COMMISSION OF INQUIRY

INTO FORENSIC DNA TESTING IN QUEENSLAND

Brisbane Magistrates Court
Level 8/363 George Street, Brisbane

On Monday, 26 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

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THE COMMISSIONER: Yes, Mr Hodge.

MR HODGE: Commissioner, today we begin module 1. If I can open my iPad, I will begin my opening.

THE COMMISSIONER: Yes.

MR HODGE: Since the first hearing that we had in front of you, Commissioner, you have delivered an interim report, and that report was released to the public last week on 20 September 2022. In that report, you considered the reporting in formal witness statements of samples using words such as "DNA insufficient for further processing" and "no DNA detected", and you concluded that statements that included those kind of phrases without further explanation were not true in all cases.

You recommended that the lab identify all cases in which those kinds of words were used in formal witness statements and issue addendum statements giving an accurate account of the factual situation of the sample in the particular case.

Your report identified that the words "DNA insufficient for further processing" came about after the formulation and presentation of an Options Paper, which was presented to the Queensland Police by the lab in 2018.

The consequence of the adoption of Option 2 in that Options Paper was that samples in the range between .001 ng/µL and .0088 ng/µL were not being tested after quantitation unless it was specifically requested by the Police or a laboratory scientist.

This module of your Commission will essentially be concerned with issues that arise in relation to that Options Paper. The process by which the decision was made in 2018 to stop testing samples in that range, the process by which further decisions were made this year to undo that 2018 decision, and with the assistance of independent experts from whom the Commission has obtained reports, the validity and merits when judged against best practice of those decisions, both in 2018 and this year.

I should also say something very briefly about the words "no DNA detected" which you also addressed in your interim report. That will not be a focus of this module.

The description "no DNA detected" has been used by the laboratory for a number of years to represent samples which had a quantitation value below the quantitation instrument's limit of detection; that is to say, below the limit at which the machine used by the lab could detect, accurately detect, the presence of DNA. And according to the laboratory's current validation of the relevant instrument, that limit of detection is .001 ng/µL, and that the use of wording such as "no DNA detected" where the level of DNA falls below the limit of detection is common in other labs in Australia, and as you found in your interim report, it is correct insofar as it reflects a scientific view, which is that no DNA was reliably detected by the instrument that was used.

We then are not concerned in this module with exploring the issue that you have already addressed in your interim report, which is the potential inaccuracy of those words when understood by somebody who is not approaching it from that scientific background.

What I now propose to do today is to outline some of the factual background and evidence that will be relevant to this module. I want to begin with the process of DNA collection and analysis. You explained this, Commissioner, in some detail in your interim report and I know you are very familiar with it, but I want to touch on some aspects of the process to assist all of those in the courtroom or watching on the live stream to understand some of the evidence in this module.

As you explained in your interim report, there are six main steps in the collection and processing of a DNA sample. First, the collection of the DNA from a crime scene or a body often by taking a swab or a tape-lift of something.

Second, the extraction of the DNA from that swab or tape-lift into a solution, and that is done in the Queensland Laboratory by two machines, and those machines ordinarily dilute the DNA into a solution of about 90 to 100 microlitres.

And so, coming back to that threshold use, when we talk about .001 ng/µL, we are talking about the quantitation of DNA in that kind of solution. And that is the third step when an instrument in the lab measures how

much DNA there is in the solution.

The fourth step is amplification, where the DNA is split apart and replicated to increase the amount of DNA for analysis. The fifth step is capillary electrophoresis, where the DNA is processed and analysed at certain locations to see how many pairs of bases exist at that location. And that process results in a graph called an electropherogram which shows how many repeats of bases were present at the particular locations considered, and a large number of pairs be shown as a peak on the graph, which then leads to the sixth stage where interpretation of that electropherogram is done to determine the likelihood that a certain person with known DNA either did or did not contribute to the sample.

If at the quantitation stage - that is, the third stage when the DNA is measured - there is a small amount of DNA detected, it is possible to perform an extra step called "concentration", and concentration involves condensing the liquid in which the DNA is suspended. And as you explained in your interim report, Commissioner, a sample can be concentrated to increase the prospect of capturing a greater amount of DNA for the amplification stage, the fourth stage, and this can increase the chance of obtaining a profile which then, if you have obtained a profile, you can compare either to a reference sample - I'll come back to that - or upload it to the NCIDD, which is a national database, and I will come back to that.

At the Queensland laboratory, typically if the sample was concentrated, that is, if it went through that extra stage, the solution in which the DNA is present is condensed, and it is condensed to about one-third of its former volume, to about 35 microlitres, although sometimes it is condensed to a much greater extent. And, of course, in condensing the solution, then the volume of DNA per microlitre is increased.

THE COMMISSIONER: So what we are talking about is if you get your 95 microlitres and if we think of a saucepan and you are going to put eggs in it, and that's the 95 microlitres, is the saucepan full of water and there is a healthy amount of DNA, so let's say there are a dozen eggs in the saucepan, then when you use a spoon to fish out 5 microlitres for testing, you are going to get an egg or two?

MR HODGE: Yes.

THE COMMISSIONER: And you can then replicate those eggs to increase the amount that you have got to analyse. But if you have got the same saucepan with only two eggs in it, then when you take five microlitres out, you might miss an egg entirely or might only get one. So you boil off the water, in effect, so that the two eggs are floating in a very small amount of liquid. Now when you put your spoon in to fish out the eggs - the DNA in our metaphor - you are likely to get one egg or both eggs out of the small sample you had. You started with two. In short, we speak of concentration, don't we? Nanograms per microlitre is the mass of material in a volume, and you can increase that ratio by decreasing the liquid.

MR HODGE: That's right.

THE COMMISSIONER: Yes. So in that way, you are more likely to capture sufficient DNA for further testing, whereas if you don't concentrate, you are likely to miss it. Is that correct?

MR HODGE: That is exactly it.

THE COMMISSIONER: Yes.

MR HODGE: And in the Queensland Laboratory, they use a machine or machines called microcon centrifugal filter devices to carry out concentration, and so the consequence is, what you will often hear and everyone will often hear is a concentration step referred to in these cases as "performing microcon" because that is the name of the machines or the instruments that they use in order to concentrate.

THE COMMISSIONER: Yes.

MR HODGE: So from December of 2012 until February of 2018, the lab used micro-concentration as a matter of routine for samples that contained low levels of DNA in order to increase the concentration of DNA within a sample.

THE COMMISSIONER: So until 2018, concerning samples below a certain value, a certain mass, certain concentration, they would take the step that you describe? They would

concentrate it in order to maximise the prospect of getting a good profile?

MR HODGE: Yes. I think the words I used were: they would do it as a matter of routine.

THE COMMISSIONER: Yes.

MR HODGE: The importance of that being that there are three classifications of samples that come into the laboratory, and they are classified according to priority.

Priority 1 is the most urgent and serious crimes; priority 2 is known as major crimes and includes all types of sexual assaults and rapes, as well as homicides and other offences against a person; and priority 3 is known as "Volume Crime" and that would relate to effectively offences against property like burglary. And whether particular samples were concentrated as part of that routine in the past depended upon both whatever quant value the sample had, so they wouldn't concentrate a sample that already had a high concentration of DNA within the liquid, and also the priority of the sample.

And so before February of 2018, Priority 1 and Priority 2 samples with a quant value of between .001 ng/µL and .008 ng/µL were concentrated. That is, the most urgent crimes and major crimes. But Priority 3 samples were not, as part of the routine, routinely concentrated.

THE COMMISSIONER: So the stage we reach is that, leaving aside volume crime which is a special case, for crimes of violence against people and among those, the crimes that the police designate as Priority 1, they are regarded as even more serious and more important, for all of those cases, all samples were tested fully and samples with a low quantitation, that is below .0088, they were also micro-concentrated before being progressed to the remaining steps, but, in short, they were all tested fully in an attempt to get a usable profile; is that right?

MR HODGE: That's right. So all of them would go through all six stages, and if they were below whatever the relevant threshold was or in between the relevant threshold, then they would be concentrated. But after that decision in February 2018, whilst Priority 1 samples continued to be concentrated, Priority 2 and Priority 3

samples were now recorded as "DNA insufficient for further process". And I will come back to that decision in a moment.

Before doing that, I need to set some other context, which is about the structure of the laboratory. The forensic DNA laboratory in Queensland is part of a wider group in Queensland Health called the Forensic and Scientific Services, and it comprises a range of services including forensic pathologists, coronial services, including the mortuary and toxicology, and a public and environmental health group which includes chemistry, public health virology and radiation and nuclear scientists.

One stream of the Forensic and Scientific Services is the Police Services stream, and that comprises forensic chemistry, which includes illicit drug analysis and forensic DNA analysis, and many of those services are provided from space at a Queensland Health facility at Coopers Plains. Within The Forensic DNA Laboratory there are a number of teams, and what I might do now is bring up an organisational chart of the lab. And the document ID is [FSS.0001.0002.3976_R].

THE COMMISSIONER: Yes. Are you going to bring it up on the public screen?

MR HODGE: I think they are.

THE COMMISSIONER: They are? All right. Thank you very much. And counsel have them? Yes. Yes, Mr Hodge?

MR HODGE: Let me then explain some of the aspects of the teams that you see on that organisational chart. On the left-hand side you see Evidence Recovery and Quality. And, put simply, Evidence Recovery deals with obtaining of DNA into a solution. And the analytical team within the Evidence Recovery and Quality performs all of the analytical tasks on the samples, including quantitation, amplification, capillary electrophoresis and concentration.

THE COMMISSIONER: So they perform the chemistry, the test tube work?

MR HODGE: That's right.

THE COMMISSIONER: That is not entirely correct, but that

is a way of looking at it.

MR HODGE: Yes. Then further to the right, you will see, moving over to Forensic Reporting and Intelligence, "Reporting", and you will see two reporting teams.

THE COMMISSIONER: Yes.

MR HODGE: And just to explain the division then, the evidence recovery and analytical teams have carefully maintained the laboratories so that DNA from the scientists or the outside world does not contaminate the samples, and they wear full PPE when they are performing their duties in the clean areas of these laboratories, and then the reporting teams comprise scientists who interpret profiles, determine whether a profile obtained from a crime scene sample matches a reference sample, or the likelihood ratio that a person contributed or did not contribute to a sample. They write formal reports for court, and they appear in court as expert witnesses.

And then further to the right, the Intelligence team assists with reporting information back to Police and uploading profiles to the national DNA database. And then having now talked about, effectively, the steps in the process, to come back to the middle of the chart, the Quality and Projects team deals with quality management within the laboratory.

And each team has a supervising or senior scientist, and you can see that on the chart. And then as you can also see from the chart, there is then a Team Leader in respect of each of those groups of teams. Paula Brisotto is the team leader for Evidence Recovery and Quality and Justin Howes is the team leader for Reporting and Intelligence. And in turn, they report to Cathie Allen, who is the managing scientist for the DNA lab and also the forensic chemistry lab. And it's not displayed on this chart, but above the Cathie Allen is the executive director of FSS who is Lara Keller and there is also an FSS-wide quality position held by Helen Gregg. So that is the structure of the laboratory as it is at the moment. Could we take that down. Thank you.

Before making significant changes to processes or procedures within the laboratory, FSS, the lab, performs an investigation to determine the benefits and risks

associated with the potential change. And when they undertake this procedure or this process, they call it a project and they give it a number. And in April of 2015, the lab started project #163. That was a project proposed by Kylie Rika, who is, as you would have seen, Commissioner, a senior reporting scientist.

And the purpose of the project was to review the results from DNA samples that had been automatically concentrated and determine whether the process of automatically concentrating them was worthwhile. The concentration process is designed to improve the prospect of obtaining DNA from the sample, as I have explained already, and at the time the concentration was occurring for samples which had a quantitation range between .00214 ng/µL and .0088 ng/µL.

THE COMMISSIONER: That is to say at the stage at which you are talking about, this is 2015.

MR HODGE: That's right.

THE COMMISSIONER: The earlier you were talking about .001, but at that time the limit of detection was a little higher.

MR HODGE: That's right.

THE COMMISSIONER: Yes.

MR HODGE: Project #163 was finalised with a conclusion that there was value in continuing the automatic micro-concentration process for samples with low levels of DNA and the final report from Project #163 was signed by the lab management team in December 2015 and put to rest on the basis that it would be revisited following the introduction of new equipment.

In April of 2017, Justin Howes, the team leader of Forensic Reporting and Intelligence, restarted Project #163 and that was approved by Paula Brisotto, the other team leader, the team leader of Evidence Recovery and Quality. And the reason for restarting the process was project improvement. The resurrection of Project #163 became Project #184, and Project #184 had the same goal as Project #163: to determine whether it was worthwhile to automatically concentrate samples with low levels of DNA.

The project proposal was circulated at the end of July 2017 by Cathie Allen, and I will have this document brought up. It is [FSS.0001.0001.0862_R].

THE COMMISSIONER: So I gather that there is a protocol within the lab for making these kinds of studies, because you speak about projects and numbers and then you put up a project plan. So I take it that there are a series of formal steps that are undertaken when somebody proposes to examine a question like the one that you have described; is that right?

MR HODGE: That's right. There is a standard operating procedure in relation to this kind of change management. I won't bring that up in the opening, but inevitably --

THE COMMISSIONER: You are going to deal with it.

MR HODGE: -- during the evidence that you will hear, we will get the standard operating procedure.

THE COMMISSIONER: Yes.

MR HODGE: But you are right, Commissioner, there is a standard opening procedure where you work through a project and it comes to the management committee to consider and sign off on the project.

This is the project plan for Project #184 [FSS.0001.0001.0862_R], and you will see that the person who is the team leader for it is Justin Howes. As I indicated, it was circulated within the laboratory by Cathie Allen at the end of July 2017. What I will just note at this point is, if we could bring up pages .0863 and .0864 side-by-side, and blow up the bottom of .0863 where it says "Expected Outcome". That will need to go to the top, and then the top of what is on .0864 to show what was the expected outcome.

You see as part of the plan, what's identified is going through and looking at what data is generated. You will see that in the first paragraph it is said:

> *It is expected that the vast majority of DNA profile outcomes would be in the 'fail' category [that is to say] mostly reported as 'complex unsuitable for interpretation'.*

And then you will see in the next paragraph that:

> *It is expected that there will be some 'success' ...*

That would include DNA profiles being uploaded into NCIDD, and that is this national DNA database:

> *... and possibly obtained linking information for the QPS.*

And then, Commissioner, I want to particularly note the next paragraph:

> *It is an expectation that any recommendations are communicated with QPS in order to agree on possible new workflow strategies.*

And then there is an identification of what one of those strategies would be, which is not automatically processing low quant samples.

I note that it was always envisaged under the Project Plan that the expectation was that ultimately recommendations would be communicated to QPS to seek QPS's agreement to any change. Could we take that down now.

That was July 2017. On 30 November 2017, version 1 of the Project Report, Project #184, was provided to the management team of the lab for feedback. And to finalise a project and implement its recommendations, essentially sign-off is required by the management committee. So part of the process is, unsurprisingly, circulation of the report to members of the management committee.

THE COMMISSIONER: So the management committee you are referring to are the managers you identified in the organisational chart?

MR HODGE: That's right.

THE COMMISSIONER: Or largely those people?

MR HODGE: Yes.

THE COMMISSIONER: Mm.

MR HODGE: And if we can bring up two documents. The first is [FSS.0001.0011.2139] and that is the email from Justin Howes circulating the Project Report on 30 November 2017 and you will see - I note the phone numbers are not redacted there, Commissioner, so I am not sure if that is being displayed on the live stream. It is not being shown on the live stream. And Commissioner, I just need you to make a non-publication order in respect of the phone numbers.

THE COMMISSIONER: Yes. I direct that the phone numbers that appear on document [FSS.0001.0011.2139] not be published.

MR HODGE: What we might do, Mr Hunter has sensibly suggested, perhaps you can make a general non-publication order in respect of the phone numbers and email addresses of individuals on screens?

THE COMMISSIONER: Yes. I direct that any evidence that shows email addresses or phone numbers not be published.

MR HODGE: Thank you, Commissioner. I just note, I think at the moment, very efficiently the operators have redacted some parts of the document. But actually, it is not necessary to redact the "To" line because it doesn't show the email addresses; it just shows who received the email.

So these are the people who have received the draft version 1 report, and you'll see feedback was sought by Wednesday, 20 December. If we can then bring up version 1 of the report, which is [FSS.0001.0001.0914].

THE COMMISSIONER: So this is really a draft report that is being circulated for approval?

MR HODGE: Comment.

THE COMMISSIONER: For comment, yes.

MR HODGE: The Project Report - I will take you to some particular parts in a moment, but, in general, let me say that the Project Report revealed that 10.6 per cent of samples were successful in this particular .001 to .0088 range. And by "success", what the report means is they

resulted in a usable DNA profile. And 89.4 per cent of the samples failed; that is, they did not result in a usable DNA profile. But then the numbers were further broken down, and before I get to those, I just need to explain two terms that you will hear used, Commissioner, by witnesses. The first is a "cold link" and the second is a "warm link."

A warm link is when a DNA profile from a sample is matched to a known reference sample, and a reference sample is the DNA sample from somebody who is already known or associated with the case. So it might be the victim or a suspect or somebody else who is already known to those, the police investigating the case. On the other hand, a cold link is where a DNA profile from a sample is matched to the DNA of someone who has not previously been associated with the case.

And what version 1 of the report identified was that only 1.86 per cent of the samples had some - and the term that is used is "interaction" - with the National Criminal Intelligence DNA Database (NCIDD). And only 1.45 per cent of the samples provided new intelligence by that interaction with NCIDD.

And "new intelligence" means one of two things. Either establishing a cold link in the case; that is, by taking the sample that has been extracted and matching it to a DNA sample that is stored in NCIDD and thereby providing new information in relation to the case, or, alternatively, providing DNA information for future linking in NCIDD. That is, it might not link with somebody who is already in the database, but it will be able to be uploaded and then be able to be used in future for future matching.

And a cold link is the term that is used to describe when this unknown profile from the sample is identified by comparison to the National Crime Database and has a match.

Before we go further with the report, it is also important to note that the QPS regards NCIDD submission and response as significant, and Inspector Neville, who will give evidence in this module and is at the Forensic Services Group at QPS, has explained to the Commission that the time taken for the lab to report the initial cold links is tracked by the Forensic Register. The Forensic Register is a database that both the QPS and the lab have access to, and so what the QPS does is look in the Forensic Register

in order to see how many days it takes for the lab to tell QPS the identity of an unknown contributor in a sample; that is, the number of days for a cold link.

But as Inspector Neville also explains, there is no tracking of that turnaround time for warm links, and Inspector Neville explains that the comparison of crime scene samples to known reference samples, which is looking for a warm link, or the time taken for the lab to provide a report for court purposes, have much longer turnaround times which are not tracked by the Forensic Register. So all of that means, as we apprehend it at the moment, that the benchmark that the QPS is conventionally using to judge turnaround times is cold links, and cold links, again as we apprehend it at the moment, are concerned with submission to the National Database.

Undoubtedly, that's a metric that makes sense for Volume Crimes. One of the questions that you will need to consider, Commissioner, is what is the significance or otherwise for that and that way of looking at turnaround times in relation to Priority 2 crimes, serious crimes involving violence to a person.

THE COMMISSIONER: So I understand it, you are speaking about the police attitude towards measuring turnaround time, which is the time between the submission of a sample and the obtaining of some kind of a result.

MR HODGE: Yes.

THE COMMISSIONER: And you are telling me that in volume crime cases in particular, break-and-enters where somebody breaks a window and leaves a bit of blood on the broken glass, for example, or leaves some other kind of trace evidence of having been there but we don't know who the suspect is - it is just a somebody who has come, nobody has identified anyone - or a car has been stolen, then the relevant thing is to get a profile, load it up onto the national database and see if you get a hit. And so, the Forensic Register, which is the database shared between FSS and Police, tracks the turnaround time for those kinds of results, unknown results, for volume crime and unknown results for any crime, really.

MR HODGE: Unknown results for crime.

THE COMMISSIONER: But in particular volume crime is where the largest number are.

MR HODGE: Or whether it is where the largest number are, the volume crime --

THE COMMISSIONER: Only because it is volume crime, so there is more of it. That's all. Go on.

MR HODGE: I was just going to say it is readily understandable why you would be concerned with turnaround time for cold links in relation to volume crime, because - there are a number of reasons, but one reason is because if you have some DNA from, say, a burglary or something like that, by being able to quickly match or relatively quickly match, given that that kind of offending is volume crime, it is often committed by same offenders repeatedly, you are effectively stopping further offending if you can quickly make a match.

THE COMMISSIONER: Yes. I see. Yes, yes. Whereas - yes, I understand. And with respect to major crime, crimes of violence generally, then many of those involve offenders who have been identified by a complainant or by witnesses, and so the contest is to prove that the identified person is the offender, is guilty. And so you are not interested in cold links; you are interested in warm links. But they haven't devised the system, is that what you are telling me, to measure the turnaround for warm links? Is that what it amounts to?

MR HODGE: At the moment there isn't a measurement for warm link turnaround time, which is not surprising again because it is likely to take longer, it is going to be idiosyncratic in the sense that it won't be - it is not a straightforward process that will be applied every time. It is likely to involve different samples and different kinds of cases. But it is also a question that you will need to consider, which is what is the utility of being concerned with turnaround time for cold links in relation to priority 2 crimes?

THE COMMISSIONER: Yes.

MR HODGE: And just to expand upon that a little, bearing in mind the kinds of crimes that we are concerned with, which are murders and sexual assaults, it seems obvious

that warm links are going to be an important consideration in relation to any decision to stop or continue processing samples because if a profile can be extracted from a sample, then common sense would suggest that it is more likely to be of significance in relation to a Priority 2 crime because it is either matched or not matched to a reference sample. And so, to give some examples, does the blood that has been found on a suspect's clothing match the victim's DNA? Does the DNA that has been extracted from semen match the suspect's DNA? Or conversely, does the DNA profile that has been extracted from some piece of evidence potentially exculpate the suspect because it does not match the suspect's DNA.

And those appear to be considerations in relation to warm links which would be particularly important if you are making a decision about Priority 2 crimes, and a decision whether to continue processing or not processing.

THE COMMISSIONER: So what you are saying is that the way that - the attention paid to turnaround time for volume crime and for major crime, measured by reference to the time it takes to get a hit on the National Database, if a hit is obtained, does not, it seems, have any relevance to the bulk of work done on major crime cases?

MR HODGE: On the face --

THE COMMISSIONER: So it seems.

MR HODGE: -- that would seem to be a possible inference that can be drawn and that is something we will hear about both with witnesses from the laboratory and also QPS witnesses.

THE COMMISSIONER: Anyway, the point at the moment is to draw a distinction between the significance of cold links applying to particular sorts of cases and cases to which cold links are irrelevant?

MR HODGE: Yes.

THE COMMISSIONER: So you have drawn that distinction, yes.

MR HODGE: And then using this report or this version of the report, I just want to draw attention to three features

of the report. There are various features that will no doubt be explored as part of the evidence and will be explored using later versions of the report, but I just want to note these three for the moment.

The first is if we go to page .0924 of the version 1 report, and there is a figure at the top of the page which is figure 2. Could we blow that up. This figure shows the spread of success and failure of obtaining a profile against the spread of quantifications within that range of .001 through to .0088. And you can see, Commissioner, at the very bottom a number that begins .001 and then at the top, you can see a number that begins .0085. And at each level, the blue bar indicates the number of successes of obtaining a profile at that level of quantitation and then the red bar indicates the number of failures at each level.

And what will be apparent to you, Commissioner, just from looking at that is that as the quantifications fall towards the limit of detection of .001, the number of successes decreases and the number of fails increases. And that point is made specifically on the preceding page. But, of course, conversely, as the quantification rises towards the ceiling of the range, .0088, the number of failures decreases and the number of successes increases, so that at a quantification of .0088, you are not missing out on 10 per cent of samples providing a profile, but something meaningfully higher. And that is apparent just from looking visually at the figure.

The second point, to come back to this issue of --

THE COMMISSIONER: So just pausing there. If we look at the bottom of that graph, we can see that the last blue bar has associated with it a very, very long red bar. So you may conclude - that long red bar ends at about 45 and the little blue bar ends at about 2, so you get two successful profiles and then about 45 unsuccessful profiles.

MR HODGE: Yes.

THE COMMISSIONER: But if we go from the top of the page to the third blue bar, then the red bar that is associated with it, if the blue bar is add about 5, the red bar is at about 7 or 8, so it is 5:8 is the ratio. And in fact, if you look at the weird bar just below the 6684 number, there is a long blue bar just below the 6684 number and above the

45, the red bar associated with it is shorter. So there is a big difference between the ratios at the top of the page and the ratios at the bottom of the page, a huge difference in ratios between success and failure.

MR HODGE: That's right.

THE COMMISSIONER: Is that what you wanted me to see?

MR HODGE: Yes. Thanks.

THE COMMISSIONER: So why does that matter?

MR HODGE: Ultimately, one of the issues that you will undoubtedly need to consider as part of the decision making process is why, as we will come to in a moment, this was treated as binary; that is, why was the approach taken without further interrogation that there would be this cut-off of .0088 so that any samples below that level would simply not be further tested unless a specific request was made, given that there is a vast difference between, as is apparent in terms of the results that you obtain versus at one end .001 and at the other end .0088, what is the reasoning process that has been employed both by the lab and also by QPS in deciding that this should be approached on a binary basis.

And then the next thing I will ask you to do, Commissioner, is to go to the next page, page 11 [FSS.0001.0001.0914, at 0925]. And I will ask the operator to blow up the paragraph immediately above the figure.

You will recall what I explained already about the 1.45 per cent. The 1.45 per cent is successful interaction with NCIDD. And so I will just identify at this stage this sentence which appears here, which is:

> *This 1.45% of samples would be the pertinent value for the client to consider if the 'auto-microcon' process was not performed.*

THE COMMISSIONER: Yes.

MR HODGE: And that ties back to the discussion that we have already had and was the second observation I would make about this report, which is why is that regarded as

the pertinent value given what we have already discussed about warm links and the obvious significance of obtaining a profile in the first place and comparison with reference samples for the kinds of serious crimes that constitute Priority 2 cases.

THE COMMISSIONER: That is to say, the Options Paper having shown that about 10 per cent of samples return a usable profile, it is now said that, really, the percentage of the matters is not 10 per cent but 1.45 per cent; these are the samples that are the pertinent values, and this is the percentage of samples, that range, that give you a cold link hit on the National Database. That's the number you should look at as what you are getting out of this whole process, they're telling Police?

MR HODGE: Yes.

THE COMMISSIONER: Or they propose to tell Police?

MR HODGE: Yes, that's right. And I just want to qualify that in two ways. One is this is not the Options Paper; this is version 1.

THE COMMISSIONER: No, I understand. But we're at the stage that they are proposing to tell Police as this report stood --

MR HODGE: That's right.

THE COMMISSIONER: -- that the relevant consideration is that we are doing all this work, but you are only getting 1.45 per cent success rate because the pertinent criterion is whether or not you get a cold link.

MR HODGE: Yes.

THE COMMISSIONER: Not whether you get a cold link and a warm link which, together, is about 10.5 per cent, 1 in 10.

MR HODGE: And again, I know I can go on in detail.

THE COMMISSIONER: No, go on.

MR HODGE: Getting 10.6 per cent is not getting a warm link; getting 10.6 per cent is getting a usable profile that can be compared to a reference sample.

THE COMMISSIONER: I understand.

MR HODGE: So you may or may not get a warm link from it, but of course you then have a usable profile that you can compare to a reference sample, you can compare it to a victim's sample or to a suspect's sample or something of that sort.

THE COMMISSIONER: To put it more accurately then, in 1 out of 10 samples yield a usable profile. Whether it can be used depends upon the case, but you have got a profile that can be used for some purpose by an investigator.

MR HODGE: Yes.

THE COMMISSIONER: Out of all the samples, only 1.45 per cent of them give rise to a successful hit on the National Database; that is, a cold link. And what is being proposed is to say to police, "This is the criterion we are getting if you concentrate upon the fact that we are doing all this work and only getting 1.45 per cent success rate".

MR HODGE: Yes, which as I have noted already appears to reflect, at least arguably reflect, the concern that police are communicating around turnaround times, which are judged according to cold links and finding cold links.

THE COMMISSIONER: Yes.

MR HODGE: There is a further point that's of note about this first report, which is if we go to page .0931 --

THE COMMISSIONER: If we can go back, I'm sorry. In the second sentence, it says:

> *In considering this, it would be important to evaluate the time and cost for processing, and the opportunity to concentrate efforts on other higher yielding samples.*

The time and cost for processing - in this draft report, was there any evaluation of the time and cost for processing? Any data about what percentage of samples, of the total samples examined by the lab, fell within this range? How many time they took and how much time would be

saved and how that time - was there any examination of how that time could be used to progress other more valuable, more fruitful work?

MR HODGE: No, not in the way that you are asking about, Commissioner.

THE COMMISSIONER: All right. And why - anyway, it doesn't matter, we'll ask somebody, I suppose.

MR HODGE: And then could I then get you to go - thank you. We have gone to [FSS.0001.0001.0914 at .0931]. I just want to note something, the qualification to what I have said about this focus on NCIDD. This is the conclusion as it was in the first draft.

THE COMMISSIONER: Yes.

MR HODGE: And if we blow up the first two paragraphs, you will see that at this stage the conclusion is focused on the idea of obtaining a profile, so that it is referring to 89 per cent not yielding meaningful results. And then there is a comparison in the next paragraph, which I will come to in a moment, about all samples that underwent a microcon step, 78.5 per cent of them did not yield meaningful results. And so, there is a certain ambiguity in the original draft of the paper where on the one hand it suggests, as I have taken you to in terms of the words already, that the point to focus upon is NCIDD's submission, but in terms of a conclusion, the conclusion is really focused upon what proportion obtained a profile.

Then the third point I want to note about this version of the report --

THE COMMISSIONER: I am sorry, I just want to make sure I understood it, Mr Hodge. What is the point you are making here? By reference to the 89 per cent failure rate for samples within the range we're discussing, and a 78.5 per cent failure rate for all samples that underwent a microcon step, whether or not within that range, what is the point you are making?

MR HODGE: I will explain the 78.5 per cent in a moment.

THE COMMISSIONER: Yes.

MR HODGE: But the point I was making was to just balance the observation I had made about the passage I took you to already where it says what is of significance for the client is 1.45 per cent against, in the draft conclusion, what is being spoken of is the 89 per cent, which is physically 89.4 versus 10.6, 10.6 being where a profile is obtained.

And then let me then explain the 78.5, which is, as you have identified, Commissioner, in your questions about benefits in terms of time and cost, evaluating whether this is a good idea on its face would seem to require a lot of extra data in terms of understanding the significance of this particular quantification range within the workings of the laboratory, what savings there will be, and things like that. There is a limited amount of comparison data, but not about the things that you were asking about in this version of the report. And if we go to page .0926, this shows the origins of that figure at 78.5 per cent so that in addition to looking at the quantification range up to .0088, there was also an assessment made of what the success was for micro-concentration in respect of all samples that were micro-concentrated from 2016. And just to explain that a little bit further, it's not the case that they were only micro-concentrating samples that were under .0088. They were also micro-concentrating samples above that.

So this shows, when you look at all samples, the failure rate in respect of micro-concentration, meaning no usable profile is extracted, was 78.5 per cent. And if we go to the next page, you will see a similar kind of figure to the one we looked at before, but this is now graphing it across the full range of samples where there was micro-concentration from 2016. And it is very small and difficult to see, but it will probably be apparent, Commissioner, that, unsurprisingly, as you step up in terms of the quantity of DNA, the proportion of times when you successfully obtain a sample increases.

So in this version of the report, there was some information that at least provided a little bit of extra context, but not the kind of context that you were asking about, Commissioner. And then if we come back to the conclusions on page .0931 and if we just keep strolling down to where it says:

Based on the data analysis, the following recommendations are offered ...

We will see the recommendation in 1 as drafted is that all microcon processing cease within the relevant range. And I will also just note recommendation 4, which was that there be a further analysis six months later in relation to priority 2 samples in the range of .0088 ng/µL up to 0.0133 ng/µL to determine whether recommendation 2, which is to cease processing for all priority 3 samples could be extended to Priority 2 samples up to that range.

So that is this version of the report was considering recommending not only ceasing immediately micro-concentration or further processing of samples up to .0088, but also in six months' time evaluate whether that should be further extended.

THE COMMISSIONER: Oh, I see. So proposition 1 is, "We are going to stop further processing if the quantity is between those two limits, except for Priority 1 which is where police insist on the work being done urgently, and except in the case of coronial examinations, which are a special case which we needn't mention at the moment." So the recommendation is we stop doing it immediately, and in six months we'll see if we shouldn't increase the number of samples that we don't sample, that we don't test.

MR HODGE: Yes.

THE COMMISSIONER: By making the limit even higher.

MR HODGE: Yes. The reason I draw that to your attention is because, having drawn to your attention that there was this extra piece of information about the effectiveness of processing above .0088, which is not, as I recall it, in the final Options Paper that went to police, it might be thought that - and we will explore whether that is linked to this fourth recommendation, which is actually to consider extending it further. And that is not a recommendation or a possibility that was put before the police in the Options Paper.

Can we take that document down. Let me now, as quickly as possible, because these are things that we will then get into in the evidence, tell you about what follows.

In January of 2018, Kylie Rika, who is the first witness that we are going to call in this module, provided her feedback regarding the project report for Project #184, version 1, the one we have just looked at. And Ms Rika's feedback raised substantial concerns regarding the relevance of NCIDD upload. And her feedback included an opinion that many samples yielded a good DNA profile without necessarily resulting in an upload to the National Database.

THE COMMISSIONER: She was pointing out that the criterion that was being proposed, the cold link criterion, she was proposing that that wasn't the relevant criterion, in essence?

MR HODGE: Yes. Or at least --

THE COMMISSIONER: In essence, not the only thing?

MR HODGE: -- not as good as something else to be considered. And Amanda Reeves, a senior reporting scientist, also provided feedback. And she questioned the proposition that there was arguably minimal value in proceeding with the auto-micro-concentration in samples with DNA values. And she suggested that the report should include perceived risks and impacts of abandoning that process.

At 4.47 pm on 8 January 2018, Justin Howes emailed version 2 of the report to the Management Team for feedback and requested feedback by 1.00 pm the next day; that is, by 9 January 2018. And Ms Rika and Ms Reeves, a member of that management team, provided their feedback jointly on 9 February 2018, and that feedback questioned the data and the need to test to know the true value of a result and also the urgency for feedback.

THE COMMISSIONER: That is to say - I was going to ask you - is the evidence going to show why it seems so urgent that feedback had to be provided within 24 hours?

MR HODGE: I expect that is an issue that will be taken up during evidence.

THE COMMISSIONER: And the feedback that Ms Rika and Ms Reeves provided, that was what an email?

MR HODGE: Yes.

THE COMMISSIONER: All right.

MR HODGE: And Ms Hedge will take Ms Rika through.

THE COMMISSIONER: All right. Thanks.

MR HODGE: By 12 January, so that is within three days, a decision appears to have been made to change Project #184 into an Options Paper for the QPS. So the project did not return as a project to the management committee that met every couple of months. A curiosity so far is that we haven't yet, or we aren't yet able to provide you with a precise answer as to how and why that decision is made to proceed by way of Options Paper, but that's something that we will explore over the coming week.

THE COMMISSIONER: Just so I understand it, you have said there is a protocol for projects which involves a proposal being put up and signed off, and then the project is undertaken. And here it was undertaken by looking at certain data and preparing a report, and then the report is circulated and feedback is obtained. And then the end result is a formal report, I take it, with recommendations in it that management then decides to implement or not implement? Is that the structure?

MR HODGE: As we apprehend it at the moment, and Ms Rika will be able to give some evidence about this, ordinarily the project report that we have been - the document that we saw version 1 of and then there was a version 2 circulated, that would be finalised and signed off on by the management committee.

THE COMMISSIONER: And so what you are saying is that that process was abandoned, and instead a fresh document was prepared which has no relationship to this project protocol but is a stand-alone document called an Options Paper?

MR HODGE: Not quite. What I am saying is there was a version 2 of the Project Report. It never continued on to be finalised by the Management Committee or signed off by the Management Committee or considered for sign-off by the Management Committee. Sometime between 9 January 2018 and 12 January 2018 a decision was made to convert that Project Report document into an Options Paper, so that when you

look, Commissioner, and we compare the Options Paper with version 2 of the report, they look visually very similar. They contain very similar kinds of information, but one is a report going to the Management Committee for sign-off and the other is or becomes a paper that is presented to the police for the police to choose --

THE COMMISSIONER: And not to the management.

MR HODGE: And not to the Management Committee.

THE COMMISSIONER: Yes, all right.

MR HODGE: Now, on the one hand the decision as to whether to continue to process samples in the range .001 to .0088 had an obvious and primary significance for QPS because it involved QPS - or involved a trade-off for QPS between turnaround time as opposed to potential assistance for investigations, at least in the way it was presented. And so, presenting an Options Paper to QPS as had been envisaged in the process plan gave QPS the choice or the agreement to - I beg your pardon, gave QPS the possibility of agreeing to what they wanted to do about that trade off.

But, on the other hand, proceeding at that point by way of Options Paper seems to have also meant that the Management Committee sign-off of a Project Report for Project #184 was no longer necessary. And the consequence of that change appears to have been, whether intentionally or unintentionally, that the procedural requirement or sign-off by the Management Committee no longer applied. Ms Rika has indicated to the Commission, and I expect will say today, that she is unfamiliar with the concept of an Options Paper, and as of yet, we have not identified a precedent within the lab for an Options Paper of this kind, but, on the other hand, as I have tried to emphasise, it was always envisaged under the Project Plan that there would need to be the agreement of QPS to the change that was to be made.

With the documents that we have, it looks or it appears that on 9 January 2018, Ms Brisotto provided feedback --

THE COMMISSIONER: Just remind me. Who is Ms Brisotto in the lab?

MR HODGE: She is the team leader on the left-hand side of the organisational chart which I think is "Evidence Recovery"?

THE COMMISSIONER: Yes, all right.

MR HODGE: If I bring up a document [FSS.0001.0001.0785]. This is an Excel spreadsheet. And if we could blow up row 6 column C. Try row 7. Thank you. I am sorry, it is the wrong tab. If you see at the bottom, you are on version 1. So if you blow up row 6 column C from "v2 feedback", you will see "PMB" are the initials, Commissioner, of Ms Brisotto and the feedback is:

> *Doesn't apply to P3 with PP21. Best to be option paper as QPS should make the decision on this.*

We apprehend that this was a spreadsheet kept by Mr Howes of the feedback that he received from various people within the organisation in relation to the two versions of the report.

Ms Brisotto has told the Commission in a statement that she cannot now recall what feedback she provided and she has not been able to find a copy of that written feedback, but while she can't confirm anymore, four years later, that she gave this feedback or that it was her view at the time, she says that she does not disagree with information being provided to QPS for their decision as that was the process that she understood was adopted in 2011 in relation to Volume Crime, which is Priority 3. And again as I noted, that reflects the outcome or the expected outcome suggested in the project plan.

On 12 January 2018 - you can take down that document, thank you - Mr Howes requested a copy of version 2 of the report so that he could convert it into an Options Paper. And sometime between the end of January 2018, the Options Paper was finalised. And it is, in effect, an abridged version of the second draft of the project report for Project #184.

On 30 January 2018, Cathie Allen emailed the Options Paper to Superintendent Dale Frieberg. Superintendent Frieberg was at the time --

THE COMMISSIONER: Now, the Options Paper is the document that I attached to my interim report, isn't it?

MR HODGE: Yes.

THE COMMISSIONER: All right. Thanks.

MR HODGE: The only reason I hesitate is I was looking at a version of the Interim Report last night, and it looked like what was attached was actually version 2 of the report, but that might just be --

THE COMMISSIONER: No, it was the - well --

MR HODGE: I hope it was the Options Paper. You certainly intended to attach the Options Paper.

THE COMMISSIONER: I hope it was too. All right. Anyway --

MR HODGE: I will bring up the email. If we bring up [QPS.0013.0649.0001]. And again, you have made the direction already --

THE COMMISSIONER: Yes.

MR HODGE: -- Commissioner, that there is a non-publication in relation to the emails. You will see there is an email at the bottom of the page from Ms Allen.

THE COMMISSIONER: The bottom, the redaction. If you go a little bit further. Yes, Mr Hodge. What?

MR HODGE: And the emails that Superintendent Frieberg attaches the Options Paper - and then I will take that down now and just bring up the Options Paper itself, which is [QPS.0013.0650.0001]. I think I was just in the midst of saying before, just identifying what Superintendent Frieberg's position was at the time, which is the superintendent of the forensic scientific group of the QPS.

THE COMMISSIONER: So was she in charge of that group, as it were? Is she the head of that group?

MR HODGE: Yes, that's as I understand it. And I think then she reported to Acting Inspector Ewen Taylor. Sorry, it is the other way around. Ewen Taylor reports to

Superintendent Frieberg. If we go to [QPS.0013.0650.0001 at .0009], and you will see at the very top of the page that sentence that we looked at earlier:

> *1. This 1.45% of 'auto-microcon' samples is considered to be the pertinent value for the client to assess if the 'auto-microcon' process was not performed.*

THE COMMISSIONER: Yes.

MR HODGE: And then if we go to [QPS.0013.0650.0001 at 0010], the Options Paper offers two options for consideration. Option 1 was to simply continue with auto-micro-concentration for all Priority 2 samples, and option two was to cease processing samples that fall within the range .001 and .0088 ng/µL.

And you will see there are then a list of key elements to consider. And if we could just scroll down the page. And I will just note the first one is a downside of ceasing to process, which is the loss of opportunity to link on NCIDD. And that was said to be 1.45 per cent. And then the next six - and I think at the moment you can see four on the page, but they keep going - the next six are apparent benefits of ceasing to process: lower time and cost --

THE COMMISSIONER: But they all say the same. There might be six of them, but they all say the same thing, don't they?

MR HODGE: They all effectively say - well, with one exception, they all effectively say it will be faster and it will require less resources, so it will improve turnaround times.

THE COMMISSIONER: "We don't have to spend money testing these samples, and we can spend the money somewhere else and we can use the time somewhere else." They say it six times.

MR HODGE: There is one exception, which you can see at the bottom of the page.

THE COMMISSIONER: Yes.

MR HODGE: And that is that by not going through the

micro-concentration process at that stage, it would conserve DNA extract for further processing if other technologies became available. So you will see, Commissioner, a reference to Y-STR analysis and LCN analysis, which were not technologies that were available.

THE COMMISSIONER: They were not available in the lab, but they were available in other labs in Australia.

MR HODGE: In other labs, that's right. Yes, that's right.

THE COMMISSIONER: So they say, "If we don't test this, then we can keep it and it can be tested," which I don't understand. Anyway, somebody will explain it no doubt. All right.

MR HODGE: We can take that document down. Superintendent Frieberg received the document. She does not have any science qualifications. Superintendent Frieberg emailed back to Inspector Ewen Taylor to seek his advice. He is an inspector at the time within the DNA Management Unit, and he, too, does not have any science qualifications but has spent many years in scene-of-crime roles within QPS and had access to others in the DNA unit which have experienced DNA issues. And Acting Inspector Taylor sought assistance from other people within the DNA Management Unit and provided advice to Superintendent Frieberg, and the advice was, in short, to accept Option 2 of the Options Paper to cease processing samples under the relevant threshold.

A question that will arise for you to consider, Commissioner, is whether the QPS consulted more widely within the QPS or ought to have consulted more widely to get the views of areas of the police force that would be directly affected who were dealing with murders and serious crimes by this change of process.

On 2 February 2018 --

THE COMMISSIONER: So the police investigators weren't asked whether they were happy?

MR HODGE: As we understand it at the moment, but that will no doubt be something that we explore tomorrow in evidence.

THE COMMISSIONER: Yes.

MR HODGE: On 2 February 2018, Superintendent Frieberg, Acting Inspector Taylor, Cathie Allen and Paul Csoban and others met to discuss the Options Paper. And after that meeting, Superintendent Frieberg emailed Ms Allen and accepted Option 2. And then in June of 2018, Inspector David Neville took over as the manager of the DNA Management Unit from Acting Inspector Taylor. Inspector Neville has science qualifications and significant and relevant experience dealing with scientific processes.

In November of 2018, the DNA results from a particular murder investigation caused Inspector Neville to question the results of some samples. The results of samples had originally been reported as "DNA insufficient for further processing FP" and upon retesting, three of the four samples provided a DNA profile.

Inspector Neville raised this with Ms Allen by email and Ms Allen responded, and Inspector Neville felt confident that the laboratory was assessing the results as a matter of routine for major crimes to determine if micro-concentrating samples would be helpful. Ms Allen's response also reinforced, from the perspective of Inspector Neville, the low efficacy of micro-concentrating samples, that is 1.45 per cent. And Ms Allen also made the point that if micro-concentration was to occur, it would use up the full sample. Inspector Neville then let the matter rest until December of 2021.

THE COMMISSIONER: Sorry, when was that first communicative exchange?

MR HODGE: That was November of 2018.

THE COMMISSIONER: 2018, yes. And that was prompted by a particular murder case wherein Spectre Neville felt the results were anomalous.

MR HODGE: Yes.

THE COMMISSIONER: All right.

MR HODGE: Three years later in December 2021, Inspector Neville had another murder investigation in which the DNA results raised concerns for him. This time, of the results

that had been reported as DIFP, 33 were further worked and 10 of those returned useable profiles. And Inspector Neville thought the success range within this range of .001 to .0088 might be much higher than had been suggested in the Options Paper. And he requested a meeting with Ms Allen and commenced a review of results, and in April of 2022, the QPS started to automatically request that all DIFP results were further worked; that is, all results in this quantification range between .001 and .0088.

THE COMMISSIONER: When did he start doing that?

MR HODGE: In April of this year. Various communications occurred as to a further report from the lab about the Options Paper, and they will be covered in the evidence.

On 24 June 2022, this further report was received by Inspector Neville. That is, after this inquiry commenced. And I will bring up that document, which is [WIT.0020.0003.0001 at .0114]. You will see this is an exhibit to Inspector Neville's statement. And if we blow up the last two paragraphs on that page. Thank you. You will see, Commissioner, what this is concerned with is looking at samples within the relevant range that underwent concentration between 2018 and 2021.

THE COMMISSIONER: Yes.

MR HODGE: And bearing in mind that as a matter of course those samples were not auto-microconned or processed; if they underwent concentration and they were within the range between 2018 and 2021, it meant that somebody must have requested that they be reworked, either a scientist within the laboratory or the police. And of the reworked samples, 25 per cent provided a DNA profile. And then you will see that in the next paragraph, 6.3 per cent of the samples provided a profile suitable for uploading to the National Database.

And Inspector Neville reviewed the report and provided his opinion to Superintendent McNab. And Inspector Neville observed that the inferred success rate is grossly minimised by only including profiles potentially uploaded to NCIDD. And he went on to say:

I believe that the important measure of success is the 25% mentioned in the ...

report which accords to some extent with what we are observing. If we were to be conservative and only consider 20% as a success rate, this is still high, certainly much higher than the rate of success that was forecast by [the lab] in 2018.

THE COMMISSIONER: So the Options Paper posited a success rate of 10 per cent. Inspector Neville began to require all samples within the range to be fully processed; is that right?

MR HODGE: Yes, but only from April 2022. I just note that, because this is 2018 to 2022.

THE COMMISSIONER: No, I understand. The results that he saw was that there was about a 30 per cent success rate; is that correct?

MR HODGE: I think 20 per cent. It depends on what you are talking about. That is, it depends whether you are talking about a particular case or whether you are talking about the samples.

THE COMMISSIONER: No, I am talking about all the samples that he then --

MR HODGE: I think you might be referring, Commissioner, to the my submission that was made to the task force. That was 30 per cent for all samples and 66 per cent for special results.

THE COMMISSIONER: But what are you telling me?

MR HODGE: No, I think we are agreeing. But those are - as I recall that submission, that's not every sample automatically. That's where there has been a request for it to be done.

THE COMMISSIONER: All right. In any event, the original Options Paper had a success rate of 10 per cent. Inspector Neville was getting a success rate higher, significantly higher, and this document indicates a success rate significantly higher. But, of course, the 10 per cent came from one year's sampling and the figures that Inspector Neville got and the figures here are certain categories that might be selected, which might suggest that - anyway,

it doesn't matter. I suggest that's for another time. Thanks. I follow.

MR HODGE: Yes. So on any view, the later comparisons after 2018 show a much higher success rate in terms of number of samples. My wariness is just that they are not necessarily directly comparable because of change in process.

THE COMMISSIONER: It is day one of the inquiry. It doesn't matter.

MR HODGE: Commissioner, the last thing I will say about this exploration of the Options Paper and the consequences of it are that during this round, you will also hear from some frontline police investigators of cases where DNA was missed on the first round of testing because of the DIFP process that was adopted.

Let me then move to the issue that was of particular concern to you in the Options Paper, which is the DIFP statements. Immediately after the Options Paper in 2018, Justin Howes proposed wording for the former witness statements which gave a more accurate account of the position of those samples, and he proposed wording that the samples had low levels of DNA and were not further tested. And that wording was discussed with other reporting scientists and preferred to the "insufficient" wording.

THE COMMISSIONER: So it was proposed that samples that were not going to be progressed further, for the reasons we have been looking at, would be reported to those concerned to receive the results, with words to the effect "low levels of DNA are not processed further" or something like that.

MR HODGE: "And were not further tested"?

THE COMMISSIONER: Yes.

MR HODGE: And that is what was proposed by Mr Howes and preferred by reporting scientists. However, the "low level of DNA" wording which you addressed in your Interim Report, Commissioner, was, for reasons that are not apparent to us yet, not added to a standard operating procedure or other formal documentation at the laboratory until 5 August this year after the Commission had sent correspondence about the

wording to the Department of Health. The management - I'm sorry, I beg your pardon, I put the wrong negative in there.

The accurate wording, that is the "low level of DNA wording" that was proposed by Mr Howes, was not added to the standard operating procedure until August this year. The managing scientist, Cathie Allen, approved a number of versions of the standard operating procedure which included the inaccurate wording as the suggested statement wording in versions between 2018 and 2022, and one of the issues that we will seek to explore as part of this round is why was that inaccurate wording put into the standard operating procedure and what discretion, if any, did the reporting scientists have to depart from that inaccurate wording.

In relation to the police, results from the laboratory are first published on a platform shared between the police and the laboratory which we have spoken about already, Commissioner, the Forensic Register, and then further wording was added to the reporting of the results under the police's main database QPRIME. And that wording stated that samples reported as DIFP had low levels of DNA but could be retested or reworked by the laboratory. And so, another question that will arise in relation to the police is whether that communication to officers in the field was sufficient, given some of the issues that have arisen and that police officers are raising. That is, did they understand that, having regard to the wording, they could request that the samples be reworked, and that it was simply a matter of process that the lab wasn't doing so.

The next issue that we will explore, Commissioner, is the decision that was made on 6 June 2022, or by that date. By February and March of this year, the Minister for Health had received sufficient information to order an internal review of the laboratory and its processes to be conducted and in May of 2022, the QPS put in their submission to discussion Paper 3 from the Women's Safety and Justice Taskforce, which I addressed at the preceding hearing that we were talking about a moment ago, which identified the usable DNA profile as 30 per cent for all cases and 60 per cent for sexual assault cases, subject to the qualifications I have already mentioned. And that number, of course, is far higher but, as I keep trying to emphasise, not directly comparable because the police would be using their knowledge and experience in asking for

certain samples to be reworked, including if, for example, the samples appeared to be possibly rich samples or rich sources of DNA if they were possibly blood or semen. But on any view as you have noted, Commissioner, the difference between 10.6 per cent in 2018 and the kinds of percentages that we are talking about this year is striking, and it raises the question of this Commission, which is whether the threshold that was set in 2018 was appropriate.

In early June of this year there was a discussion in the upper echelons of Queensland Health about the possibility of a commission of inquiry, and there was also a discussion of what should be done about the threshold, which by then was the subject of concern from scientists speaking to the media and the Queensland Police Service. Shaun Drummond, who was the Acting Director-General of the Department of Health and had previously been the chief operating officer of the Department, made two decisions on around 6 June 2022, that was the day that your Commission was announced.

His first decision was to remove the threshold that had existed since the Options Paper in February 2018. That had the consequence, as he decided, that the laboratory would again commence testing, as a matter of routine, samples with a quant value in that DIFP range of .001 to .0088. That decision was communicated to the public by the Premier and the Minister for Health at their press conference on 6 June 2022.

His second decision was more complex. It was to decide what should be done to the samples that had previously been reported as DIFP, and what Mr Drummond will tell the Commission is that he intended to change the process back to the process that had been in place up to 2018 before the Options Paper. So, in that sense, on one view, Mr Drummond was only seeking to make one decision; he was seeking to undo what had been decided in February of 2018. But for reasons that we will explore, another way of looking at it is that there are two decisions involved. One, to recommence processing of those samples within the DIFP range and, two, to process them in a particular way.

On 2 June, he had a telephone conference with the minister and others within Queensland Health in the chain of command. And on 3 June 2022, he asked for options to return the process to its position in 2018. He asked Lara

Keller, who is the responsible for whole of FSS, and her ground is in pathology and she has been a scientist working on the benches as well as having management experience in pathology. Ms Keller spoke to Ms Allen to develop some options for how these samples might be processed, and together they drafted an email to Mr Drummond setting out two options, and I will deal with that.

THE COMMISSIONER: Just to get the context clear, a point is reached where there seems to be a determination to revert to the status quo ante, the position as it was before the Option 2 was adopted. And then we move to the point where Mr Drummond seeks advice from Ms Keller, and Ms Keller speaks to Ms Allen, and then there is this email that you are going to show us?

MR HODGE: Yes. If we can bring up [FSS.0001.0051.5400_R]. And you will see this is the email from Ms Keller to Mr Drummond. It has been drafted by a Ms Keller with Ms Allen, and you will see it sets out two options. Option 1, described as the preferred option, is "Process Only". And you will see that is said to be:

> *Revert to pre 2018 workflow - which is where all samples above a quant value of 0 are processed through to DNA profiling. Samples that are identified as being beneficial for concentration can be based on the DNA profile achieved, item criticality and case context.*

And then you will see Option 2 is:

> *Concentrate and Process (Least Preferred)*

And it says:

> *Discontinue 2018 workflow and concentrate all samples with a quant value between 0 and 0.0088ng/µL and then process through to DNA profiling stage.*

That was actually the process that was in place before Option 2 was adopted?

MR HODGE: Option 2?

THE COMMISSIONER: In the Options Paper there were two options: keep doing the same thing we're doing; Option 2 is cease processing samples within this range.

MR HODGE: Yes.

THE COMMISSIONER: So the process, until that point, was to test all samples, and samples within the range 0 to 88 would, as a matter of course, be concentrated.

MR HODGE: Yes, are you quite right, Commissioner. What is being described in Option 2, even though it is said to be:

> *Discontinue 2018 workflow ...*

That's wrong, in fact the 2018 workflow was to concentrate all samples between .001, the limit of detection and 0088 ng/µL. But the way in which this email is drafted, it inaccurately conveys the situation because Option 1, which is said to be reverting to the pre-2018 work flow, was not actually reverting to the pre-2018 work flow. It was actually Option 2 which was reverting to --

THE COMMISSIONER: Can we have a look at both of them together?

MR HODGE: Yes.

THE COMMISSIONER: Thank you.

> *Revert to pre 2018 workflow - which is where all samples ... are processed ...*

Well, that's correct.

> *Samples that are identified as being beneficial for concentration ...*

The sentence doesn't make sense, but what it means is that the samples can be concentrated depending upon the DNA profile achieved, item criticality and case context. But that wasn't the position, was it? Samples between 0.001 and 0.008 were concentrated as a matter of course because they required it to give the best chance of getting a result.

MR HODGE: Yes. That's right. As a matter of course, they were concentrated. The only thing I hesitate about is they required it to give the best chance.

THE COMMISSIONER: Well, that's what they did.

MR HODGE: That's the motivation for why the laboratory did it. That's a matter of, potentially, scientific contest --

THE COMMISSIONER: Yes.

MR HODGE: -- about whether or not, as a matter of fact, it's required in all cases to give the best results.

THE COMMISSIONER: That's another thing, but the reason you concentrate is to increase your prospect of getting a profile.

MR HODGE: That's right.

THE COMMISSIONER: And so, the words revert to "revert to pre 2018 workflow" do not describe what follows. And, anyway, all of the disadvantages of both courses of action are explained, but no advantages. Anyway, yes, where do we go next?

MR HODGE: Mr Drummond chose Option 1, which meant that samples in the DIFP range would not be concentrated before amplification, although after one amplification, that is after moving to stage 4, he was open to scientists to request a concentration step before a second amplification.

Mr Drummond will give evidence and tell the Commission he was influenced by these options being presented in such a way that Option 1 appeared to be a reversion to the 2018 process; that is, seemingly undoing all of what had been done in February of 2018, and also by the risk that a sample could be exhausted if option 2 was chosen, which you will see mentioned there, Commissioner, that he thought that was unattractive in cases where some further testing could be done at another lab.

The decision to go with Option 1 was, effectively, communicated by the Minister for Health in a press conference on --

THE COMMISSIONER: It is understandable why he did that. How could you choose Option 2 the way it is presented? You'd be mad to choose Option 2 when you are told that the scientists don't prefer it and that it will take longer to do the work, it will be more expensive. So there's really only one choice, isn't there? That's how you present options, apparently. Anyway, go on.

MR HODGE: Ms Keller was advised that Option 1 had been chosen by video-conference on 6 June at around the same time as the Minister for Health was giving the press conference. And Ms Keller went to the lab and told Cathie Allen, and emails were sent internally to change the processes of the laboratory immediately. Inside the lab, emails from Management Team members had advised staff of the new process and attributed both decisions, in the way that we are classifying this as two decisions, to the Premier.

THE COMMISSIONER: They attributed the Director General's decision to accept Option 1 on the document you have just shown me, the email from Ms Keller, they attributed that to the Premier? I don't understand what you mean.

MR HODGE: You will see, Commissioner, when Ms Rika is called and you will see the emails that went internally, but the way in which it was communicated to staff within the lab was that the Premier had decided to process samples, but --

THE COMMISSIONER: Not to concentrate?

MR HODGE: -- not to automatically concentrate them.

Let me just say a few other things about that 6 June decision. It is apparent when you look at that email that's on the screen that the effects on the lab that were presented to Mr Drummond related to turnaround time on results from the lab, backlog and staffing requirements. There was no identification of scientific issues other than the exhaustion of samples or any difference between Option 1 and 2 in terms of the chance of obtaining DNA profiles from samples, or the accuracy or reliability of the results obtained, and there is also no evidence of which we're aware at present of consultation with the police or the DPP, defence lawyers, or the courts, or scientists in the lab, or, we would say, a careful explanation of the

decision afterwards.

THE COMMISSIONER: I am looking at Option 2, paragraph 2:

> *... QPS did not support an automatic concentration process, as the sample hadn't been assessed in the context of the case and may leave no sample remaining ...*

You haven't opened any evidence about conversations like that or communications like that from police or decision on the part of police about that. Is there any evidence of that?

MR HODGE: Whether it is the evidence that goes specifically to that statement, I don't know that I can say that, but there is evidence you will hear, Commissioner, about communications that occurred between police and the lab. And I think I may have referred, albeit very briefly, to something that Inspector Neville had said about this issue of using up the sample. There will be some evidence that will come out about this.

The last point I will make is that there is no consideration of what should be done about samples which had previously been reported as DIFP.

THE COMMISSIONER: Yes.

MR HODGE: That is, this is about what would happen in the future. There doesn't appear to have been a consideration at this stage by the Director-General as to what would happen for samples that had been treated as DIFP for the preceding four years.

THE COMMISSIONER: That is, nobody has given thought to whether the samples that have not been tested for four years ought now be fully tested?

MR HODGE: The Director-General hasn't.

THE COMMISSIONER: Yes.

MR HODGE: And then the last decision that is of relevance to this module is a decision that was made on 19 August 2022. What happened was this: on 21 June 2022, Superintendent McNab was advised by Ms Keller that the DNA

insufficient threshold had been removed as from 6 June 2022. And I will do this by reference to a document. If we bring up [WIT.0020.0008.0001 at 0164]. And if the operator could go over the page for you, Commissioner, you will see there is an email that's sent - and we might just redact the various email addresses - but there is an email sent by Ms Keller, in the middle of the page, to Superintendent McNab and copied to Ms Allen where she informs him:

> *On ... 6th of June 2022, the Premier announced a Commission of Inquiry [and] also announced that, moving forward, samples that fall into the category of [DIFP] would be profiled.*

And then if you --

THE COMMISSIONER: And that's really a statement that they are going to revert to the former process, the former procedure, before 2018 and test all samples within the range".

MR HODGE: Yes.

THE COMMISSIONER: And concentrate them.

MR HODGE: And Inspector Neville will say that when this email was forwarded on to him by Superintendent McNab, he did not understand from the email that samples that were in the DIFP range would not be concentrated before amplification, and he was concerned about what that would mean for turnaround times.

Later, in July of 2022, Inspector Neville became aware that samples in that DIFP range were not being concentrated, and he was concerned by that because the original Options Paper had indicated that there were stochastic or random effects where samples with lower quantitation values were processed without concentration. And he raised the matter with his superior and wrote to Helen Gregg, who was then acting as the executive director of FSS, and Ms Gregg confirmed that samples were not being concentrated before amplification. And then on 17 August, Inspector Neville wrote to Ms Gregg to express his concern that evidence may be missed.

THE COMMISSIONER: So the director-general's idea, it seems, was "Let's just go back to the previous position," whatever that was.

MR HODGE: Yes.

THE COMMISSIONER: And actually that involved processing samples within the range and automatically concentrating them. And, in fact, what happened - and then the Director-General was given two options in the email, one of which suggested that the option that should be adopted was one that did not involve automatic concentration and the other one did. He chose the option that did not involve automatic concentration, and it seems to me that that email represented that that was indeed a previous procedure, though it wasn't. And you are saying that Inspector Neville then learned that these samples weren't being concentrated and, being a scientist himself, he knew that that was a problem because if you don't concentrate these low quantity samples, you're likely to get troublesome profiles. Is that the position?

MR HODGE: Yes. He learns in July that they are not being concentrated. He speaks to his superior. His superior writes to Helen Gregg, then Inspector Neville writes himself to Helen Gregg on 17 August to express his concern. His concern - I appreciate what you say, Commissioner, which is he is, himself, a scientist. As I understand what his evidence will be, his concern is driven by what he has read in the original Options Paper, which are about --

THE COMMISSIONER: Yes.

MR HODGE: -- the problems that can occur.

THE COMMISSIONER: If you don't concentrate, yes. But do I understand then that the emails you showed me which communicated to various people that these samples would be processed without concentrating, that the content of those emails, that decision was not communicated to police. The police didn't know that that happened?

MR HODGE: As best we can tell, it wasn't explicitly communicated to police.

THE COMMISSIONER: That must be so, otherwise why would Neville be surprised?

MR HODGE: That's right. And then, so that's the 17 August when Inspector Neville writes to express his concern. Coincidentally, two days earlier, there was a meeting between Cathie Allen and Queensland Health's lawyers, and that identified a potential problem with the options that had been provided to Mr Drummond that we've looked at, and in the meeting with lawyers, Ms Allen accepted that Option 2 was the closest option to the process that had been in place prior to 2018 and explained that she had made an unintended human error and that there were a number of clarifications necessary for those options. And then Ms Gregg wrote to the Acting Director-General of Health with options at the DNA Laboratory and prepared an email, with the assistance of Ms Allen, clarifying the email from 3 June 2022. And I will bring up that email, which is [WIT.0032.0016.0001_R]. Commissioner, can I just note something.

THE COMMISSIONER: Yes.

MR HODGE: I understand there might be somebody in the back of the courtroom who is taking photographs of things that are appearing on the screen.

THE COMMISSIONER: I see. Is anybody taking photos of the screen? Who spoke, will you stand up?

UNIDENTIFIED SPEAKER: Yes. Just for note taking purposes. I've deleted them. I apologise.

THE COMMISSIONER: Have you got your camera there or is it on your phone? Well, are you not allowed to do that. Could I ask you to delete them, and then during the adjournment Mr Hodge will check that you have deleted them and that they are deleted from the deleted collection. Thank you.

A lot of these exhibits will be posted on the Commission website. Not only is the proceeding being live-streamed, but there is no restriction on recording the live-stream and using it. So you needn't be concerned that you won't have an opportunity to look at the material that is being discussed. The purpose of the public hearings is to publicise, so you needn't make your own record. If we don't give you some document, there will be a very good reason for it, and I will explain that. So anything that

you see today will, subject to redactions of things that need to be redacted like email addresses, and so on, will, I expect, be made available to all of you. Yes, go ahead, Mr Hodge.

MR HODGE: Thank you, Commissioner. So this is the email from Ms Gregg to Mr Rosengren, who is the Acting Director-General of Health. And it clarifies the information and the email includes a scientific explanation, including that the purpose of microcon is to maximise chances of a DNA profile being obtained through the DNA analysis process. Dr Rosengren, who will also give evidence, considered the information, consulted with Inspector Neville on behalf of the Queensland Police, and Inspector Neville stressed that the police were keen for samples not to be exhausted without their permission.

Dr Rosengren decided on 19 August 2022 to change the process. He chose Option 2, so that all Priority 1 and 2 samples would be concentrated before amplification if their quantitation values fell into that DIFP range, .001 to .0088. And that decision was communicated by a formal memorandum sent to laboratory staff and the QPS on 19 August 2022.

THE COMMISSIONER: What is Mr Rosengren's position?

MR HODGE: At this time he is the Acting Director-General of Health.

THE COMMISSIONER: Was he the Acting-Acting Director-General?

MR HODGE: No, he was at the time the Acting Director-General of Health at the time that he made the decision, but I will find out - I just can't remember what his position generally is at the time. Chief Operating Officer of Queensland.

THE COMMISSIONER: I see. Two options are presented in the email that was derived from advice from Ms Allen. Ms Allen accepted that there were errors in that email, but now that email is being used by somebody who is not a forensic scientist to make a decision about what the lab should do; is that is correct?

MR HODGE: Yes. If we can switch over to the next page

and you can see the options.

THE COMMISSIONER: A lot of human errors.

MR HODGE: Yes. As you can see, Commissioner, the highlighting indicates where information has been corrected from that originally known on 3 June 2022. Fundamentally, you will see it flips around and explains that the workflow that had been in place before February 2018 is not the workflow that had been communicated in the 3 June email. And the process of making this decision, or this further decision, is also something that we will examine during the course of this week. The other thing I will mention is Ms Rika, Ms Caunt and Ms Quartermain are all scientists in the lab who will give evidence as to how these decisions of 6 June and 19 August were communicated within the laboratory and the scientists' efforts to determine the basis for the decisions and the effect that they would have on other processes in the laboratory.

The last topic I want to say something about, Commissioner, is the scientific issue that underlies this.

THE COMMISSIONER: Just pausing there, Mr Hodge, how much longer do you have to go, do you think?

MR HODGE: 10 minutes.

THE COMMISSIONER: All right. We will adjourn after Mr Hodge has finished, for 20 minutes. And what I had in mind for the hearing was to have a 20-minute adjournment mid-morning and a similar adjournment during the afternoon, because I don't think it is fair to witnesses to keep them running without a break. But I will leave it to counsel to discuss what time, normally, you would wish those adjournments to be to suit your sense of what is reasonable, and I am happy to conform to that. Yes, Mr Hodge, you finish.

MR HODGE: Thank you, Commissioner. The last topic is concentration. Having looked at these various decisions, the question for you that will remain is what should be done, what is the best practice in terms of concentration of samples with low quantitation values before amplification, and the Commission has sought reports from two very eminent experts in the field: Professor Lindsay Wilson-Wilde, the managing scientist of the South

Australian Laboratory, and Dr Bruce Budowle, a US expert who has set up and run forensic laboratories in the United States.

Professor Wilson-Wilde confirms that there are positive and negative potential outcomes from adding a concentration step before amplification, and the decision as to whether to concentrate depends on both scientific and management considerations and could be a balance struck in individual cases depending upon sample type quantitation and case-type.

Professor Wilson-Wilde will advise the Commission that a concentration step will not affect the accuracy of a DNA profile, but may affect the chance of obtaining a profile from a sample, and she will also note that it is possible during the extraction step, using the instruments in use in the Queensland laboratory, to have a sample that is only 30 microlitres rather than 90 or 100 microlitres, thereby removing the need for a concentration step. And that is a point that will also be made by Dr Budowle, who notes that many laboratories dilute samples to between 35 and 50 microlitres, removing the need for a concentration step, and it is the Queensland laboratory that has this particular practice of 100 microlitres. The short point from both experts is that the low quantitation values may arise because of the large amount of dilution that occurs in Queensland in the extraction step.

THE COMMISSIONER: Oh, I see. So the way it's done here results in a sample of about 95 or 100 microlitres, but it could be done in a way that results in a sample of 35 or 50 microlitres, and in that way it has already been concentrated to a degree, is that what you mean?

MR HODGE: Yes.

THE COMMISSIONER: Yes, I understand.

MR HODGE: An additional point that is made by Dr Budowle is that he considers that there does not appear to have been any appropriate validation of the concentration methodology for the Queensland lab and concludes that whilst the process after 19 August is better than after 6 June in terms of maximising the success of obtaining a profile, the laboratory should conduct a rigorous study to revisit the DNA IQ validation and undertake a validation

study on its concentration methodology.

THE COMMISSIONER: That is to say, "validation" being an experiment to determine how the process is working in your lab and whether it is working to its optimum capacity.

MR HODGE: Correct.

THE COMMISSIONER: And you do that to ensure that when you use it for real samples, you are getting reliable results, and Dr Budowle is saying that that hasn't been done here.

MR HODGE: Yes, and that you should also - this is just an additional observation. It is also something that, conventionally, you would expect a lab to do as they change pieces of equipment within their process.

THE COMMISSIONER: Yes.

MR HODGE: Finally, he will note or recommend that there be some criteria that is developed within the lab for how to exercise the discretion of whether to concentrate to 35 microlitres or to 15 microlitres.

Then Ms Rika and Ms Caunt will explain their concerns about the concentration process in a laboratory, and in particular their concern about the lack of discretion to be exercised by scientists as to whether and to what extent concentration is performed, both before and after both the 6 June and also 19 August decisions.

Those, Commissioner, are a summary of the various issues and background to the things that we will consider this week, and we hope that that gives you some sense of the scope of what we are concerned with in this module. But to come back to what I said at the beginning, that will really mean you are considering first the changed process that was made in 2018 for samples in that DIFP range and, importantly, what this might tell us about the functioning of the lab and the decision-making in relation to DNA testing in Queensland as between both Queensland Health and also to QPS.

Second, the later identification of problems that had arisen with the change made in 2018, including the further decisions made in June and August of this year, and, again, we are interested not only in what this tells us about the

functioning of the lab, but the decision-making process of these kinds of important issues.

Third, how it was that the words "DNA insufficient for processing" were included in statements of scientists from the lab and the extent to which management within the lab permitted scientists to form their own views as to what wording should be used.

And, fourth, the expert scientific advice that you have obtained as to the question of concentration and whether the process used in the lab at present is or is not best practice.

Commissioner, that is all I wanted to say in opening. Is that then an appropriate time?

THE COMMISSIONER: Thank you, Mr Hodge.

MR HODGE: I should indicate after the break Ms Hedge will call the first witness.

THE COMMISSIONER: Yes. Thank you. We will adjourn for 20 minutes.

SHORT ADJOURNMENT

THE COMMISSIONER: Ms Hedge.

MS HEDGE: Thank you, Commissioner. I call Kylie Dale Rika, spelt R-I-K-A.

THE COMMISSIONER: Ms Rika, do you wish to take an oath or an affirmation?

MS RIKA: An oath is fine.

<MS KYLIE DALE RIKA, sworn [12.06pm]

THE COMMISSIONER: Yes, Ms Hedge.

<EXAMINATION BY MS HEDGE

MS HEDGE: Q. Your name is Kylie Dale Rika?
A. That's correct.

THE COMMISSIONER: We are just getting you a cup of water,

Ms Rika.
A. Thank you.

MS HEDGE: Q. You are currently an employee of the Queensland Health Forensic and Scientific Services; is that right?
A. That's correct.

Q. Your current position is senior scientist within the Forensic DNA Analysis Unit?
A. That's correct.

Q. Can you tell the Commission your formal qualifications.
A. Yes. I have a bachelor of science degree in molecular biology and a postgraduate diploma in forensic science and a diploma in management.

Q. How long have you worked for the Queensland Health Forensic DNA lab?
A. Since 2005.

Q. Did you work in previous forensic DNA capacities?
A. Yes. Between 2000 and 2005, I worked at the Institute of Environmental Science and Research Limited in New Zealand which is a forensic science laboratory in New Zealand.

Q. What was your position there?
A. When I left, I was at a senior scientist level as a court reporting scientist.

Q. While you have been employed by the Queensland Forensic DNA lab, have you been a reporting scientist for that period since 2005?
A. Yes, I have.

Q. Thank you. You have provided two statements to the Commission. Could I have them taken across to you. The first of your statements is dated 9 August 2022 and starts with the number [WIT.00006.0093.0001_R]; is that correct?
A. Yes, that's correct.

MS HEDGE: I tender that first witness statement.

THE COMMISSIONER: Thank you. That will be Exhibit 1.

EXHIBIT #1 - WITNESS STATEMENT OF KYLIE DALE RIKA DATED 09/08/2022

MS HEDGE: Can I have on the screen your second statement, [WIT.0006.0095.0001_R], can you see that?
A. Yes.

Q. Is that your second statement?
A. Yes, it is.

Q. It is dated 16 September 2022, which would appear as the final numbers at 0017 - [WIT.0006.0095.0001_R at 0017].
A. Yes.

Q. You have had the chance to look at those statements before coming to the Commission today?
A. Yes, I have.

Q. Is there anything you wish to correct in either of those statements?
A. No.

Q. Thank you.

THE COMMISSIONER: The second statement is Exhibit 2.

EXHIBIT #2 - 2ND WITNESS STATEMENT OF KYLIE DALE RIKA DATED 16/09/2022

MS HEDGE: Thank you, Commissioner.

Q. I return then to your time in the Queensland lab. When you first came to that lab, were you a scientist in the Reporting team?
A. Yes, I was.

Q. Can you explain generally the duties of that role?
A. As a reporting scientist, my duties were to examine items to identify and locate potential areas for DNA testing and then once those areas were identified, put them through the process and then, at the other end, I would interpret - analyse and interpret those results and report those results and appear in court, when required, to explain the results.

Q. You said then, "when I started". Is the role of a

reporting scientist in the Queensland Forensic lab different now?
A. Yes. So reporting scientists now don't have any hands-on involvement in the examination of items.

Q. I see. When did you move into the managerial role of senior scientist?
A. I think it was -

Q. You can look at your statement.

MS HEDGE: Commissioner, may the witness look at her statement?

THE COMMISSIONER: Yes, certainly.

Q. The second statement in paragraph 4, you say -
A. Yes.

Q. - that you moved into the managerial and reporting role in April 2006.
A. Yes. That's correct, yes.

Q. You have held that role continuously since 2006 to now, senior scientist?
A. Yes, I have.

Q. At times have you acted up into the team leader position of forensic reporting and intelligence when Mr Howes is on leave?
A. Yes, I have.

Q. Thank you. Could I have the organisational chart of DNA Analysis Unit placed on the screen. It is document [FSS.0001.0002.3976_R]. Is the screen in front of you working, Ms Rika?
A. Yes, it is.

Q. Thank you. We see your name under "Reporting (2)" on the right-hand side of that chart, is that correct?
A. Yes.

Q. This is the chart as at 27 June 2022 which appears in the top right-hand corner of the document.
A. That's correct, yes.

Q. Looking at it from your position, the people listed in

the box under you, they are reporting scientists; is that correct?
A. That's correct, yes.

Q. And they are people who report to you?
A. Yes.

Q. Looking upwards from your position, you report to Mr Howes.
A. Yes.

Q. And, through him, to Ms Allen.
A. Correct, yes.

Q. To the left of yourself is Ms Johnstone; she is the senior scientist in the other reporting team; is that correct?
A. Yes.

Q. Can we deal briefly with what some of these other teams do. You have explained what the Reporting team does. What about the Intelligence team that we see to the right of yourself?
A. So the Intelligence team - if there are DNA profiles that are suitable to be loaded to NCIDD, which is a DNA database for searching and matching, those profiles are loaded to NCIDD and any links generated are reported by the Intelligence team.

Q. Links to samples that are already on NCIDD.
A. Yes, correct.

Q. Moving then to the other side of the page, there is a team leader of Evidence Recovery and Quality in Ms Brisotto.
A. Yes.

Q. Is she the same level as Mr Howes?
A. Yes.

Q. Underneath Ms Brisotto is the Evidence Recovery team headed by also Allison Lloyd?
A. Yes, that's right.

Q. What does the Evidence Recovery team do presently at the Queensland laboratory?
A. So the majority of samples submitted from the

Queensland Police Service to our Evidence Recovery lab, most of them are just a sample in tube. We do also receive a few larger items for examination and also sexual assault investigation kits. So there are some items that we receive that aren't just in tube samples, but the majority of it is in tube samples. So Evidence Recovery team checks and examines all of those items and submits sub-samples to - in the case of in tube samples, they would submit that whole tube, but with larger items and sexual assault investigation kits, they will submit sub-samples through to the Analytical section for DNA profiling.

Q. So when a sample first arrives at the laboratory, the Evidence Recovery team, other than the property point -
A. Yes, yes.

Q. The Evidence Recovery team is the first team within the lab to deal with that sample?
A. That's correct, yes.

Q. Did you say that after they have done their tasks, the sample moves to the Analytical team?
A. That's correct, yes.

Q. We see that there on the chart with the senior scientist being Luke Ryan.
A. Yes.

Q. What does the Analytical team then do with that sample?
A. So the sample then goes through a process of DNA extraction, so trying to get the DNA out of the cells or cellular material on the sample in the tube. Once that DNA is extracted, then it gets quantified through quantitation process to see how much DNA may be in that sample, and then the sample gets amplified to target areas on the DNA that vary widely between people, and also make lots more copies of the DNA, and then the sample progresses through capillary electrophoresis which is the stage at which we are able to visualise the DNA profile results.

Q. Are those tasks done by instruments and machines within the Analytical section?
A. Yes, that's correct.

Q. But analytical scientists operate those machines; is that right?

A. That's right, yes.

Q. Those two groups, Evidence Recovery and Analytical, they work in a series of laboratories; is that right?
A. That's right.

Q. Which require protection from the outside world and from DNA contamination; is that right?
A. That's right, yes.

Q. And they are required to wear full PPE to do their tasks inside the clean laboratory?
A. Yes.

Q. And that's a difference between those teams and the Reporting teams; is that right?
A. That's right, yes.

Q. Generally -
A. Yes.

Q. - the Reporting teams sit in an open area, an office area -
A. That's correct, yes.

Q. - and do their tasks with computers.
A. Yes.

Q. Rather than with lab equipment.
A. Yes.

Q. But there are times of course when a Reporting side is fighting for a lab to look -
A. Yes.

Q. - at a sample or - well, you tell us. On what occasions would a Reporting scientist enter the laboratory spaces.
A. Sometimes a Reporting scientist may wish to observe a particular item that is being examined within the Evidence Recovery area, as it may be pertinent to form an opinion for the Reporting scientist on that item. That rarely happens these days. So I can't - for me, personally, I haven't been into the laboratory in a long time to look at items.

Q. Was that something different when you first arrived at

the Queensland laboratory?
A. Yes. Yes. When I first arrived, I had a lot of interaction with item examinations, presumptive clinical testing, sampling, item prioritisation, case conferencing with QPS and other interested parties to formulate an exam strategy that would best address the allegations. Now I don't do that anymore. I just obtain the DNA results, analyse and interpret those, and report them.

Q. Is that a result of a change of operating procedures within the laboratory?
A. That's correct.

Q. What about when you were working at the New Zealand lab, what was the level of involvement of Reporting scientists in the evidence recovery and analytical systems at that laboratory when you worked there?
A. So as a Reporting scientist when I worked there - I'm not sure what it's like now, but when I worked there, we would have a technician reporting scientist hearing situation and the Reporting scientist would devise an examination strategy to best address the allegations of the case. That would often involve talking to the investigating officers, with the police, to work out item prioritisation and exam strategy, sample selection; then the Reporting scientist would discuss that with the technician and provide instructions to the technician for what needed to happen with item examination and testing.

Q. When you say "exam strategy", that is an examination strategy of the samples; is that right?
A. Yes, of the items, yes.

Q. What is the output of the analytical system or the analytical team, what is the output that reporting scientists look at?
A. So once the samples have processed through the capillary electrophoresis, which is a software that helps to visualise the DNA profiles, the reporting scientists then are able to access the DNA profiles, which are called EPGs, which are PDFs, to interpret that profile and make decisions about that profile.

Q. An EPG is an electropherogram?
A. It is, yes.

Q. It is a PDF, that's the type of document that you are

looking at, a portable document format?
A. Yes, that's right. Yes.

Q. And the EPG or the electropherogram is a graph that has peaks?
A. Yes.

Q. Peaks indicate larger amounts of DNA than a lack of a peak, put very simply?
A. Yes. Yes, correct. Yes.

Q. How would you describe the peaks on an electropherogram?

THE COMMISSIONER: Why don't we wait until we have one in front of us, Ms Hedge.

MS HEDGE: Thank you, your Honour.

THE COMMISSIONER: Otherwise it is a little abstract.

MS HEDGE: Happy to do that.

Q. The last team we have the Quality & Projects/Clinical Assistants team. Do you see that one, Ms Rika?
A. Yes.

Q. The quality and projects team perhaps is self-explanatory; they deal with quality management and the projects in the laboratory?
A. Yes.

Q. And the clinical assistants, what is their role in the laboratory?
A. So they provide operational and some technical support to scientists within the lab. So making up reagents, doing some administrative duties at times, things of that nature.

Q. The laboratory exists at Coopers Plains in Brisbane; is that right?
A. That's right, yes.

Q. And it is part of a wider campus of buildings that house the forensic and scientific services?
A. That's correct, yes.

Q. And the forensic and scientific services include other

types of scientific services as the name suggests, including the mortuary, pathologists, public health, environmental monitoring, and so on?
A. Yes.

Q. A very wide range of scientific and forensic services?
A. Yes, that's right.

Q. And within FSS, there is a Police Services stream, of which DNA analysis is part?
A. Yes.

Q. And there are only two parts of the Police Services stream: DNA analysis and forensic chemistry; is that right?
A. That's correct, yes.

Q. And forensic chemistry do things like test drugs in clandestine laboratories and so on?
A. That's correct, yes.

Q. Ms Allen, the managing scientist of DNA analysis, is also the managing scientist for that forensic chemistry lab; is that correct?
A. Yes.

Q. But Ms Allen's background is in DNA analysis?
A. Yes.

Q. The DNA evidence that is obtained in this lab is used primarily in the criminal justice system; is that right?
A. Correct, yes.

Q. Is it ever used in any other forum?
A. Occasionally, we will do a civil case. But that's very rare.

Q. Going back to your position on the chart, as well as being a manager, do you still act as a reporting scientist and write statements and give evidence in court?
A. Yes, I do. Not as much as my staff members do, but I still do that, yes.

Q. Mr Howes, who you report to, does he still give evidence in court and write statements?
A. Yes.

Q. There is a process in the laboratory which describes

people as "competent" to perform certain tasks; is that right?
A. That's right.

Q. When you are "competent" to do a task, it means you have both undertaken the appropriate training, but also means you are signed off as capable of doing a particular task?
A. That's correct.

Q. So when I ask, "Do you do this task?", you can only do that if you are signed off as competent?
A. Yes.

Q. Mr Howes, yourself, all of your staff and all of the start in Reporting (1), all of those people are competent reporting scientists?
A. Yes. I still do have one staff member as Tegan Dwyer.

Q. But she is in the process of becoming competent; is that correct?
A. Yes.

Q. What about Ms Allen, is she competent to be a reporting scientist in the way that I have described her, being signed off as competent?
A. Yes, she has been. I don't know how recently she has actually practiced in that capacity, but, yes.

Q. Above Ms Allen is the Executive Director of FSS; is that right?
A. That's correct, yes.

Q. Currently acting in that position is Lara Keller?
A. Yes, correct.

Q. There is also a quality manager of FSS, whose name is Helen Gregg; is that right?
A. Yes.

Q. To your understanding, what is Helen Gregg's role in the DNA Analysis Unit?
A. Basically, Helen's role is an overarching - from what I understand, an overarching quality assurance monitoring and evaluation of all quality for our campus. Just last week, Helen has moved into our DNA Analysis lab to help us out a bit further with our work, with our management and

quality processes.

Q. Thank you. We can have that document taken down now, please.

Did you have the opportunity to listen to Mr Hodge give an opening this morning?
A. I did, yes.

Q. You are aware one of the focuses of this hearing is the "DNA insufficient for further processing" change that occurred in 2018?
A. Yes, I am. Yes.

Q. Can you explain to the Commission what that result, "DNA insufficient for further processing", how that resulted is obtain within the laboratory, when it was, back in 2018 and 2022?
A. Yes.

Q. Your second statement, at about paragraph 9, there is a description there, if that assists.
A. Yes. So in 2018, the DIFP process was implemented whereby samples that fell between 0.001 and 0.0088 ng/µL were automatically stopped and the result was reported as "DNA insufficient for further processing" through the Forensic Register to the Queensland Police.

Q. Do you refer to that as a DIFP result?
A. Yes.

Q. Is it suitable if we refer to it as DIFP in this hearing?
A. Yes.

Q. What team was the staff member in who would determine the DIFP results?
A. The Analytical team.

Q. On what basis would they do that?
A. It was just a quant value alone, a strict threshold of if it fell under 0.0088, it was stopped. And that's Processing, and reported as DIFP.

Q. And the Analytical staff member who obtained the quant value, they would do that using an instrument?
A. Yes.

Q. In 2018, using the Quantifiler; is that right?

THE COMMISSIONER: Q. It was Quantrio by then, wasn't it?
A. Yes. Quantrio

Q. And previously it was Quantduo?
A. We didn't have Quantduo.

Q. But in any event, I just wanted to say, Quantduo is a chemical kit that is used for that, for the purpose of quantification?
A. Yes, correct.

MS HEDGE: There is an instrument that goes with it, or a piece of software, the QuantStudio?
A. Yes.

Q. And these things work together for an Analytical staff member to obtain that number?
A. Yes, correct. Yes.

Q. To your understanding, do the Analytical staff members consider other things in reporting a DIFP result? For example, case context or crime scene photos?
A. No, I don't believe they do.

Q. Are reporting scientists at all involved in that process of the initial report of a DIFP result to police?
A. No.

Q. You mentioned the Forensic Register. That's a piece of software that is shared by Queensland Police and Queensland Health; is that right?
A. That's correct, yes.

Q. So Queensland Health can input information into that software and immediately a police station, a person can - a police officer who has access to it can look at that same information?
A. Yes.

Q. But when you say they send the result, it is a matter of uploading a certain result or a certain sample at your end?
A. Yes.

Q. And the police look at that result at the other end?
A. Yes. So we will put a result into the Forensic Register. Once that result has been reviewed and validated by another scientist who presses a button to say it's been reviewed, then that result will go across to the Queensland Police.

Q. When I asked you a moment ago about whether the analytical staff member looks at the context of the case or crime scene photographs, and so on, is that true for both the person who puts the initial number in and the validator?
A. I believe so, yes.

Q. You haven't worked in that analytical section, but that's your understanding?
A. That's my understanding, yes.

Q. You said that those samples would be stopped. Are there circumstances in which a sample would continue past that point?
A. So, yes. So the sample would be stopped unless a rework was requested by the Queensland Police and we could restart that sample to go to full testing; or if a statement was requested from us and a reporting scientist reviewed the case and requested a rework of the sample themselves, that could also allow the sample to be tested fully; or in the event a scientist by chance had looked at the sample when looking at others in the case during profile data analysis stage and requested a rework of the sample, at that stage, which, in my experience, is fairly rare. It's usually not until a scientist is looking at the case at the end of the process, at statement stage, that they will see or identify a DIFP sample that was reported and think, "Maybe", based on the case context and the sample type and those things, and their experience and judgment, "Maybe I should put that one through for full testing". But that's a rare - in my experience, a rare occurrence. So it's usually if QPS request us to work it further, or at statement stage.

Q. You described a rework.
A. Yes.

Q. What's a "rework"?
A. So a rework is - so what happens is a sample goes

through the process. We have a look at the result from that first working of the sample, and if we think that we might get a better profile if we rework it, that means that we could put the sample through for a number of different rework types, like amplification, microcon concentration, re-CE, capillary electrophoresis. So it's just our ability to be able to work that sample further to try and get a good result or the best result we can.

Q. If a reporting scientist is the one who requests a rework, would you determine which of the rework options would be applied to the sample?
A. It depends on which stage of the process. Obviously, with the automated DIFP process, we don't get that opportunity to make a decision on that sample until it's already gone through and the DIFP process has stopped. And then after that, we may come back and look at it, but not - not before that.

THE COMMISSIONER: Q. Ms Rika, as I understand what you are saying, the process, the sample has been processed through the Analytical department.
A. Yes.

Q. And the result is that if the quantitation is below 0 .0088, it goes to a list of such samples and it will not be processed further, and in the ordinary course you won't see it until a much later stage, which we'll come to; correct?
A. That's correct, yes.

Q. However, if a sample is worked beyond a quantitation stage and is analysed and results in a profile, then you have a work list and you take the next job, which is the next profile to be analysed?
A. Yes.

Q. And it is a profile, an electropherogram with the peaks?
A. Yes.

Q. And you will look at it and compare it to something and that's your job and you will draw a conclusion about it; is that right?
A. Correct.

Q. And having done that, you go to the work list and you get the next job and you do that.

A. Correct, yes.

Q. Which may be the same investigation but may be a completely different investigation. You are not asked in the lab to be concerned with what the case is about or what the crime scene was, or anything of that kind. Do I understand you correctly?
A. Yes. So --

Q. At that stage.
A. Yes. Yes, that's right.

Q. So then if a matter is going to court and FSS is asked to prepare a formal statement for court, that's what you call a witness statement?
A. Yes.

Q. And so at that point, you are going to look at the profile work you did again, or will somebody else do that?
A. No. I will look at it at the statement stage, yes.

Q. And it is at that point you might see the DIFP results were obtained, which you didn't see earlier.
A. Yes, correct. Yes.

Q. So it is that stage you see the DIFP result and there might be an opportunity for you to consider doing something further, but not before that stage?
A. Yes. Only in the rare case that, in the initial stage of interpretation, long before the statement comes, a scientist may by chance just, when they pick a sample off the list, they may go into that whole case and see the DIFP, but that doesn't happen as a matter of course.

Q. So to summarise then, as a matter of practice in the course of doing your profiling work --
A. Yes.

Q. -- as opposed to witness statements, you are not asked to look at DIFP results and ask whether I should rework them or whether they should be processed further for some reason; you just don't see them at all?
A. That's correct, yes.

Q. And if there was a case in which no witness statement was ever asked for, you'd never see the DIFP statement ever, DIFP result ever.

A. That's correct, yes.

Q. And if a case only had DIFP results then --
A. Yes.

THE COMMISSIONER: Well, that doesn't matter. Yes, all right. Thanks, Ms Hedge.

MS HEDGE: Thank you.

Q. At that time that the Commissioner described of when you've been asked to write a statement and you're deciding whether to ask for a rework of a DIFP result, what sort of information would you take into account as a reporting scientist?
A. I would be looking at, as much as I can, get information about the case to help me assess, looking at all the samples in the case, with that particular DIFP sample do I feel that that might be a critical sample in the case? Maybe I don't have anything else in the case. I am looking at the sample type of that DIFP sample.

For example, if I came across - if I was doing a statement for a sexual assault and I noticed that there was a high vaginal swab and I saw sperm and it was reported as DIFP, for me, I would want to rework that sample because sperm is a rich source of DNA, so, in my opinion, chances of getting a usable profile from that would be quite good. So it's at that stage that I would make all of those assessments. Especially, for example, if I had a sexual assault case and I had nothing else in the case in terms of results, I would be looking at those DIP samples and thinking maybe I need to rework these.

Q. What about the quant value? Is the quant value itself of assistance in determining whether to rework?
A. Yes. In my experience, I can rework - well, I have reworked samples between 0.001 and 0.0088, in all of that range, and sometimes got something usable. If the quant was .0087, that would inform my rework choice. I may choose to just amplify rather than micro-concentrate. But if it was .003, for example, I may wish to just micro-concentrate to full before amplification. So the quant value does play a role.

Q. When you say, "microcon to 35", that's to a volume of 35 microlitres?

A. That's correct, yes.

Q. So that's the reduction of the sample from about 90 to 100 microlitres down to 35 using a concentration process?
A. Yes.

Q. And a "concentration to full", you just described, is about 15 microlitres?
A. Yes, correct.

Q. These are very small quantities?
A. Yes.

Q. So it's not possible to be exactly precise, but it is approximately 15 microlitres?
A. Yes, correct.

THE COMMISSIONER: Q. So is it untrue to say that micro concentration involves fully depleting the sample?
A. Sorry, say that again?

Q. I am sorry, I put it like a lawyer. Does micro-concentration necessarily fully deplete the sample?
A. No, not all the time, no.

THE COMMISSIONER: All right. Thanks.

MS HEDGE: Q. In paragraph 12 of your second statement, you say sometimes QPS are in the best position to decide whether a sample should be reworked, and sometimes it's the reporting scientists.
A. Yes.

Q. Is that because of the different roles that these people play in the criminal justice system?
A. That's correct. That's correct.

Q. Do the police have a greater appreciation than the scientists as to how a particular sample fits into a case?
A. Yes. So we - under the current system in which we work, we get very little information about the whole case context to allow us to really help devise a good exam strategy for a case.

THE COMMISSIONER: Q. But you're not asked to devise an exam strategy, are you?
A. No.

MS HEDGE: Q. Sometimes at the reporting stage do you think back about what exam strategy you would have used? Is that what you mean when you say that?
A. Yes, yes.

Q. I see. So you are not - as the Commissioner says, at the start of the process when the sample first arrives at the lab to develop an examination strategy.
A. No.

Q. But later on when you are writing a statement, you might think, "What would I have done?"
A. Yes, yes, that's correct.

Q. I see. And you are saying you have little information about the case context to do that?
A. Yes.

Q. Equally, some of the information that you described you would rely on, including the quant value and particular knowledge that you have about DNA analysis, police don't have that knowledge or expertise?
A. No, that's right.

Q. And that's why you say that sometimes the police are in a good position, sometimes it is the scientist who is?
A. Yes, and I think the best way would be for both parties to work together on devising the best way to test, DNA test, a case.

Q. Do you talk to police investigators about your cases? At the examination time? I don't mean just before court.
A. No. No, I don't.

Q. If there is a sample that's recorded as - sorry, I withdraw that. Another group of samples are reported as, "No DNA"?
A. Yes.

Q. That's for below 0.001 ng/µL?
A. Correct.

Q. Are they reported with using in that same process? That is, by an Analytical scientist based on the quant value alone?
A. Yes, correct.

Q. If there is a case where all of the samples are either no DNA or DIFP and no statement is requested by the police, would a reporting scientist ever see that case?
A. No.

Q. In that case, does that mean it's entirely in the police hands whether a rework is requested, because no reporting scientist could ever exercise that discretion?
A. That's correct, yes.

THE COMMISSIONER: Q. Ms Rika, the scientists who perform extraction and the scientists who perform the analysis do their tasks very well, no doubt, but am I right in thinking that they are in no position to determine whether a particular sample ought to be worked in one way or another way?
A. In my opinion, yes, because --

Q. That is, in your opinion, "No, they're not in that position?"
A. Sorry, yes. "No".

Q. But reporting scientists, having access to a profile, if you do, can form an opinion that having regard to context, including the crime scene, the significance of the sample for the investigation, the type of sample it was - I think you mentioned semen or sperm being a rich source of DNA - are in a position to do that, but you're not asked to do that?
A. That's correct, yes.

THE COMMISSIONER: All right. Thanks.

MS HEDGE: Q. Is it your understanding that that process, the DIFP process for P2 or major crime samples, was introduced after the Options Paper in 2018?
A. That's correct, yes.

Q. Were you involved in the preparation of that Options Paper?
A. No.

Q. The Options Paper itself, not any other previous versions?
A. No, I wasn't, no.

Q. Were you present when it was presented to Police?
A. No.

Q. Did you find out about the decision made in relation to it after it had been made by Police?
A. Yes.

Q. Mr Howes informed you of the decision?
A. Yes.

Q. As your supervisor?
A. Yes.

Q. Were you involved, though, in previous considerations of workflow in relation to samples with a low quantitation value?
A. Yes.

Q. And was the first of those Project #163 that started in about 2015?
A. Yes, correct.

Q. That project related to assessing the benefits of a concentration step; is that right?
A. Yes, the automated concentration. Yes.

Q. Could you just tell us briefly what the automated concentration step is that you were assessing?
A. So any samples that at that time fell within 0.00214 and 0.0088 were sent for automated microcon concentration to 35 microlitres. And with Project #163, it was decided that a data mine and a data analysis as a look-see to see, you know, is there - are there any merits in - is there merit in thinking about a range, a quantitation range, for which we don't, like, more often than not, don't get a usable profile? And the conclusion of that project was --

Q. We will come to that.
A. Oh, sorry.

Q. If I can deal with the terminology, you said "automatic". Does that just mean it happens automatically in the laboratory without anyone exercising a discretion?
A. Yes.

Q. Microcon, that is the trademark name of the filter for the laboratory uses; is that right?

A. Yes.

Q. And concentration is the actual process?
A. Yes.

Q. Is that correct?
A. Yes, correct.

Q. So it is a concentration step?
A. Yes.

Q. Done automatically, using a particular product?
A. Yes. Yes. Sorry.

Q. Not at all. Can we start at the start of that project, and could I have on the screen document [FSS.0001.0070.5037]. This is an email from Mr Howes to a group of people. Just having a look through that, is that the reporting scientists as they were in 2015?
A. Yes, correct.

Q. In the first line it says:

> *... Cathie, Kirsten ... had some discussions with senior QPS members. Part of the discussion was on TATs.*

What is TAT?
A. Turnaround time.

Q. And what sort of turnaround time does that refer to? Turnaround time of what?
A. When a sample arrives at a laboratory to when we release a DNA result, that time taken to perform that work and get results back to the Queensland Police.

Q. Is that time split into particular categories for the benefit of considering turnaround times? For example, cold links or warm links or no DNA detected? Is there different categories of turnaround times or is it one whole --
A. It's - so, with Priority 1 cases, we have an agreed turnaround time of between three and five days to release a result. But for everything else, there's no hard and fast turnaround time mandate. I understand that the Queensland Police measure - a measure of turnaround time for the Queensland Police is processing until a cold link is obtained. I don't know anything else in terms of how they

measure those turnaround times.

Q. And what does a "cold link" mean to you?
A. A cold link is when we obtain a DNA profile from a crime sample and it doesn't match anybody else in the case that the Queensland Police already know about, and so it's an unknown profile. So we put it on to NCIDD and it may link to a person who's already on NCIDD, and that's valuable information for the Queensland Police because it helps them identify a potential lead.

Q. Is this email the lead-in to Project #163 in the sense that in the third paragraph Mr Howes says that he has asked you, and others, to assist you in getting opinions on bottlenecks and potential strategies?
A. That's correct, yes.

Q. So one of the tasks you did in response to this email was to start Project #163; is that correct?
A. That's correct, yes.

Q. Could we have on the screen [FSS.001.0051.5306_R]. This is an Initial Request form filled in by you?
A. Yes.

Q. This is the form filled in by you which resulted in project 163; is that correct?
A. Yes, correct.

Q. You say in the third paragraph:

It has been observed anecdotally that samples [in that quant range that you described] more often than not yield a DNA profile which is unsuitable for interpretation or comparison?

A. Yes.

Q. And you state specifically at the end of that paragraph that the current focus for the lab and the QPS is to reduce turnaround times?
A. Yes.

Q. That this process was entirely directed towards potential strategies for reducing turnaround time?
A. Yes.

Q. Was there any other reason to do that data analysis, other than thinking about reducing turnaround times?
A. Not that I can think of.

Q. Can I turn then to [FSS.0001.0051.5329_R]. This is a Proposal document for the project; is that right?
A. Yes. Correct.

Q. Were you the main proponent of this? Or how did it work between yourself, Josie Entwistle, Allison Lloyd, Cathie Allen, who are all listed there?
A. So myself, Josie and Allison all worked on the project together as a group, and Cathie Allen's name is on there because she is always the last person's name on documents like this as the manager of the lab.

Q. Was she involved in writing this document, Cathie Allen?
A. No.

Q. Can we turn to the third page of the document [FSS.0001.0051.5329_R at .5331]. We see a list of people who have signed off on this, and Cathie Allen, the managing scientist. Are the people listed in the second box, is that the management team of the laboratory at that time?
A. Yes, correct.

Q. So, the people who sit in the Management Team are the team leaders and then the senior scientists of the six teams that we saw on the structure?
A. Yes.

Q. Thank you. Heading to the sixth page of that document under "Aims" you indicate, as you said, that the aim was to interrogate data in that auto-concentration range?
A. Yes.

Q. To determine, in part 2, the risks and benefits to process those samples; is that right?
A. Yes.

Q. Just one short point that in that auto-concentration 0.00214 ng/µL, that number is different to the .001 ng/µL number, but they are both the number for "no DNA detected"?
A. Yes.

Q. That's the 2015 number.
A. Yes.

Q. By 2018 it was .001?
A. Yes.

Q. And that depends on what the limit of detection is of the quantifying machine?
A. Yes, that's right.

Q. Is that correct? Thank you. Can we turn then to the report, which is [FSS.0001.0051.5307]. This is the final report of Project #163; is that correct?
A. It looks like it, yes.

Q. If we turn to the third page, you will see there that it is signed off --
A. Yes.

Q. -- by the Management Team?
A. Yes.

Q. Is that a way of determining whether something is a final report or a draft, is if all those signatures are there, then --
A. Yes.

Q. And I should that say you understand that there are signatures underneath that black box?
A. Yes, yes.

Q. Can I take you to the eighth page of that document under "Results" and in the second paragraph, there were 817 samples or about 82 per cent that were non-informative, so things that didn't provide information to the Police?
A. Yes.

Q. And in the third paragraph, 184 or about 18 per cent that provided informative information?
A. Yes.

Q. In the - what you considered - I assume you are content with the contents of this project?
A. Yes.

Q. You adopt all of that?
A. Yes.

Q. What you have described as "informative", does that include both full and partial profiles?
A. Yes.

Q. What is the reason that a partial profile gives informative information to the police?
A. So whether a DNA profile is - a DNA profile can be informative whether it is a single source, a mixture, a partial, a full. It all depends on the interpretation by the reporting scientist in terms of how they assess that DNA profiling result and whether it's suitable for comparison to person samples. Partial profiles can still be suitable. Yeah.

Q. Perhaps I should step back a second. A partial profile is one which there are peaks in some of the locations on the DNA?
A. Yes.

Q. But not all?
A. Yes, correct.

Q. That your laboratory looks at?
A. Yes.

Q. Yes. And a full profile would be one that has peaks in each location that the laboratory looks at?
A. That's right. Yes.

Q. So while there may be peaks in only some of those locations, that can still allow you to compare those peaks, whatever is there, to a reference sample?
A. Yes.

Q. And that might allow you to say that there's some likelihood that the person has contributed?
A. Yes.

Q. You will have to say it out loud for the transcript. And, equally, it might allow you to exclude someone?
A. Yes. Yes.

Q. So a full profile at the moment is 24 alleles; is that right, 24 locations?
A. 20.

Q. 20.
A. Plus the gender allocation.

Q. Thank you. 21 in total.
A. Yes.

Q. But even if you had, say, four or six locations, it could provide something?
A. Yes. Correct, yes.

Q. Or to others in the criminal justice systems, defence lawyers, judges, juries?
A. Yes, correct.

Q. Prosecutors.
A. Yes.

THE COMMISSIONER: Is that a convenient time, Ms Hedge?

MS HEDGE: I have only a couple extra parts of this paper to go through. It will only take about five minutes, if that is suitable.

THE COMMISSIONER: No, do that.

MS HEDGE: Looking at the other results of this paper, could we turn to the 11th page. There is a 10 in the bottom right [FSS.0001.0051.5307 at 5317]. This is a graph that knows the informative and non-informative results across the quant value ranges we were looking at. You see the quant values at the box of the x axis or bottom axis and the number of samples that occurred in the Y or vertical axis?
A. Yes.

Q. And if we can just scroll down a little, please, operator. Thank you. In the last paragraph there, you say, or you and the other authors of this report say that the number of informative results is less than the non-informative results, but they remain fairly consistent across the quantification value ranges.

A. That's right, yes.

Q. So it is not the case that all of the good results are at the high end of the quantitation?
A. No.

Q. Some are at the very low end.
A. Yes, correct.

Q. Thank you. I turn then to page 14 of this document. Under 4.2, "Discussion" in the first paragraph, again you say:

> *... data obtained has shown that informative results were obtained across the quantitation value ranges even at the lowest quantification value ranges.*

And that's the same point, that some informative information can be obtained even with very low quantitation values?
A. That's right, yes.

Q. Thank you. And at the top of the next page [FSS.0001.0051.5307 at 5322], it says that a decline in non-informative results was observed as the quantification value increased. Putting that in a different way, does that mean when the quantification is higher, there was less non-informative results?
A. Yes.

Q. We can see that if we go back to page 10 - I am sorry, the graph is easier - the white bars on that graph are the non-informative results. So the white bars are lower at the right-hand side of the graph?
A. Yes.

Q. Thank you. Finally, if we can turn to 16 at the bottom, in the top paragraph under:

> *5. Conclusions and Recommendations*

You conclude:

> *This assessment has indicated that there has been value in the automatic-microcon process ...*

A. Yes.

Q. Do you agree with that conclusion that you wrote back in 2015?

A. Yes.

Q. Your view is that this project concluded that there was value in concentrating and processing samples in that range 0.00214 to 0.0088?
A. Yes, that's correct.

Q. Finally then on page 21, the last page of the document. That's a blank page. Thank you. Under 5.5, your recommendation was not to make any change to the process; is that right?
A. That's correct, yes.

Q. The recommendation was to finalising this and look again after the introduction of the Forensic Register and the Quantifiler Trio?
A. Yes. So we must have had Quantifiler at that stage.

Q. Not at all. So after this - and as we saw on the signatures at the start, that report and its conclusions was accepted by the whole management team, including Ms Allen?
A. Correct, yes.

Q. And so, the result of that was that there was no change to the process; is that right?
A. Correct, yes.

Q. And so, those samples in that range 0.00214 ng/µL to 0.0088 ng/µL retained their automatic microcon concentration before amplification and the rest of the process?
A. Yes. Yes, correct.

MS HEDGE: Thank you. Is that a --

THE COMMISSIONER: Q. Just while we are here, two things. The introduction of Quantifiler Trio meant that you were using a much more system to the one that preceded Quantifiler Trio?
A. Yes.

Q. Is that why you said that we had better look at this after we have looked at how much more sensitive our readings are, because things will change, so let's not do anything now?
A. Yes.

Q. The other thing is just terminology. I saw in the document there is a reference to stochastic effects increasing when the quant reduces. So the less DNA you have, the more stochastic effects you have?
A. Yes.

Q. And "stochastic" means "random", doesn't it?
A. Yes.

Q. The word you use in your field for random effects?
A. Yes.

Q. Meaningless things that look like DNA can be confused with as if they show the presence of DNA or that they can interrupt and obstruct the prominence of DNA? Is that right? How would you put it?
A. So stochastic variation is where we see in really low levels of DNA, the DNA is there, you can see a lot of variation in the biological modelling of what we would expect to see in a DNA profile. So increased, what we call "drop out" of DNA peaks, increased allelar covalence between peaks. The other things that you described, I would describe as artefacts.

Q. Yes?
A. That may not be DNA.

Q. We will come to the detail of it?
A. Yes.

Q. But random effects that make it more difficult to determine a profile?
A. Yes.

THE COMMISSIONER: Thank you. Shall we resume at 2.30, ladies and gentlemen?

MS HEDGE: Would 2.15 be suitable?

THE COMMISSIONER: It suits me. Mr Hunter? Mr Rice?

MR HUNTER: I'm fine.

THE COMMISSIONER: We will adjourn until 2.15pm.

LUNCHEON ADJOURNMENT [1.07pm]

THE COMMISSIONER: Yes, Ms Hedge.

MS HEDGE: Q. Ms Rika, before the break, we got to the end of Project #163.
A. Yes.

Q. And we saw the recommendation that it be reinvigorated at a later time?
A. Yes.

Q. And was it later reinvigorated and became project 184?
A. That's correct, yes.

Q. Can we look at the project plan for #184, which is [WIT.0006.0107.0001_R]?
A. That's right.

Q. Were you involved in running this project, at the time of writing a project plan?
A. No, I wasn't.

Q. Did you see this document at the time? That is, in about July or August 2017?
A. Possibly. Sorry, I can't remember.

Q. You can't remember? That's no difficulty for you to say that. Do you see in the third paragraph on that page it says:

Anecdotally ...

Do you see that paragraph?
A. Yes.

Q. In the second sentence:

... extracts that are of low quant value that have been automatically concentrated have been observed to rarely yield DNA information for QPS.

A. Yes.

Q. Do you think that is a fair summary after the conclusions reached in Project #163?
A. No.

Q. Why was that?
A. Because Project #163 showed that there was value in doing the auto-microcon process, because we did see usable DNA profiles across a range of quants in the low range. Yeah.

Q. Thank you. Can we turn to the next page.

THE COMMISSIONER: Q. Just before you do. There is that sentence, "Anecdotally, quants within this range have been noted to provide limited intelligence." And there was that word "anecdotally", also appeared in your document.
A. Yes.

Q. Did you write that? The first document, I mean, not this one.
A. Yes.

Q. You wrote that document? What did you mean by "anecdotally"?
A. Based on accounts - at the time, based on accounts from various staff members who were making comments that when they worked a sample in the low quant ranges, more often than not, in their experiences, they were getting profiles that weren't usable.

Q. Yes.
A. But as time has gone on, we have new and more sensitive equipment. So that's something to consider in terms of a possibility for why there might be more usable profiles now.

THE COMMISSIONER: Thank you.

MS HEDGE: Q. Thank you. Turn to page 2 of the document at the bottom of the page there is a heading, "Expected Outcome" and it says:

> *It is expected that the data ... will match the anecdotal information ...*

Which is what we're discussing?
A. Yes.

Q. The last sentence is:

It is an expectation that any recommendations are communicated with QPS in order to agree on possible new workflow strategies.

Do you see that?
A. Yes.

Q. Is that a process that you were familiar with in the lab? That is, that recommendations would be discussed with the QPS in order to agree on possible new workflow strategies?
A. So, for this particular project, I would have expected that there would be consultation with QPS around risks and benefits of any changes to our processing.

Q. Yes. Would you expect there to be agreement to be reached between the laboratory and QPS?
A. Yes.

Q. So you weren't involved in performing the project, doing the data mining analysis for Project #184?
A. No.

Q. Did your involvement start when versions of the report were circulated amongst the management team for feedback?
A. Yes, that's right.

Q. The first of those - you provided - is it correct that there were two occasions on which your feedback was sought: Once on version 1 of the report and then again on version 2?
A. Yes.

Q. The first time that feedback was sought, there was some time given for feedback?
A. Yes.

Q. If we can turn to [WIT.0006.0104.0001_R], an email attached to your second statement. This is the distribution by Mr Howes to the management team of the first version of that report; is that right?
A. Yes.

Q. Sent out on 30 November with feedback by 20 December.
A. Yes.

Q. So a little time there, 21 days or so?
A. Yes.

Q. If we turn to [WIT.0006.0105.0001_R], this is a pre-emptive email from Mr Howes saying that he intends to send out version 2, but the review must be done by 11.00 am the next day.
A. Yes.

Q. Is that correct?
A. Yes, correct.

Q. We see in the second paragraph of the email, he says:

I don't think I am stepping on Paula's toes ... by asking for this to be your No. 1 Priority as you all know how urgent this is now.

Do you know what this refers to? What the urgency was?
A. No. But I do know that at that time, as well as many other times in the lab, actually a constant focus is focusing on more results out the door more quickly. So perhaps, in my view, I'm thinking of ways that we could get through our big workload as quickly as possible.

Q. Can we turn then to [WIT.0006.0106.0001_R]. This is the email where Mr Howes actually sent version 2 at 4.47 pm on 8 January 2018.
A. Yes.

Q. And asked for the review by 1.00 pm, Tuesday, 9 January.
A. Yes.

Q. Do you see that?
A. Yes.

Q. Can we turn to the feedback that you did provide. Could we have on the screen [WIT.0006.0099.0001_R]. I would ask if that document can stay there, but was that sort of turnaround a usual sort of turnaround for providing feedback on project reports?
A. No, that was quite an urgent timeframe compared to other projects.

Q. Is that true even though it was a version 2 of that

report? So from version 1, do the timeframes tend to differ between these two versions?
A. I feel that version 2, the timeframe on version 2 of this report, was quite tight regardless of version 1 or 2, at interim periods of other projects.

Q. Just generally, how long would you generally get to review a project report, whatever version it might be?
A. Probably around about two weeks, maybe a little bit longer.

Q. Thank you. In that document that we have now on the screen, could I ask you to turn to the page of it that ends in .0012 [WIT.0006.0099.0001_R at .0012]. If we can just zoom in on the text, please. We see some black text. As I understand it, the black text is the actual report?
A. Yes.

Q. The draft report. The red text is yourself writing; is that right?
A. Is this version 2?

Q. This is version 1.
A. Version 1.

Q. That you've provided on 3 January 2018.
A. Yes. Yes, the red text is my --

Q. Additions to version 1?
A. Yes. Feedback, yes.

Q. And is the blue text Mr Howes' response to your feedback?
A. Yes. Correct.

Q. The second piece of red we see on that page, the paragraph is about what DNA intelligence would the client miss out on. Do you see that?
A. Yes.

Q. And do you understand the "client" to refer to QPS?
A. Yes.

Q. That's something that's discussed generally in the lab, that QPS is "the client" of the lab?
A. Yes. There is - everyone thought that QPS is the main client, and my view, we have a range of stakeholders, not

just the courts, but we have the community, et cetera. But there is a big focus on the Queensland Police being our main client.

THE COMMISSIONER: Q. When you say " main client", you have said what your idea is, but did anybody in management, Ms Allen or Mr Howes or Ms Brisotto, any of those managers, refer to any other clients or to any other entities as clients?
A. No.

THE COMMISSIONER: Thank you.

MS HEDGE: Q. Your comment is that that description, the one where the reference is to 1.86 per cent of auto-microcon samples were suitable for the NCIDD and 1.45 per cent provide new intelligence, your response is:

True but only relevant for vol crime not major crime where LR's can be calculated.

A. Yes.

Q.
The definition of success here is only relevant for vol crime not major.

Is that right?
A. Yes.

Q. "LRs" means likelihood ratio?
A. Yes.

Q. And that refers to - well, perhaps you can explain what a likelihood ratio is?
A. So a likelihood ratio is a statistical weighting that can be applied to describe the DNA evidence under one proposition versus another.

THE COMMISSIONER: Q. By that you mean, so when you gave evidence in court, or your colleagues give evidence in court, and you have a profile and it has particular characteristics which we will get into in due course, and you look at the reference profile from the suspect or the accused person, and you're comparing the characteristics from the crime scene sample profile to the characteristics in the reference sample that the accused person has given

up and that has been analysed --
A. Yes.

Q. -- you then have a mathematical approach to calculating the probability or the likelihood, the probability, that the person who contributed the crime scene sample, the DNA in the crime scene sample, is the same person who contributed the reference sample?
A. Yes.

Q. And when you have got a good match, although I understand you don't like using the word "match", that scientists in your profession don't like using the word "match", but when you have got a good match, have you a high probability in the billions-to-one probability; is that right?
A. Yes. In a general sense, yes.

Q. In a general sense, but that is what you are talking about?
A. Yes, that's right.

Q. It is 100,000 times to one more likely that the reference sample person contributed this sample than not; is that how you put it?
A. Yeah. We normally say the DNA evidence is 100 billion times more likely to have occurred if this person had contributed rather than if they had not.

Q. Yes. That's right. So that's what "LR" means?
A. Yes.

Q. Thank you.

MS HEDGE: Thank you

Q. Could you explain to us what you meant for volume crime, not major crime?
A. So I suppose my concern with this part of the report was that there was a big focus on what new intelligence information might the QPS might miss out on if we implemented the DIFP from 2018. And my concern was that other warm link information was not being used in its entirety or considered in its entirety.

For example, yes, a cold link, which is, as we explained before what a cold link is, is an unknown person

linking to somebody on NCIDD, which is great intelligence for the QPS. But warm link information is also - well, can be important to the QPS as well. For example, finding semen on the complainant, even though the QPS might have a suspect already, that still goes some way to help address the allegations. And I felt that this was very focused just on what new intelligence information might be missed rather than what other things could be missed that are also helpful to QPS.

THE COMMISSIONER: Q. Is that because with volume crime, break-and-enters and car stealings and things of that kind, it is often the case that the police have no suspect in mind?
A. Yes.

Q. And so, a National Database hit is what they are hoping for? Whereas in major crime, more often than not, there is a suspect --
A. Yes.

Q. -- that has been identified by the complainant, but there is a dispute about whether the offence happened?
A. Yes, correct.

THE COMMISSIONER: Thanks.

MS HEDGE: Q. Just to clarify one part of this, it is true that in some cases cold links can be relevant to major crime?
A. Yes.

Q. That is, in murders or other offences against a person where the police do not have a suspect?
A. Yes. Yes.

Q. And in some cases an NCIDD profile obtained from a burglary or something might end up solving a murder somewhere else in Australia, for example?
A. Yes.

Q. But that is a very small percentage of the major crime?
A. Yes, correct.

Q. Is that the --
A. Yes.

Q. Can we turn back to the page of this document that ends in 0007 [WIT.0006.0099.0001_R at 0007]. Zooming in under 4.2, do you see those definitions of "Fail" there?
A. Yes.

Q. "Fail" being "Complex unsuitable", "Partial unsuitable" or "No DNA", effectively?
A. Yes.

Q. And "Success" being everything else?
A. Yes.

Q. Those definitions are consistent with your informative and non-informative from Project #163?
A. Yes.

Q. But the 1.45 per cent is not linked to that definition of "Success" there, is it?
A. No.

Q. Rather, if you turn to the page ending in .0010 [WIT.0006.0099.0001_R at .0010] in the pie chart there, if you can zoom in on that, please, operator, that number there, 10.60 per cent, is the data figure that's relevant to those definitions we just looked at?
A. Yes.

Q. And was your view at the time that you reviewed this that that was a relevant piece of data for the QPS?
A. Yes.

Q. And why is that, in your view?
A. Because as I mentioned before, that 10.6 per cent includes not just new intelligence information but any other information that may be helpful to the QPS, such as finding foreign DNA on a person, that helps address the allegations.

Q. If we turn then in that same document and the page ending in .0013 [WIT.0006.0099.0001_R at 0013], we see a comment at the top of the page near the bar graph about the NCIDD outcome being relevant. Sorry, at the top of the page under the graph:

> *A profile might sit on NCIDD for years and not link.*

That's your comment.
A. Yes.

Q. And that's the same point we have made now?
A. Yes.

Q. And the next comment underneath the yellow highlighting, again:

For major crime, we need to think about how many samples gave good LR's but no upload?

A. Yes.

Q. And that's the same point you're making now?
A. Yes.

Q. That there is other informative material for Police, not just NCIDD uploads that result in cold links or new information?
A. Yes, correct.

Q. Thank you. We see Mr Howes', if we zoom back in on that second red and blue text under the yellow highlighting, we see Mr Howes' response was:

Captured in warm link data.

And do you think that adequately dealt with the concern you were raising?
A. I don't think so. It's actually - it was difficult for me to actually understand how the data was actually processed and what, if any, statistical methods were applied to that. I couldn't actually follow or find anything or see anything to follow how the data was actually analysed. But on the premise of what data was explained in terms of success and percentages within this report, it was still concerning enough for me to think about not just missing out on new intel information.

THE COMMISSIONER: Q. Ms Rika, you may not be able to answer this. Can you think of a reason why or a basis for thinking that the 1.45 per cent cold link success rate is the most pertinent factor to consider when deciding what to do with this range of samples? A proper scientific reason?
A. Being able to narrow the pertinent figure down to

1.45 per cent might look quite attractive to the reader that, well, it's a small number, so in the big scheme of things, you know, perhaps that's an option we could seriously consider, to stop processing samples based on 1.5 per cent.

Q. But are you able to offer an explanation, having regard to your field of science and your practice, a basis upon which that ought to be regarded as the pertinent figure for making a decision not to sample this class of sample, not to test this class of samples?
A. In my opinion, I think even one sample, which could be .2 per cent, for example, one sample that obtains a DNA profile, is enough. So if there's a percentage applied to some information that the QPS might be missing out on, in my view, I don't think that's relevant because, like I said, just one sample, which could be a really small per cent, less than 1.45 per cent, is enough to help - could be enough to help a case.

THE COMMISSIONER: I understand. Thanks.

MS HEDGE: Q. Could we turn to the page in that document ending in 20 [WIT.0006.0099.0001_R, at 0020]. This is the Recommendations part of Project #184.

THE COMMISSIONER: What page?

MS HEDGE: It ends in 0020 in the top right, or page 19 in the bottom right.

In black, we have the recommendations as drafted at the time of this version of the report. And then item 1, that was sent to - the recommendation, the draft recommendation, was to cease auto-microcon processing, with the exception of priority 1 and coronial/DVI samples, DVI being disaster victim identification?
A. Yes.

Q. You added there "P2 samples".
A. Yes.

Q. Is that linked to your feedback that the basis of the report was really not about major crime, which is P2?
A. Yes, yes. Correct, yes.

Q. In recommendation 2, it was at this time a draft

recommendation to:

Cease processing all Priority 3 samples up to Quantification value of 0.133ng/µL.

A. Yes.

Q. And your feedback was that should be assessed separately because at this time there was a data analysis done of a whole range all together; is that right?
A. Yes, that's correct.

Q. And finally in recommendation 4, that connects with your addition of 1c. That is, that P2 samples be an exception for the moment until they have been re-analysed; is that right?
A. Yes.

Q. At the bottom of the page, you say:

Overall, I think this idea is good.

Do you remember whether that was referable to Recommendation 5, draft recommendation 5, or to all of the draft recommendations?
A. It was all of the recommendations in terms of if we're going to look at is there a range where we can prove that we're not getting anything useful, then the idea of exploring that is good, as I had already looked at in Project #163.

Q. Yes.
A. But as I have said there in my feedback, my concern was that the data and analysis had been done just on a certain set of samples and focusing, really, just on the new intelligence of information that might be missed; not other evidence that might also be missed.

Q. Can I ask you about something that was happening in the lab at this time that you mention there:

We don't know what interp rules there will be for vol crime in PP21 ...

A. Yes.

Q. Is this correct, that leading up to 2018, leading up

to the end of 2017, P3 samples were amplified using a kit called Profiler Plus?
A. Yes.

Q. Sometimes shortened to P Plus in documents?
A. Yes.

Q. Whereas priority 1 and 2 were amplified using PowerPlex 21?
A. Yes.

Q. Otherwise known as PP21?
A. Yes.

Q. And those address two different kits by which you do amplification of DNA?
A. Yes.

Q. PP21 was introduced for priorities 1 and 2 back in 2012; is that right?
A. Yes.

Q. And so, heading into 2018, were you aware that P3 samples were going to transfer into PP21?
A. Yes.

Q. And then all the samples in all the lab would all be being amplified using PP21?
A. Yes.

Q. And was Profiler Plus being put out of - there was no more Profiler Plus? It was out of operation?
A. That's right, yes.

Q. They had stopped manufacturing it, I mean, the kits?
A. Yes.

Q. Does PP21 take more time or cost or resources than Profiler Plus?
A. Yes, it does.

Q. By a significant margin or a small margin? What's your understanding?
A. Well, when I think about when we obtained PP21, we did that in combination with a new approach to interpretation, which is a continuous approach using STRmix, which is a STR software package. And our time to interpret profiles

increased dramatically with the implementation of PP21 and STRmix.

Q. I understand. So I should have said the difference between Profiler Plus and PP21 is the number of locations on the DNA strand that it looks at and amplifies?
A. Yes. That's right, yes.

Q. And how many of those locations are Profiler Plus?
A. Nine.

Q. And PP21 is 21?
A. Yes.

Q. As we discussed earlier?
A. Yes.

Q. All right. Is there extra time and cost and resources in using Profiler Plus or PP21 at the analytical stage?
A. Not that I'm aware of.

Q. All right.
A. I don't do that part of it, but I wouldn't think so.

Q. I understand. But you are saying there is a significant difference in time, cost, resources at the interpretation stage by reporters?
A. Yes, correct.

Q. Were the Profiler Plus samples manually interpreted?
A. Yes.

Q. So they didn't use STRmix?
A. Correct.

THE COMMISSIONER: Q. Sorry, Ms Hedge, just so I get it clear, Profiler Plus provided nine sets of peaks for comparison?
A. Yes.

Q. And the peaks are when you represent what we see in the DNA?
A. Yes.

Q. There aren't peaks in the DNA, but the computer that gives us the data represents them as peaks?
A. Yes.

Q. So you get nine and you compare the characteristics of that nine in a crime scene sample to the nine in the reference sample?
A. Yes.

Q. And PowerPlex 21 is a much advanced system with 21 sets of peaks, so you have got more characteristics?
A. Yes.

Q. And by definition, you might even lose 10 of them and you've still got 11, whereas you only had nine in the original system. So it's that much more sensitive; is that right?
A. It's --

Q. Is it that much more informative?
A. Yes. Yes.

Q. But because you have many more peaks, and because peaks aren't perfect in crime scenes - they come in odd shapes, sometimes they're not there at all and sometimes fake peaks appear - do I understand that once PowerPlex 21 was introduced, that meant that some profiles took a lot longer to understand and analyse than the up-to-nine that you used to have, and so that meant your time as a profiler was - you were much more occupied with individual profiles than you had been before?
A. Yes.

Q. Is that the summary of it?
A. Correct, yes.

Q. And I think you mentioned STRmix?
A. Yes.

Q. And that is a software program that helps profilers interpret by doing some of the work automatically in identifying what matters and what doesn't matter in a profile?
A. Yes, correct.

Q. So you have introduced PowerPlex 21 and STRmix at about the same time, I think, in December 2012.
A. Yes, correct.

Q. And so the amount of time you and your colleagues were

spending suddenly increased --
A. Yes.

Q. -- as it were, to do the same work? The same amount of work to produce the same amount of results, but it was taking longer?
A. Yes.

Q. Is that the context?
A. Yes.

THE COMMISSIONER: I see. I understand. Thanks. Yes, Ms Hedge.

MS HEDGE: Thank you.

Q. So moving back to 2018, at the time you were giving this feedback, January 2018, was it the case that the lab was looking at the prospect of that happening again for P3 samples, that interpretation would take a lot longer?
A. Yes.

Q. Were there any other - so that's one pressure that might be said to be coming on turnaround times?
A. Yes.

Q. Were there any other pressures in the lab, from the lab side, on turnaround times that you remember?
A. I remember around that time - I just remember a general conversation from Cathie and Justin that QPS were putting a lot of pressure on our lab to get results out more quickly, and that information came to me and others in the lab through Justin and Cathie based on their conversations with QPS.

Q. Do you remember about when that was in comparison to you giving this feedback in January of 2018?
A. I might have something in an email somewhere.

Q. Was it around that time?
A. Yeah, it was. Yes.

Q. You have made the point also in that feedback at the bottom there that because you don't know about what the interpretation rules will be, that previous data might not be useful to use to look into the future?
A. Yes.

Q. In the feedback that we can see on the screen.
A. Yes.

Q. That is your point about comparing apples with oranges?
A. Yes.

Q. All right. So that is the feedback that you provided on version 1. Can we turn then to --

THE COMMISSIONER: Just before you move on, Ms Hedge.

Q. On that page on item 2 and item 4, you picked up that other - independently from - you have to assess the data in a different range, independently from the assessment of data that you have made with the first range from 1 to 88. If you want to go higher, you have to look at that afresh.
A. Yes.

Q. And the response by Mr Howes is:

Have re-evaluated ranges.

A. Yes.

Q. What did you understand by that?
A. That he had looked at the data again, done a new data analysis. My understanding from his reply was that he had done a new data analysis looking at discrete sets of data for the different - breaking the ranges down into discrete sets.

Q. I see. But you haven't seen that analysis?
A. No.

THE COMMISSIONER: Yes, Ms Hedge.

MS HEDGE: Thank you.

Q. I turn to document [WIT.0006.0100.0001_R], which is the second lot of feedback you provided. If we turn to the page ending in 0005 under the word "abstract", do you see that:

Given the short TAT for feedback, the Reporting 5s have combined their final

feedback.

A. Yes, correct.

Q. This is a joint feedback between yourself and Amanda Reeves; is that right?
A. That's correct.

THE COMMISSIONER: Sorry, Ms Hedge, which exhibit number is it? Ms Rika's exhibit?

MS HEDGE: AR-03-01.

THE COMMISSIONER: Thank you very much.

MS HEDGE: Have you got that?

THE COMMISSIONER: I have got it. Thank you. And we are at the abstract page.

MS HEDGE: Q. Amanda Reeves was the senior scientist of the Reporting team?
A. She was.

Q. And when you describe "Reporting 5's", that is because that position is a Level 5, relating to a pay scale in the Health Department; is that right?
A. Yes, correct.

Q. And you describe there that short TAT for feedback, and that is what we saw in the emails after lunch about returning feedback by the 9th at 1.00 pm?
A. Yes, correct.

Q. Can I ask you, particularly, about point 3 you make there:

Note that there seems to be urgency around this proposal being implemented, which might not allow time for full consideration of all potential risks/impacts.

Do you understand whether you were referring to that - well, what do you think you were referring - can you remember what the urgency was?
A. The tight timeframe of, I think it was, one day.

Q. I see.
A. Yes.

Q. From Mr Howes?
A. Yes.

Q. Does that assist you in knowing what the urgency was from his perspective, why he asked for that?
A. I don't know for sure, but in my view it's probably - it probably was because of the pressure placed upon the lab - what I was told, pressure placed upon the lab for results. More results, more quickly.

Q. You suggested, yourself and Ms Reeves suggested that it might be possible to just implement P3 and revisit it in three months. And do you see in the middle of that paragraph you said you were concerned:

> *... that trying to use P2 results (with one set of interp outcomes and purpose) to forecast for P3 results (with another set of interp outcomes and purpose) is confusing, and combined with the haste, we may miss something.*

A. Yes.

Q. And do you mean that yourself and Ms Reeves might not be able to do a full review?
A. Yes.

Q. I see.

(Audio missing)

Q. What is your view? Had the lab in this document considered its benefits appropriately?
A. No.

Q. And that is the reasons you gave in the first set of reasons?
A. Yes.

Q. When you were writing this feedback, did it feel like feedback?
A. No.

THE COMMISSIONER: Ms Rika, on that page at paragraph 2 of your feedback, one of the points you make is that it is not right, not justified, to look at a result where the DNA is found to be the DNA of an assumed known contributor. Can I just pause there. Do I take that to be, for example, you have to tape-lift off my arm, and you assume you are going to find my DNA on that tape, and you find my DNA on that tape, so that's what you are referring to as an example of a sample that gives a result, namely, an assumed known contributor?
A. Yes, right.

Q. And then you go on to say you can't look at results like that where you get a tape-lift off a person and as you expect, you get that person's DNA. And you conclude for the purposes of this analysis, this report, that that's useless information because, as you say, the value of each result changes according to the specific case history and sometimes samples are taken to see whether or not there is foreign DNA present. That is to say, the fact that you get a tape-lift off my arm and it only has my DNA on it may, depending upon the case, tell you something very valuable?
A. Yes.

Q. Is that what you meant?
A. Yes.

Q. Do I understand correctly?
A. Yes.

THE COMMISSIONER: Thanks. I just wanted to know that. Thank you. Yes, Ms Hedge.

MS HEDGE: Q. Can I turn to the page that ends in 21 at the top-right of this document. [WIT.0006.0100.0001_R at 0021]. We are in the conclusions and recommendations part of this. Again I should have said the black is the actual version of the report and the red is either yourself and Ms Reeves's suggestions, either comments or also track changes.
A. Yes, correct.

Q. In Recommendation 1, you removed the exceptions to the ceasing of the auto-microcon process and you recommended to the author that it only be applicable to P3 samples; is that right?
A. Yes.

Q. And you have described the reasoning for P2 and P1 in major crime. Is there any other reasons for that proposed change that you made, other than the information that QPS might be missing on major crimes?
A. No, not that I can remember.

Q. In Recommendation 3, you suggested that the change or that there be a re-assessment after a six-month period to look at the range for P3 and potentially include P2? So that was your proposed way forward --
A. Yes.

Q. -- for this project?
A. Yes.

Q. You might remember when we just looked at the previous recommendations of version 1, there was mention of the range going right up to.0133 ng/µL?
A. Yes.

Q. That number is now not in these recommendations?
A. Yes, that's right.

Q. So you're - I'm sorry?
A. I was just going to say yes.

Q. I didn't want to interrupt you. Had you finished that answer?
A. Yes, I had.

Q. Your recommendation in version 1 that that range, .0088 to .0133 had not been fully looked at, that was taken on board and removed?
A. Yes.

Q. But the other feedback you gave about whether 1.45 per cent was appropriate, was that taken on board?
A. No.

Q. And did this version of the report, in your view, still focus on the wrong figures in terms of what was informative to Police?
A. Yes.

Q. On the next page of this report ending in .0022, in the references you have provided some feedback on the

statistics used. That's set out there in quite a lot of detail and it says on the third dot point, the third indented dot point, that someone has done an analysis of the data to determine 95 per cent confidence intervals and so on. Who did that analysis?
A. So all of that red text, at the time Amanda and I decided to seek advice from somebody within our teams who is quite good with statistical analysis and his name is Rhys Parry. And so, we asked him to look at the data analysis and what, if any, statistical methods were applied to that, and so we incorporated - Amanda and I incorporated Rhys's feedback into our own to give back to Justin, and so all of this information on this page is basically from Rhys, which Amanda and I, we went through it, we considered it, it made sense to us. And so, that's why we put it forward, on behalf of Rhys.

Q. Can we turn then to page 24, two pages over. [WIT.0006.0100.0001_R at 0024]. This is the table of 95 per cent confidence intervals that you mentioned?
A. Yes.

Q. If we look at that, the mean quant for range, so the second column from the left --

THE COMMISSIONER: Sorry, which page is that?

MS HEDGE: It ends in 0024 in the top right.

THE COMMISSIONER: Got it. Thanks.

MS HEDGE: Q. The second column on the left is an ascending set of values?
A. Yes.

Q. And the first row is 0.001, which is the "no DNA" profile?
A. Yes.

Q. And 8 and 9 which are highlighted, rows 8 and 9, between those two is where this new proposed P3 threshold would be?
A. Yes, correct.

Q. Can I try and simplify the point that's made about the statistics using this table, that there is an increasing probability of success and lower and upper bounds of a

confidence interval shown between the bottom and the top?
A. Yes.

Q. So that suggests the prospect of getting some informative information is less at lower quant ranges and more at higher quant ranges?
A. Yes.

Q. And so the point you were making, correct me if I am wrong, is that one should not look at the data of the whole DIFP range together?
A. Yes.

Q. But should stratify it into points to determine what the prospects of success or informative information is in smaller chunks of it?
A. Yes, correct.

Q. Is that a fair summary of the statistical analysis?
A. Yes. Yes.

Q. Right. And again, putting it very simply, a confidence interval is an area within which you can be 95 per cent confident that the true value will lie?
A. Yes.

Q. Do you have anything to add to your statistical - I have tried to put it in simpler terms, but tell me if I have taken away anything.
A. No, I think - I think because most of the data - well, most of it was in the very low quant ranges, and so grouping that with data of samples in the higher quant ranges altogether skews the data in a way that is not, in my opinion, scientifically sound.

THE COMMISSIONER: Q. Could I see if I understand that by giving an extreme example. I assume you are testing to see what your rate of success is in getting usable profiles in the range between 0.001 and 0.0088 and you have 1,000 samples with a quant of 0011. And of that 1,000 samples, you've got 100 usable profiles. Let me change that. Of that 1,000 samples with a quant of 0011, you get 10 usable profiles. You have 10 samples with 0088 and of that 10, you get five usable profiles. So we can see it is 1 per cent with the low quant, it is 50 per cent with the high quant, but you have got 1,100 samples.
A. Yes.

Q. And you have got 115 usable results.
A. Yeah.

Q. And so you say it is a 10 per cent, or thereabouts, success rate?
A. Yes.

Q. But in fact, at the higher end it's 50 per cent.
A. Yes.

Q. But you have only got a handful of samples that you counted?
A. Yes.

Q. So that's what you meant by skewed?
A. Yes.

Q. If you have a huge number at one end and a small number at the other end --
A. Yes.

Q. -- then when you add it up the percentages don't work anymore to reflect the reality?
A. That's right. Exactly right, yes.

THE COMMISSIONER: Thanks. I understand it now.

MS HEDGE: Q. Thank you. That document can be taken down now, please, operator.

Q. We have gone through the feedback that you provided in response to the second version of the report circulated by Mr Howes.
A. Yes.

Q. At that time when you gave that feedback, what was your expectation about what might happen next in this project?
A. My expectation was that being a member of the Management Team, and also Amanda Reeves being a member of the Management Team and we were both managers of the Reporting scientists who give evidence in court, my expectation would be that our perspective on the project and the impact on our teams would be seriously considered, discussed, et cetera.

Q. When did you think you would become involved again? What would be the next time? Would there be a further version? Would there be a meeting? What would happen next?
A. I would have thought that after feedback on version 2, there might have been further discussion with Amanda and myself and also maybe a Management Team discussion, and if a final report was to be created, that there might be extra consideration of the points that Amanda and I had raised twice already that didn't - still didn't seem to make it into the final, or version 2.

Q. Generally in the laboratory around this time, so at the start of 2018, was it a usual process for people to provide feedback on versions of papers in projects?
A. Yes.

Q. Generally at around this time of 2018, was Mr Howes responsive to feedback?
A. So around about 2018, my perception of the Management Team's responsiveness to feedback was that if the feedback was in line with the and agenda, then it was received quite positively. But if it wasn't, then it seemed that the feedback was a nuisance. That is because, in my view, the culture of our lab at that time was quite toxic. And that's one of the reasons that Amanda and I felt the need to put our feedback together for version 2 as joint feedback, hoping it would carry the weight needed to actually be heard and considered. We thought that might help us in being heard.

At that time, in 2018, I was going through a very difficult time at work because I had witnessed my colleague, Amanda, go through quite a traumatic event and it felt to me that, based on that traumatic event, that the Management Team further isolated myself and Amanda from having our input totally and well considered.

Q. What was that traumatic incident that you refer to?
A. So - I forget the - I'll just check my ....

Q. There is a reference in, I believe, but correct me if I am wrong, paragraph 20 of your second statement [WIT.0006.0095.0001_R at 0005].
A. Yes. As I mentioned, the incident, before 2018, I observed Amanda be dealt with inappropriately in a management meeting for her raising an issue and delivering

feedback on Project #181 sperm microscopy sensitivity. In the meeting where Amanda gave this feedback, I witnessed another management team member, Allan, who was sitting directly adjacent to Amanda, slam his hands on the table and push himself back from the table and yell at Amanda. The most senior managers in the meeting that day allowed Allan to remain in the meeting and did not check on Amanda and immediately --

THE COMMISSIONER: Q. Who are you referring to when you say the most senior members of management?
A. At the time the person chairing the meeting was Justin Howes and the other senior manager, because Cathie was on leave, we had Debra Wheelan acting in her position. They allowed Allan to remain in the meeting. When Amanda left the room shocked and terrified, I, too, was shaken and scared, and immediately after the meeting, I emailed Justin to let him know the impact on me. This event contributed to my perception of how willing or not the Management Team would be to seriously consider feedback from Amanda and myself on Project #184. I think that describes the incident.

MS HEDGE: Q. Was there other incidents that you saw or responses to feedback that also contributed to your perception that feedback that was against the proposed line of a project wouldn't be well considered?
A. I haven't got, like, specific examples, but particularly at that time, but in general, there was a feeling of, like I said before, any feedback that was given on a project that was not really in line with where people thought the project might go was not taken on board positively. And I've seen that happen a few times.

Q. When you say in 2018 but also generally, has that perception of yours continued up until, say, 6 June 2022, which is the day this Commission of Inquiry was announced?
A. Yes. Yes.

Q. What do you think of that feature of not properly considering feedback in terms of good scientific process?
A. I think it's bad.

Q. Why is that?
A. Because any scientific process or any scientific experiment needs to be put forth for scrutiny from all angles for the full merits of the best way forward to be

realised.

Q. And do you think that has, would it be fair to say, openness of scrutiny? Is that fair comment?
A. Yes.

Q. And wide consultation? Is that a fair comment?
A. Yes.

Q. Do you think those things have been happening in the lab between 2018 and 6 June 2022?
A. No.

Q. Was your feedback in version 2 of the 184 report taken into account?
A. No.

THE COMMISSIONER: Q. Well, Ms Rika might not know that, but it wasn't - did you get a response?
A. No.

Q. Is there any documents referring to it or dealing with it?
A. No.

MS HEDGE: Q. Now, we saw in Project #163 that that project ended in a report signed by all the Management Team.
A. Yes.

Q. Did that ever happen for Project #184?
A. No.

Q. Did you ever see another version after version 2?
A. No.

Q. What's your understanding about what happened to the end of Project #184?
A. In my view, I feel that it became evident to Justin that Amanda and I were not going to sign off or endorse Project #184, and without our sign-off and endorsement, the project couldn't be implemented because we have a standard operating procedure around change management that says that - I've got it written down here somewhere.

Q. In paragraph 21, I believe, [WIT.0006.0095.0001_R at 0006], you mention there the procedure there for change

management?
A. Yes, that's right. It states the final report of a project must be given to the forensic DNA Analysis Management Team for consideration/acceptance.

Q. I understand?
A. And if the final report is accepted by the forensic DNA Analysis Management Team it will be e-signed.

Q. Yes.
A. And the project or change management process closed.

Q. Yes, all right. Do you understand, looking in that paragraph, from a document checklist which was annotated in handwriting by Kirsten Scott, that Project 184 was replaced with a QPS Options Paper?
A. Yes, yes.

Q. You understand the Options Paper to be the end of Project #184?
A. Yes.

Q. In some way?
A. Yes.

Q. Not in accordance with your procedure?
A. No.

Q. But in some way it was the continuation?
A. Yes.

Q. All right. Is it right that you first found out about the Options Paper, turning to paragraph 13 of your second statement, same document that we were in, page 3[WIT.0006.0095.0001_R at 0003], in a meeting on 1 February 2018, a Management Team meeting where it says in the description of each project, for 184, it said it has become an Options Paper?
A. Yes.

Q. Is that right?
A. Yes.

Q. And the previous meeting, 7 December 2017, Project #184 was just indicated as continuing as a project?
A. Yes. Correct.

Q. Had you heard of an Options Paper before?
A. No, not in my field.

Q. When did you have the chance to read the Options Paper? Do you remember reading it before it went to the Police?
A. No.

Q. Did you read it at some point after it went to the Police, but you're not sure when?
A. Yes.

Q. Was it after the DIFP process was implemented?
A. Yes.

Q. In paragraph 15, you set out what you consider to be difficulties of the Options Paper; that is, that it was based on the analysis done in Project #184, which was not done in the best way possible, as we've gone through with your feedback?
A. Yes.

Q. And you describe there the data that it should have been grouped in a different approach and that the measure of success relating to NCIDD was not the appropriate way to proceed with the data analysis; is that right?
A. Yes.

Q. So those concerns you had with the Options Paper, set out in paragraph 15, are the same concerns you set out in your feedback to the two versions of Project #184?
A. Yes.

Q. You were first told that the Options Paper had been accepted - I'm sorry, could we just deal with paragraph 16 for a moment. You were also concerned that in the Options Paper there were only two options?
A. Yes.

Q. Is that right?
A. Yes.

Q. And turning over to the top of the next page, you were concerned there was only one risk mentioned, the 1.45 per cent, and this is the same point you made in your feedback?
A. Yes.

Q. That there is other information lost, not just 1.45 per cent. All right. Whether DIFP was first implemented, Mr Howes advised you that it was going to be implemented as it had been accepted by the Police; is that right?
A. Yes.

Q. And that was on 7 February 2018; is that correct?
A. Yes, I think so, yes.

Q. Can we have a document on the screen [WIT.0006.0110.0001_R].

THE COMMISSIONER: What exhibit is that, Ms Hedge?

MS HEDGE: KR-08.

THE COMMISSIONER: Thank you.

MS HEDGE: Q. If we turn to the page in that document that ends in a 4 [WIT.0006.0110.0001_R at 0004]. We see this is the end of an email chain, but this is the first email in the chain. And do you see it is an email from Mr Howes on 7 February to a group of people. Just a little higher, please, operator. Thank you. Just a little higher again. So we can see, "From: Justin Howes." So from Mr Howes whose to a group of people. Is that the reporting scientists at the time?
A. Yes.

Q. In the first paragraph, he says that an Options Paper was presented to the QPS and that:

> *QPS have advised ... they do not wish for our efforts to be put to the auto-microcon process (including the efforts and interpretation) for Priority 1 or 2 samples.*

A. Yes.

Q. Was this the way you were advised of the outcome of the Options Paper?
A. Yes.

Q. Below that, Mr Howes suggested potential wording that could be used in a witness statement:

Low levels of DNA were detected in this sample and it was not submitted for further DNA profiling.

Do you see that?
A. Yes.

Q. So that email was sent. Can we then turn one page back to the page ending in 3. [WIT.0006.0110.0001_R at 0003]. And looking at the email at the bottom of the page, an email sent from Emma Caunt to Mr Howes in reply, ccing you. Ms Caunt is a Reporting scientist?
A. Yes, she is.

Q. And was she then in your team?
A. Yes, she was.

Q. But now she is in the other Reporting team; is that right?
A. Yes.

Q. And she says to Mr Howes, in the first paragraph, that the report shows 10 per cent of samples that went through the auto-microcon gave interpretable results.
A. Yes.

Q. And that is the same 10 per cent figure that you consider to be an appropriate, a more appropriate figure for consideration by Police; is that right?
A. Yes.

Q. Then towards the top of the next page, she is looking at how the result is identified to Queensland Police?
A. Yes.

Q. Is that right?
A. Yes.

Q. At this time, did you have the Forensic Register?
A. Yes, we did.

Q. So this is how the result went through the Forensic Register?
A. Yes.

Q. Is that right?

A. Yes.

Q. And Ms Caunt is identifying that it doesn't say that there is a chance of getting a usable profile and that QPS have the option of requesting it?
A. Yes.

Q. But Ms Caunt is identifying that the result being given to QPS - this is on the same day that Mr Howes has advised you of the change --
A. Yes.

Q. -- doesn't accurately reflect the information you've got?
A. Yes.

Q. All right. Going back to page 3, in the middle of the page there, Mr Howes agrees and says that he will fix that wording; is that right?
A. Yes.

Q. At the top of that page - we can go and look at it, but this is another email from Ms Caunt, and she says:

... the line should not be validated until the whole case has been assessed ...

A. Yes.

Q. Ms Caunt, raising concerns about the DIFP process?
A. Yes.

Q. Going back to page 2 then, in the middle of the page there, another email. This one from just Ms Caunt to you. And she says that she understands from a conversation with Mr Howes:

... that the DNA Insuff process will continue as per the no DNA detected process so samples won't be assessed taking into account the circumstances of the case.

A. Yes.

Q. And that's your understanding of what happened?
A. Yes.

Q. And Ms Caunt provided you an example there of something:

Rape case.
Nothing on the [sexual assault kit]
Underpants - EFRAC ...

"EFRAC" means epithelial fraction or skin cells; is that right?
A. Yes.

Q.

... had auto microcon and gave 2 [per cent] mixture of complainant and defendant.

So Emma Caunt identifying there that:

In this case the auto-microcon gave the only evidence to substantiate the claims of the complainant

Do you see that?
A. Yes.

Q. So she is identifying what might be missed if DIFP is implemented?
A. Yes.

Q. Is that right? Can we go back to page 1 then. You forwarded this email to Mr Howes at the bottom of the page?
A. Yes.

Q. This is still only two days after you have been told about this decision.
A. Yes.

Q. And you have forwarded this email and said:

This is a concern.

I guess it's one thing for the QPS to understand this risk (if they do) but it's not full testing/disclosure for the case from our lab.

Perhaps the process needs to be

re-assessed?

A. Yes.

Q. When you say "the process", you mean the DIFP process?
A. Yes.

Q. So everything that was implemented by the Options Paper, in your view, needed re-assessment?
A. Yes.

Q. Then did you get a response to that email of 9 February 2018?
A. No, I don't think so. No.

Q. At the top of the page, you forwarded it to Mr Howes again, 23 February:

Just following up on your thoughts re below

A. Yes.

Q. Did you get any response to that?
A. I'm not sure. I'd have to go back and look.

Q. Did the DIFP process continue?
A. Yes, it did.

Q. Was there any re-assessment of it?
A. No.

THE COMMISSIONER: Q. Ms Rika, if you go to the fourth page of that set of documents, just above Mr Howes' email announcing the implementation of the new process, Ms Caunt wrote to him, with a copy to you, and it seems to me she pointed out four things. One is that the proposal is not to test these samples and, instead, to say that the amount of DNA indicated that the sample was insufficient for further processing due to the limitations of current analytical and interpretational techniques.

Ms Caunt's first point is that this tells scientific staff that there is nothing further that can be done with this sample, which is not the case for 10 per cent of samples. Do you agree with that?
A. Yes.

Q. So that statement was untrue; that is, to announce to the world that the quantity of DNA found meant that the sample was insufficient for further processing due to the limitations of current analytical and interpretational techniques, was just false?
A. Yes.

Q. The second point she makes is that not only is it false, but in 1 out of 10 cases, on the figures in the Options Paper, at least, you can get usable profiles?
A. Yes.

Q. And the third thing she points out is that this statement to be appended as a result means that no option is presented for anyone to request further processing?
A. Yes.

Q. I said four, but three is probably it. So this idea that this should be said began at the very inception of the Options Paper scheme, and that's a subject matter of the Interim Report. Have you read the Interim Report that I published a week or two ago?
A. Yes, I have.

Q. About using language? So that's the same language, isn't it?
A. Yes.

Q. At the top of page 3 of that sheet, Ms Hedge took you to the email from Ms Caunt to Mr Howes. She refers to the difficulty presented because the reporter will assess these samples and whether they're worthy of further work only at the statement stage and she says:

... but the gap will be if no statement is requested.

A. Yes.

Q. Did you refer to that earlier, I think?
A. Yes, I did.

Q. Namely, if no witness statement is requested, nobody will ever know?
A. Yes.

Q. And you don't recall any discussions between yourself

and Mr Howes or between yourself and Ms Allen or any other of your managerial colleagues about these objections to this process?
A. No, not at that time.

THE COMMISSIONER: Thanks. Yes, Ms Hedge.

MS HEDGE: Thank you. Can I turn back to the statement at [WIT.0006.0095.0001_R at 0008]. Page 8 of the second statement, paragraph 26.

THE COMMISSIONER: I am sorry, it is in the statement?

MS HEDGE: Yes.

Q. Paragraph 26, which starts on the previous page. But if we look here, this sets out some of the other times between 2018 and now that you have raised concerns about the key process; is that right?
A. Yes.

Q. Is this a comprehensive list or would there also have been verbal conversations during the time raising concerns about DIFP?
A. There would be verbal conversations as well.

Q. Paragraph (c) there we see at the top, is that in November of 2020, you sent the management team a draft implementation plan for the 3500xL. Do you see that?
A. Yes.

Q. What is the 3500xL?
A. It is a Genetic Analyser. It is a machine that does the capillary electrophoresis to enable us to visualise the DNA profiles.

Q. So it creates the electropherogram?
A. Yes, it does.

Q. What did you notice - you state there that it might be more sensitive.
A. Yes.

Q. Did you do the validation of the 3500xL?
A. No, I didn't.

Q. Did you do the implementation plan post-validation?

A. Yes, I did.

Q. All right. And in that post-validation implementation plan, did you identify that it was or that it might be more sensitive, as you write there? What do you mean by that, that it might be more sensitive?
A. So at the time that I did the implementation plan, there was some data through the validation that showed it was more sensitive, and what I meant by "might be more sensitive" was if we start using the 3500 for a bit with real samples, then we could actually get a feel for how much more sensitive it was.

Q. And when you say "more sensitive", what do you mean by that?
A. That means the ability for DNA profile information to be higher and more visible.

Q. Peaks are higher?
A. Peaks, yes.

Q. Does that mean peaks would you have seen on previous instrumentation might be bigger?
A. Yes.

Q. But also some peaks that you might not have seen at all on previous instrumentation, you might now see?
A. Yes.

Q. Do all peaks provide information? So more sensitive means more information?
A. Yes.

Q. So you sent that to the management team; that included Ms Allen, Mr Howes, Ms Brisotto?
A. Yes.

Q. All of those senior scientists we have heard of?
A. Yes.

Q. All right. Was there any re-evaluation of the DIFP range after that, after you recommended it?
A. No. So when I sent that implementation plan with my recommendation to see if the quant range still holds for defining the DIFP process, the feedback was that, yes, we could do that, but it's not necessary for this stage of implementation; we could do it as a post-implementation

review - which never happened.

Q. Did you think that a post-implementation review was an appropriate time if it had actually happened?
A. No.

Q. Why is that?
A. Because things can be easily forgotten or missed if things aren't considered and actioned either as part of the validation or of the implementation itself.

Q. Do you remember talking to Ms Allen, Mr Howes or Ms Brisotto about this around this time?
A. Yes, through - I think verbally and also through a couple of email communications.

Q. Do you remember what any of their attitudes were to the idea of reviewing the DIFP range?
A. As part of the 3500 implementation?

Q. Yes.
A. That they didn't think it was necessary. The feedback I got from them was: we can consider doing this post-implementation review, if at all.

Q. And then looking at paragraph 27, there was a Management Team meeting in November 2021 where you identified that you were collecting samples?
A. Yes.

Q. Where results were obtained in the DIFP range?
A. Yes.

Q. At about this time, when DIFP was first implemented in 2018 --
A. Yes.

Q. -- if I can just ask you to focus on 2018-2019, that sort of time period, were the police asking for many reworks of DIFP samples during that period?
A. Let me think. I don't think so. Not at that time.

Q. What about as we get right through to late 2021?
A. Yes.

Q. So November 2021, were the Police asking for rework at that time?

A. Yes.

Q. A significant increase?
A. Yes.

Q. One you noticed?
A. Yes.

Q. And you noticed because that is mentioned on the Forensic Register? When a result comes to you, it says, "The QPS have requested this rework"?
A. Yes.

Q. So, early on were you processing or looking at many profiles from DIFP samples? Early on in 2018-2019?
A. Sorry, say that again?

Q. Would it be a fair conclusion from the fact that the QPS weren't requesting many that in 2018, 2019, you weren't looking at a report out of that many reworked DIFP samples?
A. Yes, correct.

Q. But by the end of 2021, you were looking at lots.
A. Yes, yes.

Q. Of reworked DIFP samples?
A. Yes.

Q. And is that why you started collecting them in a spreadsheet?
A. Yes.

Q. Because you were seeing usable results from them?
A. Yes. Well, I had a lot of staff members come to me and say things like, "Umm, I've just reworked this DIP sample and I've got a really good result. In fact, I've got an upload to NCIDD", or, "I've got a result of the defendant on the complainant's intimate area supported contribution greater than 100 billion" which we wouldn't have got if we didn't process, didn't rework the DIFP sample. So I started getting quite concerned with staff coming and telling me all of this which is why I started collecting the examples and at the time my colleague Adrian Pippia was acting manager of the other Reporting team and we both decided to take what we had been seeing from staff members to the management team meeting to explain and, you know, might be worthwhile looking at

re-assessing or doing a different data mine or whatever, something, but the ensuing discussion and the management team meeting made it very clear that the members - some members of the management team did not think it was a good idea at that time. There were a couple of things discussed around that. One was, you know, it might be difficult for us to get a data mine - a new data mine from the Forensic Register through BDMA which is the software company for Forensic Register and we may have to pay for it, I'm not sure, but also discussion around, you know, "We've got such a big workload at the moment, this is not the time for doing another data assessment, we don't have time for it", and so --

Q. Who said that, do you remember?
A. Sharon was quite keen to not do a data analysis at that time because of our workload, and when Adrian and I walked back to the reporting area after the meeting, Adrian said to me he wasn't impressed by that.

Q. And so Sharon is Sharon Johnstone the senior scientist of the other Reporting team?
A. Yes, yes.

Q. What about Mr Howes, Ms Brisotto, or Ms Allen, did they indicate? Do you remember what they thought about re-visiting the DIFP quant range?
A. There wasn't any enthusiasm about doing so. It was - in my view, I felt that when we raised the possibility of doing something like that, it was sort of - not that I was placated, but just, "Yeah. Maybe", "maybe we'll look into it", don't really - it was kind of just swept under the carpet.

Q. If we turn to your spreadsheet which is [WIT.0006.0109.0001_R] --

THE COMMISSIONER: Is it part of Ms Rika's statement?

MS HEDGE: It is. It is KR-07. The first page of your spreadsheet.
A. Yes, I think - yes.

Q. Under the redaction is "Sample Numbers?"
A. Yes.

Q. So it's confidential information. But if we look

across so each of these rows is one sample; is that right?
A. That's right.

Q. And the first column that we can see is "result after rework", the second column "NCIDD upload", the third column "new result for the case". Fourth column "sfrac" - that's the spermatozoa fraction?
A. Yes.

Q. "Sperm seen", that relates to seeing to sperm on a microscope slide; is that right?
A. Yes.

Q. And then we have got the "initial quant" and the "quant after rework". So you can see, is it fair to say generally looking down those two columns the quant after rework is generally greater in the second column than the first?
A. Yeah, there are somewhere it is sort of about the same, but generally, yes.

Q. Yes. If we look down the "NCIDD upload" case, we can see a couple of yeses on the first page.
A. Yes.

Q. So that's something that would not have been uploaded if a rework request had not been made either by police or by a scientists?
A. That's right.

Q. In the "new result for the case?", we can see a number of, "best result for a female in male SAIK", for example?
A. Yes.

Q. And a number of occasions where it says "yes" or "no." We turn to the next page, again in that second column, a number of uploads to NCIDD that would not have been identified --

THE COMMISSIONER: Ms Hedge, what does "new result for the case" signify as a title for that column?

MS HEDGE: We might ask Ms Rika.

Q. What did you mean by the "new result for the case" back - if we could go back one page please, operator?
A. It's not really a - well, maybe the inquiry can

decide, but basically I was interested to see from these samples that actually got processed further, past the stopping point of DIFP, was it something that, you know, gave evidence in the case that otherwise would not have been there.

THE COMMISSIONER: Q. That is to say, you ask yourself: "Does it appear to me that the rework has resulted in an extra piece of evidence for the investigation"?
A. Yes. Yes.

Q. Just while we're on that page, you said before that the DIFP results go to a limbo unless it is picked up at the witness statement stage at the end of the process.
A. Yes.

Q. How was it that you and Mr Pippia picked up these samples as DIFP samples that you thought might be worthy of further work?
A. So these - all of these samples were given to us by staff members and those staff members were either looking at the results in the case at statement stage and deciding to rework a sample and to their surprise went, "Oh, my gosh, this is a really good result; need to let my line manager know", or the Queensland Police may have requested us to do further work on some of them, or in the case of a Priority 1 case, Priority 1 cases are allocated to a reporter from the outset. So they have case carriage and consistency of care and a consistent approach from the outset with all of the interpretations in the case, and so some of these were noticed because they were samples within Priority 1 cases. Those are the ways that these sort of got picked up and reported to us and we decided to keep a collection.

Q. Thank you.

MS HEDGE: Q. So if we go back to page 2 - thank you, operator. The second column is the NCIDD upload. We can see some yeses there?
A. Yes.

Q. And the third column being the new information in the case, and we see some yeses there?
A. Yes.

Q. So each of these samples might be one case or there

might be a few samples on - together that are one case; is that fair?
A. Yes, that's right.

Q. But you were collecting these. What did you think the data showed when you were showing this spreadsheet to the management team?
A. So I didn't actually show this spreadsheet to the management team in that meeting because Adrian and I put the spreadsheet together.

Q. Yes.
A. After the management meeting where we felt disappointed that there wasn't much support in us looking at the process. I remember we decided, "Well, we can start our own little spreadsheet just to gather some information", but I did in the management team meeting sorry, I started collecting the stuff before the management meeting but in the management meeting, I did tell the management team that, you know, we were getting some really good results from these and one of the comments back was, "Yes, but we need to be really careful", you know, "It's always easy to remember the ones that are successful and not collect the ones that aren't successful." So it came back to, "Well, what's the proportion of ones that are being successful?", and, for me, I felt that that was an irrelevant point because, like I said earlier, one sample - one sperm on a child of a sexual assault, to me, that one sample is relevant. I don't care what the percentage is. So it just seemed like I couldn't get that message across to the management team and so I did in the end, end up taking this spreadsheet and my concerns all the way up to the Executive Director, Lara Keller, and she was very concerned and so we had lots of conversations about it, and, in the end, Lara asked me if - what I thought about submitting a public interest disclosure to our Ethical Standards Unit about this based on this spreadsheet, and stuff surrounding it, and I told her that I was really scared to do that because I was scared of retribution for taking things up higher because of the culture in the lab at the time, and I said, "But it is the right thing to do", and she said, "good girl", and so she said "I can put it all together and send it up as a PID" - Public Interest Disclosure - "for you" and I believe she did that and then sometime later I had another meeting with her - can't remember what about - but she mentioned to me that, "By the way, Ethical Standards have assessed the information we

gave in relation to this and it didn't meet PID criteria", and I felt really disheartened and I felt like I had been wasting people's time. I said to Lara, "I feel like I have wasted your time by bringing all of this and gathering all the information for the PID". And she said, "No, you haven't. You haven't, because all of this has to come out at some point either through an internal review of our lab" - at that time which obviously then turned into Commission of Inquiry.

THE COMMISSIONER: Q. When did you submit your PID? Not exactly, just - was it last year or this year?
A. It was either end of last year or beginning of this year, around that time, I think.

Q. Yes. You gave some evidence earlier about agitating for a review of the process because of the new equipment that you had and the fact that you were getting some positive results, and there's an email from Mr Howes to you dated 10 February 2022, it is exhibit KR-12 to your statement in which he said:

> *[There's] no movement on reassessing quant ranges to [my] knowledge.*

Did he ever give you, or did anybody who was opposed to reviewing the process, did anybody ever give you a reason why it was a bad idea to review it or why it's a better idea not to review it?
A. The only reasons I had or comments that were given to me were, "It's not the right time to do another data analysis, we have too much work on", and also - what was the other one? We don't - there was a - when all of the media started happening at the end of last year, I was told that there were to be no changes to anything until the internal review which, obviously turned into a Commission of Inquiry.

Q. Who was it who said, "This isn't the right time, we've got too much on"?
A. Sharon.

Q. In that email - sorry, go on.
A. And the other reason was around perhaps we could wait - I think Luke mentioned - Luke Ryan - mentioned we could wait perhaps for - when we implement VeriFiler Plus, which is another profiling kit again and use information

from that kit but my concern was, you know, the validation of VeriFiler Plus has been going on for a really long time - it's still not - we still don't have it, and I didn't want to wait. It was urgent to me.

Q. The final point I want to ask you about is, you had put to him in this email chain, exhibit KR-12, that you were getting some results, others were getting results, and he said, "I'm aware that there were a large number of further processing requests from QPS and FSS in this matter we were just showing a good use of the Forensic Register in rework decisions. There are a variety of outcomes as expected". So he says, well, look, the fact that some reworks had been asked for and you are getting results, shows that the system is working, namely, that the systems was that you could always ask for reworks of those samples which you thought deserved them. Whether a scientist made a decision or a police officer, well, what's wrong with that conclusion? Why isn't that true? Your anxiety is that the system is not working?
A. Yes.

Q. Because you are missing results.
A. Yes.

Q. But he is saying it is because --
A. Yes. Yes. And, you know, we work on a work list system.

Q. A work list. Yes.
A. A work list system which means that, as I mentioned before, we miss - unless a statement is requested, or the Police request reworks, there's still a lot that we don't get to see and, therefore, miss and, therefore, don't get the chance to assess if that sample might be good to rework or not.

Q. So as I understand it, you are saying that the decision is made to cull these samples by an analytical chemist, not a profiler, and if you have any discretion to exercise in order to rework a sample, actually to work a sample for the first time --
A. Yes.

Q. -- the occasion doesn't much arise for the reasons you have explained?
A. That's right, yes.

Q. I understand. Thanks. Yes, Ms Hedge.

MS HEDGE: Q. Are you aware now that in June of 2022, Mr Howes, Ms Allen presented an Update Paper to the QPS?
A. I am aware now, yes.

Q. Were you first advised of that Update Paper or told of the existence of it by the Commissioner of Inquiry --
A. Yes, I was.

Q. -- in September of this year?
A. Yes.

Q. Despite the concerns you had raised, were you told that they were preparing that paper or doing any data analysis on DIFP ranges?
A. All I knew was that some data had been gathered - I think the last four years' worth of data had been obtained from the Forensic Register and that Justin and Allan were doing an analysis of that data. So a more up-to-date DIFP analysis, if you like.

Q. Yes. So you knew that the data analysis was being done but you didn't know what the results of it were or that a paper was being prepared?
A. Yes, that's right.

Q. Can we turn to [WIT.0006.0116.0001_R] which is KR-14. At the bottom of that page, this is a set of emails - we won't go through every single one - but this is a set of emails where you ask Justin Howes about that data analysis; is that right?
A. Yes.

Q. So in August, at the bottom of the page, Justin replied to you and said that he had followed up with Helen Gregg and he said there was nothing anything to share with management team at this stage. Is that right?
A. That's right.

Q. You forwarded that to Ms Keller, the Executive Director.
A. Yes.

Q. So you are escalating this issue. That's someone two levels higher than Mr Howes?

A. Yes, that's right.

Q. And you said you were wondering if there was an update, do you see that?
A. Yes.

Q. If we can go to the top of the page, please, Ms Keller responded and directed you back to Cathie, Justin or Paula; is that right?
A. That's right.

Q. And then you wrote to Lara, Justin, Cathie and Paula?
A. Yes.

Q. And asked about an update on 7 September.
A. Yes.

Q. And were you told then that a report had been prepared and given to the Police in June?
A. No. No, in relation to that email where I've said:

Thanks Lara,

Justin, Cathie and Paula, ... Are we able to please get an update yet? [Because] I think it would be good for reporters to know ...

I haven't had a reply to this day from any of those three people.

THE COMMISSIONER: Q. "To this day" did you say?
A. Yes. I mean I haven't checked my email today but last time I checked my email.

MS HEDGE: Q. Can we move to 6 June 2022 and on that day the Commission of Inquiry was announced.
A. Yes.

Q. And you can assume for the purposes of this, Mr Shaun Drummond the then Director General of Health decided to remove the DIFP threshold and decided that samples that were formerly being dealt with as DIFP would be amplified without concentration.
A. Yes.

Q. Were you consulted by anyone in the lab or in the

Department of Health about those decisions before they were made? I don't mean the Commission of Inquiry, putting that to one side, I mean the decisions about lap processes.
A. Before 6 June?

Q. Yes.
A. No.

Q. Were you just told afterwards what had been decided?
A. Yes.

Q. Can I turn to KR-16 which is [WIT.0006.0118.0001_R]and turn to page 2 of that document, please. This is an email from Luke Ryan on 6 June. Do you remember 6 June?
A. Yes.

Q. Do you remember there was a press conference with the Premier and the Minister for Health?
A. Yes.

Q. And it was about in the middle of the day?
A. Yes, it was, I remember that.

Q. Did you watch that press conference?
A. Yes. Some of it, yes.

Q. At the lab with others?
A. Yes.

Q. Mr Ryan wrote this email. Now, you're not a recipient of this email. Are the people there in the "To" field, are those the Analytical scientists?
A. Yes.

Q. So this is Luke writing to him team?
A. Yes.

Q. Mr Ryan.
A. Yes.

Q. And in the first sentence he says:

The Premier has requested we test (amp) all samples ...

Do you see that?
A. Yes.

Q. Now, the analytical scientists are the people who determine whether things go to concentration or to amp?
A. Yes.

Q. I assume that's why it was important that they know first?
A. Yes.

Q. Because they are doing that job.
A. Yes.

Q. Coming back to page 1 of that document, please. [WIT.0006.0118.0001_R]. Is this the document where that (indistinct - audio distortion) to yourself to provide to Justin. And he says there in the second paragraph:

> *Previously reported DIFP that are requested for a restart, will go to microcon as per current process.*

A. Yes.

Q. So that's if the QPS request a rework on something previously reported?
A. Yes.

Q. Or a scientist?
A. Yes.

Q. Right. So that's how you found out about it, the 6 June decision?
A. I was also - well, I actually had Justin pop in - at the time, I was actually reviewing a case in a private room.

Q. So you weren't at your usual desk.
A. No. And I had done that because I had been asked to review the case urgently, drop everything else, do that.

Q. I understand. Let's leave that.
A. Yes.

Q. Did Justin come to see you.
A. Yes, he did. He popped his head in just to say, "Just to let you know about this process" and then I read this email later and I remember him saying words to the effect

of, "It will be interesting to see what results, if any, this new process which is amplifying at 15 microlitres produces", and at the time I was so busy doing the other case, that later on I thought about it and I spoke to a few other colleagues and realised that removing the DIFP process was good, but moving to another process which was a decision of amplifying at 15 microlitres first had its disadvantages, and I didn't feel that it had been well thought through.

THE COMMISSIONER: Q. Ms Rika, amplifying at 15 microlitres first --
A. Yes.

Q. -- you mean you get the quant - so you know the quantity.
A. Yes.

Q. And whereas before the DIFP range of samples would go to micro-concentration?
A. Yes.

Q. Now you emit the micro-concentration and go to amplification first; is that your point?
A. Yes, that's right.

Q. So the stochastic effects that you were talking about would be prone to appear?
A. Yes. Yes.

Q. So when we looked at that email from Mr Ryan:

The Premier has requested we test (amp) ...

That's amplify?
A. Yes.

Q.

... all samples in a current DNA insufficient range. When transitioning quant batches please ensure all samples in the DNA insufficient range are transitioned to the amp WL.

So did you understand that statement by Mr Ryan to mean that the Premier had requested that all samples in the range .001 to .0088 be processed fully except that they not

be concentrated, they be transitioned to amp?
A. Yes.

Q. And that was made plain by Mr Howes in his conversation with you?
A. Yes.

Q. Thanks.

MS HEDGE: Q. In your statement you identify a number of difficulties or concerns you have about the 6 June process, that's at paragraph 41 [WIT.0006.0095.0001_R at 0012]. Can you tell us the main concerns you had about that process post 6 June 2022?
A. So relating to paragraph 41?

Q. Well, these paragraphs are in, so if you can just tell us your main concern. You don't need to tell us everything in those paragraphs.
A. Okay.

Q. What are your main concerns with the 6 June process?
A. So my main concern is that it was another blanket rule applied to all samples in my view for the purposes of an automated approach because, in my view, I think samples in that range need to have a scientist assess them and use their own judgment to decide whether they should go directly for an amplification or a concentration step. Some samples are actually - some samples are actually best concentrated before amplification, so ones with a very, very low quant value, but other ones you may decide to amplify first, especially if the quant range is up around, you know, close to the threshold of 0.0088 so 0.0087, you may decide "Well, actually, this might be quite a good amount of DNA, I might just amp - amplify - that first, see what I get and then if I have to concentrate, I can". But it should be left to the scientist based on their experience and expertise and knowledge to make those decisions. It shouldn't be a blanket rule for every sample, in my view.

THE COMMISSIONER: Sorry, Ms Hedge.

MS HEDGE: Not at all.

THE COMMISSIONER: Q. Can you think of any proper reason to implement a system by which samples with low quantities

of DNA in the range we have been discussing ought not be concentrated as a rule?
A. So --

Q. That is, the system that was implemented on 6 June, that we have just looked at --
A. Yes.

Q. -- involves not concentrating any of the samples with low quants. Can you think of any proper scientific reason to adopt that course?
A. Not for every sample, no.

THE COMMISSIONER: Yes. Yes, Ms Hedge.

MS HEDGE: Q. And do you also identify in terms of concerns you had in paragraph 43 that if you amplify first before concentration, then you've lot 15 microlitres of the sample?
A. Yes, correct.

Q. Which means you have less sample and, therefore, less DNA.
A. Yes.

Q. Because the samples have an even distribution of DNA.
A. Yes.

Q. In paragraph 46, you identify that you raised this concern at a management meeting.
A. Yes.

Q. If we turn to the top of the next page, is it right you raised that concern and you were told by Cathie that she was present at a meeting with the minister and Lara Keller.
A. Yes.

Q. And that options were put forward and the Minister had chosen that option.
A. Yes.

Q. Can we then move to 19 August 2022. [WIT.0014.0009.0001_R]. On that day you were sent a memorandum --
A. Yes.

Q. -- sent out by Helen Gregg this time from Dr Rosengren, the Acting Director-General; is that right?
A. Yes.

Q. They advised you that there had been a change to the process and in the bold, in the middle there, this was said:

... all Priority 1 and Priority 2 samples with a quantitation result [in that range] should be concentrated down to a volume of 35uL and undergo one amplification process.

A. Yes.

Q. Could we just remove the zoom-in for a moment, please. The paragraph immediately below that, it is stated that if there was further amplification considered, and that would result in exhaustion of a sample, then written approval must be obtained from the QPS.
A. Yes.

Q. In terms of how much sample is used, you need 15 microlitres for an amplification.
A. Yes.

Q. And you need 2 microlitres for a quant; is that right?
A. Yes.

Q. So if it is concentrated to 35, you have got enough sample left to do two amps and one quant.
A. Yes.

Q. But if you did two amps and one quant, then you would have three microlitres left, or almost, so you couldn't do anything with that, is that right?
A. Pretty much, yeah.

Q. Is it right also that the pipetting system that you use has difficulty pipetting from a solution that has less than 20 microlitres in it?
A. Yes.

Q. So anything less than 20 microlitres creates some difficulties.
A. Yes.

Q. It can be done.
A. Yes.

Q. But it is more difficult.
A. Yes.

Q. It has to be done manually.
A. Yes.

Q. Rather than using a machine.
A. Yes.

Q. I see. This process was created from this memo. Before you received that memo in the afternoon of 19 August, were you consulted about any potential change in process?
A. No.

Q. Were you told that anyone was even considering changing the process at the lab?
A. No.

Q. Did you raise concerns with this process implemented on 19 August?
A. Yes. Yes. As soon as it was announced to us, I discussed my concerns with my colleague Emma Caunt. We then collaborated on formulating a list of potential issues.

Q. Are they in your statement at paragraph 53 at [WIT.0006.0095.0001_R at 0014]?
A. Yes.

Q. All right. I will just let that come up on the screen. This is the list of concerns that yourself and Ms Caunt developed together?
A. Yes.

Q. We won't go through each one, they are there for people to read, but is it fair to say that one significant concern that remained is the discretion to be exercised to determine when and to what level concentration should occur?
A. Yes, correct.

Q. This was another blanket rule that would apply to all samples.

A. Yes.

Q. In paragraph 56, is it right that you raised some concerns with Mr Howes?
A. Yes.

Q. And suggested that a meeting might assist.
A. Yes.

Q. Did you have two meetings with Ms Gregg after that about the process?
A. Yes.

Q. Did you raise all those concerns, or the significant concerns you had, with Ms Gregg?
A. Yes.

Q. Was she able to answer your concerns or explain the situation?
A. She did her best to try and answer our technical questions, bearing in mind that she is not a DNA analyst, but she did seem to struggle at times. She did her best to take on board, or try to take on board, what we were saying about the concerns and how - like, a lot of staff members in that first meeting raised their own individual concerns about it and, at the end, I sort of jumped on the MS Teams meeting to try and summarise the concerns I'd been hearing in my own words and suggested that, well, it's, you know, the minister's decision, or whoever's decision it was, because that was something that was mentioned to us, can you take all the information that we've just talked about today to that person so we can get some, maybe, better decisions made, or the decision re-assessed. And Helen did say that she - I'm pretty sure that Helen said she would talk to QPS and then sometime later, I think it was about a week later, she had a follow-up meeting with us, but there was no mention of a meeting or talking to QPS.

Basically the take home message was, you know: this is the decision that's been made; understand your concerns. Staff also expressed concerns and frustration around the transparency of the decisions that were being made, and why they had been made that way, especially with no consultation with those of us in Reporting who see the results daily and rework strategies daily.

In the second meeting where Helen tried to give us

some follow-up information, basically the message I got was: at the end of the day, here's the decision. The big take home message is: if you think you're going to exhaust a sample by reworking it, then you have to get QPS permission first.

Q. Can I ask you about that part. That part of the memo, that you have to get written permission before exhausting a sample, has that ever been part of any lab process that you are aware of in the last 10 years?
A. No. No. Because in the past we've been able to - if a case scientist is working on a case and they believe, "Oh, my gosh, that sample here is super, super important in the case. I'm going to look after that one and not exhaust everything in case I want to do something like Y-STR testing or some other testing later on," then we've still got that precious sample. And, again, those decisions are usually best in a collaborative exercise between our scientists, the Police, any other experts who have - where we can discuss all the information about the case and decide, you know, that's probably the best sample to - it's a critical sample; we've got to save it.

Q. Yes.
A. So I - if we were going to have a blanket rule about: don't exhaust any samples without getting written permission, it might actually be better for QPS to let us know when they submit a sample, this is one that, "Please don't exhaust it, it's super important," because we don't have that case context any more in the lab.

Q. You mentioned Y-STR testing. That is the type of testing where you can test only for male DNA?
A. Yes.

Q. Do many labs in Australia have that capability?
A. Yes.

Q. The Queensland lab does not have that capability yet?
A. Not yet, no.

Q. But some terms are being made to validate it at the moment; is that correct?
A. Yes,

Q. All right. Can I turn to the last topic which is about witness statements. You said to the Commissioner

that you had read the Interim Report of the Commission.
A. Yes.

Q. And seen the focus on the wording in formal witness statements for "DNA insufficient for further analysis" and also "no DNA detected"?
A. Yes.

Q. You have reported results in formal witness statements using the wording that was described in that report?
A. Yes.

Q. Where did you get that wording from?
A. Our standard operating procedure.

Q. Are you permitted to use other wording in your statements?
A. Basically, the message that we get is to always follow our standard operating procedures for any processes or methods or suggested wordings that are in standard opening procedures, to follow the standard operating procedures.

THE COMMISSIONER: Q. Well, that's why they are standard operating procedures.
A. Yes.

Q. That's why they are called that.
A. Yes.

MS HEDGE: Q. Who told you that, what you just said, that you should always follow the standard operating procedures? Was that verbal or --
A. Ah, yes. Yes. So Cathie Allen has always said to us, to the whole lab, that it is really important to follow standard operating procedures because there is safety in doing that for all of us, because we are all doing things the same way, and when we go to court as representatives of the lab, we can say that this is how the lab does it.

Q. Could I have on the screen [WIT.0012.0027.0001_R]. There is an email at the bottom of the page. This is an email on 5 August 2016 from Mr Howes and you are one of the people in that email.
A. Yes.

Q. Mr Howes says in that email that lately a few instances have been brought to his attention where the

collective agreed upon statement wording hasn't been used?
A. Yes.

Q. This email relates to some wording that was agreed in 2013, wasn't it?
A. Yes.

Q. But it was in a standard operating procedure just like the current wording?
A. Yes.

Q. And he says in his last sentence:

Can I please ask that we stick to the standard wording ...

Do you see that?
A. Yes, I do.

Q. Is this an example of the type of thing you were told about sticking to the standard operating procedures?
A. Yes.

Q. Thank you. Finally, can I take you back to [WIT.0006.0110.0001_R at 0004]. We have seen this email before from 7 February 2018, but I can focus on the part in italics where Mr Howes suggests some wording:

Low levels of DNA were detected in this sample and it was not submitted for further DNA profiling.

Do you see that?
A. Yes.

Q. That wording has some benefits in terms of what the Commission decided in its Interim Report because it doesn't use the word "insufficient", it uses the words "low levels"?
A. Yes.

Q. If I could have on the screen [FSS.0001.0019.1113_R]. Go to the next page, please. This is the same day. Mr Howes wrote to yourself, Ms Johnstone and Mr Nurthen, and cc'd Amanda Reeves. What is that group of people at that time? Do you remember why that would have been the people he wrote to about this topic?

A. Probably because - well, Sharon, Amanda and myself were managers and Thomas may have been acting manager.

Q. I see.
A. Possibly.

Q. And he indicates the previous wording for DNA insufficient, "going back to when we used it years ago". And as I understand it, it was used in about 2012 to 2015 for P3 samples; is that right?
A. Yes, I believe so.

Q. And the alternative is exactly as in that previous email?
A. Yes.

Q. If we go back to the page before, Mr Nurthen said:

The second I think is better ...

Do you see that at the bottom of the page?
A. Yes.

Q. I can bring up the email if you need it, but do you remember you replied and said the second is better?
A. Yes, I think I can remember that.

Q. Let's go to the top of this page first, and Mr Howes agreed:

Hi, that was the reason why I wrote an alternative...

We'll go with that.

A. Yes.

Q. Do you remember that? I will show you your email [FSS.0001.0019.1117]. There is your email saying you like the second one, too?
A. Yes.

Q. And do you remember Ms Johnstone said she preferred the original wording? You don't remember, that's fine?
A. Yes, I --

Q. We will deal with it later.

A. I'm not sure.

Q. After seeing that email where Mr Howes said that he was going to go with that wording, do you understand that wording never made its way into a standard operating procedure?
A. I don't think it did.

Q. Do you know why that is?
A. No, not for sure. I think it may have had something to do with trying to have our witness statements fully automated from the Forensic Register, and so part of that process or project involved different wordings to go in as standard wordings for the automated statement production. And I believe, from memory, there were different types of wording considered, but somewhere along the way that project, I don't think, actually got finalised. So I don't think the final agreed wording somehow made it to the standard operating procedure - I think.

Q. Thank you.

MS HEDGE: Thank you, Commissioner, those are my questions.

THE COMMISSIONER: Ms Hedge, in exhibit KR-16, on the second page, you referred to Mr Luke Ryan's email to the Analytical team informing them that it had been the Premier who had instructed that all samples within the range be tested and that they be tested by transitioning to amplification and implicitly omitting the concentration step. Is there any information that actually imputes to the Premier a technical instruction of that kind?

MS HEDGE: No.

THE COMMISSIONER: Thanks. Yes. We will adjourn in a minute, but, gentlemen, who is going - what is your order? Have you agreed on an order? If you haven't, you can do it overnight.

MR HUNTER: We have not. I think we can discuss amongst ourselves and agree on one.

THE COMMISSIONER: No doubt you can transition to the front of the bar table if anybody wants to do that. Mr Hickey, if you want to, for convenience, stand there rather

than call out from the back, I will leave it to you all to make the necessary arrangements. Mr Hodge, is there anything I need to do?

MR HODGE: No. Other than - would you mind starting at 9.00 am tomorrow.

THE COMMISSIONER: I don't mind. Do your colleagues object?

MR HODGE: Some may not be comfortable.

MR RICE: Commissioner, I prefer not to make a habit of it. There are always things to --

THE COMMISSIONER: I know, I know. It is crucial to have that time in the morning to prepare, yes. You are not sitting around gossiping.

MR HODGE: I will just explain. There are two witnesses --

THE COMMISSIONER: No need to explain. It's all right.

MR HODGE: -- we need to finish by the end of Wednesday, and --

THE COMMISSIONER: There is no need to explain, Mr Hodge. If you or others require something like that, I take it that there is good reason.

Earlier this morning when the gentleman was taking photographs - he is not here now, I think he was frightened - of exhibits, I said that we would be uploading material to our web page. Do you know if any steps have been taken to do that?

MR HODGE: I understand the statements as they go in are going to be uploaded, I assume at the conclusion of the evidence, but I will check about that overnight. And I will speak to the other parties about the other documents that are referred to.

My proposal is we will provide you, Commissioner, with a list - perhaps we will do it each morning - of the documents that were referred to the preceding day so that, in effect, you can tender in bulk the documents that were

referred to and they can be assigned an exhibit number, which will happen on the document, and that can be checked for redactions overnight.

THE COMMISSIONER: All right. Because it is a public hearing.

MR HODGE: Yes.

THE COMMISSIONER: And so unless there is good reason, we should be uploading the statements and the exhibits.

MR HODGE: As soon as possible.

THE COMMISSIONER: - as soon as possible.

MR HODGE: Yes.

THE COMMISSIONER: But we can talk about that out of hours. Thanks. Anything else, gentlemen?

MR HICKEY: Commissioner, can I just add one point. We received something of the order of 1,000-odd documents on Friday afternoon. One understands the processes that occur behind the scenes, and it is not a criticism, but I wonder if it would be possible for counsel at least to be provided with a list which identifies the statements together with the Epiq or the Ringtail numbers which identify the annexures thereto.

The difficulty is it is not presently possible to be absolutely sure that one has all of the exhibits that are attached to any particular statement, and it seems as though that must be something that is known within the Commission. It would be of assistance to --

THE COMMISSIONER: Well, talk to Mr Hodge about it, and I am sure you won't have any trouble because whatever you need, you have to have. All right. Then we will adjourn until 9.00 am tomorrow. Thank you.

AT 4.35PM THE HEARING WAS ADJOURNED TO 9.00 AM ON TUESDAY, 27 SEPTEMBER 2022

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