

Forensic Biology/DNA Laboratory
Forensic & Analytical Science Service
PO Box 162 Lidcombe, NSW 1825



**Health
Pathology**

In the matter of: Special Commission of Inquiry into LGBTIQ hate crimes – alleged murder of Kenneth BRENNAN

Date: 27th September 2023

Name: David BRUCE

Occupation: Senior Forensic Biologist, Forensic Biology/DNA at
NSW Health Pathology Forensic & Analytical Science Service

Address: C/- 480 Weeroona Road, Lidcombe NSW 2141

- 1 This statement made by me accurately sets out the evidence that I would be prepared, if necessary, to give in court as a witness. The statement is true to the best of my knowledge and belief and I make it knowing that, if it is tendered in evidence, I will be liable to prosecution if I have wilfully stated in it anything that I know to be false, or do not believe to be true.
- 2 My scientific qualifications are Bachelor of Science from the University of Sydney, a Postgraduate Diploma in Clinical Science from Riverina College of Advanced Education and a Doctor of Philosophy from the Open University, United Kingdom.
- 3 The questions contained in the letter from the Special Commission of Inquiry into LGBTIQ hate crimes, dated 19th September 2023, together with my response, are set out below.

In what years were condoms 1 and 2 tested by FASS? In particular, were condoms 1 and 2 tested in 2016/2017?

- 4 The condoms, numbered 1 and 2 by Police, were originally examined at FASS on the 29th August 1995 and samples taken from each of the condoms were DNA tested (DQAlpha) on the 6th September 1995. The same condoms were resubmitted to FASS on the 15th of March 2016 and examined and sampled on the 15th April 2016. DNA testing using a different DNA typing kit (PowerPlex 21) was carried out on these samples in 2016. In addition, further DNA testing using PowerPlex 21 was carried out in 2016 on the DNA extracts from the condoms which were tested using DQAlpha in 1995. The DNA extracts had been stored in the freezer archives since 1995.



If condoms 1 and 2 were tested in 2016/2017:

- ***please indicate the results of the 2016/2017 tests;***
- 5 DNA was not detected on the samples taken from the resubmitted condoms 1 and 2 in 2016 (DNA profiling was not carried out due to the low levels of DNA that may be present and the low chance of obtaining a profile suitable for interpretation). The further testing using the PowerPlex 21 typing kit in 2016, using the stored DNA extracts from the 1995 DQAlpha testing of the condoms, produced DNA profiles which were too weak for interpretation.
- ***and indicate in what way (if any), the 2016/2017 tests produced different results from the results referred to in your expert certificate dated 8 September 2023 (2023 results), and the reasons for those differences.***
- 6 DNA testing in 2023 was carried out on the stored DNA extracts from the original testing of the condoms in 1995 (previously tested using the DQAlpha testing kit) and a stored sample from the inside of condom no. 2 (taken in 1995). These DNA extracts were tested initially in 2016 using PowerPlex 21 with the standard 29 cycle amplification protocol and the DNA profiles recovered from this testing were too weak for interpretation. The DNA testing carried out in August 2023 used an enhanced 30 cycle amplification protocol with PowerPlex 21 in an attempt to enhance the DNA profile result. The latter results are reported in the Statement dated 8th September 2023.

If condoms 1 and 2 were not tested in 2016/2017, please indicate whether the 2023 results would have been able to be obtained in 2016/2017 had testing in 2016/2017 been carried out.

- 7 It is unlikely that any improvement in the result from the resubmitted condoms sampled in 2016 would have been obtained in 2023. However, the results that were obtained in 2023 from the stored 1995 DNA extracts could have possibly been obtained in 2016 if the 30 cycle amplification protocol for PowerPlex 21 had been used at that time.

As at September 2023, is it standard practice for the data within each state/territory DNA database to be uploaded to the National Criminal Investigation DNA Database (NCIDD system) or any other national database? If not, please outline the steps that the Inquiry should take to ensure a specific DNA profile has been checked against each state/territory DNA database.

- 8 DNA profiles obtained from evidence items in criminal investigations which meet a certain quality threshold are uploaded and searched continuously on both the NSW and NCIDD databases against other crime scene DNA profiles and reference samples from convicted offenders, suspects and unlimited volunteers. NCIDD includes convicted offender and suspect reference DNA profiles from all of the Australian States and Territories with searching in accordance with each jurisdiction's legislation and policy.



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Does FASS have access to DNA databases within New Zealand? If not, please outline the steps that the Inquiry should take to ensure a specific DNA profile has been checked against any existing New Zealand DNA database.

- 9 FASS does not have access to New Zealand DNA databases (they are not included on NCIDD). Searches against International DNA databases can be arranged via Interpol by the NSW Police Force DNA Management Unit.

If possible, please identify the medium (i.e. blood, semen, saliva etc) of each of the DNA profiles referred to at: (a) item 36i; and (b) item 37ii of paragraph 4 of your expert certificate dated 8 September 2023.

- 10 The 1995 examination of the condoms indicated that a single sperm head was detected on the outside of item 36 (condom no.1) and a possible sperm head was detected on the outside of item 37 (condom no. 2). This result would suggest that semen may have been present on these items; however, it would be difficult to state categorically that semen is the actual source of the DNA recovered from the condoms rather than that it is a possible source. Testing for blood or saliva was not carried out on the condoms; therefore, the possible presence of these biological fluids on the items was not determined. Brown staining was noted on the surface of the condoms when they were initially examined in 1995.

Signature: _____

A handwritten signature in black ink, appearing to be 'J. White', written over a horizontal line.

Date: 27th September 2023