# DEPARTMENT OF JUSTICE
# UNIFORM LANGUAGE FOR TESTIMONY AND REPORTS
# FOR GENERAL FORENSIC CHEMISTRY AND SEIZED DRUG EXAMINATIONS

## I. Application

This document applies to Department of Justice examiners who are authorized to prepare reports and provide expert witness testimony regarding general forensic chemistry and seized drug examinations. This document applies to reports and to testimony based on reports that are finalized after its effective date. Section III is limited to conclusions regarding general forensic chemistry and seized drug examinations. Section IV is applicable to all general forensic chemistry and seized drug examinations unless otherwise limited by the express terms of an individual qualification or limitation. This document does not apply to conclusions offered in the following areas: Toxicology, Paints and Polymers, Fire Debris, Explosives, and opinions offered under the Controlled Substances Analogue Enforcement Act.

## II. Purpose and Scope[1]

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 effective date 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 dependent upon legal rules imposed

[1] 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.

by the court or jurisdiction in which it is offered.

## III. Conclusions Regarding General Forensic Chemistry and Seized Drug Examinations

An examiner may offer any of the following conclusions:

1. Identification (i.e. identified)
2. Consistent with
3. Not identified
4. Cannot be differentiated
5. Excluded
6. Inconclusive

**Identification (i.e. identified)**
'Identification' is an examiner's conclusion that the scientific data supports the presence of an analyte[2] or class of analytes in a questioned sample.

The basis for an 'identification' conclusion is an examiner's determination that 1) a specific analyte or class of analytes was detected in a questioned sample using orthogonal techniques,[3] at least one of which provides chemical structure information about the analyte; 2) predefined decision criteria set forth in the relevant standard operating procedures were satisfied for each technique; and 3) the techniques included the use of positive and negative controls (where applicable); or, if positive controls are unavailable, the results were compared to a reliable database reference or to peer reviewed literature.

**Consistent with**
'Consistent with' is an examiner's conclusion that the scientific data supports the presence of a questioned sample within a class of materials.

The basis for a 'consistent with' conclusion is an examiner's determination that the results detected using orthogonal techniques do not support the identification of a specific analyte or class of analytes or product in a questioned sample, but do provide sufficient reliable information to include a questioned sample within a class of materials.

**Not identified**
'Not identified' is an examiner's conclusion that the scientific data supports the determination that an analyte or class of analytes is not present in a questioned sample or at a detectable level.

[2] An 'analyte' is the substance, compound, or element that is the target of a given test or analysis. OXFORD DICTIONARY OF FORENSIC SCIENCE 130 (Oxford Univ. Press 2012).
[3] 'Orthogonal techniques' are two or more techniques that utilize different fundamental principles of selectivity for characterizing an analyte or class of analytes.

The basis for a conclusion that an analyte or class of analytes is 'not identified' in a questioned sample is an examiner's determination that the result(s) of the technique(s) used is (are) negative for the analyte or class of analytes, or do not meet an examiner's decision criteria.

**Cannot be differentiated**
'Cannot be differentiated' is an examiner's conclusion that the scientific data does not demonstrate any significant differences between two or more questioned samples that are compared.

The basis for a conclusion that two questioned samples 'cannot be differentiated' is an examiner's determination that the results detected using orthogonal techniques from a suitable examination plan do not show any relevant differences between the questioned samples.

**Excluded**
'Excluded' is an examiner's conclusion that the scientific data supports the elimination of a questioned sample as a source of another questioned sample, or that two or more questioned samples do not share a common source.

The basis for an 'excluded' conclusion is an examiner's determination that the result(s) of the technique(s) used show(s) relevant difference(s) between the questioned samples.

**Inconclusive**
'Inconclusive' is an examiner's conclusion that the scientific data supports the decision that no determination can be made regarding the questioned sample or the comparisons.

The basis for an 'inconclusive' conclusion is an examiner's decision that the result(s) of the technique(s) used is (are) insufficient to determine the nature of a questioned sample or to assess the comparison of two or more questioned samples.

## IV. Qualifications and Limitations of General Forensic Chemistry and Seized Drug Examinations

- If an examiner asserts a 'consistent with' conclusion, he or she shall explain the limitation(s) that prevented the assertion of an 'identification' conclusion.

- If an analyte or class of analytes is identified in a questioned sample, an examiner shall not assert how that analyte or class of analytes was transferred to the questioned sample or how long that analyte or class of analytes has been present in the questioned sample.

- When analyzing a portion of a population,[4] an examiner shall not assert that his or her conclusion applies to the entirety of the population (or a percentage of the population),

[4] 'Population' means the totality of items or units of material under consideration. ASTM E456 - 13a (2017)$^{\varepsilon 2}$.

unless a statistically based sampling plan is used. When such a conclusion is offered, the examiner shall clearly explain the assertion being made, the results of the sampling unit(s)[5] tested, and the confidence level.[6]

- Except in justified circumstances (e.g., chemical 'tags' were incorporated in the questioned sample(s), or the entire population of potential sources was tested) an examiner shall not assert the exact source of an analyte or class of analytes. When such an assertion is made, the examiner shall explain the circumstances that permit it.

- An examiner shall not assert that general forensic chemistry or seized drug 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 general forensic chemistry or seized drug examinations performed in his or her career as a direct measure for the accuracy of a proffered conclusion. An examiner may cite the number of general forensic chemistry or seized drug examinations performed in his or her career for the purpose of establishing, defending, or describing his or her qualifications or experience.

- An examiner shall not 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.[7]

[5] A 'sampling unit' is an item, group of items, or segment of material, that can be selected as part of a probability sampling plan. *Standard Terminology Relating to Quality and Statistics*, ASTM E456 - 13a (2017)$^{\varepsilon 2}$.
[6] A 'confidence level' is a desired percentage of scores that would fall within a certain range of confidence limits, which are the upper and lower values of a confidence interval. DICTIONARY OF STATISTICS AND METHODOLOGY: A NON-TECHNICAL GUIDE FOR THE SOCIAL SCIENCES 42-43 (Sage Publications 1993).
[7] *See Memorandum from the Attorney General to Heads of Department Components* (Sept. 6. 2016), https://www.justice.gov/opa/file/891366/download.