

**UNITED STATES DEPARTMENT OF JUSTICE
UNIFORM LANGUAGE FOR TESTIMONY AND REPORTS
FOR THE FORENSIC FOOTWEAR DISCIPLINE**

I. Application

This document applies to Department of Justice examiners who are authorized to prepare reports and provide expert witness testimony regarding forensic footwear examination. Section III is limited to conclusions that result from the comparison of a known footwear item¹ to a questioned impression.² Section IV is applicable to all forensic footwear examinations unless otherwise limited by the express terms of an individual qualification or limitation.

II. Purpose and Scope³

The Uniform Language for Testimony and Reports is a quality assurance measure designed to standardize the expression of appropriate consensus language for use by Department examiners in their reports and testimony. This document is intended to describe and explain terminology that may be provided by Department examiners. It shall be attached to, or incorporated by reference in, laboratory reports or included in the case file.

Department examiners are expected to prepare reports and provide testimony consistent with the directives of this document. However, examiners are not required to provide a complete or verbatim recitation of the definitions or bases set forth in this document. This is supplemental information that is intended to clarify the meaning of, and foundation for, the approved conclusions.

This document should not be construed to imply that terminology, definitions, or testimony provided by Department examiners prior to its publication that may differ from that set forth below was erroneous, incorrect, or indefensible. It should also not be construed to imply that the use of different terminology or definitions by non-Departmental forensic laboratories or individuals is erroneous, incorrect, or indefensible.

This document does not, and cannot, address every contingency that may occur. For example, an examiner may not have an opportunity to fully comply with its directives during a testimonial presentation due to circumstances beyond his or her control. In addition, this document does not prohibit the provision of conclusions in reports and testimony that fall outside of its stated scope. Finally, the substantive content of expert testimony may be subject to legal rules imposed by the court or jurisdiction in which it is provided.

¹ A 'known footwear item' is a footwear item (e.g., a shoe, a boot or a sandal) whose origin was documented. A 'known footwear item' can be a physical item or a reproduction of that item (e.g., an image depicting that item or an impression made from that item).

² A 'questioned impression' is an impression whose source is unknown.

³ This document is not intended to, does not, and may not be relied upon to create any rights, substantive or procedural, enforceable by law by any party in any matter, civil or criminal; nor does it place any limitation on otherwise lawful investigative or legal prerogatives of the Department of Justice.

III. Conclusions Regarding Forensic Comparison of Footwear Evidence

An examiner may provide any of the following conclusions:

1. Source identification (i.e., identified)
2. Inclusion based on class and randomly acquired characteristics (i.e., included)
3. Inclusion based on class characteristics (i.e., included)
4. Inconclusive
5. Support for exclusion
6. Source exclusion (i.e., excluded)

Source identification

‘Source identification’ is an examiner’s conclusion that the known footwear item made the questioned impression. This conclusion is an examiner’s opinion that the known footwear item and the questioned impression have corresponding class characteristics⁴ (i.e. outsole design,⁵ physical size,⁶ and wear⁷) and one or more randomly acquired characteristics⁸ with no meaningful differences, and the observed corresponding characteristics are sufficient such that an examiner would not expect to see the same combination of characteristics repeated in a different footwear item.

The basis for a ‘source identification’ conclusion is an examiner’s opinion that the observed corresponding characteristics provide extremely strong support for the proposition that the known footwear item made the questioned impression and extremely weak support for the proposition that a different footwear item made the questioned impression.

A ‘source identification’ is the statement of an examiner’s opinion (an inductive inference⁹) that the probability that a different footwear item made the questioned impression is so small that it is negligible.

⁴ A ‘class characteristic’ is a feature that is shared by two or more footwear items. Corresponding class characteristics alone do not provide a basis for a ‘source identification’ conclusion; however, such correspondence does reduce the possible number of footwear items that could have made the questioned impression.

⁵ ‘Outsole design’ is the manufactured pattern on the bottom of a footwear item.

⁶ ‘Physical size’ is the size, shape, spacing and relative position of the outsole design components on a footwear item.

⁷ ‘Wear’ is the position and degree of erosion on the outsole of a footwear item.

⁸ A ‘randomly acquired characteristic’ is a feature (e.g., a cut, a scratch, a tear, a hole, or a stone hold) on the outsole of a footwear item acquired through random events. The position, orientation, size, and shape of these characteristics can be used to differentiate one footwear outsole from another when those outsoles share the same class characteristics. One or more ‘randomly acquired characteristics’ are required for the ‘source identification’ of a known footwear item to a questioned impression.

⁹ Inductive reasoning (inferential reasoning):

A mode or process of thinking that is part of the scientific method and complements deductive reasoning and logic. Inductive reasoning starts with a large body of evidence or data obtained by experiment or observation and extrapolates it to new situations. By the process of induction or inference, predictions about new situations are inferred or induced from the existing body of knowledge. In other words, an inference is a generalization, but one that is made in a logical and scientifically defensible manner.

Inclusion based on class and randomly acquired characteristics

‘Inclusion based on class and randomly acquired characteristics’ is an examiner’s conclusion that the known footwear item probably made the questioned impression. This conclusion is an examiner’s opinion that the known footwear item and the questioned impression have corresponding class characteristics and one or more randomly acquired characteristics with no meaningful differences; however, there are limitations associated with the evidence that prevent an examiner from reaching a ‘source identification’ conclusion. For another footwear item to have made the questioned impression, it would have to exhibit the same observed corresponding characteristics.

The basis for an ‘inclusion based on class and randomly acquired characteristics’ conclusion is an examiner’s opinion that the observed corresponding characteristics provide strong support for the proposition that the known footwear item made the questioned impression and weak support for the proposition that a different footwear item made the questioned impression.

Inclusion based on class characteristics

‘Inclusion based on class characteristics’ is an examiner’s conclusion that the known footwear item could have made the questioned impression.

The basis for an ‘inclusion based on class characteristics’ conclusion is an examiner’s opinion that the known footwear item and the questioned impression have observed corresponding class characteristics with no meaningful differences. There may be other footwear items with characteristics that are indistinguishable from the known footwear item that could have also made the questioned impression.

Inconclusive

‘Inconclusive’ is an examiner’s conclusion that no determination can be reached as to whether the known footwear item could or could not have made the questioned impression.

The basis for an ‘inconclusive’ conclusion is an examiner’s opinion that there are limitations associated with the evidence that prevent an examiner from either including or excluding the known footwear item as a possible source of the questioned impression.

Support for exclusion

‘Support for exclusion’ is an examiner’s conclusion that the known footwear item probably did not make the questioned impression. This conclusion is an examiner’s opinion that the known footwear item and the questioned impression have different class characteristics and/or randomly acquired characteristics; however, there are limitations associated with the evidence that prevent an examiner from reaching a ‘source exclusion’ conclusion.

The basis for a ‘support for exclusion’ conclusion is an examiner’s opinion that the observed characteristics provide strong support for the proposition that a different footwear item made the questioned impression and weak support for the proposition that the known footwear item made the questioned impression.

Source exclusion

‘Source exclusion’ is an examiner’s conclusion that the known footwear item did not make the questioned impression. This conclusion is an examiner’s opinion that the known footwear item and the questioned impression have different class characteristics and/or randomly acquired characteristics.

The basis for a ‘source exclusion’ conclusion is an examiner’s opinion that the observed characteristics provide extremely strong support for the proposition that a different footwear item made the questioned impression and extremely weak or no support for the proposition that the known footwear item made the questioned impression.

IV. Qualifications and Limitations of Forensic Footwear Examination

- A conclusion provided during testimony or in a report is ultimately an examiner’s decision and is not based on a statistically-derived or verified measurement or comparison to all other footwear items. Therefore, an examiner shall not:
 - assert that a ‘source identification’ or a ‘source exclusion’ conclusion is based on the ‘uniqueness’¹⁰ of an item of evidence.
 - use the terms ‘individualize’ or ‘individualization’ when describing a source conclusion.
 - assert that the known footwear item made the questioned impression to the exclusion of all other footwear items.
- An examiner shall not provide either of the two ‘inclusion’ conclusions described in Section III unless he or she also explains that there may be other footwear items with characteristics that are indistinguishable from the known footwear item that could have also made the questioned impression.
- An examiner shall not assert that forensic footwear examinations are infallible or have a zero error rate.
- An examiner shall not provide a conclusion that includes a statistic or numerical degree of probability except when based on relevant and appropriate data.
- An examiner shall not cite the number of forensic footwear examinations performed in his or her career as a direct measure for the accuracy of a conclusion provided. An examiner may cite the number of forensic footwear examinations performed in his or her career for the purpose of establishing, defending, or describing his or her qualifications or experience.

¹⁰ As used in this document, the term ‘uniqueness’ means having the quality of being the only one of its kind. OXFORD ENGLISH DICTIONARY 804 (Oxford Univ. Press 2012).

- An examiner shall not assert that the known footwear item made the questioned impression with absolute or 100% certainty, or use the expressions ‘reasonable degree of scientific certainty,’ ‘reasonable scientific certainty,’ or similar assertions of reasonable certainty in either reports or testimony unless required to do so by a judge or applicable law.¹¹

¹¹ See Memorandum from the Attorney General to Heads of Department Components (Sept. 9, 2016), <https://www.justice.gov/opa/file/891366/download>.