



Final Report (December 2018)

Proficiencytesting@forensicfoundations

Biological Examination and DNA Analysis 2018-3

Authorised by Anna Davey, Director, Forensic Foundations,
18/12/2018.

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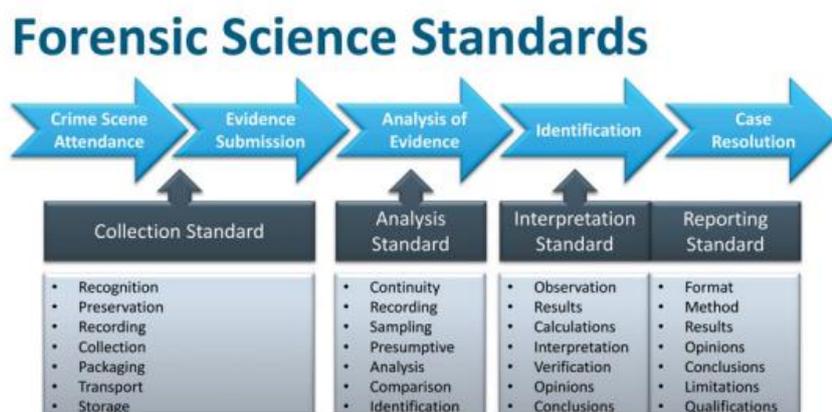
Introduction

Design

Forensic Foundations' Proficiency Tests are designed to address the following points

- Relevance to forensic science laboratories;
- Limitation of any potential context information;
- Knowledge of the 'ground truth' of samples;
- Importance of consistency between tests; and
- Cost affordability for the laboratories.

An additional feature of Forensic Foundations' Proficiency Tests is that they test the end-to-end forensic examination process. The AS 5388 Forensic Analysis series of Standards describes the forensic examination process from collection to reporting. The following figure¹ illustrates the inter-relatedness of all steps in this process and was used as the basis of the Standards' development. The figure is also used as the basis in the development of Forensic Foundations' Proficiency Tests. Thus, all Forensic Foundations' Proficiency Tests commence with item collection and/or receipt and all the subsequent examination / analysis steps, culminating in the reporting reflects actual forensic casework. NATA states 'PT samples/items should be handled in the same way as routine casework as far as practicable. The facility's routine test procedures must be used.'²



All Forensic Foundations' Proficiency Tests are ISO 17043 compliant. These requirements include a mechanism for participating laboratories to request a review and/or lodge an appeal regarding the evaluation of their performance. With respect to this test, a request for review:

- from Australian laboratories should be forwarded to ANZPAA|NIFS for transmission to Forensic Foundations; or
- From all other laboratories should be forwarded directly to Forensic Foundations.

The Final Reports of this 2018 round of Proficiency Tests will be publicly available via Forensic Foundations web site. Participating laboratories may use the report as outlined in their respective laboratory policies.

¹ James Robertson, Karl Kent & Linzi Wilson-Wilde (2013) The Development of a Core Forensic Standards Framework for Australia, Forensic Science Policy & Management: An International Journal, 4:3-4, 59-67

² NATA (2018) ISO/IEC 17025 Application Document. Legal (including Forensic Science) - Appendix

Biological Examination and DNA Analysis 2018-3

Three laboratories were involved in this round of testing.

Two laboratories undertook the full forensic biological examination and DNA Analysis test.

One pathology laboratory undertook a modified test using the same test items.

The manufacture, distribution, assessment and reporting of this proficiency test has provided, and will provide, the basis for continuous improvement for both Forensic Foundations and the participating laboratories.

In addition to interpreting the results from known and unknown biological samples, testing generic issues such as receipt, triage and continuity of items for examination also formed part of the overall process.

In order to remove contextual bias in the interpretation, the participants were given no information regarding the source of the reference samples.

Laboratory Responses

Continuity, receipt and description of items

Laboratory 96150 gave a full description of the packaging, item description upon initial receipt and throughout the various stages of their testing.

For example:

“All items were received in labelled plastic tamper proof bags with seals intact. Items 1-5 were not signed or dated. Item 6 is signed and dated by S/C BROWN of the Eastern Australia Police Force’

The case notes record that the items were received sealed and that the exhibit identifiers match the Police paperwork. The report includes a detailed description of each item and when necessary a photograph with scale.

The description provided by Laboratory 96150 concurs with the packaging, labelling and samples as distributed.

Laboratory 16473 gave a limited description of the initial packaging. The description of the contents did not mention that each item was received in separate sealed tamper evident bags nor were any continuity details recorded.

The report includes a photographic record (with a scale) of each item.

The limited description provided by Laboratory 16473 concurs with the packaging, and samples as distributed.

Note: Laboratory 16473 did not include the test/laboratory number (16473) on any of the paperwork.

Pathology Laboratory 1, not being a forensic laboratory was not asked for, and therefore, did not report on the details of the packaging, however the date of receipt and description of the items, as received, was reported.

The description provided by Pathology Laboratory concurs with the labelling and samples as distributed.

Case Analysis

Laboratory 96150

A small portion of the staining (~ 4 x 4 mm) from Items 1 – 5 (Reference samples) were excised and forwarded for DNA profiling using PowerPlex 21.

5 stains (A – E) from Item 6 were examined.

Stain A was KM positive

Stain B was KM & Hematrace positive

Stain C was KM positive

Stain D was KM positive

Stain E was KM positive

Swabs from Stains A – E were forwarded for DNA profiling using PowerPlex 21.

The results are recorded in the attached tables. The results obtained from Laboratory 96150 concur with the pretesting results

Laboratory 16473

Items 1, 2, 3 & 5 (Reference samples) were profiled using RapidHit 200.

Item 4 (Reference sample) was profiled using RapidHit 200 and GA 3130.

No presumptive or confirmatory tests for blood were reported.

No indication of the method of collection from the stains (i.e. tape lift, swab, excision) was given.

13 stains were profiled from Item 6.

Stains 1 & 3 were profiled using RapidHit 200 and GA 3130.

Stains 2, 4-13 were profiled with RapidHit 200

The results are recorded in the attached tables.

Reference sample, Item 4 Lab reference 3932 was profiled using both RapidHit 200 and GA 3130. At locus D13S317 the pretesting profile and the profile obtained by the RapidHit 200 system was 8,11. However, the reported profile using QA 3130 was 12, 12.

Reference sample, Item 5 Lab reference 3933 was profiled using both RapidHit 200. At locus SE33 the pretesting profile was 15, 32.2. However, the reported profile using from Laboratory 16472 was 15, 15. The remainder of the results obtained from Laboratory 16473 concur with the pretesting results

Pathology Laboratory

Samples from 5 EDTA tubes were profiled using Identifier.

Initially, the laboratory did not report the DNA profiles however the results reported concurred with the expected match / no match results. Following the receipt of Manufacture's Information, the laboratory noted a discrepancy in their typing results.

In Sample 3 (equivalent to Item 2 above) at the locus D3S1358 the pretesting profile was 17, 20, whilst the profile obtain by the laboratory was 17, 20.1.

Interpretation and Conclusions (please include the wording you would use in your report)

Laboratory 96150

EXHIBITS RECEIVED, ITEM EXAMINATION AND FINDINGS

This report includes DNA profiling results from the following DNA profiling kit: PowerPlex 21.
Please refer to the Abbreviations list for terminology used in this report.

If a named individual was compared to a DNA profile and cannot be excluded as the donor/a possible contributor, two competing hypotheses are evaluated in order to determine the significance of this finding:

H1: <named individual> is the donor of, or is a contributor to, the DNA evidence, rather than an *unknown individual* randomly chosen from the Australian population.

H2: <named individual> is **not** the donor of, or a contributor to, the DNA evidence and instead the DNA evidence has originated from an *unknown individual* randomly chosen from the Australian population.

The probability of the evidence given each of these possibilities can be calculated and expressed as a likelihood ratio.

Statistics favouring H1 are reported below.

Statistics favouring H2 can be provided upon request.

Item Description	DNA Result	Individual Compared	Comments/Interpretation	Statistical Weighting
Item 1 – Reference sample				
<i>Blood sample</i>	SSP	Suspect 1	Used as the reference DNA profile for Suspect 1.	
Item 2 – Reference sample				
<i>Blood sample</i>	SSP	Suspect 2	Used as the reference DNA profile for Suspect 2.	
Item 3 – Reference sample				
<i>Blood sample</i>	SSP	Suspect 3	Used as the reference DNA profile for Suspect 3.	
Item 4 – Reference sample				
<i>Blood sample</i>	SSP	Suspect 4	Used as the reference DNA profile for Suspect 4.	
Item 5 – Reference sample				
<i>Blood sample</i>	SSP	Suspect 5	Used as the reference DNA profile for Suspect 5.	
Item 6 – Carpet				
Stain A <i>KM: Positive</i>	SSP	Suspect 4	SSP matched Suspect 4. H1: Suspect 4 is the donor. H2: Suspect 4 is not the donor.	>100 billion in favour of H1
Stain B <i>KM: Positive</i> <i>HemaTrace: Positive</i>	SSP	Suspect 3	SSP matched Suspect 3. H1: Suspect 3 is the donor. H2: Suspect 3 is not the donor.	>100 billion in favour of H1

Date: 27 September 2018

Page 1 of 2

Item Description	DNA Result	Individual Compared	Comments/Interpretation	Statistical Weighting
Stain C <i>KM: Positive</i>	SSP	Suspect 4	SSP matched Suspect 4. H1: Suspect 4 is the donor. H2: Suspect 4 is not the donor.	>100 billion in favour of H1
Stain D <i>KM: Positive</i>	SSP	Suspect 2	SSP matched Suspect 2. H1: Suspect 2 is the donor. H2: Suspect 2 is not the donor.	>100 billion in favour of H1
Stain E <i>KM: Positive</i>	SSP	Suspect 2	SSP matched Suspect 2. H1: Suspect 2 is the donor. H2: Suspect 2 is not the donor.	>100 billion in favour of H1
Additional red/brown staining <i>KM: Positive</i>	NS			

ABBREVIATIONS

Hematrace - A confirmatory test for the presence of human blood.

KM - Kastle-Meyer (KM) is a presumptive chemical test for blood.

NS - Not sampled.

SSP - A single source DNA profile was recovered. The DNA profile recovered is assumed to have originated from one individual.

Laboratory 16473

CONCLUSION

1. Evidence number **3929/2018/KBF,- (suspect # 1)** : A full DNA profile was obtained, and the gender was identified as female (X,X).
2. Evidence number **3930/2018/KBF,- (suspect # 2), 3931/2018/KBF,- (suspect # 3), 3932/2018/KBF,- (suspect # 4) and 3933/2018/KBF,- (suspect # 5)** : Full DNA profiles were obtained, and the genders were identified as male (X,Y).
3. Evidence number **3934/2018/KBF,- (carpet cut-out)** :
 - a. There were 13 (thirteen) blood stains (Picture 3).
 - b. The blood stain on number 1 was identical to suspect # 3.
 - c. The blood stains on numbers 2, 5, 9, 10, 11, 12 and 13 were identical to suspect # 2.
 - d. The blood stain on number 3 was identical to suspects # 2 and # 4.
 - e. The blood stains on numbers 4, 6, 7 and 8 were identical to suspect # 4.
 - f. There were no blood stains belonged to suspects # 1 and # 5
4. The examinations were carried out using Rapid HIT 200 and GA 3130 instruments, and the results from both were identical

Pathology Laboratory

Summary:

The STR profiles obtained from DNA extracted from EDTA blood labelled **Item 1' (our reference 18-190-06777)** and EDTA blood sample labelled **'Item 2' (our reference 18-190-06846)** were concordant at 15 out of 15 informative loci.

This result indicates that these two specimens came from the same individual or from two genetically identical individuals.

Summary:

The STR profiles obtained from DNA extracted from EDTA blood labelled **Item 1' (our reference 18-190-06777)** and EDTA blood sample labelled **'Item 2' (our reference 18-190-06846)** were concordant at 15 out of 15 informative loci.

This result indicates that these two specimens came from the same individual or from two genetically identical individuals.

Summary:

The STR profile obtained from DNA extracted from EDTA blood sample labelled '**Item 3**' (our reference **18-190-06898**) was discordant with the other samples tested from this batch.

This result indicates that this sample did not originate from the same individual as the other blood specimens received for analysis.

Summary:

The STR profiles obtained from DNA extracted from EDTA blood labelled '**Item 4**' (our reference **18-190-06950**) and EDTA blood sample labelled '**Item 5**' (our reference **18-190-06995**) were concordant at 15 out of 15 informative loci.

This result indicates that these two specimens came from the same individual or from two genetically identical individuals.

Summary:

The STR profiles obtained from DNA extracted from EDTA blood labelled '**Item 4**' (our reference **18-190-06950**) and EDTA blood sample labelled '**Item 5**' (our reference **18-190-06995**) were concordant at 15 out of 15 informative loci.

This result indicates that these two specimens came from the same individual or from two genetically identical individuals.

Conclusion and Summary of the Test

The aim of this test was to examine the end-to-end forensic examination and analysis process. To minimise extraneous elements influencing the interpretation, limited contextual information was provided to the participating laboratories.

Items were sealed in tamper evident bags and included descriptors for continuity purposes.

The Forensic Science laboratories were provided with 5 reference blood samples and 1 item for examination – a piece of carpet with 13 blood stains.

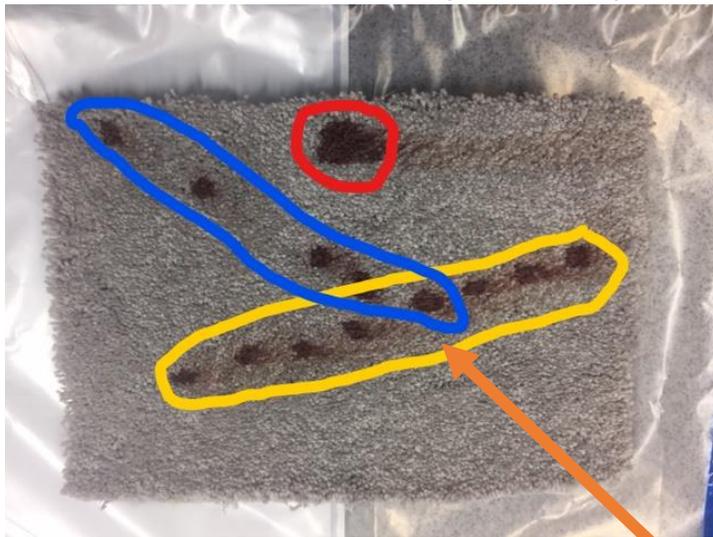


Figure 1

The deposit of the stains is demonstrated in Figure 1.

The stain indicated by the red marking corresponded to Reference sample 3.

The stain indicated by the blue marking corresponded to Reference sample 4.

The stain indicated by the yellow marking corresponded to Reference sample 2.

Note the stain indicated by the orange arrow contain equal volumes of blood corresponding to Reference samples 2 and 4.

The Pathology laboratory was provided with 5 blood samples in EDTA vacutainer tubes. Items 1 and 2 were sourced from the one donor. Items 4 and 5 were sourced from a second donor. Item 3 was sourced from a third donor.

Comments To Test Recipients

Laboratory 96150 and the Pathology laboratory correctly recorded the packaging in a manner that traceability could be achieved. Laboratory 16473 did not report on the recording of the intermediary packaging i.e. they reported on the external packaging and the final contents but not details regarding the tamper evident bags nor the continuity details.

All participants correctly linked the correct samples.

Laboratory 96150 appears to have sampled the ends and the middle of the blood 'trails' and thus did not sample the mixed stain.

Laboratory 16473 reported two incorrect DNA genotypes:

- Sample 3933 was reported as SE33 15,15 rather than 15, 32.2;

- Sample 3982 was correctly reported at D13S317 to be 8,12 using RapidHit 200 but incorrectly reported as 12,12 using GA3130.

The discrepancy reported by the Pathology laboratory regarding the genotype at D3S1358 in reference Sample 2 / Sample 3 is currently under investigation by ThermoFisher.

Neither Laboratory 16473 nor the Pathology laboratory used a statistical weighting in their reporting.

Laboratory 96150 reported their results using a likelihood ratio. The two competing hypotheses used were clearly stated.

APPENDIX A**Form No: WEF-03-A****Proficiencytesting@forensicfoundations****PROGRAM PLAN**

Program	Biological examination and DNA interpretation		
Round	2018-3		
Advisory Group			
Program Coordinator	Mrs Anna Davey Director, Forensic Foundations PO Box 2279 North Ringwood, 3134		
Discipline specific expert(s)	Dr Henry Roberts c/- Forensic Foundations PO Box 2279 North Ringwood, 3134		
Supplier(s)	Initial sample preparation collection & test production. Results interpretation.	Blood supplies	DNA profiling
	Forensic Foundations PO Box 2279 North Ringwood, Victoria 3134	Australian Red Cross Blood Service 100 - 154 Batman St, West Melbourne, Vic 3003	DNALabs Level 1, 14 Giffnock Ave Macquarie Park NSW 2113
Aims/Objectives	The aim of the program is to assess the laboratories' ability to competently locate, and analyse biological material and to correctly interpret DNA profiles		
Purpose	To assist the laboratories by ensuring their methods/procedures are performing adequately.		
Program Design			
Tests	>5		
Number of samples	6		
Type of sample	1 x sample of carpet with blood staining 5 x reference blood samples.		
Levels	The biological samples will be placed on the carpet in known positions (using a mask) and of varying quantity. Some of the samples will be overlapping. Only three donor samples will be used on the carpet.		
Range of values/assigned values	The expected answers in the examination phase are binary. The samples will be located or not located. The profiles obtain from those samples should match the relevant reference samples. For smaller deposits, a partial profile may be expected. A mixed profile should be obtained from one sample.		

Traceability/origin of assigned values	<ol style="list-style-type: none"> 1. Identification of biological material recorded upon collection. 2. DNA extracted from FTA cards/swabs by DNALabs – continuity maintained. DNA profile obtained and independently interpreted by two individuals. 3. Placement of deposits will be conducted by one individual and checked by a second individual.
Methods	Sample location may be undertaken by a range of presumptive and confirmatory tests. Sample collected may be undertaken by tape lifting or excision. DNA Profiles will be obtained following extraction, quantitation, amplification and electrophoresis. Interpretation will be conducted using standard laboratory protocols.
Design	Blood samples will be obtained from non-related donors at the Australian Red Cross Blood Service. Carpet will be new and unlaied. Blood samples will be deposited on the carpet using a mask.
Selection Criteria	Samples to be placed on the carpet will be randomly assigned.
Potential Major Sources of Error	Failure to located biological material. Failure to correctly obtain and interpret the DNA profiles.
Participants	Forensic Biology laboratories in Australia and overseas.
Reporting Criteria, Accuracy	NA
Analysis	Correctly located blood deposits and identify possible contributors.

Pre-testing	
Homogeneity Testing	Blood samples will be agitated before sampling. Deposits on the carpet will be made with the use of a mask. Duplicate samples retained, for subsequent homogeneity/repeatability checking if required.
Stability Testing	NA – Dried blood is stable for long periods if store dry.
Homogeneity/Stability Acceptance Criteria	NA
Technical Review (internal)	
Participant Instructions	Provide copy of Instructions and evidence of Technical Review
Results Sheet	Provide copy of Results Sheet and evidence of Technical Review
Report	Include copy of Report and evidence of Technical Review

Sample Preparation	
Storage requirements	Liquid blood samples will need to be stored at 4°C for short term storage and -20°C for longer periods. ?
Distribution requirements	Distributed via Forensic Foundations
Sample checks	NA
Sample Identification	NA
Program Dates	
Invitation letter	17 January 2018

Sample distribution	August 2018
Results due	October 2018
Manufacturing Information to be sent	November 2018
Final report due date	December 2018
Statistical Analysis	
Homogeneity Testing	NA
Stability Testing	NA
Data Entry	Include evidence of data entry checks in file
Normality	NA
Review by Statistician	NA
Reporting	
Report No:	2018-3
Master copy	Reports folder
Availability	Website

Program Coordinator signature: Anna Davey

Date: | 31/1/2018 |

Samples produced on: 3/7/2018

Samples produced by: | BJD (FTA cards), KAD (Carpet) |

Checked by: | KAD & BJD |

Samples packed on: 5/7/2018

Samples packed by: | KAD |

Checked by: | BJD |

Result data input by: | KAD |

Data checked by: | DGP |

Statistics and report collated by: | KAD |

Report checked by: | DGP |

APPENDIX B

3/2018
Test xxxx



Proficiencytesting@forensicfoundations **Biological Examination and DNA** **3/2018**

Thank you for participating in this Proficiency Test. We hope that you find this test useful and welcome any feedback which can be used in the design of further tests.

In addition to this exercise being a test of your laboratory procedures using controlled items, we also anticipate that it will enable participants to evaluate the quality of their analytical results against those from other laboratories and observe how other laboratories express their opinions or advice to clients. To enable this, we request that participants submit the following:

- An outline of the methodology used; and
- Their opinion in the format that they would provide to court.

Attached you will find the case 'Examination Request and Item Submission' form and the test commences with the receipt of the items followed by your routine processes - item description, examination, analysis and interpretation. The information submitted to the laboratory on the examination request form will direct what testing needs to be undertaken. Please use the attached results sheets. Additional pages may be added if required.

The attached results sheets should be returned to Forensic Foundations by 5th October 2018.

Qualitative feedback will be provided to participants. Feedback will be both participant-specific (i.e., whether a particular laboratory "got the right answer") and group specific (e.g., which techniques seemed to perform better than others).

Following the conclusion of the testing participants will be advised of the expected results and details regarding the production of the test.

APPENDIX C

PROFICIENCY TESTING @ FORENSIC FOUNDATIONS	
<p>EXAMINATION REQUEST AND ITEM SUBMISSION</p>	 <p>forensic FOUNDATIONS™ ISO 9001 certified</p>

OFFENCE:	Serious Assault
DATE OF OFFENCE	20/01/2018
BRIEF STATEMENT OF FACTS	
<p>A disturbance occurred in newly built house. The house had been painted and carpeted ready for occupancy.</p> <p>Neighbours reported the disturbance and police attended. A number (3-5 depending on the witness interviewed) of individuals were seen fleeing the scene.</p> <p>Upon examination, what appeared to be blood staining was located on the carpet in the lounge room. The area of carpet was excised.</p>	
ITEM SUBMITTED FOR EXAMINATION	
<p>Item 1 – blood sample from suspect 1 Item 2 – blood sample from suspect 2 Item 3 – blood sample from suspect 3 Item 4 – blood sample from suspect 4 Item 5 – blood sample from suspect 5 Item 6 – A piece of grey carpet with what appears to be blood staining.</p>	
EXAMINATION REQUESTED	
<p>The police have a number of suspects, however the suspects were identified partly because of their involvement with the final decorating of the house, thus their fingerprints and DNA could be legitimately found in the house. The police are hoping that the blood staining may match one or more of the suspects.</p>	

APPENDIX D



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PROFICIENCY TESTING @ FORENSIC FOUNDATIONS BIOLOGICAL EXAMINATION AND DNA INTERPRETATION

MANUFACTURER'S INFORMATION

Introduction

The test was designed to replicate bloodstains created as a result of an assault involving multiple bleeders.

Scenario

A disturbance occurred in a newly built house. The house had been painted and carpeted ready for occupancy.

Neighbours reported the disturbance and police attended. A number (3-5 depending on the witness interviewed) of individuals were seen fleeing the scene.

Upon examination, what appeared to be blood staining was located on the carpet in the lounge room. The area of carpet was excised.

Test production

The tests were produced in the School of Biosciences, University of Melbourne.

Blood

5 Units of whole blood from different donors were sourced from Red Cross Australia. The blood was used on the same day it was received. The Red Cross sample numbers were recorded, and each unit of blood was given a Forensic Foundations sample number (samples 1-5).



Blood was removed from the blood bag lines using a syringe and placed into labeled EDTA vacutainers for further manipulations. Transfers were checked by a second scientist.

Reference samples

Approximately 100ul of blood was pipetted onto FTA cards, using an uncalibrated micropipette. FTA Card Lot No: 16806498. Transfers were checked by a second scientist.

The FTA cards were labelled

Item 1 – blood sample from suspect 1

Item 2 – blood sample from suspect 2

Item 3 – blood sample from suspect 3

Item 4 – blood sample from suspect 4

Item 5 – blood sample from suspect 5

which corresponded to the Forensic Foundations' sample number.

Item of Interest

A roll of unused carpet was cut into A4 sized pieces.

Once piece was used to test the absorbency of blood into the carpet and the effect of smearing the blood stain.

3 different samples of blood were to be used create the staining on the carpet. Blood sample 2, 3 and 4 were randomly assigned.

Three masks were created – one for each blood sample, so that the placement of blood on the carpet was as close to identical as possible.

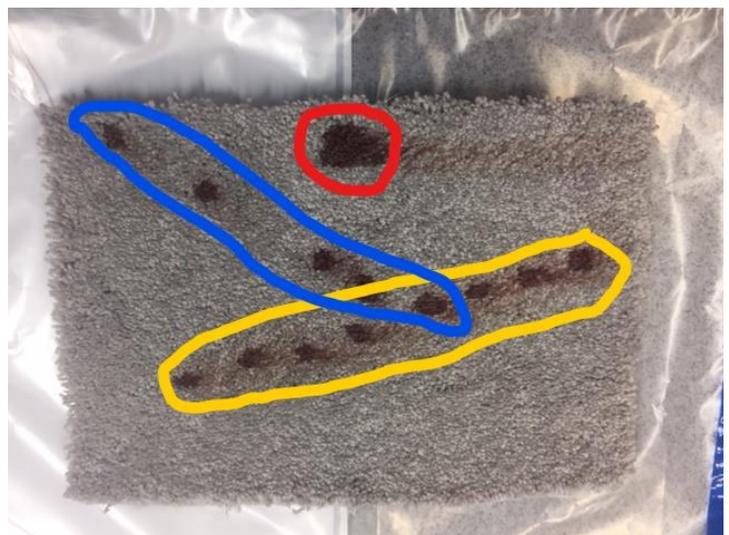
Each piece of carpet was treated in the following manner:

Blood sample 2:

The appropriate mask was placed on the carpet and 5 drops of blood (using a 1ml transfer pipette) were placed in each of 8 locations. The mask was removed, and the blood smeared. Shown in yellow.

Blood sample 4:

The appropriate mask was placed on the carpet and 5 drops of blood (using a 1ml transfer pipette) were placed in each of 5 locations. One location overlapped with one of the Sample 2 stains. The mask was removed, and the blood smeared. Shown in blue.



Blood sample 3:

The appropriate mask was placed on the carpet and 1ml of blood (using a 1ml transfer pipette) was placed in one location. The mask was removed, and the blood smeared. Shown in red.

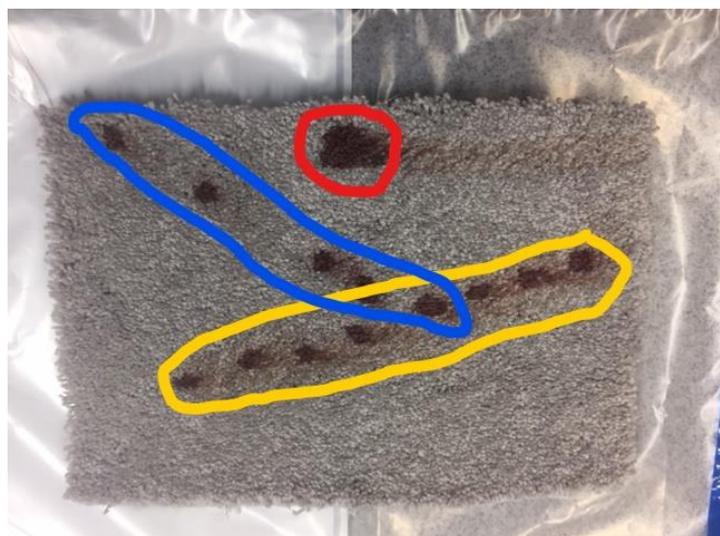
Final product

The final test comprised 5 FTA cards (Items 1-5) with reference blood stains and one piece of stained carpet (Item 6).

Expected results

The following results \pm results from other loci should have been obtained from the reference blood samples.

Sample	Item 1		Item 2		Item 3		Item 4		Item 5	
D3S1358	15	17	17	20	17	18	14	16	15	
vWA	17	19	15	17	16	18	14	16	16	18
D16S539	11	12	9	13	12		10	13	12	14
CSF1PO	10		9	10	11		10	12	12	
TPOX	9	12	8	12	8		9		8	11
Yindel			2		2		2		2	
AMEL	X		X	Y	X	Y	X	Y	X	Y
D8S1179	10	14	8	12	15	16	13		12	13
D21S11	29		31.2	33.2	28	32	28	30	31.2	33.2
D18S51	16		12	15	12	15	13	17	14	
DYS391			10		11		11		10	
D2S441	10	11	10	11	11		11	13	10	11
D19S433	13	14.2	13	14	10	14.2	14		12	13
TH01	7	9.3	6	7	6	9.3	6		9.3	
FGA	21	24	23		20	24	21	22	23	24
D22S1045	15	17	15		11	15	11	15	16	
D5S818	11		10	11	13	14	11	12	11	12
D13S317	11	12	11	12	8	12	8	12	11	12
D7S820	10	12	10	11	8	12	10		10	
SE33	27.2		27.2	29.2	26.2	32.2	20	27.2	15	32.2
D10S1248	14	16	13	17	13	14	13	15	13	14
D1S1656	14	17.3	15	17.3	11	13	12	17	12	17.3
D12S391	18	20	22		16	17	19.3	20	17.3	19.3
D2S1338	17	22	17	24	18	23	22	25	17	24



The blood stains on the carpet should match the relevant donor with the exception of the mixed stain which should indicate a mixture which is consistent with originating from both suspect 2 and suspect 4.

END of REPORT

Biological examination and DNA Analysis 2018-3 Feedback

Forensic Foundations prides itself in providing flexible fit-for-purpose forensic programs. This Challenge Test was the second developed by Forensic Foundations and thus the second undertaken by forensic laboratories. The manufacture, distribution and assessment and reporting of this test has provided, and will provide the basis for continuous improvement for both Forensic Foundations and the forensic laboratories. To this end we would appreciate your comments to assist us to improve the tests.

Please tick the appropriate box and make any relevant comments.

	Strongly Agree	Agree	Disagree	Strongly Disagree	NA
1. The test was too basic for our facility	<input type="checkbox"/>				
.....					
.....					
.....					
2. The samples supplied were suitable	<input type="checkbox"/>				
.....					
.....					
.....					
3. The results required were not outlined sufficiently	<input type="checkbox"/>				
.....					
.....					
.....					
4. The final report provided suitable detail	<input type="checkbox"/>				
.....					
.....					
.....					
5. The tests involved should be more challenging	<input type="checkbox"/>				
.....					
.....					
.....					

Please comment briefly on the following:

6. Are there additional aspects which could be included in the test?

.....
.....
.....
.....

.....

7. Any additional comments

.....
.....
.....
.....

.....

8. Facility (optional)

.....
.....
.....
.....

.....

9. Would you like us to contact you to discuss your feedback?

.....
.....
.....
.....



Forensic Foundations' Proficiency Tests are required to be fit-for purpose. To assist us to provide the relevant tests, please use the following form to suggest further tests for development.

Recommendation for Proficiency Test development

Contact	Name	
	Email	
	Phone	
Discipline/ subdiscipline		
Specific issues(s) to be addressed*. Note: The tests can be designed to be multidisciplinary.		
Suggested technical advisor (if known)		
Suggested manufacturer (if known)		

* All Proficiency Tests will include the end to end process (receipt & continuity, triage, description, examination, analysis, data generation, interpretation, reporting) but one aspect may be of particular interest/focus.

This form can be emailed to quality@forensicfoundations.com.au or you can discuss your suggestions on either 03 9018 8919 or 0429 966 012.