, so you need 20 replicates to obtain
24 a percentage of that specificity.

25
26 You may remember, Commissioner, that Dr Budowle and
27 Professor Linzi Wilson-Wilde also gave evidence in the
28 first week of the hearing that this aspect of the
29 validation had not been done appropriately.

30
31 Dr Taylor deals with recommendations of how this
32 matter might be rectified. Could we turn, operator, to
33 page 82. Could we zoom in on recommendation 9 and
34 recommendation 10, the two recommendations relating to
35 QuantiFiler Trio.

36
37 In recommendation 9, Dr Taylor recommends that
38 additional testing should be carried out to perform that
39 validation appropriately, including a range of
40 concentrations, and with 10 to 20 replicates at each
41 concentration step.

42
43 In recommendation 10, Dr Taylor recommends that until
44 a limit of detection is properly determined, it should not
45 be used as a decision threshold, but, rather, all
46 quantified samples should be treated as though they exceed
47 the limit of detection.

1
2 THE COMMISSIONER: I'm sorry, where does he say that?
3

4 MS HEDGE: In recommendation 10. As you know from the
5 first week of hearing, the threshold for reporting no DNA
6 detected set by the FSS lab at the moment is the limit of
7 detection from the quantitation instrument.
8

9 THE COMMISSIONER: Let me see if I understand it. The
10 validation did not test the extent to which, or whether,
11 DNA could be detected below 0.001 ng/μL?
12

13 MS HEDGE: Yes.
14

15 THE COMMISSIONER: And as a consequence, we don't know
16 whether the instruments can detect DNA reliably below that
17 concentration?
18

19 MS HEDGE: Yes.
20

21 THE COMMISSIONER: Therefore, rather than treating
22 a reading of less than 0.001 ng/μL as indicative of no DNA,
23 one should treat it upon the assumption that there is DNA
24 in the sample; is that right?
25

26 MS HEDGE: Yes, until that further work is done to
27 properly identify true limit of detection.
28

29 THE COMMISSIONER: So does it follow, then, that to report
30 no DNA detected for samples that returned a quant below
31 0.001, as was the case until recently, is unsound?
32

33 MS HEDGE: Yes, that's right, but perhaps not with the
34 knowledge of anyone doing it.
35

36 THE COMMISSIONER: No, no, nobody knew it at the time, but
37 the implication from what Dr Taylor is saying is that
38 a limit of detection is generally understood as a quant
39 value below which we know that our instruments cannot
40 reliably return a result for the presence of DNA, or its
41 absence.
42

43 MS HEDGE: Yes.
44

45 THE COMMISSIONER: Now we have another reason why a quant
46 below 0.001 can't be regarded as indicative of the absence
47 of DNA, because it has not been tested to determine whether

1 it is unreliable; it might well be possible to determine
2 the presence of DNA below that level.

3
4 MS HEDGE: That's right. That's right.

5
6 THE COMMISSIONER: I understand.

7
8 MS HEDGE: The effect of his recommendation is that, going
9 forward, immediately, there should be no reporting of no
10 DNA detected, because at this time, in his view, there has
11 been no proper validation of that limit of detection.

12
13 THE COMMISSIONER: So we should be testing samples that
14 return a quant below 0.001 upon the assumption that it does
15 contain DNA until we know differently?

16
17 MS HEDGE: That's right, which is all samples, now that
18 the DIFP threshold has been removed.

19
20 THE COMMISSIONER: Which means all samples.

21
22 MS HEDGE: Yes, all samples that are put through the
23 laboratory.

24
25 THE COMMISSIONER: Thank you.

26
27 MS HEDGE: Commissioner, depending on what the true limit
28 of detection is, which would be determined if
29 recommendation 9 is put into effect, there may also be some
30 effect on samples reported as no DNA since this validation
31 was done in 2015. That is, if the true limit of detection
32 happens to be 0.001 ng/ μ L, then there is no concern about
33 previous results, but if the true limit of detection is
34 lower, then there may be some impact on previous results
35 and impact on what should be done with samples that have
36 been tested in the past and reported as no DNA.

37
38 THE COMMISSIONER: Of course, that depends upon a question
39 that hasn't been raised yet but will have to be raised and
40 answered, which is this: in cases of serious crime, major
41 crime, violence against the person, there is an issue
42 whether whatever quant is returned, even zero, samples
43 shouldn't be tested fully - that is to say, whether any
44 threshold whatsoever should be applicable to determine that
45 samples should not be tested when major crime is involved,
46 and so the issue is should all samples that have been taken
47 with a view to attempting to capture a suspect's DNA be

1 fully tested if the samples were taken as part of an
2 investigation into major crime?

3
4 MS HEDGE: Yes, that question arises and will be dealt
5 with by Dr Kogios and Ms Baker, who are doing the overall
6 review of the current operation of the laboratory.

7
8 THE COMMISSIONER: Yes.

9
10 MS HEDGE: That deals with the QuantTrio recommendations
11 and findings of Dr Taylor.

12
13 The second validation with which he found concerns
14 with experimental design relates to the ProFlex
15 instruments. The lab has a number of ProFlex machines.
16 The ProFlex is a thermocycler. That means the machine
17 heats and cools the samples in accordance with a program to
18 allow the amplification process to take place.

19
20 Can we turn to page 72 of the report, please,
21 operator, and zoom in on the paragraph under 11.9, please.
22 As Dr Taylor says here at line 2363, in his opinion, the
23 ProFlex validation was not carried out in accordance with
24 best practice. That relates to a number of features:
25 first, the use of STRmix in a validation, which was only
26 included after implementation; second, the number and
27 variation of samples which were processed using each
28 machine; and, third, the generation of what are called
29 model-maker parameters in STRmix for the ProFlex
30 instruments as a group rather than for each ProFlex
31 instrument individually.

32
33 THE COMMISSIONER: What does that mean? I don't
34 understand it.

35
36 MS HEDGE: There are parameters in STRmix, settings, which
37 coincide or are tested to make sure that the ProFlex and
38 STRmix work together appropriately. I'm sure there is
39 a number of ways of setting those settings, but what
40 Dr Taylor recommends is that for each individual ProFlex
41 machine, settings should be determined, the interaction
42 between the two, the instrument and the software, but this
43 validation treated the ProFlex instruments as a group and
44 used averages to set the settings.

45
46 THE COMMISSIONER: Let me see if I have understood it, and
47 you can correct me if I have misunderstood it. STRmix is

1 the computer software that is used to, in effect, smooth
2 out profiles by way of assistance to the interpreters so
3 that the profile that they see is the clearest and best
4 profile that is obtainable. Would that be a fair
5 description?

6
7 MS HEDGE: I would describe STRmix as the program that
8 assists with the creation of the likelihood ratios --

9
10 THE COMMISSIONER: Yes, all right.

11
12 MS HEDGE: -- rather than the electropherogram.

13
14 THE COMMISSIONER: All right. So STRmix is a software
15 program which assists the reporting scientists in
16 interpreting the electropherograms, the profiles, but the
17 way it works is that it has to be programmed, or, rather,
18 parameters have to be set within STRmix for each laboratory
19 depending upon the equipment that it uses and the kinds of
20 results it tends to get, so it has to be individualised as
21 a software program for each laboratory?

22
23 MS HEDGE: Yes.

24
25 THE COMMISSIONER: And it has to then be individualised
26 because of the unique equipment system that any particular
27 laboratory uses, the manufacturer of a particular piece of
28 equipment or a chemistry kit that is used, and so the
29 STRmix has to be instructed to take into account the use of
30 particular chemical equipment and particular electronic
31 instruments; yes?

32
33 MS HEDGE: Yes.

34
35 THE COMMISSIONER: So when this laboratory uses the
36 ProFlex thermocycler as a piece of electronic equipment as
37 part of the amplification step in DNA profiling, it doesn't
38 have a single ProFlex machine; it has a number of ProFlex
39 machines?

40
41 MS HEDGE: Yes.

42
43 THE COMMISSIONER: What Dr Taylor says is that the
44 parameters of STRmix have to be adjusted to take into
45 account each individual ProFlex machine; is that right?

46
47 MS HEDGE: Yes.

1
2 THE COMMISSIONER: Whereas the validation assumed that it
3 was sufficient to set the parameters of STRmix as though
4 there was only one ProFlex machine; that is, it was a set
5 of parameters taking into account the group of machines as
6 though they didn't differ between each other. But one
7 shouldn't assume that. One should set STRmix parameters
8 according to each individual machine that is used as part
9 of the amplification process?

10
11 MS HEDGE: Yes, unless, when you test each individual
12 machine, it turns out that the settings happen to be either
13 the same or so close as to be sufficient to use one setting
14 across.

15
16 THE COMMISSIONER: Yes, you shouldn't assume that they
17 won't have a difference in the effect upon the samples that
18 go through to STRmix. They may have a different effect,
19 they may not, but it will be a coincidence if they don't,
20 but you should not assume that they will. Yes,
21 I understand.

22
23 MS HEDGE: Operator, could we zoom in on the next
24 paragraph, please, on that page. At line 2370,
25 Commissioner, Dr Taylor concludes that while there is no
26 evidence of unreliability, equally there is a limited
27 ability to demonstrate reliability on the results shown,
28 and Dr Taylor believes additional laboratory work would
29 have been beneficial. The technical details of that are
30 set out in the rest of that paragraph.

31
32 Can we turn then to page 13 of the report. Dr Taylor
33 does have an executive summary at the start of the report
34 that deals with each of the validations. Could we turn to
35 the paragraph at line 418, please. This relates to the
36 ProFlex machines. He concludes that:

37
38 *There is a risk of unreliable results being*
39 *produced and reported (ultimately being*
40 *reflected in the likelihood ratio produced*
41 *to QPS) if there is an undiagnosed*
42 *divergence in performance between the*
43 *ProFlex instruments.*

44
45 Which is the matter that I was just discussing with you,
46 Commissioner.

1 Could we highlight the next paragraph there, please,
2 operator. At line 422, Dr Taylor says:

3
4 *However, I do not believe a suspension of*
5 *laboratory functions are required whilst*
6 *this additional validation work is being*
7 *carried out.*

8
9 He bases his opinion on three factors, which appear
10 immediately below that. Put briefly, they are that the
11 current STRmix settings are set as an average, which is the
12 safest way, perhaps, of doing it other than testing each of
13 the instruments; that STRmix is robust to changes in
14 settings; and that appropriately qualified and trained
15 scientists would likely have seen in the profiles if there
16 were any dramatic issues with the STRmix results.

17
18 Could we turn back to page 82, please, operator.
19 Again, here are the recommendations. The top
20 recommendation here is recommendation 8. The heading
21 appears on the previous page, but all of the text appears
22 on this page from line 2706. The recommendation there is
23 that additional experimental laboratory work should be
24 carried out to show the relative differences in performance
25 of the ProFlex instruments, and there are specifics of the
26 technical detail of what that extra work should involve.

27
28 Commissioner, those are the most significant issues
29 identified by Dr Taylor. That means, of course, that other
30 validations reviewed by Dr Taylor did, in his view, have an
31 adequate experimental design. That includes the
32 validations of the 3500 machine, which is the current
33 Genetic Analyzer, and the Hamilton STARlet machines, which
34 are automatic pipetting machines. While some of those
35 validations did not have appropriate statistical analyses,
36 Dr Taylor did not conclude there was a risk of unreliable
37 results from them.

38
39 When Mr Taylor gives evidence, we will deal with some
40 of those statistical matters, but I didn't intend to deal
41 with them at length now.

42
43 From his review, Dr Taylor has identified a number of
44 recommendations that would improve the way validations are
45 performed by the Queensland laboratory in the future.

46
47 Can I outline some of those now. Can we turn to

1 page 80 of the report and zoom in on recommendation 1,
2 please. Recommendation 1 sets out a recommendation about
3 what should be included in standard operating procedures.
4 There is a standard operating procedure about performing
5 a validation, but Dr Taylor considers it could be improved.
6 As it says, there is an appendix there. At line 2638,
7 Dr Taylor mentions the appendix of the "Writing Guidelines
8 for Validation and Change Management Reports", but he
9 considers there could be an improvement of what the
10 standard operating procedure says to assist staff who are
11 performing the validation task.
12

13 Could we turn to recommendation 2. Dr Taylor
14 recommends that acceptance criteria should be based on
15 absolute values rather than relative to the performance of
16 a previous instrument. That means that in some of these
17 validations that he reviewed, the validation work simply
18 compared the new instrument to what was being produced by
19 a previous instrument to see whether it was just as good.
20 His recommendation is that that shouldn't be done and
21 that's not a proper way to approach a validation, but,
22 rather, there should be an objective standard against which
23 the new instrument is measured.
24

25 Could we turn to page 81, please, recommendation 4.
26 Of course, each of the recommendations is important to you,
27 Commissioner, but I am simply highlighting some of them in
28 this opening. In recommendation 4, there is
29 a recommendation that for each validation carried out that
30 requires a statistical analysis of results, an individual
31 who has formal training or qualifications should be
32 involved. That is in direct response to the number of
33 validations which had problems with their statistical
34 analysis, in Dr Taylor's view. He recommends that could
35 come in a number of ways - a professional statistician
36 within Queensland Health, a professional statistician
37 outside of Queensland Health or there could be training of
38 members of the laboratory. Mr Rhys Parry has some training
39 in that area. I'm sure there are others also. But in
40 every validation, there must be a person with that level of
41 expertise.
42

43 Then to recommendation 7: of the members who sign off
44 validation reports, at least one should be external to the
45 group who is carrying out the validation to provide
46 external feedback.
47

1 Can we turn to page 83. At recommendation 13, at the
2 bottom of that page, there is a recommendation from
3 Dr Taylor that following the completion of a validation,
4 a presentation should be given to all members of the
5 forensic organisation, explaining the work done, the tests
6 carried out and the meaning of the test results. This
7 ensures that each member understands the statements being
8 made in their own reports within the context of how they
9 relate to the performance of the laboratory instruments.

10
11 Commissioner, Dr Taylor will give evidence later in
12 this hearing. Today's witnesses are Mr Parry and Ms Caunt,
13 two of the reporting scientists at the laboratory.
14 Ms Reece will now call Rhys Parry.

15
16 THE COMMISSIONER: Thank you.

17
18 <RHYS PARRY, affirmed: [10.02am]

19
20 <EXAMINATION BY MS REECE:

21
22 MS REECE: Q. You are Rhys Parry?

23 A. Correct.

24
25 Q. Mr Parry, you have provided a statement to the
26 Commission?

27 A. I have.

28
29 Q. And you swore that, or you signed that statement, on
30 28 September?

31 A. Yes.

32
33 Q. Could you have a look at that statement. It's just
34 being handed to you.

35
36 MS REECE: Commissioner, that document is
37 [WIT.0043.0001.0001_R].

38
39 Q. Mr Parry, is that your statement?

40 A. It is.

41
42 Q. The contents of that statement are true and correct?

43 A. They are.

44
45 Q. Is there anything you wish to amend in that statement?

46 A. No.

47

1 MS REECE: Commissioner, I tender the statement of
2 Rhys Parry.

3
4 **EXHIBIT #70 STATEMENT OF RHYS PARRY, BARCODED**
5 **[WIT.0043.0001.0001_R]**
6

7 MS REECE: Q. Mr Parry, you are a reporting scientist at
8 the DNA Analysis Unit of the Forensic and Scientific
9 Services division of Queensland Health?

10 A. That's correct.

11
12 Q. What are your qualifications?

13 A. I have a Bachelor of Science. I have a postgraduate
14 honours degree in forensic osteology. I have
15 a postgraduate certificate in experimental design and data
16 science. I have a few other minor qualifications that are
17 not terribly relevant.

18
19 Q. You have worked at the DNA lab since March 2006?

20 A. That's correct.

21
22 Q. And as a reporting scientist there since August 2008?

23 A. Yes.

24
25 Q. What did you do prior to commencing your role at FSS?

26 A. I was a lecturer in basic experimental design and
27 anatomy and physiology for the Australian College of
28 Natural Medicine.

29
30 Q. Can you tell the Commissioner what experimental design
31 is?

32 A. Experimental design is a subset of science whereby you
33 develop a means of studying a scientific process. It's not
34 a - just because you're a scientist doesn't mean you
35 understand experimental design. It is basically a genre
36 unto itself, and it basically boils down to having controls
37 and how to manipulate variables in a controlled way so that
38 you can make inferences based on the changes that you
39 observe and how to analyse that data.

40
41 There are important parts about setting up experiments
42 because it's important that you set up an experiment in the
43 right way to basically measure the variation in the system
44 that you are trying to understand so that you can then
45 analyse it in a particular way in order to get the result
46 that you are after, or at least understand the system that
47 you are trying to understand.

1
2 Q. You had that experience prior, and then you sought
3 that postgraduate qualification?

4 A. That's correct. I had done some as a part of research
5 assistant positions that I had held in the past, and part
6 of my honours degree was very heavily stats related. But
7 it had been some 15 years or so since I'd done it in any
8 great depth, and I was aware that there were some problems
9 in the lab with the way we were doing things, but I wasn't
10 confident enough in my memory of statistical processes to
11 be able to say, "This is definitely what we should be
12 doing", blah, blah, blah blah. So I wanted to go and get
13 that qualification to, one, refresh my own memory and, as
14 well, learn a bunch of new techniques that had sort of been
15 developed and become a lot more popular since computing
16 power had advanced considerably since the 1980s, early
17 1990s, when I was last at university.

18
19 Q. The issues that you observed in the lab, they were to
20 do with the statistical analysis as part of the
21 experimental design that was being undertaken as part of
22 project work, for example?

23 A. That's correct.

24
25 Q. I'll take you briefly to your evidence about your
26 concerns following the 6 June 2022 decision. I will use
27 that shorthand, Mr Parry, because the Commission has
28 already heard quite a bit of evidence about what that
29 decision was and, in fact, quite a bit of evidence about
30 people's response to it, but I would like to ask you.

31
32 At paragraph 6 of your statement, which is on the
33 first page, you explain that after that decision, your
34 concerns were:

35
36 *... that the DNA Analysis Unit maintained*
37 *the process of analytical staff reviewing*
38 *'no DNA detected' and 'DNA insufficient for*
39 *further processing' results without the*
40 *reporting scientists seeing them ...*

41
42 Could you explain what you mean by that and, in particular,
43 what you mean in relation to DNA insufficient?

44 A. To my mind, the range which has been discussed at
45 length, between 0.001 and 0.0088 as DNA insufficient -
46 within the lab, anything below that is considered no DNA.
47 To my mind, it's not no DNA. We've never explored that

1 range. The QuantTrio validation never looked below that
2 level. If DNA is still detected in that below 0.001 and it
3 is higher than 0.000, that's still detectable DNA. Now, it
4 might not be sufficient to get a profile, but, to me,
5 that's still DNA insufficient, because it was detected.
6 So, to me, it's still correct to say that they were writing
7 those off, because if it was below that threshold of 0.001,
8 they were still just being written off as no DNA in terms
9 of the way they were being reported back. But, to me,
10 that's still DNA insufficient, and no DNA is when you get
11 0.000 in the quant.

12
13 Q. So your comment there is really a concern in relation
14 to those very low quant ranges and the way they are
15 presently being characterised or classified?

16 A. Yes.

17
18 Q. Your concern about the process communicated to the lab
19 on 6 June was that you thought the decision to return to
20 amplification only, without microcon, was problematic?

21 A. Yes.

22
23 Q. You say in paragraph 7 that your concern was that this
24 change in process could result in significantly lower
25 probability of obtaining optimal DNA profiles from samples
26 in that now well-known range of 0.001 and 0.0088?

27 A. That's correct.

28
29 Q. What do you see as the implication of that? What's
30 the problem with that?

31 A. That if you are just amplifying in that range, one,
32 you are consuming sample that could be microconned down to
33 get a better concentration of DNA in the sample in order to
34 get a better profile; and, two, a lot of samples will then
35 yield a no DNA profile, which again is not particularly
36 helpful. In that range, you really need to be microconning
37 in order to get the best result. So just amplifying is not
38 going to do that.

39
40 Q. You explain that further in your statement. Just to
41 move through sequentially your concerns following the
42 19 August decision, can you explain your response to that
43 decision to microcon all samples to that 35 microlitre
44 level?

45 A. As I said, I had mixed feelings, in that it's not
46 optimal. When you are down to that level, the difference
47 between 35 and concentrating it to 15 and then amplifying

1 is effectively you are doubling the amount of DNA,
2 potentially, doubling the DNA. So microconning to full
3 will give the best result, generally speaking. But I kind
4 of understood at the time that QPS might have been losing
5 confidence in our ability to obtain DNA at low levels
6 because of everything that had gone on, and maybe they were
7 hedging their bets so that they could get it analysed
8 elsewhere if they wanted to. I honestly didn't have a big
9 problem with that, because maybe, given everything that's
10 gone on, that was the best decision for the community. But
11 from a scientific perspective, it wasn't the optimal
12 decision because microconning that extra little bit doubles
13 the DNA, as I said, which is more likely to give you a good
14 profile.

15
16 Q. So I think it is fair to say the tenor of your
17 evidence is that it's not your ideal position, but it is
18 a step in the right direction?

19 A. It was a step in the right direction and I thought it
20 was an understandable one, if it had come from QPS.

21
22 THE COMMISSIONER: Q. You mean if, as you speculated,
23 QPS decided that they were prepared to forgo the best
24 scientific approach in favour of reserving some of the
25 sample for testing maybe in another lab, you could
26 understand why they would do that, although from
27 a scientific perspective, that's not the best course; the
28 best course is to micro-concentrate to full or at least be
29 in a position to consider whether to do that?

30 A. That's correct, yes.

31
32 MS REECE: Q. Just to be clear, you talk about that that
33 was your suspicion, that QPS were involved, but you are not
34 aware necessarily of anything --

35 A. I have no firsthand knowledge of that. It was just me
36 speculating based on the events that were occurring at the
37 time.

38
39 Q. I will just take you, then, back somewhat in time to
40 around July 2017. This is in paragraph 9 of your
41 statement, Mr Parry. The questions I want to ask you here
42 are about Justin Howes asking you to look at some data or
43 a spreadsheet where he had carried out some calculations of
44 some success probabilities of microconning samples in
45 a particular range, a particular quantitation range. What
46 you say in your statement is that he provided you with this
47 spreadsheet. What did he ask you to do?

1 A. He asked me to check the calculations in the
2 spreadsheet. He basically stated that he was looking at
3 historical microcons and their success rates, and that was
4 pretty much all he said about it. It was a verbal
5 transaction, and then he sent me - well, indicated where
6 I would find the spreadsheet and basically said, "Go and
7 check it."

8
9 Q. When you did check it, you formed a view as to what it
10 was that he might have been trying to examine, when you
11 looked at that data?

12 A. That's correct, yes.

13
14 Q. And what was that?

15 A. I thought he was looking at the frequency with which
16 you would get - or trying to work out a frequency with
17 which you would get a useable profile based on the
18 concentration of the original sample.

19
20 Q. You then produced a model of that data?

21 A. That's correct.

22
23 Q. You have provided a copy of that model. Now, you
24 didn't find any errors in his calculations, did you?

25 A. No. The calculations in the spreadsheet that he had
26 were correct for what they seemed to be calculating. But
27 I had my suspicions that what he was aiming for was a bit
28 different to what he was actually calculating, and so
29 that's why I did the probability distribution calculation.

30
31 Q. So you created - or you plotted the success
32 probabilities and you created a document for him that set
33 those out?

34 A. Yes, when I went back to tell him that the spreadsheet
35 that he presented me with had the correct - the
36 calculations in it were all correct, I said - I basically
37 provided him with an A4 sheet that had the plot on it and
38 a table. There was another sheet that had a table on it
39 that was the probabilities at - they were fairly arbitrary,
40 but evenly spread divisions of concentration, and I said to
41 him that I thought this was what he was looking for and
42 explained briefly, it was a fairly brief exchange, that
43 I didn't think percentages were the ideal way to go because
44 the data was not distributed evenly and you needed to
45 normalise it, and additionally it wasn't a linear
46 relationship, it was an exponential relationship, so you
47 had to factor that in, and he said basically, "Okay, well,

1 leave that with me", and that was it.

2

3 Q. Can you take you to RP-02, which should be flagged on
4 your brief. Mr Operator, that's page 7 of this. I have it
5 as page 7. I think that might be wrong.

6

7 THE COMMISSIONER: It is 0007, I think, what you want,
8 Ms Reece?

9

10 MS REECE: It is not that document, though. It's
11 [WIT.0043.0002.0007_R at 0007_R]. That document is not
12 relevant to what we're currently looking at, Commissioner.
13 Thank you, Mr Operator.

14

15 Q. Mr Parry, that's the plot that you have just been
16 speaking of?

17 A. That's the plot, yes.

18

19 Q. Do I understand your evidence to relate to the fact
20 that at the lower level of quantitation that you can see
21 there, the probability - perhaps I can ask you to explain
22 what is demonstrated on that document?

23 A. Okay. This is a probability distribution. You are
24 looking at the mean quant across the bottom. Basically,
25 I divided it into a bunch of different silos of information
26 and then took the mean quant across each of those silos.
27 I honestly, off the top of my head, can't remember what
28 those silos were, but they were very narrow bands, like
29 0.000 to 0.0001, 0.0001 to 0.0002, et cetera, all the way
30 across from 0.000 up to 0.0033, which is basically our
31 optimal amp. So when you get to 0.0033, you are amplifying
32 at the optimum level. So it was everything suboptimal.

33

34 Then the predicted probability is up the left-hand
35 side on the Y axis. The blue line is the mean probability.
36 The dotted red lines are the 95th percentile confidence
37 limits for that mean. You can see at 0.010 mean quant that
38 if you just draw a line up from that, you come to a mean
39 probability of about 0.33 maybe, so that's a 33 per cent
40 chance in ordinary terms, with a confidence limit of
41 maybe - so the two red bars, the lower red bar would
42 probably match up with maybe 0.027 and the upper one with
43 0.036 or 7, something like that. Do you follow me?

44

45 Q. Yes.

46 A. And so basically you can see that it is not a linear
47 relationship, because it is curved, and it is not a simple

1 percentile sort of arrangement, because there was so much
2 more data down at the zero end that it was basically
3 swamping out the results. An analogy would be if you had
4 a large jar with a couple of red balls in it and 1,000
5 white balls, that's going to give you 0.02 per cent chance
6 of getting a red ball if you randomly draw one. But if the
7 next jar has a few more red balls and the next jar has
8 a few more red balls, if you add them all up - I'm not
9 explaining that very well, I'm sorry.

10
11 THE COMMISSIONER: Q. Let me see if I grasp it. What we
12 are doing is we are trying to work out the probability of
13 getting a useable profile --

14 A. Yes.

15
16 Q. -- from various quants, from very low, close to zero,
17 up to 0.008 - yes?

18 A. Well, no, I went further than that. I went up to our
19 optimal.

20
21 Q. You went up to 0.3, but in the range that Mr Howes was
22 interested in --

23 A. Yes, it covers that.

24
25 Q. -- it was from almost zero up to 0.008, and the
26 problem that you struck was that, in the metaphor that you
27 were using, if you had the very low quants, that's the same
28 as having a jar with white marbles in it, 1,000 white
29 marbles, and two red ones --

30 A. Yes.

31
32 Q. -- and what's the prospect of getting a quant out of
33 that? Well, it is very low.

34 A. Yes.

35
36 Q. And at the upper limit, you have, say, 100 red marbles
37 in 1,000. It's much better.

38 A. Yes.

39
40 Q. But if you then mix those two jars together --

41 A. Well --

42
43 Q. Sorry, you go ahead.

44 A. We're on the right track. The mistake I made in my
45 initial thing was the next jar doesn't contain 1,000. It
46 contains, say, 10 red marbles in 100 - with 100 white
47 marbles, and the next one contains 50 red marbles out of

1 70 marbles, so there's 20. So when you add them all up,
2 you can see that the 1,000 white marbles swamps out the
3 proportions that are in the next silo and the next silo.

4
5 Q. In short, you can't just get a composite probability?

6 A. No.

7
8 Q. You have to look at the probability of getting the red
9 marbles in each of the cases that you have?

10 A. Yes, or normalised across.

11
12 Q. And give effect to the fact that you have a lot more
13 of the very few than you have of the very rich?

14 A. Yes, that's correct.

15
16 Q. If you put the probabilities all together and got an
17 average, you get a false average, because you are not
18 giving due consideration to the fact that most of your
19 samples are in the rare class?

20 A. Yes, that's correct. Yes.

21
22 MS REECE: Thank you, Commissioner.

23
24 Q. Mr Parry, that, in summary, is why you told Justin
25 Howes that percentage calculations weren't ideal --

26 A. Yes.

27
28 Q. -- for the kind of conclusion that he wanted to draw
29 about this data. He didn't actually ask you to look at
30 simply the 0.001 to 0.0088 range, did he?

31 A. No.

32
33 Q. It was a broader distribution of results?

34 A. It was all the data, all the microcon data, as far as
35 I understood, and I just derived this from the data he had
36 given me. I didn't harvest the data or reanalyse it or do
37 anything to it. It was just the data that he provided to
38 me - that was what it yielded.

39
40 Q. You have spoken of a table. If I could take you to
41 RP-03 and the second page of that, which is the next page,
42 Mr Operator, thank you. That document is some feedback
43 that you provided to Amanda Reeves and Kylie Rika --

44 A. That's correct.

45
46 Q. -- during the Project #184 period. On the second page
47 of that exhibit, that's the table that you were referring

1 to, isn't it?

2 A. I think that's a - that particular table there has
3 been neatened up. I think I just gave him a raw table much
4 more akin to what is on the last page of RP-01.

5
6 Q. That's page 0006. Yes, I see. So that's the table
7 that you provided to Mr Howes?

8 A. It would be very similar to that.

9
10 Q. And then the neatened-up one is the one that you
11 provided to Amanda and Kylie?

12 A. That's correct.

13
14 Q. In between Justin asking you to look at those figures
15 and Amanda and Kylie approaching you, had you heard
16 anything further about that analysis?

17 A. Not the analysis, not the project, no, nothing.

18
19 Q. You weren't part of that project?

20 A. No.

21
22 Q. When you gave that feedback to Amanda and Kylie, you
23 were really raising the same concern about taking
24 a percentage approach to success probabilities of those low
25 quant samples?

26 A. That's correct.

27
28 Q. If I can take you now further through your evidence,
29 you talk about your concerns about not microconning
30 samples. This is at page 18. This is the post 6 June 2019
31 situation, and you say the ability to microcon to full
32 greatly increases the likelihood of obtaining a DNA profile
33 compared to other strategies?

34 A. That's correct.

35
36 Q. You go on to say that simply amplifying a sample in
37 that range really - the probability of obtaining a useful
38 DNA profile is not high, taking that approach?

39 A. In my opinion, no.

40
41 Q. That's the basis of your concern about the decision of
42 6 June, isn't it?

43 A. Yes.

44
45 Q. You go on to say that you were concerned that that
46 change to go straight to amp without microcon would lead to
47 the suboptimal results at the end of the process, and your

1 concern is that it might be seen to reaffirm or back in
2 that 2018 decision to move to optional processing to show
3 that it was justified?

4 A. It's hard to see how it could be interpreted
5 otherwise, but, yes, that was my concern.

6
7 Q. So you can't think of any other reason --

8 A. I can't.

9
10 Q. -- why you would skip the microcon step and go
11 straight to amp for those low quant samples?

12 A. There might be another reason, but I can't think of
13 it.

14
15 Q. I want to ask you a little bit about reworking
16 samples, and before I do that, I will just ask you this:
17 when you talk about reworking in the lab as a reporting
18 scientist, there are two aspects to that, aren't there?
19 There are reworking of no DNA and DIFP samples, which you
20 can do of your own volition?

21 A. Yes, if we get to see them, yes, we can do that.

22
23 Q. If they arrive on your work list for you to do
24 a statement as part of a bundle of other samples that have
25 come through that do have profiles --

26 A. Yes.

27
28 Q. -- you might see them and think, "I had better send
29 that back"?

30 A. If a case has been assigned to us, which is usually -
31 either it's a big operation or if it's assigned to us for
32 statement writing, we have that option. Otherwise, we
33 don't generally see them.

34
35 Q. The other aspect is that there might be samples which
36 have been processed and there has been a profile or there
37 has been a validated result sent through to police, but
38 then as a reporting scientist, when you look at it, you
39 have some concerns about a further step that should be
40 taken, perhaps to enhance that result or --

41 A. It doesn't even have to be a result that has been sent
42 through. Often we will rework. So we will get a result
43 and go, "Well, based on the peak heights, I'm not confident
44 that this is two people. I think it might be three people,
45 so I will rework it to see if that changes." Because of
46 the stochastic nature of low-level DNA, sometimes a peak
47 can drop out. A second amp might bring that peak back. If

1 it comes back a second time and there is nothing there,
2 then probably there was nothing meant to be there. So
3 sometimes it can be done to just give you greater certainty
4 as to what the profile is actually doing, particularly if
5 it is a bit lower level.
6

7 Other times, it can be used to resolve what may be
8 potential artefactual things, like primer binding site
9 mutations, where you can see an obvious profile in there,
10 but one peak seems to be missing, because it's just gone.
11 Sometimes, DNA alleles, they have a mutation on them and
12 they don't amplify, so you will get its pair sitting there,
13 but it will be missing one of them, so you might redo it to
14 confirm that; or if you find a tri-allele, which is an
15 aberration in a locus sometimes where you get three peaks
16 from a single person rather than just the normal two, you
17 might rework it again to confirm that. There are other
18 things, but often it is, you know, if you sort of - as you
19 said it originally, there is a result that you go, "Oh,
20 I don't like that result. I will rework it and see."
21

22 Q. If a result has already been validated and sent to the
23 police and you want to rework it, you have to ask for
24 permission, don't you?

25 A. Now, yes.
26

27 Q. That has been the case since about 2019?

28 A. I don't recall having to ask police permission, but
29 then we didn't generally rework stuff that had already been
30 sent out. It may have been the case. Certainly we would
31 have had to have gotten permission internally. But, yeah,
32 I can't comment on that. I don't recall.
33

34 Q. So when you say "now", do you mean the procedure where
35 you have to talk to QPS about this?

36 A. Yes.
37

38 Q. What I'm asking you about is a process whereby you
39 needed to ask permission of the managing scientist to
40 rework certain samples.

41 A. Yes, internally, yes, we had to, if a result is sent
42 out, we had to send a request to get approval.
43

44 Q. Your concern about reworking probably, as I understand
45 it, is that it can cause significant delay?

46 A. It can.
47

1 Q. And that that delay can impact on whether scientists
2 in fact undergo that rework?

3 A. Yes.

4
5 Q. Depending on time frames, presumably?

6 A. That's correct.

7
8 Q. Do you have any issue with the process whereby you
9 have to ask permission from the managing scientist to
10 rework samples?

11 A. Not so much - one, I don't know that we necessarily
12 should have to, because we're the subject matter experts.
13 But between that and then sending it off for rework and all
14 the other things that can occur in the meantime, it can be
15 a delay of two to three weeks sometimes. So, you know,
16 if - and we often don't have that lead time. Sometimes you
17 are writing statements with only a few days to go, so you
18 just don't have the opportunity to rework, and so some
19 scientists will just go, "Look, it's just too late."

20
21 Q. You have spoken at paragraph 29 that, for example, you
22 have asked management that if sperm are observed, even if
23 there are no DNA or DNA insufficient results, that instead
24 of that process occurring, that it instead goes to
25 a reporting scientist for automatic rework?

26 A. Yes.

27
28 Q. Your understanding is that that was done verbally and
29 through email and that a spreadsheet was set up in November
30 2021. Is that Kylie Rika's spreadsheet?

31 A. It is.

32
33 Q. You are aware of this through your conversations with
34 your colleagues? It's not a request that you yourself have
35 made?

36 A. No, I had discussed it with Kylie and I knew she was
37 addressing it, so I hadn't put in my own further comments,
38 but it had been well discussed amongst the reporting
39 section that I think most of us, if not all of us, thought
40 it was a problem.

41
42 Q. That's because of the potential anomaly in a sample
43 where sperm is observed, but then no DNA is detected, or
44 insufficient?

45 A. That's correct, yes.

46
47 Q. Kylie Rika isn't your line manager, is she? Sharon

1 Johnstone is?

2 A. No; that's correct.

3

4 Q. But you have a good relationship with Kylie?

5 A. Yes.

6

7 Q. And you discuss these kinds of issues with her?

8 A. Yes.

9

10 Q. You have raised a concern about two aspects of the
11 wording in witness statements. If I can just take you to
12 that, that's at paragraph 30 of your statement, on page 6.
13 The first that you raise is a concern that you have with
14 the reporting of multiple unknown profiles. Can you
15 explain to the Commissioner what you mean by that?

16 A. An unknown profile is a profile that we can basically
17 pull out that has a certain strength that we can be
18 confident that that set of alleles comes from a single
19 individual, but it doesn't match any of the reference
20 samples that have been provided to us as part of the case,
21 so it's essentially a profile of unknown origin.

22

23 We designate those within the case as unknown male 1,
24 unknown male 2, unknown female 1, unknown female 2, or if
25 we aren't certain about the gender, we will call it unknown
26 person 1 or unknown person 2, et cetera. However, when we
27 are writing statements, it's not standard practice to
28 designate between them. A lot of scientists - and I think
29 the official wording or the recommended wording is just to
30 report it as an unknown profile and move on, whereas
31 I think it's important that it's designated that this
32 unknown is different from this unknown is different from
33 this unknown in statements. But, yes, it's not something
34 that we do.

35

36 Q. So it's information that you are assessing and you are
37 recording as you go along, but it's not conveyed in the
38 statement?

39 A. For the most part, no. It's something that I do, and
40 there's a couple of other scientists who do it, but it's
41 not a universal thing. It was discussed way back when we
42 first started doing wording for STRmix-based statements,
43 and it was - my memory of it is that it was considered that
44 police weren't particularly interested, or at least that's
45 the impression that I got or was told, so we didn't do it.
46 But I've always thought it was an issue, so I've always put
47 that in.

1
2 But even when we do mixtures, there are often unknowns
3 that we can pull out of the mixture that get attributed as
4 an unknown person, but we don't write that in the
5 statement, and no scientist does that. I don't, other
6 scientists don't. We just say it's a mixed DNA profile
7 that didn't match, or did match, you know, whoever from the
8 reference samples, and if it matches - if there is an
9 unknown that we are able to deduce from that, it just never
10 gets mentioned.

11
12 Q. You also talk about three person mixtures that are
13 potentially two person mixtures, and you note at
14 paragraph 39 that this is a particularly important issue in
15 sexual assault cases, where a sample reported as a three
16 person mixture with no further information may incorrectly
17 convey or suggest to stakeholders that there was a third
18 person's DNA present, when, your words are, "it is more of
19 a mathematical construct". Taking you back through that,
20 this is about the statistic modelling that STRmix uses,
21 isn't it?

22 A. That's correct.

23
24 Q. Often, you can see at the electropherogram stage, when
25 you are interpreting, whether or not it's truly a third
26 person?

27 A. So, yes, if at a particular region - so at every
28 region of DNA that we look at, a single individual will
29 generally contribute two pieces of information, one from
30 their mother, one from their father, except in that case
31 I talked about earlier with tri-alleles, but they are
32 fairly rare. So if you see four alleles, you can safely
33 assume that it is probably two people. If you see five
34 alleles, you can usually safely assume that it is at least
35 three people.

36
37 But sometimes you will get four alleles and little
38 artefactual peaks that come with each allele called
39 stutter. Sometimes those stutter will be a little bit
40 bigger than they are expected to be, so that could be
41 indications that there is a third person there and that
42 it's also contributing to that same piece of information as
43 what the stutter is.

44
45 It depends on the height of the profile. If you have
46 a very, very clean, high, strong profile, you might go,
47 "Well, that's just high stutter, and there are no other

1 indications of an extra contributor. I'm just going to
2 call that the minimum number I can see." But if it is
3 lower level and a bit more ambiguous, you might go, "Well,
4 that could be a third person contributing, so I'm going to
5 model it mathematically as a third person", because it is
6 better to model with an extra person than to model with one
7 too few. That's just the way the model works. But we will
8 report that as three people, even though we're kind of just
9 mathematically hedging our bets. It looks like two people,
10 but there are a few aberrations that make it possibly
11 three. I don't think that's a big issue if you are talking
12 about a park bench, but if you are talking about a sexual
13 assault investigation kit, arbitrarily adding in that third
14 contributor, even though we need to do it for the analysis,
15 can be misleading in terms of the impression it gives to
16 the legal system.

17
18 Q. It could be significant and even suggest there were
19 additional parties in a sexual assault --

20 A. Yes.

21
22 Q. -- which could be quite concerning for some victims?

23 A. Absolutely.

24
25 Q. You talk about your preferred wording, which might be,
26 for example, to say, depending on the case, that two
27 profiles were observed and that there was a third
28 contributor, perhaps a trace contributor. That would be
29 a preferred wording, perhaps, for what you have described
30 as lower level?

31 A. I think moving forward that we need to move towards
32 something that is a bit more descriptive of what's actually
33 going on in the profile rather than just inserting number
34 of contributors into a standard block piece of text,
35 because I think it has the ability to give the wrong
36 impression. And whilst we can always explain that on the
37 stand, if we are asked, we don't go to court that often any
38 more and so we don't get that opportunity.

39
40 Q. Do you go to court less nowadays than you used to?

41 A. Oh, yes, yes. Yes, yes. Since the legal reforms from
42 a few years ago, it's much less common.

43
44 Q. Do you mean by that the section 95 certificates can be
45 issued for your evidence to be - I'm sorry, committals,
46 perhaps is more --

47 A. The committals, yes.

1
2 Q. I'm reminded by my learned friend that that would be
3 more likely.

4 A. Yes.

5
6 Q. You used to give evidence at committal stage?
7 A. Yes.

8
9 Q. The risk really, you would agree, wouldn't you, for
10 a layperson - and we are all laypeople, more or less -
11 looking at this evidence of a three-person mix would be
12 that there would be an assumption that that was evidence of
13 three people, the presence of three people's DNA?

14 A. Yes, prima facie, that's what it says, and so, yes,
15 unless you know otherwise, you would accept it at face
16 value, sure.

17
18 Q. You have raised in your statement - and this is at
19 page 10, Mr Operator, under the heading "Validations".
20 Now, validations of processes and equipment in the lab is
21 something which you feel particularly strongly about,
22 Mr Parry?

23 A. It is.

24
25 Q. You have set out in your statement, which was provided
26 in September, a number of concerns that you have about
27 different validation projects which have been undertaken in
28 the lab over time, and in particular, or perhaps initially
29 at least, the one that you raise is QuantTrio, which was
30 Project #152?

31 A. Yes.

32
33 Q. You raise your concern that that validation project is
34 very poorly designed?

35 A. In my opinion, yes.

36
37 Q. It contains multiple errors that have ramifications
38 then for other validations. Can you explain the function
39 of the QuantTrio instrument?

40 A. QuantTrio is a system for quantification. Basically,
41 it's a means by which we measure the amount of DNA that
42 there is in a sample, which then informs us how best to
43 amplify that DNA to get the optimal profile, which is what
44 we basically use as our means of analysing a profile or
45 analysing a sample.

46
47 Q. You have been provided with a copy of Duncan Taylor's

1 report into validations in the lab?

2 A. I have.

3
4 Q. And you have provided a response via email to the
5 Commission, which has been forwarded on to Dr Taylor.
6 Operator, could the witness please be shown, or the
7 Commission be shown, [WIT.0009.0022.0001_R]. Mr Parry,
8 I will leave to one side for the moment your concerns
9 around Project #192, but I see at the outset there that you
10 confirm that you have reviewed the statement and that you
11 have no disagreement with his findings. You did have some
12 concerns then about Project #192, effectively?

13 A. That's correct. It was more the way Dr Taylor worded
14 it, I was just concerned about how that might be
15 interpreted down the track. I don't inherently think he is
16 wrong with what he has stated with Project #192. It's just
17 I wanted some clarification around the way he had worded
18 it.

19
20 Q. Your concern is that unless that is made explicit or
21 perhaps elaborated on further, Queensland Health management
22 may take the view that there is nothing wrong with that
23 validation?

24 A. That's correct.

25
26 Q. And you are concerned about that being the case going
27 forward?

28 A. That's correct.

29
30 MS REECE: I tender that email, Commissioner.

31
32 **EXHIBIT #71 EMAIL DATED 10 OCTOBER 2022 FROM MR PARRY TO**
33 **MS REECE BARCODED [WIT.0009.0022.0001_R]**

34
35 MS REECE: Q. You have ongoing concerns about that
36 project, and you think the whole thing should be redone?

37 A. Absolutely.

38
39 Q. I won't take you through each of the matters that you
40 have raised in relation to validations, Mr Parry, because
41 they are covered in that report that Dr Taylor has
42 provided. Those responses, for the benefit of those in the
43 courtroom, are from part 14 onwards, where Mr Parry's
44 concerns are addressed by Dr Taylor.

45
46 I will just ask you, one of the features that you are
47 concerned about in the experimental design or the way

1 validation projects have been carried out historically in
2 the lab is - your concern is that the lab are doing
3 repeatability and reproducibility incorrectly?

4 A. That's correct.

5
6 Q. Can you explain what are repeatability and
7 reproducibility studies and why are they important for
8 validating instruments?

9 A. Okay. Generally speaking in science, repeatability is
10 your ability to get the same result doing the same
11 experiment again and again and again. Reproducibility is
12 generally the ability of other teams to get the same result
13 doing the same method elsewhere.

14
15 Within a validation construct, repeatability is your
16 ability to get the same result over and over again, and
17 reproducibility is on different days, at different times,
18 to get the same result, because machines heat up, ambient
19 temperatures in the room might make a difference. Ideally
20 you run a machine five times on a single day in quick
21 succession, and then you run it five times on different
22 days with different operators, and hopefully the results
23 should be fairly similar across all those runs.

24
25 Now, when you are testing a machine, or validating
26 a machine, the machine is the experimental unit. It is the
27 thing you need to test, and you need to test it multiple
28 times. The mistake that often gets made in the laboratory
29 is that repeats are seen as multiple examples of the same
30 sample run on the machine. So the machine gets run once,
31 but it will have many, many repeats of the samples that we
32 are using to measure that machine. This is what is known
33 as pseudo replication. So it is not really replication,
34 but it looks like it is, because of the mistake of thinking
35 that you are testing the samples. The sample is just the
36 means by which you are measuring the machine. You are
37 testing the machine. You need to run the machine multiple
38 times, not have multiple samples.

39
40 You can have multiple samples for the purpose of just
41 eliminating any sample variation, because, you know, you
42 take one sample and you take another one, there is a little
43 bit of variation from the pipetting, there is a bit of
44 variation because the samples aren't quite exactly the
45 same, so you can take a mean of those to get rid of that
46 variation, but ultimately it is the machine process that
47 needs to be repeated for you to understand the variation

1 within the machine. You are not really interested in
2 variation in the samples.

3
4 THE COMMISSIONER: Q. So if I'm understanding correctly,
5 if I want to test a machine that measures something,
6 measures a quantity of DNA, for example, then if I put in
7 10 samples ranging from a very low quant to a high quant,
8 I've got 10 samples there, and they are known quantities,
9 and I put them through, and I get around the known
10 quantities as a result, and so I feel satisfied that I've
11 tested the machine 10 times, but that's the pseudo testing
12 that you are talking about, because in fact I should be
13 taking quant number 1 and putting it through the machine
14 10 times; is that right?

15 A. Nearly. So what would happen, you need to put in the
16 different levels. The different levels would be referred
17 to as factors in normal experimental design language. So
18 you would have a high concentration, a medium concentration
19 and a low concentration, for argument's sake. What will
20 happen in the lab generally is that there will be five or
21 six replicates of the high concentration, five or six
22 versions of the medium concentration and five or six
23 versions of the low concentration, and that is interpreted
24 as being five repeats of each of them. But it's not. It's
25 one repeat, and they are all just pseudo replicates.

26
27 It's useful to do that, because then you can take
28 a mean of those values and go, well, that's probably the
29 true value of that high concentration and then the true
30 value of the medium concentration, but you need to repeat
31 that on another machine run, and that will give you two
32 runs, and then on another machine run --

33
34 Q. That is to say, you take a low, a medium and a high
35 quant and you take five examples of each and put all five
36 samples of low, five samples of medium and five samples of
37 high through the machine in one run and you get an adequate
38 result, and you think you have tested the machine five
39 times, but you say you have only tested it once?

40 A. That's right.

41
42 Q. What you need to do is test the machine on samples
43 over five runs of the machine, not five samples but five
44 runs of the machine?

45 A. That's correct.

46
47 Q. So you have tricked yourself in the first case,

1 thinking that you have done five runs, but you have only
2 ever run the machine once?

3 A. That's correct. It is not an uncommon mistake, but,
4 yes, you have got five samples, you think you have got five
5 repeats. But it is not the five repeats of the samples you
6 are interested in; it is the five repeats of the machine
7 you are interested in.

8
9 THE COMMISSIONER: Yes, I understand.

10
11 MS REECE: Q. You say at paragraph 61 that you have had
12 some success, for example, in convincing Paula Brisotto,
13 who is the team leader of evidence recovery, analytical and
14 intelligence --

15 A. That's correct.

16
17 Q. -- that repeatability and reproducibility was not
18 being done correctly, and that process was changed for that
19 particular project. I understand that your concern is that
20 that has not been rolled out across the board in these
21 sorts of validation projects?

22 A. It - I don't have a lot of - this is not part of my
23 normal job, so I don't get to see a lot of these. It's
24 only if I go hunting for them that I find them. My
25 impression was that it did improve for a while, but then
26 I noticed very recently a project, Project #199, where
27 again there was a machine testing thing where they had just
28 done two runs of the machine and called that repeatability
29 and reproducibility, when, in my opinion, it was pseudo
30 replicates.

31
32 Q. How do you become aware of these projects? Are you
33 consulted about them at all?

34 A. No.

35
36 Q. So when you say that you had some success with
37 convincing Paula Brisotto in this particular process that
38 they were running, how did you find out about it?

39 A. To be honest, I don't remember mostly. It would
40 either be I looked it up for some reason to see what we'd -
41 something had made me wonder what we had found, or I was
42 just checking to see what our results were to make
43 a decision on something, or someone had brought it to my
44 attention. I honestly can't remember. But I had gone in
45 and had a look and gone, "Well, that doesn't seem right" -
46 or read it.

1 It's not something that I'm ever asked to do, or the
2 projects are not - although they are publicly - not
3 "public", although they are available to everyone to go and
4 look at at any time, they are not kept secret or anything,
5 you have to sort of go and do it, and given that it takes
6 many hours, or even days if you go back to the actual raw
7 data, to go through a project and see how well done it was,
8 it's not something I just have time to do in amongst my
9 regular work. So it's only occasionally that I will see
10 them and notice them.

11
12 Q. That approach to project work - there is no actual
13 validation project team, is there?

14 A. Not that I'm aware of. There is the decision-making
15 team who oversee all the projects, but they sort of farm
16 out projects here and there as they need them done.

17
18 Q. I think you make some comments about what you think
19 would be a better approach, a dedicated team?

20 A. Yes.

21
22 Q. What would that look like?

23 A. I think it would be a team of people who had been case
24 managers or had experience in that. They would need to
25 have at least some experience in experimental design and
26 running projects. They would also need to have someone who
27 had some statistical abilities and have to, at the very
28 least, have a mentor outside, who we could send project
29 designs and plans to for an external assessment, or
30 alternatively employ a dedicated experimental biologist.
31 But if they didn't want to go to that level, at least have
32 a mentor outside the system. And I think the project team
33 needs to be independent of management, and while reporting
34 to management, they need to be independent of management so
35 that the science can be done as the science needs to be
36 done rather than the way it seems to be done now.

37
38 Q. What do you mean by that?

39 A. Well, like I say, the science is not being done
40 properly. I don't think a lot of the projects that we have
41 meet NATA requirements for repeatability and
42 reproducibility; there are a lot of mathematical errors
43 being made, statistical errors being made. So I think the
44 project team - a project team or validation team would need
45 to be able to design their own experiments as they see fit
46 for the problem at hand and have that externally vetted
47 rather than being told what to do or being limited in what

1 they can do.

2
3 Q. Is that the kind of work that you would like to be
4 doing as part of your job?

5 A. Personally I would, yes.

6
7 Q. Do you feel like you are given opportunity to take on
8 any additional role within the lab outside of your
9 immediate job description?

10 A. Very rarely.

11
12 Q. I'm sorry to take you back in time, but before we move
13 on, I just wanted to ask you one question about that
14 three-person mix issue from the statement that you have.
15 Have you ever spoken to any interstate or international
16 labs about how they approach that question of how mixes are
17 reported?

18 A. I haven't personally. It's possible that other people
19 have, but I haven't discussed that with other people.

20
21 Q. Do you have a good exchange with interstate or
22 international labs?

23 A. I've had very little exchange with interstate. My
24 impression is that it's frowned upon within the lab to
25 communicate with other labs.

26
27 Q. How have you formed that impression?

28 A. Just over the years, based on events that have
29 occurred and just what other people have told me.

30
31 Q. Can I take you to this QuantTrio validation that
32 you've had these ongoing concerns about. At paragraph 64
33 of your statement, which is at page 12, you speak of an
34 email that you sent to Justin on 8 March 2018, where you
35 raised issues in the QuantTrio validation. At RP-04 is
36 a copy of that email with the attached analysis. That's at
37 page 11 of [WIT.0043.0002.0001]. You see it is an email to
38 Justin on 8 March, and then the second page is an
39 attachment?

40 A. That's correct.

41
42 Q. You go through there both the issues that you have
43 with the validation and the risks as you saw them - well,
44 which were not specific to QuantTrio but to validations
45 generally?

46 A. Yes.

1 Q. That really goes to the susceptibility of challenge of
2 evidence if validations haven't been carried out correctly?

3 A. That's correct.

4

5 Q. Now, when you sent that email to Justin, it's not
6 apparent from that trail that he responded. Did he
7 respond?

8 A. No.

9

10 Q. When you sent it to him, it does say, "Hey, Justin, as
11 requested". Do you recall him requesting that information
12 from you?

13 A. My vague recollection is that I had raised that
14 I thought there was an issue and that he had said, "Put it
15 in an email and send it to me." I could be wrong on that,
16 though.

17

18 Q. Have you had any further conversations with him since
19 that time about that?

20 A. No, not that I recall, no.

21

22 Q. Sorry?

23 A. Not that I recall.

24

25 Q. I won't take you to some of the other validations that
26 you raise issues to, but I will come to Project #192. This
27 is a validation looking at the extraction process for
28 bones?

29 A. Yes.

30

31 Q. We heard some evidence yesterday about some ongoing
32 concerns that one of your colleagues, Ms Keller, has about
33 mixed profiles being obtained in cases where really they
34 shouldn't be, if I can put it that way. Can you explain to
35 the Commissioner and the Commission what your concern is
36 with Project #192, how that --

37

38 THE COMMISSIONER: What is Project #192?

39

40 MS REECE: The validation of the QIASymphony SP for bone
41 extraction. This is at paragraph 88 of Mr Parry's witness
42 statement.

43

44 THE COMMISSIONER: It is part of RP-09, is it?

45

46 THE WITNESS: RP-01.

47

1 THE COMMISSIONER: 01?

2

3 THE WITNESS: No, sorry.

4

5 MS REECE: It's page 16 of Mr Parry's statement, at
6 paragraph --

7

8 THE COMMISSIONER: No, I'm looking at the actual report.
9 It's part of RP-09, is it? It seems to be the fourth page
10 of that, or the fifth page of that exhibit, for some
11 reason.

12

13 MS REECE: The actual project is in Ms Keller's report
14 from yesterday, Commissioner.

15

16 THE COMMISSIONER: I'm looking at something called the
17 supplementary repeatability and reproducibility, but you
18 are looking at something else?

19

20 MS REECE: There is a supplementary repeatability and
21 reproducibility report, which is at [WIT.0043.0003.0005].
22 Thank you. It's several pages into that document.

23

24 THE COMMISSIONER: Yes, that's the one I was talking
25 about. Is that what we're discussing with Mr Parry?

26

27 MS REECE: That's a supplementary --

28

29 THE COMMISSIONER: Is that what we are discussing?

30

31 MS REECE: Yes.

32

33 THE COMMISSIONER: Yes.

34

35 MS REECE: Q. Mr Parry, you have set out a number of
36 concerns that you have about Project #192. One of them is
37 that you have some concerns that the results were highly
38 variable?

39 A. Yes.

40

41 Q. For example, one of the bone samples had a known quant
42 value of 0.00 and, in your view, shouldn't have been
43 included in any study?

44

45 A. No, because if it's got no DNA in it, it skews the
46 results. It's not going to give you a meaningful result.
47 Trying to get as many samples as you can to understand how
the system works, putting something in that you know

1 doesn't have anything in it isn't going to help.

2

3 Q. One of the concerns that you raise is --

4

5 THE COMMISSIONER: I'm sorry, Ms Reece, you are at
6 paragraph 92 of Mr Parry's statement; is that right?

7

8 MS REECE: Yes, and also across the page at paragraph --

9

10 THE COMMISSIONER: Yes, but where is the document that he
11 is talking about? In paragraph 91, he is talking about
12 table 1 somewhere.

13

14 THE WITNESS: I think that's the original Project #192.

15

16 THE COMMISSIONER: Yes, I understand, but where is it?

17

18 MS REECE: I'm just trying to find it, Commissioner.
19 I think it is appendix --

20

21 THE COMMISSIONER: The document that is exhibited as part
22 of exhibit RP-09 to Mr Parry's statement is not the one you
23 are talking about.

24

25 MS REECE: It is not, because that is a supplementary
26 report.

27

28 THE COMMISSIONER: Yes, that's right, so where is the one
29 that we are discussing here?

30

31 MS REECE: The actual report, 192, is attached to
32 Ms Keller's statement, which was tendered yesterday, and
33 it's [WIT.0003.0459.0001_R].

34

35 THE COMMISSIONER: Right. So it's exhibit 24 to
36 Ms Keller's statement?

37

38 MS REECE: Yes. Mr Operator, if you would go to page 5 of
39 that document. That's page 4 on the bottom. If you could
40 scroll up one page, thank you.

41

42 Q. Mr Parry, is that table 1 there the table that you
43 refer to at paragraph 90 of your statement?

44

45 A. That is, yes.

46

47 Q. That shows 10 casework samples that have come in for
identification?

1 A. Yes.

2

3 Q. You speak in your statement that the normal process is
4 to get four subsamples or aliquots of each bone, submit
5 them all separately and that ideally they all come back
6 with similar quant and the same DNA profile?

7 A. Yes.

8

9 Q. And that's how you validate that process?

10 A. Well, yes, that's how we analyse unknown bones from
11 coronial and --

12

13 Q. I'm sorry, okay. And each was quanted, and their
14 range is found in that "Original Quant Range" column?

15 A. These original quant and were done using organic
16 extraction, and that's the range of the quant and that were
17 obtained from the original four aliquots, so a minimum and
18 a maximum.

19

20 Q. Then when you compare those, when you compare table 1
21 to the actual results obtained on page 6, you say that the
22 results do not compare well. What do you mean by that?

23 A. In my opinion, the results obtained from the
24 experimental or validation organic extraction do not
25 correlate particularly well with the organic extraction
26 that was used during the original casework. This, to me,
27 is a cause for concern, because it means that there has
28 been a process breakdown somewhere. You would expect some
29 natural variation, but you would expect it to lie in the
30 region of the original, around the original result, whereas
31 some of these results are markedly different, and that, to
32 me, is a major cause for concern over the accuracy of --

33

34 THE COMMISSIONER: Q. If we can take as an example, on
35 page 5, what we're seeing is the known quant of samples
36 that are being used to test the system; is that right?

37 A. In table 1, these were original casework - these were
38 actual identifications that we did, and these were the
39 quant and that we got using an organic extraction method on
40 those bones historically.

41

42 Q. Yes, so they are the samples that are being used to
43 test the system, and we proceed upon the basis that
44 sample 2 has a quant range between 10 and 20 ng/ μ L?

45 A. Yes.

46

47 Q. So what you expect, if the system is working well --

1 A. In the validation, if the organic extraction and the
2 validation is working okay, it should be roughly 10 to 20,
3 in the range.
4

5 Q. That's right, and so when we look at sample 2, we want
6 to get something between 10 and 20, but sample 2 is 1.8 or
7 1.9; is that right?

8 A. That's correct.
9

10 Q. So instead of a minimum of 10 nanograms, we've only
11 got under 2 nanograms?

12 A. Yes, so you're looking somewhere at - at minimum,
13 a fifth of what you would expect in terms of concentration.
14

15 Q. So then if we go to sample 4, you are expecting
16 something between 0.10 and 0.15, and you are getting below
17 0.1; you are getting 0.07?

18 A. That particular one is possibly just due to natural
19 variation. Sample 4 had its own problems because, from
20 memory, it ended up being a mixture. There was some issue
21 with it. It ended up being removed from the experiment.
22 But, yes, there are examples of - similar to what you said.
23

24 Q. Well, sample 7. You expected to get between 4 and 5
25 nanograms, but you are only getting 1.6?

26 A. Yes.
27

28 Q. So you see that, and the problem is, what, that that
29 difference is ignored?

30 A. It appears to be. It appears to be.
31

32 Q. So somebody is running an experiment to see if the
33 extraction works, and they are using a sample, number 2,
34 and if the new extraction method is working, you should be
35 getting 10 to 20 ng/ μ L, and you use the new method and
36 you're getting one-fifth, 1.8?

37 A. This is not a new method. This is the same method.
38 This is the same method. So when they have done the
39 experiment, they have used those bones that have
40 a historical result, and then they have run them using an
41 organic extraction method, which is the same method that
42 was used historically, and then compared that to two new
43 methods. But given that the repeat of the historical
44 values doesn't match the historical values, you have got to
45 call into question whether the repeat of the organic
46 extraction was valid.
47

1 Q. Yes. I misunderstood. You've got the historical
2 result of X nanograms, and you are going to use the same
3 method as the baseline for your experiment, and when the
4 experimenter tries to do it, the experimenter doesn't get
5 X; he gets one-fifth of X?

6 A. That's correct.

7
8 Q. But just carries on with the experiment?

9 A. It appears that way. And the supplemental has similar
10 issues.

11
12 THE COMMISSIONER: Yes, I understand.

13
14 MS REECE: Q. The project goes on to consider
15 extractions of samples which have been treated differently
16 prior to running them through the QIA Symphony; is that
17 right?

18 A. Sorry, can you repeat that?

19
20 Q. Project #192 was a number of different experiments
21 using the QIAGEN --

22 A. QIAGEN.

23
24 Q. And, for example, experiment 2, testing the extraction
25 in the pre-lysis method with overnight --

26 A. I believe so, yes.

27
28 Q. So the experiment had a number of different aspects?

29 A. Yes. There were two methods quintessentially that
30 they were looking at and comparing it to organic
31 extraction, which is considered, or had been considered up
32 until recently, as pretty much the gold standard for
33 getting DNA from bone.

34
35 Q. Your concerns overall with this project are that due
36 to the variability of these results, someone should have
37 questioned why there was that variability?

38 A. Yes.

39
40 Q. You set out your concerns further in your statement,
41 Mr Parry, so I won't take you through it in any greater
42 detail, but I do note and I want to ask you about your
43 evidence at paragraph 99, where you say you complained
44 about this particular validation to Ms Brisotto?

45 A. Yes.

46
47 Q. She took notes, she listened to you?

1 A. Yes.

2

3 Q. And she said it would be fixed?

4 A. Yes.

5

6 Q. You weren't consulted again, but you are aware that
7 then there was that supplementary report that you have just
8 referred to?

9 A. Correct.

10

11 Q. So there was an attempt, in that sense, to undertake
12 a further repeatability and reproducibility piece of work?

13 A. Yes.

14

15 Q. But you still have some concerns about how that was
16 carried out?

17 A. Well, yes, the methodology as written is pretty vague,
18 and so I'm not a hundred per cent certain exactly what was
19 done. It appears at face value to have addressed the
20 repeatability and reproducibility issues. I still have
21 concerns about some of the variability, because ideally the
22 relationship between the three projects, the three
23 different types of samples, should be the same from the
24 repeatability to the reproducibility, and if you look at
25 those graphs, the repeatability graph for bone 1 should
26 look similar to the repeatability of bone 1 in the
27 reproducibility graph. Similarly for bone 2, repeatability
28 should look the same as reproducibility. They don't
29 particularly, to my mind, and it is never investigated as
30 to why there is so much variation. There will be natural
31 variation. I just think it's way more than would be
32 expected and should have been investigated.

33

34 THE COMMISSIONER: Q. So what we're looking at is
35 exhibit RP-09 and page [WIT.0043.0003.0001 at 0010] and the
36 bar graph at the bottom, if that's what it is called.
37 That's a graph - tell me if I'm right - showing three
38 different ways of testing for DNA, and if we just look at
39 the first large rectangle, does that tell us that the
40 variability is between about 0.004 and 0.012?

41 A. Yes.

42

43 Q. So if we keep that in mind, between 4 and 12 for
44 bone 1 repeatability on organic, we should get the same
45 thing when we do the reproducibility test?

46 A. They should look fairly similar.

47

1 Q. If the test is successful, that is to say, I've done
2 my repeatability test and I'm getting variables between X
3 and Y, then I do the reproducibility, and for the test to
4 succeed, to say this is all working, I should get between X
5 and Y or thereabouts?

6 A. Similar, yes.

7
8 Q. So we go to page [WIT.0043.0003.0001 at 0015] and we
9 see the rectangle on the left-hand side is a completely
10 different height; now it's between 8 and 12 rather than
11 between 4 and 12?

12 A. Yes, and the relationships between the three --

13
14 Q. And the relationships are different between the three
15 different forms of test, so you have failed in your search
16 for results being repeated by the same operator doing the
17 runs and by a different operator with a different machine
18 doing the same runs?

19 A. I would argue that, yes, the breadth of some of the
20 results, particularly the organic results, indicates that
21 there are some issues methodologically there, but you are
22 right in saying that the reproducibility has failed because
23 those graphs don't look similar.

24
25 Q. Yes, the reproducibility has failed because the graphs
26 don't look the same. What does the report conclude?

27 A. That - to be honest, I can't remember. It was one of
28 the machine processes was the optimal, and organic was not.

29
30 Q. If we go to page [WIT.0043.0003.0001 at 0018] and the
31 subtitle "Discussion", is that the relevant section?

32 A. Yes, it appears to be.

33
34 Q. So if you have a look at that and tell us what it
35 means, what's the significance of what you have pointed out
36 and how is that dealt with by the writer of this report?
37 I've taken you to the wrong page, I think.

38 [WIT.0043.0003.0001 at 0022], "Conclusions and
39 Recommendations". It is the first paragraph, I think,
40 Mr Parry.

41 A. Yes, that they recommended that the QIA-symphony is
42 implemented to replace organic extraction.

43
44 Q. And what do you think of that?

45 A. Look, I just don't think it is a valid conclusion
46 based on the results that were obtained.

1 THE COMMISSIONER: Did you want to adjourn now, Ms Reece?

2
3 MS REECE: Yes. Commissioner, I think I'm probably
4 another 20 minutes at least with Mr Parry, so if that's
5 convenient.

6
7 THE COMMISSIONER: We will adjourn for 20 minutes.

8
9 **SHORT ADJOURNMENT**

10
11 THE COMMISSIONER: Yes, Ms Reece.

12
13 MS REECE: Q. Before the break, Mr Parry, we were
14 talking about validations, particularly one validation
15 report, 192. In your email, when you wrote to Justin Howes
16 in March 2018, you were talking to him about what you
17 perceived the risks to be of the situation where there were
18 some ongoing concerns that you had about the reliability or
19 the accuracy of the validations of particular instruments
20 or pieces of equipment in the lab. As I understand what
21 you set out in the risks to Mr Howes, which is at that
22 8 March email, which is exhibit 4, Commissioner, you don't
23 say that a risk, for example, is that reported profiles are
24 unreliable?

25 A. No.

26
27 Q. You say that the risks are that defence might ask for
28 copies of validation reports; they might seek expert advice
29 as a result of their concerns with validation, for example;
30 there might be rejection of DNA evidence due to
31 inappropriate validation or verification of equipment; you
32 raise the concern which I understand would flow from that,
33 that there might be the potential for rework of hundreds or
34 even thousands of samples; that the lab might lose
35 scientific respect in the community and by other DNA labs;
36 that the lab might lose confidence and respect of the
37 community because any successful defence challenge is
38 obviously in public, in court; and you also talk about then
39 having to contend with ongoing defence challenge and
40 corresponding section 95 reports as the lab's underlying
41 science would be viewed as weak. Those were concerns that
42 you raised with Mr Howes four years ago?

43 A. That's correct.

44
45 Q. It is important to note that when you spoke to
46 Mr Howes, you perceived each of those risks to be quite low
47 risks?

1 A. Reasonably low, yes.

2

3 Q. Is that low because it is unlikely people would
4 understand the issues with validations?

5 A. By about 2017, defence challenges on validations were
6 very rare. Back before 2010, they were much more common.
7 So the risk of being challenged and having a defence expert
8 come along who (a) thought to look, (b) understood enough
9 stats to see that there were issues was quite low. But if
10 you did have someone, it would lead to a chain of events,
11 you know, not dissimilar to what we find ourselves in now,
12 whereby, yes, our validations could all be called out and
13 challenged. I've honestly kind of lived in fear for
14 several years now that I would be asked on the stand if
15 I was confident that our quality and validation processes
16 were good, because I would have had to have said on the
17 stand that I did not, and that would have been very
18 problematic back at the lab if I had done that. It's just
19 kind of fortunate that no-one has asked that question.

20

21 Q. Until now?

22 A. Until now.

23

24 Q. Why have you told the Commission about these concerns?

25 A. Because, for me, it's the last-ditch effort to have
26 someone listen. I've tried to alert internally. We've had
27 departmental inquiries come through and I've tried to talk
28 to them about it. I've fed back, through departmental
29 feedback that we get every year, these problems, that these
30 need to be looked at. Never got a response. No-one's ever
31 listened.

32

33 Q. When you say "departmental feedback"?

34 A. Every year we get a form that we go through to rate
35 how the department - the section is going, you know.

36

37 Q. Is that the Working for Queensland survey?

38 A. Yes, the Working for Queensland survey. And, you
39 know, I have mentioned that there are issues, scientific
40 issues, there. I've mentioned to the Livingstone inquiry
41 that there were scientific issues, to the Workplace Edge
42 inquiry that there were scientific issues, but no-one's
43 ever really taken it seriously. So I came forward because
44 I take it seriously.

45

46 Q. And you approached the Commission because of those
47 concerns?

1 A. Yes.

2

3 Q. I will turn to a question which harks back to
4 something you told us at the commencement of your evidence,
5 which is that you sought out a postgraduate qualification
6 in experimental design and data science?

7 A. Yes. Originally - it was just to get some
8 qualifications. I originally enrolled in a masters of
9 experimental design and applied statistics, I think it was,
10 but after doing half the subjects, I decided for a number
11 of reasons to - I had done all the core statistical
12 subjects that I wanted to do and I decided to not progress
13 to the masters and just take the postgraduate certificate
14 at that point, which is a postgraduate certificate in data
15 science, but the original masters was experimental design.

16

17 Q. You told the hearing earlier that you did this because
18 you saw that there was a need for that in the lab?

19 A. That's correct.

20

21 Q. And you saw that this was an area of interest for you
22 as well, wasn't it?

23 A. It is, yes.

24

25 Q. In 2014, in your performance and development plan,
26 which I think now is called a CSP, but it was called a PDP
27 then --

28 A. Yes.

29

30 Q. -- you requested to undertake training in statistics
31 in order to refresh those skills that you had had as part
32 of your undergraduate degree and then in your honours
33 degree and your early work life but hadn't used in your
34 role as a reporting scientist?

35 A. I hadn't used for a long time, yes.

36

37 Q. You wanted to learn about the new techniques for
38 statistical analysis which had arisen in the time, and you
39 have said in your statement to the Commission that you were
40 not actively supported to do so other than being allowed to
41 use some professional development leave to take exams?

42 A. That's correct.

43

44 Q. Can you tell the Commission what support you did seek
45 or consider seeking?

46 A. I looked at getting financial support for it, and
47 I spoke to Justin Howes about it and he seemed supportive

1 of that and told me to - referred me on to SSDU, which is
2 our training unit. I went and spoke to them and kind of
3 got the impression that it was very, very low probability
4 because it wasn't considered an essential qualification.
5 They said I could put the paperwork in, but the paperwork -
6 having looked at it, I just thought, no, I'll just pay for
7 this myself and then I'm not subject to the department
8 telling me what I can do and can't do and when I have to do
9 it. So I paid for that myself, and that was fine, but
10 I kind of expected that there might be a bit more support.
11 There was a time when I wanted to photocopy some notes
12 using departmental resources, but I was denied that.

13
14 Q. When you were told that it wasn't considered
15 essential, your role as a reporting scientist doesn't
16 actually include statistical design or analysis, does it --

17 A. No, it's not essential for me to do my day-to-day job,
18 but I would argue that it is essential that probably
19 someone in the section has it.

20
21 Q. Do you recall who told you that it wasn't considered
22 essential?

23 A. I believe it was Pete Clausen from SSDU.

24
25 Q. SSDU is the scientific services development unit?

26 A. Yes.

27
28 Q. And that sits across all of the work units, including
29 mortuary --

30 A. Yes.

31
32 Q. -- and forensic chemistry?

33 A. Yes.

34
35 Q. You are the only person in the lab, to your knowledge,
36 with higher-level statistics qualifications?

37 A. That's my understanding.

38
39 Q. You have given evidence today that on at least two
40 occasions you were actively consulted by your colleagues
41 about statistical issues, but is that commonplace for you?

42 A. No, and it's not usually prior to projects commencing.
43 It's usually - those situations where it has arisen, it's
44 been someone has been asked to review something and they've
45 come to me and gone, "What do you think of this?" It's
46 always after the fact, which is a bit too late then.

1 Q. You say in your statement that you have heard from
2 some staff that they have been told specifically not to
3 seek advice from you?

4 A. That is what I've been led to believe, yes.

5
6 Q. You give an example of a particular project where your
7 colleague Emma Caunt asked for your assistance for part of
8 the VeriFiler stutter analysis?

9 A. Yes.

10
11 Q. This was ultimately allowed, as it was understood
12 there was no-one else capable of running the analysis
13 required?

14 A. Yes.

15
16 Q. Can you tell the Commission a little bit about what
17 happened in the aftermath of your involvement in that
18 project?

19 A. We wrote a report, the people who had done that
20 particular analysis, we wrote a report of our findings,
21 sent it back in, and then we received an email basically
22 that stated that - it didn't state outright but it kind of
23 gave me the impression that it was not well received that
24 my name had been on the paper and that other people who
25 were on the project but didn't contribute to that
26 particular analysis were not listed. That was the gist of
27 it, as I read it.

28
29 Q. You note in your statement that your perception of
30 that experience or that incident is that it's a clear
31 example of professional exclusion?

32 A. I believe so.

33
34 Q. You feel professionally excluded in your workplace?

35 A. Absolutely.

36
37 Q. You say at paragraph 124 of your statement that the
38 success of raising issues depends on who raises the issue.
39 Do you mean scientific issues?

40 A. Yes.

41
42 Q. Can you expand on that?

43 A. I think if you have a view that is contrary to what
44 the decision-making group has, the burden of proof is much,
45 much greater than if you have a view that is aligned with
46 their view, and it's just my perception that if people like
47 Kylie or Emma raise an issue, they get a lot more pushback

1 than other people do.

2
3 Q. What about yourself?

4 A. Well, I've never successfully been put on to any of
5 these projects and no-one has ever come to ask me about
6 them, so clearly my feedback has had limited success, so
7 I would have to say that I also fit into that category.

8
9 Q. There was an example in your statement that you have
10 had some success raising issues with Paula Brisotto?

11 A. Yes.

12
13 Q. But in general, management don't enlist you for any
14 experimental design?

15 A. No, no. And that project could only have been
16 improved because I found it, by whatever means I came to
17 it, and then went and analysed it and said, "Hey, I think
18 there's a problem." It was never a case of, "We've done
19 this. What do you think of it?", or anything like that.
20 So if I hadn't looked, it would still be doing what it was
21 originally.

22
23 Q. It was happenstance, not design?

24 A. Yes.

25
26 Q. You've spoken about that there should be a separate
27 project team that is independent from the management team.
28 Why is that important?

29 A. I think because the science should stand on its own
30 merits. Now, obviously there are going to be financial and
31 other considerations going into what science is done, but
32 I think just because you are in management does not make
33 you an experimental scientist. Having a science degree
34 doesn't make you an experimental scientist. It's
35 a separate skill, and I think going forward that the
36 decision-making group has to be separated from the science,
37 and then the science is presented and the decision-making
38 group can make their decisions based on that science, but
39 I don't think that they should be running the projects,
40 because, in my opinion, you have the potential for inherent
41 bias in that sort of situation.

42
43 Q. Bias that might be based on concerns outside of the
44 application of scientific principle?

45 A. Well, that and the tendency towards finding results
46 that support your desired outcome.

1 Q. Which is similar to the concern you raise about going
2 straight to amp rather than microconning?

3 A. Yes, yes.

4
5 Q. You do say that your perception of the lab culture is
6 that it's misogynistic?

7 A. It's just my perception over the years talking to
8 female staff that they seem to have a lot of problems
9 getting access to flexible work arrangements, particularly
10 if they have children. To my mind, as long as they put in
11 their hours per day, it doesn't really matter if they go
12 home a bit early, if they start a bit early. You know, it
13 should be flexible so that they can take children to school
14 or pick children up from school or go to medical
15 appointments for the children or whatever. But it's just
16 my perception over the years that they often have problems
17 getting approval for long-term arrangements for those sorts
18 of things.

19
20 Q. A lot of your colleagues are women, aren't they?

21 A. They are.

22
23 Q. You say at paragraph 131 that it is your belief that
24 management have highly prioritised turnaround times, QPS
25 requirements and cost-saving over results quality. What do
26 you base that on?

27 A. On the validations that have been done, the removal of
28 the automatic microcon process, the fact that we sort of -
29 my perception is that we acquire a piece of machinery and
30 then post-hoc validate it rather than getting two
31 alternative means of performing a particular function and
32 then assessing them both side by side and then choosing the
33 one that's best. We get something and then - I'm not aware
34 of any situation in which a machine has been obtained and
35 then has gone, "Oh, that's not suitable. We'll send that
36 back and get something else."

37
38 Q. You talk specifically about turnaround times, though.
39 What impact do turnaround times have on what you say, which
40 is this emphasis on turnaround times over result quality?

41 A. Well, there are times like, for example, with the DIFP
42 stuff, where people aren't reworking things that they might
43 normally, because we have to get it out for court or we
44 have to get it out quickly. For some stuff, there's plenty
45 of time, but a lot of stuff we get, there is not a lot of
46 time, and so we don't rework as optimally as we might if we
47 had more time, weren't constrained as much in terms of

1 having to get results back by --

2
3 Q. Sorry, I didn't hear that last bit?

4 A. If we weren't as constrained as what we often are in
5 how quickly we have to get results back.

6
7 Q. Where does that pressure come from? Who talks to you
8 about turnaround times?

9 A. It has been mentioned many times in the past in
10 meetings, team meetings. We don't tend to have team
11 meetings any more, I'm not sure why. But particularly in
12 the period of Paul Csoban's management, there was a lot of
13 issue around turnaround times and that we weren't getting
14 results out fast enough and - yes. I think since then,
15 I can't think of any specific examples recently where
16 there's been pressure internally for that, but I think it's
17 become one of those cultural issues that there's just this,
18 "You need to get it out faster, faster." There's always
19 pressure to get results out quickly rather than necessarily
20 pushing them as far as you might like.

21
22 MS REECE: Commissioner, that's the evidence-in-chief of
23 Mr Parry.

24
25 THE COMMISSIONER: Thank you. Mr Hunter?

26
27 **<EXAMINATION BY MR HUNTER:**

28
29 MR HUNTER: Q. Mr Parry, can I just ask you about the
30 scientific concepts of accuracy and precision. They are
31 two separate concepts; correct?

32 A. That's correct.

33
34 Q. Accuracy, when you are talking about a measurement, is
35 how close the measurement is to the true value?

36 A. That's correct.

37
38 Q. But precision is about the repeatability of
39 independent tests?

40 A. It's sort of how closely you are to that - how closely
41 your results are to each other. So you can be - let's say
42 you're shooting at a target. So if you're hitting in the
43 bull's eye, you're accurate and precise. If you're missing
44 the bull's eye, you're inaccurate. But all your rounds can
45 be clustered in a nice ball over here - you are still
46 precise but inaccurate.

1 Q. So high precision does not necessarily mean accuracy?
2 A. Not necessarily.

3

4 Q. The goal, when undertaking validation, is to ascertain
5 that the results you are going to get from using
6 a particular piece of equipment or a particular testing
7 methodology are results that are both accurate and precise?
8 A. That's what you're aiming for.

9

10 Q. The data that was identified in Project #192 was
11 neither accurate nor precise; correct?
12 A. In my opinion.

13

14 Q. Can I go to 6 June this year, when you learnt about
15 the abandonment of the DIFP workflow and the amplification
16 of what I will call low quant samples without the
17 micro-concentration. Now, you were notified about that by
18 email; is that right?
19 A. I believe so, yes.

20

21 Q. Was it immediately apparent to you that what was being
22 proposed made no scientific sense?
23 A. Yes, yes.

24

25 Q. Because all that would occur if you amplified these
26 low quant samples without first microconcentrating them is
27 a very high likelihood of a useless set of data?
28 A. If you got anything at all, yes.

29

30 Q. Obviously you were aware of what the procedure was
31 with respect to low quant samples prior to the start of
32 2018, when DIFP came in?
33 A. Yes.

34

35 Q. What was proposed on 6 June this year bore no
36 relationship to what was being done --
37 A. It skipped the micro-concentration step.

38

39 Q. Am I right in thinking that you can't think of any
40 proper scientific reason as to why someone would propose
41 processing those low quant samples without first
42 micro-concentrating them?
43 A. No.

44

45 Q. If, though, you wanted to convey perhaps to someone
46 who wasn't across the science that, "Look, see, there's no
47 point in testing these low quant samples because you don't

1 get any results", that would be one way of doing it,
2 wouldn't it?

3 A. Potentially, yes.

4
5 Q. One other matter. I'm not sure that you were asked
6 about this, but in terms of the allocation of a particular
7 case file to one reporting scientist, that's something that
8 does happen from time to time?

9 A. It does.

10
11 Q. What about, though, when results come in for
12 interpretation in the reporting section - if, say, you were
13 allocated a particular case file, would it necessarily be
14 the case that the results as they came in would all come to
15 you?

16 A. Not necessarily. It would depend on if it was
17 assigned prior to samples coming in. Operations and
18 high-priority cases are often assigned beforehand, so in
19 that case generally the reporting scientist would be across
20 all the case management in that sample. But sometimes if
21 a case becomes larger and is going to be - for a statement,
22 it will be assigned to someone, but some of the case
23 management will have already been done, so it will be
24 a mixture of people.

25
26 Q. Is that a desirable state of affairs?

27 A. Not for larger cases. I think for volume crime or
28 low-level property crime, having large lists where people
29 just pick and choose is fine. But I think for sexual
30 assaults and serious person offences, it's probably better
31 to assign cases, just for consistency.

32
33 Q. It's important, isn't it, that a scientist who might
34 be considering reworking some samples knows about all of
35 the results in the particular case?

36 A. It is generally best, yes.

37
38 Q. Because, for example, if you were going to
39 micro-concentrate a sample that had been previously
40 reported as DIFP, the extent to which you would concentrate
41 it might be informed by what the other results had already
42 provided?

43 A. Yes, yes.

44
45 MR HUNTER: Thank you. Those are my questions.

1 <EXAMINATION BY MR DIEHM:

2
3 MR DIEHM: Q. Mr Parry, I appear for Ms Brisotto. In
4 your statement, at paragraph 99, if that can be put up on
5 the screen for the witness, do you see in the first
6 sentence you speak about having complained about the
7 validation concerning Project #192 to Ms Brisotto, and you
8 said there that she took some notes and told you that it
9 would be fixed, but you were not consulted about the matter
10 again?

11 A. That's correct.

12
13 Q. So that's a conversation that, plainly enough, on the
14 face of it, must have occurred after you'd become aware of
15 the content of the original report from Project #192?

16 A. Yes.

17
18 MR DIEHM: If the witness could be shown Ms Keller's
19 statement, exhibit AK-24, that was up on the screen
20 earlier - do you need the number?

21
22 THE COMMISSIONER: [WIT.0003.0459.0001]

23
24 MR DIEHM: Q. If we can go to the second page of that
25 document, please, you will see there the sign-off on that
26 document by the first four, at least, of the management
27 people, and we've got dates ranging there between 6 April
28 and 10 April?

29 A. Yes.

30
31 Q. And then over the page, other signatures also in that
32 date range?

33 A. Yes.

34
35 Q. So that appears to be when the report was finalised.
36 Do you have a recollection that it was soon after
37 finalisation of that report that you became aware of it?

38 A. I honestly can't remember. I believe it might have
39 been Ms Keller who brought it to my attention, but I can't
40 remember how long after this it was.

41
42 Q. In any case, once you became aware of it and had an
43 opportunity to see what it provided for, you had some
44 concerns about it and you identified them to Ms Brisotto?

45 A. That's correct. I'm sorry, I believe I may have
46 identified them to Justin Howes, who referred me on to
47 Paula Brisotto.

1
2 MR DIEHM: Commissioner, my instructing solicitors, only
3 about 20 minutes or so ago, forwarded some documents by
4 email to the Commission. I have some hard copies but only
5 three. If they are not available electronically, I can
6 proceed with the hard copies, providing you with a copy --
7

8 THE COMMISSIONER: Let's see if anyone knows about this.
9

10 MS REECE: It has been sent to the operator, Commissioner,
11 but I don't know that that has happened.
12

13 THE COMMISSIONER: Can you assist the operator in what it
14 is we're looking for?
15

16 MR DIEHM: The first document is a document headed
17 "Project Proposal #192 Supplemental", and it bears the date
18 of April 2018.
19

20 MS REECE: It will have been emailed to you if anything,
21 I think, Mr Operator.
22

23 THE OPERATOR: By the Commission?
24

25 MS REECE: Yes.
26

27 THE OPERATOR: I can't find anything in my inbox.
28

29 THE COMMISSIONER: Ms Hedge, why don't you go outside and
30 see if you can make a phone call while Mr Diehm --
31

32 MS HEDGE: I can. I suggest you use the hard copies, as
33 it may take a little time.
34

35 THE COMMISSIONER: We will keep doing that for the moment,
36 yes. Mr Associate, if you go and get those documents and
37 give one to Mr Parry and one to me, please. Thank you.
38 Now, this one, I think, is --
39

40 MS REECE: Commissioner, it is not the same document at
41 RP-09. That may be explored, but it's not that document.
42

43 THE COMMISSIONER: Yes. Excuse me a moment. I see.
44

45 MR DIEHM: It is a project proposal rather than --
46

47 THE COMMISSIONER: Yes, I understand. Go ahead, Mr Diehm,

1 we will carry on and see what happens.

2
3 MR DIEHM: Thank you, Commissioner.

4
5 Q. Mr Parry, I will give you as much time as you need to
6 look at the content of the document, though seeing it now
7 may have brought back a memory for you. You will see the
8 title on the front cover of the document, and it indicates
9 that it is a document being authored in April 2018. If you
10 go to the second page, you will see "Document details" is
11 the heading and it indicates there that the contact officer
12 is you?

13 A. Yes.

14
15 Q. And that the version history shows this document as
16 being version 1, with the date of 27 April 2018.

17 A. Yes.

18
19 Q. The document description is "Document created", and the
20 column head is "Changed by Rhys Parry"?

21 A. Yes.

22
23 Q. So that indicates, does it not, that you are the
24 author of the document?

25 A. It does. I honestly had completely forgotten about
26 this document and I apologise if I have misled the court in
27 that regard, but I had seriously forgotten I wrote that.

28
29 Q. Mr Parry, remembering the details of all of these
30 sorts of things must be very difficult. I'm not here to
31 offer any criticism of you for that --

32 A. Yes.

33
34 Q. -- but rather, really, to take up the sequence of
35 events to see if your memory can be assisted in that
36 regard. It is the case, is it not, that you must have
37 identified the concerns that you had with the original
38 report of Project #192 at some time between about 10 April,
39 when the last of those management signatures went on it,
40 and 27 April, when you authored this document?

41 A. That seems reasonable, yes.

42
43 Q. Some time in that period, you spoke to Ms Brisotto
44 about those concerns?

45 A. Yes.

46
47 Q. Indeed, I then want to show you another document that

1 can be removed from the stapled bundle. There are three --

2
3 THE COMMISSIONER: Just so I'm following, Mr Diehm, the
4 sequence is that the project report 192 was circulated,
5 having been approved in early April 2018, and then in
6 late April 2018, Mr Parry has written a project proposal
7 for 192 supplemental?

8
9 MR DIEHM: Yes.

10
11 THE COMMISSIONER: What you are putting is that that must
12 have happened as a result of his conversation with
13 Ms Brisotto?

14
15 MR DIEHM: Yes.

16
17 THE COMMISSIONER: Yes, thank you.

18
19 MR DIEHM: Q. If I can show you a further document,
20 Mr Parry, again, the same number of copies being all that
21 is available, Mr Associate. Mr Parry, this document,
22 self-evidently, is an email from you to Paula Brisotto, no
23 other recipients, on 30 April 2018 at 9.07am, and it says:

24
25 *Here is the updated project proposal. If*
26 *you have any questions, please feel free to*
27 *ask.*

28
29 A. Yes.

30
31 Q. Whilst it describes that as an "updated project
32 proposal", the document I suggest to you that was attached
33 to it is the version of the project proposal that you have
34 with you at the moment.

35 A. That's probably the case, yes.

36
37 Q. Now, just to make sure that this is understood
38 correctly, when I showed you the second page of that
39 project proposal, 192, it said that that was
40 version 1 - version 1.0?

41 A. Yes.

42
43 Q. Is it possible that there had in fact been an earlier
44 version that you have then made some amendment to but
45 didn't update the version number in the box on the second
46 page of that document?

47 A. Look, given that I had forgotten that I had even

1 written this document, that is possible.

2
3 Q. In any case, what is now coming back to you in terms
4 of your recollection is that you having identified the
5 concerns you had and spoken to Ms Brisotto, you came to
6 prepare, and perhaps then amend, a project proposal to
7 investigate the very concerns that you had about the
8 original paper?

9 A. Yes.

10
11 Q. We know, do we not, that in April 2020 a report that
12 corresponded to this project proposal of yours was finally
13 produced?

14 A. That's the final supplemental?

15
16 Q. The supplemental report.

17 A. Yes.

18
19 Q. The one that is attached to your statement as
20 exhibit 9.

21 A. Yes.

22
23 Q. So appreciating, as I said to you before, about the
24 lack of criticism for not remembering the details of these
25 things, when you revisit paragraph 99, you would say that
26 you complained about the validation verbally to
27 Ms Brisotto, you explained the issues, and that what flowed
28 from that was that you were invited or permitted to provide
29 to her a project proposal for the investigation of those
30 concerns?

31 A. Yes. I retract that second - third sentence, sorry,
32 "I was not consulted". Clearly I was, and I had forgotten.

33
34 THE COMMISSIONER: Q. So the sequence must have been
35 that you complained about the validation in the way that
36 you described, and you then were invited to and you
37 prepared a supplementary series of experiments that you put
38 forward in project proposal 192 supplemental?

39 A. Yes.

40
41 Q. And sent that to Ms Brisotto, so that's the stage we
42 have reached in the story so far?

43 A. Yes.

44
45 THE COMMISSIONER: Go on, Mr Diehm.

46
47 MR DIEHM: Thank you.

1
2 Q. Then what seemed to follow from there was that that
3 proposal was acted upon and a report was prepared?

4 A. It appears so, yes.

5
6 Q. You weren't one of the authors of the final report, in
7 the end?

8 A. No.

9
10 Q. But you became aware of its publication?

11 A. Yes.

12
13 MR DIEHM: Thank you. I tender those two documents.

14
15 THE COMMISSIONER: Yes. I will make the email from
16 Mr Parry to Ms Brisotto dated 30 April 2018 at 9.07am
17 exhibit 72.

18
19 **EXHIBIT #72 EMAIL FROM MR PARRY TO MS BRISOTTO DATED**
20 **30 APRIL 2018 AT 9.07AM**

21
22 THE COMMISSIONER: Proposal project number 192
23 (supplemental) dated April 2018 will be exhibit 73.

24
25 **EXHIBIT #73 PROJECT PROPOSAL NUMBER 192 (SUPPLEMENTAL)**
26 **DATED APRIL 2018**

27
28 MR DIEHM: Thank you, Commissioner. Those are my
29 questions.

30
31 THE COMMISSIONER: Thank you. Mr Rice?

32
33 MS REECE: I'm sorry to interrupt. If it assists anyone
34 further at the Bar table, those documents are now with the
35 operator and can be placed on the screen.

36
37 THE COMMISSIONER: All right. I don't think it's
38 necessary, I guess.

39
40 MS REECE: I don't know my learned friends' intentions.

41
42 THE COMMISSIONER: If anybody needs it, we can do that.

43
44 **<EXAMINATION BY MR RICE:**

45
46 MR RICE: Q. I just want to ask you about one matter in
47 your statement, Mr Parry. It's at paragraphs 112 and 113

1 on page 20. Just take a moment and refresh your memory of
2 those.

3 A. Yes.

4
5 Q. Is it right that by way of background to that, in the
6 first half of 2021, there was a project being undertaken
7 relating to VeriFiler?

8 A. Yes, that's my understanding. I was not involved in
9 the early parts of it, so I'm not certain when it began.

10
11 Q. I think you relate in paragraph 112 that Dr Scott was
12 the project leader for the project that was under way?

13 A. That's my understanding.

14
15 Q. In addition to her, is it right that there were
16 a number of reporting scientists assigned to that project
17 as the so-called VeriFiler team?

18 A. That's my understanding.

19
20 Q. Is it right that those scientists - that is, the
21 reporters associated with the VeriFiler team - were
22 Ms Johnstone, Ms Caunt and Ms James?

23 A. At least. I don't know if there were more, but those
24 people were on it, yes.

25
26 Q. When you say in paragraph 112 that you understand or
27 believe that Emma requested your assistance for part of the
28 analysis associated with that, the relevance of Emma is
29 that she was one of the VeriFiler team of reporting
30 scientists; correct?

31 A. That's correct.

32
33 Q. In due course, the document that you refer to as
34 exhibit RP-10 was prepared, co-authored by yourself,
35 Ms Caunt, Ms James and Ms Adamson, as we see in
36 paragraph 113?

37 A. Yes.

38
39 Q. Perhaps we will have a look at that. It's RP-10. We
40 can see in the heading of that the four authors; correct?
41 [WIT.0043.0004.0001 at 0010]

42 A. Yes.

43
44 Q. If we can go to page 0037 of that same exhibit,
45 Mr Operator, we come to the email that you exhibit as
46 RP-11. Do you recognise that email?

47 A. Yes.

1
2 Q. You will see it is an email from Dr Scott to four
3 persons, being the four authors of the report that we just
4 looked at the first page of; correct?

5 A. Yes.

6
7 Q. You will see, as the email opens, that Dr Scott
8 thanked you four authors for your extensive assistance and
9 the incredible value of the document that had been
10 prepared; correct?

11 A. Yes.

12
13 Q. She expressed her appreciation for your effort and the
14 hours put into it; correct?

15 A. Yes.

16
17 Q. In the third paragraph, she makes mention that, "We
18 have a VeriFiler team", being the three that I referred to
19 you before, and she mentions workshops that had been
20 conducted, again, to assist with the progress of this
21 particular project.

22 A. That's what it says, but I have no knowledge of that.

23
24 Q. I was going to suggest to you that there were two
25 workshops conducted to which a range of scientists were
26 invited for the purpose of sharing ideas in a collaborative
27 way to advance that project?

28 A. Possibly. I may have even attended them. I don't
29 recall.

30
31 Q. That's what I was going to suggest to you, that you
32 were invited?

33 A. Okay.

34
35 Q. As part of your acceptance into participation in this
36 project - you were invited to participate in one of the two
37 workshops?

38 A. Possibly, yes.

39
40 Q. If we go to the second paragraph, this is the one that
41 you make mention of specifically in your statement.
42 Dr Scott said:

43
44 *I do however feel a little uncomfortable*
45 *about how we are proceeding with authorship*
46 *on this one.*
47

1 A. Yes.

2
3 Q. Now, the authorship she is referring to is the
4 document which is RP-10, which, as we saw, had four
5 authors, two of whom were part of the VeriFiler team and
6 two of whom were not; correct?

7 A. Yes, I guess so, yes.

8
9 Q. The upshot of that is perhaps in the final
10 paragraph bar one, commencing with the words:

11
12 *Given that we still have a long way to*
13 *go ...*
14

15 You will see Dr Scott was looking for some clarity on the
16 authorship, which would become more complex as the project
17 proceeded if it wasn't sorted. That's what she says, in
18 effect?

19 A. I guess you can interpret it that way, yes.

20
21 Q. In relation to that authorship, you will see in the
22 next sentence she expressed her preference that all
23 VeriFiler reporting and interpretation of reports be
24 co-authored by the three persons who were the reporting
25 scientists associated with this particular project;
26 correct?

27 A. Correct.

28
29 Q. But she goes on to say that those three should be
30 co-authors "as a minimum" - that is to say, not to exclude
31 other authors; do you agree?

32 A. Well, that's - yes, yes.

33
34 Q. The reason is so that it was clear that the VeriFiler
35 reporting team, being the three reporting scientists named
36 here, would be overtly associated with support for the
37 document by virtue of their co-authorship; that's the point
38 she is making, is it not?

39 A. I guess so.

40
41 Q. In terms of incorporating other staff, you see from
42 the final sentence that she is not dismissive of that but
43 would appreciate a discussion to regularise the authorship,
44 so that, at a minimum, the VeriFiler reporting scientists
45 were all included for the reasons she gave; correct?

46 A. Correct.

1 Q. Well, arising from all of that - your original
2 agreement to participate in this project, your
3 participation, as I put it to you, in a collaborative
4 workshop, and Dr Scott leaving it open to additional
5 authorship beyond the three reporting scientists - this is
6 not, as you say, a clear example of your exclusion from
7 a professional exercise?

8 A. I took it at the time to mean that it was irregular
9 that my name was on it and it wasn't listed as per the
10 VeriFiler team. Now, I can't recall why Sharon's name
11 wasn't put on it originally, but essentially, from my
12 memory, Sharon didn't contribute to that particular aspect
13 of it, so it was just written as the four authors who
14 contributed. I took this to mean that that was
15 inappropriate, that my name shouldn't have been on it
16 because I wasn't an official VeriFiler team member. I'm
17 not sure why we would need explicit discussion as to an
18 author being on a paper that they had co-authored. So
19 I took it to mean that my name shouldn't have been on
20 there.

21
22 THE COMMISSIONER: Q. Mr Parry, if we look at the
23 third-last paragraph, beginning, "However this document
24 does not contain all VeriFiler reporting and interpretation
25 sub-project staff" - maybe I will start again. I'm just
26 not familiar with this notion of authorship. What does it
27 signify if your name is on the cover of a report, such as
28 project report 192, which is exhibit 24 to Ms Keller's
29 statement, which has the names of four scientists on the
30 title page; what is that supposed to tell anyone? What
31 does that mean? What's the sign in your laboratory if
32 a name appears there?

33 A. That you have contributed to the project in some way
34 or that you have had oversight of it, is my understanding.
35 I'm not sure if there are hard and fast rules about it.
36 Normally, the first person will be the major writer, the
37 second or third author will be people who have contributed
38 largely to the research, and the last two names will be
39 project supervisor and the last name will be Cathie Allen,
40 who, as the chief scientist, oversees all projects so is on
41 all projects.

42
43 Q. So in this case, RP-10, the report relating to
44 stutter, Ms Caunt, Ms James, Ms Adamson and your names are
45 there?

46 A. Yes.
47

1 Q. In the first place, do we take it that the four of you
2 worked up this report, did the work for the purposes of
3 this report, or not?

4 A. This was just a sub-report to report back on a small
5 aspect of the overall project, so we didn't think it needed
6 to --

7
8 Q. Yes, I understand. Whatever it was, your names were
9 there because the four of you did the work that led to this
10 report; is that right?

11 A. Did the analysis and reporting, yes.

12
13 Q. So what was Ms Brisotto's concern about the document
14 containing all VeriFiler reporting and interpretation
15 sub-project staff? Was it that she wanted all staff within
16 the relevant area to be credited on the cover of a report
17 like the one we're discussing? Is that how you understood
18 it?

19 A. Yes, that other people should have been on it.

20
21 Q. Just so I understand it again, in the second-last
22 sentence of Ms Scott's email, she says:

23
24 *My personal preference would be that all*
25 *VeriFiler reporting and interpretation*
26 *reports were co-authored by Sharon, Emma*
27 *and Cassie (as a minimum) so that it is*
28 *clear that you support the document as*
29 *written.*

30
31 That suggests to me that Ms Johnstone, for example, might
32 not have written the document or done the work involved in
33 the document, but her name ought to be on it to signify
34 that she has read it and approved it, that she takes
35 responsibility for it. Is that how you understand that?

36 A. That's a possible explanation, yes.

37
38 Q. Then in the last sentence, perhaps this is the key to
39 my understanding of it, "other staff":

40
41 *If we incorporate other staff ...*

42
43 Then Ms Scott would appreciate a discussion. Who are the
44 other staff, that is, non-VeriFiler reporting and
45 interpretation sub-project staff? Are you a part of that
46 staff - were you a part of that staff?

47 A. I was not officially on the project. I was just

1 brought in for this one particular analysis.

2
3 Q. To do some particular work on it, to do with
4 statistics?

5 A. Yes.

6
7 Q. So are you the "other staff"?

8 A. I assume so.

9
10 Q. Is there anybody else who is --

11 A. There may have been in other aspects of the project.
12 I wasn't part of any other part of the project.

13
14 THE COMMISSIONER: All right. Thank you, Mr Rice. I'm
15 sorry, I interrupted you.

16
17 MR RICE: Q. With reference to the words "other staff"
18 in the final line, can I suggest that that must be
19 a reference to yourself and Ms Adamson, being two of the
20 four authors of this document who were not part of the
21 VeriFiler reporting team?

22 A. Potentially, yes.

23
24 Q. Your participation by way of assistance in this
25 project had already been agreed, had it not, as per
26 paragraph 112 of your statement?

27 A. Yes.

28
29 Q. What I want to just suggest to you is that having
30 regard to your agreed inclusion in this project, insofar as
31 you have taken a professional slight about this email, none
32 is really justified. What do you say to that?

33 A. Well, that's the way I took it at the time. Could
34 I have misinterpreted it? It's possible.

35
36 MR RICE: Thank you.

37
38 THE COMMISSIONER: Mr Hickey?

39
40 **<EXAMINATION BY MR HICKEY:**

41
42 MR HICKEY: Q. Mr Parry, I appear for Cathie Allen and
43 for Justin Howes. Could I ask you questions, please, just
44 to clarify some of the things that you have said in your
45 statement. The first is, could we go, please, to
46 paragraph 9 of your statement, this is where you give some
47 evidence about a conversation you had with Mr Howes in July

1 of 2017 --

2 A. Yes.

3

4 Q. -- in which he asked you to review those calculations
5 in the spreadsheet that you were taken to very early in
6 your evidence today?

7 A. Yes.

8

9 Q. And what you say there is:

10

11 *He stated he was data mining the results of*
12 *historical microcon processes but provided*
13 *no other detail.*

14

15 Can I suggest some things to you to see whether it might
16 prompt your memory about things that were discussed at that
17 meeting. Do you recall that he mentioned that he was
18 re-looking at the data for auto-microcons based on
19 anecdotal feedback from staff on their feeling that not
20 much was being obtained?

21 A. That's possible.

22

23 Q. You would accept that he may well have said that to
24 you?

25 A. He may have. I don't recall - I don't recall. It
26 certainly wasn't presented to me as a project with these
27 defined goals and outlines, so he possibly did.

28

29 Q. And he asked if you could look at the data to check,
30 and if there were any other ways to look at it?

31 A. No, I don't recall being asked to look at it in
32 different ways, it was just to check the document.

33

34 Q. Now, were you aware that you had been listed as
35 a technical reviewer on the project plan for Project #184?

36 A. I was not aware of that until fairly recently.

37

38 Q. But you are aware of that now?

39 A. Yes.

40

41 Q. Then can we go, please, to paragraph 53 of the
42 statement. Here you are giving some evidence about an
43 issue that had been identified in the forensic register,
44 and you describe in paragraph 53 that in 2019, further
45 information had come in for a case, which has been
46 redacted, which you weren't aware of until someone told you
47 sometime later.

1 A. Yes.

2
3 Q. Were you aware that the situation that you have
4 mentioned in paragraph 53 was the reason why an enhancement
5 was raised in the forensic register to help with the
6 awareness of items received post-statement?

7 A. Whether that exists now, I'm not sure if it's been
8 implemented, but that was - I believe that was one of the
9 reasons - that particular instance was one of the reasons
10 why it had been raised.

11
12 Q. I think you said just now that you are not aware
13 whether it has been implemented. If in fact it has been
14 implemented, would you agree with me that that is an
15 appropriate outcome to a situation where you had identified
16 something that should be improved?

17 A. Yes, sure.

18
19 Q. Now, in paragraph 109 of your statement, if we can
20 scroll on to that, please, you give some evidence about
21 staff being "routinely", you say, "denied the ability to
22 obtain new skills". You say:

23
24 *Secondment or temporary release to work*
25 *elsewhere is not an option.*
26

27 In particular, you give some examples, and one of those is
28 Ms Julie Connell. Now, I think you say in your statement
29 that you have been working at forensic services since 2006,
30 so I presume you are aware of the comings and going of
31 Ms Connell over time?

32 A. Yes.

33
34 Q. And is it that to which you refer in saying that her
35 personal circumstances couldn't be accommodated?

36 A. My understanding was she wanted to get secondment to
37 the AFP in Canberra and wasn't allowed, so she quit her job
38 here, went to work for them for two, three years, I can't
39 remember, then came back, reapplied for a position at FSS
40 and acquired that position and worked there for some time
41 before then leaving to work for the police.

42
43 Q. Can I just put some facts to you to see whether it
44 accords with your understanding of Ms Connell's situation
45 or not. The first thing is that Ms Connell requested
46 a 12-month secondment to take up a position at the
47 Australian Federal Police?

1 A. That's my understanding.

2

3 Q. And that that secondment was in fact approved by
4 Greg Shaw?

5 A. That was not my understanding.

6

7 Q. She then applied, having gone on that secondment, for
8 an additional 12 months' secondment. Were you aware of
9 that?

10 A. No.

11

12 Q. And that she advised, in fact, that she was in a
13 permanent position at the AFP when she sought that
14 additional 12 months' secondment. Were you aware of that?

15 A. No.

16

17 Q. Were you aware that advice was sought from workforce
18 support and HR, and that Mr Shaw was advised that it wasn't
19 in FSS's best interests to approve the second request for
20 secondment?

21 A. No.

22

23 Q. And that the decision that Mr Shaw ultimately made not
24 to approve that second - the extension of the secondment,
25 was based on that advice?

26

27 THE COMMISSIONER: I'm sorry, Mr Shaw got advice from
28 whom?

29

30 MR HICKEY: From HR and workforce support. I presume
31 that's someone within the department.

32

33 Q. You weren't aware of that?

34 A. No.

35

36 Q. I presume you are aware that in 2011, Ms Connell came
37 back to FSS?

38 A. That would seem probably about right, yes.

39

40 Q. About right?

41 A. Yes.

42

43 Q. Were you aware by way of background to that that she
44 had contacted Ms Allen about a position in forensic DNA
45 analysis?

46 A. No.

47

1 Q. And that all that was available at that time was
2 a temporary position, not a permanent position?

3 A. No.

4
5 Q. But, in any event, she was offered that position and
6 was welcomed back - I presume you are aware that she was
7 welcomed back?

8 A. It was my understanding that she had applied for
9 a job, but I could be wrong.

10

11 Q. And then, because it was only a temporary position
12 that was available to her at FSS, she took up a permanent
13 position with Queensland Police?

14 A. Eventually, yes.

15

16 Q. So given that alternative set of facts that I have
17 suggested to you, would you agree with me that your using -
18 if you assume that all of that is true, would you agree
19 with me that, by contrast to what you have suggested in
20 paragraph 109, at least in the case of Ms Connell, she was
21 given an opportunity to seek a secondment and to work
22 elsewhere for a period?

23 A. If the facts as you lay them out are the case, then,
24 yes, I would concede that my understanding of the situation
25 was incorrect.

26

27 Q. My second-last question is this: if we could just
28 scroll on, please, to paragraph 126, here you give some
29 evidence about some what you say is limited success you
30 have had with raising issues with Ms Brisotto:

31

32 *... but management never come and ask how*
33 *an experiment could be designed or how best*
34 *to analyse the results. As such, many of*
35 *our validations are invalid.*

36

37 You have given some evidence about that earlier today?

38 A. Yes.

39

40 Q. Are you aware that experimental design is provided to
41 all management team members so that management team members
42 can seek the input from staff members generally?

43 A. There is a project proposal which outlines the
44 experimental design which they assess and decide whether it
45 should move forward or not.

46

47 Q. Were you aware that it was open to you to ask your

1 line manager to be actively involved in the review of
2 experimental design from time to time?

3 A. No, because we don't know that the projects are taking
4 place, generally speaking.

5
6 Q. Your current line manager is Sharon Johnstone; is that
7 right?

8 A. That's correct.

9

10 Q. How long has she been your line manager?

11 A. Since 2018 or 2019.

12

13 Q. And prior to that?

14 A. For a short period it was Matt Hunt.

15

16 Q. And prior to that?

17 A. Amanda Reeves.

18

19 Q. Did Amanda Reeves, for instance, ever tell you that it
20 was open to you to express a general interest to be
21 involved in experimental design?

22 A. She may have, but I have expressed general interest in
23 having a part - in having a role in these projects.

24

25 Q. And you expressed that to your line managers?

26 A. I had expressed it to a number of people.

27

28 Q. Can I ask my question again: you had expressed it to
29 your line managers?

30 A. I believe so. Maybe not Sharon, but certainly prior
31 to that.

32

33 Q. Now, the final issue is you were asked some questions
34 about some evidence you give in your statement, and I'm
35 afraid I can't tell you the immediate paragraph reference
36 but it is probably of no particular moment - you suggested
37 that the culture at the lab is misogynistic?

38 A. That's just my perception.

39

40 Q. I understand that. And you give as an example of
41 that, as I understand your evidence, the fact that there is
42 some inflexibility around a desire by staff to have
43 flexible working arrangements?

44 A. That's the principal - one of the principal reasons,
45 yes.

46

47 Q. And you mention people who have childcare commitments

1 and things like that. Is it the case that you are aware of
2 any situation where a man has been granted flexible work
3 arrangements that were refused to a woman in similar or
4 identical circumstances?

5 A. Around childcare?

6
7 Q. Yes.

8 A. Not that I'm aware of.

9
10 Q. I'm not intending to be tricky or smug about this.
11 I'm just trying to understand the four walls, if you like,
12 of the suggestion that it is misogyny. Is there anything
13 other than that apparent inflexibility around work
14 arrangements which you point to as evidence of the
15 misogynist nature of the culture of the lab?

16
17 THE COMMISSIONER: I don't know that he was saying it was
18 misogynist; I think he was saying that the climate is
19 inflexible, the culture is inflexible, so that, for
20 example, scientists who seek alteration in hours for
21 childcare purposes are not granted that. It's not that
22 females are treated differently from males, it's just that
23 that bracket of employees are not given the latitude that
24 they want. That's how I was understanding it, but I might
25 have missed something.

26
27 MR HICKEY: Can I explain to the Commissioner why I'm
28 asking the question?

29
30 THE COMMISSIONER: Yes, certainly.

31
32 MR HICKEY: The evidence that is given in paragraph 129
33 is:

34
35 *I feel that despite the gender balance of*
36 *the management team, the laboratory culture*
37 *is quite misogynistic.*

38
39 THE COMMISSIONER: Yes, I see. No, no, you are quite
40 right. Carry on.

41
42 MR HICKEY: You are right, Commissioner, that he goes on
43 to describe that inflexibility.

44
45 THE COMMISSIONER: No, carry on, I had not appreciated
46 that that word was there.

1 MR HICKEY: Thank you, Commissioner.
2

3 Q. So you understand, Mr Parry, what I'm trying to
4 explore with you is whether there is something in the
5 second sentence of what you say in paragraph 129 when you
6 say "the lab's culture is quite misogynistic"?

7 A. I can see that that might be - might be wording that
8 is a bit more forceful than I had intended. I would still
9 argue that the inflexibility towards female staff and their
10 childcare commitments is inherently problematic, so to me,
11 it's an example of a somewhat misogynistic sort of view of
12 HR rules.
13

14 Q. I think the point you make in the second sentence,
15 with respect, is clear enough, and you can understand why,
16 in the current climate, a word such as "misogynistic"
17 carries with it particularly important connotations, and so
18 it's important that we understand, and the Commissioner
19 understands, with real precision what you intend by that
20 term "misogynistic", and you have just said it might be
21 given greater emphasis than you intended. Is it something
22 more than what you describe in the second sentence?

23 A. I would probably be using it more in its original, not
24 so much in its current cultural context. I do think it's -
25 I use it in the sense of there are some rulings that seem
26 to be unfair towards the female staff in FSS.
27

28 Q. Again, I don't intend to be painful about this: is
29 that because that is the nature of the requests which are
30 being made, or is it because, in your view, they are
31 females who are making the requests?

32 A. It just seems to be a lot around - there just seems to
33 be a lot - well, it's going to be female staff making the
34 requests, because they are the mothers who have the
35 children who, you know - I'm probably not the best person
36 to ask about this. This is just my perception of how it
37 is. Ask some of the female staff, you know. I'm sure they
38 are more aware of how it is, because they live it every
39 day. If they say that I'm off track, then I will recant
40 that and retract it, but that's all I can tell you.
41

42 MR HICKEY: Thank you, that's helpful. Those are the
43 questions.
44

45 THE COMMISSIONER: Thank you, Mr Hickey. Anybody else?
46 No?
47

1 MS REECE: Commissioner, I do have some re-examination, if
2 I might, thank you.

3
4 THE COMMISSIONER: Yes, go ahead.

5
6 **<EXAMINATION BY MS REECE:**

7
8 MS REECE: Q. Just on that point, Mr Parry, how is it
9 that you come to know about any concerns about flexible
10 work arrangements?

11 A. Because I hear the female staff talking about it
12 frequently.

13
14 Q. And what do you observe, what impact does that have on
15 them, that issue of flexibility in the workplace?

16 A. Many of them seem very frustrated about their ability
17 to obtain it or the hoops they have to jump through in
18 order to get it.

19
20 Q. And is flexibility of work arrangements sought for
21 other reasons, other than childcare and child-caring
22 issues?

23 A. Yes, they are.

24
25 Q. For example, ill health or disability?

26 A. Yes.

27
28 Q. Perhaps caring for other family members?

29 A. Yes.

30
31 Q. Do you observe the same issues arising with
32 flexibility requested for those types of arrangements?

33 A. My impression is that it is easier to get it for those
34 reasons than it is for childcare. But that, again, is just
35 my perception. You would be better off asking the people
36 who actually are involved.

37
38 Q. Mr Parry, you have been asked some questions about
39 this proposal, which you had forgotten about?

40 A. Yes.

41
42 Q. If I could ask that it be put up, I understand it has
43 been sent through to the operator. It's the proposal
44 itself rather than the email. "Project Proposal 192
45 (Supplemental)" - you have still got that document in front
46 of you in hard copy?

47 A. The hard copy, sorry, yes.

1
2 Q. Not the email, the project itself. While we're
3 waiting for it to come up, I will just ask you to look at
4 page 2.

5 A. Yes.

6
7 Q. The way that it has been presented in evidence is that
8 it was attached to an email to Paula Brisotto as a Word
9 document. You would agree with that?

10 A. Yes, yes.

11
12 Q. Was this proposal, to your knowledge, ever accepted by
13 the management committee?

14 A. I don't know.

15
16 Q. In the proposal, there was a space there for
17 signatures. If this document had been accepted by the
18 management committee, or approved, would you expect that
19 there would be signatures on the version that was approved?

20 A. You would expect, yes.

21
22 Q. That follows the same pattern with the final report,
23 doesn't it - that there is a page where the authorship is
24 reflected?

25 A. Yes.

26
27 Q. For the proposal, it is the approval, and for the
28 report, it is the authorship?

29 A. Yes.

30
31 Q. I think I asked you, you are not aware that this
32 actual proposal was accepted by the management committee?

33 A. Not that I'm aware.

34
35 Q. Is the methodology the same as between your proposal
36 and the work that was carried out and reported on two years
37 later?

38 A. There are similarities. Without going through it
39 fully, I couldn't say. It's possible that they followed
40 the methodology, based on the results they obtained. My
41 bigger concern with the supplemental bone project is the
42 results themselves, the disparity between the repeatability
43 and the reproducibility, the disparity between the expected
44 organic extraction quants and the obtained experimental
45 extraction - organic extraction results, not so much with
46 the design of the supplemental.

1 Q. Your concern about the methodology in the
2 supplementary report was that it was vague?

3 A. Yes.

4
5 Q. And the way that it was expressed in the report, but
6 you say that your concern was the variability of results -
7 and this is at the bottom of paragraph 100. Is it fair to
8 say that the variability of results and the analysis of
9 those results are what you're concerned about in relation
10 to that supplementary project?

11 A. Yes, it's the results themselves, not so much the
12 design, because at face value, they had corrected the
13 problem with the low sample number or the n=1 issue, and
14 they had corrected the repeatability and reproducibility
15 part, it's just that, as written, the supplemental
16 Project #192, the methodology is quite vague. It doesn't
17 actually refer to this document, this project.

18
19 Q. So it doesn't refer to the project proposal?

20 A. It doesn't refer to the comparison of organic phenol
21 chloro, et cetera, that I can see.

22
23 Q. Would you like to consider the document after lunch
24 and then briefly return to just answer a final question on
25 that?

26
27 THE COMMISSIONER: Q. I would be interested, Mr Parry,
28 in knowing whether and to what extent the proposal that you
29 put forward does or does not conform to the project as it
30 was carried out.

31 A. Sure.

32
33 MS REECE: Thank you, Commissioner.

34
35 THE COMMISSIONER: 2.15, Ms Reece?

36
37 MS REECE: Yes, thank you.

38
39 THE COMMISSIONER: We will adjourn until 2.15.

40
41 **LUNCHEON ADJOURNMENT**

42
43 THE COMMISSIONER: Yes, Ms Reece.

44
45 MS REECE: Thank you, Commissioner.

46
47 Q. Mr Parry, before the break, you'd been provided in

1 cross-examination with a - if we could go to the last
2 document that was on the screen, it was "Project Proposal
3 #192 (Supplemental)". This is the document that you had
4 emailed to Paula Brisotto?

5 A. Yes.

6
7 Q. And then you were shown a document by - I'm sorry,
8 this is the document that you were shown. Have you had an
9 opportunity to go through that and also to go back through
10 the actual report for Project #192 over the break?

11 A. Yes, yes.

12
13 Q. I will take you to another document which you had also
14 been shown just shortly before we commenced, but I will
15 start with what you were first asked to do, which was to
16 over the break look over the project proposal that you put
17 together and compare it with the report. Did you have any
18 comment that you wished to make about that?

19 A. It appears to have followed the structure of the
20 design I put forward, in that they did the repeatability
21 testing as appropriate, reproducibility testing as
22 appropriate, used an appropriate number of repeats for
23 individual bones. So that was all good. They didn't do
24 the statistical analysis that I suggested. That being
25 said, it could be argued that it's not necessary to do
26 that, that a series of box plots would give you the
27 information that you wanted. So, yes, it looks similar
28 enough.

29
30 Q. Mr Woolridge, if you could just scroll down to I think
31 page 3 of the document currently - no, sorry, the second
32 page. You created this document, and version 1.0 was dated
33 27 April 2018?

34 A. Correct.

35
36 Q. You've now been shown, just shortly before court,
37 another document. I know that this has been provided,
38 Commissioner, by Mr Diehm and his instructors, and it has
39 been emailed to Mr Woolridge. Does that now appear to the
40 right-hand side of the screen, Mr Woolridge? Thank you.
41 If you could scroll down on that second document, when you
42 look at that document there, you see, don't you, Mr Parry,
43 that it was created on 12 March 2019 by Luke Ryan?

44 A. Yes.

45
46 Q. And it was signed off, variously, by a number of
47 people on 5 April 2019?

1 A. Yes.

2

3 Q. You have had a chance to look at that second document,
4 which is now on the right-hand side of the screen?

5 A. I have.

6

7 Q. Are you able to comment on whether it is similar,
8 identical, different in some way to the document which is
9 on the left-hand side of the screen, which is the draft
10 that you provided?

11 A. It's similar. Again, they've dropped the statistical
12 analysis that I suggested. I can't say that they've
13 followed exactly what I proposed, but they've done
14 something very similar - similar enough that I wouldn't
15 have concerns with the actual manner that the experiment
16 was carried out in. I still have concerns about the
17 results that were obtained and that were accepted. Based
18 on what I said earlier about the disparity between the
19 expected results and the final results and the lack of
20 consistency between the reproducibility and repeatability,
21 it's the results I still have concerns with. But in terms
22 of the structure of the experiment, no, it's essentially
23 what I - in essence, it's what I proposed.

24

25 Q. It's what you proposed, but it's proposed a year
26 later?

27 A. Yes.

28

29 Q. And not by you?

30 A. No.

31

32 Q. By Luke Ryan?

33 A. Yes.

34

35 Q. And signed off by people who also don't include you?

36 A. That's right.

37

38 Q. And you weren't involved at that stage?

39 A. I don't believe so.

40

41 Q. In fact, you weren't aware that this proposal had been
42 put forward?

43 A. I don't recall.

44

45 Q. You weren't given access to it?

46 A. No, I don't think so.

47

1 Q. With experimental design, when you set up a project
2 like this and you design an experiment, is that the end of
3 it? Do you essentially set an experiment and it continues
4 from there, or does there need to be some ongoing process
5 of adapting the experimental design as things progress?

6 A. It depends on how big your experiment is and what you
7 are trying to achieve. A simple experiment like this, it's
8 really just a one and done. That being said, when you're
9 assigning it to a process that you are going to be using,
10 you really do need to come back three, six months later and
11 then have a look at results that are coming out to see if
12 what you have done in your validation is consistent with
13 what you are getting down the track, so there needs to be
14 some revisitation. But for a small experiment like this,
15 it's just a one and done kind of deal. If you had a larger
16 project where you had multiple experiments where one
17 experiment might lead to what you are doing further down
18 the track, yes, there's a constant revisiting and
19 re-evaluation and reassessment of what results are showing
20 you, to guide you as to where you might go later on.

21
22 Q. Mr Parry, when you look at the essence of what you
23 have put forward to Ms Brisotto in 2018 and you look at
24 what was done in 2019, does that play in at all to what you
25 were saying earlier about professional exclusion?

26 A. I would have to argue yes.

27
28 MS REECE: Commissioner, in a moment I'm going to ask
29 Mr Woolridge, as the final part of Mr Parry's evidence, to
30 show two pages side by side of those two documents. I'm
31 just having those references given to me, Commissioner. On
32 the left-hand side, the document from 2018, Mr Woolridge,
33 could you please scroll to page 5. I believe that's the
34 page numbers. And the same page number for the second
35 document.

36
37 Q. When you look at those two documents, Mr Parry, can
38 you see that under "Methods", under "Sample Selection" at
39 4.1, there is a bigger box of text there, you would agree,
40 for the "Sample Selection"?

41 A. Yes.

42
43 Q. Can you comment on whether then, underneath, with
44 "Bone/teeth crushing", "Organic", "DNA extraction",
45 "QIAGEN", "Pre-lysis", they are all the same headings,
46 aren't they?

47 A. They seem to be the same, yes.

1
2 MS REECE: Thank you, Commissioner. That's all the
3 evidence of this witness.

4
5 THE COMMISSIONER: Thank you. Thank you, Mr Parry, for
6 your assistance. You are free to go, or you are free to
7 stay as well.

8
9 <THE WITNESS WITHDREW

10
11 MS HEDGE: Commissioner, I call Emma-Jayne Caunt.

12
13 THE COMMISSIONER: Yes. That's Mr Parry's statement
14 there, isn't it?

15
16 MS REECE: Commissioner, I should tender those documents.

17
18 THE COMMISSIONER: Yes, which two documents are you
19 tendering?

20
21 MS REECE: The proposal document from 2018, which is on
22 the screen now - that one was already tendered. And then
23 it's the - I'm sorry, I just can't remember the exhibit
24 number, Commissioner.

25
26 THE COMMISSIONER: There is only one you are tendering?

27
28 MS REECE: Yes. I'm now tendering the one which is now on
29 the screen.

30
31 THE COMMISSIONER: So you are tendering --

32
33 MS REECE: Signed proposal from 2019.

34
35 THE COMMISSIONER: -- "Project #192 - Validation of
36 QIASymphony", dated April 2019, version 2.0. That will be
37 exhibit 74.

38
39 **EXHIBIT #74 "PROJECT #192 - VALIDATION OF QIASYMPHONY",**
40 **DATED APRIL 2019, VERSION 2.0**

41
42 MS REECE: Commissioner, that is actually a proposal. It
43 doesn't state it on the cover sheet, but it is apparent
44 that it is a proposal rather than the final report, and
45 I say that because there is a report bearing the same name.

46
47 THE COMMISSIONER: Yes, all right.

1
2 MS REECE: Thank you.

3
4 <EMMA-JAYNE CAUNT, sworn: [2.37pm]

5
6 <EXAMINATION BY MS HEDGE:

7
8 MS HEDGE: Q. Your name is Emma-Jayne Caunt?

9 A. It is.

10
11 Q. You are a reporting scientist at Queensland Health
12 Forensic and Scientific Services?

13 A. I am, yes.

14
15 Q. You have provided two statements to the Commission; is
16 that right?

17 A. Yes.

18
19 Q. I will put the first one of those on the screen,
20 [WIT.0004.1193.0001_R]. This is your first statement?

21 A. Yes.

22
23 MS HEDGE: I tender that statement, Commissioner.

24
25 **EXHIBIT #75 STATEMENT OF EMMA-JAYNE CAUNT, BARCODED**
26 **[WIT.0004.1193.0001_R]**

27
28 MS HEDGE: Q. Could I have the second statement on the
29 screen, [WIT.0004.1224.0001]. Is that your second
30 statement?

31 A. It is, yes.

32
33 MS HEDGE: I tender that statement also.

34
35 **EXHIBIT #76 STATEMENT OF EMMA-JAYNE CAUNT, BARCODED**
36 **[WIT.0004.1224.0001]**

37
38 MS HEDGE: Q. Can we return to the first statement,
39 [WIT.0004.1193.0001_R], and can we zoom in on the
40 background section, please. You started your reporting
41 scientist career in the United Kingdom; is that correct?

42 A. That's correct, yes.

43
44 Q. You were trained by experts in forensic biology at the
45 Forensic Science Service in the United Kingdom?

46 A. That's right, yes.

1 Q. You worked there from 1999 to 2006?
2 A. Yes.
3
4 Q. And then emigrated to Australia?
5 A. Yes.
6
7 Q. And worked at Queensland Health since 2007?
8 A. Yes.
9
10 Q. We see in paragraph 5 that between 2008 and 2013, you
11 acted - I'm sorry, is it from those five years or is it
12 between?
13 A. Yes, it's the five years, yes.
14
15 Q. In those five years, for those five years, you acted
16 as a senior scientist position, which are the positions
17 currently held by Kylie Rika and Sharon Johnstone; is that
18 right?
19 A. That's right, yes.
20
21 Q. I only say that to identify it for everyone here. So
22 you acted in that position for those five years, and during
23 that time you acted up into the position currently held by
24 Mr Howes, that is, the team leader of forensic reporting
25 and intelligence; is that right?
26 A. That's right, yes.
27
28 Q. So your experience spans not only reporting for a long
29 period but also the management of the lab in Queensland?
30 A. Yes.
31
32 Q. Now, can I start by asking you about the Options
33 Paper. When it was done in 2018, you were a reporting
34 scientist?
35 A. That's right, yes.
36
37 Q. Were you told about the Options Paper before it was
38 presented to police?
39 A. I don't believe so, no.
40
41 Q. But it was communicated to you afterwards that
42 a decision had been made to implement the DIFP threshold?
43 A. That's right, yes.
44
45 Q. You immediately raised a concern about that process;
46 is that right?
47 A. Yes, I did.

1
2 Q. Can we turn to EC-02 of that statement. I'm sorry,
3 I don't have the number, but I will obtain it. It is
4 [WIT.0004.1227.0001]. I'm sorry, one moment. I'm sorry,
5 Commissioner, I didn't realise I didn't have that number.
6 [WIT.0004.1195.0001]. If we turn to the second-last page
7 of that exhibit - one page back, please, operator. At the
8 bottom of the page - can we zoom in down there - this is an
9 email from Mr Howes, and that's the email where you were
10 told of the Options Paper?
11 A. Yes, that's right.
12
13 Q. Turning over on to the next page, please, operator -
14 we have seen this email in the first week of hearings.
15 This is the email where Mr Howes suggested that wording,
16 "low levels of DNA were detected in this sample", as
17 a potential way that might be used in a statement. Do you
18 remember that email?
19 A. Yes, yes.
20
21 Q. Going back up on to page 3, the next email in the
22 chain, it is an email from you, and it is about 50 minutes
23 after being told of the Options Paper; is that right?
24 A. That's right, yes.
25
26 Q. You had a look at the reports for this, and by that do
27 you mean the Project #184 reports or did you have access to
28 the actual Options Paper?
29 A. I can't remember. I don't know, sorry.
30
31 Q. But whatever you looked at showed you that 10 per cent
32 of samples that went through the auto-microcon gave
33 interpretable results?
34 A. That's correct, yes.
35
36 Q. You considered that to be the significant or pertinent
37 number in terms of the statistical analysis in the reports
38 you read?
39 A. Yes.
40
41 Q. You identified the expanded comment line, which is in
42 the forensic register; is that right?
43 A. I believe so, yes.
44
45 Q. And you were concerned about what that line said at
46 that time?
47 A. Yes.

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Q. Is that right?

A. That's right, yes.

Q. And you asked for that line to be changed to identify clearly, as you say in that sentence immediately under the quote:

This indicates to scientific staff that there is nothing further that can be done with this sample, which is not the case for 10% of samples.

A. Yes.

Q. So your focus at this time was on the ability to retest?

A. That's right, yes.

Q. Or rework, I should say?

A. Yes.

Q. Can we move up, thank you, operator, to the next page. Mr Howes replied about six minutes later, seven minutes later, and said that he understood and would change the wording; is that right?

A. That's correct, yes.

Q. Then can we scroll up to the next email, please. This is the next morning.

A. Yes.

Q. You say, on 8 February, that you are:

... not necessarily opposed to stopping the auto-microcon process, but I do think that there is a risk that we are able to manage.

A. Yes.

Q. And you say that, in your view, the validation of a DNA insufficient result should not occur until someone has had a look at the whole case; is that right?

A. Correct, yes.

THE COMMISSIONER: Q. By "the line should not be validated", do you mean that the sample should not be

1 signed off as DNA insufficient for processing until
2 something has happened - so validation means that result
3 line goes in and that's the end of that sample?

4 A. That's correct, the validation of that line prompts it
5 to go over to the QPS for them to see the result, yes.

6
7 MS HEDGE: Q. Moving up to the next email, which is at
8 the bottom of the next page, the next email in this list is
9 an email from you to Kylie Rika?

10 A. Yes.

11
12 Q. Was she your line manager at that time?

13 A. Yes, she was.

14
15 Q. You say in this email that you understand from
16 a conversation with Justin that the DNA insufficient
17 process will continue as per the no DNA detected process,
18 so there won't be a full case review before validation?

19 A. Correct.

20
21 Q. Did you have that conversation with Justin?

22 A. I believe so.

23
24 Q. Do you remember it now?

25 A. I don't remember it, but reading the email, I would
26 say that I have had conversation with him.

27
28 Q. Do you remember anything about it that you can tell
29 us - how long it went for or who said what in the
30 conversation?

31 A. No, I don't remember.

32
33 Q. Now, you have passed on a case example here to Kylie,
34 and you identify:

35
36 *In this case the auto-microcon gave the*
37 *only evidence to substantiate the claims of*
38 *the complainant.*

39
40 Do you see that there?

41 A. Yes, that's right.

42
43 Q. Was this a case that you processed before DIFP came
44 in?

45 A. Yes.

46
47 Q. But it was a case that you saw would be affected by

1 DIFP had it occurred after 8 February 2018?

2 A. That's right, yes.

3
4 Q. Do you remember what you hoped to highlight by giving
5 that case example to Kylie?

6 A. I just wanted to highlight that for this particular
7 case, had the DIFP process been implemented, then that
8 sample that gave the pertinent result would not have been
9 processed, and had a statement not been requested for that
10 case, then that sample would probably never have been
11 reworked.

12
13 Q. If we scroll to the top of the page, Kylie's response
14 to you, she tells you that she had mentioned this type of
15 thing in her feedback on Project #184 but had not had
16 a response, and it seems the executive decision had been
17 made?

18 A. Yes.

19
20 Q. Did Kylie or Justin come back to you any further in
21 relation to the issues you had raised in these emails?

22 A. No.

23
24 Q. Was your mind set at ease by your conversation with
25 Justin, or did you continue to harbour concerns about the
26 Options Paper and DIFP?

27 A. I continued to have concerns.

28
29 THE COMMISSIONER: Q. Sorry, what was that?

30 A. I continued to have concerns.

31
32 MS HEDGE: Q. What concerns did you have back then?

33 A. The concern for me was that once the sample had gone
34 through the quantification process and it sat in that DNA
35 insufficient range, those samples would populate a list for
36 the result line to be validated to go across to the police,
37 but there would be no other assessment of that sample to
38 determine whether there was anything within the case to
39 suggest that that sample should probably be processed. So
40 in my opinion, it was a blanket rule that said anything in
41 this range will be reported as DNA insufficient, and there
42 is not going to be any assessment of that, and it can be
43 reworked later if the police request or if a reporting
44 scientist decides to rework it.

45
46 The issue with that is that the reporting scientist
47 would never see that sample, because it never hit a list

1 that a reporting scientist would look at, and so the only
2 time that a sample like that would be seen would be if
3 there was a statement request on the results from the rest
4 of the case, and then a whole case assessment would
5 completed and those samples would then come to light and
6 then be available for review. But if you have a case that
7 has a DNA insufficient sample in it and the rest of the
8 case gives nothing probative, then the police are unlikely
9 to request a statement, and so that sample then disappears
10 and nobody would ever know that there was a sample there
11 that could potentially have given us profile.

12
13 THE COMMISSIONER: Q. So, just so I understand it, one
14 of the serious potential consequences is that every sample
15 that police submit is reported as DNA insufficient, so they
16 get that result and so they are getting no help from FSS in
17 terms of evidence to incriminate somebody, and if they
18 otherwise have a very weak case, then they may not twig to
19 the fact that maybe they can get those samples actually
20 worked?

21 A. That's right.

22
23 Q. With the consequence that they don't bother getting
24 the samples tested, and you as a reporting scientist never
25 see those samples with a view to assessing whether they,
26 for reasons that you can see in context, are worth
27 processing?

28 A. That's right.

29
30 Q. And so the case is dropped?

31 A. Correct.

32
33 Q. Although the samples, or one of them, might give rise
34 to a piece of evidence that can let the case go forward?

35 A. Correct, yes.

36
37 MS HEDGE: Q. Can I ask you, you understand what
38 information the police have to make a decision as to
39 rework?

40 A. My understanding is that the information that they
41 have was in the expanded comment that was shown in the
42 email.

43
44 Q. But we should say, you understand that Justin Howes
45 did make a change to that expanded comment after your
46 suggestion?

47 A. I don't know, because I never went back and checked.

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Q. So you weren't advised of anything?

A. I don't believe so, no.

Q. You understand that the police get given an expanded comment, whether it be in that form or some other form?

A. That's right, yes.

Q. Do you think a police officer, as opposed to a reporting scientist, is in a better position to make a decision as to rework in these cases you are talking about where a reporting scientist might never see the result?

A. No, I don't think so, because there are many factors that a reporting scientist would bear in mind when considering whether one of these samples could be potentially reworked, and that would include the quant value itself, so whereabouts it sits in that range, but also whether any previous body fluid testing had been carried out and what the results of that were. So, for example, it may be a bloodstain, it could be a semen stain, and just being highlighted to the fact that the sample possibly has blood or semen on it, regardless of the quant value, would potentially prompt you to rework a sample, but the police don't have that information.

Q. Now, did you take your concerns any further than Ms Rika and Mr Howes?

A. I did, yes. I took my concerns to Andria Wyman-Clarke, who was the general manager of HR in HSQ at the time.

Q. In 2018?

A. In 2018, yes. And I also took my concerns to John Doherty, who was the executive director. I'm not sure when that would have been. He wasn't in that position in 2018. It probably would have been about, maybe, 2020-ish --

Q. I'm sorry, please finish.

A. And I think I may have also raised a concern with Lara Keller as well.

Q. Going back to 2018 with Andria Wyman-Clarke, was there an outcome of that, of the Options Paper?

A. I didn't see an outcome.

Q. What about with John Doherty or Lara Keller, your

1 raising the issues with them - did you see that have any
2 impact on how the lab was running?

3 A. No.

4
5 Q. So immediately following the Options Paper, in that
6 time perhaps 2018 to early 2021, was the lab reworking many
7 DIFP samples?

8 A. To be honest, I'm not sure. I don't know.

9
10 Q. Do you remember reporting on samples that had been
11 reworked after an initial DIFP result?

12 A. I believe I would have done, but I can't recall.

13
14 Q. What about from November 2021 to now, or to 6 June
15 this year, did you see a lot of DIFP samples in that time?

16 A. I did, yes, because it seemed that the QPS were
17 requesting reworks of a lot of those samples, because the
18 older samples in a work list sort on date received, they
19 come to the top of the list, so they are actually one of
20 the first samples that need to be looked at, and so I've
21 seen maybe 30 or 40 of those since November.

22
23 Q. When you say the "work list", this is the work list in
24 the forensic register that sets out what reporting
25 scientists should do by way of interpretation and review?

26 A. Yes, yes.

27
28 Q. So when you go to work in the morning, do you look at
29 that list?

30 A. Yes. It's a list of all of the samples that have been
31 through the profiling process and are ready to be
32 interpreted.

33
34 Q. And you saw some that were old, you say?

35 A. Yes, yes.

36
37 Q. They were ones that the QPS had requested a rework on
38 that were old?

39 A. Yes, that's right.

40
41 Q. Did you contribute some of those to the spreadsheet
42 that Kylie Rika was keeping of DIFP samples that resulted
43 in a useable profile?

44 A. Yes, I did, yes.

45
46 Q. In those 30 or 40 I think you said you have seen
47 since November, did you see some of them produce useable

1 profiles?

2 A. Yes. Yes, I think probably most of them, if not all
3 of them, did, yes.

4

5 Q. Did you see some of them that were highly significant
6 in the case that they were in?

7 A. Yes. A lot of them would have been in internal swabs.

8

9 Q. So did that change your level of concern about the
10 DIFP threshold?

11 A. Yes.

12

13 Q. And how?

14 A. Because there is now a large number of samples that
15 I have personally seen that have previously been reported
16 as DNA insufficient, that I have now seen have given
17 interpretable DNA profiles, whereas previously, because
18 they were going on to the list and I potentially wasn't
19 reworking many of them, or whatever, I wasn't really seeing
20 them, but because these were obvious because they were
21 coming to the list and they were sitting on the top of the
22 list, you could see them, and the ones that I looked at,
23 the majority of them were interpretable, so, yes, that's
24 a concern.

25

26 Q. What did that make you think should be done about the
27 DIFP threshold?

28 A. That it needed to be removed.

29

30 Q. Did you raise that with anyone in the lab between
31 November 2021 and June 2022?

32 A. I don't believe I did, no.

33

34 Q. But you contributed to Kylie Rika's spreadsheet?

35 A. Yes, I did, yes.

36

37 Q. Did you understand what that spreadsheet was for?

38 A. The spreadsheet was collecting examples of samples in
39 that range that had provided interpretable DNA profiles,
40 with the view to presenting that to management to try and
41 get a reassessment of the thresholds.

42

43 Q. When I asked you a moment ago, "Did you raise that
44 with anyone?", did you take that question as meaning did
45 you raise that with management?

46 A. Whether the threshold should be removed?

47

- 1 Q. That's right. What I'm asking now is, did you raise
2 it with your colleagues, people at the same level as you?
3 A. Oh, yes, yes. Absolutely, yes, yes.
4
5 Q. I thought you might have taken my previous question
6 as, "Did you raise it above you?", is that right --
7 A. Yes.
8
9 Q. -- when you said, "No, I didn't raise it with anyone"?
10 A. Yes, yes. Sorry, yes, no, I did raise it with my
11 colleagues, yes.
12
13 Q. That's the other reporting scientists?
14 A. That's right, yes.
15
16 Q. Was this a topic of much conversation?
17 A. Absolutely, because people were seeing the same thing
18 that I was, yes.
19
20 Q. There are 14 reporting scientists; is that right?
21 A. More. Maybe about 18-ish.
22
23 Q. Let's say 15 to 20 reporting scientists?
24 A. Yes.
25
26 Q. Who was involved in these conversations - everyone or
27 just a few people?
28 A. At least half. I would say at least half, yes.
29
30 Q. You are in Sharon Johnstone's team; is that right?
31 A. That's right, yes.
32
33 Q. Were these conversations in Sharon Johnstone's team,
34 or were there people from both of the reporting teams?
35 A. People from both of the teams.
36
37 Q. Where did these conversations where the reporting
38 scientists were discussing this and expressing concerns -
39 was that where your desks are in the lab?
40 A. Yes.
41
42 Q. Reporting scientists sit in an open-plan desk office
43 setting; is that right?
44 A. That's right, yes.
45
46 Q. And outside - at one end of the analytical lab?
47 A. Yes.

1
2 Q. So conversations had there can be heard by anyone who
3 happens to be in the area?

4 A. Yes.

5
6 Q. You have, and you have set out in your statement,
7 significant involvement or expertise in STRmix; is that
8 right?

9 A. That's right, yes.

10
11 Q. That's the software that assists in producing
12 likelihood ratios for profile interpretation; is that
13 right?

14 A. That's right, yes.

15
16 Q. You were involved in the verification of STRmix
17 version 2.7 after the 3500xL Genetic Analyzer was
18 implemented in 2021; is that right?

19 A. It was before the implementation, because we had to do
20 the verification before we implemented.

21
22 Q. So was there a validation of the 3500 first?

23 A. There have been a few projects opened to validate the
24 3500 and there has been various work performed, but the
25 work that I performed in 2021, I think, was the final work
26 that was done before we actually implemented.

27
28 Q. So that verification of STRmix version 2.7 was to make
29 compatible STRmix and the 3500 working together to produce
30 profiles for interpretation?

31 A. Yes.

32
33 Q. And likelihood ratios?

34 A. Yes.

35
36 Q. Were you involved in the validation of the 3500 or
37 those projects you're speaking about?

38 A. On and off for many years, yes.

39
40 Q. That validation was not easy; is that fair?

41 A. No; that's correct.

42
43 Q. What was the main problem that struck the 3500
44 validation?

45 A. The main issue with the 3500 is because the peak
46 heights are so large, it produces what we call pull-up
47 peaks. So the dye from one, what we call a lane - so there

1 are four different dye lanes for a PP21 profile. So if in
2 the blue dye lane we have a really big peak (audio dropout)
3 in the yellow dye lane, now, that peak in the yellow dye
4 lane isn't actually DNA; it is an artefact that's created
5 by the peak in the blue dye being so big, and so you get
6 this peak that isn't DNA, but because it is so large, it
7 can interfere with the interpretation of the DNA profile.

8
9 Throughout the validations of the 3500, those pull-up
10 peaks were actually quite significant, and it made it
11 difficult to interpret the DNA profiles, and that resulted
12 in the 3500 validation kind of being on and off over
13 a number of years as various things were changed and
14 investigated.

15
16 Q. The work you did with version 2.7 of STRmix and the
17 3500, did that raise greater concerns about the DIFP
18 threshold?

19 A. It did, yes, because the 3500 produces peak heights -
20 I think they estimate it's about four times the height of
21 the peaks from the previous instrument called the 3130. So
22 by definition, then, you know that the 35 00 is going to
23 produce larger peak heights, which then results in being
24 able to detect smaller amounts of DNA, because with the
25 older instruments, the peaks would be so small that you
26 couldn't detect them. Then with the new 3500, those peaks
27 are bigger and so they come above the baseline and they can
28 now be detected. So my opinion was that when the 3500 was
29 to be implemented, we should have reassessed the DNA
30 insufficient threshold.

31
32 Q. Can we return to your first statement,
33 [WIT.0004.1193.0001_R], at page 5, and zoom in on
34 paragraph 26, please. You recall here in paragraph 26
35 a conversation you had with Justin after doing that work
36 that you just described?

37 A. I think it was actually during the work, while the
38 work was being done.

39
40 Q. And you suggested to him that maybe you should be
41 reassessing the DIFP threshold --

42 A. Yes.

43
44 Q. -- for that reason you have just outlined?

45 A. Yes.

46
47 Q. Is his response there?

1 A. Yes. His response to me was that the capillary
2 electrophoresis instrument itself doesn't affect the
3 sensitivity of an amplification kit. So the actual kit
4 itself is what affects the sensitivity, and not the CE
5 instrument, and therefore, in his opinion, the
6 implementation of the 3500 didn't warrant a reassessment of
7 the thresholds, but he did say to me that when we implement
8 VeriFiler Plus, which is a new amplification kit, that
9 would be the point in time that we would reassess the
10 thresholds.

11

12 Q. What did you think of that? Did that explanation
13 satisfy you?

14 A. No, it didn't.

15

16 Q. Why is that?

17 A. Because having looked at the profiles myself that we
18 generated during the validation of STRmix, I could see that
19 it was more sensitive. But I can only provide the
20 information. I'm not a decision-maker.

21

22 Q. Now, VeriFiler Plus - you were involved in that
23 validation also?

24 A. Yes.

25

26 Q. And that was also not an easy validation?

27 A. Correct.

28

29 Q. VeriFiler Plus is a potential replacement for PP21; is
30 that right?

31 A. I believe so, yes.

32

33 Q. You were doing the validation. Is that the purpose of
34 it, to replace PP21?

35 A. I think - I think that the reasoning behind the
36 validation of VeriFiler Plus was so that we could have like
37 a stand-by kit as a business continuity plan, so that if
38 anything happened where we couldn't get PP21 kits, we would
39 at least be able to use VeriFiler. I have a feeling -
40 I don't know, because I'm not on the decision-making group,
41 but I have a feeling that the idea is that VeriFiler would
42 be used in preference to PP21, and then PP21 would be used
43 as the fall-back for business continuity.

44

45 Q. So the reason you said "maybe" was related to the word
46 "replacement"?

47 A. Yes. Yes, sorry, yes.

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Q. It does the same job as PP21?

A. Yes.

Q. I understand. How long has the laboratory been trying to validate VeriFiler Plus?

A. I believe since about 2019.

Q. And has that succeeded?

A. No.

Q. So it's not been validated?

A. Not yet. It's still in progress.

Q. From Mr Howes' suggestion of when the DIFP threshold would be re-looked at, it wouldn't yet be re-looked at, even up to today?

A. No, correct.

Q. Can I ask you about no DNA. Do you have similar concerns about the no DNA detected threshold as you do about the DIFP, or had about the DIFP threshold?

A. Yes, I do.

Q. Why is that, can you explain that to us?

A. I'm not sure that I've submitted a no DNA detected sample for rework, but I have seen no DNA detected samples that have tested positive for sperm, so by default there should be some DNA in the sample.

If you've only got a small number of sperm, you would only expect a small amount of DNA in the sample. But for me, if sperm is detected in a sample, we should be profiling it, because we may be able to get something. We've seen that there is physically something there. And so to write it off I don't think is necessarily the right thing to do.

Q. Does that concern only relate to samples in which sperm is seen in microscopy - is that where the sperm is seen?

A. The sperm would be seen in microscopy, yes, but there could be samples that have tested positive for blood, for example. We know that the quant process is inherently variable, and I think it may be quoted that there is about a 30 per cent variability. So if you submit a sample for quantification and it gives you a quant of 0.00099, falls

1 below the no DNA detected threshold, but next time I quant
2 it, it might give me a quant value of 0.0013, so now it is
3 above the no DNA detected threshold. And so bearing that
4 in mind as well, if you have a sample where you believe
5 that there's going to be DNA present, particularly if it's
6 bloodstained or you have seen semen, sperm, and you have
7 got a low quant value, there could also be some variability
8 in that quant value, and therefore we should be profiling
9 it.

10
11 Q. Taking that all into account, what is your view about
12 whether quant values should be used as a threshold in the
13 laboratory at all?

14 A. No, because of the - because we know that the quant is
15 only an estimation and that it has an inherent variability
16 in it, to use it as a hard cut-off I think is probably not
17 the best thing to be doing.

18
19 Q. Are you open to a soft threshold - that is, one which
20 sets a threshold and then there is some discretion - or are
21 you suggesting there should be no threshold?

22 A. I'm happy with a threshold for triage, provided there
23 is a further triage process as opposed to a - so, yes,
24 I would be happy with a soft threshold, provided that
25 threshold could be backed up, but there are also other
26 things in place so that the samples that should be profiled
27 are profiled.

28
29 Q. Thinking back to your time in the United Kingdom lab
30 and the lab that you are working in now, what's the level
31 of discretion and ability to decide what happens to
32 a sample, by comparison?

33 A. When I worked in the UK, a case would be allocated to
34 me and I would have full carriage of that case to make all
35 of the decisions in relation to that case. I mean, bearing
36 in mind this goes back to 2006, we didn't have any
37 thresholds. Everything was profiled, and then it was up to
38 me to determine whether it was worth doing further work on
39 that sample, whether we would go back and resample items,
40 that kind of thing, because the whole case was mine for me
41 to make the decision on.

42
43 THE COMMISSIONER: Q. Prior to which date?

44 A. Well, I left the Forensic Science Service in 2006.

45
46 MS HEDGE: That was in the United Kingdom, Commissioner.
47

1 THE COMMISSIONER: Yes.

2
3 MS HEDGE: Q. What do you see as the benefits of that
4 approach comparatively to the work list approach?

5 A. The benefit of that approach is because you have just
6 a complete, holistic overview of the case. So I would
7 receive a case. In there would be an amount of information
8 about the case. The first thing I would do would be to
9 call the investigating officer and say, "Tell me the
10 details about this case. What's happened? What kind of
11 things are we looking for?", but also, "Do you have
12 a suspect and what's his version of events?", so that when
13 I'm looking at the evidence, I'm actually bearing in mind
14 that there may be evidence to support his proposition, the
15 suspect's proposition, as opposed to the victim's
16 proposition. So all of that information I had in mind
17 while I was doing the examination of the items. So
18 I wasn't just looking for DNA or some information that
19 would prove the offence; I was also looking for information
20 that might prove that the offence didn't happen, you know.
21 So just having that whole overarching, holistic view just
22 enables you to be able to do the best thing for that case.

23
24 Q. Can I ask you about reporting DIFP in witness
25 statements. You have reported results in statements as DNA
26 insufficient for further processing since 2018?

27 A. I don't know if I have done it all the way back to
28 2018. The email that Justin sent with the wording that
29 says "low levels of DNA were detected in this sample" -
30 I can't remember exactly what it says - I recall that I was
31 using that wording when we first implemented, because
32 I didn't know what wording to use. That was his
33 suggestion, so I was using that wording. But I know that
34 at some point in time, I changed that to the DNA
35 insufficient. The only thing that I can think of is that
36 it went into a SOP and so I started to use it because it
37 was in a SOP, whereas it may not have been right at the
38 beginning. But I'm not sure.

39
40 Q. But you don't remember why you changed?

41 A. No.

42
43 Q. Have you looked up the SOP recently?

44 A. Yes.

45
46 Q. Is what you were writing consistent with what was in
47 the SOP pre 6 June 2022?

1 A. Yes.

2
3 Q. Are you permitted, in your work, to write wording
4 that's not approved by management or in a standard
5 operating procedure?

6 A. Generally speaking, I believe that you are allowed to
7 deviate from a SOP in certain circumstances, provided it's
8 something that is appropriate for whatever it is that you
9 are doing and you have the appropriate permissions and you
10 make the appropriate notes. Deviation from a SOP is not
11 something that you do on a general basis, because then
12 there is something wrong with the SOP. So if I were to
13 find a sample that had something unusual about it and
14 I just wanted to do something slightly different, I may be
15 able to deviate from the SOP, provided I have justification
16 for doing that. But I can't do that for every sample. You
17 know, generally, for the bulk of our casework, we have to
18 follow SOPs.

19
20 THE COMMISSIONER: Q. You can adopt an idiosyncratic
21 approach for something if you can justify it, it makes
22 sense, but you can't establish your own standard operating
23 procedure?

24 A. That's right, yes.

25
26 MS HEDGE: Q. What would happen if you did start
27 reporting DIFP as some other phraseology that you chose?

28 A. I suspect that, for want of a better word, I would get
29 into trouble, somebody would address that with me and tell
30 me that it's against the SOP and I shouldn't be doing it.

31
32 Q. Can I just take you to 6 June 2022. That was the date
33 that the DIFP threshold was removed. Can I have on the
34 screen [WIT.0004.1200.0001_R], and that's exhibit EC-07 to
35 the first statement. Do you see at the bottom of that page
36 an email from Sharon Johnstone to you, among others?

37 A. Yes.

38
39 Q. Forwarding on instructions about what had changed on
40 6 June?

41 A. Yes.

42
43 Q. Can we go to the top of the page, please, operator.
44 You responded to Sharon, Kylie and Justin. So that's the
45 two reporting team senior scientists and the team leader?

46 A. Yes.

47

1 Q. You stated that:

2
3 *Before the DIFP process was implemented,*
4 *all PP21 samples in [that] quant range ...*
5 *were sent for an automatic microcon (as per*
6 *QIS 17117v19).*

7
8 That's a SOP, isn't it?

9 A. Yes.

10
11 Q. A case management SOP?

12 A. Yes.

13
14 Q. And so you asked why you were sending these samples
15 straight for amp rather than auto-microcon?

16 A. Yes.

17
18 Q. So your mind was firmly focused on the pre-2018
19 process at that time?

20 A. Yes.

21
22 Q. That version of the SOP that you identify there on
23 7 June, that ended up being the one that the
24 director-general directed you to use on 19 August?

25 A. Oh, possibly. I do know that that was the SOP that
26 was in use at the time, because I looked it up.

27
28 Q. On this day?

29 A. Yes.

30
31 Q. And so did you have the understanding on this day that
32 the aim of the decision-makers on 6 June was to revert to
33 a pre-2018 process?

34 A. No, because the information that was given said that
35 they would go straight for amplification without an
36 auto-microcon and so the decision had been made that we
37 wouldn't be going to the automatic microcon, and my
38 question was, well, why would we do that?

39
40 Q. So why did you think what matters is what happened
41 pre-2018? Why was that at the forefront of your mind?

42 A. Because if you have a sample that has got such a low
43 quant value, for me personally, I would be wanting to
44 concentrate that before I amplify it, because if I take
45 15 microlitres out of that sample to progress it straight
46 to amplification, I'm likely to get a low-level profile and
47 I'm likely to want to concentrate it to improve the

1 profile, but now I've lost 15 microlitres of my sample.

2

3 Q. So you were thinking at this time that the pre-2018
4 process was a better one than the one that was given to you
5 on 6 June?

6 A. Correct.

7

8 Q. And that's the reason you raised it?

9 A. Yes.

10

11 Q. Because you considered it a better process?

12 A. Yes.

13

14 Q. Did you discuss this aspect of your concern with your
15 colleagues, that removing microcon was a problem for the
16 reason you have just identified?

17 A. Yes.

18

19 Q. And what about with Sharon, Kylie or Justin, did you
20 discuss it with them?

21 A. I had a fleeting exchange of words with Sharon. So
22 I had sent the email, and I think I was walking past her
23 desk and she stopped me and just said something along the
24 lines of, "I know what you - I know what you're trying to
25 say, but this is what Cathie has decided."

26

27 Q. And what about Kylie or Justin?

28 A. I didn't get a response from Kylie or Justin - though,
29 to be fair, sorry, to add to that, to be fair, I would have
30 discussed it - officially as part of the email, I didn't
31 get a response from Kylie and Justin, but I would have also
32 discussed it with Kylie. But she's not my line manager,
33 which would be why Sharon spoke to me.

34

35 Q. I understand. So you have a good relationship with
36 Kylie?

37 A. Yes.

38

39 Q. So you would have just spoken to her at some point
40 when you were talking?

41 A. Yes, that's right.

42

43 Q. What about Justin?

44 A. No.

45

46 Q. Didn't speak to him?

47 A. No.

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Q. He didn't reply to your email?

A. No.

Q. Can I move to another topic that you deal with in your second statement, [WIT.0004.1224.0001], and if we zoom in on paragraph 2 there, this is under the heading "Consistency between scientists" and this deals with consistency between reporting scientists; is that right?

A. That's right, yes.

Q. You identify in your statement three areas in which reporting scientists disagree?

A. Yes.

Q. They are the stutter threshold?

A. Yes.

Q. Combined stutter, and removing loci?

A. Yes.

Q. We're not going to go into all of the technical details of those, but can you just briefly tell us what those three issues are and then we will deal with how the inconsistency has been dealt with?

A. With respect to the stutter, stutter is effectively an artefact of the profiling process. We know that it occurs, we expect it to occur, and we expect it to occur at a certain level. So we can generate thresholds that we can use to say, yes, this peak is likely to be stutter or is more likely to be allelic.

Q. Allelic meaning actual DNA?

A. Actual DNA, yes.

Q. Stutter meaning you should ignore it?

A. Yes.

Q. Yes, keep going.

A. The way that reporting scientists assess stutter differs between scientists, and that assessment, depending upon how a scientist chooses to assess that peak as being stutter or allelic, can then affect the determination of how many contributors there are to a profile, which can then affect the downstream interpretation of that and potentially the likelihood ratio.

1 Further to that, you can have a stutter peak from
2 a particular allele, a particular piece of DNA, that falls
3 in the same position as a stutter peak to another piece of
4 DNA, so there are two stutter peaks together in one
5 position, which we would term combined stutter, and
6 reporting scientists assess the presence or not of combined
7 stutter differently, which again can affect the
8 determination of the number of contributors.

9
10 Q. When you say "differently", just pausing there for
11 a moment, is it the case that some reporting scientists
12 don't believe in the concept of combined stutter?

13 A. That's right, yes.

14
15 Q. And some do believe in the concept of combined
16 stutter?

17 A. Correct.

18
19 Q. Are there journal articles or scholarship on this
20 topic?

21 A. There is a journal article that relates to how STRmix
22 works and the models that it uses within its interpretation
23 that describes how STRmix assesses any peak as being
24 additive, so that can be an allele plus stutter, stutter
25 plus stutter, you know, so basically the concept of allelic
26 peaks is additive if you've got more than one thing
27 contributing to the height of it. That's also backed up in
28 the STRmix users manual.

29
30 Q. That journal article is in paragraph 12 of your
31 statement?

32 A. Yes.

33
34 Q. We don't need to go into it any further than that.
35 What about the removing of loci, what's that issue?

36 A. That issue relates to a pull-up again, so what we
37 talked about before. If pull-up occurs in a stutter
38 position, so you have a peak that's potentially stutter,
39 but it's affected by a pull-up peak, so it makes that
40 stutter peak bigger, it can then push it over the stutter
41 threshold to then make it look like it could potentially be
42 DNA rather than stutter, but it's not; it's just been
43 affected by the peaks in other dye lanes. Now, a stutter
44 peak may be affected by pull-up but still sit below the
45 stutter threshold, or it may be affected by pull-up and sit
46 slightly above the stutter threshold.

1 Q. Can a reporting scientist, in their discretion, just
2 remove a peak from the analysis?

3 A. There are a number of different ways that it can be
4 approached. The modelling of STRmix is actually quite
5 robust and a lot of the time can probably handle that type
6 of peak. But I am aware that there are scientists that, in
7 that instance, would actually remove the locus from the
8 STRmix interpretation, which means that STRmix doesn't have
9 the information from that locus to be able to model the
10 rest of the profile. My understanding is that that removal
11 of loci can occur at maybe two or three loci within
12 a profile, which means that a lot of information has been
13 removed from that STRmix analysis that potentially
14 shouldn't be being removed.

15
16 Q. In PP21, there are 21 loci?

17 A. Yes.

18
19 Q. So if you are removing two or three, you are
20 potentially removing more than 10 per cent of the loci
21 available?

22 A. Yes.

23
24 Q. Do the reporting scientists do that in GeneMapper? At
25 what stage of the process, I should ask?

26 A. They can actually do that at the profile
27 interpretation stage. When you put a profile into STRmix,
28 you can actually tell STRmix to ignore those loci. So you
29 don't need to do it in GeneMapper or forensic-register or
30 anything; you can just tell STRmix to do it.

31
32 Q. What is your approach? How many loci would you be
33 comfortable removing from any profile?

34 A. I would only be removing loci from a profile under
35 extreme circumstances. For example, STRmix is not able to
36 analyse loci that have mutation events in them. STRmix is
37 expecting to see two alleles at one particular area, but
38 sometimes there may be a mutation event, which shows -
39 which gives three alleles. So STRmix can't deal with that,
40 because it is only expecting to see two, and so we have to
41 remove the locus from the STRmix analysis. That is when
42 I would be removing it.

43
44 From an issue such as pull-up in stutter position,
45 there are other things that can be done to rectify that
46 issue, so I wouldn't be removing loci if I had pull-up in
47 stutter position.

1
2 THE COMMISSIONER: Q. As I understand it, STRmix uses
3 some kinds of very complicated algorithms in order to
4 present ultimately an electropherogram which takes away
5 what STRmix considers is irrelevant; is that right or not?

6 A. It factors it in to the interpretation, so --

7
8 Q. But what I mean is, it factors it in to the
9 interpretation, but how does it do it? For example, if
10 STRmix considers that something is stutter and not an
11 allele, does it make that invisible, that stutter
12 invisible, or does it leave it there for you?

13 A. Yes, if STRmix has considered that that peak is only
14 stutter, it will remove it.

15
16 Q. Yes, that's what I mean.

17 A. Yes.

18
19 Q. But in undertaking that process in accordance with its
20 software, it is taking into account the whole body of the
21 electropherogram, so what you are saying is that if you
22 remove more than one locus from consideration by STRmix,
23 you are corrupting the analytical process in which the
24 software engages?

25 A. You could be potentially affecting the way that STRmix
26 is modelling the profile. I probably wouldn't use the term
27 "corrupting", because it's still going to do it, but it may
28 not be doing it in the best way.

29
30 Q. You are influencing the interpretation or the output
31 of STRmix in a way that does not aid accuracy?

32 A. Potentially.

33
34 Q. You may be influencing in a way that does not aid
35 accuracy --

36 A. Correct.

37
38 Q. -- because the software assumes that there will be the
39 number of loci that it is looking for?

40 A. Yes.

41
42 MS HEDGE: Q. Returning, then, to paragraph 2 here,
43 those are the three topics about which - are they the only
44 topics where you have seen disagreements that have turned
45 into heated arguments or are those just three examples of
46 topics?

47 A. They are just three examples of topics. Topics do

1 come up regularly.

2

3 Q. Do they often escalate into heated arguments between
4 reporting scientists?

5 A. Not often, but I have seen it happen.

6

7 Q. This paragraph you state here, where there are heated
8 discussions, with individual scientists dominating
9 meetings, causing others to not participate even if they
10 don't agree, and reluctance to engage, is that a recent
11 experience of yours or how far back in time - well, is that
12 current, is that the current situation?

13 A. It is the current situation.

14

15 Q. And now how far back does that go?

16 A. It would be years, because we haven't had a reporting
17 team meeting to sit and discuss these things for years.

18

19 Q. Can you say how many years?

20 A. We used to have what we called FRIT team meetings, so
21 we've got everybody.

22

23 Q. Forensic reporting and intelligence team?

24 A. Yes. I don't think we've had a FRIT team meeting for
25 maybe three or four years. We have more recently had what
26 were termed profile interpretation meetings. We've
27 probably only had a couple of those.

28

29 Q. A couple of those in what time period?

30 A. Probably last year.

31

32 Q. Two last year?

33 A. Yes.

34

35 Q. None this year?

36 A. There may have been - within the last year, there
37 would have been two.

38

39 Q. I see. My apologies.

40 A. Yes.

41

42 Q. Justin Howes is the team leader of that - of FRIT?

43 A. Yes.

44

45 Q. Did he run those meetings when they happened three or
46 four years ago?

47 A. Yes.

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Q. He was the team leader then?

A. Yes.

Q. He ran them for a number of years before that?

A. Yes.

Q. Have you raised with him why he doesn't have those meetings anymore?

A. I'm not sure. Possibly not.

Q. Have you raised with him your belief that those meetings would assist with these problems?

A. Not with him, but I believe I've raised it with Kylie and Sharon, which is why we've had a couple of those profile interpretation meetings, to try and fill that gap.

Q. Those three issues that you have identified - stutter threshold, combined stutter and removing loci - have they been resolved by these meetings that you have had in the last year?

A. No.

THE COMMISSIONER: Q. Ms Caunt, one can have differences of opinion, one has to accept, because you are engaging in something in which there is judgment involved?

A. Yes.

Q. But I'd like to understand a little better the removal of loci issue. You have said that it's inadvisable to remove more than one locus --

A. Yes.

Q. -- for reasons you have explained. If you are right about that, then the consequence of people removing two or three loci is that it affects the reliability of the STRmix analysis?

A. It could do, yes.

Q. It might do, yes. And so if you are right, then there is a risk to the reliability of the STRmix analysis?

A. Yes.

Q. If you are wrong, then there is no problem?

A. Correct.

Q. So there are scientists who are of the view that it

1 doesn't matter, but if you are right, then that's really
2 unsatisfactory from a scientific point of view; you ought
3 not be doing that?

4 A. Correct.

5
6 Q. So this isn't an issue where reasonable minds can
7 differ and keep moving as they choose; this is an issue
8 that has to be determined --

9 A. Yes.

10
11 Q. -- conclusively. Your notion is either right or it is
12 wrong, but we have to determine it one way or another;
13 otherwise, we can't have confidence in what's happening?

14 A. Correct.

15
16 THE COMMISSIONER: Thank you.

17
18 MS HEDGE: Q. You prepared a workflow for how to deal
19 with pull-up affected stutter in relation to that issue
20 that the Commissioner was just asking about - removing
21 loci?

22 A. Yes.

23
24 Q. And you did that in October 2021?

25 A. Yes.

26
27 Q. And sent it to Allison Lloyd, who was then acting team
28 leader of FRIT?

29 A. Yes.

30
31 Q. You have asked a number of times, you say in
32 paragraphs 22 and 23, what is happening with that workflow,
33 and you have not been advised of any action being taken; is
34 that right?

35 A. Correct.

36
37 Q. Now, in paragraph 25, which is on page 4 of the
38 statement, you say that the removal of loci is not recorded
39 in statements provided to the QPS but only in the case
40 file; is that right?

41 A. That's correct.

42
43 Q. And so unless the prosecution or defence request
44 a case file, those persons would not be aware of loci being
45 removed?

46 A. Correct.

1 Q. Does the inconsistency of approach between reporting
2 scientists also increase the likelihood of an incorrect
3 result?

4 A. Yes.

5
6 Q. That's because in combination with the work list,
7 people are looking over each other's results; is that
8 right?

9 A. Yes, yes.

10

11 Q. And if you have a different number of contributors,
12 then there will be a different result, naturally; is that
13 right?

14 A. Yes, that's right.

15

16 Q. If you change the number of contributors, that's
17 automatically an incorrect?

18 A. Yes, it would be, yes.

19

20 Q. Have you seen that, that the removing of loci - have
21 you seen that cause an incorrect, or is that just a risk
22 you're aware of?

23 A. No, I have seen it cause an incorrect.

24

25 Q. In paragraph 26, you identify that in May of this
26 year, late May, Ms Rika sent an email to Mr Howes about
27 a meeting that she and Sharon Johnstone had about
28 interpretation and inconsistency and so on?

29 A. Yes.

30

31 Q. And that related to some of the issues that you have
32 raised?

33 A. Yes. Angela and Cassandra and I had a meeting,
34 because they are STRmix trainers, that's what they are
35 termed, and so together, because we have a lot of
36 troubleshooting, between us we do a lot of STRmix
37 troubleshooting, that kind of thing, they both said to me,
38 "We're seeing these things. We should perhaps sit down and
39 talk about them and work out what the best approach is."
40 So we had a meeting and talked about inconsistencies in
41 interpretations, what kind of things were happening and
42 what kind of things we could do to address those
43 inconsistencies, and we drafted an email and sent it to,
44 I believe, Kylie, Sharon and Justin, and said, "Look, we've
45 raised all of these. These are our potential solutions.
46 These are the things that we're thinking about. Can we
47 have some guidance on who the decision-maker is for these?"

1 And then I believe that Kylie and Sharon had a meeting
2 about that and put those minutes to Justin for some kind of
3 agreement, I think.

4
5 Q. Can we just look at the list of things.
6 [WIT.0004.1229.0001 at 0005]. It's at the bottom of this
7 email, this is the email of 31 May, at the bottom of this
8 page.

9 A. Yes.

10
11 Q. If we can just turn on to the next page, operator,
12 that might assist with not having to redact. Can we zoom
13 out to look at that whole page which ends in 0006. This is
14 small, but do you see each of these issues? Do you see
15 there, "2. Saturation point", "3. -2 repeat stutter",
16 "4. 4p mixtures", and so on? We're not going to go through
17 all of these. Can we look at page 7 also. These are all
18 the individual issues that have been raised and they are
19 highly technical?

20 A. Yes.

21
22 Q. Under each one, you have suggested something to push
23 it forward --

24 A. Yes.

25
26 Q. -- towards some sort of agreement, is that right --

27 A. Yes.

28
29 Q. -- or at least understanding of level of disagreement,
30 perhaps?

31 A. Yes.

32
33 Q. Then if we can come back to page 1 of this exhibit,
34 please, operator, there is a chain of emails there. This
35 is the most recent. Mr Howes wrote to Ms Rika and
36 Ms Johnston in this chain of emails that attached that -
37 that was the start that we just looked at; this is the
38 end - and he suggests that perhaps there might be some
39 discussion on SS. What's SS - single source?

40 A. Single source.

41
42 Q. And that maybe it would be good for staff to continue
43 discussing as a group?

44 A. Yes.

45
46 Q. Do you feel this is sufficient urgency for the
47 problems you're raising?

1 A. No, and, in my opinion, discussion as a group is not
2 likely to resolve the issues, because we already have
3 disagreements, which is why the issues were brought up, and
4 so what we need is somebody to make a decision, or at least
5 find the information - or at least seek advice to assist in
6 making a decision.

7
8 Q. What form do you see that taking in your ideal world?
9 Would there be a project, a research project, data
10 collection, an experiment - what is required?

11 A. Some of it is as simple as somebody just making
12 a decision and saying, "This is the way that we're going to
13 do it." Some of it would be seeking external advice and
14 seeing how other people do it and if there is any risk to
15 the way that we are doing it. I don't think that any of
16 them necessarily involve a project; it's more about
17 decision-making, and that's why I highlighted the issues
18 and moved them up, because I'm not in a position to make
19 a decision, but a decision needs making about them.

20
21 Q. Do you have a decision on any of those issues?

22 A. No.

23
24 Q. Those three issues?

25 A. No.

26
27 Q. Can we go back to the statement, please, operator, and
28 to page 4. Can we just zoom in on paragraphs 27, 28 and
29 29. In response to an email about combined stutter and the
30 workflow, Mr Howes said that he had asked BSAG their
31 opinions in dealing with stutter affected by pull-up?

32 A. Yes.

33
34 Q. And that's the Biology Special Advisory Group of
35 ANZFSS; is that right?

36 A. ANZPAA.

37
38 Q. ANZPAA.

39 A. Yes.

40
41 Q. He didn't tell you that he was seeking that
42 information?

43 A. No.

44
45 Q. He told you where that spreadsheet was, so you could
46 look at it?

47 A. I think he forwarded it to Kylie.

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Q. And you looked at it and saw that he had that information in 2021 and hadn't told you?

A. Correct.

Q. In your opinion, you say in paragraph 29, your reading of it was that every interstate opinion had the same position as you?

A. Yes.

Q. After that conversation where Mr Howes provided the BSAG opinions or the BSAG survey, did you have any further conversation with him about what would be done next?

A. Well, there wasn't a conversation. I think he had forwarded it in an email to Kylie, so that's where I got it from. So I haven't had a conversation with him about it.

Q. Can I ask you about one small topic within the topic of validations. You have identified in your statement a number of validations and your concerns about them?

A. Yes.

Q. We won't go through all of them, but can we talk briefly about the ProFlex?

A. Yes.

Q. This is on page 6 of the statement, please, operator. Now, the ProFlex is the thermocycler?

A. Yes.

Q. In paragraph 41 at the bottom of that page, please, operator, you say that when they were starting out the verification of the ProFlex, Ms Rika asked you for feedback on the experimental design?

A. Yes.

Q. And you said that you should complete a Model Maker analysis, as the ProFlex instruments may cause a change in peak height variability?

A. Yes.

Q. Could you just briefly, if you can, explain a Model Maker analysis?

A. In order for STRmix to model the DNA profiles produced by the lab, it needs to have some information about the variability of those DNA profiles within the lab. So of course, within our instrumentation, we're going to have an

1 inherent degree of variability between DNA profiles, and
2 STRmix needs to know how variable they are, so that it can
3 then incorporate that into its interpretation, so it knows
4 that this variability is literally just due to lab
5 variability and not because of something that's happening
6 within the profile.

7
8 Model Maker is actually a module within STRmix that
9 takes a set of known DNA profiles that are amplified at
10 different input templates, so they're different level of
11 profiles, low-level profiles to larger profiles, and it
12 does an analysis of all of those profiles to work out what
13 we term a variance, so how much variability there is within
14 peak heights, within profiles that we determine within the
15 lab.

16
17 The information that that gives us then allows us to
18 put settings into STRmix, and those settings that we use
19 are lab and instrument specific, and everybody's STRmix has
20 those settings in them that STRmix then uses to interpret
21 DNA profiles. So if something changes within the lab that
22 is likely to change the variability of the peak heights, we
23 need to rerun the Model Maker analysis so that STRmix has
24 the information about the profiles that we're generating to
25 enable it to interpret profiles.

26
27 THE COMMISSIONER: Q. So Model Maker is part of STRmix
28 and is used to inform STRmix about the nature of the
29 profiles that you tend to get in your laboratory,
30 including, relevantly, the range within which peak heights
31 might vary and still be genuine peak heights?

32 A. Yes.

33
34 Q. STRmix then takes that information and can apply it,
35 along with other algorithms and so on, in order to make
36 a computer judgment about what is or is not within the
37 range of variability and is therefore to be treated as
38 a real peak rather than as something that has to be given
39 less weight?

40 A. Correct, yes.

41
42 Q. And so, in essence, STRmix is a program that can
43 assist in analysis by taking into account probabilities
44 that are too complicated for the human mind to calculate?

45 A. Yes.

46
47 Q. But in order to do that, it's got to have the data

1 about the kinds of profiles that you are getting and what
2 they mean?

3 A. Yes.

4
5 Q. So what you are saying is that when you change an
6 element in the total process from beginning to end in such
7 a way that, relevantly, the variability of the height of
8 peaks is now going to be different, then you have to tell
9 STRmix you have done that?

10 A. Yes.

11
12 THE COMMISSIONER: I understand.

13
14 MS HEDGE: Q. Ms Rika asked you to seek advice from
15 STRmix support; is that right?

16 A. Yes.

17
18 Q. And they said the same thing as you, that there should
19 be a Model Maker analysis done as part of the validation?

20 A. Yes.

21
22 Q. At paragraph 46, you say that there was a meeting
23 where four people - Angela Adamson, yourself, Allan McNevin
24 and Cassandra James - met?

25 A. Yes.

26
27 Q. And that Allan McNevin was at that time a member of
28 the management team, and he gave you the perception that
29 you had to not do that for the management team to accept
30 the validation; is that right?

31 A. Yes, that's right.

32
33 Q. And then that happened - that is, that the ProFlex
34 validation was done without the Model Maker analysis?

35 A. Correct.

36
37 Q. And then the Model Maker analysis was done later?

38 A. Yes.

39
40 Q. And you now understand that's one of Dr Duncan
41 Taylor's criticisms of the ProFlex validation?

42 A. Yes.

43
44 Q. You have read Dr Taylor's report?

45 A. Yes.

46
47 Q. Do you understand that he says for three reasons that

1 it is not necessary to cease processing on the ProFlex
2 machines, despite the problems with validation?

3 A. Yes.

4
5 Q. You have a concern about one of his reasons; is that
6 right?

7 A. Yes, that's right.

8
9 Q. Can I have this email put on the screen,
10 [WIT.004.01245.0001]. It is in an odd format, so it's
11 throwing me off. Is that a true number? There we are.
12 This is an email that you sent to me yesterday to identify
13 your concern?

14 A. Yes.

15
16 Q. And that is that - well, perhaps you should explain
17 briefly what your concern is about what Dr Taylor said?

18 A. He said in one of his recommendations that some
19 additional experimental laboratory work should be carried
20 out, but he further says that he doesn't believe
21 a suspension of the laboratory functions are required
22 whilst this additional validation work is being carried out
23 and that his opinion was based on three factors.

24
25 The first of those factors he said was that:

26
27 *The current STRmix settings appear to be*
28 *based on a combination of data from all*
29 *ProFlex Instrument [sic] and so will be*
30 *somewhat representative of their grouped*
31 *average performance.*

32
33 So that, to me, says that he has considered that the Model
34 Maker work that we did on the ProFlex instruments, and the
35 fact that those settings are being used, is one of the
36 reasons why he is happy for us to continue using the
37 ProFlex machines.

38
39 But we haven't actually implemented those ProFlex
40 Model Maker settings. We're still using the settings from
41 the instruments before the ProFlex machines. We're still
42 using the old Model Maker. So my concern was that he
43 didn't understand that we hadn't actually - although we
44 calculated the settings, we haven't actually implemented
45 them, and therefore does that then change his opinion that
46 we can continue using the ProFlexes until we do the
47 additional work?

1
2 Q. And what is the reason that you haven't implemented
3 the settings that you found in that report, 199?

4 A. We completed the report, the analysis and the report,
5 and we came to implementation stage and we found that we
6 had made an error in the running of Model Maker, and so we
7 couldn't use those settings, and we knew that we needed to
8 go back and redo them.
9

10 But we hit a couple of issues, in that Justin
11 requested that we raise an OQI for the fact that we made
12 a mistake with the Model Maker settings. He's also
13 suggested that we need to have a reviewer of the data.
14

15 I have questioned both of those, firstly the necessity
16 for an OQI but, secondly, who is going to review the data,
17 because I don't believe that there is anybody in the lab
18 with sufficient knowledge to have picked up the error that
19 we made, and therefore who is going to be this reviewer?
20

21 So we can't move forward with the Model Maker analysis
22 now without a suitable reviewer, but I don't know who this
23 reviewer is likely to be. It's not up to me to assign the
24 reviewer. Somebody else needs to assign the reviewer.
25

26 Q. No reviewer has been assigned, to your knowledge?

27 A. No, no.
28

29 Q. So your view is that you cannot implement the settings
30 from 199?

31 A. No, not the ones that we calculated.
32

33 Q. Because there is an error in them?

34 A. There is an error, yes.
35

36 Q. And you haven't yet worked out new settings?

37 A. Correct.
38

39 Q. So as we stand today, there are no settings that you
40 could implement reliably or justifiably or confidently?

41 A. No, we have no new settings. We're still using the
42 old ones.
43

44 Q. Your concern is that Dr Taylor may not have understood
45 that from simply being provided that report?

46 A. Correct.
47

1 THE COMMISSIONER: Q. When you did you pick up the
2 error?

3 A. I can't remember. It was literally the day we were
4 implementing. I think as Cassandra and Angela were
5 importing the settings, STRmix gave some kind of error that
6 highlighted them to the fact that there was something
7 wrong, and then we kind of did some backtracking and found
8 what the mistake was. I've got a feeling that may have
9 been May.

10
11 Q. Of this year?

12 A. Yes.

13
14 Q. You said that there's nobody in the lab who's suitably
15 qualified to review the work. What are the qualifications?

16 A. Well, the way that I looked at it was that we had
17 missed one of the settings that we needed to apply to Model
18 Maker. Now, in order for a reviewer to pick up that we had
19 missed that setting, they need to know how Model Maker
20 works and that that setting should have been applied, but
21 there's nobody in the lab, else in the lab, that had the
22 knowledge to have been able to pick that up without us
23 having to tell them to check it, and that's pointless
24 because obviously we missed it, if that makes sense. So
25 it's not necessarily a qualification as such but an
26 in-depth knowledge of how STRmix and Model Maker works.

27
28 Q. By "qualification", I didn't mean a degree or diploma.
29 I meant you would be qualified if you had a good working
30 knowledge of STRmix?

31 A. Yes.

32
33 Q. And the people who have a good working knowledge of
34 STRmix are who in the lab, yourself and --

35 A. The people that were working on the report, so
36 myself - this is a difficult one, so, sorry, this might be
37 a long answer.

38
39 When STRmix was implemented back in 2012, I was
40 trained by the developers - Dr Duncan Taylor, John
41 Buckleton and Jo-Anne Bright. They provided me with
42 training, and then I went back again to attend a train the
43 trainer course with them as well. I brought that training
44 back to the lab and appointed Rhys Parry; he was brought in
45 to help me provide that training to everybody. We provided
46 the training and we did the validation of STRmix and
47 implemented it.

1
2 As time has gone on, I've been the only person that
3 has kind of kept the carriage of the STRmix and validations
4 and keeping in touch with Duncan to get advice and
5 everything else. I did have somebody that was assisting
6 me, but he left the lab. So when he left the lab, I had
7 asked Justin to provide me with somebody else. I have had
8 a number of people who have decided that it's not quite for
9 them, and that's fine.

10
11 I'm currently in the process of training Angela and
12 Cassandra in all things STRmix to assist me. And so, on
13 that basis, there is only me, really, with the knowledge,
14 and it was me that made the mistake.

15
16 Q. So you are the person who is most highly qualified and
17 you are training two others?

18 A. Yes.

19
20 Q. But Dr Taylor is one of these people as well, as it
21 happens?

22 A. He's an expert - he's the expert, yes. Sorry, I'm
23 just --

24
25 THE COMMISSIONER: Thanks.

26
27 MS HEDGE: Q. Can we just deal with one final matter.
28 You say in a few parts of your statement about dealing with
29 external labs?

30 A. Yes.

31
32 Q. You just mentioned then that you kept in touch with
33 Dr Taylor after being trained in STRmix. You mentioned in
34 the ProFlex validation section at paragraph 45 that you
35 were told by Justin Howes not to contact STRmix support,
36 because it costs money, and that he must be asked before
37 you contact them?

38 A. Yes.

39
40 Q. You also deal with contacting other labs from
41 paragraphs 104 to 106 and you say that Justin Howes told
42 you not to contact other laboratories generally?

43 A. Yes.

44
45 Q. But in respect of Duncan Taylor specifically, you were
46 told not to contact him, because South Australia didn't
47 want him contacted all the time by people, but Duncan has

1 since told you that you can contact him?

2 A. Yes.

3
4 Q. There are two questions here. Do you feel able to
5 contact subject matter experts outside your lab, and, if
6 not, how does that detrimentally affect you doing your job?

7 A. Well, up until I spoke to Dr Taylor at the conference
8 in September, no, I didn't feel like I could contact
9 anybody outside the lab. That impacts my ability to do my
10 job, because when troubleshooting issues with STRmix and
11 potential interpretation issues - so take, for example, the
12 dropping loci, that would be a perfect example where
13 I would contact all of the other labs and say, "What do you
14 do? What do you think? What are your thoughts? What's
15 the impact going to be?", everything else, and they would
16 contact me and say - and then I would be able to put
17 together some kind of recommendation or whatever. But not
18 being able to contact anybody then leaves me stuck with,
19 "Well, this is my opinion, but I don't know if my opinion
20 is backed up by anybody else." You know, I have no way of
21 finding out, and therefore we don't progress.

22
23 Q. Do you think that affects the quality of the science
24 implemented at the Queensland laboratory?

25 A. Definitely, yes.

26
27 Q. Has that changed over time, or since you joined the
28 laboratory has it always had that sort of separation?

29 A. It's changed over time. When I first started the
30 training and implementation of STRmix, I had contact with -
31 we had a statistics working group that worked underneath
32 BSAG, which was the biology advisory group. As a group, so
33 there were representatives from all jurisdictions across
34 Australia, we had John Buckleton helping us out; Duncan was
35 part of the group as well. So I had contacts in every
36 single lab, and they were all attempting to do the same
37 thing. We were all learning about STRmix and implementing
38 and everything else. So I had this whole group of people
39 that I could contact and go, "Hey guys, I'm thinking about
40 this. What do you think?" So I developed all of these
41 contacts, friendships and everything else, but over time my
42 ability and permission to contact those people has
43 diminished.

44
45 MS HEDGE: Thank you. Can I tender that email that I had
46 on the screen, the email from Ms Caunt about Dr Taylor's
47 report, please.

1
2 THE COMMISSIONER: Yes. What is the date of it and from
3 whom to whom?
4

5 MS HEDGE: 11 October 2022.
6

7 THE COMMISSIONER: Yes, from Ms Caunt to you?
8

9 MS HEDGE: Yes.
10

11 **EXHIBIT #77 EMAIL FROM MS CAUNT TO MS HEDGE, DATED**
12 **11 OCTOBER 2022, BARCODED [WIT.004.01245.0001]**
13

14 MS HEDGE: Thank you.
15

16 **<EXAMINATION BY MR HUNTER:**
17

18 MR HUNTER: Q. I act for the Queensland Police Service.
19 Can I ask you about the process of micro-concentration. It
20 has been a regular thing for as long as you've been at the
21 laboratory for there to be micro-concentration to full or
22 to 15 microlitres?

23 A. Yes.
24

25 Q. And there is an established procedure for doing that?
26

27 A. Yes.
28

29 Q. There always has been?
30

31 A. Yes.
32

33 Q. Has there ever been a concern raised by the police
34 service, as far as you are aware, about the fact that
35 micro-concentrating to full might result in exhaustion of
36 the sample?

37 A. No, I've never been made aware of any concern.
38

39 MR HUNTER: Thank you, Commissioner.
40

41 **<EXAMINATION BY MR DIEHM:**
42

43 MR DIEHM: Q. Ms Caunt, I appear on behalf of
44 Ms Brisotto. I have a couple of questions, if I may. In
45 paragraph 77 of your second statement, if that can be
46 brought up on the screen, please, page 11, you identify
47 there raising a concern with Ms Brisotto about implementing
PP21 at half volume, because of problems with
interpretations?

1 A. Yes.

2

3 Q. If we can just scroll up, please, to paragraphs 75 and
4 76, you explain in paragraph 75 that you were involved with
5 the PP21 validation?

6 A. Yes.

7

8 Q. Was that what is known as Project #107?

9 A. Yes, but if I can explain, I actually had the STRmix
10 component of that, which I think was Project #105 maybe,
11 but because I needed - I was also looking at
12 interpretation, how we interpret profiles, because we
13 needed to put that in - because we needed STRmix and
14 interpretation to go together, and so I was working closely
15 with the people doing the PP21 validation to ensure that
16 I got the samples that I needed in order for me to do my
17 part of the validation. So while I probably didn't
18 actively do the PP21 validation itself, I was involved in
19 sample selection and obtaining information and, you know,
20 not really helping out, but information sharing.

21

22 Q. You made a contribution to Project #107 because of
23 your involvement in Project #105?

24 A. Yes.

25

26 Q. Now, each of those projects came to be concluded in
27 December 2012; is that right?

28 A. Yes, that's right.

29

30 Q. What you have spoken about in paragraph 77 are matters
31 that bore upon Project #107?

32 A. Kind of a combination of the two, because I was
33 looking at interpretation, and so from my perspective,
34 there were issues with interpretation of the half-volume
35 samples that were affecting - impacting on my part of the
36 validation, but it was kind of part of both validations, if
37 that makes sense.

38

39 Q. Now, do you recall that it was the case that when
40 Project #107 was concluded, was signed off on in terms of
41 the report that was produced as a result of its existence,
42 there was in fact a process that allowed half volume as
43 well as full volume to be used --

44 A. Yes.

45

46 Q. -- as part of the PP21? All right. Can I just ask if
47 this document can be brought up on the screen,

1 [WIT.0016.0104.0001]. You can see up in the top right-hand
2 corner that it conveniently has the hash for 107,
3 Project #107, and you can see from the title of the
4 document that that is what it is?

5 A. Yes.

6
7 Q. If I can ask if we can go to what should be page 64 of
8 that document, that has recommendations there. That second
9 recommendation, is that a recommendation that speaks about
10 half- and full-volume samples, as you are referring to in
11 paragraph 77 of your statement?

12 A. Yes, yes.

13
14 Q. If we can go, then, to the second page of the
15 document, please, and scroll down a little further, just if
16 we can stop there for now, we can see that the document has
17 a date, 14 December 2012, and then it has been signed by
18 those particular signatories --

19 A. Yes.

20
21 Q. -- at around about that date, 14 December, final
22 approval by Ms Allen on 17 December. If we can scroll down
23 further, please, it may take us on to the next page, the
24 balance of the signatures are on the 14th, except for
25 Mr Nurthen on 17 December as well?

26 A. Yes.

27
28 Q. You are one of the signatories to that document
29 because you made the contribution you spoke of previously?

30 A. I'm one of the signatories on the document because
31 I was a member of the management team at the time.

32
33 Q. I'm sorry, thank you. I appreciate the correction.
34 Given that at the time the document was approved by you and
35 your colleagues on the management team around 14 to
36 17 December, it proposed and it seems it was approved that
37 there be use of both half and full samples, or
38 alternatively half or full volume, for testing?

39 A. Yes.

40
41 Q. I've understood that correctly? The concern that you
42 speak about in paragraph 77 of your statement must be one
43 that came up afterwards; is that right?

44 A. No. Before I signed it.

45
46 Q. Before you signed it?

47 A. Yes.

1
2 Q. If we can go back to page 64, please, those are the
3 recommendations, but what appears above it at the top of
4 page 64 and then over on to page 63 - perhaps just stop
5 there, sorry, firstly. Forgive me for asking you to read
6 this in reverse order, taking that you will have some vague
7 familiarity with what is being spoken about there all these
8 years later, and if, when you are ready, Ms Caunt, you can
9 say so, and we will go to the previous page.

10 A. Yes.

11
12 Q. Go to the top of the page, please, Mr Operator,
13 thank you, and allow Ms Caunt to read the whole of the rest
14 of the conclusion there, or as much as you feel you need
15 to.

16 A. Yes.

17
18 Q. Is it the effect of it - and again if you need to look
19 at any more of it, please say so - that there was a project
20 set up, there were experiments undertaken, and the report
21 that came back to the management team, and it was approved
22 by the management team, said that whether you used half or
23 full PCR volumes didn't matter, in effect; there were sound
24 results produced?

25 A. I'm not sure that it says that there are sound results
26 produced. In the second paragraph on this page here, where
27 it starts, "12.5 microlitre total PCR volumes gave higher
28 peak heights than their 25 microlitre counterparts", that
29 was part of the problem.

30
31 Q. Ms Caunt, just so that you are not concerned about
32 something you need not be, my questions aren't coming to
33 challenge your contention that there was a problem. I'm
34 just asking you about the history about how it evolved.
35 Okay?

36 A. Mmm.

37
38 Q. In the very next paragraph, that paragraph concludes
39 by saying:

40
41 *... however the increased sensitivity does*
42 *not necessarily result in more reliable*
43 *information.*

44
45 A. Yes.

46
47 Q. So, in effect, it's saying, yes, there is some

1 difference, but the difference isn't significant at the end
2 of the day, at least at what was being contended for at
3 that time?

4 A. I don't think, in my opinion, that this
5 paragraph represents there being a significant difference
6 or not; this paragraph is saying that the half-volume
7 amplification provides increased sensitivity, but it
8 doesn't necessarily result in more reliable information.
9 That is correct. But when it comes to the interpretation
10 of those half-volume profiles, they were very complex and
11 unwieldy to interpret. So that paragraph doesn't actually
12 relate to my opinion.

13
14 Q. Can I just ask the operator to scroll just a little
15 bit more up, so that we get the whole of the paragraph that
16 is at the bottom of the page at the moment. Just stopping
17 there, you will see that that last paragraph on that
18 page says that:

19
20 *For the range of DNA templates specified*
21 *above, significant differences between*
22 *[half and full] PCR volumes was not*
23 *observed.*
24

25 A. And that may be the case on the tests that were - on
26 whatever those significant differences were based on.
27 I don't know what they were based on. But when it comes to
28 the actual interpretation - that finding may be correct,
29 but when it comes to the interpretation, there was
30 a difficulty in interpreting the half-volume profiles.

31
32 Q. In any case, do you accept that as at the time when
33 the approval was given for this report by the management
34 team, the facts being put before the management team were
35 that it was satisfactory to use either half- or full-volume
36 PCR?

37 A. Yes, I would say that the report probably indicates
38 that both are okay, the report itself.

39
40 Q. In that context, then, it's not particularly
41 remarkable that the management team, including you, signed
42 off on it?

43 A. Correct.

44
45 Q. Now, if I could ask the witness to be taken to this
46 document, please. It is [FSS.0001.0002.3879]. You might
47 recognise the document even at a glance, Ms Caunt, as being

1 a minor change document?

2 A. Yes.

3

4 Q. If I can draw your attention, please, then to the
5 page - yes, we will need to scroll down to the entry that
6 is for 4 February 2013. If that can be highlighted,
7 please, or uplifted, as the case may be. Now, can you see
8 from that, Ms Caunt, that what there is then is an entry
9 that has been made by Mr Howes in the minor change registry
10 that says that half-volume amp profiling is to cease?

11 A. Yes.

12

13 Q. And he goes on to give other instructions and says,
14 "Full-volume reactions to be assessed"?

15 A. Yes.

16

17 Q. This is a reference in a minor change registry to
18 a change of what had been recommended in the document
19 signed off back in December 2012, to say that now you are
20 not to do the half-volume PCRs; you are only to do full
21 volume?

22 A. Yes.

23

24 Q. If we can then please move to 22 February 2013, an
25 entry on that date, and again perhaps a reinforcement with
26 a further entry to say:

27

28 *Amplifications at full-vol PP21 started for*
29 *routine analysis.*

30

31 A. Yes.

32

33 Q. So that was now the norm, was full volume?

34 A. Yes.

35

36 Q. That change, it would seem, reflected the very concern
37 that you have identified as having formed yourself about
38 not testing at half-volume PCR?

39 A. Yes.

40

41 Q. So given the history that appears from those
42 documents, in terms of what you have said in paragraph 77
43 of your statement, I suggest to you that what must have
44 been the course was that a report was prepared for the
45 management committee's consideration that said that you
46 could use half-volume or full-volume PCR, either of those
47 was satisfactory?

1 A. Yes.

2

3 Q. The management committee approved of that?

4 A. Yes.

5

6 Q. Something was identified soon thereafter to suggest
7 that that shouldn't be the case, that one shouldn't use
8 half-volume PCRs?

9 A. Correct.

10

11 Q. And so a change was made so that it is only now only
12 full-volume PCRs from early in February 2013?

13 A. Yes.

14

15 Q. Given that history, it is not a question of you
16 speaking to Ms Brisotto and her saying that the reason to
17 do half volumes is because Cathie Allen has said so. At
18 a time, half volumes were being done because the management
19 committee approved of a report that had been prepared for
20 its consideration?

21 A. From my observations, regardless of the report, the
22 report may show that the half volume was acceptable to use,
23 but from my experience of looking at the profiles during
24 the validation, my opinion was that it was going to cause
25 problems.

26

27 Q. That wasn't a concern that you identified at the time
28 of the management committee approving the report though; it
29 may have been one that you identified soon after?

30 A. Well, I believe that I spoke to Paula before it was
31 signed off, and so I identified before it was signed, but
32 the report itself and what the report said I would have
33 agreed with at the time. But that doesn't necessarily mean
34 just because - just because a validation shows that it is
35 okay doesn't mean that it is necessarily appropriate to
36 implement.

37

38 Q. These events are more than 10 years ago. It must be
39 difficult to remember the precise chronology about how
40 these things unfolded; do you agree?

41 A. Some of these events are also quite clear in my mind.

42

43 Q. If it was not you identifying a concern about using
44 half-volume PCRs after the management committee signed off
45 on the report in December 2012, you don't know what it was,
46 I suggest, that caused the revision reflected by Mr Howes'
47 entries in the minor change registry?

1 A. What was caused by the revision was that we
2 implemented half volume and we found that the
3 interpretation of the profiles was difficult, which is what
4 I had suggested when I suggested that we don't implement
5 half volume, and once we had implemented, we identified
6 that that was a problem, which subsequently caused us to
7 have to go back and reprocess all of those samples that
8 were amplified at half volume.

9
10 Q. The half-volume PCRs that were used were used for
11 a brief period of time after the management committee
12 approved the report?

13 A. Correct.

14
15 Q. And so in terms of what you have said in paragraph 77,
16 it wouldn't be right to say that half volume was being used
17 because Cathie Allen had said so, but, rather, because
18 that's what the management committee had signed off on?

19 A. The impetus behind the implementation of the
20 half-volume amplifications was because it reduced the
21 consumables and was therefore reduced cost. And that's why
22 the - my understanding is why the half-volume
23 amplifications were being progressed and were preferable,
24 even though, yes, I did highlight that I didn't think that
25 it was going to work. And ultimately after implementation,
26 it was shown that it didn't work.

27
28 THE COMMISSIONER: Q. Ms Caunt, do you know why the
29 minor change entry was made on 4 February 2013 to cease
30 using half-volume amps and to use full-volume amps?

31 A. I believe it was because we were struggling with the
32 interpretation of the profiles at half volume.

33
34 MR DIEHM: Q. Ms Caunt, I just want to ask you about one
35 other matter. In paragraph 108 of your second statement -
36 if that can be brought up on the screen, please. I'm
37 sorry, Commissioner, before I move on, I should have
38 tendered that last document that I had up on the screen.
39 I can read that page back out.

40
41 THE COMMISSIONER: Do you want to tender both documents -
42 the project report and also the minor change direction, or
43 at least the pages to which you referred?

44
45 MR DIEHM: Yes, I should do, because the project report is
46 actually an annexure to Mr Howes' statement.

1 THE COMMISSIONER: Yes, you may as well tender it as
2 a document. Would you describe it? It is project what?

3
4 MR DIEHM: Project #107.

5
6 THE COMMISSIONER: The report of Project #107 is
7 exhibit 78.

8
9 **EXHIBIT #78 REPORT OF PROJECT #107**

10
11 THE COMMISSIONER: The two entries from the minor change
12 register of 4 February 2013 and 22 February 2013 are
13 exhibit 79.

14
15 **EXHIBIT #79 TWO ENTRIES FROM THE MINOR CHANGE REGISTER OF**
16 **4 FEBRUARY 2013 AND 22 FEBRUARY 2013**

17
18 MR DIEHM: Thank you, Commissioner.

19
20 THE COMMISSIONER: Mr Diehm, you haven't put, I don't
21 think - I don't know whether you intend to - that
22 Ms Brisotto did not give that answer that is referred to in
23 paragraph 77. Did you intend to do that or not?

24
25 MR DIEHM: My client doesn't have a recollection of the
26 conversation, so submissions will be made based on the
27 documents.

28
29 THE COMMISSIONER: No, that's fine.

30
31 MR HUNTER: Commissioner, can I just clarify with respect
32 to the minor change register that has been tendered that it
33 is your intention that only those two entries will be --

34
35 THE COMMISSIONER: I did, but I don't mind the whole thing
36 going in.

37
38 MR HUNTER: It is not my client's document, it is
39 Queensland Health's document, but it contains throughout
40 it --

41
42 THE COMMISSIONER: Confidential material?

43
44 MR HUNTER: -- contact details and so forth that need to
45 be redacted.

46
47 THE COMMISSIONER: I will limit it to those two entries,

1 as I had intended, because they don't contain anything
2 confidential. If anybody actually wants copies of them, we
3 can always provide copies of those entries. Thank you for
4 mentioning it, Mr Hunter. Mr Diehm?

5
6 MR DIEHM: Thank you, Commissioner.

7
8 Q. Now, Ms Caunt, paragraph 108 of your statement starts
9 off by speaking about something that happened in 2018, and
10 that was that:

11
12 *... after the validation of the 3500's,*
13 *peak heights were of a reasonable height*
14 *and profiles were easy to interpret ...*

15
16 Then it says:

17
18 *... however now the peak heights are much*
19 *larger and show issues with pull-up which*
20 *affects the interpretation.*

21
22 You then go on to say that you mentioned something of this
23 to Ms Brisotto. When is it that you are speaking of about
24 the peak heights being much larger and showing issues with
25 pull-ups?

26 A. I've just realised that that date is actually wrong.
27 That's 2021, not 2018.

28
29 Q. Yes, because the 3500s weren't implemented until
30 February 2021?

31 A. That's right, yes.

32
33 Q. Can you recall when in 2021 it was that this
34 conversation happened?

35 A. No. I just know that there was a - that when the
36 3500s were implemented, peak heights were what I call
37 reasonable. What I mean is they were interpretable without
38 being influenced by pull-up peaks. But even now, peak
39 heights that are generated by the 3500s are much bigger
40 than they were when we first implemented, which causes
41 pull-up and then affects the interpretation. So it's my
42 opinion that there has been a change in the peak heights
43 between implementation in February 2021 and the current
44 day.

45
46 Q. The concern that you spoke of as having communicated
47 to Ms Brisotto wasn't the subject of any email?

1 A. No, it wasn't.

2

3 Q. You are a person who it might be thought from the
4 evidence before the Commission will commonly put concerns
5 of such a nature in emails to communicate in a form of
6 a record your concerns?

7 A. Not necessarily, no. Particularly with Paula, I find
8 Paula very approachable, so it's quite easy to go over and
9 have a chat with her. So, no, I wouldn't necessarily put
10 it in an email.

11

12 Q. Do you have an expectation about what would ordinarily
13 be the response to a problem of the kind that you say you
14 identified to her?

15 A. Some kind of acknowledgment that, "Okay, there might
16 be an issue. Can you find me more evidence?", or, "Maybe
17 I will speak to somebody and we will have a look", or
18 something to indicate that, you know, my observation, my
19 opinion, may not be true, but to be validated and to at
20 least have somebody say, "Okay, let's have a look at this"
21 would be my expectation.

22

23 Q. Would you think it within the bounds of what would be
24 the usual sort of response to a problem of that kind for it
25 to be referred to the line manager of the analytical team
26 to look into?

27 A. Not necessarily.

28

29 Q. That there would be a quality check to assess whether
30 there were any artefacts within the process?

31 A. I don't understand what you mean by that.

32

33 Q. You are familiar with a concept or a term, the CE
34 process?

35 A. Yes.

36

37 Q. As part of that, are there CE quality checks that can
38 be undertaken?

39 A. Yes.

40

41 Q. And that if there is increased pull-up observed, then
42 there may be an examination to check spectral calibration?

43 A. I don't really know the details about that.

44

45 Q. You don't know the details of the technology that is
46 being used in that sense, because it is not your area; is
47 that what you are saying?

1 A. Not the technology. I don't know about the CEQ check
2 process.

3
4 Q. In any event, an examination of the processes, the
5 equipment, the settings, the reagents being used might be
6 looked into to see whether there is an explanation for the
7 pull-ups that are being observed?

8 A. There might be.

9
10 Q. You would expect, as part of the ordinary course of
11 a response to a concern of the kind that you identified,
12 that there would be that kind of a process engaged in?

13 A. Possibly, yes.

14
15 Q. In your experience, Ms Brisotto is the sort of person
16 that would provide that kind of a response to a concern
17 that you identified?

18 A. Yes, I would expect so.

19
20 Q. So if there was a concern of the kind you identified,
21 I would suggest to you that Ms Brisotto would have given
22 you that kind of response rather than just saying, "Well,
23 it's something in the past. You don't need to worry about
24 it"?

25 A. On this occasion, she didn't.

26
27 Q. And you didn't take the matter any further?

28 A. No, because I felt like my concern was not a concern,
29 because that's how I interpreted her response to be.

30
31 Q. Well, did you accept that it was not a concern?

32 A. No.

33
34 Q. Then given what you have described as being the nature
35 of your working relationship with Ms Brisotto, why would
36 you not have said to her, "Look, I'm not so sure that
37 that's the answer. Can we look into it?"

38 A. Because I - I suspect that my feeling was that it
39 wouldn't have made any difference. I felt that my concern
40 had not been validated. You know, my experiences with
41 providing feedback in the recent years has not been great.
42 And so I've raised it. If I'm not going to be heard, then
43 there's probably not much more that I can do.

44
45 Q. From what you said before, that wasn't your experience
46 with Ms Brisotto?

47 A. Not previously, no.

1
2 Q. So, therefore, you wouldn't have had any reason to
3 have that feeling about her immediate statement that you
4 attribute to her at that time?

5 A. Maybe not, but this was the conversation as I recall
6 it, and they were my actions. If I didn't follow it up and
7 I should have done, then maybe so, but at this point in
8 time, that was the response that I was given.
9

10 Q. Do you think, then, reflecting on it, that there just
11 might have been a failure of communication on both sides to
12 really get across what you were needing to say?

13 A. I don't think it was a failure of communication,
14 because I feel that I am capable of communicating my
15 concerns. So I don't think it was a failure of
16 communication.
17

18 MR DIEHM: Thank you, Commissioner.
19

20 THE COMMISSIONER: Thank you, Mr Diehm.
21

22 MR RICE: Nothing from me, thank you.
23

24 THE COMMISSIONER: Mr Hickey?
25

26 MR HICKEY: I've got two short matters.
27

28 THE COMMISSIONER: Why don't you go ahead.
29

30 **<EXAMINATION BY MR HICKEY:**
31

32 MR HICKEY: Q. Ms Caunt, I'm representing Cathie Allen
33 and Justin Howes. I've got two issues, please, to take up
34 with you. The first is this: if we could turn, please, to
35 paragraph 16 of the second statement of Ms Caunt,

36 Mr Operator, thank you. Now, before I press on, could you
37 tell me, please, how you pronounce the word spelt L-O-C-I?
38

39 A. Loci.
40

41 THE COMMISSIONER: It is an Americanism, Mr Hickey.
42

43 MR HICKEY: I read the interim report and I was sure the
44 Commissioner was correct, but I didn't want to get it wrong
45 with the witness.
46

47 Q. So there in paragraphs 16 to 21 you have explained the
lead-up to your presenting a suggested workflow in respect

1 of the removal of a single loci, and then in paragraphs 22
2 to 28 you go on to explain some communication that you had,
3 and you make some general expressions of concern about what
4 I apprehend to be your complaint that things weren't
5 appropriately followed up. Is that a reasonable summary of
6 that passage of your evidence?

7 A. Yes.

8
9 Q. Now, I want to suggest some facts to you, and you tell
10 me whether you are aware of them or not. Mr Howes, in
11 response to that communication of yours that you identify
12 in paragraph 22, emailed senior scientists with the
13 intention to meet with them and to discuss the topic that
14 had been raised by you. Are you aware of that?

15 A. I'm sorry, can you say that again?

16
17 Q. Yes. Mr Howes emailed senior scientists, and in
18 particular, those senior scientists were Ms Rika and
19 Ms Johnstone, to meet and discuss with him the topic that
20 had been raised by you.

21 A. Okay.

22
23 Q. Were you aware that he did that?

24 A. Given that I received no response, then, no,
25 I wouldn't have been aware.

26
27 Q. You are not presently aware?

28 A. I can't remember. I'm - I may be - somebody may have
29 told me, but I can't remember if I've been told or not.

30
31 Q. And indeed, then, he met with Ms Rika and Ms Johnstone
32 and decided that he would contact the BSAG?

33 A. I'm not aware of that.

34
35 Q. He asked Ms Rika and Ms Johnstone to check the email
36 he proposed to send to BSAG to ensure it was what the team
37 wanted to ask them?

38 A. I'm not aware of that.

39
40 Q. And he then ultimately sent that email to BSAG?

41 A. Not aware of that.

42
43 Q. Now, pause there. If you assume that I am correct -
44 or, rather, if you assume that each of those facts that
45 I have just set out for you is true, would you agree with
46 me to that point that those were an appropriate set of
47 steps to take in response to the correspondence that you

1 had sent that you identified in paragraph 22, as initial
2 steps?

3 A. As initial steps, yes.

4
5 Q. And were you aware, then, that shortly after sending
6 the email to BSAG against the background that I've just
7 described, he forwarded to Ms Rika and Ms Johnstone the
8 spreadsheet of responses that he had received from BSAG?

9 A. I'm not aware of that.

10
11 Q. And then some little time later, he received a further
12 reply from another member of the BSAG, which he also
13 forwarded on to Ms Rika and Ms Johnstone?

14 A. I'm not aware of that.

15
16 Q. If you assume that each of those facts that I've just
17 identified for you is true, it would have been a reasonable
18 expectation on your part, wouldn't it, to have expected
19 that Ms Johnstone or Ms Rika, or both, might have mentioned
20 those things to you?

21 A. I would say probably more Sharon Johnstone, as she is
22 my line manager.

23
24 Q. And she's the one that you have more day-to-day
25 contact with than Mr Howes?

26 A. I probably don't have a lot of day-to-day contact with
27 her, but probably more than Justin Howes, yes.

28
29 Q. In any event, she's the one who is directly
30 responsible, typically, for communicating to you and to
31 other members of the team information that comes from
32 further up the line management chain?

33 A. This is kind of a, for want of a better word, foggy
34 area, because previously when I was working on STRmix,
35 implementation of PP21, troubleshooting, training,
36 everything else, actually, although I was at the time under
37 Kylie Rika's line management, I reported all things
38 interpretation and STRmix directly to Justin and worked
39 directly with Justin. So even though there was always
40 a line manager in between Justin and I, when things of
41 interpretation came up for discussion, Justin and I would
42 communicate directly.

43
44 However, over the years, that line has kind of become
45 a bit foggy for me and I'm not really sure what the - how
46 that relationship sits. So I wouldn't necessarily say that
47 I would expect that information from Justin would come via

1 a line manager, because we have had a very direct
2 relationship with respect to this kind of work.
3

4 Q. If your criticism is a fair one - which is to say that
5 you received no response to your communiqué in paragraph 22
6 there and that there was generally a failure to pass on to
7 you whatever feedback had been obtained - in circumstances
8 where you had emailed, in the first instance, Ms Johnstone,
9 Ms Rika, Ms Lloyd and Mr Howes, if indeed both Ms Johnstone
10 and Ms Rika knew the same things that Mr Howes knew, that
11 is a criticism which is equally borne by all three of them,
12 you would agree?

13 A. Yes.
14

15 Q. And did you know that over the months after you sent
16 that communiqué in paragraph 22, Mr Howes was working with
17 at least Ms Rika and Ms Johnstone on information that was
18 being sent to and being received from BSAG?

19 A. Well, my understanding is that the current spreadsheet
20 was completed in December 2021, so I'm not sure that
21 communication is still happening.
22

23 Q. I didn't suggest to you it's still happening. What
24 I said to you was were you aware, say, for instance
25 between October 2021 and December 2021, that Mr Howes was
26 in regular communication with both Ms Rika and Ms Johnstone
27 about this very issue?

28 A. No.
29

30 Q. And if that indeed was occurring, would you agree with
31 me that that evinces his taking seriously the concerns that
32 you had raised in the email in paragraph 22?

33 A. Well, for me, I don't know that it's being taken
34 seriously if nobody's passing the informing to me.
35

36 Q. No, I didn't ask you that. I accept that. What
37 I asked you was do you agree with me that if what he did
38 was consulted with those other two senior managers
39 regularly, and ultimately sought advice from BSAG about
40 what other jurisdictions were doing, that evinces his
41 taking seriously the matters that you had raised in
42 paragraph 22?

43 A. Yes.
44

45 Q. Thank you. Now, could we go, please, to paragraph 29,
46 where you say to the Commissioner:
47

1 *I have read the BSAG excel spreadsheet, and*
2 *every interstate opinion represents the*
3 *same position as me about when and how many*
4 *loci to remove.*

5
6 Now, can we pause there, please, and can we take up
7 exhibit EC-011 to Ms Caunt's second statement. The number
8 is [WIT.0004.1226.0001]. I'm sorry, it is EC-01-1,
9 [WIT.0004.1226.0001]. That's it, thank you. Now, this is
10 the workflow that you proposed that was connected to the
11 email that you forwarded, wasn't it?

12 A. Yes.

13
14 Q. Can I just ask you some questions about this, please.
15 This is what you proposed - and correct me if I'm wrong in
16 my summary of this. This is the workflow that you proposed
17 in respect of when and the number of loci that should be
18 removed in the process of pulling up affected stutter
19 peaks?

20 A. Yes.

21
22 Q. If we look at that document, we see, moving from left
23 to right, in the top right-hand corner of the page, just to
24 the right of the exhibit number, in a rectangular box,
25 "Drop locus". That's the time at which, in the workflow,
26 you suggested the loci, if any, should be removed?

27 A. Yep.

28
29 Q. So you would accept, wouldn't you, that according to
30 your workflow, there was a prescription about the time at
31 which the loci should be removed, if any?

32 A. Yes.

33
34 Q. Then what we see is a footnote appended to "Drop
35 locus" and if we look to the bottom right-hand corner of
36 the screen we see where that footnote is set out, and here
37 you say, or suggest, perhaps more fairly:

38
39 *A maximum of one locus can be dropped per*
40 *interpretation.*

41
42 A. Yes.

43
44 Q. So would you agree with me that what you were
45 suggesting, your proposed workflow, was prescriptive in
46 that it articulated a rule that only one locus could be
47 dropped per interpretation?

- 1 A. Potentially, yes.
2
3 Q. That's the effect of it --
4 A. Yes.
5
6 Q. -- on its face, you would agree?
7 A. Yes.
8
9 Q. Could we go then, please, to exhibit EC-04-1, and
10 I will assist you, Mr Operator, with the document number in
11 a moment. You don't need my help, thank you.
12 [WIT.0004.1230.0001]. This is the spreadsheet which you
13 have been asked about and you gave me some information
14 about a few moments ago, which contains the summary of the
15 responses from BSAG which was assembled by Mr Howes.
16 A. Yes.
17
18 Q. You don't suggest, do you, that this document is not
19 an accurate record of what he was told by the
20 representatives of the other jurisdictions?
21 A. No.
22
23 Q. Now, just so that we can familiarise ourselves with
24 what this document contains, what we see in the first row
25 is the contents of Mr Howes' question to the other members
26 of BSAG. Do you see that?
27 A. Yes.
28
29 Q. You are familiar with this document, I presume?
30 A. Yes.
31
32 Q. You don't have any difficulty, do you, with the
33 substance of the email that he sent to BSAG?
34 A. Yes.
35
36 Q. That is to say no, you don't have any concerns?
37 A. Sorry, no, I don't have any concerns.
38
39 Q. Just so the record is clear. Then as we work our way
40 down the document we see the date, 15 December, he
41 receives - Mr Howes - an email from Pam at FSST. Now,
42 that's the Tasmanian equivalent of Queensland's FSS, isn't
43 it?
44 A. Yes.
45
46 Q. If we look closely at what Pam says to Mr Howes, in
47 the first paragraph, she says this at the end of the second

1 line:

2
3 *To my knowledge we have only ever had one*
4 *locus in a particular profile at a time*
5 *needing to be ignored. We have not set*
6 *a maximum number allowable.*
7

8 Would you agree with me that the Tasmanian position does
9 not prescribe a maximum of one consistently with the rule
10 that you were proposing in the document that I took you to,
11 EC-01-1?

12 A. Yes.

13
14 Q. So in that way, the Tasmanian approach is different,
15 you would agree, from what you were proposing in your
16 workflow?

17 A. No. So if Pam is saying, "To my knowledge we have
18 only ever had one locus in a particular profile", they have
19 only ever had to address the issue of whether one locus is
20 going to be removed. She doesn't say whether, if somebody
21 wanted to drop two loci, would that be an appropriate thing
22 to do. What she has said is that, "We've only ever needed
23 to remove one." Yes but you would agree, wouldn't you,
24 that her final statement is:

25
26 *We have not set a maximum number allowable.*
27

28 That suggests she, or at least Tasmania, does not think it
29 is necessary to set a prescriptive rule in the way you have
30 proposed?

31 A. Well, they wouldn't set a prescriptive rule if they
32 had only ever seen one locus at a time be dropped.

33
34 Q. Then if we scroll down, we see on 16 December some
35 correspondence was received from Lisa at Vicpol. Now again
36 I presume that's the Victorian correspondent of --

37 A. Yes.

38
39 Q. The Victorian equivalent of FSS. We see in the final
40 paragraph, Lisa tells Mr Howes:

41
42 *We don't have rules around how many loci*
43 *can be dropped from the one sample,*
44 *however, I don't know of any situation*
45 *where we have had to drop more than one.*
46

47 A. Yes.

1
2 Q. So again, I suggest to you, Victoria, in marked
3 difference from what you were proposing in your workflow,
4 does not have a prescriptive rule about how many loci can
5 be dropped, as the case may require?

6 A. I think making that comparison may be misleading, for
7 the following reasons: so, firstly, she says that if
8 pull-up is extreme and affecting peaks at other loci, the
9 sample would be re-amped at a dilution in order to get rid
10 of the pull-up. She also says that generally they only
11 remove loci for trisomies, which is mutations that we
12 talked about earlier. And so why would they need to
13 consider the option of dropping multiple loci due to
14 pull-up affected stutter when they actually resolve it in
15 other ways. So again, it's not a direct comparison to the
16 workflow that I was proposing.

17
18 Q. So you disagree that it doesn't - it's not different
19 from your rule?

20 A. No.

21
22 Q. And just so that I can be clear in your answer to my
23 question, you don't accept that it doesn't contain a rule
24 prohibiting more than one loci being removed?

25 A. No, it doesn't contain a rule, but it also considers
26 the dropping of loci in a completely different set of
27 scenarios to the consideration that I have put.

28
29 But can I also add that earlier we talked about
30 deviating from SOPs and that a deviation from a SOP is
31 allowable, provided that there are documented reasons for
32 doing so. So yes, in my workflow, I can suggest that only
33 one locus at a time be dropped because, in my opinion,
34 dropping more loci affects the STRmix interpretation and
35 can therefore affect the outcome of the interpretation, so
36 dropping loci is a risk. You have to balance that, and so
37 if somebody needed to deviate from that, they can do that,
38 provided it's documented and the risk has been
39 appropriately assessed.

40
41 So it wouldn't be fair to say that I'm putting in a
42 blanket rule. What I'm suggesting is that when you balance
43 the risk of dropping multiple loci and the impact that that
44 can have on the interpretation, with the fact that pull-up
45 can be easily addressed by amping a sample down and putting
46 less DNA in it, the best option is to amp it down and put
47 less DNA in it than it is to remove multiple loci and

1 potentially affect the interpretation.

2
3 Q. You would agree with me we don't see anything like
4 that explanation, either in your workflow or the email by
5 which you sent it?

6 A. Because it's only a suggested workflow. Nobody's
7 asked me for any details around it, nobody's asked me for
8 any discussion or anything like that. It was a proposed
9 workflow because we had an issue that I thought needed to
10 be addressed, and therefore, I put together what I thought
11 would be an appropriate workflow to address it. I'm not
12 saying that that's the only way we can do it. That's my
13 opinion on one way that we can address this issue. It
14 hasn't been put in a SOP. It hasn't been discussed.

15
16 Q. And if we go back to the document on the screen there,
17 please, and we scroll to the bottom, we see here some
18 correspondence from somebody whose name is unknown in
19 Western Australia. Again, I presume you accept that this
20 came from the Western Australian equivalent of FSS?

21 A. The one at the top there is actually New South Wales.

22
23 Q. No, I'm sorry, further down.

24
25 THE COMMISSIONER: The last one?

26
27 MR HICKEY: Yes, that's the one.

28
29 THE WITNESS: Western Australia.

30
31 THE COMMISSIONER: "Wishing all a very happy new year!"
32 That's the one?

33
34 MR HICKEY: That's the one.

35
36 Q. There, in the last paragraph, we see whoever this is
37 says in the second line:

38
39 *... we don't ignore multiple loci. If*
40 *there is a requirement to ignore multiple*
41 *loci, I would suggest that the profile has*
42 *systemic issues and should not be*
43 *interpreted. However, we do not have*
44 *strict guidelines as to the maximum number*
45 *of loci or molecular weight of the loci*
46 *that may be ignored. If there is clear*
47 *justification to ignore a locus (that can*

1 *be supported scientifically), I would*
2 *consider personally ignoring multiple loci.*
3

4 So can I again suggest to you that this is different, in
5 that it is not prescriptive in the way that your workflow
6 suggested a rule should be prescribed?

7 A. So again, absolutely agree that if there is
8 a justification that can be supported scientifically for
9 removing more than one locus, absolutely, go ahead and do
10 it. But my opinion is that as a general rule in a general
11 workflow, it is not something that we should be doing all
12 of the time.

13
14 Q. Could we go then, please, back to the second
15 statement.

16
17 THE COMMISSIONER: Just before you do.

18
19 Q. The problem that we're addressing, I just want to
20 understand it, is a locus that is suspect and is distorting
21 the reading, so you want to do something with it?

22 A. Yes.

23
24 Q. And you have charted out a workflow that might lead to
25 a decision to remove it from consideration by STRmix, and
26 your view is that you ought not remove more than one locus
27 from consideration by STRmix for that reason, because that
28 would tend to distort the operation of the model so that
29 the result is at risk of being unreliable. That's the
30 starting point, isn't it?

31 A. Correct, yes.

32
33 Q. And the second thing you have said is that if there is
34 a good reason by which you could justify taking that risk,
35 well, then, you could take that risk?

36 A. Yes.

37
38 Q. And the third thing you have said is that - and this
39 is the point of my question because that's the part I don't
40 understand - if you need to remove more than one locus from
41 consideration, then it's better to do the amping and
42 testing again, and did you say with a sample that is more
43 diluted?

44 A. Yes. So the general theory around the use of STRmix
45 is that if you have an issue, the best way to resolve that
46 issue is biologically. So that means do something with the
47 sample, rather than tamper with the STRmix settings, and so

1 if you have pull-up affecting your stutter, you have
2 probably got too much DNA in your sample, and so the first
3 port of call would be to actually reduce the amount of DNA
4 in the sample to try and get rid of the pull-up so that the
5 issue isn't even there at all, and then you don't need to
6 worry about what to do with STRmix.

7
8 Q. So this is something that hasn't yet emerged although
9 I have seen it before - if you have too little DNA then you
10 may have problems getting a useable profile, but there are
11 techniques you can adopt to maximise your prospects of
12 getting a useable profile from a quant with a low
13 concentration of DNA?

14 A. Yes.

15
16 Q. The converse is that if you have too much DNA in a
17 sample, again, you may have a problem getting a useable
18 profile because then there is too much in the profile that
19 is not representing the truth, as you would see it, so you
20 would then use techniques, and largely the technique would
21 be to dilute the sample to an optimum concentration; is
22 that right?

23 A. That's right, yes.

24
25 Q. And so there is a Goldilocks zone in which you have
26 a concentration which is optimal for the production of
27 a useable profile?

28 A. Yes.

29
30 THE COMMISSIONER: Mr Hickey, are you moving on from this
31 controversy about the ignoring loci?

32
33 MR HICKEY: Yes.

34
35 THE COMMISSIONER: I just want to ask something else.

36
37 Q. I just don't understand the timeline. You might be
38 able to explain it to me. You raised - I will just go back
39 to your statement. Yes. You need not look at it, but at
40 paragraph 26 of your statement you refer to an email that
41 Kylie Rika sent to Mr Howes referring to issues that you
42 and Ms Adamson and Ms James had raised about
43 inconsistencies with interpretations?

44 A. Yes.

45
46 Q. And possible solutions. And we've seen that. That's
47 31 May 2022. And then there follows in that email chain,

1 which is part of exhibit 4 to your statement, an exchange
2 of emails from May 2022 through to August 2022, and it is
3 in August 2022 that Mr Howes responded to say, "I had asked
4 BSAG for some information and I got it." But that
5 information was obtained in December of the preceding year,
6 it seems.

7 A. So the pull-up in stutter position issue has been one
8 that has been ongoing for a while, and so in October
9 I decided that we needed to make some kind of move on this,
10 some way of dealing with it, so I put a workflow together
11 and passed it to Allison Lloyd who was acting for the team
12 leader at the time. So in May 2022, when I had met with
13 Angela and Cassandra to put these things together, it was
14 an outstanding item. So outstanding since October 2021.

15
16 Q. So you had raised the issue, among other things, as
17 I understand it, of the multiple loci in October 2021?

18 A. Yes.

19
20 Q. And is that when you formulated that workflow, or did
21 you do that in 2022?

22 A. No, I formulated the workflow in October 2021.

23
24 Q. And submitted it to somebody?

25 A. Allison Lloyd.

26
27 Q. So then, in May, Ms Rika does something with Mr Howes
28 and then there is the email chain leading to August?

29 A. Yes.

30
31 Q. But the information in relation to the matter that you
32 raised, the subject of your workflow, had been obtained
33 in December but evidently not communicated to anybody?

34 A. Well, it hadn't been communicated to me. I don't know
35 who else it may or may not have been communicated to.

36
37 THE COMMISSIONER: Thank you, I understand it now.
38 Mr Hickey?

39
40 MR HICKEY: Can I just foreshadow, Commissioner, given the
41 tenor of your last question, the evidence I anticipate will
42 come is that it was promptly and immediately communicated
43 both to Ms Rika and to Ms Johnstone. So it's not right to
44 say it wasn't communicated.

45
46 THE COMMISSIONER: No, no, that's Ms Caunt's position,
47 that she didn't know.

1
2 MR HICKEY: Yes.

3
4 THE COMMISSIONER: But whether other people knew is
5 a whole different thing.

6
7 MR HICKEY: Quite.

8
9 Q. I just wanted to finish with this issue. You've given
10 some evidence about Mr Howes telling you that requests for
11 STRmix support needed to be directed through him?

12 A. Yes.

13
14 Q. Now, the reason for that is, isn't it, because STRmix
15 support is not free?

16 A. Correct.

17
18 Q. And you don't have the financial authority to order
19 that support yourself unilaterally?

20 A. Correct.

21
22 Q. Whereas he does?

23 A. I don't know.

24
25 Q. But in any event, on any occasion that you have sought
26 access to STRmix support, Mr Howes has not declined to
27 obtain that support, has he?

28 A. I don't know. I can't answer that question, because
29 there have been occasions where I've asked to seek external
30 advice and that's not been allowed. So I can't - I can't
31 remember whether I specifically asked to contact STRmix
32 support and it has been refused. So I can't answer that
33 question. I don't know.

34
35 MR HICKEY: All right. Those are the questions, thanks,
36 Commissioner.

37
38 THE COMMISSIONER: Thank you, Mr Hickey. Does anybody
39 else have anything? Ms Hedge, do you have anything in
40 re-examination?

41
42 MS HEDGE: I don't. Might Ms Caunt be excused?

43
44 THE COMMISSIONER: Yes, thank you, Ms Caunt, for your
45 assistance. You are excused.

46
47 <THE WITNESS WITHDREW

1
2 THE COMMISSIONER: What's happening tomorrow, Ms Hedge?

3
4 MS HEDGE: We have two further scientific witnesses,
5 Dr Ingrid Moeller and Ms Kylie Rika. So that's all that is
6 planned for tomorrow.

7
8 THE COMMISSIONER: All right. Then shall we adjourn until
9 9.30 or 10 tomorrow? I guess 9.30 is safer, if nobody
10 objects. No problem for anyone? All right. Well,
11 thank you. We will adjourn until 9.30 tomorrow.

12
13 **AT 4.58PM THE COMMISSION WAS ADJOURNED TO**
14 **THURSDAY, 13 OCTOBER 2022 AT 9.30AM**
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