STATEMENT OF CATHERINE ALLEN

I, **Catherine Allen,** of 39 Kessels Road, Coopers Plains in the State of Queensland, do solemnly and sincerely declare that:

Background

1. I am employed by Queensland Health Forensic and Scientific Services (**QHFSS**).

2. I hold the position of Managing Scientist at QHFSS at Coopers Plains.

3. I hold a Bachelor of Science from the University of Queensland, conferred in 1994, a Master of Science (Forensic Science) from Griffith University, conferred in 2002, and a Certificate IV in Project Management, conferred in 2008.

4. On 19 September 2022, under s 5(1)(d) of the *Commission of Inquiry Act 1950* (Qld), Commissioner Sofronoff QC issued Notice 2022/00200 (**Notice**) to me. I am required to provide a statement regarding my knowledge of the matters set out in paragraphs 1 to 101 of the Notice.

5. To provide this response, I have read and had regard to the following:

   (a) the Notice; and

   (b) the documents annexed to this statement.

6. Before turning to the questions I have been asked to answer, I record that I have endeavoured to provide as much assistance as I am currently able to provide, given some medical issues I am currently experiencing (about which my solicitors have previously made the Commission aware) and my ability to efficiently access documents is limited by the current circumstances of my employment.

Proficiency testing

Question 1

Explain how proficiency testing is conducted by 'Collaborative Testing Services Inc' or any other provider used by the DNA Analysis Unit.

13. It's my understanding that some staff members will be aware that the samples are from a proficiency test due to allocation process and details within the Forensic Register.

Question 6

In your view, is the proficiency test "blind"? Should it be?

14. The laboratory has sought to make the proficiency test as 'blind' as possible. The scenario is supplied with the proficiency test samples and staff follow routine Standard Operating Procedures to examine, analyse and interpret DNA profiles obtained.

15. Reporting of proficiency test results to the manufacturer is via a different mechanism that the provision of results to QPS.

Question 7

Are you aware of proficiency tests being processed differently to other samples by staff? If so, how are they processed differently, what is the basis of your knowledge, and what, if any, steps have you taken in relation to that?

16. I am not aware of staff processing proficiency tests differently to other samples as staff follow routine Standard Operating Procedures. Any deviation from Standard Operating Procedure should be noted within the casefile and an Opportunity for Quality Improvement raised if necessary.

Question 8

How are proficiency test results received by FSS?

17. Standard Operating Procedure named 'Proficiency Testing in Forensic DNA Analysis' details in Section 12 how the results are received. Please see attached – Exhibit – **CA-1**.

Question 9

Explain the process that is undertaken once proficiency test results are received? (including who is provided with the results, how they are reviewed, any process for assessing the results).

18. Standard Operating Procedure named 'Proficiency Testing in Forensic DNA Analysis' details in Section 12 how the results are received. Please see attached – Exhibit – **CA-1**.

25. Standard Operating Procedure called Examination of Sexual Cases, numbered 32106 versions 3 and 4 for Auslab processes were active between January 2015 to December 2017. Standard Operating Procedure called Examination of Sexual Cases, numbered 33798, versions 1 to 8 for Forensic Register processes were active from January 2017 to current. Please see attached – Exhibits – **CA-3 to CA-12**

26. Standard Operating Procedure called Examination For and Of Spermatozoa, numbered 17189, Versions 13 to 17 were active between January 2016 and current. Please see attached – Exhibits – **CA-13 to CA-17**.

Question 14

Explain your understanding of the process and procedure in January 2016 for testing samples suspected to contain spermatozoa, including the use of preliminary and presumptive testing and policies concerning when the testing should cease.

27. My understanding is that staff deemed competent to undertake this process would follow Standard Operating Procedure called Examination For and Of Spermatozoa, numbered 17189. Please see attached – Exhibits – **CA-13 to CA-17**.

Sperm microscopy – 2016 and Project 181

Question 15

Explain how you first became aware of the issue related to a discrepancy in the levels of spermatozoa detected during evidence recovery microscopy compared to the levels detected during differential lysis microscopy ***(the sperm microscopy issue)***.

28. Allan McNevin, Senior Scientist at the time, raised an item at the Forensic DNA Analysis Management Team meeting on 12 May 2016 – Item 5.4 in the Meeting Minutes. Please see attached – Exhibit – **CA-18** [management team meeting minutes].

Question 16

Explain your understanding of the sperm microscopy issue at the time it was raised.

29. My understanding of the process used at the time was that staff deemed competent in the task followed Standard Operating Procedure called Examination For and Of Spermatozoa, numbered 17189. This procedure outlines the steps taken to examine for

Services Stream. Deborah's usual role was Managing Scientist – Coronial Services Stream.

34. I'm not aware of an OQI or Adverse Event Log entry for this item.

Question 20

Explain your role, if any, in the design, execution and reporting of results from each of the projects undertaken during or after 2016 in relation to the sperm microscopy issue.

35. My role as Managing Scientist was to ensure that a process was in place to review the Standard Operating Procedure, a process in place to conduct any reviews of data and a process to raise a Change Management project to design experiments that may be required. My role was to authorise any financial resources required and review, provide feedback and approve the reports such as Experimental Design and Final Report.

36. I was on leave from 30 May 2016 until 6 September 2016 (inclusive). Upon my return, I resumed my duties and participated in the Change Management Process for Project #181.

Question 21

What role did Allan McNevin take in responding to the sperm microscopy issue, and the reasons for his involvement?

37. Allan McNevin, Senior Scientist at the time, took a lead in the response to the issue raised as he was the line manager responsible for the Evidence Recovery team where these processes took place.

Question 22

Explain how Project 181 was proposed and how it commenced?

38. My understanding of the events is outlined in an email to Jade Franklin, Senior Human Resources Advisor in December 2016. Please find attached – Exhibit – **CA-20** (7 attachments – 001 Email to HR with background_20161212 plus email attachments).

Question 25

Provide an explanation of the document entitled 'Data analysis of modified sexual assault process for zero spermatozoa detected at Evidence Recovery'. Identify:

(a) *the aim of this report;*

(b) *who approved this report, if anyone;*

(c) *your role and/or involvement, if any, in the formulation of the report, including drafts;*

(d) *what was work was conducted pursuant to the report, and over what period the work was conducted; and*

(e) *the results and conclusions of this report; and*

(f) *whether the paper was finalised.*

44. It's my understanding that Paula Brisotto, Team Leader undertook this body of the work, in conjunction Matthew Hunt, Reporting Scientist, Kylie Rika, Senior Scientist and Luke Ryan, Senior Scientist.

45. I did not have a role in the formulation of this body of work, its report or drafts. To my knowledge, this report has not been finalised.

Question 26

Provide an explanation of document entitled 'Project #181 Spermatozoa Microscopy Sensitivity'. Identify:

(a) *the aim of this project;*

(b) *who approved this proposal, if anyone;*

(c) *your role and/or involvement, if any, in the formulation of the report, including drafts;*

(d) *what work was conducted pursuant to the project, and over what period the work was conducted; and*

(e) *the results and conclusions of the final report.*

replicated.' 'Attempts to develop a more effective method for ER slide preparation and improve sensitivity were explored, however these were ultimately unsuccessful.' This section also details the development of 'an alternative 'proposed method' to replace microscopy at ER was devised' and that this proposed method features essentially the same microscopy process as that which occurs at Diff Lysis, then those results where Diff Lysis slides showed superior sensitivity the proposed method are not overly problematic.'

Question 28

Explain when and on what basis Project 181 concluded. Include any discoveries made from Project 181.

52. The final report for Project #181 was approved by me on 5 August 2020, after all other management team members had endorsed the report. Please see attached – Exhibit – **CA-21**.

53. Section 12 of the report contains the Conclusions and outlines the discoveries made from this project.

54. Section 13 of the report contains the Recommendations from this large body of work.

55. A journal article has been prepared and submitted from this project. I'm unaware of the progress of this journal article. Please see attached – Exhibit – **CA-22** [journal article].

56. A poster on this project was presented at the recent Australian and New Zealand Forensic Science Symposium held in Brisbane, 12 to 15 of September 2022. Please see attached – **CA-23** [ANZFSS poster].

Question 29

Explain whether you consider Project 181 adequately addressed the sperm microscopy issue.

57. In my opinion, given the number of staff involved from different teams within Forensic DNA Analysis, the number of experiments undertaken and the review by the management team members, I believe that Project #181 addressed the sperm microscopy issue and other associated topics that arose during this project.

Scientist and Luke Ryan, Senior Scientist to analyse this data. Please find attached – Exhibit **CA-24** [Data analysis report].

Question 33

Explain if any workplace culture/environment issues (for example, personality clashes or communication issues between individuals at FSS, favouritism, productivity etc.) impeded the efficient resolution of the sperm microscopy issue. If so, provide any examples or attach any relevant documentation.

61. Project #181 was impacted by a negative interaction between two staff members in June 2016. This negative interaction resulted in an investigation conducted by Livingstones. This was a stressful time for many staff members of Forensic DNA Analysis. Please see attached – **CA-25.**

62. This project, and possibly others, was impacted by the movement of a Senior Scientist, Amanda Reeves to different duties in early 2017, returning back to the work unit and then from FSS to a different work unit within Queensland Health in 2018. This process involved Human Resources assistance and required staff members' time to respond to Right to Information requests and Workplace Edge processes (external consultants). . Please see attached – Exhibits **CA-26 to CA-30**.

Question 34

Explain your knowledge and involvement, if any, into procuring and engaging the New Zealand Institute of Environment and Science and Research ("ESR") to conduct an independent review, or provide an opinion about, the processing sexual assault investigation kits (SAIKS) at the QHFSS Forensic DNA Analysis Laboratory in 2016 and 2017, including:

(a) *who proposed the review;*

(b) *the purpose of the review;*

(c) *determining the scope of the review;*

(d) *developing and finalising the Terms of Reference for the review sought;*

(e) *the preparation of the documents and/or production of the documents considered to develop the Terms of Reference;*

Question 35

Explain and detail your knowledge and involvement, if any, in the decision that made to engage Livingstones to externally investigate the workplace allegations raised by Amanda Reeves, including:

(a) *your knowledge of who proposed the investigation;*

(b) *your participation in and/or knowledge of any conversations in which the following was raised:*

(i) *the reasons for the investigation;*

(ii) *the scope of the investigation;*

(iii) *the intended or expected outcome from the investigation; and*

(iv) *why an external investigation was preferred instead of an internal process.*

70. Upon returning from leave in early September 2016, Deborah Whelan, who had undertaken the role of Managing Scientist – Police Services Stream during my period of leave, briefed me regarding the situation to date, amongst other items. I was advised of the negative interaction between two staff members that occurred in June 2016 and the allegations one staff member made regarding the other.

71. In collaboration with Paul Csoban and Jade Franklin, Senior Human Resources Advisor, we discussed an appropriate mechanism to resolve this situation. During discussions regarding an appropriate mechanism, we discussed whether an internal process or an external, independent process would be likely to produce a better outcome. It was agreed that an external, independent process would be more likely to have a better outcome, given staff member/s may not trust an internal process. The delegation for approval of an external process sat with Gary Uhlmann, then Chief Executive Officer, Please see attached – Exhibit – **CA-36** [meeting notes Jade Franklin Paul Csoban 20160915].

72. My recollection is that Jade Franklin drafted the Terms of Reference and Instrument of Appointment, which detailed the scope of the investigation. I drafted the Forensic DNA Analysis Brief for Approval, given my knowledge of the laboratory. These three

76. On 23 February 2017, I was forwarded an email by Paul Csoban that advised WorkCover had not accepted Amanda Reeves' workers compensation claim application.

77. I don't have any independent recollection of conversations regarding alternative work tasks for Amanda Reeves. My understanding is that the discussions and considerations regarding this were with Paul Csoban and Jade Franklin, Senior Human Resources Advisor.

78. On 12 October 2017, I prepared a timeline of events for Workplace Edge, consulting company. Detailed within the timeline, I have noted 'Given a written directive from CEO to undertake a project…' Please see attached – Exhibit – **CA-41** [CJA Timeline of events written 20171012 for meeting with Workplace Edge].

79. On 2 November 2017, I was provided with documentation from the office of the Chief Executive Officer of Health Support Queensland to include in the response for Right To Information request #3961. Within this documentation was a copy of the letter from the Chief Executive Officer to Ms Reeves describing the return to work arrangements.

Bones

Question 37

Explain the current process for bone samples and who is responsible for each task, including:

(a) *procurement of instruments;*

(b) *cleaning of instruments;*

(c) *allocation of bones samples to staff / work flow of a sample;*

(d) *extraction;*

(e) *testing and analysis;*

(f) *reporting.*

76. The Managing Scientist role or the Executive Director role is the financial delegate for the procurement for the acquisition of instruments.

Question 39

Explain the reasons for the change in processes identified in question 31 above, including:

(a) *who made the decision;*

(b) *the reasons for the decision;*

(c) *the material or information on which each decision was based;*

(d) *the risks and benefits considered for each decision and how they were assessed;*

(e) *any investigation, consultation or review into the process that was undertaken immediately prior to the change;*

(f) *the records of those decisions.*

83. Changes to the extraction method for bone samples were conducted through the Change Management Process of Project #192. Please see attached – Exhibits – **CA-50** and **CA-51** [final report and supplementary final report].

Question 40

Explain any challenges identified or concerns raised by any member of staff at the forensic DNA laboratory or Queensland Police Service or Coroner's Court in relation to any of the processes or changes to processes identified in questions 30 and 31 above.

84. Please find attached a summary of all Opportunities for Quality Improvements that have been raised regarding coronial samples – Exhibit – **CA-52** [spreadsheet].

85. Please find attached all correspondence that I located regarding coronial cases that have been authored by the previous Managing Scientist – Vanessa Ientile – Exhibit – **CA-53**.

Question 41

Please provide copies of any validations undertaken on the processes identified in question 30 above, specific to bones.

86. Please see question 39 regarding the validation for the extraction method for bone samples.

Question 42

(a) *were you aware of that data, in particular any increase in obtaining mixed profiles or reporting "No DNA" or "DNA insufficient for further processing" for bone samples;*

(b) *can you give an explanation for any increase in obtaining mixed profiles from bones;*

(c) *can you give an explanation for any increase in reporting "No DNA" or "DNA insufficient for further processing" for bone samples.*

92. I was not aware of any particular increase in obtaining mixed profiles or reporting 'No DNA' or 'DNA insufficient for further processing' for bone samples.

93. Whilst undertaking searches for this statement, I became aware of OQI #56724 called Mixtures in Bones which was raised on 17 June 2022. I am not on the Notifyee List for this OQI. This QOI is currently under investigation and may provide information for the mixed DNA profiles that have been obtained.

Validations

Question 47

Explain what it means to:

(a) *'approve' a validation proposal/report; and*

(b) *'endorse' a validation proposal/report.*

94. Approval of a validation proposal means that it can proceed with testing. Approval of a report means that it is approved to implement.

95. Endorsement of a validation proposal means the staff member agrees and supports the proposal to proceed with testing. Endorsement of a report means that the staff member agrees and supports the report for implementation.

Question 48

Outline the duties and responsibilities of staff when approving or endorsing a validation proposal or report. Attach any Standard Operating procedures or guidelines for the requirements of staff endorsing a validation report.

Question 51

Explain who chooses the staff to validate and endorse a validation.

102. Standard Operating Procedure called Procedure for Change Management in Forensic DNA Analysis describes the responsibilities of the Forensic DNA Analysis Management Team in considering a Project Proposal (section 4.4) and in considering Implementation and Final Report (section 4.5). Staff members who are undertaking higher duties in a management team member role will also undertake these responsibilities. Please see attached – Exhibit – **CA-55** [22871v17].

Question 52

Outline the qualifications, experience, or training relevant to performing or endorsing validations for the validators and endorsers of:

(a) *The Quantifiler (2004 – 2005);*

(b) *PowerPlex 21 (2012 – 2013);*

(c) *STRmix (Project #105 and #151);*

(d) *3130xl B Genetic Analyzer;*

(e) *Quantifiler Trio (Project #152);*

(f) *Quant Studio 5 (Project #185);*

(g) *QIAsymphony (Project #192);*

(h) *3500 Genetic Analyzer (Project #182 and #186);*

(i) *ProFlex (Project #199);*

(j) *Hamilton STARiet A (Project #173); and*

(k) *Any method for the cleaning of bone instruments.*

103. Forensic DNA Analysis management team members and staff members who undertake higher duties in management team member roles have a Bachelor degree, several years of forensic experience, have a working knowledge of or been trained in the end to end

Group on DNA Analysis Methods (SWGDAM) Validation Guidelines for DNA Analysis Methods. Please see attached – Exhibit – **CA-60** [SWGDAM].

109. Validations had oversight from project members, management team members and all staff within Forensic DNA Analysis through access to the documents on a local network drive or by updates at team meetings.

110. Documents that described each step of the process were provided for feedback to ensure that the aim of the validation was being undertaken.

111. I read, understood and assessed the documentation for validations and with my qualifications and experience in forensic DNA analysis determined that they had been successfully completed to a high standard.

Question 58

Explain the extent to which you engaged with the staff validating and endorsing the validations listed in question 45.

112. Staff members undertaking validation projects provided updates to the Forensic DNA Analysis Management Team or Forensic DNA Analysis team. This was an opportunity to provide an overview of the status of the validation project and an opportunity to ask questions.

113. Validations projects were a standing agenda item for the Forensic DNA Analysis management team meeting and was an opportunity to review the project status and discuss any issues with the management team member that was leading the validation project.

114. I don't have an independent recollection of specifically engaging with particular staff from particular validation projects since January 2017.

Question 59

Explain any concerns you had with the validations listed in question 45, either during or after the validation. Attach any documentation evidencing the raising of any concerns and any response to your concerns.

written the reports. It is likely that they reviewed the reports prior to submitting them to the Forensic DNA Analysis Management Team for review.

120. Luke Ryan and Thomas Nurthen endorse the reports as a management team member.

Question 62

State any concerns you have about the validation process within the DNA Analysis Unit. Attach any documentation, if any, evidencing these concerns being raised.

121. The laboratory works in a continuous improvement model and in my opinion, the validation process has improved over time.

122. The projects leads can request additional assistance with particular areas such as statistics if I required.

123. I don't have concerns about the validation process that has been used, but understand that if changes are made to SWGDAM Guidelines, the laboratory will update the Standard Operating Procedure.

Quantifiler

Question 63

Outline the validations undertaken for the Quantifiler prior to its implementation in April 2004. Attach all relevant validation documents.

124. A large number of experiments were undertaken prior to the implementation of the Quantifiler system and detailed within two documents. Please see attached – Exhibits – **CA-63** to **CA-76** Ministerial Briefing 8 March 2005; Quantifiler Review 2005 Petricevic, Review of Petricevic Report 2005 Simon Walsh, Review Petricevic Report 2005 Peta Stringer, Summary of DNA Processing Improvement Project_Hlinka, DNA Improvement Project Update_04 March 2005, DNA Processing Improvement project, A report on the investigation into DNA quantitation using Quantifiler system_Jan 2005, Review of Amp Repeat Rates and Contributing Factors_2005, Review of Quantifiler Implementation and Performance March 2005, Extended Internal Validation of the ABI 7000 Quantifiler System 19 April 2006, Extended Internal Validation of the ABI 7000 Quantifiler System 28 April 2006, Quantifiler System by Forensic Biology Extended internal prospective validation of the ABI PRISM(R)7000 Quantifiler system 20 July

129. The validation reports were written to document the experiments that had been undertaken, any further experiments that were undertaken and to ensure that all recommendations of ESR were covered off on.

Forensic Register

Question 67

*Who made the decision to implement the Forensic Register (**FR**) at the DNA laboratory?*

130. Queensland Health initiated a project to replace AUSLAB in October 2012. In February 2014, the Health Support Queensland Executive Board made the decision to split this project into two – one being a Pathology Laboratory Information System and a Forensic Information Management system. Greg Shaw, previous Senior Director of FSS and Kyle Gimpl, previous Commercial Director, FSS undertook an environmental scan which highlighted a number of available Laboratory Information Management Systems, including the QPS FR. A Technical Assessment of the FR was conducted in August 2014 by members of the Laboratory Information System project team. The outcome of this assessment was a recommendation that the FR was fit for purpose for Police Services Stream of FSS. Greg Shaw and Kyle Gimpl met with Assistant Commissioner Alistair Dawson, Operations Support Command QPS, regarding adoption of the FR and the QPS provided approval to move forward with utilising the FR for forensic purposes. Please see attached – Exhibit – **CA-78** [FAQ].

Question 68

If you made the decision, by what process and on what basis did you decide that QHFSS should implement the FR? Include a timeline of actions taken.

131. I did not make the decision regarding the FR.

Question 69

If you did not make the decision, outline your understanding of the process and on what basis it was decided that QHFSS should implement the FR? Include a timeline of actions taken.

132. Please see response in question 67.

138. The completed and signed off documents for FRIP would be held on corporate file within Queensland Health.

Question 73

What training was provided to DNA Analysis Team following the implementation of the FR?

139. The Scientific Skills Development Unit provided overview training of the Forensic Register and this was followed by a number of training sessions led by Subject Matter Experts from Forensic DNA Analysis. Staff members completed Training Modules and were deemed competent to undertake tasks in the FR.

Question 74

Outline any concerns/issues you had with the previous information system used by the laboratory (AUSLAB)?

140. AUSLAB was patient focussed laboratory information system and this meant that several fields related to patients, rather than being forensic focussed. This meant that training of new staff members took longer as they needed to understand the pathology fields and how forensic areas used them. Changes for forensic areas within AUSLAB often took a long time, sometimes many months or years. It was difficult to extract data from AUSLAB and then could only be extracted in limited formats. AUSLAB required a scanning device to scan a document for inclusion in the casefile. Whilst a large number of forensic features had been added to AUSLAB, it was reaching its limit in being able to include more forensic features such as cross-checking crime scene profiles against the Staff Elimination Database. Due to the limitations of AUSLAB or the lengthy time for enhancements to be undertaken, most forensic work units created work-around solutions which meant that additional software programs were required and created some inefficiencies.

Question 75

When was the most recent version of the FR implemented at the laboratory?

141. The commercial version of the FR was implemented on 30 April 2022.

142. Change management project #235 was undertaken for the implementation of the commercial version of the FR. Please see attached – Exhibit – **CA-79** [project #235]

Question 78

If a staff member wishes to collate data or results from the FR, what actions must be undertaken? Is approval required?

148. A request is provided to Lara Keller, Acting Executive Director to authorise for data collation from the FR. A quote may be requested to undertake this package of work.

Sexual Assault Investigation Kits (SAIKs)

Question 79

*For which agencies or organisations does the Forensic and Scientific Services **(FSS)** DNA Analysis Unit conduct forensic DNA testing of samples obtained by using a sexual assault investigation kit **(SAIK)**?*

149. Forensic DNA Analysis analyses sexual assault investigation kits (SAIKs) submitted by QPS.

Question 80

Did the DNA Analysis Unit design the current SAIK model used in Queensland?

(a) *if yes, when was the current model designed?*

(b) *if no, identify who designed or determined the contents of the current SAIK model. Detail the input the DNA Analysis Unit had into that process.*

150. Change management project #114 details the change process and consultation undertaken for the SAIKs which began in July 2012. Adrian Pippia, then Acting Senior Scientist was the project leader. Consultation was undertaken with Dr Adam Griffin, Director of the Clinical Forensic Medicine Unit on the constituents of the SAIKs.

Question 81

Do you consider the current components of a SAIK to be adequate for forensic DNA testing? Do you consider the current components of a SAIK permit the best quality biological samples to be taken?

151. I consider that the current components of a SAIK to be adequate for forensic DNA testing.

(b) *if no, what agency or organisation produces the just-in-case SAIKs?*

158. Laboratory Assistants within Forensic DNA Analysis compile the Just In Case SAIKs.

159. Standard Operating Procedure called Configuration of SAIKS (Sexual Assault Investigation Kits describes the configuration of the kits and lists the consumables. Please see attached – Exhibit – **CA-82** [17151v14].

Question 85

Do you provide just-in-case SAIKs to QPS and/or other agencies? If yes, detail which agencies. If they are provided to QPS – are the just-in-case SAIKs provided to QPS officers state-wide, or only for QPS officers in certain regions?

160. Just In Case SAIKs are supplied to Queensland Health Pathology Queensland laboratories across the state. When required, Pathology Queensland staff supply a Just In Case SAIK to medical practitioners to undertake the procedure.

Question 86

To your knowledge, does the SAIK and the just-in-case SAIK contain equipment that is designed to take a reference sample? For the purposes of quality forensic testing, do you have a preference that the reference sample be included and taken with the rest of the SAIK, or be done entirely separately?

161. The SAIK and Just In Case SAIK do not contain consumables for the purpose of taking a reference sample.

162. The submission of a timely reference sample is beneficial for reporting of results to QPS. Given recent recommendations from the Women's Safety and Justice Taskforce, considerations should be made regarding the most appropriate opportunity for this sample to be taken from the victim-survivor and I will be guided by medical advice regarding this.

163. It is my preference that the reference sample remains external to the SAIK packaging to ensure that the SAIK is not compromised if the packaging is opened to retrieve the reference sample at Forensic Property Point.

87 – 'Project 9 – Report on the Evaluation of Commercial DNA Extraction Chemistries'.

170. The laboratory undertook a project to validate a manual method of extracting DNA using the Promega DNA IQ system. This validation recommended that the manual DNA IQ protocol should be used for cell and blood samples. Please see attached – Exhibit – **CA-88** – 'Project 11 Validation of Extraction Chemistry report v1.0'

171. Verification of an Automated Promega DNA IQ Protocol on an automated platform was undertaken. This automated protocol was designed to mimic the validated manual method with minor modifications. Please see attached – Exhibit – **CA-89** – 'Project 13 – Report on the Verification of an Automated DNA IQ Protocol using the MultiPROBE II PLUS HT EX with Gripper Integration Platform'.

Question 89

Explain what problems with DNAIQ were experienced in approximately 2008. Explain, to the best of your knowledge, how these problems were first detected.

172. An issue regarding DNAIQ was first discussed at the Forensic DNA Analysis Management Team meeting on 10 April 2008. Allan McNevin raised a discussion topic (Item 3.8). Please see attached – Exhibit – **CA-90** [minutes 10 Apr 2008].

173. Please see the attached timeline for an overview of how the issues were detected. Exhibit – **CA-91** [DNA IQ timeline 12-11-2008_copy]. Please see attached – Exhibit – **CA-92** [Memo referred to in timeline].

174. Please see the attached draft report for an additional overview of the issues detected – Exhibit – **CA-93** [OQI report v0.4]. I am unable to access OQI #20615 as this is marked Private in the QIS2 system. No records were found in QIS2 system for OQI #22880.

Question 90

Identify each OQI and adverse event that relates to DNAIQ problems at around this time, or has since been linked to DNAIQ problems from around this time.

175. Please see the attached timeline for an overview of OQIs relating to issues identified. Exhibit – **CA-91** [DNA IQ timeline 12-11-2008_copy].

and submission. Please find attached – Exhibit – **CA-100** [ED Briefing_Extraction Issues_220908].

183. Legal advice was requested and engagement with Crown Law was undertaken. Requests for advice were issued from Greg Shaw's office and attempts to locate such documents have been unsuccessful.

184. Greg Shaw and I met with the Office of the Director of Public Prosecutions (ODPP) staff on 4 December 2008 to brief them regarding the issue. Greg Shaw confirmed the outcome of the meeting in a letter to ODPP, dated 9 January 2008 (sic). Please see attached – Exhibit – **CA-101** [Letter to DPP_Dec 2008].

185. On 19 December 2008, Greg Shaw received a letter from Rob Hutchings, Assistant Crown Solicitor providing an overview of joint opinion from Solicitor-General Walter Sofronoff QC and Mr Peter Davis SC. The letter included a copy of a Memorandum of Advice relating to the disclosure of adverse results. Please see attached – Exhibit – **CA-102** [Letter from Crown Law & Opinion from Solicitor General].

186. Upon legal advice, statements were re-issued with appropriate wording. Please find attached – Exhibit – **CA-103** [statements containing IQ samples].

Question 92

Was the cause of the issues or problems relating to DNAIQ identified? If yes, what was it?

187. The root causes for the issue were identified as one or a combination of the following - automated platform programming (Perkin Elmer MPII platform), automated platform syringe wear and tear, inappropriate seal used to cover a consumable, well to well seepage on the plate. Please see attached – **CA-96** [powerpoint Update 15122008_Crown Law].

Question 93

What immediate action was taken after the cause of the issues or problems was identified?

188. Once the issue had been isolated to the extraction automated platform, its use was ceased on 28 July 2008 and the laboratory reverted to extraction method used immediately prior to the implementation of the automated platforms.

192. Change Management Project #56 was conducted to provide additional experiments and procedures for the re-implementation of the automated DNAIQ process. Please see attached – Exhibit – **CA-120**.

Question 98

Explain what communications were made to external agencies, including the Queensland Police Service, the Office of the Director of Public Prosecutions, and the Queensland Courts, about the problems with DNAIQ and when the communications were made. Attach copies of any emails or letters sent to the external agencies.

193. Please see response to question 91.

Question 99

Did the DNAIQ problems lead to the retraction or amendment of results in these cases?

194. Upon legal advice, samples that were affected by the issue and had been reported in a statement were re-issued with appropriate clarification. Please see attached – Exhibit – **CA-102** [Letter from Crown Law & Opinion from Solicitor General].

Question 100

Has the DNA laboratory since returned to using DNAIQ processes, systems and/or products? Explain all further problems in detail, including what has been done in response to them. Attach any OQI's, Adverse Entry Logs or record of the problem being identified and investigated.

195. On 22 June 2009, a manual procedure for DNA IQ Extraction of DNA was implemented for casework samples (with the exception of Differential Lysis, Hair and Semen extractions). Please see attached – Exhibit – **CA-121** [Change Register – Minor Changes and emerging or novel practices].

196. On 20 August 2009, an automated procedure for DNA IQ Extraction of DNA was implemented for volume crime scene samples. The format for processing samples was in a checkerboard format.