COMMISSION OF INQUIRY

INTO FORENSIC DNA TESTING IN QUEENSLAND

Brisbane Magistrates Court
Level 8/363 George Street, Brisbane

On Wednesday, 28 September 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

<DAVID HAROLD NEVILLE, on former oath, continuing

<EXAMINATION BY MR JONES, continuing

THE COMMISSIONER: Yes, Mr Jones.

MR JONES: Thank you, Commissioner.

Q. Mr Neville, yesterday I asked you some questions about the number of requests for further work to be done on samples that had been recorded to Police as "DNA insufficient" between the years of 2018 and 2021. Do you recall that?
A. Yes.

Q. And you undertook to carry out some investigations overnight?
A. I did.

Q. And you've done that?
A. I have.

Q. What have those investigations revealed, or that investigation revealed?
A. Okay. So I tasked a member of my staff to do some checks of data, and for the year 2018, there were 141 requests for samples reported initially as DIFP to be further tested. For 2019, there were 102 samples requested to be tested that were originally, obviously, reported as DIFP. 2020, 139 samples originally reported as DIFP were requested to be tested. And then 2021, there was 278 that were requested to be tested.

Q. Thank you.
A. So a total of - and that is up until 2021, up until 1 December when I became alive to the issue again. So the grand total was 660.

Q. Thank you. We got up to in your evidence a discovery of a problem in --

THE COMMISSIONER: Mr Jones, at some point we are going to need the other number, which is the number of DIFP results that were put forward.

MR JONES: Yes. And then you could perhaps make a direction about that.

THE COMMISSIONER: Yes, thanks.

MR JONES: Q. Yesterday, you gave evidence that in November 2018, a murder investigation was brought to your attention because P1 samples were coming back as "DNA insufficient for further processing"?
A. Yes.

Q. And your understanding was that that had never been agreed to?
A. Correct.

Q. Then you raised the issue, you went on leave, and you came back in January 2019?
A. Yes.

Q. Apart from communicating with Queensland Health, internally the Police had resolved to make an amendment to the information provided to frontline police officers by making the addition to QPRIME that you spoke of yesterday?
A. Correct.

Q. Then between January 2019 and November 2021, there's no other issues that are brought to your attention about "DNA insufficient for further processing"?
A. That's right.

Q. And in November 2021, an issue was brought to your attention regarding another murder investigation; is that right?
A. That's right.

Q. And you were told that 33 samples had been returned with "DNA insufficient for further processing" from the lab?
A. Yes.

Q. And officers had requested those to be further worked?
A. Yes.

Q. And they came back with 10 samples with full profiles?
A. 10 samples with profiles.

Q. With profiles, sorry.
A. Yes.

Q. You raised this issue with your superintendent at the time, Superintendent Dale Frieberg?
A. I did.

MR JONES: Commissioner, there are two exhibits in Superintendent Dale Frieberg's statement of 5 September 2022. I seek to tender the statement and have it marked for identification. The Superintendent will be called later today and it will be tendered proper. It is [WIT.0035.0001.0001_R]and the two exhibits that I will take the Commissioner to are 25 and 26.

THE COMMISSIONER: Thank you. And you are going to put them up on the screen?

MR JONES: I am. Mr Woolridge, could you bring up [WIT.0035.0001.0001_R at 0153], please. Could you blow it up, just so that we can't see the full text. Just scroll down. Thank you.

This is the email where you raised the issue with Superintendent Dale Frieberg?
A. Yes.

Q. It is dated 29 November 2021 at 12:58?
A. That's right.

Q. You identified to the Superintendent that there had been a potential issue with DNA testing in relation to a murder investigation?
A. Correct.

Q. Which was solved over the weekend?
A. Yes.

Q. And you identified that the 10 samples that were reported as "DNA insufficient", which were part of the 33 --
A. Yes.

Q. -- had come back with profiles?
A. Yes.

Q. Then underneath that you identified the importance of the samples. Are you able to indicate to us in some way how they were important, other than the nature of the Investigation? Were they important in solving or

identifying an accused?
A. One of the samples - well, actually a couple were. But one of the samples was taken from the deceased's calf, and that was identified to the accused.

Q. Thank you.

THE COMMISSIONER: Q. One of the samples had been reported "DNA insufficient for further processing"?
A. That's right.

Q. In a murder case?
A. Yes.

Q. And it was a tape-lift from the deceased's calf?
A. That's right.

Q. And when you asked for it to be retested, it returned a usable profile identifying the accused?
A. It did. Yes, that's right.

THE COMMISSIONER: Yes.

MR JONES: Q. You have identified there that after these were retested, each yielded a profile that could be linked to a person with a likelihood ratio of greater than 100 billion?
A. Okay, yes.

Q. Yes?
A. Yes.

Q. Over the page at [WIT.0035.0001.0001_R at 0514] - and, sorry, on that page and then over the page you have identified the samples, where they are from, and their initial reporting. And it is cut off on the side, but presumably you go on to say what the results were of the retesting; is that right?
A. I presume so. I can't see it.

Q. Over the page at 0514 at the bottom there, you articulate the process as you understand it; that is, that the initial part of the testing is quantifying the DNA?
A. Correct.

Q. Extracting and quantifying it?
A. Yes.

Q. The sample only goes to be profiled if it is over a certain threshold?
A. Yes.

Q. And you are talking about there about the 0.001 to 0.0088 threshold?
A. Yes.

Q. You have identified that:

Given what has occurred, I think this threshold needs to be reviewed. Are you happy for me to raise this with [Queensland Health]?

A. Correct.

Q. Back to [WIT.0035.0001.0001_R at 0153], please, Mr Woolridge. At the top you get a response from the superintendent. And the superintendent, this is on the same day, says:

Perhaps verbal in the first instance. Keep me posted if you have any issues.

A. Yes.

Q. Thank you. You then called Ms Allen and Mr Howes on 1 December 2021?
A. I did.

Q. And you had a telephone discussion with them about this case?
A. We had. Yes. Yes.

Q. Could [WIT.0020.0002.0458_R] be brought up, please.

THE COMMISSIONER: What exhibit number was that again?

MR JONES: Exhibit 64A, my apologies --

THE COMMISSIONER: 64A?

MR JONES: -- to Inspector Neville's --

THE COMMISSIONER: Yes, thank you.

MR JONES: Q. Did you take a diary note of the conversation?
A. I did, yes.

Q. Is that the copy on the screen there?
A. Yes.

Q. Can you step us through that telephone discussion, please?
A. So I spoke to Cathie and Justin over the telephone. I advised of the matter where 33 samples originally recorded as "DNA insufficient", but when we asked for further testing, 10 of them gave a profile. I indicated concern had been raised about the current media attention in relation to another matter that was in the media at the time. And issues raised in that case around samples not yielding a profile.

Cathie advised me that Queensland Health had done repeated testing and had revealed it's highly unlikely to get a profile below a particular quant value. She told me that it was incumbent on the QPS to decide whether or not testing should continue, and she indicated that we had agreed to that in 2008. I may have misheard; it might have been 2018 she was referring to.

Q. Is that potentially a reference to the subsampling in 2008?
A. Yeah, it could have been that or the Options Paper in 2018. It's probably more likely the Options Paper. I just may have just misunderstood at the time. She told me her staff were not in a position to make an assessment of the likelihood of a result from a particular, given they no longer get case information. I raised with her that we actually place a photo of the sampled area, of the stain, and the presumptive screening results, on the exhibits screen in the Forensic Register, which is visible to Queensland Health.

I asked her if Queensland Health ever looked at that information to make a decision as to whether testing should be conducted or continued. Cathie advised me, or words to the effect, that "Just because it's a red stain, it doesn't mean it was blood to us", and "You are the ones now doing the screening." I reiterated that approximately 30 per cent of the samples, in this case, yielded a profile after the

work was requested. Sorry, that was a reference maybe back to the previous case. No, no, no. Sorry, that was for that case. Cathie said that she believed this was an outlier but would review if the information was provided to her, which I did later.

Cathie then went on to raise some concerns about information in the media and that someone from QPS was potentially leaking that information because they didn't have the FR at the time of the matter that was in the media. I indicated to her that perhaps it was court transcripts that the information was being gleaned from.

I then met with Superintendent Frieberg and discussed the matter with her.

Q. And you put a post-script there a little bit further on?
A. Oh, yes, yes. During the conversation, too, she mentioned again or reinforced --

Q. Mr Woolridge, please. Back to 001? Is it there or not? That's dropped off, but do you recall?
A. I think it was something along the lines of that, again, that if you micro-concentrate you exhaust the example.

THE COMMISSIONER: Q. Your note [WIT.0020.0001.0001_R at 0035] reads:

She also advised that they were hesitant to test low quant samples because they should be retained in case a more sensitive method [becomes available].

A. Okay. Yes.

Q. You noted that Ms Allen said her staff were not in a position to make an assessment on likelihood of a result for a particular sample because they didn't have the information. Ms Allen had written to you that long letter that you looked at yesterday?
A. Yes.

Q. That you were giving evidence about at the end of your evidence yesterday?
A. Yes.

Q. And she made a reference to - there was a reference there, as I recall, to scientists making a judgment about testing further?
A. Yes. She --

Q. That gave you comfort, you said?
A. Yes. She had mentioned in the email that the scientists have a look at the samples and the information and make an assessment as to whether micro-concentration might be appropriate or not in the context of the case and the sample.

Q. How does that fit in with this statement?
A. It seems to be in conflict, to me.

Q. Did it occur to you at the time or did you think about it at the time, that the two statements were inconsistent?
A. No, that email that I received at late 2018 --

Q. Yes?
A. -- it was three years earlier.

Q. Yes, of course. All right. All right.
A. But the information is there. There is a photograph, and there's presumptive screening results.

MR JONES: Q. She also - can I say this: at 1 December 2021 is the first time that you're learning that the scientists can't look at the photos or aren't looking at the photos when considering the samples?
A. It's when I first suspected, yes. So I asked the question then because some of those samples were of a condom and things like that, and wondered why you wouldn't get DNA from that. So --
Q. And you are still being told in December 2021 that they had done repeated tests and it revealed it is highly unlikely to get a profile below a particular quant value?
A. That's right.

Q. So Ms Allen, in that conversation, is still urging on you or pushing on you that there is a very low chance of getting a profile through the DIFP quant that we've spoken about?
A. That's right.

Q. And this is the first time she raises with you that

the scientists are not in a position to assess the samples at that stage?

THE COMMISSIONER: Well, that is not what she says. She ignores the point and says, really, words to the effect that it's not very informative, because if it is a red stain, it doesn't mean it's blood. So Ms Allen isn't saying that they can't look at the photos. She's really giving an example to illustrate the point that looking at the photos isn't very helpful in making a decision. Is that how you read it, Mr Jones?

MR JONES: No, at [WIT.0020.0002.0001_R at 0458], it is written. She said her staff were not in a position to make an assessment of likelihood of result for a particular sample given they no longer get that information.

THE COMMISSIONER: Yes, I see.

MR JONES: Q. This is the first time that it has been brought to your attention that they are not in fact in a position to consider a further working of a sample at the DIFP stage?
A. It was the first time it was brought to my attention that they weren't taking note or looking at the information that we had been provided in 2008 to make those decisions.

THE COMMISSIONER: Mr Jones, you might not be able to help me immediately, but what is the evidence about the availability of contextual information in the form of photographs available to scientists at the lab?

MR JONES: Because the DIFP threshold is a hard threshold --

THE COMMISSIONER: I mean generally are the photographs of the - showing the provenance of a sample available to scientists at the lab? Were they in 2018 to 2021?

MR JONES: As I understand the state of the evidence, they are available on the Forensic Register --

THE COMMISSIONER: To the scientists?

MR JONES: -- to the scientists, together with a description of the sample, whether it is an SAIK, high vaginal swab, or something like that, a substrate.

THE COMMISSIONER: I see. Yes.

MR JONES: Q. You followed up that telephone call with an email to Ms Allen on 1 December?
A. I did.

Q. Could [WIT.0020.0003.0001_R at 0008] be brought up, please? At the bottom of the page is an email arranging the telephone conversation that you have just taken us to in your file note?
A. Yes.

Q. And that was sent on 1 December 2021 at 10:24. And then above that is your follow-up email to Ms Allen after your telephone call?
A. Yes.

Q. Again, you place further context by citing that there were 33 items sent in and that returned a "DNA insufficient for further testing"?
A. Yes.

Q. Requests made for further work, and 10 of the samples returned a result with persons being identified greater than 100 billion?
A. Yes.

Q. You attached a spreadsheet that includes the results?
A. I did.

Q. And you wondered if there was a particular reason for this case as to why approximately 30 per cent of the samples yielded a result after the work was requested?
A. Yes.

Q. And you asked for her advice about what the actual threshold is and advice as to whether the threshold ought to be reviewed?
A. Yes, I did.

Q. And then you apologise for being demanding, and you say:

> *... can you also provide information on your expected likelihood of success in normal casework, (i.e. the likelihood of*

DNA insufficient samples yielding a result if testing is continued).

A. Yes.

Q. To page [WIT.0020.0003.0001_R at 0006], please. Ms Allen, down the bottom, if that could be blown up, replies on 3 December 2021?
A. Yes.

Q. And:

I appreciate the timely feedback.

My apologies. That's at [WIT.0020.0003.0001_R at 0007]. If that can be blown up, please. 3 December 2021 at 9:55?
A. Yes.

Q.

Thanks for the additional information [provided].

A. Yes.

Q.

After we had conducted a review of a large dataset, it was found that below a particular quantitation threshold and in line with manufacturer's specifications, a very small percentage of samples may provide some type of DNA profile, if they proceeded through DNA processing.

Did you understand what Ms Allen was referring to there?
A. Again reinforcing to me that the success rate was very low and, in fact, she's indicating there that the micro-concentration process for samples in that range was very low success rate to give any type of profile.

Q. She is referring, of course, after the next sentence, to the Options Paper?
A. Yes, yes.

Q. And she goes on to say:

We've monitored this and have found that with a larger dataset, the small percentage didn't vary.

A. Yes.

Q. Do you understand that after the inception of the Options Paper, that the lab was continuing to monitor the results?
A. I had no idea whether they were or not. I've never seen any data to suggest that, but.

Q. But what she is saying there, "We've monitored this"?
A. Yes.

Q. Having just spoken about the Options Paper and said, "We did a large dataset and have found with a large dataset the small percentage didn't vary"?
A. That's right. Again, to me there was further advice that, you know, the success rate was low.

THE COMMISSIONER: Mr Jones, that sentence that you have just dealt with:

We've monitored this and have found that with a larger dataset, the small percentage didn't vary.

It implies that work was done by way of processing "DNA insufficient for further processing" samples, that such samples had been processed, resulting in a large dataset that showed only a small percentage of results?

MR JONES: That's right. And Inspector Neville says he wasn't provided with any data to suggest that that had been done.

THE COMMISSIONER: Are you aware of any documents or information about the further monitoring of such samples?

MR JONES: No, save for a fact that shortly, as the story will unfold, the Inspector starts to have --

THE COMMISSIONER: No, well he does.

MR JONES: That's right. But not from --

THE COMMISSIONER: Inspector Neville does

MR JONES: Not that I'm aware of from --

THE COMMISSIONER: And the other thing is at the beginning of that paragraph:

> *It was found that below a particular quantitation threshold and in line with manufacturer's specifications ...*

What does that reference mean, "in line with manufacturer's specifications"?

MR JONES: I suspect it is a reference the validation of the equipment down to 0.001 to get a reliable result.

THE COMMISSIONER: All right. Thanks.

MR JONES: The review of the dataset, Commissioner, you'll recall, is the updated paper which I am getting to. But that's about June 2022.

THE COMMISSIONER: No, but that hasn't been done yet. But that wasn't done by this stage.

MR JONES: That's right. That's the only review that we're aware of.

THE COMMISSIONER: Mm.

MR JONES: Q. Over the page to [WIT.0020.0003.0009_R at 0006] and down the bottom there, you replied to Ms Allen on 3 December at 10:07?
A. Yes.

Q. And you appreciate the timely feedback and refer to the conversation you had on 1 December 2021.
A. Yes.

Q. And you make reference again to:

> *... I am assuming these discussions occurred in 2008.*

A. Yes, I did. Yes.

Q. So at the moment, you are - is that a typographical error, or do you recall now that there was some discussion about it --
A. Well, no. I must at that point have thought it was 2008. I diarised 2008. Again, like, the Options Paper wasn't, you know, fresh in my mind. It had been some time since I had seen that. I had been very heavily involved in things that occurred in 2008, and I think that was just my misconception --

THE COMMISSIONER: It seems that at this point in 2021, December last year, when you were asking questions about results with this description --
A. Yes.

Q. -- and the anomalies that you were finding --
A. Yes.

Q. -- you didn't have in mind the Options Paper. I mean, now it is very prominent, but it seems that at this point it didn't figure in your thinking as the origin of any of this because you don't mention it and you're talking about 2008. So it looks like it just didn't have it in mind?
A. That's correct, Commissioner. And it had been, unfortunately, you know, three years since I had --

Q. Yes, I understand.?
A. And a lot of things had occurred in the meantime and it just wasn't at the front of my mind. But it came to my attention soon afterwards.

THE COMMISSIONER: Yes.

MR JONES: Q. But you are still investigating it. You are asking again:

> *Is there any correspondence that was provided to base this decision on that you can provide, please? For our [reference] and moving into the future, what is the actual percentage that your dataset has indicated?*

A. Yes. Correct.

Q.

Obviously this information will be helpful in guiding future requests for retesting.

A. Yes.

Q. And then over the page at [WIT.0020.0003.0001_R at 005], down the bottom, it is now 13 December.
A. Yes.

Q. 2021 at 14:06.
A. Yes.

Q. And you sent an email again to Ms Allen?
A. Yes.

Q. And you cc an officer working with you, Libby Harris, into the email?
A. Yes.

Q. And then back over to [WIT.0020.0003.0001_R at 0006], can we assume that you haven't received a reply?
A. No, I hadn't received any feedback at that point.

Q. And what's that, 10 days? And you respond saying:

Since sending you my last [email] I found some correspondence from February 2018 ...

And here, you are now making the link to the Options Paper?
A. That's right.

Q. You mention there that chance of obtaining a profile was less than 2 per cent?
A. Yes.

Q. You used the word "profile"?
A. Yes.

Q. You don't make mention of the database?
A. No.

Q. That is, the National Criminal Database as your measure/metric?
A. That's right.

Q. You say:

Samples below this threshold were previously micro concentrated in an effort to attain a profile.

A. Yes.

Q.

Based on the advice from [Queensland Health], the [Police] agreed to discontinue [that process] under such circumstances and the result would be reported as ... (DIFFT).

And that's your understanding at that time of the Options Paper?
A. That's right.

Q.

I am assuming this is the information I was seeking ...

And that's a reference to what you were saying in 2008, but it's 2018?
A. Yes.

Q. So we can take it that you had to go and work that out for yourself. Ms Allen didn't respond and say, "Here's the Options Paper"?
A. That's my recollection, yes.

Q. You then make a reference to a murder operation/investigation and the fact that you have asked your staff to undertake a wider review of further testing that was originally reported as DIFP in the year of 2021.
A. Yes.

Q. What did you discover from that review that you're referring to there in the paragraph?
A. Yeah. So at the start of December, I had tasked Sergeant Libby Harris to go back for the previous six months and have a look at where police had requested the further testing of the DIFP results, what were we seeing? What were the number of profiles coming back? So this is the first time I was getting a larger dataset. And out of the 160 samples that were requested to be tested, 51

yielded a profile. So I thought that was pertinent information then to provide Health to assist them in investigating and us, I guess, reviewing the threshold of whether that was appropriate.

Q. And to seek Ms Allen's advice?
A. Yes.

Q. And then in the next paragraph down you make reference to the November 2018 murder investigation?
A. That's right.

Q. Where P1s were being cut off at the same threshold?
A. Yes, but at that point my recollection of the previous event three years earlier - I recalled it again - and, I guess, reminded Ms Allen that this is the second time now we've seen this, and previously in 2018, I had raised this concern when three out of four samples, when further tested, yielded a profile.

Q. And then in the final three paragraphs, you continue your plea for a review?
A. Yes.

Q. And you raise it as a question. That is, should a review happen of this practice of truncating testing lower quants?
A. Yes.

Q. You ask a question:

For instance, is the threshold value still valid?

A. Yes.

Q.

Also, within implementation of the latest version of STRMix that can deconvolute more complex mixtures, is it more likely to get a result now?
A. Yes.

Q. And then you say:

I think the 30 per cent success rate of retesting warrants a little further

examination to make sure we are maximising our chances of solving crime, particularly for major crime matters.

A. Yes.

Q. Thank you.

THE COMMISSIONER: Q. Do I understand you to be taking this position with this email, that whatever might have been agreed to in 2018, and however valid that decision might have been in February 2018, you were aware that, first, the results were better than expected from retesting?
A. Yes.

Q. And, secondly, you were aware that at least one thing had changed in the lab to make their work more sensitive, namely, the - more "sensitive", I'll call it, in making usable profiles - namely, the introduction of this software system called STRmix?
A. Yes.

Q. And that that might be the reason why a decision made in 2018, valid then, might no longer be valid?
A. That's right. I wanted to explore why.

Q. Yes, thank you.

MR JONES: Q. Are you starting perhaps to get a suspicion that perhaps November 2018 and November 2021 are not isolated, one-off events?
A. Absolutely.

Q. And on 16 December 2021, you get a response from Ms Allen at 12:42 pm. Page 5, please, Mr Woolridge. At the top. Thank you. Zoom in. [WIT.0020.0003.0001_R at 0005]. You get a two-line response to your two earlier emails?
A. Yes.

Q. Three earlier emails. The two on 3 December and then your other one on 13 December. You get:

Thank you for your email and feedback regarding this. We will review scientific data available to us and will provide

further advice to the QPS in due course.

A. Yes.

Q. About 13 days after you first raised the issue with Ms Allen?
A. Yes.

Q. Over the page please, Mr Woolridge, page 4. Down the bottom there [WIT.0020.0003.0001_R at 0004]. You respond 14 minutes later:

Hi Cathie.

Thanks, this is a high priority for us, we would appreciate advice as soon as possible please.

A. Yes.

Q. Why was it a high priority for you?
A. I was forming a suspicion that we were missing out potentially on profiles of evidence. So I wanted to resolve it.

Q. You then sent a follow-up email on [WIT.0020.0003.0001_R at 0003], Mr Woolridge, over the page. Down the bottom. Zoom in, please. You then send a follow-up email on 17 December the next day at 12:04 pm?
A. Yes.

Q. And you say:

In addition to the items on the list provided previously, last week we requested a blood swab ... to be retested which was originally reported as "insufficient DNA for further testing". This sample was taken from blood on a broken shard of glass as depicted in the photo below.

Given the nature of the stain and inert substrate, we were surprised with the original result which is what prompted the request to further test. Today we were advised that subsequent testing yielded a single source 20 loci profile. This was an

excellent result solving the crime which would have been otherwise missed.

A. Yes.

Q. And over the page, it was your understanding that blood is a rich source of DNA?
A. It is.

Q. And there you attached the photo?
A. I have, yes.

Q. It is photographed with a sticky label that says "blood"?
A. Yes.

Q. It has:

[Something] ALMA [something].
RTN
BLOOD SW

Are you able to help us out with that? Is that indicating, for example, that it has been presumptively tested for blood and that it's come up positive?
A. No, no. That will be the address of the crime scene.

THE COMMISSIONER: That's near where I live.

MR JONES: Q. Sorry, that should have been redacted.
A. But the presumptive screening tests are indicated on the exhibit screen together with that image that is visible to the scientists on the Forensic Register.

Q. So at the very least it has got the word "blood" there, it has got a shard of glass, presumably from a broken window or something, suggesting that it is blood?
A. Yes.

Q. And in fact, confirmed later that it was blood?
A. Right.

Q. I am asking you, is that right?
A. I'm not sure. I believe - I'd have to look at the Forensic Register. I believe this had a - presumptive screening results on there that were positive for blood. And if it's positive presumptively and yields a DNA profile

and by the appearance, we would come to the conclusion it is in fact blood.

Q. But in the text above, you're again agitating for confirmation whether this information is looked at by the scientists?
A. That's right.

Q. And you ask that Ms Allen and her scientists consider it together with the other material you provided earlier?
A. Yes.

Q. We will go to page 3, please, [WIT.0020.0003.0001_R at 0003]. At the top there. Thank you. You get a reply that evening from Ms Allen. Sorry, could you just go back down to the bottom, please. In fact, could you go to page 0004, to the bottom, please, Mr Woolridge. [WIT.0020.0003.0001_R at 0004]. We see there that you have introduced on 16 December Superintendent Dale Frieberg to the conversation?
A. Yes.

Q. And you have introduced Lara Keller to the conversation?
A. They may have been present in the previous emails. I'm not really sure. But, yes, they were definitely included in this.

Q. We can go over that. [WIT.0020.0003.0001_R at 0005].
A. Yes.

Q. And then down a bit further. There we go. On the 13th, they're not there.
A. Right. Yes, okay.

THE COMMISSIONER: But I think it is Ms Allen who introduced them in her email at the top of that page. December 16, 12:42 pm, she introduced - she cc'd --

MR JONES: Yes, it is. Thank you, your Honour.

Q. Now to [WIT.0020.0003.0001_R at 0002] at the bottom of the page is an email from Ms Allen, 17 December at 5:06 pm?
A. Yes.

Q. And over the page at [WIT.0020.0003.0001_R at 0003]:

Thank you for the follow-up email regarding

samples within this case.

To ensure that we're all on the same page, I'd like to clarify the process. If samples that have been deemed 'insufficient DNA for further processing' are processed further, they are all first undergo a concentration step, followed by amplification. This is in contrast with samples that are not deemed in this range, as these samples amplification, without a concentration step. Just wanted to draw to your attention that there is additional work undertaken on the DNA extract to attempt to achieve a DNA result for the samples deemed 'insufficient DNA for further testing'.

A. Yes.

Q. Then over the page at [WIT.0020.0003.0001_R at 0002] you reply at about 17 minutes later, 16 minutes later, that evening. And you say:

Hi Cathie

Thanks for the clarification. That was my understanding too. I was of the belief that QHFSS stopped doing this as a matter of routine for low quant samples because there was a lower than 2 percent chance of success. However, QPS has found the success rate to be 30 percent when we requested this to be done. It is the difference between these success rates that I am interested in.

Correct?
A. Yes.

Q. And you are still bringing to her attention that your understanding is that there was only ever a 2 per cent, or less than 2 per cent, chance of missing a profile?
A. That's right.

Q. And that you have discovered a 30 per cent --
A. That's right.

Q. -- if I can call it that.

THE COMMISSIONER: Q. Is it correct - Mr Jones will go through the emails - but is it correct that you put forward your belief that the decision to cull these tests, these samples from the testing regime, was based upon the proposition that only 2 per cent of them - less than 2 per cent of them - resulted in a usable profile, and you put that proposition a number of times in these emails?
A. That's right.

Q. And the Options Paper in fact didn't say that, you now appreciate?
A. That's correct.

Q. It said that fewer than 2 per cent give rise to a cold link?
A. That's right.

Q. But that on the face of the Options Paper, about 10 per cent of these samples give rise to a usable profile, correct?
A. That was - it is now my understanding.

Q. Yes, that's the position now. Yes, I understand.
A. That's right.

Q. But you had put to her your then mistaken belief that the decision to cull these samples was based upon the assumption that fewer than 2 per cent of them gave rise to a usable profile. But that proposition, as you put to Ms Allen, she never corrected it?
A. That's right. In fact, earlier in the string, which I believe led me to believing it was 2 per cent, she said that they had a very large dataset and a very small number would produce a profile.

Q. Yes.
A. And --

Q. Consistent you with the proposition you were advancing?
A. That's right. Well, actually, that was the proposition that she advanced at that point.

Q. No, I understand. But what she put to you there was

consistent with the mistaken view that you were putting to her?
A. I think that in that case it actually led me to the mistaken view.

Q. Right.
A. So she had given me the information they had a large datasets, they had a very low percentage --

Q. I see, so you have then gone to the Options Paper and seen the number?
A. That's right.

Q. And came to the conclusion that that's what she was talking about?
A. I saw that the pertinent figure is 1.45 per cent.

Q. I see, yes.
A. I was dealing with a number of other issues at the time.

Q. Yes.
A. I had put the two and two together and came up with the incorrect call.

Q. Yes, I understand.
A. But I was never corrected.

Q. No, that's what I'm putting to you.
A. No, I was never corrected.

Q. When did you learn that that view was mistaken and that the true number on the Options Paper was 10 per cent?
A. So I actually went on leave pretty much after this email and I came back at the end of February and turned my mind --

Q. Of this year?
A. Sorry, the start of February. Yes, this year. Turned my mind to the matter again immediately returning to work and had explored the Options Paper a lot deeper.

Q. Yes.
A. And that's when I came to the conclusion it was 10 per cent.

Q. Yes.

A. And I had asked Ms Allen - you will see emails - "I think it's 10 per cent. It's 10 per cent, isn't it?" But still there was no clarification. She came back with 2 per cent. But at that point I knew it was 10 per cent, so --

Q. Mr Jones will take you through.

MR JONES: You will recall, Commissioner, at page 7 of the Options Paper [CCC.0085.0027.0001 at 0008], the relevant paragraphs starts with:

> *If samples were not processed through the 'auto-microcon' process, what DNA intelligence would the client miss out on ?*

THE COMMISSIONER: Yes.

MR JONES: And it goes on to talk about the 1.5 and the 1.8.

THE COMMISSIONER: Yes.

MR JONES: Q. Above that, you have an email to your superintendent, it seems. You don't have a date. Do you recall whether that was sent soon after your final December exchange with Ms Allen?
A. I think it would be the same day. I can't recall exactly, but --

Q. What you say there is that there is a meeting in an hour with Queensland Health, because you just saw it in your Outlook. Just have a little read of that?
A. Okay. This may have been when I returned in February. I'm sorry.

Q. Sorry, I'll just give you - there are some minutes which I am going to take you to.
A. It is unfortunate that the email doesn't have a date on it.

THE COMMISSIONER: I don't suppose we can work it out, Inspector? In December you were raising these issues, and the last email we have from you in 2021 is 17 December?
A. Yes.

Q. And you put the 2 per cent figure in that email?

A. Yes.

Q. And then you said you went on leave, so you were on Christmas leave from then?
A. Yes.

Q. And you came back, you said, in early February?
A. Yes, and there was a meeting on 1 February.

Q. Yes, so you must have been speaking about that meeting in this email?
A. I assume so.

Q. "There is a meeting in an hour". So we can - there might be other documents that will pinpoint the date, but we can proceed upon the assumption that this is early February 2022.
A. Yes.

MR JONES: Q. The email below, you have said to Ms Allen, "This is the difference I am interested in, the success rate between 2 and 30 per cent"?
A. Yes.

Q. And then up above you tell the Superintendent:

... the chance of getting a profile is less than 2%. Based on that advice we agreed to discontinue testing in those circumstances.

A. Yes.

Q.

However, we have found that [it was] for testing to continue, we have a success rate of 30%. I have asked Cathie a few times to explain this and she has not provided one yet.

A. Yes.

Q. And so, we can take it that on 17 December you didn't get a response to that email either?
A. I don't think so, no.

Q. Thank you. On 14 February, you prepared a Ministerial Briefing Note, 2022?

A. Yes.

Q. What is a Ministerial Briefing Note?
A. Oh, it's a brief prepared for the Minister, usually a two-page document. If there is an issue that's critical that should be raised to that level, it provides advice on the background, the issues and sometimes a recommendation forward.

Q. You drafted the Ministerial Briefing Note and gave a background to what you were discovering?
A. That's right.

Q. Do you know whether that Ministerial Briefing Note was ever sent?
A. No. I had discussed the matter again with Superintendent Frieberg. We came to the conclusion that it might be more appropriate to make it an Executive Briefing Note, which is a similar document but it is designed for the Commissioner and the Executive of the QPS, and that, in that document, we would recommend that a letter be forwarded from the Commissioner to the Director-General of Health requesting a review of the threshold.

Q. That was done on 22 February. You drafted that on 22 February 2022?
A. No. It was drafted around the 14th. It was submitted, I believe, on the 22nd. So submitted to the Assistant Commissioner of Support Command.

Q. Thank you?

MR JONES: I am not going to take you there, Commissioner, but they are exhibits 80 and 78 of Inspector Neville's statement.

THE COMMISSIONER: All right.

MR JONES: Q. You further emailed Ms Allen on 21 February 2022, and that's exhibit 70, Commissioner. Is that right, Inspector?
A. Yes.

Q. [WIT.0020.0003.0001_R at 0063]. Would you take us through your email there of 21 February 2022 to Ms Allen, please.
A. Look, I alluded to some ongoing coverage in The

Australian about a particular high profile case and that it may have been causing stress for her staff. I indicated that I had been drawn in to comment internally around peripheral matters that related to a similar thing, which is around thresholds.

So there was an article in The Australian that claimed that Queensland required the equivalent of 22 cells to get a profile, which was double that of the New South Wales laboratory. And I referred back that I know that she had been busy, but:

> *... since 1 December 2021 I have raised concerns in relation to the truncating of testing based on DNA quant values because of the significant number of below threshold samples yielding a profile when testing is continued.*

I wanted to reaffirm that it remains a priority for the QPS and:

> *To date I have not received any feedback or explanation as to difference between the predicted (<2%) ...*

The 2 per cent is what I was operating on at that point:

> *... and observed success rates (30%) for samples that reportedly contained a low concentration.*

Q. And then you go on to plead for her advice, as you had done on the previous occasions?
A. Yes.

Q. About thresholds?
A. Yes.

Q. And how they now accord with other jurisdictions in Australia?
A. Yes.

Q. At this stage, had you started to do any investigations yourself with other jurisdictions?
A. I had. I didn't get a lot of feedback. So I had emailed or spoken to South Australian Police and

New South Wales Police. Well, actually the South Australian Forensic Science - FSSA. I can't remember. Forensic Services of South Australia. And I had spoken to a laboratory manager there. I can't remember his exact name. And I was advised that their threshold was actually, supposedly, higher. I think it was 0.01, so slightly higher than the Queensland.. I had spoken to, I think it was, Sharon Neville at the Forensic or FAS. I can't remember what the acronym stands for, but it's the New South Wales Health DNA laboratory. She was hesitant, really, to provide any comment, I think, because it was in the media. And I don't think she affirmed or really denied that there was a difference, or the information in the newspaper about 22 cells and 11 cells, I didn't get any advice from her whether that was correct or not. She sort of avoided the subject.

Q. Did you speak to Pam Scott at all?
A. Yes, sorry, I did. I spoke to Pam Scott, too.

Q. Who is Pam Scott?
A. She is from Hobart. She is the leader in charge of the DNA laboratory down in Hobart. And I know Pam because I'd been on an NATA committee with her, so I had contacted her, and she was an NATA assessor. So I'm not sure if I spoke to her about this matter or a previous matter that was about mixed profiles, or both. Are you - what part of my statement are you referring to?

Q. No, I'm not. I am asking you whether you spoke to her?
A. I don't know that I did. I had spoken to her previously about a mixed profile issue and I may not have asked her in this case. I can't recall.

Q. And then in your penultimate sentence in the final paragraph, you say:

> *Can you also please advise the outcome of any internal review that you have undertaken based on the information I provided.*

You are talking about the information you provided on or about 1 December and through to about 13 December?
A. Yes.

Q. And we are now 21 February 2022?
A. Yes.

Q. And we can take it then that you haven't received any feedback about those urgent matters you were raising?
A. No.

Q. And you sign off with:

I need this information as a matter of urgency to brief the executive in relation to this matter.

A. Yes.

Q. Then over the page [WIT.0020.0003.0001_R at 0062] at the bottom Ms Keller responds 21 February 2022, 16:24?
A. Yes.

Q. And, it seems, provides you a copy of the Options Paper?
A. Yes.

Q. And it may go some way to answering your enquiries, and tells you that Cathie is away but back the next day.
A. Yes.

Q. And of course, it doesn't answer any of your enquiries, because all of your enquiries are about the Options Paper?
A. Right.

Q. And the consequences, correct?
A. Yes.

Q. You then respond 10 minutes later or so just to Ms Keller?
A. Yes.

Q. And take us through your response there, please?
A. I indicated to Ms Keller that I already had that document and:

Based on the paper, a recommendation was made to QPS that testing of samples containing less than 0.008ng/µL of DNA should discontinue because the chance of

obtaining a profile would be less than 2%.

So at that point I was still operating on the incorrect assumption that it was 2 per cent:

As a result of this research [Queensland Health] advised that they would report samples below this threshold as 'insufficient DNA for further testing' and that QPS could request testing to continue if the sample was critical to a case.

Anyway, moving on:

In November 2021 the QPS undertook a review of the success rate of obtaining a profile when it requested testing to continue for samples initially reported as [DIFP]. This revealed that 30% of the samples yielded a useable DNA profile when testing was continued.

Again, I reinforced:

It is the difference between the 2% (expected) and 30% (observed) that I am concerned about.

Q. You don't get a response from Ms Keller, but on 22 February you get a response. This is exhibit 71, Commissioner, [WIT.0020.0003.0001_R at 0083]. And a response here from Ms Allen on 22 February at 16:32?
A. Yes.

Q. And there is a reference to the bimonthly meeting on 1 February?
A. Yes.

Q. Which is probably the meeting that you informed Superintendent Dale Frieberg was coming up shortly?
A. Yes.

Q. And Ms Allen says she provided you a verbal update to you and the Superintendent at that meeting?
A. Yes.

Q. And the minutes are being circulated, and that

Ms Allen has, in her possession, detailed notes that she took during that meeting?
A. Yes.

Q. And she says that she was having some difficulty because of the community transition of COVID-19 in the lab and there was slow progress?
A. Yes.

Q. And she says that you gave her assurances that you understood the situation?
A. Yes.

Q. And during the meeting, she says that you advised her that QPS had cherry-picked particular samples to be tested further and that this may be the reason behind the results that were achieved?
A. Yes.

Q. That the data that is required to be analysed is between the Forensic Register, within the Forensic Register, and that Ms Allen needs to receive a quote from "bdna" in order for them to extract that data. And once she has received the quote and approval for it, then received the data, they will provide a report to the QPS regarding this?
A. Yes.

THE COMMISSIONER: Q. So now this is three months since you asked for an explanation, I think?
A. Yes. Time is ticking.

MR JONES: Q. Over the page at [WIT.0020.0003.0001_R at 0082], you replied the next day at 8:51 am.
A. Yes.

Q. Would you take us through your reply, please.
A. So I thanked her for her email. However, the response did not address the main query posed. I said:

> *I am seeking information from you in relation to the comments in the Australian claiming that the thresholds in Queensland are twice that of other states and three times higher than the manufacturer's recommended value. These claims in the national newspaper come at a time when the*

QPS has raised similar concerns around testing triage thresholds.

I said:

Unfortunately the gears have shifted since our meeting on 1 February due these claims in the media and I am being asked questions in relation to these very issues.

Q. You go on to then clarify in the meeting what you meant in the meeting when you said that QPS had "cherry picked" the samples?
A. That's right.

Q. And you said?
A. I said:

The dataset that was provided included the barcodes of samples that the QPS requested to continue testing after receiving a result 'insufficient DNA for further testing'. Some of these were selected because we found it unusual for the sample type to yield low DNA. This included samples from blood and a used condom.

And I guess, yes, that is some cherry-picking in those:

The fact that these produced low quant value is concerning to some extent. However, the majority of them were selected due to the probative value of the sample rather than the sample type.

For [a particular operation] 33 samples with 10 later providing a full profile. Yes, [I agreed,] the sample selection may have had some impact, however it could not explain the vast difference between >2% and 30% success rate.

Having said this, I do appreciate the work that you have done so far in reviewing the dataset. I understand that this may not be a sample task. I know that we share a common interest in ensuring the

effectiveness of DNA in enhancing community safety. To that effect, could you please provide an estimated timeframe for completion.

For clarity, could you please provide advice on the threshold values used within [Queensland Health] as a matter of priority including how they accord with other jurisdictions. I assume that this information will be readily available within your procedures.

Q. And you made the assumption from her earlier emails that she had commenced considering data by this stage?
A. Yes.

Q. And the question you're asking here about thresholds in other jurisdictions does not require any consideration of any data, does it?
A. No.

Q. There had been a meeting a few days earlier, on 17 March 2022 --

THE COMMISSIONER: Sorry, we are in February 2022.

MR JONES: Sorry, my apologies. I got out of order there. Thank you, Commissioner.

Q. Over the page, please, to [WIT.0020.0003.0001_R at 0081]. At the bottom of 00800 it has this email from Cathie Allen on 24 February 2022 at 8:37?
A. Yes.

Q. In response to your email?
A. Yes.

Q. And she says:

The laboratory has conducted an extensively validation process prior to the implementation of the current quantitation process.

A. Yes.

Q. And:

The validation outcomes were in line with the manufacturer's specification.

A. Yes.

Q. She identifies that:

From August 2018 onwards, if a sample obtains a quantitation of 0.001ng/µL or below, the laboratory reports this to the [Police] as 'no DNA Detected'?

A. Yes.

Q. And if a sample was between 0.001 and 0.0088 it would be reported as "DNA insufficient"?

A. Yes.

Q. And there was reference to the expanded QPRIME result supplied below, which she has cut and pasted into the email?
A. Yes.

Q. And she goes on to identify that they are the values that were listed in the Options Paper attached that was provided to the Police, and she says that it was the lab's understanding that forensic officers; that is, police forensic officers --
A. Yes.

Q. -- review DNA results within the context of the case and can request testing or submitting additional items for testing?
A. Yes.

Q. Correct? Then Ms Allen goes on to speak of the theoretical values regarding human cells to derive DNA profiles?
A. Yes.

Q. And makes reference to the values the lab uses to obtain from quantitation?
A. Yes.

Q. And identifies that they are approximate amounts?
A. Yes.

Q. Then in the next paragraph Ms Allen says:

Each year, the forensic laboratories will exchange information regarding profiling kit and equipment used, however details regarding quantitation values has not been exchanged or collated so I'm unable to comment or draw comparisons to other jurisdictions.

A. Yes.

Q. She's answering your question now without giving you any information, correct?
A. I guess so.

Q. That is to say, "I can't give you information"?
A. Yes.

Q. She goes on to say:

Validation studies conducted within each laboratory ensures that the method or equipment is fit for purpose within that laboratory environment, so it's not unexpected that different laboratories [use different thresholds].

A. Yes.

Q. And then speaks about in-house validation --
A. Yes.

Q. -- of their equipment. She says:

If the QPS request a 'DNA insufficient' sample to be processed, it first undergoes a concentration step then amplification and associated DNA interpretation (excluding Priority 1 samples). The concentration step is required to give the sample the best opportunity to obtain ... 'useful' DNA [profiles] ...

A. Yes.

Q. And she doesn't deal there with your misunderstanding yet of the 2 per cent or the difference between the 2 and 30 per cent questions?
A. No.

THE COMMISSIONER: Q. Nor, as I see it, are you told about the ability to get usable profiles from samples returning quants below 0.0088 ng/µL quants?
A. No, there's no information there about their own observations or what in that - you know, so it's still - I am still under the assumption it's 2 per cent.

Q. I am sorry, Inspector Neville. I was interrupting you.
A. No, it's fine, I had finished.

THE COMMISSIONER: Mr Jones, do we know whether a quote was ever sought from this company, bdna, that runs the forensic register, or the data that Ms Allen referred to at the foot of her email?

MR JONES: No, we don't, but I will make that a rule, that --

THE COMMISSIONER: We better send a requisition to them. Thanks.

MR JONES: We will look into that, Commissioner.

Q. At [WIT.0020.0003.0001_R at 0079] 24 February, on the same day at 1 o'clock, you respond to Ms Allen, correct?
A. Yes.

Q. You have a moment to refresh your memory of that, because we are going to get you to summarise it for us in a moment.
A. Yes.

Q. Right.
A. So this is when the penny dropped for me that the success rate wasn't 2 per cent. 2 per cent relates to the likelihood of the process resulting in a new link rather than the likelihood of obtaining a profile.

Q. That's what we see at paragraph 2 there.
A. The actual success rate is roughly 10 per cent overall, according to Figure 1 in the Options Paper. I made comment that:

> *... using the number of new links to measure the value of analysis is ... problematic because the probative value of the evidence will vary hugely depending on the sample type and location.*

Q. I will just get you to explain what you are saying there.
A. Well, for instance, they're treating all samples as if they have the same probative value or evidential value, and I said something yesterday, and I will use the same sample.

For instance, for a rape case, DNA on the swab, on the internals of - an internal swab of a victim, is a lot more important than DNA on a cigarette butt 300 metres up the road. So according to this logic, if you had got the cigarette butt, you discount the vaginal swab. It just defies logic. It really does, although I did say I could see the logic to some extent, but it does over-simplify it. I have said here that the 10 per cent is much closer to the 30 per cent that I observed. I then alluded to that I did some calculations. So in the Options Paper there is a bar graph, basically.

Q. Mr Woolridge, can you shrink that so that the Inspector can see what is on the next page of his email response. Or perhaps scroll up. Perfect. Thank you. [WIT.0020.0003.0001_R at 0080]. And could you just zoom in on his graph there. Thank you.
A. So that graph shows success versus failure of testing these samples in the range. So at the bottom of the bar graph, it's the bottom of the range at 0.001. At the top is the top of the range, 0.0088 ng/µL. And understandably, the ones that have less DNA right at the bottom, the success rate - there is much more failures than successes. But at the top, the success rate has increased.

So I did a little sort of summing-up of the numbers there in the range between 0.0088 and 0.0066, at the top end, and I counted the number of successes and the number of failures, and it appeared to me then the success rate, in that area of the range, the top end of the range, is

24 per cent. So I drew that to Ms Allen's attention and said that's closer to what I'm seeing, 30 per cent.

Q. Right.
A. The other thing that is interesting in this graph, too, is that the number of samples, it seems, that they have actually tested, there's more in the bottom end, which may skew that figure, which may actually be a reason why the 24 per cent is lower than what I had seen in 30 per cent.

Q. Can you just close off the graph a little, please and keep that image there. You conclude on the first page - sorry, Ms Allen says to you on that first page in the second-last paragraph - sorry.

You in the second-last paragraph say to Ms Allen that:

Investigators are advised to let the DNA Management Section know if they seek for this to occur.

That is, the testing?
A. Yes.

Q. You make reference to the onus to make a decision?
A. Yes.

Q. And you identify that that's problematic for members of the police to make, whether testing should proceed, because they do not have access to information about the quality and quantity of DNA present. You will remember yesterday I asked you what uses you could have had for the information on the Forensic Register that you had a brief access to?
A. Yes.

Q. You go on then to identify that you had access to, for some time, some visibility of that information. That is, quant values and the quality of the DNA?
A. Yes. It's the quant, the degradation values, yes.

Q. And are you saying there that your DNA Management Unit, that could see that for a small period, would assist them in making decisions if they were consulted by frontline police officers about whether things could and should be reworked or further worked?

A. Not really the DNA management but more the forensic officers, yes. Because some or most of my staff are administrative officers, but if we are to make decisions about whether testing should be undertaken or not, based on my evaluation of that bar graph, you could see that the ones at the top of the chart are going to have a higher success rate. So that information, it would be very useful in informing us whether you should go ahead with the testing or not.

Q. And then on page 80 there, [WIT.0020.0003.0001_R at 0080]. We will zoom in to your text at the bottom of the email, you inquire whether, after cutting and pasting that table, it would be worthwhile revisiting the threshold?
A. Yes.

Q. At that stage, you say you are not supportive to returning to automatically processing of all of the samples?
A. That's right.

Q. You think it would be a retrograde step and unnecessarily tie up the scientists. This is in the context you have been told an increase to the budget will slow down the scientists and that you may lose your whole sample. Are you still of that understanding at this time?
A. There was some --

Q. This was February 24th?
A. It was more you could see at the bottom end of that range there was a lot of failures. You can see the majority of them, there was - well, the overwhelming majority would not yield a sample. So I didn't think - yes. So you can see there that in fact there were no successes. I can't read the gradient there, but towards the bottom of that table there was virtually no success. So I didn't think that auto-micro-concentration of every sample would be an effective use of resources, but I did think that we really needed to have a look at the threshold and fine-tune that to maximise the opportunity of getting profiles.

Q. And in fact, you say at the end:

> *However it also highlights a need for us to modify our practices. Can you please provide advice on the practicality of the*

suggestions I have made? Alternatively I would be very interested in any improvement suggestions you may have.

A. Yes.

THE COMMISSIONER: Mr Jones, is this an opportune time?

MR JONES: It is.

THE COMMISSIONER: We will adjourn for 20 minutes.

SHORT ADJOURNMENT [10.57am]

THE COMMISSIONER: Yes, Mr Jones.

MR JONES: Q. Commissioner, we are still on exhibit 71 of Inspector Neville's statement at [WIT.0020.0003.0001 at 0077 and 0078]. Ms Allen replies to your email and she replies on 3 March 2022 at 12:34?
A. Yes.

Q. She thanks you for your recognition of them, being the DNA lab, as experts in DNA profiling?
A. Yes.

Q. And she goes on to speak about the Queensland Government having made:

... significant investment in the expertise and skills of all staff in Forensic DNA Analysis in our area ...

A. Yes.

Q.

... profiling and interpreting and it's great that they are recognised for that.

Then, for what seems to be the first time since you raised this issue in 2018 and then in December 2021, Ms Allen clarifies the Options Paper figure of 1.86?
A. Yes.

Q. She makes reference to it being data from 2017 there in that paragraph?
A. Yes.

Q. That's incorrect. The data is on page 3 of the report as having come from 2016, but otherwise she makes reference to the 1.86 being attributable to or linked to the National Database?
A. Well, being uploaded to the database. Yes.

Q. My apologies.
A. There doesn't have to be a link, but yes, it's uploaded.

Q. Then in the next paragraph, Ms Allen refers to:

The Commissioner ...

I assume that's the Commissioner of Police?
A. Yes.

Q.

... delegates the responsibility for DNA testing [to the lab].

A. Yes.

Q. Ms Allen makes reference to a spreadsheet used within your DNA Management Unit regarding quant values, et cetera?
A. Yes.

Q. Do you know what she is referring to there?
A. We didn't have access to the quant values, so I wasn't really aware of the spreadsheet that she was talking about.

Q. She goes on to ask you for a copy of it, because it would help if that could be incorporated into the Forensic Register?
A. Right.

Q. But you don't know what she is referring to there? Just have a moment to have a read of the paragraph.
A. Yeah, I wasn't sure what she was referring to. I think now, as time has moved forward, she may have been referring to a spreadsheet that the cold case people were using to make decisions on - because for that period of time they would ask, sorry, Queensland Health for the quant values, and I think they use some kind of formula to make decisions on whether they would ask for retesting. That

was based on the degradation and quant values.

Q. In any event, the quant values or degradation values are coming from the lab, aren't they, not QPS?
A. That's right. I'm not sure what she was asking.

Q. Then she seems to refer to your quote, or quote you from your email:

> *... you've rightly pointed out 'there is a lot to assimilate when you don't work in the field'.*

A. Yes.

Q. And this is the first substantive assistance she has given you in assimilating the Options Report, isn't it?
A. Yes.

THE COMMISSIONER: Well, what's the assistance, Mr Jones?

MR JONES: Paragraph 2. She has identified now that there has been --

THE COMMISSIONER: Q. But Inspector Neville --
A. I guess it was more confirmation that I was right.

Q. You had already put that. You weren't corrected earlier, but once you let the secret out, you were then told what the secret is?
A. Yes.

MR JONES: Q. Then in the final paragraph again Ms Allen incorrectly attributes the data to 2017, but ultimately goes on to say:

> *We anticipate providing a follow-up paper to [your superintendent] in approximately two weeks.*

A. Yes.

Q. And that's on 3 March 2022?
A. Yes.

Q. Over the page at page 76, [WIT.0020.0003.0001_R at 0076], two hours later, you replied to Ms Allen?

A. Yes.

Q. And you say:

Without doubting your obvious expertise ...

You then go on to - well, I might suggest you are doubting her expertise. And say, "I think you have misinterpreted the data".

THE COMMISSIONER: Where are we now, Mr Jones?

MR JONES: Page 76.

THE COMMISSIONER: Yes.

MR JONES:

Hi Cathie

Without doubting your obvious expertise, I think you may be misinterpreting the data in the paper.

A. Yes.

Q. What are you referring to there?
A. That her response was that the 1.86 refers to - I quoted her:

"The value of 1.86% refers to DNA profiles that are able to be uploaded to the NCIDD ('loadable profile')." However, in part 4 of the paper it describes 'success' as what appears to be a loadable profile and figure 1 indicates [that] this is 10.6% ...

Q. And then over the page - sorry, you've then got a cut and paste of section 4 of the Options Paper?
A. Yes.

Q. And then over the paper you have got the screenshot of the success/fail pie chart?
A. Yes.

Q. And you identify that first paragraph under there that:

The 1.86% refers to where 'success' occurred and it was the only sample in the case that was NCIDD ...

That is the database?
A. Yes. I think I was wrong. I might have outsmarted myself because I think it should have been the 1.45 per cent, not the 1.86 per cent. There was a level of frustration when I wrote this email.

Q. What was the cause of that frustration?
A. I'd been asking for information or, you know, some sort of, I guess, agreement between the two agencies that we review the threshold, and I just wasn't getting any traction.

Q. And then you go on to query the spreadsheet and say that the reason you are querying it or requesting - sorry, you don't have access to the quant values, so no such spreadsheet exists.
A. That's right.

Q. And you request that - you make reference to your earlier requests about having access to degradation values and quant values?
A. Yes. I indicated it would be helpful for us if we had to make that decision.

Q. You then go on to agree that the scientists are in the best position to make the determination as to whether Microcon or further testing ought to occur?
A. Yes.

Q. And that you would much rather the decision be made by an expert with access to all the data?
A. Yes.

Q. But your understanding, now --
A. Yes.

Q. -- is that that does not occur?
A. Yes.

Q. And by that you mean the scientists in that DIFP range are not reviewing the data or the uploads of the Forensic Register?

A. Yes. So, rather, that the testing is automatically ceased and it is left up to the QPS to make a request without access to any of this information.

Q. And you agree that any change should be evidence-based, and you would request that the Options Paper give consideration. That is, I am assuming, the next Options Paper coming?
A. Yes. She prompts a report, and I was hoping that that would give consideration to lowering the threshold value.

Q. And you look forward to receiving that report?
A. Yes.

Q. And that's on 3 March?
A. Yes.

Q. Over at [WIT.0020.0003.0001_R at 0075], there is a reply from Ms Allen, 7 March 2022.
A. Yes.

Q. And there is a clarification about the 1.86 per cent uploadable?
A. Yes. She correctly clarified it. I had made a mistake. 1.86 was uploadable profiles, not the requirement for it to be new evidence for the case.

Q. And says that she will:

... work with Lara Keller on how this is best resolved and we'll provide a recommendation/s in the follow -- up report.

A. Yes.

Q. At [WIT.0020.0003.0001 at 0074], you reply on 16 March 2022?
A. Yes.

Q. Nine days later. And you identify that you are continuing to track the success rates?
A. Yes.

Q. I take it you don't have a report by 16 March?
A. No.

Q. And you identify that you are seeing usable profiles from matters that you are sending back for further work?
A. I indicated that we are seeing the same trend, that 30 per cent of profiles for the next period that we assessed were - sorry, 30 per cent of samples were yielding some sort of profile if we ordered testing be continued. And I provided the information of the details of those samples in a spreadsheet to Ms Allen for her assistance if she was looking at the data, preparing her report.

Q. And it's the case, isn't it, around March/April is when you said yesterday you directed your staff to automatically send anything back --
A. Yes.

Q. -- for further work if it was DIFP?
A. By that time my suspicion - I had suspicion. I was absolutely of the firm belief now that there was problems, and so I directed my staff to any result that came back from Major Crime as DIFP, just ask for them to test it. And we initiated some review of cases or historical cases, back to 2018, particularly around sexual offences, because the success rate was much higher. And the plan was to, in time, go through every major crime.

Q. And so you give her an Excel sheet with different tabs and different data and things that you collected?
A. Yes.

Q. And you identified that between 1 October and 15 March --
A. Yes.

Q. -- I am taking that is from 2021 to 15 March, the day before your email 2022; is that right?
A. Yes.

Q. That there are a total of 155 samples that have finalised testing?
A. Yes.

Q. 43 of those samples obtained a usable profile, a single source, 2-, 3- and 4-person mixed source DNA profiles?
A. Yes.

Q. Two samples returned a quality control failure result?

A. Yes

Q. And 110 samples did not return a usable result?
A. That's right.

Q. The remainder of the samples that were submitted for further processing for this period, 47 samples, are still undergoing testing.
A. Yes.

Q. Therefore, it is unknown at that time what the results will be?
A. That's right.

Q. And you provided that information to her to assist with the report that you understood had been prepared?
A. Yes.

Q. And would be provided to you, I think, soon?
A. It was to be in the next few days. They promised it in two weeks previously.

Q. You finish there with:

It would be very interesting to see how the quant and degradation values correlate with success of further processing.

A. Yes.

Q.

It may also assist with any review of thresholds as requested by QPS.

A. Yes.

Q.

This is provided for information only.

A. Yes.

Q. So you try to give her some context from the Police perspective?
A. I was trying to - I had already given data for a period of six months in 2021, and so this was further testing that was undertaken in a later period. And so I think it would have totalled about 300 samples and some

results, so the dataset was bigger, to assist them, to assist with, I guess, the development of their own report.

Q. You met with Ms Keller and Ms Allen on 17 March 2022?
A. Yes.

Q. Exhibit 76 to your statement which is [WIT.0020.0003.0001_R at 0150] --
A. Yes.

Q. -- is a copy of the minutes?
A. Yes.

Q. And 3.0 is what we are concerned with today.

THE COMMISSIONER: Which one?

MR JONES: 3.0:

> *Insufficient DNA for further processing results.*

There is discussion recorded about the 30 per cent.
A. Yes.

Q. And you explain the difficulties involved with QPS making the decisions of testing samples when they don't have access to quality and quantity?
A. Yes.

Q. And under "ACTION ITEM" there, the lab is to provide you a report by 25 March 2022?
A. That's right. That undertaking was given by, I believe, Lara Keller on the day. Bruce McNab was also present at that meeting.

Q. Yes. And then at [WIT.0020.0003.0001_R at 0073 and 0074], which is the email we were going through before, you replied to Cathie Allen on 1 April 2022.
A. Yes.

Q. Being after 25 March when you were promised a report?
A. That's right.

Q. You say you were previously promised a report, have spoken to Bruce who indicated that he has not received a report, and you are asking her to confirm whether it's been

prepared and sent?
A. That's right.

Q. And if not, is there an expected release date?
A. Yes.

Q. And then you say there Bruce, that is Superintendent McNab, has also requested that the report be provided to you?
A. Yes.

Q. By this stage, was Ms Allen not responding to you and only responding to your superior? Or --
A. During the meeting on the 17th, Cathie made it quite clear that she was displeased with me for providing her the additional data that I did. Words to the effect she said it wasn't appreciated . And then she said on numerous occasions in the meeting that the report would be given to Bruce McNab, basically not me, and said that on a few occasions. So I said to Bruce after the meeting, "I'm just going to tell her to provide it to me", and he agreed.

Q. Then on page 73 [WIT.0020.0003.0001_R at 0073], you send an email to your superintendent on 6 April 2022?
A. Yes.

Q.

As per our discussion this morning, I am hesitant to accept any delay in responding to this concern raised by QPS in December last year.

A. Yes.

Q.

As you would be aware, the Women's Safety and Justice Taskforce has now raised this same matter as issue and has requested advice from the QPS as to the impact of DNA testing thresholds on justice outcomes.

A. Yes.

Q. You identify the analysis you had undertaken about how the thresholds may be impacting on samples?

A. Yes.

Q. On sex offences?
A. Yes.

Q. And you have identified that 66 per cent of samples initially reported as "DNA insufficient" were yielding yielded a profile when requested to continue?

A. Yes.

Q. And then you say:

> *Based on this observation, I don't think it is appropriate to delay any review or provision of information that might assist in understanding the nature or extent of the issue. Failure to take timely action could place people in the community at risk by allowing a perpetrator to go unidentified.*

A. Yes.

Q. And then at page 72 and the top of page 73, [WIT.0020.0003.0001 at 0072 and 0073], your superintendent responds to you a couple of hours later?
A. Yes.

Q. Sorry, that afternoon - the next day, on 7 April 2022. And he says that he has spoken to Lara and that:

> *... their legal unit has asked all such reporting ...*

That is, your request for this report:

> *... is held until the review of [the lab] is commenced at the direction of government.*
>
> *I've expressed to Lara that as the client we are very uncomfortable that such a serious matter would be delayed for the same reasons you outlined, but not just from a public optics point of view, but also as you outlined, from a potential risk*

to victims particularly those who are victims of sexual assault.

And:

She is going to speak to their legal department and get back to [the superintendent].

A. Yes.

Q. Then over the page at [WIT.0020.0003.0001_R at 0072], you respond at 16:18. This is exhibit 71.

THE COMMISSIONER: So this is a month later and - oh, it doesn't matter. It doesn't matter

MR JONES: The report is not until June.

THE COMMISSIONER: Go ahead, Mr Jones. No, no. Go on.

MR JONES: Q. There is an email from you to your superintendent and now Darren Pobar, who has been joined a little earlier on. But who is Darren Pobar?
A. Darren was going to relieve Bruce for a period a week or so after this email. So, as the Acting Superintendent, so I included him on this email for his information. I think you will see that Bruce included Darren --

Q. In this one earlier?
A. -- in the stream on the previous one.

Q. Yes, sorry. On 7 April 2022 at 16:18, you write back to Bruce and say:

That is very concerning. Given this response and our worrying observations in relation to the efficacy of the current testing, I would strongly recommend that we advise QHFS that the QPS no-longer assents to the removal of the automated micro-concentration stage for major crime matters.

Have you seen any terms of reference for the review?

A. Yes.

Q. You go back to him on 10 May:

Hi Bruce

Has there been any information provided back from [the lab]. Have the QPS been provided any information about the terms of reference ...

A. Yes.

Q. And he comes back to you the next day and says:

No mate not yet

A. Yes.

Q. You then emailed Lara Keller on 30 May 2022.
A. Yes.

Q. Which is exhibit 72, Commissioner. [WIT.0020.0003.0001_R at 0094]. It is to Lara Keller and also to Cathie Allen?
A. Yes.

Q. Would you step us through this email, please?
A. I raised that:

During previous meeting and email discussions I have raised concern about the success rates we are seeing when a sample is requested to continue being tested after having received a result [of] 'insufficient DNA' ... Since our last discussions we have undertaken further internal analysis that I feel you need to be advised of. Since January 2021 QPS have requested 393 samples to continue with testing and found that 33% of these samples returned a usable profile. The success rate was 66% for [those] that pertained to sex offences.

And I provided a spreadsheet that gave all that information:

The success rate observed for samples relating to sex offences is disturbingly high and raises the risk that we may be missing evidence that could identify an offender. The QPS needs to take steps to mitigate this ... Based on the results being achieved, the QPS is no longer comfortable with the automatic discontinuation of testing of samples below the value of .008 ng/µL ... This matter needs to be discussed as a matter of priority between both agencies to find a suitable solution. I believe the next meeting has been changed for later in June which may be too far away to discuss this important matter. I would wondered if there was a time you might be available sooner please.

Q. You have still not received the promised report?
A. No.

Q. That was promised to be delivered on 25 March 2022?
A. That's right.

Q. And it is now 30 May 2022?
A. That's right.

Q. Could exhibit 73, which is [WIT.0020.0003.0001_R at 0114], be brought up on the screen, please. That is the report that you ultimately received?
A. It is.

Q. And you received it in June, or it is dated 21 June 2022. Did you receive it around that time?
A. I think it was at 24 June I may have seen it first.

Q. Thank you. On 24 June, that same day that you received it, you provided your analysis of it to Superintendent Bruce McNab, didn't you?
A. I did.

Q. Could exhibit 75, which is [WIT. 0020.0003.0001_R at 0139], be brought be, please. Can you take us through your analysis there that you emailed to Superintendent McNab on 24 June 2022 at 15:11, please?
A. I advised:

I have reviewed the report by Ms Allen [and others].

And that the data that they are now providing accords to some extent with what I had been seeing, which was the 30 per cent.

The important distinction, however, is what is considered successful.

The Queensland Health Report mentions a 25 per cent success rate overall, but it then tried to infer that the success rate really was only 6.3 per cent because they only counted samples that had some type of NCIDD interaction or were able to be loaded to NCIDD as a success. I indicated that that wasn't appropriate because it discounted all of the other profiles that were useful in cases that may not have reached an NCIDD threshold but certainly gave a likelihood ratio in the order of greater than 100 billion, and also profiles that were suitable enough for one-to-one matching, which is usually what occurs in Major Crime matters where you have reference samples and it is a closed set comparison.

So as I result, I said there was an inappropriate - grossly minimising the success by just limiting it to the ones that might have been uploaded or uploadable to NCIDD.

I said there that our own data had indicated that 20 per cent of the samples in our analysis yielded a likelihood ratio greater than 100 billion, which is, as far as we are concerned, as conclusive as you can get. And if that was the measure, then that's a conclusive result; at least, it should be considered that as a concession.

Q. Can I stop you there?
A. Yes.

Q. So now 24 June 2022, you have a good master of the Options Paper and you have mastered or a good understanding of this updated paper?
A. Yes.

Q. And you are seeing that what was once reported as 1.8 or 1.4 per cent is in fact now 6 per cent, roughly?
A. Yes.

Q. You still say that's an inappropriate measure because it's linking to the database, not how we have discussed how you would otherwise use DNA profiles?
A. So they've discounted all the profiles that wouldn't be uploaded to NCIDD. I thought that was grossly minimising the success.

Q. And you have identified that the 10 per cent is now around the 20?
A. That's right.

Q. That is, usable profiles?
A. No, no, no. When I say - sorry, no, no, no. The 20 per cent was based on our own analysis, and that was purely - we had seen at this point now a 36 per cent success rate. But out of that 36 per cent, 20 per cent, or a 20 per cent component of that, were profiles that had a likelihood ratio of greater than 100 billion. The most conclusive result you could get in DNA testing. So I was just highlighting that.

My main point here, look, is that - look, are now seeing a 25 per cent success rate. They are trying to minimise that down, whittle it down to 6.3 for some reason, similar to what they did in the previous paper. They appear to be doubling down on that, that would be the measure of success. And I was saying that is not an appropriate measure of success.

Q. They are now reporting 25 per cent of the samples yield a profile so for comparison purposes you have written in the first paragraph there?
A. Yes.

Q. And that's a reference to what previously had been identified as about 10 per cent?
A. Yes.

Q. Can I ask you this: knowing what you now know and the position that you hold within the DNA Management Unit, if you were presented with 6.3 per cent and you understood that even to attach to profiles - not even the database, but just profiles - would you suspect the ceasing of auto-microcon?
A. Probably not. Having said that, I wasn't privy to the commentary at the meetings and the discussions around what

was stated.

Q. I understand that. But that is a high percentage, isn't it, for --
A. For a major crime, we'd certainly give it a go with that success rate.

Q. We can take it from that that you certainly wouldn't - I withdraw that. Sorry.

Then in the next paragraph down, you say:

The statement that we do not provide case/sample information is incorrect, we make a photograph available of the sample and substrate and include results of presumptive screening tests to assist the scientist to make analytical decision.

A. Yes.

Q. And you are talking there about the information that is uploaded to the forensic database?
A. Yes.

Q. You identify that the QHFSS presented and put this option on you, that is the QPS, not round the other way?
A. That's right. The point was that it was an uninvited approach to the QPS for some reason to accept this Options Paper, and the reason I wanted to say that was that in the paper, it tried to link the Options Paper, the initial Options Paper, to the 2008 initiative where Police took over the screening and subsampling, and they're completely different issues and they shouldn't be linked.

Q. Then you conclude by saying:

Secondly, [the] paper indicates that samples are selected for further processing based on a collaboration between [the Police] and [the lab]?

A. Yes.

Q. And:

[The lab] make no assessment of samples

with a concentration under the .0088 ng/µL threshold, they simply automatically discontinue the process.

A. That's right.

Q. And you make some recommendations there?
A. That's right. The paper actually gave a couple of - well, there were four recommendations, which were quite convoluted and different options, about how you might either continue with the current system of what came out of the original Options Paper, and then there were other options about dropping the threshold and concentrating for different classes of P1, P2, P3.

I had recommended to Bruce that I didn't like any of those options, and my thoughts were for Volume Crime, we should lower the threshold and continue for those, but for Major Crime, I think that it's more important there is a threshold, and even if it is the current threshold, that it triggered the case scientists to actually make analytical decisions about how to treat the samples to maximise the opportunity for getting a proposal file. Now, whether that be concentration or something else, but not to have a hard bar anywhere that stopped testing.

THE COMMISSIONER: Q. Inspector Neville, the word "triage" has been used in these documents, and in your email and in your evidence just now, you discussed options to limit the kinds of samples that were going to be tested?
A. Yes.

Q. My understanding of the word "triage" is that it is applied when somebody has limited resources so that those resources cannot be applied to every case demand, whether it is treatment in a hospital, medical treatment in a war zone, or a testing of samples in a laboratory?
A. Yes.

Q. And because you don't have enough resources to test everything --
A. Yes.

Q. -- you choose not to test some things. And the question is what criterion or what criteria do you apply in making that hard decision?
A. Yes.

Q. Here I haven't seen any evidence in the Options Paper or in this later report or, indeed, anywhere that tells me or could have told you what the resources were and what proportion of those resources were being applied to particular categories of work. So, for example, I don't know whether the samples that fall within the range of quants, 0.001 to 0.0088, is 10 per cent of the work of the lab or 50 per cent or 90 per cent. Do you?
A. No, I don't.

Q. So if it was, let us say, for argument's sake, 5 per cent of the work of the lab and you don't do that work, well, you're not saving much in terms of resources, are you?
A. I'll agree. But I'll just qualify that.

Q. Yes.
A. These are probably the samples that are going to give the most complex profiles, because there's lower amounts there. And it might take more effort at the back end to interpret them.

Q. Yes, yes. Granted that they take more work than other samples --
A. Yes.

Q. -- which might not be right if the sample is just below the top level --
A. Yes.

Q. -- as you discovered.
A. Yes.

Q. But granted that is so, if you assume that the number of samples that fall into this category is only 5 per cent of the work that they do, then you have to ask the question what you are saving by not examining them.

Take the other extreme --
A. So you --

Q. Assume that they are - let me put this to you. Assume it is 90 per cent of the work that they do. Well, in that case that's the work they are doing?
A. Yes.

Q. And you don't cull the work you're doing?
A. Yes.

Q. So a great deal depends upon the percentage of the work that this represents, both in number of samples and, as you have correctly pointed out, in terms of the workload that those samples represent.
A. Yes.

Q. None of that has emerged in any of this so far that I've seen. Have you seen anything attributing - connected with that question?
A. No. As I said yesterday, in August 2018, I tried to find out what benefits may have been realised out of this Options Paper and I didn't get a response. I have tried to work out what the capacity of the lab is in terms of possible number of samples per year so that we could modulate for that, and I haven't had a response on that.

What I do know, and I just thought about that while you were mentioning it, there are 21,000 results that were DIFP since 2018 and roughly we put through about - somewhere to 25,000 to 27,000 samples a year. So that might give a rough guide on how many fall in that category. So in the four years, let's say, there was 100,000 samples that went through the lab. 20,000 were reported as DIFP, so about a fifth of their workload.

Q. Over that time, have you become aware of a significant improvement in turnaround time and efficiency?
A. No. In fact, immediately following the DIFP work flow, turnaround times increased. So they went from around 40 days to 55 days.

Q. Thanks.

MR JONES: Q. Just over the page at 140 there [WIT.0020.0003.0001_R at 0140], you finish the email with a couple of tables identifying some of the data from "1 January 2021 - 2 June May"?
A. Yes.

Q. Sorry, what is that meant to be? "2 May June to 2 June 2022"?
A. Yes, that was just some information on success rates.

Q. Just scroll up a little bit there. Do you see that

first line from 1 January 2022 to --
A. Yeah, there are a total of 574 samples that were finalised testing and I gave a breakdown of the results achieved.

Q. Just to clarify, though --
A. Yes?

Q. Is it June to May that you do? See there?
A. I don't know, sorry.

Q. The email has been sent in June.
A. I assume it's June.

THE COMMISSIONER: It is June in the second table.

MR JONES: Would you go to paragraph 245 of your statement. Commissioner, that is page 47.

THE COMMISSIONER: Thank you

MR JONES: Q. [WIT.0020.0001.0001_R at 0047]. And paragraph 245. You have a heading there:

> *Summary of consequences of accepting the Options Paper.*

A. Yes.

Q. Take us through paragraph 245, please.
A. So I am now satisfied that the true success rate is around 30 per cent or more. That, I think, is a - it would be my minimum. I think 30 per cent would be higher. There were approximately 21,000 samples that fell within this concentration range since January 2018, and that 1,410 of those had been requested for further testing and 549 of those then yielded a profile. So that's how I came up with the figure of 30 per cent. So that is conservative, really.

Q. And there are still 7,000 - or at the time of doing this statement, in August --
A. Various --

Q. There are 7,000 outstanding Major Crime samples?
A. That's right, that's right. And I will not know the true success rate or, I guess, the true consequence until

all of those have been assessed and tested.

Q. Above that at paragraph 242, you refer to you in March 2022 asking the DNA Management staff to do a review of all sexual assault cases, and we've seen it. You would have heard about that in the emails and the task force?
A. Yes.

Q. As a result, over the page at page 48, [WITR.0020.0001.0001_R at 0048] you discovered two example cases from reworks that your unit asked to be done --
A. Yes.

Q. -- as a consequence of the review you were doing in March?
A. Yes.

Q. The first one is a rape that was investigated by Detective Senior Constable Troy Bond?
A. Yes.

Q. We won't say geographically where he is, but he is a frontline investigator.
A. Yes.

Q. And the case that you refer to there was a rape of a lady who gave an account immediately after being raped?
A. Yes.

Q. She was submitted to SAIK and you explained before that that was a Sexual Assault Investigation Kit?
A. Yes.

Q. And they do high/low vaginal swabs --
A. That's right.

Q. -- as part of that?
A. That's right.

Q. And part of her complaint was that she had been digitally and penile raped, and then the defendant or the accused had ejaculated on her back?
A. Yes.

Q. And part of the accused's story was that they had been inside a room and gone outside to have a drink?
A. Yes.

Q. And there was a bottle that was tested for DNA?
A. Yes.

Q. And the purpose of that was to corroborate an account?
A. Yes.

Q. And swabs were taken of the complainant's back?
A. Yes.

Q. That was to corroborate her account?
A. Yes.

Q. And this person had exercised their right to silence and chose not to speak to police, correct?
A. I believe so.

Q. But had given an account to some other people?
A. I think they may have made a statement to police that it was consensual.

Q. You might be confusing that with another one.
A. Okay.

Q. But this - it is difficult not being able to talk about the geographics, but this one is in the north of the state.
A. Okay.

Q. Do you have with you the table or figures of what swabs were sent and returned "DNA insufficient" results?
A. I do. So there were nine swabs taken. Six from the victim, from intimate areas, including internal swabs.

Q. We will break that down. So the vulva was swabbed?
A. Yes.

Q. And her lower back?
A. Yes.

Q. And perineum; is that right, yes?

Q. Okay. Keep going.
A. And then there were three swabs actually taken from the offender's genitals.

Q. And that was from his penis and shaft?

A. Yes.

Q. Yes.
A. They were all tested around 25 November 2021, originally. Some of the examples, particularly from the victim, were at that point spermatozoa positive. So they had examined them under the microscope and seen sperm.

Q. Do you know whether they were from her back?
A. Yes, two from the back that were examined microscopically on 25/11/2021 were found to be micro-positive for sperm. And then on - would it be easier if I went through each sample individually or --

Q. Whatever is easier for you.
A. Let's just do that. From the victim, there was a vulval swab that was found to be micro-positive for sperm on 23 November and then it was tested on 25 November in 2021. They reported the result "DNA insufficient." There was a request for retesting in May this year. It came back with a hit to the offender, 100 billion likelihood ratio, over 100 billion.

The same thing for the perineal SAIK swab from the victim. Again, in November last year it was micro-positive for sperm but then reported as DIFP. Further testing was undertaken in May this year. It came back to the offender with a likelihood ratio of 100 billion.

The same with the lower back. There were two samples taken from the victim's lower back. Both were sperm positive, both reported in November last year as "DNA insufficient". However, they were further tested actually in March and in February this year, a match to the offender, 100 billion likelihood ratio.

A couple of other samples taken from the victim's back. They weren't micro-positive for sperm, but they were reported as DNA insufficient" in November. Further tested - in November, sorry, 2021. Further tested in June this year, a match to the offender, 100 billion likelihood ratio. So there were six samples in total taken from the victim originally reported as "DNA insufficient" and then later tested and reported matching the offender.

Then there were some samples taken from the offender. There were three samples taken, one from his penis, all

reported in November last year as "DNA insufficient", all retested between May and June this year and all came back to matching DNA to the victim, so there is cross-transfer between them both.

Some of the likelihood ratios were a little bit lower for these, but still in the order of between 10,000 and 100,000. There was one, sorry, that was from the shaft of the penis which was only low support for the contribution, but still it couldn't be excluded because there was some DNA there. And from the glans of the penis it was between 1 million and 1 billion likelihood ratio. Interestingly there, all samples tested, nine samples tested in November, all between 25 and 29 November, all reported as "DNA insufficient". When further tested, all came back with a profile.

Q. The SAIK kits for the complainant, the victim, are done by a doctor?
A. Yes.

Q. Using a swab internally?
A. Yes.

Q. And externally?
A. Yes.

Q. And, similarly, a SAIK kit is performed on a defendant to swab the penis?
A. Yes. Sometimes.

Q. Sorry, when you say "sometimes", there's no other way of getting testing?
A. Well, only if you can find the offender.

Q. Sorry, I am talking about the actual performance of it --
A. Yes.

Q. -- is done by a doctor?
A. Of course.

Q. And it is rubbing a swab down the skin of the penis?
A. I assume so.

Q. Right. That accused had told people that there had been sexual interaction between he and the complainant?

A. Yes.

Q. But the DNA was still useful to corroborate the account of the complainant?
A. I think the account of the complainant was that she was pushed down and raped from behind, and the fact that the semen was found on her back corroborated the story.

Q. And it was also used because a bottle was found outside and it had the accused's DNA on it, which gave an explanation for how it made its way outside?
A. Okay, I'm not sure about that.

Q. Okay. Very well. Thank you. You are aware that the investigating officer understood at the time he was investigating this matter that "no DNA detected" meant that there was no DNA detected at all in an example, correct?
A. Yes.

Q. And to his knowledge this term or similar wording has always been used for that type of notification?
A. Yes.

Q. But he was aware that he could contact the DNA Management Unit if he had any questions.
A. Yes.

Q. And you're aware that the wording "DNA insufficient for further processing", he understood that to cover all scenarios where DNA had been located, however, further working of the sample would not likely result in a profile being developed?
A. That's what he claims, yes.

Q. And you're aware that he understood, though, that he could call the DNA Management Unit and seek clarification?
A. Yes.

Q. And that it wasn't as urgent in some cases because there was some acknowledgement of sexual contact between the two --
A. Yes.

Q. -- and your team ordered the retesting before he had an opportunity to?
A. Yes.

Q. Thank you. You have then provided another account or example there. We don't need you to go through that. The officer will come and tell the Commissioner about that.

At paragraph 248, you speak about the Options Paper indicating that the strategy would improve turnaround times?
A. Yes.

Q. And the Commissioner asked you some questions about that?
A. Yes.

Q. And your answer was that you didn't see an improvement?
A. That's right.

Q. And you have outlined that at paragraph 249 onwards?
A. Yes. In fact, it increased.

Q. You make reference to speaking with, or emailing Cathie Allen about the Options Paper --
A. Yes.

Q. -- about that?
A. Yes.

Q. Have you got your statement of 14 September 2022 there? [WIT.0020.0008.0001_R]. Have you got it there, Inspector, or not?
A. I have got a draft of it in front of me.

Q. Perhaps go from the screen. If we could have page 4, which is paragraph 12.

THE COMMISSIONER: The statement dated what, Mr Jones? 8 or 14?

MR JONES: 14 September 2022.

THE COMMISSIONER: Thank you. Yes, go ahead.

MR JONES: Q. You deal with the decision on 6 June 2022 from paragraph 12 in your third statement [WIT.0020.0008.0001_R at 0004]?
A. Yes.

Q. Is it correct that you understand no one from Queensland Police Service was consulted about the decision made by The Acting Director-General of Health on 6 June?
A. I certainly wasn't. I don't know of anybody that was.

Q. Do you consider that the Queensland Police Service should have been consulted about the process change?
A. They're our samples, so potentially yes.

Q. The Queensland Police Service was not advised of the process change formally until 21 June 2022?
A. Yes.

Q. Could [WIT.0020.0008.0001_R at 0164] be brought up, please, Mr Woolridge. This is exhibit 200 to your statement of 14 September 2022. I have just given you the wrong page there. My apologies.

You were notified by an email from Lara Keller?
A. Yes. There was an email sent from Lara Keller to Bruce McNab that as of 6 June, I think it was, that all samples would be profiled and they were no longer going to use the "DNA insufficient" regime, and Bruce forwarded that to me.

Q. What was your understanding about whether the laboratory was concentrating samples in the DIFP range at that time?
A. Well, at that point I actually thought they must have been concentrating them because that's their own Options Paper in validation, or lab validation was, as reported in the Options Paper, that for samples below 0.0088 ng/µL, it was subject to stochastic or random effect; you couldn't get a reliable profile. So I assume they would have been concentrating them.

THE COMMISSIONER: Q. In fact, the Options Paper and the whole discussion surrounding this at the time called the process the "auto-microcon" process?
A. That's right. So we have assumed that they have gone back to the auto-microcon. And my concern was that if they were doing that for Volume Crime that might have a negative impact on turnaround times and it might grind the lab to a halt. So I just raised that as a concern to Bruce. And I also asked, I think, for a copy of the report at that point. No, no, that's it. So thank you.

MR JONES: Q. Could we return to the statement of 14 September 2022 to page 6 which is [WIT.0020.0008.0001_R at 0006]. See paragraph 18 there, and, Inspector, I will just give you a moment to have a look at that.
A. Yes.

Q. So turnaround times remained the focus of the Queensland Police Service at that point?
A. Oh, it's not a focus. It's a concern if, for instance, for Volume Crime, if there was - because the paper indicated that it was going to - it's quite a big - quite a lot of work to do this, these samples. And if all of the Volume Crime samples were going to be micro-concentrated, then it might blowout turnaround times in fact on Major Crime.

So as a result, I spoke to Darren Pobar at that point who was Acting Superintendent. We met with the Assistant Commissioner Marcus Hill on 15 July just to discuss whether this new strategy might impact on turnaround times. And, as a result of that, Darren sent an email to Helen Gregg, I believe, who was acting as the ED at the time, just asking what was occurring and, if this was going to impact on turnaround times, what was the strategy from Queensland Health to minimise that?

Q. Over the page to paragraph 19. It was not until 20 July 2022 that you understood that they were not micro-concentrating low quantification samples?
A. That's right. So around 20 July, I think it was on that date, I was advised by Olivia McIntyre that Allison Lloyd from Health had told her that these samples were going straight through without micro-concentration. And I discussed this with Darren then, given my concern that we are just wasting the sample, if that's the case, potentially, or a component of the sample. So Darren raised that with Helen in an email, asking again or clarifying what is occurring with those samples, are they being micro-concentrated.

Q. Between 6 June and 20 July, you were not aware of the process being undertaken by the lab?
A. No.

Q. Moving to 17 August 2022.
A. Yes.

Q. On that day, David Rosengren spoke to you?
A. Yes.

Q. Dr Rosengren was seeking your approval or support for a change in process?
A. That's right. I got a phone call from a fellow called Matt - well, I didn't get the phone call. My staff alerted me to a phone message from Matt Rigby advising that he wanted to speak to me about the process they were following out there and they wanted to change it. And then we had a phone call then, after that. They called me back and there was a fellow introduced himself as David Rosengren, and we discussed or they were seeking advice from me whether the QPS would either "support" or something like that, along those - words to that effect, a return to the process where all samples were micro-concentrated.

I raised with them that I had warnings from the Managing Scientist that that might result in the loss or the consumption of the sample and I said, however, I now thought that warning might have been false. And I gave the reasons for that, because there was 35 microlitres and you only needed 15 microlitres.

Q. You are talking about what you understood had been provided by Ms Allen to you previously?
A. Yes. So I had just relayed to them that concern but I had said I am not in a position really to really know; that was my suspicion. And they - I said I would get back to them that day, and later on I said I needed to consult, and I had contacted Matt Rigby and basically said, "Look, this is a decision for Queensland Health," and, you know, we weren't comfortable with shifting the risk to QPS because we don't have the expertise to make that decision.

Q. You didn't think it appropriate for the QPS to take that advice role and decision making role?
A. Well, we're not in a position to know, (a), whether the - if the policy was going to risk the loss of samples, et cetera, or exhaust the samples, and we're not the experts. So I gave some advice, basically, that whatever they did, it needs to be - the decision needs to be in the context that the QPS wants to maximise the opportunity to get a profile from every sample. And if there was some limitation in the technology out at Queensland Health for a particular sample, they knew that they couldn't test it, please give us the opportunity to do the testing somewhere

else. Don't exhaust it. And that was really the limit of the advice.

Q. And otherwise you provided email information, including emphasising the QPS concern about exhausting samples?
A. Again, I did say that I qualified that we weren't in a position really to know. That was just a warning that was given to us previously.

Q. After the decision was made on 19 August, you had concerns with the decision?
A. I guess.

Q. Did you raise those in an email for seeking urgent review? This is exhibit 206 of the statement [WIT.0020.0008.0001_R at 0211]?
A. Yes.

Q. The email was marked as high importance?
A. Yes.

Q. And you sent it to Matt Rigby in the Office of the Director-General?
A. Yes.

Q. Have you received any response from the Office of the Director-General?
A. Yes. I was referred to Lara Keller.

Q. I beg your pardon?
A. I was referred to Lara Keller, to deal with it.

Q. You provided some new emails via your solicitors last night?
A. Yes.

Q. Could [WIT.0020.0009.0001] be brought up, please, and turn to page 12.

MR JONES: Commissioner, would you like a copy?

THE COMMISSIONER: I would. Do your colleagues have copies?

MR JONES: It has been uploaded and shared with the parties, as I understand it.

THE COMMISSIONER: Thank you.

MR JONES: Q. At page 12, down there there is an email from yourself 8 September 2022 at 8:58am.

THE COMMISSIONER: The pages aren't paginated, so it is the 12th page, is it?

MR JONES: Sorry, for Mr Woolridge the operator it is page 12, I understand. No, it's not. That is 8 September. That's the last email. And up from that is an email from Matthew Rigby of 13 September 2022. [WIT.0020.0009.0001_R at 0012].
A. Yes, yes.

Q. Have a read through that, would you, please.
A. So Matt Rigby had replied, said:

> *We have carefully considered the issues raised in your email below.*
>
> *Our primary objective is to undertake DNA testing in a manner that has been appropriately validated ...*
>
> *We understand that questions have been raised following the decision, on 19 August ...*
>
> *It seems there are also questions about the circumstances in which QPS should approve testing if the result will risk exhausting [the] sample ...*
>
> *It might be beneficial for us to arrange a meeting between QPS and key personnel from FSS to discuss these matters. If you agree, can you please contact Lara ...*

And I, as a result, contacted Lara Keller to discuss the matter.

Q. I'll just stop you there.

MR JONES: Commissioner, have you managed to find where we are?

THE COMMISSIONER: Yes, yes. Yes, I've got it.

MR JONES: Q. Alright. And then up from that --
A. Do you need for me to outline what the concern was?

Q. I beg your pardon?
A. Do you need for me to outline what the concern was?

Q. Yes. Please do.
A. The concern was, post the August 19 decision to concentrate everything to a blanket volume of 35 microlitres in the process, a scientist had come forward saying that that blanket policy is risking samples at the lower end of the range - so I think she said somewhere lower than 0.0066 or whatever - because those samples, if you concentrated them to 35 microlitres, they are still too dilute to get a profile. So, in essence, if you run it, you have now wasted half of the sample.

THE COMMISSIONER: Q. What you are being told is that to apply a blanket policy - I'll start again. If you are going to micro-concentrate samples between .001 and .0088 --
A. Yes.

Q. -- if you apply a blanket policy of concentrating the solution down to 35 microlitres --
A. Yes.

Q. -- that won't suit all of the samples across the range?
A. Correct. Yes.

Q. So what has to happen, were you told, was that a scientist has to apply judgment about the degree to which there should be concentration?
A. That's right.

Q. Because what's good for one quant may be entirely unsuitable for another quant?
A. That's right.

Q. Therefore, although it might have been the procedure before 2018 to apply a blanket policy --
A. Yes.

Q. -- you were being told by a scientist from the lab that that was unwise and that scientists should be asked/required to apply judgment to the question depending upon the nature of the sample?
A. Correct.

Q. And so your concern that you wanted to communicate to those who were going to make these decisions, your concern was to ensure that they understood that this was a view from a professional and that they were to take that into account?
A. And subsequent to that, I had two other scientists contact my staff seeking permission from the QPS to concentrate to a different volume. So I now had three scientists from the laboratory confirming it may not be appropriate to have a blanket policy.

THE COMMISSIONER: Yes. Go ahead, Mr Jones?

MR JONES: Q. You reply on 13 September at 8:18 and make clear that you weren't in a position to provide advice, et cetera?
A. Yep.

Q. And then you receive an email from Ms Keller on 13 September 2022 at 1:11?
A. Yes.

Q.

I am not available [to speak with you.]

And:

I understand we have our regular ... meeting on Thursday?

A. Yes.

Q. You then respond at 1:14:

Thanks for letting me know. If you have time for a phone call tomorrow that might be helpful. I could make time anytime you like.

A. Yes.

Q. And then on 13 September at 13:17 from Lara Keller:

Perfect. How about I call you at 11am tomorrow?

A. That's right.

Q. Then there is an email from you on 14 September 2022 at 12:29?
A. Yes.

Q. Which is after you met with Lara and Helen?
A. Yes. We met and they described to me the difficulty with changing the procedure. They had to have something that was validated, so that's why they reverted back to the 2018 procedure.

Q. And you have asked for that confirmation, or "for clarity could you please confirm"?
A. She wanted confirmation from me that it was okay for them to exhaust samples.

Q. And then you outline the concerns you still have, over the page there, in the dot points?
A. I indicated that I am still left with the concerns that haven't been resolved, that the blanket concentration of examples to 35 microlitres may be risking the loss of evidence.

Q. And then you get an email back on 15 September 2022 at 13:34 from Lara Keller?
A. Yes.

Q.

Good morning David

I trust that our conversation yesterday answered your questions and clarified the process in place since 19 August 2022 (per the attachments).

We look forward to receiving definitive advice from QPS regarding permission to consume remaining sample.

In the meantime, we will collate and analyse data (as discussed).

So there was another discussion?
A. Yes.

Q. You have then responded to that email?
A. I gave a response basically saying I couldn't give this blanket, "You could exhaust all samples", but I said that QPS understands it is a destructive test and that sometimes, you know, it's better to exhaust the sample than waste half of it and not be able to get a profile anyway.

So I gave permission, yes, if they are comfortable that their testing is likely to yield a result, then go ahead and exhaust the sample if you need to. But if they didn't have the technology to test a particular sample and they knew that, then leave us the opportunity to send it to another laboratory that had the requisite technology.

Q. You conclude by saying:

I look forward to the outcome of the data analysis. Given that if the concerns are correct, the practice could be risking the loss of evidence, would it be possible to establish a timeframe around this please?

A. Yes.

Q. And you get a response from Ms Gregg. This has come up on 16 September at 11:57:

Lara has passed this on to me. I will be able to give you a better indication of timeframe by the end of next week.

A. Yes.

Q. Above that, you thank her?
A. Yes.

Q. And then on 20 September 2022, you write another email:

Hi Helen and Lara

I appreciate the efforts being undertaken to assess the concerns about the potential risk of evidence being lost [if there is a blanket concentration.]

Out an abundance of caution, I would request QHFSS temporarily pause testing P1 or P2 samples within the range until the matter is resolved, please.

This temporary pause of testing of samples in the range is contingent on QPS receiving advice on the outcome of your data analysis.

Could you please confirm by return email that such testing has been paused.

A. Yes.

Q. You get confirmation on 20 September 2022 at 8:56 from Lara Keller?
A. Yes.

Q. Well, not confirmation, but asking for you to be very specific about your request, please, and to confirm whether this represents a formal request from the Police:

We are presently under the direction of the [Queensland Health] A/Director-General as per the memo dated 19 August 2022. Any proposed change to current practice would require consultation and clearance by his office before implementation could be considered.

A. Yes.

Q. And then you replied to that, 20 September 2022 at 9:55:

This week a third scientist made a request to concentrate to a different volume ...

This is what you were referring to before?
A. Yes.

Q. And:

... was not appropriate for that sample. We are in a position now that we have multiple experts indicating that the concerns raised initially may be valid.

A. Yes.

Q. And:

This is a formal request from QPS made in consultation with A/Supt Larissa Miller. Please note that it is only a request for a temporary pause until Helen can advise as to whether there is any risk in the recent process adopted.

A. Yes.

Q. And then you get your response on 21 September 2022 at 14:51 from Lara Keller:

I have briefed up and will be in contact ...

And there is some strange text there, but "I am able", I think?
A. Yes. So there is no confirmation there, though, that testing has been paused.

Q. On 21 September 2022 at 2:52 pm:

I hope you and your team are being looked after at this difficult time.

A. Yes.

Q. And a response, a further email from you on 24 September 2022 at 11:41?
A. Yes.

Q.

I am just following up on your email dated 16th indicating some initial feedback this week. I wondered if this could be provided soon given the temporary pause. I

apologise if I missed this.

You haven't had a response yet?
A. That's right.

Q. And then you get a response on 26 September 2022 from Ms Gregg:

We are making progress, but as with any scientific idea, it needs enough of the right data with robust analysis. This takes time. I envisage it will be months not days or weeks until this proposal is properly evaluated.

A. Yes.

Q. And then you reply on 26 September 2022 at 12:21?
A. Yes.

Q.

Thanks for this information. Can you confirm that testing of samples in the range has been paused and when that might have occurred, please.

Because at this stage you still don't have any confirmation of it?
A. That's right.

Q.

This pause was requested whilst you considered and reported back on concerns raised by your staff about the appropriateness of concentrating to a blanket volume. Is the timeframe below an indication of when you might get back to us as to whether or not there is any basis to the concerns raised (by one scientist and corroborated by two others independently)?

Are you talking to you scientists that had either spoken to you by phone or come in to see you?
A. No. Scientists that had contacted my staff seeking permission to concentrate to a different volume.

Q.

Is it possible to get some indication as to whether this has any basis sooner please? We can't really wait months to test some of these examples.

A. Yes.

Q. Have you received a response to that email of 26 September 2022 at 12:21?
A. Not as of this morning.

MR JONES: That's the evidence-in-chief. Thank you, Commissioner.

THE COMMISSIONER: Thank you. Mr Hunter, are you going first?

MR HUNTER: I think there is a slight change to the order and I will go last before re-examination if that's convenient.

THE COMMISSIONER: So Mr Rice?

<EXAMINATION BY MR RICE

MR RICE: Q. Can I just ask you a few things about turnaround time, Inspector. You explained yesterday that turnaround time is not simply a measure of efficiency of the laboratory, per se, but that it's linked to a higher purpose, is it not? That a faster turnaround time serves the interests of timely detection or timely solving of crime?
A. Yes.

Q. You have had fairly extensive contact with a range of people within FSS from Executive Director level perhaps down to the scientists from time to time?
A. Yes.

Q. Over a number of years?
A. Yes.

Q. Is it your experience that the scientists and the management at the laboratory are in tune as you are with the objective of timely turnaround with a view to solving

of crime?
A. I would agree with that.

Q. So it's not just a matter of efficiency of delivery in the same way as Australia Post might measure its efficiency by how long it might take to deliver a parcel? There is a higher interest involved in the faster turnaround time, is there not?
A. I guess there is; yes.

Q. I think you have agreed with me already that you understand that the scientists are on the same page as you with that?
A. Yes.

Q. That's as you would expect it to be, wouldn't you?
A. Yes.

Q. And it would be reasonable for the scientists and the police in collaboration to work out ways to achieve the timely turnaround with that higher interest in mind?
A. Yes.

Q. And in fact, in your case when you came into the job, that was one of the, the turnaround time was one of the factors that you very early addressed?
A. In June 2018, yes.

Q. One of the things you noticed from quite early in the piece was that turnaround time for Volume Crime was about 10 weeks apparently? 50 days?
A. It was quite high, yes.

Q. So you devised a measure by which to try to reduce that?
A. Yes.

Q. And that involved, in fact, sacrificing the submission of some samples to the laboratory with that interest in mind?
A. Well, it limited it in the first instance. So officers could always submit further samples if the initial testing didn't yield results.

Q. On approval?
A. On approval, yes.

Q. Okay. But the object which you were pursuing was to achieve a more timely turnaround in the interests of resolving crime?
A. Yes.

Q. And you were prepared to sacrifice the submission of samples to achieve that outcome?
A. I was prepared to triage. If that ended in - if the consequence was that some of the samples weren't submitted, that may be because there was other evidence. For instance, the initial testing yielded a result or the offender may have been identified by a fingerprint, et cetera. But the --

Q. Sorry.
A. If the officer, I guess, wasn't tenacious enough to request further testing, then that might have been the end result.

Q. But did you not - I am looking at paragraph 87 of your statement, [WIT.0020.0001.0001_R at 0018], did you not seek approval to actually limit the number of samples that would be submitted, trace samples?
A. Yes, I did.

Q. You call it "triage". I used the word "sacrifice", but we could use another word. You opted to limit, did you not, the number of samples that were submitted with a view to achieving more timely turnaround?
A. That might have been the end goal - not the end goal, but the end result, yes.

Q. Well, you raised it as a significant issue in an Executive Briefing Note?
A. Absolutely. I guess I used the word "triage" rather than "sacrifice" because if the initial testing didn't provide evidence, they could submit more samples. Sometimes the testing will yield a profile in the first instance; there's no need to do any further testing. Or, as I said, there may be other evidence that comes - made available. For instance, fingerprints.

Q. Look, to use that as an example, there is a trade-off, isn't there, between achieving outcomes, as many profiles as you can get, with the time it takes to do it?
A. Yes.

Q. The Options Paper applied not to Volume Crime but rather to Major Crime?
A. Yeah.

Q. In two samples. And I accept that you misunderstood the content of that --
A. Yes.

Q. -- insofar as you thought that only 2 per cent of profiles might be sacrificed by the decision. But even on that basis, you were prepared to forego at least that number of samples in the interests of efficiency, including turnaround time?
A. Yes, but bearing in mind that if a sample was important to the investigation, the investigators had the option to initiate the testing or recommence the testing.

Q. In addition to that, correct me if I am wrong, your evidence is that you thought that the scientists, likewise, were actively pursuing the exercise of a discretion --
A. Yes.

Q. -- in the same way as you would expect your own investigators were doing?
A. Yes.

Q. You satisfied yourself in due course that that discretion was not being as rigorously exercised as you thought? Is that --
A. Yes.

Q. So as to assist you. Okay. And you told us earlier this morning insofar as I think it was Figure 1 - remember the graph from the Options Paper that you drew a circle around the top levels --
A. Yes.

Q. -- to identify that you thought that perhaps the upper levels could reveal 25 per cent worth of samples?
A. Yes.

Q. And you used that discovery or calculation --
A. Yes.

Q. -- to propose that - not a return to the automatic micro-concentration, because you would judge that to be inefficient, correct?

A. Yes.

Q. But rather to simply adjust the threshold downwards to some degree?
A. Yes.

Q. Does all that indicate going forward from this point and arising out of all this experience that you personally and the Queensland Police Service are not in principle opposed to the idea of triaging even major crime samples?
A. No, it is done as a matter of routine, I think, for all laboratories.

Q. I assume that your acceptance of that concept is on the premise of appropriate information being given to you to inform you as a stakeholder as to where that appropriate threshold might lie?
A. Yes.

Q. So, depending on what view the Commission might take, you and Queensland Police are at least open to the idea of the existence of some level of threshold, depending on balancing considerations?
A. I think so. I'll qualify that. A threshold that's a hard bar where there is no assessment of the sample and it just stops, that's not acceptable.

Q. Well --
A. But a threshold where there is an assessment of the sample type, the probity of it and making decisions at that point, that would be acceptable.

Q. Would that be a condition?
A. I would think so.

THE COMMISSIONER: Q. As I understand what you are saying, you wouldn't object in principle to the proposition that the preliminary position for a certain category of samples is that they are not tested, but that the decision not to test can be reviewed by a scientist or by a police officer or by some other qualified person; you would object to a system where a certain category of samples were never going to be tested?
A. No, what I am saying is that if there was a threshold and there was decision-making around whether that sample should be tested or not, it needs to be a decision based on the probity of the sample and also the likelihood of the

sample actually yielding a result. And those two factors together should be considered, moving forward, whether it be shelved or whether it be tested, rather than just a hard and fast rule, a hard bar, "if it is at this quant, we don't test it."

MR RICE: Q. The other thing that is desirable going forward, correct me if I am wrong, is that there be full and open exchange of information as between Police and the scientists, because in all of the correspondence that you have been referred to, it is apparent that at times the scientists say, "We don't have enough information", and you, on the other hand, have said a number of times, "Police don't have enough information to make the decision", so ought there not be some mechanism by which to reach a resolution of that instead of one blaming the other that they don't have enough information?
A. There is obviously a balance that could be made there. Again, if Police provide a sample to Queensland Health now for testing, we've already prioritised it. So we undertake the sampling and the screen and we make a decision what's going to be submitted because it is of probative value for our case. We provide all of the information that the scientists should be able to look at and make a decision on - analytical decisions - about whether - what to do with the sample, whether it is blood, they can see images of it. They will see whether there is presumptive semen, positive. There is a description of the sample, where it was taken from. In SAIKs, there is additional information provided to them in the kit; the doctor gives some sort of information around what occurred to assist them in sampling those or testing those samples.

Q. Look, the reality is, as we discovered looking at the correspondence, that at times you have said that Police are not in the best position to make a decision on whether a sample should be processed or reworked?
A. That's right.

Q. And on occasions the scientists have come back to you - Ms Allen, for example - have said that the scientists are not best-placed because they don't know the overall case context. I am simply suggesting to you, will you be amenable going forward to a serious review of the quality of information exchanged between the Queensland Police and the laboratory to achieve the best outcome in the interests of all?

A. Absolutely. There's a balance there because you don't want to unnecessarily provide information that might provide some sort of bias from the scientists, but there is certainly a capability for an exchange of testing more case information that might inform that. But I'm still left with the current situation with the information we're giving now, it's not being looked at.

Q. Well, that's another issue.
A. Yes, but what you are suggesting is we provide more information.

Q. Possibly?
A. But --

Q. Or at least be open to doing so?
A. Absolutely, I don't have a problem with that at all. And when I say the scientists are best positioned, what I say is they have access to information around the amount of DNA there and the degradation values, and that will inform them, really, how likely the sample might yield a profile.

Q. Well, that's the kind of information that you have expressed a number of times that you would like to have, correct?
A. Yes, but I'll be honest with you, I don't think we are still best positioned to do it. I think that decision - I would be happy not to get that information, provided the scientists assess that information. I'm only asking for that because at the moment they're not assessing that. It is just a hard bar, and below that quant, they don't test.

Q. Well, just as to the provision to the Queensland Police of that kind of information about the quantity and quality of DNA, part of your statement is taken up with that in relation to the incident that occurred in 2020 when there was a computer alteration that gave you short-term visibility of that kind of information?
A. Yes.

Q. You recall that incident?
A. Yes.

Q. And the outcome of that was that it was adjudged to be, rightly or wrongly, a breach of NATA accreditation requirements, and hence the computer system reverted to what it was previously?

A. Yes.

THE COMMISSIONER: By the way, Mr Rice, did you have in mind at some stage to substantiate the content of that email? That in fact it would be a breach of NATA?

MR RICE: No, I didn't.

THE COMMISSIONER: I wondered whether anyone would, because it is an odd sort of email. Anyway, never mind. Someone else can look at it I

MR RICE: Q. You have expressed your opinion about that?
A. Yes.

Q. Based on what you understand. And it might be right and you might be wrong?
A. It's my opinion, so yes.

Q. Let's assume for the sake of argument that you are wrong about that and that it was in fact a breach of NATA accreditation requirements. You wouldn't pursue your interest in having that information at the expense of the laboratory's accreditation, would you?
A. No.

Q. Because the accreditation, may I take it, is most important to Queensland Police?
A. Yes, absolutely. It's actually a requirement under the legislation that they are accredited.

Q. And if the laboratory didn't have it for some reason, would you have to go somewhere else?
A. Yes.

Q. Towards the end of your evidence, you were asked about exchanges that you had in the lead-up to a decision by the Acting Director-General on 19 August.
A. Yes.

Q. You told us, I think, that you were approached - perhaps it was the 18th or thereabouts - by Matt Rigby in a phone call?
A. Yes.

Q. You had one - the 17th? Okay. You had one or two phone calls concerning that matter?

A. Yes.

Q. And you summarised your position, did you not, subsequently in the form of an email?
A. I did.

Q. Okay. Perhaps if we could go to that. It's in that bundle that Mr Jones last referred to as recently being obtained. The document, I think, is [WIT.0020.0009.0001_R]. If we go to your summary email of 19 August, which is page 15 of that document, [WIT.0020.0009.0001_R at 0015], the last paragraph of that in the first couple of sentences identifies the QPS concern, does it not, about the exhaustion of samples.
A. Yes.

Q. And that was consistent with what you had discussed in earlier conversations?
A. Yes.

Q. That that was a concern?
A. Well, it was a concern. It was a warning given to me by Ms Allen in 2018, I guess fuelled by that.

Q. I understand the background.
A. So - and I raised that, that if that was a valid concern, it needed to be considered in the decision.

Q. Okay.
A. And then I've said here that the QPS doesn't have the expertise to assess the likelihood of that risk.

Q. Well, the purpose of putting it in there was so that it would be taken into account --
A. Oh, absolutely.

Q. -- in whatever decision was being made?
A. Absolutely.

Q. Okay. Well, subsequent to that, as you've described, one or more scientists had made contact with your office and expressed some concern --
A. Yes.

Q. -- about the return to the pre-2018 position?
A. Yes.

Q. As reflected in the memorandum?
A. Yes.

Q. As a consequence of that, you wrote an email on 8 September?
A. Yes.

Q. Could we go to page 12, [WIT.0020.0009.0001_R at 0012]. You see the header of your email addressed to Mr Rigby?
A. Yes.

Q. If we go to the next page, which is number 13, in the second-last paragraph of that [WIT.0020.0009.0001_R at 0013], you took the position that the Police were prepared to accept the matter of exhaustion of a sample. But you posed a test for that, did you not, that the testing which might result in exhausting the sample should be undertaken where, and only where, the test has:

> *... a high likelihood of yielding a useful profile ...*

So does that not reflect the test which you were looking to be satisfied before proceeding to exhaust a sample?
A. Sorry, which paragraph, I'm trying --

Q. Well, it is the second-last paragraph on page 13. The sentence commencing:

> *If QHFSS is able to reliably undertake a test that has a high likelihood of yielding a useful profile, the testing should be undertaken ...*

A. That's right, even if it exhausted the extract.

Q. So it is not simply a matter, is it, from the way this reads, that you would just leave it up to the scientists? You were prepared to leave it up to the scientists on the footing that the scientist would predict and expect a high likelihood of yielding a useful profile.
A. Yes.

Q. Otherwise you didn't want it exhausted; isn't that right?
A. Well, that's right, but I did qualify that further on

when I sent an email either to Helen or Lara where I said that in our understanding there is no guarantee of getting a result and --

Q. And you start - sorry, go on.
A. And I indicated that there's a risk of - the other risk is trying to preserve sample, but they're diluting it so the sample is basically useless. So there's a balance there.

And my point is from time to time there are tests that we might procure from other service providers that aren't delivered by Queensland Health. So if they think that their testing they do on a routine basis is not likely to yield a result, and if they think that some other service provider might be able to get a result for us, then give us that opportunity.

Q. But you have told the Commission in your evidence that on the inquiries that you were making from December 2021 onwards, you formed the view that upon reprocessing or actually processing some of these DIFP samples, that a success rate of perhaps 30 per cent might be achieved?
A. Yes.

Q. Well, that's never going to meet a test of high likelihood of yielding a sample, if the success rate is 30 per cent. If it was only 30 per cent, you would never do it, isn't that right?
A. Oh, I guess if you draw that nexus.

Q. Well, that doesn't highlight the problem?

THE COMMISSIONER: Q. But the 30 per cent figure, where it appeared, as I understood it, was in the context that these samples are routinely not being tested. And the proposition is they ought to be tested, because there is a 30 per cent chance of success. But what you're raising with Inspector Neville is a test that would exhaust the sample, which is a different thing. Isn't it?

Before you go on, Mr Rice, is this a convenient time or would you like to finish this topic? Whatever you prefer?

MR RICE: No, I am happy to have a break. Thank you, Commissioner.

THE COMMISSIONER: Thank you. We will adjourn then.

MR HODGE: Sorry, just before you adjourn, can we resume at 2 pm. And we need to interpose Professor Linzi Wilson-Wilde at 2 pm.

THE COMMISSIONER: Have you discussed this with your colleagues?

MR HODGE: I think. I'm hoping I emailed all of them last night and told them --

THE COMMISSIONER: So you are going to call Professor Wilson-Wilde at 2 o'clock, are you?

MR HODGE: Yes. Ms Hedge will call her.

THE COMMISSIONER: All right. Well, we will adjourn until 2 o'clock then.

MR HODGE: Thank you.

LUNCHEON ADJOURNMENT [1.06pm].

THE COMMISSIONER: Yes, Ms Hedge?

MS HEDGE: I call Dr Linzi Wilson-Wilde. She is to appear via video-link.

<PROFESSOR LINZI WILSON-WILDE, (affirmed via video-conference)

THE COMMISSIONER: Yes, Ms Hedge.

<EXAMINATION BY MS HEDGE

MS HEDGE: Q. You are Professor Linzi Wilson-Wilde?
A. I am, that's correct.

Q. You can see and hear me on the screen now.
A. I can. Yes, thank you.

Q. Let us know if there is any difficulty with the link. Can you tell the court your formal qualifications?
A. I have a bachelor of science in biological science, a post-graduate diploma in molecular genetics and I have a

PhD in molecular genetics as well.

Q. What is your current position?
A. I am currently Director of Forensic Science SA in South Australia.

Q. How long have you worked in the area of forensic DNA analysis?
A. I have worked in forensic science for 25 years, and most of that time has been in DNA analysis to some degree or other. I started my career off in 1996 with Victoria Police as a DNA scientist and I've worked for three jurisdictions performing DNA science, expert advice and opinions and case work.

Q. Thank you. You have prepared two reports for this Commission. Could I just identify them. Firstly, you prepared a report dated 7 August 2022 relating to an issue of micro-concentration [EXP.0002.0003.0001]?
A. That's correct.

Q. And, secondly, a report dated 20 September 2022 relating to the QHFSS Option Paper [EXP.0002.0001.0001]?
A. That's correct.

Q. In addition to the documents that are stated in your reports that you have had reference to, you have also been provided by the Commission with copies of the reports of Dr Bruce Budowle in relation to both of those topics, [EXP.0001.0001.0001] and [EXP.0001.0002.0001]?
A. That's correct.

Q. Thank you. Can I ask you questions first on the second report. That is, the one about the Options Paper. Overall, what did you think of the process of presenting an Options Paper like that to the Police for a decision?
A. Options Papers can be used to inform decisions with stakeholders in collaboration. This particular Options Paper, I would consider, is a little bit unusual as far as Options Papers goes. Whilst there's no standard format for an Options Paper, I would have thought that it would provide - it should have provided some further background than what was there.

Generally speaking, the options presented should be balanced and independent and there should be sufficient data and information for the Police to make a determination

based on the options, but each option should have the impact to the options or the risks and benefits of the options, with a recommended preferred option. And so, that's certainly in this paper. So it was an unusual process in what's contained in the paper, but the standard idea of presenting an Options Paper to police to assist in determining various aspects of DNA analysis processes is not unusual.

Q. You listed a number of things that should be in the paper. At the end you said, "And certainly that's in the Options Paper." Were you referring only to the last point, which was "a preferred option"?
A. There is certainly a recommendation that has been proffered and that would be something that would be fairly normal. Most of the remaining points I was making probably aren't in there to the level that I would anticipate or expect.

Q. What other stakeholders would be expect to be consulted in a process like the Options Paper?
A. It's fairly standard protocol to consult the scientific experts within a forensic laboratory within options papers, and also the police in determining the course of action to be taken stemming from the Options Paper. So they're probably the two main groups of stakeholders that would be usual in this sort of thing.

Q. When you say "the scientists in the laboratory", how many scientists? How far down the chain would you expect there to be consultation?
A. Certainly, the management that run that particular area or that discipline and the senior scientists conducting the work would certainly be engaged. Obviously, the more broader engagement you have with the scientists, then if you take a diversity of thought perspective, then the better the resulting product is at the end. The fewer people that you have involved in providing their opinions or their advice in regards to a paper or project, then that would dictate that you wouldn't get as much variation or diversity in the thought that is being put into it. So I think the more that you can engage within the laboratory, then the better the product that you get at the end.

Q. What is your opinion about including other stakeholders in the criminal justice system? For example, judiciary, defence lawyers, prosecutors?

A. To be fair, it's probably not usual for something of this level to consult more broadly outside the laboratory and the police stakeholders for this type of change. So it's dependent on, I guess, where it directly goes to, but we would probably focus on the communication of the results more broadly as opposed to consultation within the development of an options paper.

Q. Thank you. Can I move then to the data that was presented in the Options Paper. And you have dealt in your report with the relevance of the 1.45 per cent statistic relating to new intelligence, and also the 10.6 per cent success rate. Could you tell us which of them in your opinion, 1.45 per cent or 10.6 per cent, was the more appropriate figure to identify the proportion of samples that would provide information that was useful to Police?
A. From my perspective, the 10.6 per cent is probably the more relevant figure as it represents more closer towards the true value of that percentage of samples that would be informative to Police. I consider that the 1.4 per cent is a subset of the 10.6 per cent. So it's only a portion of the potential samples that could be informative to Police.

Q. And in particular, could you tell us what parts of the 10.6 per cent that are not included in the 1.45 per cent would be of - how that piece of information would help the police?
A. The 1.4 per cent represents the samples that are uploadable to NCIDD and have a warm or a cold link. So linking to something. There are samples that go on to NCIDD that don't result in a link, but they do sit there as potential - future potential for a future link. But they may also be informative within the case as well.

In addition to that, there are other examples that would be included in the 10.6 per cent that might not necessarily be put on to NCIDD, such as a victim's profile. That still could be useful for police, you know, depending on where it was located in the crime scene or if it was found at the suspect's house, or something like that. So I think the 10.6 per cent includes that broader level of profiles that you can interpret within the context of the information of the case and then that's what determines whether it's important. And just isolating on a certain percentage of the samples where they're NCIDD-uploadable is very restrictive and therefore not as relevant a figure when it comes to whether Police might find it a useful

result or not.

Q. Thank you. And is one of those types of indications a "warm" link? The actual - where you know who the potential person you are interested in, or the police are interested in? That is another example of things that are in the 10.6 per cent and not in the 1.45; is that right?
A. Yes, I believe so. The warm links can be useful because they're linked within the case that you know, but that doesn't mean to say that it is a figure that's not relevant. The figure those that are warm links is still important.

Q. Yes. Can I go then to the definitions of "success" and "failure" set out in the Options Paper, which appear on page 4 of your report.
A. Yes.

Q. Which is [EXP.0002.0001.0001 at 0004]. And in paragraphs 13 and 14 you set out what the definition is in the Options Paper. In paragraph 17 of your report, you say that those definitions may not be optimal or may not be "valid", is the word that you use, because the police may be interested in reviewing results where a partial profile is found. Do you see that?
A. Yes, that's correct.

Q. Looking at those definitions, the partial profiles which are deemed suitable for comparison would come within the definition of "success"; is that right?
A. Yeah, it is a little bit ambiguous in terms of the definitions that they have used. "Fail" has "partial, unsuitable for interpretation" and "success" has DNA profiles that were suitable for loading on to NCIDD, the national database.

If you were to infer that the profiles that are partial that are not suitable for loading on to NCIDD are included in there are "partial - unsuitable for interpretation", then there would be quite a number of samples in that category that would still be useful in terms of an investigation. And I will just outline the minimum number or the generally accepted number of alleles for loading onto the national database is 12, and that is excluding the markers that are found on the X and Y chromosomes.

So if, for instance, you had a profile that had 10 alleles and those were in - sorry, 10 alleles, then you could reasonably expect to be able to make some inference around whether that profile would exclude or include a person connected with the crime. And then depending on the number of alleles that you obtained, you could still do a statistical weighting on that and get an indication of how strong that evidence is.

Even just two alleles is useful, but if you had - and you could do something with it. But the more loci you have where you have results, the two alleles from a particular loci, it can increase your statistical weighting by a factor of 10. So, for instance, if you had 10 alleles that were from five loci, you could get a statistical weighting in the order of 100,000. That's clearly something that's informative for police. But, as I said, those definitions are very - a little bit ambiguous, and I would consider that even a very small number of alleles would still be useful for police within an investigation, even if they couldn't be put onto NCIDD.

Q. Thank you. So does that ambiguity mean that potentially there are more profiles, in truth, that should have been defined as "success" rather than "fail"?
A. That's correct. And certainly, if that definition holds true that if DNA profiles aren't suitable for NCIDD upload, partial ones, if they're not suitable for NCIDD upload then they are part of the "fail" criteria, there would be quite a number of samples, I would anticipate, that would be included, that would be in addition to that 10.6 per cent.

Q. I see. Does that mean that potentially that 10.6 per cent is an under-estimate of the number of samples or the true number of samples that would have provided informative material to the police?
A. That's correct. And I think that's borne out by some of the other reports as well that I reviewed, the Valuation Report. And then the previous and earlier report as well, Project #163, had better success rates, although they were after micro-concentrating.

Q. When you say, "the Evaluation Report", is that the Update Report from June 2022, [FSS.0001.0001.0954_R]?
A. Yes:

The Evaluation of the Efficacy of a Post-Extraction Concentration Step Using the Microcon Centrifugal Filter Devices in Yielding DNA Profile Intelligence.

Q. To another point in the data. Is it your view that the grouping of all data between .001 ng/µL and .0088 ng/µL was appropriate or not?
A. I think there are better ways that the data could have been grouped. I think it has a potential to skew the data, because most of the "fail" samples would sit within that range. And because of that, it will skew it out - skew the data out to not looking as successful. Whereas if they broke that down into smaller brackets, say, for instance, you know, .001 and then .002, going up, then it would show - better reflect the data and perhaps better reflect where that threshold might have actually or could have actually sat a bit lower. And the police, therefore, would have had more information to work out where they were comfortable in that threshold being set.

Q. That approach of breaking up the data, is that a fairly standard statistical approach?
A. I think normalising the data across the range is fairly standard. And I think if you can bracket the data into those smaller brackets, you'll be able to see the distribution of the data a little bit better. I think it would have improved the visibility of where an appropriate threshold is at the lower level and made that determination a little bit more transparent.

Q. In your view, should that have been done in this report?
A. I would recommend that that is the approach that should have been taken.

Q. In paragraph 10 of your report, [EXP.0002.0001.0001 at 0003], you set out some of the concerns that were raised by scientists in Project #184 that you identify were not addressed in the evaluation report or the Options Paper. And I understand your view is that they were valid concerns of the scientists?
A. They appeared to me to have merit. So yes, they were valid.

Q. All right. What does the failure to take into account that feedback say about the procedure inside the lab

leading to the Options Paper?
A. I would infer that it indicates that there was potentially a purpose to the Options Paper that's more of a managerial - from a managerial perspective than a data-analytics perspective. And so, there was potentially an end goal that was required, which may or may not be understandable, and that this was written to reflect that end desire as opposed to something that's probably a little bit more independent and transparent as far as the data analytics go.

Q. That inference that you draw, is that related to the feedback but also to the reference paper itself?
A. It's both. It's both.

Q. Right.
A. There's no discussion or confrontation around why the feedback wasn't accepted, so that wasn't evident to me, but some of the feedback I thought was very - was very valid and really should have been taken into consideration. So I can see no reason why it wouldn't be. Other than there was an end goal.

Q. I'm sorry?
A. Sorry, other than there was an end goal, was the only reason I could postulate.

Q. I see. And what about in the Options Paper itself? What about the Options Paper itself led to you drawing the inference that there was an end goal in mind?
A. So there was certainly data that was included in the evaluations paper that wasn't included in the Options Paper. And the way that, I guess, the language and the set-out of the Options Paper was quite focused towards that end goal of what appeared to be reducing the number of samples that progressed through the laboratory is - I would envisage is a way to manage resources better.

Q. You say in your report at paragraphs 16 and 32, [EXP.0002.0001.0001 at 0004 and 0006], that a determination of a threshold is not an unreasonable step, but that to set a threshold, the decision-maker needs to have sufficient information to strike a balance between scientific considerations, criminal justice system considerations and resourcing or managerial considerations; is that right?
A. That's correct.

Q. Okay. What parts of that was dealt with by the Options Paper and what parts of that were not dealt with by the Options Paper?
A. So in terms of the Options Paper itself, I think the data that they provided in terms of the effect of the concentration at the varying levels in the graph that they have, which - I will find that figure for you, I apologise, Figure 2 - is useful. So they can see a general spread, but it is still a little bit limited and it is not the full figure that was in the evaluation report. And so --

Q. Sorry, just before you go on, Professor, I will just get that up on the screen so that we can all look at it. It is [FSS.0001.0001.0891_R at 0898]:

Figure 2: Spread of data and categorised as 'Success/Fail' for 'Auto-Microcon' samples.

Is that the figure you are speaking of?
A. Right.

Q. Yes, I am sorry to interrupt. Please go on.
A. So this is a useful spread for the police to understand that the lower the concentration result from the quantitation quantification process, you have got a reducing chance of obtaining a result. But it's not the full diagram; it is a portion of it. But I think it's still very useful for police in terms of working that through. However, there were diagrams that existed in the evaluation document that didn't exist in this - didn't make it into this final report. And the one that probably most pertinent for that is Figure 6 in the evaluation report.

Q. Sorry, I am just obtaining that one. Figure 6. Figure 6 I have as a pie chart, is that right? Or is it the larger bar chart?
A. It is the pie chart. It is the:

% 'Success'/'Fail' of 'Auto-Microcon' Samples

So it is a combined data figure.

Q. I will just read out the number for that one. [FSS.0001.0001.0891_R at 0897]. Thank you. We've got that.

A. That's an end figure. So this shows a general process of micro-concentrating samples gives a 21.5 per cent success rate. And so that shows the general success rate for micro-concentration. And that's very similar to a previous result that they had in the previous Project #163, which had a success rate of 18.4 per cent, so they're fairly consistent. And so, it does lend a message that if you concentrate samples, you will get a success rate of somewhere around the 20 per cent mark. But in the Options Paper, they focused on just the auto-concentrated process, which has that lower success rate of 10.6.

Q. Okay. Thank you. What other considerations did you think were not well dealt with by the Options Paper to allow the police to strike a balance between scientific, managerial, and criminal justice considerations?
A. Yeah, I think there's - I think there's quite a number of things which could have been added to the Options Paper that would have provided more clarity for police in making these determinations, such as when you analyse samples from different types of biological materials, the success rate isn't the same, and so where you have samples that are things like blood and semen, you will get a higher success rate than you will from samples that are trace samples from swabs or touched items. So a breakdown of that and maybe a percentage breakdown would have been more useful for police as well.

I would have probably preferred to see different options, including a "do nothing", and then breaking the picture down for Volume and Serious Crime and looking at the risks and benefits of each of those.

Q. What sorts of risks and benefits are you talking about here?
A. It's not in the Options Paper.

Q. I understand, but do you mean --
A. Yes. Sorry.

Q. What sort of risks and what sort of benefits would you expect to see there?
A. So I would expect to see data around - if you increase the threshold, the risk is you will not identify X number or X percentage of samples, versus if you do, you will lose this. And if that was broken down into the different threshold levels, for instance, then police could see just

how many samples are potentially not going to identify if they increase or lower the threshold. So it's the risk of implementing a threshold at a higher level versus a lower level and the benefits. So the benefits might be improved turnaround times or reduced cost or things like that, whereas the rest will be you will potentially not obtain a result you would otherwise have got. So it's really clarifying that as what this means from both of those perspectives to police.

Q. In terms of the reduction in turnaround times or the amount of cost, would you have expected that to have been quantified?
A. It may not have been quantified in terms of days, but increase or decreases is a very usable - you know, that is something that could easily be put in there. I appreciate working out what the actual impact might be a bit hard for some laboratories, so that might be not something they could put in, I'm not sure. I can't respond to that.

But also, I think, the impetus for this in terms of recognising that if there was an issue in the sense of case numbers increasing, so a need to manage resources was part of the impetus for this, then that would have been good to clearly position that at the beginning of the Options Paper so Police understood why a certain recommendation was being made.

Q. I see. Just going back to that quantification point, would a laboratory not have, you know, an average time that samples took or an average cost? And, therefore, you could just calculate out if you're not testing this-many-thousand samples, then it removes this percentage of the workload? Therefore, there would be a consequent - some estimate, at least, of the number of days increase or decrease in turnaround times, or the number of hundreds of thousands of dollars that might be saved or not?
A. Yes, certainly dollars is relatively easy to do. The turnaround times, maybe a rough estimate could have been provided. It is quite complicated and there can be a multitude of factors that impact the turnaround times for laboratories, such as staff absences and pieces coming in might increase unexpectedly. Potentially, a rough estimate could have been provided, but it would have had to have been clearly stated that it was a very rough figure.

Q. Thank you. Finally on the Options report, you say in

your report at paragraphs 43 to 44 [EXP.0002.0001.0001 at 0008] that the threshold should not be a hard barrier for Major Crime cases. Can you tell us in your opinion how should such a threshold work consistently with best practice for forensic DNA?
A. Thresholds are often used to limit the number of samples that progress through amplification to analysis and interpretation, and it's usually a means of attempting to streamline processes and balance - as I said before, balance sample numbers versus resources, et cetera. So thresholds for Volume Crime can be, in some laboratories, implemented as a hard barrier.

But for serious crime, that's generally not the case, and laboratories endeavour to keep analysing samples until they obtain results or exhaust the possibilities. And so, the case type becomes really important, and scientists should be able to look at the type; the circumstances; the sample type, such as whether it is from blood or what type of biological material it is; the quantitation result, and then determine whether samples should proceed with or without a concentration step.

Q. Thank you. I turn then to your first report, the Concentration report. You explain in that report that concentration condenses the solution so as to increase the concentration of DNA in a sample; is that right?
A. Yeah. It focuses on increasing the chance of obtaining DNA profile in samples with low levels of DNA.

Q. Can we deal with the matter of elution volumes. What does that terminology mean?
A. The obstruction process breaks down the cellular material to release DNA into a solution and then washes that broken down cellular material and any chemicals that might inhibit the further downstream DNA analysis process to result in the DNA remaining in a solution, so it's put into just DNA in a solution without any of the extra cellular material.

The volume that that solution ends up being is called "the elution", or "the extract" is another term for it. So it is the elution volume or the extract volume.

Q. What is the elution volume in Queensland?
A. I understand it is 100 microlitres.

Q. How does that sit with other labs in Australia or best practice?
A. The final elution volume that you utilise is one you end up with after validation, and your validation study can result in varying elution volumes, depending on your processes, your equipment; whether you have automation. There isn't a standard elution volume that's defined. It's usually a range, and that range can be anywhere from 30 to 400 microlitres. My laboratory uses a 65 microlitre elution volume.

Q. All right. You had the chance to read Dr Budowle's report, and could I just take you to his report on this topic of concentration, back to [EXP.0001.0001.0001 at 0007], paragraph 14. He makes some criticisms there of the validation study performed by QH - I'm sorry, it must be - yes, thank you, operator. There is some criticisms there of the DNA IQ validation performed by QHFSS about changing aspects of the experiment between testing 50 microlitre elution volume and 100 microlitre elution volume. Do you agree or disagree with his conclusions about whether that should be revisited by the lab?
A. I would agree. It's good scientific practice to only change to one variable at a time when testing a process. So if you change two, you wouldn't know which one is having the greater effect or not.

Q. Now, what does that, the fact that it is a greater elution volume than, say, your lab, what does that mean for the significance of concentration in Queensland?
A. So if you have a higher elution volume, for some examples that might be appropriate where that sample exists in high concentration. For instance, if you are extracting DNA from meat blood, you might validate that to have a high concentration so that your final concentration of DNA is not too concentrated for your downstream reactions, because there is a finite range at which it operates optimally. For trace DNA samples, though, that have a lower level of DNA that's likely to be extracted, you might want to end with a lower extraction volume. And I can give you an example if you like?

Q. Yes. Thank you.
A. So if you elute to 100 microlitres and when you quantitate that, that shows there is 1 nanogram of DNA per microlitre, then that 100 microlitre sample will have 100 nanograms of DNA. So it is just 1 times 100. And then

when you add 15 microlitres, which is fairly standard, to your PCR reaction, you are adding 15 nanograms of DNA.

If you were to elute to a different volume, say, 13 microlitres for a trace sample, which would be generally an understandable or reasonable amount to elute to, you would still have 100 nanograms of DNA, but now it's in 30 microlitres. So when you add your 15 microlitres of extract or elution to your PCR, you are now adding 50 nanograms of DNA. And so, you are adding far more and, therefore, increasing significantly your chance of getting a DNA profile. That is essentially how it works.

Q. Yes. So does that mean if the elution volume was smaller in Queensland, there would be less samples that fall within this range of 0.001 to 0.0088 ng/µL?
A. It is a reasonable expectation that you would have more getting up into that higher volume because you've got more concentrated samples.

Q. And also if you had a lesser elution volume, you would spend less money and time doing micro-concentration?
A. That's correct. The micro-concentration step is known to lose DNA. So when you concentrate a sample, you can lose up to 30 per cent of your DNA. And so, if you elute to a smaller volume, then you don't have that. So you're maximising the DNA you have in a concentrated sample.

Q. Those are some benefits of the lab trying to validate a lower elution volume, and I appreciate you wouldn't suggest anyone changes it without a full validation --
A. That's correct.

Q. -- performed, but would there be any negatives to attempting to validate a lower elution volume?
A. I don't think so. I think it would streamline the process so you're not having to concentrate as often. There would still be instances where that might be a reasonable approach, to do that, but as a routine if you could elute certain sample types that might be validated to the sample type, then that would be a completely reasonable approach and would aid in streamlining your processes.

Q. Is that something you would recommend to the Queensland lab?
A. Absolutely.

Q. All right. Now, coming back to the present position where the elution volume is 100 microlitres, in your view should there be a blanket rule about which samples are concentrated or should this be a matter of discretion?
A. I would advocate for a matter of discretion for the reporting scientists based on case type, biological material that's been extracted, quantitation result, and importance in the case - case information and case context. Absolutely.

Q. All right. What about the level to which one concentrates? Whether it be in Queensland, as I understand it, sometimes there is concentration to 35 microlitres, sometimes to 15 microlitres. Is that also something that should be a matter of discretion or something that should be a rule?
A. That would be reasonable, that the reporting scientist could have a look at the sample type and the quantification value and determine where they might want to elute the sample to after the concentration. That would be reasonable, because if say, for instance, it is a sexual assault case, they might want to have sufficient extract to run a PCR and maybe a Y-chromosome analysis test as well.

So it's within the context of the case that these decisions should be made, and I think streamlining is very useful but it's not appropriate in all instances where you can have one stock standard process for all cases and all sample types. It's just not - whilst it might be efficient, it's not effective in getting better results for the case, particularly those serious cases.

Q. When you say it's not appropriate to have such a blanket rule, if I can put it like that, is it your view that that's not best practice in forensic DNA at the moment?
A. Hard bar thresholds for serious cases I would not consider to be best practice.

Q. Thank you. When you wrote your report, there had been a decision made on 6 June 2022 to not concentrate anything between 0.001 and 0.0088 ng/µL. And then after you delivered your report, you have been advised by the Commission that another decision has been made on 19 August that all samples in that range will be P2 - I should say P2 and P3 - would be concentrated in that range to 35 microlitres. So is it fair to extrapolate from your

previous answer that both of those decisions, in your view, are not consistent with best practice?
A. Without a proper validation and understanding what the implications are and looking at the workflows, I wouldn't consider a knee-jerk reaction as an appropriate pathway. However understandable in the circumstances, it wouldn't be in line with best practice I would consider.

Q. All right. I'll just ask you - you said "without a validation." Tell me from your previous answers, does it matter whether it's validated or not? Were you not saying earlier that just having any blanket rule is not best practice?
A. Yeah. As in any threshold that you have should have some data behind it. So you should understand why you've got a threshold at a certain level and why the rules are and what the implications are, and that's what a validation study will tell you. And so, if you are going to change your processes, there should be some data that supports it, is the point.

If a previous validation study had that data and you were re-assessing it, then that's fine, but it should be based on a properly thought out decision and a decision process that's documented, and notwithstanding that hard bar thresholds in any way are not useful. And if they're doing it for all - is it all sample types? It's not P3?

Q. I believe it's P2 and P3. Just one moment. Yes, P2 and P3.
A. Yes, so there should be some consideration over the sample types. Volume crime, for instance, it is more acceptable to have a hard bar threshold for volume crime so that you don't clog up your resources that you have, and some laboratories for serious crime will progress all of them. I'm not sure whether that delineation is of assistance there.

Q. Thank you. Yes, thank you.

MS HEDGE: Those are my questions.

THE COMMISSIONER: Mr Hunter.

MR HUNTER: Thank you.

<EXAMINATION BY MR HUNTER

MR HUNTER: Q. Professor, my name is Jeff Hunter. I act for the Queensland Police Service. Can you see and hear me?
A. I can't see you. I can hear you.

Q. All right. If you can't hear my questions, let me know. Can I just touch on that last issue. That is the amplification of these low quant samples without first micro-concentrating them. You understand, don't you, that this laboratory had found that when it came to what I'll call low quant samples; that is, samples between the range of 0.001 and 0.0088 ng/µL, that when they were amplified without micro-concentration, the resulting profiles exhibited marked stochastic effects?
A. Yes.

Q. You understand that as a result of the Options Paper that was presented, that the lab simply stopped testing those samples, the samples in that range?
A. Yes.

Q. And you understand, though, that in June of this year, the laboratory resumed testing of those low quant samples?
A. Correct.

Q. But when it came to P2 and P3 samples, those samples were tested without being first micro-concentrated; that is, they were amplified without first being micro-concentrated?
A. Yes.

Q. This is at a laboratory that has already found that engaging in that process is likely to lead to marked stochastic effects, correct? You understand that?
A. Yes.

Q. Do you agree with me that amplifying profiles in that way, amplifying samples in that way without first micro-concentrating them was likely to achieve, firstly, profiles that were unsuitable for interpretation - yes?
A. Correct.

Q. Sorry, you are nodding.
A. Sorry.

Q. The transcript will be assisted if you responded verbally. Thank you. And it would also waste 15mls of sample?
A. Well, potentially, yes.

Q. Well, assuming what the result was was an unsuitable profile for interpretation.
A. I haven't seen the breakdown of the success rates for those types of samples. So increased stochastic effects could result in the profile still being readable, albeit more difficult to read, and it's clear that micro-concentration would clean the samples up or produce a better profile, and so that would be an advantageous step to do.

Q. Well, can you think of a sensible reason why a scientist who was aware of the likelihood of these marked stochastic effects in low quant samples would recommend the amplification of such samples without taking that step of micro-concentrating them?

THE COMMISSIONER: That is, can the Professor posit a proper reason to do it?

MR HUNTER: Q. Yes. Thank you.
A. I can postulate it is a reaction to process the samples without investing resources in the concentration step, which is timely and costly. So to process - put the samples through but without realising the full impost of analysing those samples as their validation - previous validation has told them that they should do.

Q. But that would be in circumstances where amplification was not likely to be particularly beneficial because of the high likelihood of these stochastic effects?
A. Dependent on what the impact of those stochastic effects are.

THE COMMISSIONER: Q. I think what Mr Hunter is putting, and correct me if I am wrong, Mr Hunter, but he put those propositions to you earlier, and the implicit conclusion is that in order to get the best chance of getting a usable profile, you would micro-concentrate samples within that range before amplifying them; therefore, the converse is that if you don't take the micro-concentration step, you are not testing the samples to give the best probability of

guessing a usable sample, and what is being asked is could there be a proper reason to take that course for samples of that kind? I think what you have put is that, well, if one considers that saving money on the chemicals involved and the time involved in that step is a proper reason, that's a proper reason, but you don't offer any other proper reason?
A. That's correct.

THE COMMISSIONER: Yes. Is that clear?

MR HUNTER: Thank you, yes.

Q. Can I move to the topic of change management.
A. Yes.

Q. It's important for the laboratory to have proper procedures for the management of change?
A. That's correct.

Q. That is, that these procedures should document the way in which change is to take place?
A. Change in terms of the changes to the scientific processes or methodology, absolutely.

Q. That's what I mean. Yes, that's what I mean. All right. And it's important that if change is to occur, that there be strict adherence to the procedures that are specified in writing about change management?
A. That's correct.

Q. The views of appropriate experts should be taken into account?
A. That's correct.

Q. And just so I make myself clear, I am talking about what was Project #184, which we have heard became the Options Paper.
A. Yes.

Q. We've heard that in order for any change recommended by the Project #184 to be implemented, it required the sign-off by a quorum of senior scientists at the laboratory.
A. Okay.

Q. Is that a conventional approach to change management as far as you're concerned?

A. We have final sign-off by a higher level management. And so, it goes through - I am not aware of any particular guidelines or requirement around a quorum of scientists to sign-off. That is not to say it is not an acceptable approach. It is reasonable. There should be some higher-level management sign-off as well, I would have thought.

Q. All right. Well, what we have heard is that Project #184 was, because of the attitude of some of the scientists at the laboratory, never going to achieve the level of support that it required to be signed off.
A. Okay.

Q. And so what then occurred was that the project morphed into the Options Paper that was presented to the police, right?
A. Okay.

Q. My question to you is this, then: accepting that this process really enabled the side-stepping of the procedures for change management, what's your comment about that process as a means of effecting a significant change in the processes of a laboratory such as the one with which we're concerned?
A. It is concerning in that clearly the data that sits behind it sits in the evaluation in the previous project that you mentioned, and that hasn't got the full support of the scientists. So it is concerning that that then has morphed into an options paper and, effectively, the results of the project have been used for a particular purpose but haven't garnered the support that would be expected. So I would find that concerning.

Q. Can I ask you now about NATA accreditation and, in particular, ISO:17025.
A. Yes.

Q. There has been evidence there was a point in time at which police had visibility - that is, read-only visibility - of records of the laboratory about the progression of a sample through the laboratory - that is, the stage at which it had reached - but also access to - again read-only - data, but that data was limited to the quant and the degradation value for the sample in question.
A. Yes.

Q. Now, assuming the laboratory was aware that the police had this visibility - and that might be a matter about which there's some dispute - but assuming the laboratory was aware of that, can you see anything objectionable in terms of compliance with ISO:17025 with the police having read-only visibility of that limited set of data?
A. I can't recall a clause in ISO:17025 that precludes that, so I wouldn't have any concerns about it. If that's the documented process that that jurisdiction has, that's reasonable.

Q. Can you see any advantages in Police, particularly scientifically trained police having access to data such as the quant and the degradation value for a particular sample?
A. If the scientists have appropriate training and can understand what that means, and maybe the ones that might be advising on whether a sample should be concentrated or progressed through amplification, for making decisions there, then I would suggest that that's reasonable and appropriate.

Q. You, I take it, would endorse a collaborative approach between the scientists and the investigating police?
A. Absolutely.

Q. And so, the quant and the degradation would be two factors that would be taken into account in determining how to process a particular sample?
A. That's correct.

Q. But also it would be important to know the significance of that particular sample in the overall context of a case?
A. Correct. That is really important.

Q. If there was already other evidence, there might be less concern about the extent to which the sample was micro-concentrated?
A. That's correct. If there was other evidence sufficient for police purposes, you may not need to concentrate or progress. If it's all you have, then you'd probably go with whatever you had.

Q. You were talking earlier about the importance of a partial profile?
A. Yes.

Q. By "partial profile", for present purposes, I am talking about a profile that would fall within the definition of "fail" as specified in the Options Paper.

Am I right that there may well be occasions where the identification of a single allele could be of forensic significance in a case?
A. It is entirely - whilst it is up to the case context and the investigating officer, it is quite - if you had two alleles and they were both at the same locus, then your likelihood ratio would only be about 10, so you may well question what value that would have for a court. But it might be useful to the investigator. Even one allele may be useful. I can't comment on whether it is or isn't. It's up to the investigator to say, if they have one and it includes a suspect, that might give them some information that they can then progress or follow a lead on.

Q. It might also, though, help them to exclude a suspect, might it not, because the suspect might not have that allele?
A. That's correct.

Q. Correct?
A. Correct.

Q. Lastly, in terms of the Options Paper, is your assessment of the Options Paper that it really offered a binary choice to the decision-maker?
A. Yeah, it was exceedingly limited in what it offered, and I think I question whether it was really a choice at all for Police.

Q. Well, that's the next question I was going to ask you. The paper really makes it appear that there was only one choice, you agree?
A. I agree.

Q. And the true position as you now understand it is that it was vastly more nuanced than a choice between those two options?
A. Correct.

MR HUNTER: That's all.

THE COMMISSIONER: Thank you, Mr Hunter. Mr Rice, are you

next?

MR RICE: Yes.

THE COMMISSIONER: Mr Rice acts for the Health Department, Professor.

<EXAMINATION BY MR RICE

MR RICE: Q. Professor, I only want to ask you about a few paragraphs of your paper to do with the Options Paper?
A. Could we go to paragraphs 31 and 32, [EXP.0002.0001.0001 at 0006]. Your answers there are directed towards questions framed in terms of the Options Paper, but I wanted to actually elevate it to a slightly higher level than purely that consideration.

THE COMMISSIONER: Excuse me, Mr Rice. Ms Hedge, could you arrange for that part of the report to be on the screen so that the rest of us can see it?

MS HEDGE: Yes, it is [EXP.0002.0001.0001 at 0006] in the middle of the page.

THE COMMISSIONER: Thank you. Go ahead, Mr Rice.

MR RICE: Thank you.

Q. If you take paragraph 32, for example, you refer to the fact that a laboratory looking to address the question of thresholds is required to balance a number of things that you set out there. One can readily understand the considerations that you have set out that need to be balanced. What I really wanted to ask you is who should be the one to do the balancing exercise?
A. My opinion is that should be a collaborative effort between the laboratory and police.

Q. You don't see it as involving wider, perhaps political considerations, or considerations affecting the criminal justice system beyond the Queensland Police, for example?
A. It does depend on the level of decision-making that is contained within the options that you're considering. If it is a relatively minor change or a new instrument that you are suggesting, there may even be an instance where that consideration is entirely within the laboratory. If it has a broader impact on results to the stakeholders then

you might consult more broadly again. If is a whole new system or a whole new DNA analysis process, then you might consider consulting even broader than that to the judiciary or defence.

It is entirely dependent on the level and the extent to which what you're determining will change the processes. And so, it was just - I was answering it probably in terms of the Options Paper itself and the decision made there, but you are correct that if it was a decision where you were changing your analysis process entirely, such as moving from the current method of STR analysis to whole genome sequencing, for instance, you would want to consult exceedingly broadly with a change of that magnitude.

Q. Is there any preferred method for undertaking that kind of analysis and collaboration?
A. There is not a defined level of change or defined, "You must consult at this level if it's this change." It is a judgment decision that you need to make, and it does go - it is very much influenced by the impact of the change that it will have, and who it will impact.

Q. It might assist you and the Commission to take your state as an example. Now, we understand that in the case of major crime, there is a threshold applicable in South Australia, and it happens to be 0.01; is that correct?
A. That's correct.

Q. And that happens to be the highest threshold, the highest such threshold, in Australia or New Zealand, correct?
A. As a - taken as a pure threshold, it is the highest.

THE COMMISSIONER: Q. As a what threshold, Professor?
A. A pure threshold benchmark, it is the highest. But as an end-to-end process, it's not.

MR RICE: Q. I well understand that it is matched with a discretion, and I wanted to ask you about that also. But just taking the example of your State, someone has arrived at a decision that 0.01 is a suitable threshold for your laboratory balancing, presumably, the kind of considerations that you have referred to. Am I right?
A. Yes.

Q. Who made that decision in your State?

A. That particular decision was made before I arrived. The decisions of threshold are made - we have a Forensic Science Steering Committee meeting where we may inform. I believe that particular threshold, though, wasn't made at that steering committee; it was probably made internally.

Q. From what you are saying, it's made at the level of the laboratory?
A. That one was, I believe. It's my understanding. I can't confirm it, though, because I wasn't here at the time, but it is my understanding.

Q. Okay. And likely involved some steering committee for whom this issue was part of its agenda, correct?
A. With the steering committee has South Australia Police on it and the forensic laboratory personnel on it, and usually we inform them of changes, and sometimes decisions for changes will go to there for consideration.

Q. Would a threshold of 0.01 be acceptable, if not matched, with a discretion for scientists to individually assess major crime samples?
A. Yes. Just noting our elution volume is lower than the Queensland one. So when you take into account the elution volume, our threshold is lower than Queensland's elution threshold, if that makes sense. So I just want to make sure that's clear, and then any decision to concentrate samples or progress them through is made by the reporting scientist. And then there's also circumstances where we have case conferences with police on major cases such as murders and things, where those decisions around samples, what samples are analysed or progressed, would be made in collaboration. So it all depends on the case circumstances.

Q. Okay. Well, that leads on to the next question or two. If it is the case that the threshold is 0.01 but is matched to a discretion by the scientist to perform some strategy, does that not both allow and require that all samples below that threshold be directed to a scientist for strategic consideration?
A. Correct.

Q. Okay. And is that the system that is in application in South Australia?
A. Yes.

Q. Earlier in the week, for which you weren't present, evidence was led to the effect that there is a sample-by-sample or production line-type processing applicable in Queensland, but is that concept one that you understand?
A. It is, yeah. It's an item level analysis.

Q. From what you say, that is not the method that is in application for the major crime samples in South Australia?
A. No. Well, in a sense of the samples come in, they're all analysed, but the results of the samples will all end up with a reporting scientist that will then look at it from a case perspective.

Q. Yes. So all samples, once they go through the analytical phase, go to a reporting scientist for consideration as to what further, if anything, may need to be done?
A. Correct, with the context and the information they have in relation to that case.

Q. Yes. In the Queensland model, it's basically the sample-by-sample analysis but there are certain exceptions where cases are referred to scientists for more rapid management. That's selective according to certain criteria. Can you tell me this: are all major crime cases in South Australia assigned to a scientist for strategic assessment?
A. All major cases are, as far as I'm aware. I don't know of any that aren't.

Q. Well, let's be clear what we are talking about. In Queensland, there is a description called "Major Crime" and it is by contrast with "Volume Crime", which is the property related crime?
A. Right.

Q. So major crime relates to, essentially, offences against a person. Do you have such a delineation in South Australia?
A. No, we don't. We have volume crime and major crime is combined together, and we have two work flows that are "with suspect" and "without suspect".

Q. If we were to talk about offences against the person, and they happen to be called in Queensland "major crime", are all such cases assigned to a reporting scientist for

whole-of-case assessment?
A. Yes. We don't run a digital system. We run a hard copy system. So every case has a case file. That case file is handed to someone who must analyse that case and write a statement for court purposes. The statement contains all of the samples that are within that case.

Q. And obviously, a decision has been made by - or at least the funder of your lab - and I am not sure who is the funder in your case - that is a satisfactory process to which to apply the funds? In other words, it's worthwhile to do it that way, from the funders' point of view?
A. We are funded directly from Treasury through the Attorney General's Department. I would advocate the funder probably doesn't know. The Treasury don't know our internal processes, so aren't making a decision that way.

Q. They might now.
A. They might now, yeah. But we are looking to adopt an electronic case management system, but we would - and that means we can get rid of our hard copy case files. But we would still do those considerations within a case context. I mean, that's why we do case conferencing with SA Police. So it's case consideration.

Q. Is the case allocation approach one that has always been in play in South Australia?
A. I can't comment on prior to me arriving as director, but certainly since I've been here, which is, unfortunately only a year and a half, we have cases. And I suppose I should delineate. We might report back a result to police as we can or result report something - might not wait until the whole case is contained, but certainly for all the cases I see we have case files, and those case files are collated and signed off.

Q. At what point is the case file (indistinct)? Is it after gone through Analytical? Or before that?
A. Yes. So we have a team that do the - and that might be where the confusion is coming. We have a team that does the exhibit recovery, which isn't overseen by a reporting officer. And it goes through DNA analysis. So it would be after that process, but they can still review those results as a group and then they can ask for further work to be done wherever they need to within that case context. But at the beginning they don't have it.

Q. So the case allocation is not contingent, for example, on the scenario where a request is made of a scientist for a statement for court? It occurs well before that scenario might arise?
A. Yes. Yeah. Absolutely.

Q. Has any consideration ever been given to what efficiencies there might be to the alternate sample-by-sample or production line method?
A. Not at this stage, because we don't have a LIMS system that could support it. There are certainly some advantages for streamlining that item-level reporting can have, so that can certainly be advantageous at the stream-lining effect, but you would need to have someone who looks at it from a case perspective at some point in the process.

Q. Is the streamlining sample-by-sample approach, can you tell me this, is it more likely to be applicable and appropriate to high volume laboratories as an efficiency measure?
A. Probably those laboratories that use that process are probably more aligned to high throughput processing labs and get a higher throughput, but not all. It's - I know laboratories that have a case approach that are high throughput as well. So it becomes that balance of resources versus systems, and what your system can handle or allow you to adopt.

Q. Am I right that South Australia by comparison to, say, Victoria or even Queensland, is not a high throughput laboratory?
A. No, we don't get anywhere near the samples that yourselves get or New South Wales or Victoria. We are probably a medium-sized lab.

Q. You were asked about the scientific merit of some decisions that had been made, firstly on 6 June and then 19 August?
A. Yes.

Q. Can I confirm with you that your views about those are based only on their scientific merit?
A. On the information that I've been provided and an assessment of that information.

Q. But your approach is to assess the scientific merit, am I right?

A. Yeah. Absolutely.

Q. And, for example, not to take into account a scenario where a policy decision was made in Queensland to abandon the thresholds and establish a Commission of Inquiry? And in that scenario, there was no opportunity for a decision-maker to undertake any validation of some alternate approach beyond the one which had applied prior to the Options Paper' decision? You haven't taken those kind of considerations into account?
A. No, I haven't. I haven't taken the political environment into account in that ISO.

Q. Someone has to, do they not?
A. I would agree.

Q. Okay.

MR RICE: Thank you.

THE COMMISSIONER: Who is next? Mr Hickey, do you have any questions?

MR HICKEY: Yes, I do. I have a few questions, please, Commissioner.

<EXAMINATION BY MR HICKEY

MR HICKEY: Q. Professor, my name is Hickey. I appear for Catherine Allen and Justin Howes. I have a few questions to ask you arising from the evidence that you gave my learned friends Mr Hunter and Mr Rice about your view that an ideal situation is that there should be collaboration between those in the lab, the scientists, and the police. Do you recall that evidence?
A. Correct.

Q. Could I ask you a little bit about that. In South Australia is it the case that there is a person who is responsible for the forensic department of the South Australian Police with whom you regularly liaise?
A. That's correct.

Q. And is that person a person who holds scientific qualifications?
A. Not that I'm aware of.

Q. All right. I am going to ask you to assume some matters and then at the end of that I am going to ask your opinion about something.

Can I ask you to assume that there exists a person in that state with whom you deal from time to time.
A. Yes.

Q. And that that particular person holds particular qualifications and has particular expertise, and I am going to tell you what that is.
A. Okay.

Q. The particular qualifications that that person has is a Bachelor of Applied Science in biology and a Masters of Science in Forensic Science. So those are the qualifications.

And the experience that that person has, relevantly, are these: They have held scientific roles within the Police Service since 1991, they manage the DNA Management Section of the Police - feel free to take notes if it assists.
A. I am. Thank you.

Q. And I will repeat any of this if it helps you. They are a member of the International Standards Organisation ISO. You understand who that is?
A. Yes.

Q. And, indeed, they're a member of the Technical Committee of that organisation which is responsible for putting together and developing standards of delivery of forensic science throughout the world.
A. Yes.

Q. They are a person who sits on the equivalent domestic board in Australia.
A. Yes.

Q. They are a person who has sat on the NATA board for three years and purports to have been a technical advisor for audits.
A. What kind of audits?

Q. So those are the - for audits, NATA audits. Those are the qualifications and the experience that I want you to

assume that person you deal with has.
A. Yes.

Q. I want you to assume that you provide that person a copy of the Options Paper. You read the Options Paper?
A. Yes.

Q. Given that suite of qualifications and expertise, would you think such a person should find the Options Paper, having closely read it - I want you to assume that --
A. Mm-hmm.

Q. -- would you expect such a person to find the Options Paper a very difficult read?

MR HUNTER: I object to the question. The bare recitation of those questions says nothing about the ability of the author to comprehend or otherwise --

THE COMMISSIONER: Q. That may be right, but - and if that's so, then the question may lead to an answer that doesn't have any great significance for me. But it is a Commission of Inquiry, I can handle it, and you'll tell me what I should do. And the answer may be very helpful, so we better let it in. Go ahead, Professor?
A. I don't know whether I am going to be helpful, I'm sorry. I can't comment. None of - I hire graduates with Masters into biology and they still require five years of training in order to learn the DNA analysis processes. A biological science degree is not going to teach you about forensic DNA analysis, and unless they are auditing - are they auditing DNA labs or are they auditing crime scene or management or, I don't know, chemistry? It depends on what they're actually auditing in NATA. That, itself, wouldn't give you that technical detail and nor would any of the other roles. So I can't actually comment on whether they would understand it or not, because I don't know what their expertise is in.

MR HICKEY: Q. Thank you. Would you describe the document, having read it, as being in the nature of a scientific paper?
A. It certainly has some assumed knowledge. It's written - I mean, the language is relatively easy to understand, but there is a lot of assumed knowledge and technical information that underpins a lot of some of the

data, that if you had a lot of experience in DNA, that you could infer some information from it. It would - certainly if you understood the processes within the laboratory, you would be able to elicit more information out of the report or infer more from it. I am not sure it's - in terms of where my counterpart would be making a decision and the information that they need to know in order to assist them in making that decision, I'm not convinced the Options report has that to the level it should.

Q. You make that comment in circumstances where your counterpart does not have scientific qualification?
A. Even if that counterpart had a science degree, if they had worked in a DNA laboratory for five years, then I can suggest that they should be able to understand it. But barring them working in a DNA lab and going through the DNA lab training, then I wouldn't agree with that.

Q. Thank you, Professor.

MR HICKEY: Thank you, Commissioner.

THE COMMISSIONER: Thank you, Mr Hickey. Ms Mckenzie, do you have anything?

MS MCKENZIE: No, thank you, your Honour.

<EXAMINATION BY THE COMMISSIONER

THE COMMISSIONER: Q. I wanted to ask you a couple of things, Professor. The first is that you were asked about South Australia's using a threshold of a particular kind. Could you explain what that threshold is and how it works in the context in which you use it?
A. Our threshold is higher. It is 0.01 ng/µL as a threshold. We use it in the context of our elution volume is 65 microlitres, approximately, and so we start with a higher concentration of DNA. And I gave you the example in the initial discussion. So we start with a higher concentrated DNA. So the equivalence of comparing 0.0088 and a 0.01, they're not the same when you have a starting volume that one is more concentrated than the other.

And so, we push those through, we apply the same thresholds to volume and serious crime, they go through our processes, and then the scientists at the other end can

determine that if they look at the sample itself and look at the case context and the quantitation results, then they can request that that sample is analysed or progressed to PCR. They can request samples are concentrated, although that is not something that occurs that often, because we start with the 60 microlitre elution volume. We do concentrate some samples, such as reference samples and things like that. They may go in concentrate if they choose to. So it is a discretionary process. And then if it is a very serious case, we'll have a case conference meeting with the police, who may target other samples or existing samples for further analysis or a different type of analysis. So we have everything at the disposal of our scientists.

Q. So the scientists who perform the chemistry, as I'll call it, act under the rule that if the quant is below 0.1, they will not further test a sample, but then that system is operating under rules which give responsibility for a particular case to a particular scientist at an early stage; that is, at the point where all the results come in, and that scientist will see all the results, including the fact that certain samples have not been tested fully. Am I right so far?
A. That's correct. So we have what's called a reporting officer.

Q. Yes.
A. And the reporting officer who will analyse the results that come out and look at it within the case context, et cetera, will make that determination.

Q. So the system you adopt is that every sample that is not tested for that reason must be considered by a scientist as part of the job of looking at the case as a whole with a view to determining whether or not that sample should be tested; yes?
A. That's correct.

Q. And the information that that scientist has, what's the case information that that scientist has as a matter of course? I am speaking of - anyway, as a matter of course, what case information does she have?
A. So the police fill out a form and they put the circumstances of the crime or what's occurred, of the events, and they will also have the original exhibit. So if it's a swab, they will just have a swab. But items of

clothing or knives or whatever will be analysed by the Evidence Recovery team. So the scientists can access pictures or even access the item if they need it and can access all the pictures, the description, the test results and the case information.

So they have all of that information at their disposal and they may decide, for instance, if it is a serious case, "There is a bloodstain on a T-shirt that didn't provide a result but I can see here another stain. Please go back and retest that stain". So there are various options of where they would like to intervene and conduct further analysis.

Q. And in a case in which the scientist wishes to get further information from the investigating police officer, is that police officer's identity known? Is it part of the record so that that scientist can call that person?
A. They can do that.

Q. And does that happen commonly? In any event, do your scientists do that?
A. Probably not for volume crime as much. But certainly for serious crimes there would be a strong collaborative relationship between the investigators that look after those most serious of cases. So, yes, they could get on the phone if they want to.

Q. Yes. The other question I have is - I'm aware that - I just want there to be an understanding about the sensitivity of the testing that can be conducted by scientists such as you which might not be required in many cases, but the limit of it is relevant. And I am aware that there was a case in which you set out to see if you could get a profile from a single cell, and you managed to do that?
A. It was --

Q. A sperm head on some underwear, I think?
A. So that was a case sample from when I worked at the AFP doing a case.

Q. Yes.
A. We had a sexual assault case. There was a slide done from the swab of the inside of the crotch area of the underpants, and a couple of sperm heads were located, so we knew we had sperm, and those samples progressed through in

what we call the differential extraction where we separate the female and the male components. And it took 12 goes to get a full profile from the male, adjusting the chemistry to certain degrees. The first result gave only female DNA, so that was the difference between tweaking the chemistry. It is chemistry after all, and if you add a bit more of something, or increase a (indistinct) or - you know, there are varying things and chemicals you can do to adjust the process and it's the end result.

Q. How long did that take you?
A. Three months. And you wouldn't do that in every case. This was a serious enough case that you would actually invest that time and that resource and that cost. I would not have done that for a volume crime case, for instance. A break-and-enter would probably end at the first shot, but this case was quite a serious sexual assault case and was therefore worth the investment.

Q. And just so it is clear, what was the volume of material that you had? You said that you had two sperm heads on the slide?
A. It was --

Q. From what was seen on the slide?
A. I can't recall the exact number that we saw, but the DNA sample itself was taken from another area on the crutch. So I knew I had a couple - I knew I had a very small amount of male DNA available to me, but I knew it was there. That was the significance of it, is that I knew I had male DNA. And if there were a couple of spermatozoa on the slide, there was going to be maybe a few on the crotch that I could go. But I had the underwear that I could go back to and analyse --
Q. Yes.

A. -- and, you know, take a couple of different samples and extract them in a different way and concentrate them down. But being able to go backwards and forwards and to the original item was what meant that I could get a result in the end.

Q. You were given responsibility for that case, and you commanded the whole field on it so you could do it?
A. Yes. Now --

Q. Yes? Go on. Were you going to say something?

A. I didn't do every component of the analysis process --

Q. No, no.
A. -- but I could direct it.

THE COMMISSIONER: That's right. Anything arising out of anything I have asked? Thank you Professor. Sorry, Ms Hedge?

MS HEDGE: Sorry, I've just got one short thing. It is not arising out of what your Honour said.

THE COMMISSIONER: No, go ahead. Yes.

<FURTHER EXAMINATION BY MS HEDGE

MS HEDGE: Q. Can you see me again, Professor?
A. I am sure I will soon.

Q. I just have to correct an error that I made in my last question. We were talking about 19 August 2022.
A. Yes.

Q. We were talking about which samples would go to automatic concentration. I corrected myself that it was P1 and P2 go to automatic concentration after 19 August; P3 to amplification. I don't believe that necessarily changes your answer because you made a distinction between major and volume crime in your answer, but out of fairness, is there anything else you wish to add to that part of your evidence?
A. So P1 and P2 I understand are the serious crime cases, so that's reasonable. Whether P3 goes to concentration or amplification first is essentially a management decision because it's a volume crime case. And so, obviously based on the result, you might want to progress with a concentration step to maximise your results, but there may be a management decision that they don't want to invest as much in volume crime and want to leave the resources for the serious crime and therefore choose to go amplification. From my perspective, that's a management decision, based on a study that they know what the impact is.

Q. And when you say that it's reasonable to do something different for P3 than P1 and 2, that doesn't take away from your earlier comments about having blanket rules rather than discretion; is that right?

A. That's correct. That's correct.

Q. All right.

MS HEDGE: Yes, thank you.

THE COMMISSIONER: Thank you. Do any of you have any questions arising out of what Ms Hedge has just led? No? Thank you.

Thank you, Professor, thank you very much for your evidence.

THE WITNESS: Thank you very much.

MS HEDGE: Commissioner, apparently we need a few minutes to reset the cameras.

MR HUNTER: Before you adjourn, Commissioner, can I raise a matter. It concerns two statements from Inspector Neville that were uploaded to the public book yesterday. For reasons that aren't presently relevant, those statements were not properly redacted --

THE COMMISSIONER: I see. Have you contacted anyone?

MR HUNTER: They have been taken down, but, unfortunately, there was some publication of some sensitive material which has, mercifully, been redacted by the media organisation that published that information.

THE COMMISSIONER: Yes.

MR HUNTER: But we seek a non-publication order in respect of those two statements. And they were exhibits 3 and 12 on the public exhibit list. They are Inspector Neville's statement of 26 August and 14 September.

THE COMMISSIONER: The order you want me to make is a non-publication order with respect to the unredacted versions of those statements; is that right?

MR HUNTER: They were partially redacted already, but not completely.

THE COMMISSIONER: I just want to describe them correctly, that's all.

MR HUNTER: It will be the form in which they were in as at this morning. They were taken down this morning, I am told. That is all that I can describe them as.

THE COMMISSIONER: No, that's all right.

I direct that the content of the statement of David Harold Neville dated 26 August 2022, which is marked as exhibit 3 in this inquiry, and the statement of David Harold Neville dated 14 September 2022, which is exhibit 12 in this inquiry, as in the form in which they were uploaded and published as at today's date, 28 September 2022, in their partially redacted state, not be published.

Is that satisfactory?

MR HUNTER: Thank you. Can I indicated for those who are interested in his redacted statement that we understand that a properly redacted version of each will be uploaded tomorrow.

THE COMMISSIONER: Thanks very much for that. Ms Hedge?

MS HEDGE: Yes?

THE COMMISSIONER: What next?

MS HEDGE: We need a few minutes to change the cameras, as I understand it, for the next witness. Is that correct?

THE COMMISSIONER: All right. What is the time?

MS HEDGE: And then we will continue with Inspector Neville.

THE COMMISSIONER: Let's resume at just after 3.55 pm or thereabouts. We will adjourn for 10 minutes or so.

<THE WITNESS WAS RELEASED

SHORT ADJOURNMENT [3.44pm]

<DAVID HAROLD NEVILLE, continued

THE COMMISSIONER: Yes, Mr Hodge.

MR HODGE: Before the witness starts, can I just hand up to you a document. It is just a list of documents to be tendered from yesterday. Just by doing this, I just want to expedite things going up and being made available.

THE COMMISSIONER: Yes.

MR HODGE: That now allocates for the numbers from 22 through to 29. I think you have two copies.

THE COMMISSIONER: I see. It is the same thing. I am missing document 21, though, exhibit 21. The last one on the previous list that you gave me was 20. Anyway, we will sort it out later, don't worry about it.

MR HODGE: Thank you. Then can I also just ask to tender, and we will get the exhibit numbers sort it out, the two reports from Professor Wilson-Wilde. The first one was dated 20 September 2022 and the doc ID is [EXP.0002.0001.0001], and the second one that was referred to, which is dated 7 August 2022, is [EXP.0002.0003.0001].

THE COMMISSIONER: We will give them exhibit numbers when we sort out the mess. Yes.

MR HODGE: We can treat those as tendered?

THE COMMISSIONER: Yes, yes. You can.

MR HODGE: Thank you. Mr Rice? Yes?

<EXAMINATION BY MR RICE continued

MR RICE: Q. Inspector Neville, we were discussing some of emails post 19 August this year, shall we go to that, shall we?
A. Sure.

Q. Mr Operator, the document is [WIT.0020.0009.0001_R at 0013] and the page is page 13? Thank you.

Perhaps before we go to that, you sent this email to Mr Rigby in the context, was it not, that you had had discussions, or your staff had, with perhaps several scientists who had expressed concern that the microcon to full option was not available to them?
A. Yes.

Q. Your email was directed to that scenario in particular, was it not?
A. Yes. Well, adjusting. Not using a blanket volume.

Q. Yes.
A. And microcon to full would be one of those options.

Q. So if we go back to what we were talking about, I think before lunch, which is the second-last paragraph - perhaps that could be enlarged - the first sentence of that relates to the prospect that testing might exhaust a sample. Do you see that in the second line?
A. Yes.

Q. The prospect of testing that might exhaust a sample is actually a reference to the microcon to full process in the context in which this issue was raised to you, as we just discussed, correct?
A. Yes.

Q. And it's true, isn't it, that the samples that might be the most obvious candidates for this kind of process are those in the very low quant range?
A. I guess so.

Q. That's the kind of scenario as it was put to you, wasn't it, by these scientists --
A. That's what I was told.

Q. -- that there are quite low quant samples --
A. Yes.

Q. -- that might benefit from this process?
A. Yes.

Q. And this prompted you to write the email in the fashion that you did, correct?
A. That's right.

Q. It is the case, or do you accept that it is the case, that the samples in this low quant range, even with microcon to full, are those which are least likely to develop a usable profile by virtue of their quant?
A. It would make sense.

Q. Well, in that case, can I suggest to you there would

be few, if any, such samples that would satisfy the test which you imposed that there be a high likelihood of yielding a useful profile before that measure was undertaken?
A. Well, look, the likelihood of getting DNA out of samples, I guess, is never going to be 100 per cent. And what's high is something of debate. Like, for instance, 30 per cent could be considered high. But, look, I did try to qualify this later. So I admit in this email that yes, the bar might seem a little bit too high to make a decision.

Q. Do you agree that these are the samples least likely to yield a profile?
A. That's right.

Q. We are talking about - in reality, we are talking about the possibility of developing a profile as opposed to any kind of likelihood, are we not?
A. Well, that's right. But you either test it and you get nothing - sorry, you either test it you get a result or the chance of a result, or you don't test and you get nothing. So generally if your lab has the same capability as any other lab to test it and possibly get a profile, we're happy to exhaust the sample. But if it is some sort of technology that you know that your lab doesn't have, I requested, "Please give us the opportunity to go somewhere else". For instance, you know --

Q. I think you agree that the prospect of exhausting a sample is a serious one to be properly considered according to proper criteria pertaining to that sample?
A. Yes, but it is a destructive test and that's by nature, and you can't get away from that.

Q. But does not your requirement actually direct to the laboratory a need to undertake some kind of data analysis of the process of Microcon to full to identify what kind of likelihood is in fact involved, whether it involves a high likelihood - however that might be defined - or something else? In other words, there's no data, is there?
A. I understand they're obtaining data.

Q. Okay. Once that's obtained, then that might shed some more light on this issue of likelihood that you have raised and in fact required that it be satisfied?
A. Yeah, I just want to again say I qualified that on

later emails to the people at the laboratory. Not to Mr Rigby, no, but after further discussions with Lara Keller and Helen Gregg, and they asked for some audited advice, I gave further qualification that we understood that there is no guarantee getting profiles and that there is a balance between trying to preserve the sample sometimes and actually using it to try and get a result.

Q. I guess what I am really putting to you is that an issue now arises which requires sober assessment in a scientific way --
A. Yes.

Q. -- by extraction of data analysis to determine the nature and extent of the discretion which you would permit to be allowed with respect to Microcon to full?
A. Absolutely. This has to be done in a scientific way and backed up by data and validation. And that's why we have asked for a pause on that testing, if you like.

Q. It might even require a project, such as Project #184, to do the data mining and do the analysis and come up with information to give to you? In proper form, of course. Do you accept that that might be a scenario that is posed by what you have put in this email?
A. Possibly.

Q. Can I suggest to you the conundrum that you have delivered to the laboratory is revealed in the first page of that document, if we can go to that [WIT.0020.0007.0001_R]. This is your latest email of 26 September, 12:21. The last line of that says:

> *We can't really wait months to test some of these samples.*

Correct?
A. That's right.

Q. So you accept that it may need a project to evaluate the criteria for Microcon to full in a proper way, but in the meantime you can't wait for months to test the samples that are backing up. That's what you have delivered to the laboratory, isn't it?
A. My understanding is that if you're going to have a blanket rule about, "everything is going to be

micro-concentrated to a certain volume", then it would require a fair bit of validation. If some of these samples are going to need to be tested, I guess it might be on a case-by-case basis and with consultation with police until that's done. But if there's going to be - if we are going to stick with a blanket volume, it needs to be something that doesn't risk the loss or the ability to get a profile from those at the bottom end.

Q. Well, from what?
A. A profile from those at the lower end of that range.

THE COMMISSIONER: Mr Rice, I don't want to interrupt you. I don't want to stop you, certainly. What's the concern to which you are directing your cross-examination?

MR RICE: Well, it's a dilemma that is presented by imposing a test of likelihood or high likelihood that Microcon to full will reveal a result. A scenario which requires assessment and possibly a project to determine the proper criteria --

THE COMMISSIONER: But as I understand what's happened, it emerged at about the time the Commission was established that the process adopted in 2018 ought not be continued, pending further work, so there was a desire to revert to the previous status quo. That's the first step, wasn't it? Is that right?

MR RICE: Yes.

THE COMMISSIONER: And then after that decision was taken, it emerged that what had been established was not the status quo, but the status quo without the concentration step?

MR RICE: Yes.

THE COMMISSIONER: So then the next decision that was made was to introduce the concentration step. And all of that was done in good faith and, as you correctly said, in a peculiar context, an urgent and peculiar context. And then it emerged that there was a scientist or scientists within the lab, who were concerned that using a rule for all cases was not the best practice, but that discretion should be exercised. So Inspector Neville put that information forward to the authorities, and there it sits for the

moment, but his contention in the correspondence related to a problem that might arise if a blanket rule were adopted and applied, and that, in those circumstances, he was concerned that those making the decision took it upon the footing that there was a degree of certainty of getting a result.

But history has passed by that problem, because at the moment there is a fixed rule to concentrate to 35 microlitres, but the authorities have been given information about what scientists think of that rule, that there is a better way to permit a discretion to be exercised, and no doubt that will be looked at. But I don't know that I am going to be concerned with making a finding about whether Inspector Neville's point, that particular point, is right or wrong, sound or unsound, because it relates to decisions being made in the circumstances that you have identified.

And so, why does it trouble you? I can see it troubles your client. So why does it trouble your client?

MR RICE: The situation is really this, that yes, there's a blanket rule, and it may well be that it was desirable to exercise some exception to that. But that gives rise to a scientific problem of identifying properly what the exception would look like and validating - in effect, validating a new process in the alternative.

THE COMMISSIONER: I think, as I understand it so far from what Professor Wilson-Wilde said and from the reports, if you're going to adopt a process, a fixed process, then you better test it and validate it before you adopt a fixed process.

MR RICE: Yes.

THE COMMISSIONER: But if you're going to leave it to the discretion of scientists to decide whether or not to take a step or not, then although there can be fixed criteria to take into account as factors, you could also leave it up to them to decide, as Professor Wilson-Wilde says happens in her lab in relation to this threshold issue.

MR RICE: But it is really the timing and methodology of achieving that result.

THE COMMISSIONER: Yes.

MR RICE: You can't just say today or tomorrow --

THE COMMISSIONER: I am in the business of making findings.

MR RICE: Yes.

THE COMMISSIONER: So there is a finding that you don't want me to make because it would be wrong. What's the finding you don't want me to make?

MR RICE: No, I am just seeking to draw out --

THE COMMISSIONER: Yes.

MR RICE: -- that, on the assumption it is desirable to have some exception to the blanket rule, that needs time and effort to develop.

THE COMMISSIONER: Yes, I think that's unarguable. Of course that's right.

MR RICE: That's really the only point I was looking to make. In circumstances where the Inspector has said to the laboratory, "We can't wait months for testing".

THE COMMISSIONER: Yes.

MR RICE: So that raises a question, "Well, what do you do pending" --

THE COMMISSIONER: Wasn't he talking about, on the basis there has been a pause in testing, "We can't wait months to test some of these samples", so you can't just stop testing. But nobody stopped testing, have they? So that assumption is --

MR RICE: No, but it leads to the scenario where, pending development of an alternate process, if the desire is to continue to process, then it will be on the basis of the 19 August memorandum because that is the best available scientific basis at this point in time.

THE COMMISSIONER: Yes. But he's not saying it isn't, is he? Anyway, you ask him. Go ahead. I just wanted to

identify your client's concern about what finding I might make, because if I am not going to make a finding, you don't have a concern.

MR RICE: No. Well --

THE COMMISSIONER: But if there is a risk I might make a finding, then you should continue to educate me and elicit the fact.

MR RICE: No, it is not really a matter of persuading you to make a finding or not, Commissioner.

THE COMMISSIONER: Yes.

MR RICE: I was just really alerting to the dilemma that developing an alternative to the memorandum is not as simple as --

THE COMMISSIONER: No, of course not. Of course not.

MR RICE: I've got no other point to make.

THE COMMISSIONER: And if, for example, your client considered that the process advocated in the Options Paper was never to be resumed and the question is raised, "What's to replace it?", then of course you will have an interim measure and that's none of my business because I'm looking at the position to this date, in a sense, and not into the future. There are going to be many interim positions, aren't there, and many studies.

MR RICE: The only point, Commissioner, is that interim measure --

THE COMMISSIONER: Yes.

MR RICE: -- may not be and apparently is not one which will, for that interim period, be entirely satisfactory to the police, but that's just a product of the flow of events.

THE COMMISSIONER: Of course it is, yes. And no doubt Queensland Health and FSS and Police will work towards arriving at the best possible things that can be done now about the things that will be done in the future. Yes. But some criticisms might be made about the particular

proposals that were put forward from time to time since June, so be it, but they were put forward and modified and under the urgent circumstances and pressing circumstances that you rightly identified.

MR RICE: Insofar as Inspector Neville expresses concerns about the interim procedure --

THE COMMISSIONER: Yes.

MR RICE: - it is simply the case, which is really the only point I was seeking to make, they are not capable of immediate resolution, that's all.

THE COMMISSIONER: No, that's right. I accept that.

MR RICE: Yes. That's all. Thank you.

THE COMMISSIONER: Mr Hodge, did you want to say anything about that?

MR HODGE: I don't want to say anything about that.

THE COMMISSIONER: All right. Mr Rice, you were on your feet cross-examining Inspector Neville. Did you want to continue?

MR RICE: No, I had finished.

THE COMMISSIONER: You had finished?

MR RICE: Yes, thank you.

THE COMMISSIONER: Is there anybody else who is going to ask questions? Ms McKenzie?

MS MCKENZIE: No, thank you, your Honour.

THE COMMISSIONER: Do you have any re-examination, Mr Jones?

MR HUNTER: I do have some questions. But I think, Mr Jones, you have some too?

MR JONES: I don't.

THE COMMISSIONER: No, I'm sorry, I forgot that you hadn't

asked any questions. Go ahead, Mr Hunter.

<EXAMINATION BY MR HUNTER

MR HUNTER: Q. Can I just clarify something concerning the way in which samples from murder investigations are classified for the purposes of whether they are P1 or P2. Is it the case that any sample in a murder is P1?
A. No.

Q. And so is that why, whilst in 2018 - November 2018 - when you became aware of this issue with respect to samples in a particular murder that had not been auto-microconned, if I can use that expression, the same issue didn't arise in December 2021 when you got some DIFP results for a murder investigation and the samples in that.
A. I believe so.

Q. That's because those samples were P2.
A. Yes. P1, there is a limited number that can be put through. P1, it's limited to 15, I think is the physical capability of the instruments used. So, you know, it would only be the very highest priority samples put through. The rest would go through the routine P2 process.

Q. So it was therefore possible to get a DIFP result in --
A. Yes.

Q. -- despite it being a murder investigation?
A. Correct.

Q. We have heard about the decision that was made in June of this year to amplify the low quant samples without micro-concentration.
A. Yes.

Q. Did the QPS have any involvement in that decision at all?
A. I certainly didn't and I didn't hear about anybody else from QPS being consulted.

Q. In terms of the availability of the forensic record at the laboratory, we know that the reporting scientists have access to the forensic record.
A. Yes.

Q. Do the Analytical scientists have access to the forensic record?
A. Yes.

Q. Do I understand your position to be that whatever model ultimately be adopted at the laboratory, it's an essential part of the process that the Forensic Register be consulted at the analytical stage?
A. Yes.

Q. Particularly obviously with low quant samples.
A. Yes.

Q. And at that point a strategic decision be made about whether they are to be micro-concentrated?
A. Yes.

Q. And, if so, to what quantity.
A. Yes.

Q. Can I ask you about the turnaround time and could I ask, please, that we have displayed a graph that is on page 49 of the witness' statement, it is [WIT.0020.0001.0001_R at 0049]. If you can just blow up the graph. Thanks.

This is from paragraph 248.
A. Yes.

Q. Of your first statement?
A. Yes.

Q. It is a graph that tracks turnaround time in days --
A. Yes.

Q. -- from 2016 through until the middle of 2018.
A. Yes, for violent crime.

Q. Did you, or anyone else as far as you know, ever apply any pressure to the laboratory about turnaround times?
A. We've asked for a turnaround time of 10 days as an aspirational target, but I know people before me hadn't raised it at all with the laboratory and in my time, I have raised it, but since then it's still floated between 10 and 20 days. There was no negative consequence for the laboratory if it went over the 10 days or whatever. If it got to 10 days, I gave some appreciation. If it got high, we might bring it to their attention but, as I said, there

was no material consequence if it didn't meet 10 days and in fact it's been way over 10 days for a long time. There's no impact on the funding that we give to the laboratory or anything like that. As I said it's an aspirational target.

Q. I misread that graph. I had mistakenly thought that it covered the period immediately prior to the implementation of the --
A. It does.

Q. -- Options Paper? Yes, it does.
A. It does.

Q. We see December 2017.
A. Yes. At 40 days.

Q. It is between 40 to 50 days or thereabouts? Or is that November?
A. No, no.

Q. That's November.
A. It's 40 days.

Q. And immediately after the implementation of the Options Paper in February of the following year, the turnaround time was tracking upwards.
A. And it continued to, yes.

Q. We heard some evidence on Monday, I believe it was, or it might have been yesterday from Ms Rika about her experience as a forensic scientist prior to 2008 when entire items in the main were submitted to --
A. Yes.

Q. -- the laboratory and the scientists took over a case from inception and managed it all the way through.
A. Yes.

Q. Do you have a view about how that process compares with the current one?
A. Previously it was problematic because we took large numbers of physical items to the laboratory and they did the screening and presumptive testing and sub-sampling, and that was the bottleneck. And as a result, we introduced a model where, in the field, police would do that - the forensic officers, I should say, would take on that

responsibility and that not only immediately addressed the backlogs because the bottleneck was solved, we had 300 people doing the sub-sampling and screening rather than a small number at a laboratory.

But there were a few advantages around that too, in that, for instance, items of clothing and whatever, you could target better to actually tape-lift - if you had the complainant with you and said, "I was grabbed here", so you could actually target areas that would maximise the opportunity to get a DNA from it. But it also allows you to - or actually, it minimises the chance of any contamination, because you are doing it in situ, the only opportunity for contamination is from something in the immediate environment or from the person taking the sample and we had an elimination database to filter that out.

So it eliminates any chance of inter-case or in sometimes intra-case contamination at the lab where everything is coming to a common bench. So there were a number of advantages around that. Oh, and also if you put items in packaging and it rustles around on the way to the lab, there's a chance of dislodging the material too. So it gives a better opportunity to target. It minimises some of the contamination risks and it definitely sped up the process. So I would be very hesitant to go back to a process where all the samples, as in physical items, were sent back to the lab. I think that would be a retrograde step but it seems to be a flow-on from that, which was not the intent of the QPS but it's become a production line, sort of cookie cutter thing, everything is treated the same way and there doesn't seem to be any overview of the case and I think that is problematic.

Q. So do you see benefit in there being an approach that encourages communication between the investigators, the scenes of crime officers and scientific officers and the forensic scientists?
A. Look, because of the way that we are collecting these items, the scientists are given a sample that is already targeted. So in a lot of case the labs will need to talk to investigators to work out where the target sample. So, we've sort of obviated that. But I do accept some better information-sharing might assist provided it's accessed. Queensland Health and Queensland Police both use now the common Forensic Register and it's divided. So we can't see what's on Queensland Health's side and they can't see

what's on the Queensland Police side. There may be some benefit to exchanging some more information around that, particularly some of the information in the examination summaries. I'll be honest with you it is hidden from them, but there is a balance because you don't want to introduce unnecessary cognitive bias where a scientist may be more motivated to call them an allele because they have some emotional response to the information that they know about the case, so it has to be balanced. I do think that there could be an improvement there.

Q. On the issue of access to information, you talk in your statement about a disagreement you had with Ms Allen about that brief period where police investigating cold cases had access to limited data --
A. Yes.

Q. -- from the laboratory.
A. Yes.

Q. Now, the access that they had was read-only, correct?
A. I believe so. If it wasn't, it was certainly auditable, but I believe it was read-only.

Q. You referred to the relevant ISO standard, it's 17025?
A. Yes, ISO 17025.

Q. Clause 7.11 .3 prescribes that:

The laboratory information management system(s) shall:

a) be protected from unauthorized access;

A. Yes.

Q.

b) be safeguarded against tampering and loss;

A. Yes.

Q.

c) be operated in an environment that complies with the provider or laboratory specifications or, for non-computerized systems, provides conditions which

safeguard the accuracy of manual recording and transcription;

A. Right.

Q.
d) be maintained in a manner that ensues the integrity of the data and information;

e) include recording system failures and the appropriate immediate and corrective actions.

A. Yes.

Q. Now, can you see any way in which a system that enabled the QPS to have visibility of the progress of a sample within the laboratory?
A. No, and in fact there's another clause that escapes me the number, but it actually says that the service provider needs to provide the customer the opportunity to view basically the operations, and that could be witnessing examinations and the like, and I would draw the parallel to seeing that information on the Forensic Register is the same.

Q. And similarly can you see any problem in terms of compliance with that standard if the QPS had visibility of data such as the quant and the degradation value?
A. No.

Q. Obviously this would have to happen with the consent --
A. Yes, yes.

Q. -- of the laboratory?
A. So your - it's very customer-centric standard and by agreement with the customer, you can - for instance, I think the main concern was the customer was viewing reports or information that had not been peer reviewed, but by agreement with the customer that is possible. So at least the customer knows it's not peer reviewed.

THE COMMISSIONER: Q. But the quants are the quants.
A. That's right.

Q. They're not peer reviewed. The interpretations are

peer reviewed.
A. That's right.

MR HUNTER: Q. So would it be useful for someone, say, sitting in your position who is being asked to pass on a request for retesting, because that's how it works, isn't it, it comes through your section?
A. Someone with the appropriate training and awareness I guess of how to interpret it, it doesn't have to be extensive, yes, it would be helpful.

Q. And so that would be informative if you were getting a result that was otherwise DIFP, assuming we end up with a system that is analogous to that at least below some cut-off point, that would assist police in making a decision in conjunction with a forensic scientist as to whether or not a sample ought to be further tested.
A. Yes, but I agree with Ms Allen in her - she has raised it also that the scientists are better equipped to assess that and if they are assessing that data, I'll be honest with you, there is probably no need for us to do it.

Q. I suppose the issue, though, is that the scientists won't know the criticality or otherwise of the particular sample and that's an important factor as well, isn't it?
A. Well, at the moment if we're provided the sample, I would contend it's important, it has some importance for the case, because we triage before we give them to the laboratory. So if we hand a sample over in a vial, it is important for us.

Q. I suppose what I mean though is what about a sample that is a low quant sample --
A. Okay.

Q. -- and if it is going to be amplified it needs to be microconned to full so it's going to be exhausted. Now, surely the scientist would need to consult with the police about that process and the desirability of it or the need to do it prior to exhausting the sample?
A. It could get quite cumbersome. It's an assessment that, I think, could be made with the context of the case by the scientist. If there's other DNA evidence - and this is just something additional and potentially not, but if there is very limited evidence in the case in terms of DNA, and they are probably not aware of other evidence such as fingerprints, yes, I guess it would be important to consult

with the police.

Q. Lastly, can I ask you about this issue of your awareness of the laboratory's capacity in terms of how many samples can it cope with in a particular time. You told us that you have tried to find that information out.
A. Yes.

Q. Can you explain why you were trying to find that information out?
A. Well, I mentioned in my initial evidence that it's a bucket and you can only fill it. You can only do so much. I wanted to work out that and try to moderate what we gave and if we couldn't moderate it, I guess start looking at options to try and increase the size of the bucket, but I haven't been able to get a handle on that.

Q. Was there at one stage an attempt by Queensland Health to have the QPS enter into a memorandum of understanding regarding the performance of this sort of testing of forensic samples?
A. Yes.

Q. Can you tell us about that?
A. Well, most recently - in 2018, after the Queensland Audit Office Report, there was a suggestion - a recommendation, I should say - that some sort of service level agreement or performance criteria should be established for the testing of crime scene samples. We had, as I said, an MOU in place from the reference samples but not for the crime scene samples. So in response to that, Queensland Health did establish an MOU and the Audit Report actually covered all of our aspects of testing. So it covered drug testing and some toxicology - I think every aspect of what they do out there.

And there was an attempt to have a generic agreement, and they sought police to approve this generic agreement, and then they were going to have schedules attached that would have the cost for the service and some performance criteria around that. We were never given that cost or the performance agreement, and the QPS was not in a position to sign that agreement until we knew the cost. It would be just like buying a car and you negotiate the price afterwards; you wouldn't do it. So we still haven't been given those costs and so we haven't entered into the agreement.

Q. Thank you.

MR HUNTER: No further questions. Thank you.

THE COMMISSIONER: Mr Jones, do you have anything?

<RE-EXAMINATION BY MR JONES

MR JONES: If I can clarify some of the evidence, because there seems to be a bit of a conflict.

Q. The time when you got access to the quants and degradation values in December 2019, I think it was, around then - does that sound familiar?
A. Yes.

Q. The people that had access to that were a very select few within the DNA Management Unit, weren't they?
A. Yes.

Q. They weren't forensic officers that had access to that information?
A. So it was - I think it was, yeah, a small number. I can't - it wasn't every forensic officer.

Q. No.
A. Yes.

Q. And the access came by the police side. That is, someone who took over from Troy O'Malley was able to adjust it?
A. Yes.

Q. The Forensic Register?
A. Yes.

Q. And it reverted back?
A. Yes.

Q. And at the time you had access and subsequent to having access, there's nobody who has any particular training to read those degradation values --
A. No.

Q. -- or quant values?
A. No.

MR HUNTER: Commissioner, we have a copy of the relevant portion of the standard and it is [QPS.0013.0433.0001], and we tender that.

THE COMMISSIONER: Thank you. I will make that an exhibit so that we know --

MR HUNTER: That hasn't been disclosed

MR JONES: It is a publicly available document, I believe, but it has not been disclosed to the parties. But it has been requisitioned so it can be disclosed.

THE COMMISSIONER: And would you make sure I get a copy of it so I can put it with Inspector Neville's statements in one place? Thanks. So that's it for today? That's it for today?

MR JONES: Yes, thank you.

THE COMMISSIONER: Thank you, Inspector Neville. I think that concludes your evidence. Thank you for your assistance.

<QUESTIONS BY THE COMMISSIONER

THE COMMISSIONER: Q. Sorry, there was one thing I want to ask you, just to clarify in my mind.

In cases of major crime, do police as a matter of practice only submit up to a certain number of samples for each case? You might take 100 samples, but how many do you submit?
A. So I mentioned this previously. So there is no limit to the total number, but the idea is not to flood the laboratory. So they are prioritised in lots of 25.

Q. Yes.
A. Sometimes multiple lots of 25, or a little bit more might be submitted at once, but the idea is to submit the most probative ones first, the most urgent. As you get the results back, submit more. It might get to a point the ones that are of least priority are not submitted because you have sufficient evidence for the case.

Q. Yes. So selection is made by investigators to have

what they regard as the most critical samples tested first?
A. That's right. So it is a decision made generally by consultation between the Forensic Coordinator or Forensic Manager, because for these - generally for the bigger major crimes, especially, there is someone appointed to oversee the multi-disciplinary approach between them and the detectives who are investigating.

THE COMMISSIONER: Yes. I understand. Thank you. We will adjourn to tomorrow to 9.30am.

<THE WITNESS WAS RELEASED

THE HEARING WAS ADJOURNED TO 9.30 AM ON THURSDAY, 29 SEPTEMBER 2022

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