

DNA Analyst Training Laboratory Training Manual

Protocol 8.02 DNA Report Wording



This laboratory protocol (or part thereof) has been provided as an example of a laboratory SOP, courtesy of the Illinois State Police. It has been included for training and example purposes only.

PRESIDENT'S
DNA
INITIATIVE



INTRODUCTION

The following guidelines will be followed when practical. Modifications to these guidelines may be necessary based on the evidence in the case and may be used at the discretion of the analyst. The analyst will determine the wording which best fits their case and the technical reviewer will confirm that the wording is appropriate for the analysis conducted.

SECTIONS OF THE REPORT

Evidence Description Section of the Report

The first section of the report will consist of two columns with the headings, Exhibit and Description. Analysts can choose to list all of the exhibits, or list only those analyzed and include the following statement: “other exhibits were received but not analyzed.”

Results Section of the Report

This section of the report will contain the following information for each exhibit analyzed:

1. The method of analysis and the loci amplified. For cases worked outside the laboratory system (outsourced cases), the laboratory conducting the analysis will be identified.
2. The type of profile identified (no DNA profile, a “single” human DNA profile or a mixture of human DNA profiles).
 - The loci at which the profile has been identified must be stated if fewer than the number of loci amplified.
 - If the profile represents a mixture, it must be stated whether the mixture was interpreted as a mixture of two individuals or more than two individuals.
3. A statement of inclusion, exclusion, or inconclusive.
 - A. Inclusion statements: The reporting of a positive association between an unknown profile and a standard. There are two types of inclusion statements:
 - Match statement:
Applies to single source profiles or profiles deduced to single genotypes at all interpreted loci and should indicate to whom the questioned profile matches.

- Non-Exclusion statement:
Applies to mixtures where profiles cannot be deduced to single genotypes at all interpreted loci and should indicate who cannot be excluded as a possible contributor. This statement also applies to single source profiles which exhibit possible incomplete genotypes at any locus.
- B. Exclusion statements: The reporting that no positive association exists between an unknown profile and a standard.

There are two types of exclusion statements:

- Does not match statement:
Applies to single source profiles or profiles deduced to single genotypes at all loci and should indicate to whom the profile does not match.
 - Can be excluded statement:
Applies to mixtures where profiles cannot be deduced to single genotypes at all interpretable loci and should indicate who can be excluded as a possible contributor. This statement also applies to single source profiles which exhibit possible incomplete genotypes at any locus.
- C. Inconclusive statement: Pertains to comparisons where there is insufficient information in a questioned profile to exclude an individual but also insufficient information to conduct a statistical evaluation. In such instances, the results will be reported as inconclusive and no statement of positive association to known standards will be made.
4. A statistical statement for all matching probative samples in order to report the weight of the match/non exclusion. Loci that were used for calculating statistics must be listed if fewer than those cited for the profile identification.
 5. A CODIS statement, when appropriate.
 6. A reference to the attached table of observed alleles, when appropriate.
 7. Any additional information about the evidence.

Requests Section of the Report

This section of the report is used as an area for the analyst to be able to request items from the submitting agency. It will also be used to reference prior reports.

Evidence Disposition Section of the Report

The disposition of all exhibits referenced in the report should be mentioned in this section, whether transferred to another section, retained by the laboratory, returned to the submitting agency, or ready for agency pick-up.

A statement is required indicating when an item has been consumed in analysis, and whether extracted or amplified DNA remains for further testing.

EXAMPLES OF REPORT WORDING STATEMENTS FOR DNA REPORTS

Method of Amplification and Loci

DNA from Exhibits X and Y was amplified using the Polymerase Chain Reaction (PCR) and profiled at the following loci: D3S1358, vWA, FGA, D8S1179, D21S11, D18S51, D5S818, D13S317, D7S820, D16S539, TH01, TPOX, CSF1PO and Amelogenin.

DNA from Exhibits X and Y was amplified and interpreted by (Vendor Name) using the Polymerase Chain Reaction (PCR) and profiled at the following loci: D3S1358, vWA, FGA, D8S1179, D21S11, D18S51, D5S818, D13S317, D7S820, D16S539, TH01, TPOX, CSF1PO and Amelogenin.

DNA from Exhibits X and Y was amplified using the Polymerase Chain Reaction (PCR) and profiled at the loci listed on the attached table.

Type of Profile Identified

Single profiles: A human DNA profile was identified in Exhibit X. (If at all loci amplified)

A human DNA profile was identified in Exhibit X at the A, B, C and D loci. (If at fewer than all loci amplified)

Mixed Profiles: A mixture of human DNA profiles was identified in Exhibit X which has been interpreted as a mixture of two people.

A mixture of human DNA profiles was identified in Exhibit X which has been interpreted as a mixture of at least three people.

Inclusion, Exclusion and Inconclusive Statements

The examples given below of inclusionary, exclusionary and inconclusive report wording are categorized under the situation which most commonly warrants them. They are intended as a general guideline and can be modified as needed.

1. Single profile

A human DNA profile was identified in Exhibit X which matches the DNA profile of John Doe and does not match the DNA profile of Jane Doe. This profile would be expected to occur in approximately 1 in XXX Black, 1 in XXX White, or 1 in XXX Hispanic unrelated individuals.

2. Two people mixture: Major and minor differentiated to single genotype at all loci.

A mixture of human DNA profiles was identified in Exhibit X that was interpreted as a mixture of two people. One DNA profile was identified which matches the DNA profile of Jane Doe and does not match the DNA profile of John Doe or Jack Doe. This profile would be expected to occur in approximately 1 in XXX Black, 1 in XXX White, or 1 in XXX Hispanic unrelated individuals.

An additional DNA profile was identified which matches the DNA profile of John Doe and does not match the DNA profile of Jane Doe or Jack Doe. This profile would be expected to occur in approximately 1 in XXX Black, 1 in XXX White, or 1 in XXX Hispanic unrelated individuals.

3. Two people mixture: Major differentiated to single genotype - minor exhibits multiple genotypes at one or more loci.

A mixture of human DNA profiles was identified in Exhibit X that was interpreted as a mixture of two people. One DNA profile was identified which matches the DNA profile of Jane Doe and does not match the DNA profile of John Doe or Jack Doe. This profile would be expected to occur in approximately 1 in XXX Black, 1 in XXX White, or 1 in XXX Hispanic unrelated individuals.

An additional DNA profile was identified from which Jack Doe cannot be excluded. Approximately 1 in XXX Black, 1 in XXX White or 1 in XXX Hispanic unrelated individuals cannot be excluded from having contributed to this additional profile.

4. Two people mixture: Major differentiated to single genotype - minor exhibits multiple genotypes and drop out.

A mixture of human DNA profiles was identified in Exhibit X that was interpreted as a mixture of two people. One DNA profile was identified which matches the DNA profile of Jane Doe and does not match the DNA profile of John Doe or Jack Doe. This profile

would be expected to occur in approximately 1 in XXX Black, 1 in XXX White, or 1 in XXX Hispanic unrelated individuals.

An additional DNA profile was identified at the A, B, C, D and E loci from which John Doe cannot be excluded. Approximately 1 in XXX Black, 1 in XXX White or 1 in XXX Hispanic unrelated individuals cannot be excluded from having contributed to this additional profile at the A, B and C loci. Jack Doe can be excluded as having contributed to this [additional profile] [mixed profile].

5. Two people mixture: Major and minor profiles cannot be fully differentiated to a single genotype at all loci, but can at a significant number of loci.

A mixture of human DNA profiles was identified in Exhibit X that was interpreted as a mixture of two people. One DNA profile was identified from which Jack Doe cannot be excluded. Approximately 1 in XXX Black, 1 in XXX White or 1 in XXX Hispanic unrelated individuals cannot be excluded as having contributed to this profile.

An additional DNA profile was identified from which John Doe cannot be excluded. Approximately 1 in XXX Black, 1 in XXX White or 1 in XXX Hispanic unrelated individuals cannot be excluded as having contributed to this additional profile. Jack Doe can be excluded as having contributed to this mixture.

6. Two people mixture: Major and minor profiles cannot be differentiated.

A mixture of human DNA profiles was identified in Exhibit X that was interpreted as a mixture of two people. John Doe and Jack Doe cannot be excluded as having contributed to this mixed profile. Approximately 1 in XXX Black, 1 in XXX White or 1 in XXX Hispanic unrelated individuals cannot be excluded as having contributed to this mixed profile. Joe Doe can be excluded as having contributed to this mixed profile.

7. Two people mixture: Assuming one profile.

A mixture of human DNA profiles was identified in Exhibit X that was interpreted as a mixture of two people. [This profile matches the combined profiles of Jane Doe and Jack Doe.] Assuming this profile is a mixture of Jane Doe and one other individual, Jack Doe cannot be excluded as having contributed to this additional profile. Approximately 1 in XXX Black, 1 in XXX White, or 1 in XXX Hispanic unrelated individuals cannot be excluded as having contributed to this additional profile. John Doe can be excluded from having contributed to this [additional DNA profile] [mixed DNA profile].

8. Three or more people mixture: Major profile differentiated to single genotype at all loci.

A mixture of DNA profiles was identified in Exhibit X that has been interpreted as a mixture of at least three people. One DNA profile was identified which matches the DNA profile of John Doe and does not match the DNA profile of Jack Doe. This profile would be expected to occur in approximately 1 in XXX Black, 1 in XXX White, or 1 in XXX Hispanic unrelated individuals.

[Additional DNA profiles were identified in Exhibit X] [Minor DNA profiles were identified in Exhibit X] from which Jack Doe cannot be excluded. Approximately 1 in XXX Black, 1 in XXX White or 1 in XXX Hispanic unrelated individuals cannot be excluded from having contributed to this mixture of DNA profiles at the D3S1358, vWA, D8S1179, D5S818, TH01 and TPOX loci.

9. Three or more people mixture: Major profile cannot be differentiated.

A mixture of DNA profiles was identified in Exhibit X that has been interpreted as a mixture of at least three people. John Doe cannot be excluded from having contributed to this mixed profile. Approximately 1 in XXX Black, 1 in XXX White or 1 in XXX Hispanic unrelated individuals cannot be excluded from having contributed to this mixture of DNA profiles at the D3S1358, vWA, D8S1179, D5S818, TH01 and TPOX loci. Jack Doe can be excluded as having contributed to this mixed profile.

10. Differential Extractions exhibiting carry over - Reporting on the whole exhibit:

This is generally applied when the male profile can be identified in the sperm fraction (either single source or deduced from a mixture attributable to carry over from the non-sperm fraction) and the non-sperm fraction contains a female DNA profile (either single source or deduced from a mixture attributable to carry over from the sperm fraction).

A human male DNA profile was identified in Exhibit X which matches the DNA profile of John Doe and does not match the DNA profile of Jack Doe. This profile would be expected to occur in approximately 1 in XXX Black, 1 in XXX White, or 1 in XXX Hispanic unrelated individuals. [A human] [An additional human] female DNA profile was identified which matches the DNA profile of Jane Doe.

11. Differential Extractions - Reporting on fractions:

This is generally applied when the male profile is found in a fraction other than the sperm fraction or when the male profile is deduced from a mixture not attributed to simple carryover. These situations will follow the appropriate report wording in the above sections with the inclusion of non-sperm fraction, sperm fraction or mixed fraction as needed.

12. Inconclusive

An inconclusive DNA profile was identified in Exhibit X at the A, B and C loci. John Doe can be excluded from having contributed to this profile. This profile does not contain enough information to either exclude or imply any positive association with Jack Doe.

A mixture of DNA profiles was identified in Exhibit X that has been interpreted as a mixture of two people. One DNA profile was identified which matches the DNA profile of John Doe and does not match the DNA profile of Jack Doe. This profile would be expected to occur in approximately 1 in XXX Black, 1 in XXX White, or 1 in XXX Hispanic unrelated individuals. An inconclusive DNA profile was identified at the A, B, C and D loci. Joe Doe can be excluded as having contributed to this profile. This profile does not contain enough information to either exclude or imply any positive association with Jeff Doe.

Miscellaneous Statements

Exhibit X was not profiled [at this time].

Exhibit X was not analyzed.

No human DNA profile was identified in Exhibit X.

Exhibit X was not profiled due to the limited amount of DNA detected.

CODIS Statements

Profiles from this case [may be] [have been] included in the DNA Index.

The DNA profile identified in Exhibit A has been included in the DNA Index.

A human male DNA profile was identified in Exhibit X. This profile has been searched against the DNA Index. The search did not detect a profile consistent with the profile in this case.

The human DNA profile identified in Exhibit X was searched against the DNA Index. The search detected a match with XXX, from (State), SID # XXX. This individual demonstrates a DNA profile that is consistent with the evidence profile and could be the donor of the biological material identified.

A human DNA profile was identified in Exhibit X. This profile has been searched against the DNA Index. The search detected a match to Laboratory Case # XXX (Agency Name, Agency Case Number), Exhibit Y.

The questioned profile from Exhibit X has been included in the DNA Index and will continue to be compared to other profiles. You will be notified if a consistent profile is detected.

Summary Table Statements

Refer to [pdi_lab_pro 8.03](#), Worksheet

Requests Statements

This information can be used for investigative purposes only. Please submit an additional [standard] [sample] from XXX for confirmatory forensic analysis.

Other exhibits were received in this case, but were not analyzed.

Please refer to the evidence receipt for a list of all exhibits received on this case.

Please contact (Officer's name) of (Agency name) at (phone number) for further information.

For results of previous biological examinations, please refer to the laboratory report by Forensic Scientist Jane Doe from (laboratory name).

For results of previous biological examinations, please refer to the laboratory report by Forensic Scientist Jane Doe from (laboratory name) dated XXX.

For results of previous biological examinations, please refer to my laboratory report dated XXX.

For results of previous DNA analysis, please refer to my laboratory report dated XXX.

Upon submission of additional standards, further analysis can be conducted to resolve the source of the open profile identified in Exhibit X.

The inconclusive DNA profile identified in Exhibit X will be used for exclusionary purposes only. No positive association will be made between this profile and any additional standards submitted on this case.

Evidence Disposition Statements

The evidence will be held in the laboratory vault and should be picked up within thirty days.

The evidence will be held in the laboratory vault and may be picked up at your earliest convenience.

The evidence has been returned to your agency via registered mail.

Please note that Exhibit X was consumed in analysis. Extracted DNA remains for further testing.

Please note that Exhibit X was consumed in analysis. Amplified DNA remains for further testing.

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