## Commission of Inquiry to examine DNA Project 13 concerns

Brisbane Magistrates Court Court 40, 363 George Street, Brisbane

On Friday, 3 November 2023 at 11.00am

Before: The Hon Dr Annabelle Bennett AC SC, Commissioner

Counsel Assisting:

Mr Andrew Fox SC (Senior Counsel Assisting)

Ms Gabriella Rubagotti (Counsel Assisting)

MR FOX: Just in relation to timing - I'll just say this now so that I'm not castigated later, but I will finish by lunch. I'll just start by indicating there are five topics that I want to address this morning. The first is by way of general introduction to the terms of reference and the scope of the Inquiry. The second is to identify evidence that hasn't been the result of any oral evidence at the hearing, but it's statements that have been received. I will give you a brief indication of those statements as to what that evidence is that's been accepted and read.

Then the next matter is to provide an analysis of the scientists' evidence, and that's not just the Project 13 scientists but also the experts who joined in what I will describe as the second hot tub. The fourth matter is then to do an evaluation of the evidence concerning Professor Wilson-Wilde, and then the final matter is to deal with issues of conclusions based on the evidence received and also the territory of recommendations.

At the outset it's crucial to appreciate that the scope and bounds of this Inquiry are limited. The Inquiry has been concerned with the automated method used for the extraction of DNA by the QHFSS laboratory, which commenced back in October 2007 and ceased in November 2016. It's beyond the scope and not a part of the scope of this Inquiry to determine the particular techniques available to be used for the DNA extraction today for historical samples.

It's also crucial to appreciate that this Inquiry has been required to be conducted and completed within a very confined time period. That of course has had a bearing on the extent of the evidence which can be sensibly taken into consideration and also the extent to which the Inquiry can delve into the issues which arise for consideration. The written submissions served by the various parties who have participated in this Inquiry indicate their recognition of these matters.

 Although the time period for this Inquiry has been confined, there's been a wealth of material and evidence which has been presented. Since the commencement of the Inquiry on the 5th of October, when it was announced, the Inquiry has received an extremely large number of documents

from government agencies, individual parties and the manufacturer of the MultiPROBE platform. Documents have been received from Queensland Health, the Department of Justice and Attorney-General, Department of the Premier and Cabinet, Revvity, which is the manufacturer of the MultiPROBE device, as well as from individual parties.

Thirty-five notices to produce were issued. Recipients were given extremely short timeframes in which to respond, often less than 24 hours. The largest number of documents were received from Queensland Health. A total of 12,148 documents were received from all parties, which can be broken down into the following categories: 1,868 emails, 1,902 minutes of meetings, 603 PowerPoint presentations, 112 reports, 988 spreadsheets and 6,675 general documents. I note that you've read every one of them, Commissioner. A total of --

THE COMMISSIONER: I have to be clear that I have not.

MR FOX: A total of 37 witness statements were received, which themselves comprised 3,500 pages of information. It will be appreciated, given the tight timeframe allocated to this Inquiry by the Queensland Government, the Commission has relied heavily on the parties to identify relevant documents from this wealth of material.

THE COMMISSIONER: Can I interrupt for one moment to make a - I mean, this is not just a loose comment. Again, if over the weekend but before Monday morning any party that has produced documents that believes that a particular document should be brought to our attention, please notify and identify it, because it's not been possible for me or those assisting to have gone through all of those documents, and it may well be we've missed one. I know that I've asked is there any documents you wish to adduce, but if there are ones that you'd thought you produced and therefore didn't refer to them, if anybody has a document that they wish to draw to our attention, please do so by Monday morning - I know it's the weekend, but still - and identify the document and the part of it and what you think is relevant. It doesn't have to be done in a formal manner, as long as the information is conveyed to us. Thank you. Otherwise we won't have the opportunity to raise that.

MR FOX: Thank you. Now, the focus of the Inquiry has

been on what's been styled Project 13. That's made plain by the terms of reference. The terms of reference state that you are to review the recent public statements and any other documents that may be produced to the Inquiry about Project 13, Project 13 being the name that's been used throughout this Inquiry to describe the introduction in 2007 of the automated platform using the MultiPROBE device. That device was at that time known to be suitable for use in an automated DNA extraction process, and it was being used by at least three other laboratories so far as the QHFSS laboratory was aware. That's PathWest in WA, Forensic Science South Australia and also the Centre For Forensic Sciences in Toronto.

The terms of references also state that you are to consider whether the recommendations made by the first Inquiry, I quote, "are sufficient to address the matters raised" regarding Project 13.

In relation to the lab, Dr Wright made various statements concerning the laboratory and Project 13 in the media - that have been reported in the media. As to Project 13 she stated that the data in the Project 13 report revealed plainly that the automated DNA IQ protocol used on the MultiPROBE device was systematically failing and recovered far less DNA than the manual method. Against that data Dr Wright observed two matters of significance. First, the abstract of the report stated that the automated method was comparable to the manual method and, secondly, the report recommended that the automated protocol be implemented.

Now, it's Dr Wright's opinion in view of these matters, firstly, that Project 13 scientists at least must have known that they recommended the implementation of the failed DNA recovery method; secondly, that the Project 13 scientists recommended such a method where its sole purpose was to extract DNA for analysis in connection with the prosecution of matters in Queensland's criminal justice system; thirdly, that in those circumstances those scientists recommended a DNA extraction method that was likely to compromise convictions in serious crimes, including rape and murder; and, lastly, that the laboratory deliberately favoured the exigency of clearing backlogs over sound scientific method, with catastrophic consequences.

 It is also Dr Wright's opinion that those responsible for the implementation of the automated DNA method ought to be held accountable to restore faith in Queensland's criminal justice system and its forensic science capabilities.

As to Professor Wilson-Wilde, Dr Wright has raised an additional but separate issue concerning Project 13. The issue concerns the evidence of Professor Wilson-Wilde, who was another witness in the first Inquiry. She gave several expert reports which were tendered in the first Inquiry, also gave evidence in the first Inquiry, but it's her report of 20 October 2022 which is the subject of issues raised by Dr Wright. That report was tendered as part of module 5, technical issues at the laboratory and their resolution, but she did not give oral evidence as to this report at the first Inquiry.

 For the purposes of her report, the professor was given a series of questions and also a large number of documents to review. Amongst those documents was the Project 13 report. However, in providing her report the professor did not draw attention to the report and to the fact that the report's main conclusion was inconsistent with the data contained in it. The question which Dr Wright has raised in media statements is why Professor Wilson-Wilde did not draw attention to that matter in answering those questions posed.

In Dr Wright's opinion Dr Wilson-Wilde failed to draw a significance of - from the Project 13 report to the attention of the Sofronoff Inquiry, either adequately or at all. She failed to do so when it ought to have been immediately apparent to her that the automated method was failing adequately to extract DNA and when she subsequently claimed publicly that this was in fact apparent to her. She also failed adequately to explain why she did not draw the failings of the automated method to the attention of the Sofronoff Inquiry, and, finally, it was suggested that she may have deliberately misled the Sofronoff Inquiry.

Recent statements made by Professor Wilson-Wilde after the publication of the Sofronoff report can be considered relevant to this Inquiry, firstly because Dr Wright 's statements assert a lack of integrity on Professor Wilson-Wilde's part in her handling of Project 13 for the Sofronoff Inquiry, thus calling into question her integrity in implementing the recommendations of the Sofronoff Inquiry, especially recommendation 105. Secondly, Dr Wright's statements also called for consideration of whether recommendation 105 ought to be varied or strengthened to restore public confidence in Forensic Science Queensland.

Finally, Dr Wright made public statements about her concerns as to whether the advisory board can manage conflicts of interest. It's not clear on the face of those statements how they might fall within the terms of reference. However, and in any event, Dr Wright has confirmed in her oral evidence given earlier in the week that she does not seek to agitate her concerns in this forum. There is evidence that the membership of the board and its subcommittees which have been put before this Commission which suggests that an issue about conflicts of interest requires no further consideration.

If I can then outline the second aspect of what I wanted to make submissions on, which is the statements of evidence that did not result in any oral evidence. Firstly, there are two statements by Ms Generosa Lundie and Cecelia Iannuzi. They are two named authors on the Project 13 report who were not called to give oral evidence. They each provided two statements in response to notices. Each produced documents accompanying their statements. They were mostly repeats of - in terms of the documents they were mostly repeats of documents produced by other Project 13 scientists.

Ms Lundie worked in the QHFSS automation team as a graduate scientist between June '06 and the end of 2008, and by 2009 she - in early 2009 she had moved to the analytical team. Ms Iannuzi was employed in the laboratory in various positions between 2003 and 2019, and was part of the automation team during the period which Project 13 was in progress. Both give generalised evidence about the extraction processes and had little to no independent recollection of much of the detail with respect to the validation of the manual method or the automated using - use of the MultiPROBE device.

 However, both gave clear evidence that they did not contribute to the drafting of the Project 13 report, and each believed they were named on it due to their role in the automation team whereby work was done by each of them

that supported Project 13 in some way. Each also states that on their review of that document the Project 13 report was a draft.

Ms Desley Pitcher is a former employee of PerkinElmer Australia, the manufacturer of the MultiPROBE device. She held a number of roles with that company between 2005 and 2014 where her responsibilities included supporting MultiPROBE customers. Ms Pitcher describes amongst other things the services offered by PerkinElmer Australia to purchasers of the MultiPROBE device. She states that new purchasers were usually given training to maintain and write protocols for the device. In her experience it was normal for the manufacturer's engineers and specialists to attend premises of customers to install, maintain and troubleshoot MultiPROBE device.

She identified QHFSS as one such customer, which was among a number of laboratories that she was personally in contact with. She visited the site on various occasions between 2006 and 2009. She recounts from her experience that it was normal for purchasers to modify device settings and still produce valid results. She also recounted that validations of modifications to device settings were the customers' responsibility, and also that after each visit she made to the QHFSS laboratory the system operated without issue.

She only recalls one occasion where issues were experienced by the lab with the MultiPROBE, which were resolved with her support. She notes that on this occasion, which was in October 2008, so this is during the period of the contamination issues, she observed droplets on the tips, part of the liquid-handling steps, which can cause cross-contamination. She said that she made appropriate adjustments and ran several checks to ensure that this issue was fixed. There is nothing in her evidence which identifies any broader concern about how the laboratory was using the MultiPROBE device.

 Acting Superintendent David Neville gave evidence in the Sofronoff Commission of Inquiry. He was a member of the quality management section of the QPS Forensic Services Group from 2005 to 2010 and had frequent contact with QHFSS staff. Mr Neville provided two statements to the Inquiry dealing with discrete issues. His first statement refers to how and when QPS became aware that the MultiPROBE device

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had been taken offline in the laboratory, and references statistics provided to QPS by QHFSS showing rates of presumptive blood samples failing to produce a DNA profile.

Superintendent Neville's second statement responds to the oral evidence of Mr Nurthen during the first expert hot tub on Monday, 30 October regarding an issue about a change in swabs used by QPS to collect DNA. Each of these matters were addressed in the further hot tub which was held yesterday, to which I'll return.

Ms Julie Dick SC is a retired judge of the District Court of Queensland and co-chairs the FSQ advisory board alongside Mr Walter Sofronoff KC. Ms Dick notes that the pool of candidates from which to select appropriate scientists to sit on the board is relatively small and affirms that the co-chairs are fully cognisant of and alive to potential conflicts which may arise for the board members. She informs that no conflicts of interest have arisen to date and that a conflicts check is the first agenda item at each meeting.

She otherwise states that she was not involved in the appointment of other board members and confirms that Professor Wilson-Wilde recommended to the board's forensic justice subcommittee on 7 September 2023 that all serious cases between October '07 and July '08 be re-examined and this will be considered by the board in its next meeting.

You put this date range to Professor Wilson-Wilde during the course of her oral evidence on 1 November and whether this was proper given the evidence of Project 70 and the reintroduction of the automated method in 2009. The professor responded that, given the work and discussion that has now been had, she would advocate a more extensive date range from the beginning of the year to 2 October 2007. That's the beginning of this year through to - back to 2007.

Ms Hedge, Susan Hedge, was a junior counsel assisting in the Sofronoff Inquiry and provided a statement in response to a notice and a further statement amending the first statement that she gave and also responding to the statement of Professor Wilson-Wilde. Across her statements she recounts her recollection of her dealings with Professor Wilson-Wilde concerning the circumstances leading to the production of the professor's report dated

20 October 2022. She states that the only conversation she recalls with Professor Wilson-Wilde about the DNA IQ extraction method concerned the contamination issue and not to any difference in operational effectiveness between the manual and automated DNA IQ extraction methods.

There was no difference of any significance as between the recollections of Ms Hedge and Professor Wilson-Wilde with respect to the dealings between them. Importantly, Ms Hedge says that if Professor Wilson-Wilde had told her about the significant failings of the methodology and the results in the Project 13 report then she would have ensured that they were investigated. Her evidence tends to confirm Professor Wilson-Wilde's evidence that her 20 October '22 report was confined to consideration of how the laboratory responded to the contamination issue.

Ms Amanda Reeves is the executive adviser to Professor Wilson-Wilde as CEO of FSQ. She has provided two statements to this Inquiry. Her first statement annexes and refers to a number of media articles concerning the Project 13 issue, to which she provides comments. Her second statement responds to a number of oral statements made by several of the Project 13 scientists in the hot tub on 30 October, producing a number of emails as part of her responses. These matters were addressed in the resumed second hot tub held yesterday so as to give Ms Ientile, Mr Nurthen and Mr McNevin an opportunity to respond.

Then, lastly, two matters to mention. There was a submission that was received - a joint submission - from Brett Scott, Dr Jeremy Watherston and Natasha Mitchell. Those three comprise the senior leadership team at FSQ. Their joint submission is supportive of Professor Wilson-Wilde's handling of the Project 13 issue - that is, the notion of retesting - and her leadership at the laboratory.

Separately, Mr Rhys Parry is a senior scientist at FSQ. He provided a statement annexing a joint letter signed by himself and five other scientists at the laboratory, collectively the whistleblowers from the Sofronoff Inquiry. The joint letter is supportive of Professor Wilson-Wilde and her leadership of the laboratory.

If I can then turn to the third matter, which is the

review of the scientists' evidence that was given. As you will recall, the evidence was given in the course of two expert witness hot tubs. The first comprised members of the laboratory at the time that the automated DNA IQ system was introduced in October '07. The Project 13 scientists gave evidence about the steps that they took prior, during and after their validation and implementation of the automated protocol.

A variant of that hot tub gave evidence in a separate session to address particular points which had been raised by the very recently received statements of Mr Neville and also Amanda Reeves. Participants in that resumed hot tub were Ms Ientile, Mr Nurthen and Mr McNevin.

The second expert hot tub was attended by Dr Budowle, Ms Veth, Professor Wilson-Wilde and Dr Wright. The principal purpose of that hot tub was to provide expert opinions responsive to the matters addressed by the Project 13 scientists hot tub and indeed the evidence that they gave in writing.

The most convenient way to address the oral evidence of the hearing is by reference to the chronology of events which took place in the laboratory commencing in late '05 to early '06. A convenient starting point is the 2005 ministerial taskforce report that we've heard of time to time during the course of this hearing, and that was under the - section 6.4.5 concerned the introduction of an automated system in order to clear the backlog. Commissioner, you drew attention to part of that paragraph which indicated that the validation could take up to 12 months, it wasn't something that was easily done, and part of that recommendation also said that it would be possible to perhaps shorten that period by reference to work that had been done by other laboratories of repute.

Now, in connection with that particular move to automation the report recommended under recommendation 8 "that the Chief Executive Officer of the Institute ensures that, when validating future equipment, the validation work undertaken by other jurisdictions to introduce equipment [et cetera] is utilised to minimise validation time ..." Now, before October --

THE COMMISSIONER: "While maintaining scientific accountability".

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Exactly. Indeed. Before October 2007, when the MR FOX: automated system was introduced, DNA testing was being conducted manually by the staff at the laboratory using the Chelex system and then later then using the DNA IQ protocol manually. But that was part of the moves to automation.

Now, the DNA IQ protocol had been investigated by a team of seven scientists at the laboratory - this is the Project 9 report - together with four other potential extraction kits made by other manufacturers. scientists compared these extraction kits against the then current in-house Chelex protocol and assessed the overall performance - quality, yield, user-friendliness and ability to automate - of those kits. A replacement was being sought for the Chelex protocol because it was found that it would often leave impurities within the DNA.

A team of scientists - that's the Project 9 team produced a report dated June '07, which reported on their investigation of each of the five extraction kits and recommended Promega's DNA IQ protocol to be adopted for use in the laboratory. As I said in opening, and I did today as well, there's no suggestion that that particular device is not fit for purpose for manual use or indeed in an automated environment. But the Project 9 team at that time were only concerned with reporting on its suitability for manual extraction.

As was addressed during the first Inquiry, the laboratory at this time was under considerable pressure to reduce the significant backlog of specimens and material for DNA testing. This was addressed as part of the first Inquiry and indeed in the final report, and there is no issue that at the time of these events the laboratory was operating suboptimally.

The laboratory's investigation of automation then appears to have taken into a new phase in June to October This is what I'll style as the Project 11 period. That process started with the team of scientists in the Project 9 team producing a report ultimately dated August 2008, which is the Project 11 report. Importantly, that Project 11 team was investigating and reporting on a modified method of the manufacturer's method; that is, the team had made changes to the manufacturer's step in the The Project 11 report concluded that the team had "validated" the modified DNA IQ protocol for use in manual extraction.

Now, although the team styled their work as validation of a modified manual off-the-shelf process, the experts in the second hot tub agreed that this work fell well short of a proper scientific validation. There were essentially four modifications which were made to this off-the-shelf manual process. The first, as you heard, is that there was a modification to include a lysis step using an extraction buffer in the presence of Proteinase K prior to incubation in the DNA IQ lysis buffer. This modification was undertaken to follow the automated protocol validated for use on the MultiPROBE device and developed by CFS in Toronto.

Secondly, the manual process was modified to lower the lysis incubation conditions from about 65 degrees Celsius to 35 degrees Celsius. That was done --

THE COMMISSIONER: I think it was 37.

MR FOX: Thirty-seven. Sixty-five to 37. This was done to broaden the range of samples to which the process could be applied. Notably, some substrates such as nylon, polyester and gum were susceptible to degradation at higher temperatures, and the laboratory wished to avoid problems with DNA being encased by dissolving samples which have -would have lowered the yield.

Now, again, that modification to the manual process followed the CFS automated protocol, and in that regard Dr Nurthen and Dr Hlinka stated that 37 degrees Celsius is a standard and acceptable temperature at which to perform lysis because Proteinase K operates satisfactorily at that temperature.

The third modification was to include a double elution step of 50 microlitres, whereas the CFS automated DNA IQ protocol had a smaller elution volume towards the lower amount recommended in the Promega manual method; that is, 25 to 100 microlitres. This step was introduced to obtain a higher DNA yield. The experience of the laboratory was that DNA was still bound to the beads after a single elution step, and a double elution step allowed for the recovery of additional DNA.

 THE COMMISSIONER: I think it was recognised in evidence that that would give rise to a lower concentration, but I think Mr Nurthen's evidence was that because it was a higher quality DNA devoid of inhibitors they were not concerned about that.

MR FOX: Yes.

THE COMMISSIONER: I hadn't gone back and - I haven't got the transcript to check it, but I think that's right.

 MR FOX: No, and my very next sentence was that, although the double elution resulted in a lower concentration, it produced a higher yield, and where necessary the laboratory undertook an additional concentration step.

THE COMMISSIONER: I don't think it was a higher yield. But, again, I'm sure you have a transcript reference to that. It certainly was better quality.

MR FOX: Yes.

THE COMMISSIONER: One of them did say he thought that the second elution step would bring more off the beads and therefore give you a higher yield within that process. Yes, I think that's right.

MR FOX: Then the fourth laboratory change that was made was to the plasticware and the consumables. In the first instance it adopted the Nunc, N-u-n-c, tube plasticware then already in use in the laboratory. In the second instance it incorporated the Slicprep devices, a 96 well spin basket. That was a device newly released on the market, of which there were no protocols or various other consumables.

Taken individually, the making of such modifications was not controversial. The second expert hot tub acknowledged that the making of modifications was routine and to be expected. It's apparent that this is what ought to have occurred. However, it did not in the present case. Each modification should have been tested one at a time so as to ensure that the modifications were made scientifically rigorous. That was necessary to ensure validation.

The next step in the chronology is the Project 9 team,

the same team as named in the Project 11 report, then investigated whether the modified DNA IQ protocol was suitable for use in an automated system using the MultiPROBE device. It is this investigation which was known as Project 13, or has been known at least in this environment. The results of their investigation were set out in the Project 13 report. Dr Wright has not only pointed to the experimental design and results in this report, but has pointed out that the main conclusion in the abstract - that's the notion about it being comparable - the word 'comparable' is inconsistent with the interpretation of the data and is indeed misleading.

Rather, the data in the report as set out most plainly in a series of bar graphs and in the report showed very clearly that the results of the automated procedure were considerably worse than for the manual procedure. The data and figures show that the automated system was not able to report DNA yields anywhere near the success rate achieved for manual testing. Indeed, the automated method failed to recover detectible DNA from blood on cotton and rayon swabs at one to 100 and one to a thousand, such dilutions being comparable to trace blood samples from a crime scene.

There are a few important matters which the evidence confirmed regarding Project 13. Firstly, it's a draft document. That was agreed by everybody in both hot tubs. It bears the date of August 2008 as its purported date, but the automated method was introduced in the laboratory in October '07. It's unclear who were the actual authors of the document, although Dr Hlinka acknowledged that he contributed to writing part of it and noted that the reference style used his template, whilst Mr Nurthen thought it likely that he wrote part of the document but could not identify which part.

None of the Project 13 scientists say they wrote the abstract. The most that was said was that Mr Nurthen believed it was probably dropped in from the abstract of another report known as report 1. Nevertheless, a sentence was added supporting the recommendation for implementation, and no-one knows who wrote the extra sentence.

 Mr Nurthen produced as part of his written evidence 10 different iterations of the draft report. It's not apparent from the evidence which iteration was the introduced system. There's no evidence to suggest the

document was ever finalised, although Dr Hlinka thinks it might have been. There is no evidence to suggest that it was distributed outside the laboratory to any other organisation or entity, such as the Queensland Police, and Mr Nurthen confirms that he never received a copy. Although the evidence did not reveal with any precision how the document came to be created, what is not in dispute is that the automated method described in the draft report was in fact implemented in October 2007.

The Project 13 report is significant. The data and results contained in it reveal even prior to its implementation in October 2007 that the use of the automated method using the MultiPROBE device was failing to extract sufficient DNA from crime samples. Samples such as blood, which should have been rich sources of DNA, were failing to yield DNA.

Shortly before the project's launch Mr Nurthen told Ms Ientile that he was concerned that it was not ready to go live because the yields were too low. He did so at the weekly project update meetings on 9 October '07 and 16 October '07. Ultimately Mr Nurthen did not seek to escalate his concerns, noting that the laboratory intended to continue and to optimise the method's development after implementation.

Ms Ientile does not have an independent recollection of this matter, although she infers from an email that she sent to the laboratory - that's the general mail-out about the start of the launch - that it was intended to be a slow implementation involving significant training. But within a short time after the automated system was introduced in the laboratory - that is, after its launch - it became apparent that the automated system was not operating optimally.

 That was addressed by the first Inquiry during the course of what was called module 6, where it was being observed that, firstly, contamination was first reported on 11 February '08; secondly, a decision was made in July '08 to cease use of the automated system so that the contamination issues could be investigated; thirdly, the laboratory reverted to the manual system for a period of about 12 to 18 months; and, fourthly, by August '09 the contamination issues had been resolved, and the fully automated method then commenced to be used again from 20

August '09. The MultiPROBE device continued to be used until 21 November '16, when the QIAsymphony instruments were introduced.

Now, just to deal briefly also with what's been styled Projects 21 and 22, the Project 13 automated DNA IQ method provided for all steps in the extraction process to be performed on the MultiPROBE device; that is, the on-deck arrangement. However, in early 2008 two further projects were developed, the first being Project 21 and the second being Project 22.

Each of those projects involved what's known as off-deck lysis. Mr Nurthen and Mr McNevin each gave evidence that these projects were undertaken because the lab found that the Slicprep was too difficult and laborious to use. Taking the lysis components off-deck was an attempt to overcome this. This was yet another hurdle that the laboratory encountered after implementation of the automated method and that it then needed to improve. This introduced further variations, which should have in turn each been validated.

Turning then to the issue of re-implementation in 2009, as I indicated before, in July 2008 the automated system was taken off-line. The lab then commenced using from 28 July '08 the manual Chelex method and other methods, including manual DNA IQ method and the NucleoSpin. The re-implementation of the automated system followed the resolution of the contamination issues, as I indicated, dealt with by the Sofronoff Inquiry.

Where the present Inquiry then picks up is essentially the tail end of the contamination resolution period and the steps taken by the laboratory for the purpose of reintroducing the automated system. In April 2009 the automated method was re-implemented in a modified form pursuant to the project document of that date. The modified version was quite different from the previous version that was routinely used in the laboratory. The laboratory looked at various methods to reduce contamination, various changes to equipment were made, and off-deck lysis volumes were reduced from 500 microlitres to 300 microlitres to minimise the risk of well-to-well splashing and thus cross-contamination.

Whilst doing so, the laboratory sought to optimise

other steps in the process. After off-deck lysis the laboratory manually mixed the resin. In this regard it is Mr Nurthen's view that the mixing step was critical to the DNA's binding to the resin beads and its subsequent release.

It is clear from the April 2009 report - that's the TN32 - that the word "efficiency" was considered as part of the validation process to reintroduce the MultiPROBE to the laboratory. Mr Nurthen concluded from the testing that, "The modified method was very sensitive and able to isolate low copy DNA samples at a very high recovery rate that was close to 100 per cent." That was because the quality of the DNA obtained was much higher than that from the Chelex method. Having come to this conclusion, Mr Nurthen did not consider yields to be an issue from re-implementation onwards. The laboratory appears to have believed that it had validly reintroduced the automated DNA IQ method as and from the middle of 2009.

However, the laboratory failed properly to re-implement the automated method in modified form owing to several factors relating to the need to properly validate the method. The laboratory used genomic DNA as an efficiency control, not extracted DNA. Further, it tested only the on-deck component of the process, and thus failed to test the end-to-end DNA extraction process. Further, again, there is no evidence to suggest that anywhere else they undertook experiments to test the end-to-end DNA extraction process. Consequently, it would have been impossible to know the yield of any extracted sample.

Dr Budowle concluded that, whilst the test appeared to be one designed "to justify sensitivity of the assay", it was not possible to do that with the test that was performed. In these circumstances, Professor Wilson-Wilde concluded that the re-implementation was not properly validated and was not done in accordance with good practice. Therefore, there is no evidence to demonstrate that following the re-implementation and at any point between 2009 and 2016 the laboratory actually improved the method or indeed validated it.

As Ms Veth stated in the joint session, "We still don't seem to have sensitivity data to support the use of this method. We still have questions about the yields of DNA that the method is producing and understand that there

were some assumptions made that it didn't matter that the yields were low because the profiling results were better, or better than Chelex. But I haven't seen any data to support that anywhere, and I would just - I would just challenge that that is actually the case."

This in turn raises a significant question as to the quality assurance and quality control in the laboratory at these times. As Dr Budowle emphasised, and I quote, "We have to be concerned that maybe the laboratory didn't have a full appreciation of what a quality system is."

Now, in this context something remains to be said about the Project 70 report that arose in 2011. So this is now fast-forwarding a couple of years. Project 70 was conducted to verify a new robot, the Maxwell 16. The Maxwell 16 operates with off-deck lysis and, unlike the MultiPROBE device, it has limited scope for customisation.

Now, the point of Project 70 being raised by Dr Wright was because it was - on her view it was another opportunity where the results indicated that the laboratory should have been aware about the incapacities of the automated system. That was the reason why she drew attention to it.

Now, an evidentiary or an evidential dispute arose between Dr Wright and Mr McNevin regarding the significance of Project 70. It was Dr Wright's opinion that Project 70, firstly, compared the failed automated DNA IQ method with off-deck lysis with the new Maxwell robotic method and, secondly, showed up to eight times lower DNA recovery between the failed robotic method compared to the Maxwell method. Dr Wright concluded that the authors, including Mr McNevin, documented the MultiPROBE method to recover significantly less DNA than it ought to but did not make recommendations to fix it.

 Now, Mr McNevin was adamant that Project 70 used data from the Maxwell that was comparable to that data produced by the DNA IQ manual method. It did not use data from the MultiPROBE automated method. Some of this dispute on this matter may have arisen, frankly, from imprecise use of the word "manual" within that particular document. But, having regard to submissions that I'll make later regarding what conclusions should be drawn from the evidence that's been before the Inquiry, in my submission it's not necessary for the Commission to resolve the dispute that arises with

respect to Project 70 and that report.

Could I then move to the topic of Professor Wilson-Wilde, and firstly I'll deal with the evidence concerning the Project 13 report and how she came to be provided with that and her conclusions in her 20 October Her integrity has been called into question 2022 report. by reason of media reports and statements that have been made by Dr Wright. I outlined those earlier, but, relevantly, questions that have been raised as to, firstly, whether she identified the failings of the Project 13 report in the course of preparing and giving expert evidence in the earlier Inquiry; secondly, and whether and to what extent she reported those failings in her report to the Sofronoff Inquiry or otherwise in the course of assisting that Inquiry or ought to have done so; and, thirdly, the content of subsequent public statements which she has made regarding those matters.

Dealing with the first matter, her role in the earlier Inquiry and the background to her report, she had been engaged to provide an opinion by Mr Sofronoff in response to nine letters of instruction over the period from July 2022 to November 2022. She prepared seven reports to that Inquiry: the first dated 31 July 2022 and the last dated 24 November 2022.

At the time she was assisting that Inquiry, Professor Wilson-Wilde was employed as the director of Forensic Science South Australia. She gave evidence in her statement to this Inquiry that she would usually complete her work for the Commission of Inquiry outside her usual work hours, including over the weekend.

On 16 September 2022 she was asked by counsel assisting, Ms Susan Hedge, if she had capacity to provide a further report. She was given a number of instructions which included by way of background that the, "DNA IQ instrument in and around 2008, it was discovered that the seals from the DNA IQ products (consumables) in the extraction phase were leading to cross-contamination amongst different unrelated samples."

 She was also told that in those instructions that, "Once the laboratory discovered the issue, there was a retrospective assessment of all the samples that were processed with the relevant consumables", an issue which

affected many batches of samples and required significant rectification work.

She was instructed to advise on - and I just read these out so that they are clear, and I quote in each case:
- "whether the methods, systems and processes in relation to the above two issues were consistent with international best practice when the issue arose"; "whether the identification, investigation and resolution of the issue was appropriate and consistent with international best practice"; and "whether the amended methods, systems and processes implemented in each case was consistent with international best practice."

In her statement to this Inquiry she stated that her understanding of instructions was that she was to look into the contamination samples that were discovered in 2008. She styles that in her statement as the contamination issue. Her evidence was that she discussed her instructions with counsel assisting, Ms Hedge, and the proposed due date of her report, given that she was due to be overseas in Denmark during the meeting from 30 September to 10 October 2022.

She also gave evidence of various subsequent interactions with counsel assisting and the provision of material to her, including correspondence, investigation files and reports in September '22. She then met with counsel assisting to discuss the work required and the timeframes, and gave her evidence that it was "clear" that the work she was to do was focused on the contamination issues that arose in and around 2008, including looking to a potential cause for those issues and whether the laboratory's response was consistent with good practice.

Around that time, Professor Wilson-Wilde gave evidence in the Inquiry on another question, that's the first Inquiry, known as the Options Paper. She then flew to Denmark and, while she was overseas, received more materials to review. Further instructions were then provided as well as a supplementary brief of materials. She was then advised that the deadline for her report was 17 October 2022.

 The background for the work she was to complete was contained in an amended letter of instruction dated 12 October, which included the statements under the heading

"Background". That again referred to concerns raised about contamination. She prepared a draft report which she provided to counsel assisting. She met with counsel assisting virtually regarding that report.

Further materials were then provided to her on 18 October. That material included validation documents. It included the draft Project 13 report. So that's just two days now before her report is actually finalised.

 She was asked to review further topics, including validations, the adequacy of information contained in an OQI report to assist with the identification of systematic issues, and to provide "any recommendations you may have for future best practice in respect of documents created by QHFSS". Further communications with counsel assisting followed, including on the day of her report being signed, 20 October, which respect to validation documents. A draft report at that time and the provision of more documents were made to the professor.

Further communications with counsel assisting followed - sorry, I withdraw that. There is no question that the timing of those communications and the provision of further documents was a short one; that is, the professor's report was being sought on that very day. There is also no question that Professor Wilson-Wilde was provided with a significant volume of materials to review, including being provided with various documents on an iterative basis. She was asked to and did communicate with counsel assisting regarding her draft report, including a number of communications and telephone calls in a short period of time regarding the draft.

At 10.30 pm on 20 October she provided her final report to the Sofronoff Inquiry, which is the one that's the subject of debate and issue. Her evidence is set out in the final report at module 5 under the subheading 5.1, "The contamination event which concerns the contamination events which were first reported on 11 February '08".

Her evidence was that, firstly, she was provided with a suite of 148 documents exceeding 9,000 pages to review for this parcel of work and that the time period from receipt of the revised instructions to her submitted report was eight days.

 That evidence was corroborated by Ms Veth in her oral testimony on Tuesday. She also described this period "as intense" and noted that she had been asked to review thousands of documents. Notwithstanding Professor Wilson-Wilde's evidence regarding the significant volumes of materials that she had been asked to review in a short period of time, it is not in dispute that she was briefed with and reviewed the Project 13 report.

Turning then to the issue of her capacity to identify the yield failures in the Project 13 report at the time she reviewed that report, it's not in dispute that the Project 13 report - noting that she says that occurred on the evening of 20 October, being the same day that she ultimately produced the report, that is she reviewed it on the very same day - it's not in dispute that she reviewed it on that very same day and that in undertaking that review she identified at least some of the issues that we know arise with respect to that report; that is, Professor Wilson-Wilde accepts that at the time she prepared her 20 October report she had read the report, that is the Project 13 report, and "I had identified it as problematic".

It is also not in dispute that the issues with the Project 13 report were, to use a colloquial term, obvious. Indeed, in her statement to this Inquiry she expressly stated that there were "issues with the DNA yield on the face of the draft Project 13 report".

In oral evidence she accepted that it was readily and immediately apparent to her that the document was flawed. She also stated in her statement to this Inquiry that "ultimately it should never have been implemented given the number of issues, including that it was a verification and not a validation".

Turning then to the question of whether Professor Wilson-Wilde addressed the yield issues in her report, it cannot seriously be in dispute that, notwithstanding these obvious issues, she did not identify in her 20 October report that the manual or automated extraction or the hybrid manual automated extraction methods as discussed in the Project 13 report or used in the timeframe that the report purported to cover disclosed a problem with DNA vield or extraction.

 To the extent that statements were subsequently made by her to the media that could be said to suggest that she did so, those statements are not consistent with what her report in fact said. She referred to the Project 13 report in her 20 October report. She provided the following relevant and limited comment at paragraph 32, "The verification of the automated method is not consistent with expected good practice."

She said in her statement to this Inquiry that by this reference she "called out the report as a whole" and that the phrase "not consistent with expected good practice" was science-speak for flawed, referring to the whole report.

She said further, "I considered that given the number of issues with Project 13 report and the lack of information provided that would have allowed me to give detailed commentary that was supported by a scientific basis that I was tasked with identifying the cause of the contamination issue. It was scientifically appropriate to say that the report as a whole was not consistent with expected good practice. That is science-speak for flawed."

In August 2023 she conducted a number of interviews with the media in which she referred to the Project 13 report, its methodology and conclusions. During those interviews she said variously, "I thought the whole thing was rubbish. The whole project was flawed from the beginning. The entire project wasn't scientifically valid. That wouldn't be implemented in the laboratory now. It wouldn't even have been commenced, quite frankly. I called out the entire project from the title to the recommendations. The project, in my opinion, should never have got off the ground. It should never have commenced."

 Now, when asked whether with the benefit of reflection she accepted that the statement, "My report deals with the whole report, I called out the entire project from the title to the recommendations" was wrong, she did accept that it was an overstatement. She said, "It's definitely an overstatement. I was in my mind referring to the sentence that the project wasn't - the whole validation wasn't consistent with good practice and that should not have been - it should have been a full validation, not a verification. Those comments I made in it are more general in nature, but I do concede that my report is largely - well, it is focused on the contamination issues." She also

accepted that "with the benefit of hindsight perhaps I could have been clearer."

Now, in oral evidence she said that, notwithstanding the concession, it was not her style to report on matters in this way. When I asked whether she might simply not have come out in her report and stated it was flawed and why not just say that, she said, "That's an accepted terminology and it's an accepted way of phrasing a scientific opinion. That is how I would phrase it."

When asked why her wording changed when speaking to the media, that is why she did not engage in more strenuous language responsive to what "you've seen which would more accurately reflect and more clearly reflect to a reader your reaction to that document", she responded, "I would not write a scientific report for a court using emotive terminology. I would not write that way."

She also said, "I wouldn't use emotive language. I would stick to the terminology that I have that I utilised. If I was writing the report now I would still use scientific terminology."

Her choice of language in her report is perhaps not surprising given those matters.

THE COMMISSIONER: Just from what you said earlier, the language in her conclusion reflected the question that she was asked. The question she was asked was in terms of or in accordance with best practice or something, and her response was in those terms.

 MR FOX: Yes. To the extent that the Project 13 report was not specifically referred to in her 20 October report, she emphasised that she answered the question posed of her in the context of the background of the information and the focus on the contamination issues and the samples that were analysed in 2008 as part of the investigation into the contamination issue - that picks up your observation to me a few moments ago - that is, she understood her task to be looking specifically at the contamination issue.

She also noted that the Project 13 report was a draft containing parts that were not finalised. She also said in her evidence to this Inquiry that because she was tasked with looking at the contamination issue she was not

 provided with the project proposal or any other project design information, therefore felt it was very hard to provide detailed commentary with a scientific basis on the Project 13 results.

Evidence was also that for her to have commented further she would have required the project proposals, including the project design information, the data obtained and analysed during the project and DNA profile results. She further noted from the documents provided to her that she understood that the extraction method had been changed since Project 13 had been implemented and, on the face of the brief, the method that was implemented in 2009 had improved the DNA yield issue.

Turning to the communications with counsel assisting, the further issue arose in this Inquiry as to whether Professor Wilson-Wilde informed anyone, in particular counsel assisting in the Sofronoff Inquiry, of the failures evident in the Project 13 report. In her evidence to this Inquiry, Professor Wilson-Wilde initially suggested that she had a discussion with counsel assisting about DNA yield and Project 13; that is, the change to a fully automated extraction was a significant change to have occurred at the time and should have been fully validated, that there was a difference in yield between the automated and manual extraction methods in Project 13 which was greater than expected, and that she believed this was possibly due to issue with the automated lysis step.

Now, her evidence was that she had no recollection of any response by counsel assisting to those issues. In evidence to this Inquiry counsel assisting, Ms Hedge, disputed such a discussion occurred and said that had it been disclosed to her, that is matters of that seriousness, she would have taken the issue further.

Ms Hedge's evidence was that during the discussion about the draft report Professor Wilson-Wilde mentioned some things that were not in the draft, including the cleaning procedures, but she could not recall the other issues raised. She recalls the professor mentioned Project 13 and took her through that particular report but did not mention yield, to the best of her recollection.

Ms Hedge said that, whilst she could not definitely state that Professor Wilson-Wilde did not inform her of

those matters, her best recollection was that she did not; in other words, "Didn't tell me about the matters of significance." If she had understood that Professor Wilson-Wilde was telling her about a significant or systemic issue which might have called into question the reliability of results, she would have taken steps to investigate it.

Council assisting's evidence was that the report that Professor Wilson-Wilde had been asked to prepare was one relating to the DNA contamination issue only. It would have been explained to her in terms of contamination events found after the introduction of the automated process. The 20 October '22 report appropriately addressed the instructions that the professor had been given. Ms Hedge did not expect Professor Wilson-Wilde to identify every problem with every document which she was briefed. However, had Professor Wilson-Wilde identified a separate issue that was "worthy of investigation I would have been keen to hear about it and taken steps to investigate it".

 Now, following consideration of that evidence, in her oral evidence before the Inquiry Professor Wilson-Wilde accepted that her memory of these iterations with counsel assisting was limited and that, having since then reviewed the second statement of counsel assisting, she may be mistaken as to the nature of those discussions about Project 13 and the yield issue.

Her oral evidence was that she had a memory of discussing Project 13, looking at figure 9, 10, 11 and 12, "But I'm just not sure when that occurred. I do have a strong memory of looking at that report and discussing it, but I just don't know when that occurred. I - the fog of memory, I just - I just don't know who it occurred with."

She had a recollection of looking and discussing the difference and saying there is a difference in the yield. "The discussion was in high level detail"; that is "only in a very high level detail so I have a recollection of discussing it but, in all honesty, I probably would have recognised it and then discounted it. I know in my head that I was thinking about it, but those results. But I - I might not - appreciate I have no recollection of whether I said any of that and to whom."

Now, it may be that Professor Wilson-Wilde had the

problems with Project 13 in her mind when she spoke to counsel assisting. But the evidence does not establish that she expressed those matters to counsel assisting in a way that conveyed that they were a separate, important issue.

There is no evidence before the Commission to support a conclusion that any other expert raised these matters to the Sofronoff Inquiry or that Professor Wilson-Wilde was in fact aware of them doing so. She suggested in her statement to the Inquiry that yield issues regarding DNA IQ method were raised to the Commission of Inquiry by Dr Budowle in his report of 15 September which had been sent to her on 20 September. DNA yield was also raised by Dr Budowle, Ms Jo Veth and Dr Wright in their reports regarding the Blackburn samples.

It's correct that the question of DNA yield had been raised by these experts in their reports. But it must be noted that this was not in the context of the Project 13 report, as Dr Budowle stated that he had not been given that report in this Inquiry or indeed in that Inquiry.

Now, with respect to statements in the media, in her statements to this Inquiry Dr Wright has raised a question about inconsistencies she says arise in what Professor Wilson-Wilde told various journalists regarding these matters; that is, whether she identified the issues with the Project 13 report, referred to those in her report to the Sofronoff Inquiry, and felt that it was her role to do so.

THE COMMISSIONER: Sorry, Dr Wright felt that it was --

MR FOX: Yes, necessary to do so; that's right. Now, I have addressed those matters in the submissions I have made by taking you through in detail what was said. In summary, in her statement to this Inquiry Professor Wilson-Wilde addresses those assertions and rejects them. In particular, she rejects that there were inconsistencies in her public statements as to these matters.

 The second aspect of the Professor Wilson-Wilde issues, if I can style them as that, concerns the work that's been undertaken by FSQ and the advisory board since the first Inquiry's final report. That's relevant to the terms of reference because of the consideration of steps

which have taken place since the first Inquiry's report has a bearing on the veracity of adverse media statements concerning the professor and her capacity to perform the role of CEO.

She was appointed that role commencing on 16 January 2023 and was tasked with rebuilding the laboratory and implementing recommendations of the Sofronoff report. In compliance with the recommendations in the Sofronoff report, an interim FSQ advisory board was established which provides an advisory role to the CEO, the staff of Queensland Health, and to FSQ itself.

As mentioned previously, the co-chairs of that board, the advisory board, are Mr Sofronoff KC and Ms Dick SC. The advisory board has established three subcommittees to further oversee specific aspects of the laboratory. These are the forensic medical examinations advisory subcommittee, the forensic justice advisory subcommittee, and the forensic biology advisory subcommittee. A range of experts from a variety of institutions sit on each of the subcommittees, including some interstate experts. The constitution of each subcommittee comprises people from a broad range of organisations and interest groups.

Now, on the topic of Professor Wilson-Wilde's progress at FSQ since January 2023, she provided written evidence in her statement detailing the reforms that she's either instituted or intends to institute in the laboratory since January this year. She also gave oral evidence to the Commission in respect of those reforms.

The evidence before the Commission is that the FSQ has undergone significant change since January this year. The major actions taken and reforms implemented by her and FSQ, I wish to go through a few of them.

Firstly, a deep dive into the laboratory's processes which entailed three independent in-depth reviews conducted by interstate experts for current evidence recovery DNA analysis, illicit drug analysis, and clandestine laboratory analysis services. Those services included a review of the facilities, validations, methods and procedures of the laboratory.

Secondly, the intense training of FSQ scientists in DNA interpretation which was carried out by independent

 overseas experts and an overhaul of the laboratory's DNA interpretation guidelines.

Thirdly, the establishment of a new leadership group within FSQ which includes a manager of innovation and a manager of quality, and the development and implementation of leadership training program.

Fourthly, the development of a new project framework which involves a robust project proposal and approval process prior to the implementation of projects, including the requirement for final sign-off by the management team and an independent interstate expert.

Fifthly, the revision and implementation of a new process for conducting validations, the development of a detailed validation guideline, and ensuring the FSQ has appropriate validation documentation for all of its current methods.

Sixthly, the introduction of a number of mechanisms to support the development of a positive culture, including hiring a director of wellbeing and culture and a clinical psychologist, transparent management communication and reporting, and the ability for staff to raise issues, including what she described as the CEO drop-in session and to engage in robust scientific discussion in a safe environment. And, finally, the stakeholder engagement with QPS, the Office of DPP and the courts.

She also gave evidence that her priority upon commencement as CEO was to ensure that current processes and methods meant that current results being released by the QPS and DPP were accurate and reliable, so earlier this year she commenced a high-level gap analysis of the validations in place for the current evidence recovery processes.

In addition, under her direction QFS is also reviewing the forensic chemistry validations, methods and procedures. She has also commenced the procurement of new extraction robots and has plans to research and validate new methods such as Y-STR testing which is currently being outsourced.

She noted that, with the establishment of an innovation team, the laboratory intends to develop relationships with other laboratories and universities to

ensure an exchange of research and ideas to keep abreast of developments. In evidence she accepted that there had been problems arising from the imprecise or inconsistent use of language in the laboratory. That's obviously in the writing environment, not necessarily --

THE COMMISSIONER: I think Dr Budowle raised that too.

MR FOX: Yes.

THE COMMISSIONER: He just generally raised the importance of precise language, especially when you're - it's not just a random concept. I think he was - probably in the context of Project 70, but he was talking about the importance of precision, especially in a case like this where some of the terminology is - a slight change in terminology gives rise to different conclusions to the subject matter.

MR FOX: Indeed. She noted in that regard about language that the innovation team manager was currently developing an SOP for validation addressing some of those concerns particularly around standardised formatting.

In response to the concern that scientists take personal responsibility, she acknowledged that that kind of cultural shift would be "a longer journey", those words, but said that she was confident that they would get there.

With respect to any review of historical cases she, Dr Budowle and Ms Veth agreed that in effect it must be legally led, subject to questions of materiality and scientific expertise. Further, she agreed that where retesting must occur it must be done on the original DNA samples, extending back to 2007, and will not be limited to DNA already extracted.

THE COMMISSIONER: That is with respect to what we're talking about.

MR FOX: Yes.

THE COMMISSIONER: I don't know what other samples she's looking at. But, with respect to anything affected by the MultiPROBE work, Project 13 and subsequently, you have to go back to the original samples. I think that's what she conceded.

 MR FOX: Yes.

THE COMMISSIONER: Yes.

 MR FOX: She agreed that "the methods of retesting of samples would be the optimal method for the substrate and the biological material" in order to maximise DNA recovery. The evidence is that under her leadership FSQ has adopted --

THE COMMISSIONER: Sorry to interrupt again. I think there was a discussion also in the context of expert hot tub where there was discussion about ways of keeping up to date with the latest in techniques, adopting new techniques, not always just adopting them willy-nilly, but considering and if necessary going to specialist laboratories in order to ensure that the most appropriate methods were being utilised.

MR FOX: And that would appear to be an entirely prudent and --

THE COMMISSIONER: Yes, it wasn't controversial.

MR FOX: Yes. She gave evidence that she intends to implement reforms to the laboratory that not only address but in fact go beyond the 123 recommendations that were made in the Sofronoff Inquiry in that report. For example, her evidence is that the FSQ has taken the changes and improvements to the quality system and validation requirements for particular methods a step further than the reforms set out in the report. Her evidence is that she is of the opinion that the changes made at FSQ have resulted in substantial changes to the methods, culture, quality, innovation and therefore the provision of results to the justice system.

THE COMMISSIONER: I'm sorry to interrupt, and it's just a question I raise. I can't recall whether either in her statement or in the evidence at all there was any reference to a change in culture relating to the taking of responsibility. I don't think you can probably answer it on the spot, Mr Fox.

 MR FOX: I did indicate a moment ago that she had touched upon that. It was around the topic of the CEO drop-in session.

THE COMMISSIONER: Right.

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MR FOX: safe environment. and was also addressed at transcript 222, line 32 to 223, line 6.

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46 47 THE COMMISSIONER: You can.

MR FOX: I can answer it. I like to make sure that the sentences have all got the proper references to them so there is simply no dispute about it.

And engage in a robust scientific discussion in a

That was paragraph 11 of her statement

Now, there was some commentary that was given responsive to listening to the steps that she had Those steps that she had been asked to undertaken. identify in the witness box were important, the commentary being provided independently by Dr Budowle and Ms Veth, and also Dr Wright had an opportunity to hear that. Just to reflect on some of the observations that they made, Dr Budowle, his opinion was that the steps taken by Professor Wilde were "commensurate with the recommendations"; he called that what had happened to date "a Herculean effort"; and said that many of the things that Professor --

THE COMMISSIONER: By "to date" he means when she took over?

MR FOX: Yes. And that many of the things that she had outlined were "spot on". He also noted that "it's much harder to rebuild a lab that has a culture issue and a quality issue than to start a lab from scratch or to take over a lab that is functioning well. So she has a real challenge."

Ms Veth's evidence was that rebuilding the laboratory "is an enormous task" and "frankly, I'm surprised at what Professor Wilson-Wilde has already been able to accomplish Her view was that the "projects Professor Wilson-Wilde has identified seem appropriate given what came out of the Commission", being the first Inquiry.

Dr Wright agreed that the task of rebuilding the laboratory "is an enormous amount of work" and that it would take "many, many years to do the technical side of it, but also the cultural side of it". As I indicated before, Professor Wilson-Wilde said that it was a cultural change of a long journey.

Now, there have been a number of endorsements of Professor Wilson-Wilde which ought to be noted concerning her performance as the CEO since the beginning of this year. I indicated before, the Commission received two statements from FSQ management and scientists endorsing her performance to date as the CEO. In evidence is a submission to the Commission of 25 October jointly signed by members of the FSQ leadership team. I indicated that was Mrs Scott, Jeremy Watherston and Natasha Mitchell. That submission further supports Professor Wilson-Wilde's evidence as to current practices in the laboratory and the systems and processes established under her leadership.

The submission includes the following paragraph, and  ${\bf I}$  just wish to quote it:

Since our commencement, Professor Linzi Wilson-Wilde has made it clear that the review of current practices at FSQ shall attend beyond the recommendations provided by the 2022 Commission of Inquiry into Forensic DNA Testing in Queensland. we continue to assess and seek to understand the full extent of the workings of the laboratory, we have identified multiple fundamental deficiencies and are progressively working to address these. Professor Wilson-Wilde readily seeks our authoritative advice and enables us to be effective leaders, encouraging us to challenge the status quo. In her messaging to staff, Professor Wilson-Wilde has consistently conveyed that we are striving to create a culture of transparency and continuous improvement at FSQ.

That leadership team further commented on her responsive leadership style, which was said to be focused on "empowering our staff to develop our laboratory and a world-class facility".

Also in evidence is the statement dated 27 October from Dr Rhys Parry, who holds the position of senior

scientist in the forensic biology division of FSQ. Annexed to his statement is a joint statement by the current FSQ scientist Emma Caunt, Ingrid Moeller, Alicia Quartermain, Kylie Rika and Angelina Keller, all of whom also worked under the previous QHFS management. In that joint statement the scientists relevantly make the following observations:

> We are more confident than at any time in the past that we are in a position to raise concerns and freely discuss differences of scientific opinion in an appropriate format.

There is a further piece of evidence for you, Commissioner, on that point that you raised with me earlier. The next quote:

We have found Professor Wilson-Wilde to be very open and responsive to meaningful scientific discussions when differences of scientific opinion have arisen, and she often speaks on the critical importance of diversity of thought in all our staff meetings. The required changes as recommended by the Sofronoff report [they say | are now being implemented under the direction and guidance of Professor Wilson-Wilde, whose goal and focus in our opinion and observation is to strive for best scientific practice. Since the arrival of Professor Wilson-Wilde, many of the recommended changes have been finalised or are in the process of being implemented.

## Then finally they say:

The COI recommendations set the roadmap to reform our laboratory from the ground up and, under new leadership, Forensic Science Queensland is going beyond the recommendations to review all current and past practices to identify and address any affected cases. We are heartened to know that these actions are already having a positive impact on the justice system and we feel confident that we are now in an

environment in which we can raise 1 2 scientific concerns of this audit to 3 achieve sound resolutions. With Professor 4 Wilson-Wilde's leadership and scientific expertise and the support of the broader 5 6 FSQ leadership team, we remain focused on helping to develop our laboratory into a 7 world-class facility for Queensland. 8 9 10 Finally, I wish to draw attention to the evidence that we received from a Ms Amanda Reeves, who made a written 11 12 statement on 27 October 2023. She's been a long-term employee in the Forensic DNA Analysis section of 13 14 Queensland Health who is now employed as the executive 15 adviser to Professor Wilson-Wilde. I just pause there for 16 If there were to be one person who would be able to say in the proximity of her work to the professor that 17 if there was a chink in any of the other statements that 18 19 have been made by anybody else it's often - and, 20 Commissioner, you would be aware from your own experience, 21 it's the person in a close administrative and a supportive 22 fashion who would know full well as to whether or not 23 anyone was gilding the lily in terms of evidence that might 24 be given. 25 26 THE COMMISSIONER: Why would I know that? 27 28 MR FOX: I simply --29 30 THE COMMISSIONER: I hope you're not making any untoward -31 as a general proposition --32 MR FOX: 33 No, no. 34 THE COMMISSIONER: 35 (Indistinct). 36 37 No, no, I just simply make it as an observation, 38 that a person of that proximity decides to come forward and give support to a person of Professor Wilson-Wilde's 39 position, it's a matter that I consider to be of some 40 significance. 41 42 THE COMMISSIONER: Yes. I think also Ms Reeves described 43

MR FOX:

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herself as a whistleblower in previous occasions.

I understand that.

I understand that.

THE COMMISSIONER: So she's not frightened to call things out from that --

MR FOX: Not frightened at all. She says:

As a long-term employee of Queensland Health and repeat whistleblower, my position is that prior to my return to FSQ in February 2023 I had never met nor worked with Professor Wilson-Wilde. I have confidence in the direction that Professor Wilson-Wilde is taking the laboratory. My current assessment is that the new governance framework and revitalised leadership team is more than adequate to allow for recommendations and any other associated matters to be implemented and for historical casework to be addressed.

In respect of the implementation of recommendations in the Sofronoff report, she says in her statements at paragraphs 23, 4, 5 and 6:

It is my experience from working closely with Professor Wilson-Wilde that, when the lab identifies any scientific quality issues with its processes or methodology, a proactive and measured approach is taken towards achieving an appropriate resolution. If a situation were ever to arise where issues were identified and there was no apparent intention by the lab to address or investigate these issues, I would as I have always done in the past escalate my concerns via the proper channels.

That picks up the point you just made to me a moment ago:

I'm aware that as a result of an update received on 16 October 2023 from the implementation manager, Rhiannon Hunter, that once the quality positions have been filled recommendation 105 is to be the first project undertaken by the quality coordinator, biology. As at 12 September 2023 the onboarding quality team was moved

to "in progress" and included links to Project 13 and continual review of historically affected casework in accordance with recommendation 105. In my opinion, the cultural leadership problems in the lab that enabled Project 13 to become a problem are no longer present in the lab today.

Could I then move to the final topic, which is to provide submissions in relation to conclusions on the evidence and very briefly to make some observations about the issue of recommendations.

With respect to the Project 13 scientists and the implementation of the failed method, the implementation of the automation project, referred in shorthand as Project 13, occurred a significant time ago, some 16 years. Given the passage of time, it is to be expected that the recollection of the scientists involved in the implementation of the automation project would not have the clarity that is accompanied by recent memory.

That said, each of the scientists could be said to have given evidence of their best recollections, often aided in their recall by reviewing historical records. Their oral testimony did not reveal any suggestion that they were given other than as honest recollections. They made appropriate and many acknowledgments of the difficulties and deficiencies in the laboratory, and in evidence readily recognised many of those deficiencies arising with respect to the automation project.

The fact that at times they provided oral evidence which might have justified or been seen to be self-serving justifications of their individual decisions ought not to be taken as diminishing their evidence. Rather, evidence of that kind may be understood as reflecting their honest belief that their actions at that time were considered in their mind to have been proper and appropriate.

 The assistance given to the Inquiry by Mr Nurthen warrants particular note. He was able to provide the Commission with a broad range of documents, which included multiple drafts of the Project 13 report as well as information on the history of the development of the implementation project. His responses to the questions

that were put to him were clear and consistent, including with respect to matters raised of which he was aware and also matters which didn't fall under his direct responsibility but he had awareness of.

In light of the scientists' evidence, it's open to the Commission to conclude on the evidence that, firstly, the concept of taking the DNA extraction system validated by either a manufacturer or another reputable laboratory was scientifically valid.

Secondly, the expectation of the scientists was that adopting the system would be relatively straightforward and also that they would be able to take the validated system and modify it to encompass an automated version of a manual extraction method. In implementing the system in this manner, problems were nonetheless encountered in the laboratory. It's not apparent to the scientists - or it was not apparent to the scientists where or why the problems with the automated system were arising. They never reached the point where they could say with certainty what was causing lower yields than might have been expected.

Mr Nurthen was of the view that the time that the most likely reason was that there was an issue was with respect to the adherence of the DNA with and then the removal of the DNA from the magnetic beads, and he stated as follows, and I quote from the transcript:

Yes, but we think that - well, I think from the experiments that we've seen, that's the critical part, is that binding and the It works on an ionic strength, release. the way the beads and the way the DNA will bind to the beads. So I don't think we had any issue getting the DNA out of any of the cells. I think the 37 degrees and the TNE buffer worked fantastically. I think the issue we were having was having it bound to the beads and getting them back off the beads, hence the double elution being required because some of that DNA was stuck to the beads.

THE COMMISSIONER: Just to clarify, that's his opinion now. That's his opinion.

MR FOX: Yes.

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THE COMMISSIONER: It still is his opinion. There was an issue about the 37 degrees that was raised I think by Dr Wright and a concern that perhaps - if I can get it back It related to the temperature of the prime activity of DNA nuclease or perhaps it was Proteinase K. There was no scientific data to back it up, but she did raise that as a possible issue. I don't recall if that was It just came out in a raised with Mr Nurthen or not. different hot tub obviously. But my recollection is that Mr Nurthen was concentrating on the beads, and that's what they were obviously doing at the time. But one of the other uncertainties is whether the temperature - we don't know, whether the temperature may also have been a factor.

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MR FOX: Yes. We certainly didn't have evidence before us to say that it was.

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THE COMMISSIONER: No. But, like a lot of these things which were not experimentally validated, there are theoretical possibilities that were not tracked.

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MR FOX: Yes.

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THE COMMISSIONER: I may not be correctly stating the summary of the evidence, but that's just my recollection.

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MR FOX: Yes. Just to complete the quote, he said.

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... hence the double elution being required because some of that DNA was stuck to the beads. Ideally, one elution should allow it to fully come off. But it wasn't coming off.

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46 47 Mr Nurthen was concerned that the automation step was implemented because the DNA yield was low, and he expressed his concerns about the system being launched. He raised those concerns with Ms Ientile, the managing scientist. Notwithstanding those concerns, a decision was made to go ahead and implement the system, albeit not for all samples, and then to optimise the system "on the run". From other evidence before the Commission it's quite clear that this was not an appropriate way to validate or indeed to

implement a new system.

Once the contamination issues arose in early '08, which is only a matter of months after the automated system had commenced, the entire focus of the laboratory and the scientists was directed to resolving that issue. When that issue was resolved in early to mid '09, re-implementation of the system occurred and the laboratory team considered that it was appropriate to do so in the circumstances.

After undertaking the tests set out in the April 2009 report, TN32, owing to the conclusions reached about sensitivity of the modified automatic method and the very high recovery rate achieved by the automated part of the process - that was close to 100 per cent - yields were not considered to be an issue. The laboratory believed that it had validly reintroduced the automated DNA IQ method. However, it can be noted that this did not include the recovery rate from the off-deck lysis and mixing stage.

 However, with regard to the nature and scope of this Inquiry, it's not necessary, in my submission, for the Commission to investigate and reach conclusions about every aspect of the automation project. What is clear is that the evidence establishes that the retesting of samples must go back to the beginning of Project 13, and that's necessary; that is, to the very introduction of the MultiPROBE itself.

There can be no sensible dispute on the evidence before us that this is the case. The Commission can't be satisfied, in my submission, that the flaws that attended the automation project were ever fully addressed during the period from 29 October '07 to 21 November '16, being when it ceased.

THE COMMISSIONER: I don't think any opinion has been expressed to the contrary.

MR FOX: Indeed. There is no dispute that the samples themselves will need to be retested, not the extracts, nor is there any dispute that the process should be first legally and then scientifically led.

 Having reached these conclusions, it's appropriate to reflect upon the observations of the experts concerning the conduct of the Project 13 scientists both in their

implementation and validation of what's described as Project 13 and more generally.

Each of the independent experts - Budowle, Veth, Wright, and Wilson-Wilde - were of the view that the approach of the scientists lacked scientific rigour, proper quality control, and was insufficiently documented. This in turn undermined the ability of the scientists to implement effective continuous improvement processes. Most saliently, there is no evidence that they ever effectively implemented the automated method.

There was no evidence which could support the suggestion that the Project 13 scientists engaged in deliberate misconduct in connection with Project 13. It could, however, be said that their conduct reflected systemic clinical governance failures in the laboratory during that period.

With respect to Professor Wilson-Wilde and the alleged failure to address the Project 13 report in her 20 October '22 report in the first Inquiry, she acknowledged that upon reviewing the Project 13 report issues with the DNA yield - the problems with the DNA yield or issues with the DNA yield were apparent on the face of the document. She accepted that it was "readily and immediately apparent" to her that the document was flawed.

To the extent that she initially suggested that she had discussed DNA yield and Project 13 with counsel assisting, Ms Hedge, counsel assisting provided two statements to the Inquiry disputing that such a discussion occurred; that is, it was counsel assisting's best recollection that Professor Wilson-Wilde did not inform her of those matters.

Her evidence was, further, that if she had understood Professor Wilson-Wilde was telling her about significant or systemic issues which might have called into question the reliability of results she would have taken steps to investigate it. That tends to confirm that Professor Wilson-Wilde hadn't conveyed to counsel assisting those matters of significance.

 Now, following consideration of that evidence in her oral evidence before the Inquiry, Professor Wilson-Wilde accepted that her memory of these interactions with

 counsel assisting was limited and that, having since then reviewed the second statement of counsel assisting, she may be mistaken as to the nature of those discussions.

It is open to the Commission to conclude on the evidence that Professor Wilson-Wilde did not inform counsel assisting that Project 13 was such a flawed document that the entire automated procedure with respect to DNA testing was invalid. The importance of this issue was not conveyed with respect to the consequence of a low extraction of DNA.

The conclusion is similarly available from the evidence that, if Professor Wilson-Wilde did in fact mention the yield issues evidence in the Project 13 report to counsel assisting, it was certainly not sufficient to gain the attention of counsel assisting.

As to whether Professor Wilson-Wilde addressed or addressed sufficiently the apparent problems with yield arising from the Project 13 report in her 20 October '22 report, it cannot be seriously put in dispute that she did not identify that the manual or automated extraction or hybrid manual automated extraction methods as discussed in the Project 13 report or used in the timeframe that the report covers disclosed a problem with DNA yield or extraction.

What Professor Wilson-Wilde did do was to identify in her report that "the verification of the automated method is not consistent with expected good practice". Her evidence to this Inquiry was that by this reference she had called out the report as a whole and that the phrase "not consistent with expected good practice" was science-speak for flawed.

In her oral evidence she maintained the view that that language used by her was proper language for an expert report; that is, that she was very careful and conscious of not writing anything in the report that she couldn't definitely support with empirical data - that's a quote from her - and that she was also writing the report very much for the task that was at hand, again a further quote.

While the reference in her report was brief, it's open to the Commission to conclude that on the evidence that Professor Wilson-Wilde's statement in her report was an

accepted way of phrasing a scientific opinion to convey that the automated method as disclosed in the Project 13 report was not a valid method as a whole.

The Commission may find that Professor Wilson-Wilde's use of language consistent with scientific report writing was appropriate, namely where she was answering the specific questions posed to her which focused on contamination. Nonetheless, she accepted that her language "could have been clearer".

With respect to what follows, the evidence establishes that the professor will now take steps to address the problems associated with the Project 13 automated method. The recommendation was recently proposed that all serious cases between 2007 and July 2008 be reviewed. That's the draft minutes. In her oral evidence in response to your question she said that she would now be advocating that the laboratory go back from the very beginning to October 2007.

THE COMMISSIONER: From a later date.

MR FOX: From a later date, yes. She candidly accepted that, until the media raised issues regarding the Project 13 report, she had not prepared a paper or other documentation which might provide such recommendation. Indeed, she acknowledged that the only reason why such a paper had been prepared was because she had been prompted by reason of the interview with the journalist from The Australian.

That said, Professor Wilson-Wilde did already have a plan in place for reviewing historical samples in the laboratory but not for the whole of the timeframe presently recognised.

In my submission, it is open to the Commission to accept her explanation as to why that was the case; that is that, since she commenced in her new role, her focus had been on ensuring that the current methods used by the lab are fit for purpose and setting up the necessary infrastructure. She also gave evidence that she was focused on implementing recommendation 105, which requires that the lab go back through that work in any event. She accepted in her oral evidence that retesting of samples going back to Project 13 times was required, including in order to provide confidence to the public that the issue

was being looked at.

Now, as to her performance as CEO of FSQ, it's plain that since her appointment she has taken significant steps directed to the performance and culture of that body. In my submission, the following conclusions may be drawn from that evidence concerning those steps.

Firstly, she has to date made extensive and substantial changes to the FSQ's methods, culture, quality and innovation. She has already achieved the implementation of numerous recommendations from the Sofronoff report.

In respect of the review of historical cases in recommendation 105, such review will encompass samples extending back to 2007 and, where retesting is necessary, will not be done on the original DNA samples and will not be limited to the extracted DNA.

Ms Veth and Dr Budowle are of the view that the reforms undertaken by the professor at FSQ are commensurate with the recommendations by the Sofronoff report and are an impressive accomplish so far. The professor has the confidence and backing of the FSQ leadership and scientists, from the evidence that I've taken you to.

THE COMMISSIONER: (Indistinct). There is a lot of evidence from Professor Wilson-Wilde and the scientists presently at the laboratory as you have stated. Is there any evidence or any assertion to the contrary that you can --

MR FOX: That anybody has suggested, whether current or former employees --

THE COMMISSIONER: Current.

MR FOX: I would have drawn attention if there had been a current staff member who had given us a statement.

THE COMMISSIONER: I'm not certain even if there's even an assertion. That I don't know. But there's no evidence --

MR FOX: There's no evidence that's been put before you of any contradictor.

 Can I then turn to the final topic of recommendations. In my submission, the Commission may wish to consider making recommendations that deal with at least two matters. These all concern recommendation 105. There is no submission that's made by any of the other parties who participated in this hearing that there need be any further recommendation made and there's no submission made other than recommendation 105 is perfect as it is.

I think the most important submission, with all due respect to all the various parties who have made submissions, the most important submission comes from Queensland Health, and it considers that there's no need for any modification or variation of recommendation 105. They consider that the recommendation is sufficiently broad to encompass the matters that have been brought before you in this Inquiry.

So the two matters that I would invite your consideration, firstly, whether recommendation 105 is expressed sufficiently to encompass the evidence given regarding --

THE COMMISSIONER: Sorry to interrupt you. But, in that regard, bearing in mind that one can say here and now one could construe it to be broad enough perhaps, and I haven't looked at it for this purpose yet until I come to the conclusion of the report, but just looking at the wording of it, yes, one could look at it and possibly construe it as being broad enough, sufficiently broad, if we go that way. But it's of interest that it wasn't construed perhaps to encompass, for example, the dates until now.

So there's two possibilities, aren't there? One is it's sufficiently said to put recommendation 105 in context - I may be jumping the gun for you, Mr Fox - or clarifying it by rewording the recommendation or by dealing with the wording of the recommendation to make it clear.

MR FOX: That's the very territory I was going to venture into. I'll keep it brief.

THE COMMISSIONER: No, I was just dealing with the comment in the submission that it was sufficiently broad. I think the point I was making was it hasn't presently necessarily been construed, for example, to cover what we're dealing with.

MR FOX: Yes. I would venture to say this in relation to what you've said, Commissioner; that, like statutory construction, one can have a phrase that on its literal meaning it might mean one thing but then when you look at what was intended by the second reading speech and other supporting materials it was to have a different life.

THE COMMISSIONER: Maybe what you're doing is (indistinct) second reading speech material --

MR FOX: That's the essence of where I'm heading. So could there be some re-crafting of the recommendation to make it very clear that it also includes the Project 13 issue? The second point related to that is whether, because it doesn't have an expression of date range, it could be read down in some way by reason of what the Sofronoff Inquiry was investigating. Those are the only matters that I would make any suggestion.

I should just indicate that the only - sorry, there is one further matter. I know that there's been a notice to produce that was issued that sought to obtain documents relating to KPIs associated with the CEO's position at FSQ. It may be, Commissioner, on reviewing matters that you consider that there should be some recommendation made about implementation of KPIs for the CEO's position to ensure compliance --

THE COMMISSIONER: Recommending that KPIs reflect implementation of the - not broadly because I'm not covering all of that, but KPIs against the specific implementation that we're discussing, taking into account - again, it would have to take into account the timeframes that the evidence said applied to the implementation of the recommendations. I'm not sure - it would have to be progressive, because I don't have any evidence to tell me how much time it would take to revisit the samples that were to be retested.

MR FOX: Yes. I think that's - one point of reticence on my part, but one wouldn't wish to impose an undue burden by reason that - it would have to be something that would be - again, we haven't had the benefit of any evidence on the topic.

THE COMMISSIONER: No.

MR FOX: But it's really just more --

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THE COMMISSIONER: it's up to the board, really. It could just be that the board look at the questions of KPIs rather than trying to draft them myself.

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MR FOX: Yes.

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THE COMMISSIONER: It's a matter for the board.

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MR FOX: Thank you, Commissioner. Those are my submissions.

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THE COMMISSIONER: Thanks, Mr Fox; not that far out from the original time estimate.

It could be a matter for the board or

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First. I should record the enormous effort that has gone into the preparation of these submissions from Mr Fox and other counsel assisting. I think everyone in the room will appreciate that that has required quite an effort to draw together the material, and I want to record my thanks to the counsel assisting team and to the entire team supporting the Inquiry.

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I should just make an observation. It's been said before, and I'm going to come to the other counsel in a moment. This Inquiry was set up on quite short notice and, while it's easy to look at when notices went out and the time given for response to notices to produce and notices to give statements, and indeed the timing of the evidence for this Inquiry, a lot of people - including myself before I got involved in any of these things - assumed that everything happens on - that sort of thing can happen on Day 1.

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It doesn't deal with the steps that need to be taken to set up the Inquiry itself, and the front-loading that goes into everything from getting a team together, finding premises, setting up a website that can be used for the benefit of those who wish to have access to the material, the recording system, and all of the other matters that go - even finding at short notice counsel and others with sufficient time to devote to - necessary to be counsel assisting in this Inquiry.

So I formally wish to record my appreciation to all involved in that regard. So, anyone who thinks they've been given insufficient time to prepare their responses, it is nothing compared to what's gone on inside the Inquiry itself.

Having said that, I do appreciate the efforts that have been made by all those involved as witnesses in the Inquiry and those representing them. Thank you very much for getting your written submissions to us in the time that you did.

So now I'm just going to ask if anybody has anything additional they wish to say in response to counsel assisting's submissions.

MR FOX: I should just add or whether they would wish - you indicated yesterday that if people needed the lunch break to confer.

THE COMMISSIONER: Yes, you can have a lunch break.

MR FOX: They might be able to give an opportunity now.

THE COMMISSIONER: Or you can take the opportunity to put no more than half a page in in writing.

MR RICE: We don't wish to be heard further, Commissioner. Thank you.

THE COMMISSIONER: Thank you.

MR DIEHM: Commissioner, I can be very brief orally now rather than coming back after lunch.

THE COMMISSIONER: Okay. That's a promise.

MR DIEHM: Yes, it is. It's merely one point, which is dealt with in our written submissions. But, given what Mr Fox has addressed you orally on, I draw it to your attention. In terms of the evidence concerning the exchanges between our client and Ms Hedge - and this involves absolutely no criticism of Ms Hedge, I might say as well at the outset, nor do our written submissions - Ms Hedge in her supplementary statement at paragraph 11 dealt with what was said by our client in paragraph 70 of her statement, and in paragraph 11(b) she referred to

paragraph 70(a) of that statement in which our client said that she had informed counsel assisting that the change to a fully automated extraction was a significant change to have occurred at that time and should have been fully validated. Ms Hedge said of that that she knew that Adjunct Professor Wilson-Wilde held that view in October of 2022, but she could not say whether she knew that from discussion with her or from the report that was written.

Now, that at the least goes to the submission made by counsel assisting that the way in which Adjunct Professor Wilson-Wilde expressed herself in writing her report was an accepted way of phrasing such a matter in an expert report. But it is also relevant to the other considerations of the extent of the communication.

THE COMMISSIONER: I think the submission, as I heard it, was that she may not - I think Mr Fox submitted that that could well be sufficient to deal with the entirety of the Project 13 so-called validation.

MR DIEHM: Yes.

THE COMMISSIONER: But I think the issue comes down really to whether she expressly referred with sufficient clarity, for want of a better word, to the yield aspect --

MR DIEHM: Quite so.

THE COMMISSIONER: And I don't think there's anything - that's the way I heard the submission. I think that's what you're really dealing with, isn't it, Mr Diehm?

MR DIEHM: Yes, and I am perhaps --

THE COMMISSIONER: I am very experienced with expert reports and the way in which they're framed.

MR DIEHM: Quite so. I'm sure that's the case, Commissioner. So, at the risk of having misapprehended what Mr Fox was saying as to the actual exchanges that occurred between them, there was to that extent common ground as to the nature of the communications --

 THE COMMISSIONER: If I understand your submission, you're saying that there is no dispute that the validation - the lack of validation or the concerns about validation that

Dr Wilson-Wilde had were sufficiently conveyed to Ms Hedge, who appreciated that that point had been made by that stage one, isn't it?

MR DIEHM: Yes. Well, I should for the sake of certainty of that submission say that there is no dispute that our client identified that there was - that such a change needed a - sorry, that it was a significant change and that it should have been fully validated.

THE COMMISSIONER: Yes, I understand.

MR DIEHM: Yes.

THE COMMISSIONER: I didn't hear Mr Fox saying anything differently.

MR DIEHM: No. And the reason why I paused to clarify that was so as not to be suggesting that that involved an expression of opinion of all of the problems that there were as the evidence reveals with respect to the lack of validation.

THE COMMISSIONER: No, I don't think the lack of validation was really the focus of that --

MR DIEHM: Indeed.

THE COMMISSIONER: I should just make an observation that was going through my head at the time, too, and you can say what you want - I appreciate your submission on that. There's no doubt that Dr Budowle and Ms Veth, at least Dr Budowle, said that things can be missed when you're going through a report like that, and they both said they may have missed issues.

This, though, is I think - I'm not sure - I think that the focus of that is this may not be one of those issues. I think that the point is - I think the discussion is that, if the yield had been specifically raised as a specific aspect of it, counsel assisting said that she would have taken that further, because it pre-dates the - it precedes, I should say, the automation stage. There's agreement that the validation point was very carefully made, and was made and accepted.

MR DIEHM: Yes. We've addressed this in our written

submissions.THE COMMISSI

THE COMMISSIONER: Yes, I will go back to your written submissions with some care and ensure that any discussion and findings that I make in that regard take in those written submissions and the matters that you have cross-referenced in that and the exact wording of them be taken into account.

MR DIEHM: Thank you, Commissioner.

THE COMMISSIONER: Does anybody else wish to say anything?

UNIDENTIFIED SPEAKER: Nothing further, Commissioner.

MR McLEAN-WILLIAMS: Nothing further, Commissioner.

MR MURDOCH: On behalf of the scientists, Commissioner, we're content to rely upon our written submissions.

THE COMMISSIONER: Yes. I have read them. I have read them all, thank you. I do congratulate you for doing them to the timeframe to the standard that they have been done. But I will have to synthesise all of them properly together with Counsel Assisting's submissions for the purpose of my report.

 If there is nothing else that anyone wants to say or do about this Inquiry, it sounds to me that the appropriate time is to, as I would say in another place, reserve my decision. I would like to thank also all those involved in the recording, in particular jumping up and helping us at the right time. It's very much appreciated.

So I will adjourn. Sorry, I don't adjourn. I conclude the oral and submission part of the Inquiry. The rest of it is just the backroom for me until the report comes out, and I think you're all aware of the date. Thank you.

## AT 12.44PM THE COMMISSION OF INQUIRY WAS ADJOURNED ACCORDINGLY

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