

Deadline of Submission of Comments: 12-Jun-23
Document Number: ANSI/ASB Std 013
Document Title: Standard for Friction Ridge Examination Conclusions

#	Section	Type of Comment (E-Editorial, T-Technical)	Comments	Proposed Resolution	Final Resolution
12	all	T	We realize that changes were made in response to some comments on the last 2 rounds, but the fundamental problem of calling a statement of strong support for the same-source hypothesis an "identification" remains. Several LTG members believe that the terminology in the standard remains confusing or inappropriate, but we realize this is a second recirculation.		Reject. Consensus is to use term "source identification."
5	3.13	E	Explanations for the observations, data and calculations.	Add comma after data	Accept. Suggestion was forwarded to editor TR016.
1	3.17	T	"...or a known source" is contradictory to the rest of the definition for questioned impression	remove "or a known source" at the end of the definition	Reject. Please note that comments on a re-circulation are generally accepted only on revised section of a document. Comments made on text not revised from the previous public comment period are generally not accepted. In some cases, such as ten-print to ten-print comparisons, questioned impressions may be from a known source.
23	3.20/4.2	T	The reworded statements for Source Exclusion appearing in sections 3.20 and 4.2 are in conflict with the following requirements documented in section 4.1:- "A conclusion shall be expressed as an opinion, not as a fact, because it is an interpretation of observed data made by the examiner" - "In reaching a conclusion, an examiner shall assess the similarities and dissimilarities in the observed data and consider the probability of both under each of the two following propositions: the two impressions originated from the same source or from different sources."Both source exclusion statements are clearly expressed as fact (i.e. "that two friction ridge impressions did not originate from the same source"). If presented to a trier of fact as is, there is every expectation that the trier of fact would interpret these to be statements of fact (which is also in conflict with a number of prohibitions as listed under Section 5). Section 4.2 further discusses source exclusion only in terms of the rejection of one proposition rather than the "probability of both under each" as is required under Section 4.1. RECOMMENDATION: Both statements of Source Exclusion (3.20 & 4.3) must either be reverted to the previous verbiage (which is accurate and not in conflict with the document requirements) or be explicitly amended to no longer suggest that source exclusion is a statement of fact and that the probability of both propositions is considered.		Reject with modification. "Fact" deleted from section 4.1. Conclusions are defined as opinions in section 3.2.
16	3.5	E	The period should be within the ending quotation mark of "disagreement" rather than outside of it.	Move period between the t and ending quotation mark: "disagreement."	Accept. This change has already been made in TR016, and STD 013 has been edited to reflect that change.
3	3.7	E	"moulded prints"	change to molded prints (american english vs UK english)	Accept. Suggestion was forwarded to editor TR016.
4	3.7	E	Note Examples may include, but are not limited to, inked tenprints, inked palm prints, Livescan prints, powder and lift prints, casted/moulded prints, or photographs of friction ridge skin.	Insert colon after "Note"	Reject. This is ASB style. See ASB Manual (2021), section F.4.2.
13	4.1	T	4.1: The redlined version eliminates language indicating that conclusions reached by friction ridge examiners are "inherently subjective." This language should not have been removed from the Standard. An overwhelming body of research indicates that each step of the friction ridge examination process, up to and including conclusions, is subjective and often not repeatable or reproducible. Different examiners select different features when the analyze prints, employ different subjective thresholds for sufficiency, and utilize the category of inconclusive differently. It is simply not credible to argue that conclusions drawn by friction ridge examiners are not subjective, and thus this standard should revert to acknowledging as much.	bring back removed language	Reject. The term "interpretation" implies subjectivity.

6	4.3, 4.4, and 4.5	T	4.3, 4.4, and 4.5 conclusions are too arbitrary with the possibilities for reaching an inconclusive decision and need to be reconciled. Essentially there are five inconclusive conclusions an examiner can reach, with the inclusion of moderate and weak support. The conclusions are already subjective and adding more conclusions will make subjectivity greater. Examiners will be tasked with determining the frequency of limited corresponding minutiae (with similarities or dissimilarities) in two impressions and what distinguishes each type of inconclusive from one another. Without adequate research to support these stand alone inconclusive conclusions, there will be greater subjectivity in examiner conclusions, as well as low reproducibility and repeatability of conclusions.	Remove Inconclusive with Similarities, keep Inconclusive (based on the standard and limited corresponding minutiae), and keep Inconclusive with Similarities based only on example A.3.2 (i.e., examiner was not confident that they had searched in the correct area). Example A.3.1 describes a scenario that could be classified as NO Value. Examples A.5.1, A.5.2, A.5.3, A.5.4, and A.5.5 can be categorized as Inconclusive with equal support for both same source and different source propositions. There is no research to distinguish the amount and type of information needed between reaching an Inconclusive conclusion, Inconclusive with similarities (moderate) conclusion, and Inconclusive with similarities (weak) conclusion. Until then, the proposition should be equal.	Reject. Please note that comments on a re-circulation are generally accepted only on revised section of a document. Comments made on text not revised from the previous public comment period are generally not accepted.
14	4.6	T	The definition of "source identification" has moved from "substantially stronger support for identification" to "extremely strong support," but juries will still view the phrase "source identification" as a statement that there is one identifiable source of the print. The fact that the document then says you cannot say 100% or "infallible" and the like will be lost on lay juries. The addition to the note for that opinion, we believe, makes clear that what is being proposed is wordsmithing that will ultimately still be confusing to jurors and would be solved if the term "source identification" were eliminated.	Eliminate "source identification" as a valid term.	Reject. Consensus is to use term "source identification."
24	4.6	T	4.6 How is 'substantially stronger' measured, as opposed to stronger support? Using personal thresholds, as in 4.5 which states 'the examiner believes...' is a clear indication of pseudoscience, which has led to past errors. Statements such as this do not improve current practices. It seems that a new process is being promoted as a standard when it has not been tested or validated. It appears that testing is being done on human subjects (actual cases). When lives and liberties are at stake, testing should be done prior to implementation. ndation: This could be a recommendation. It should not be labeled as a standard until it has been tested.		Reject. Unfortunately the discipline cannot do any better than qualitative measurements of the strength of support at this time.
22	4.6	E	Since we define "agreement" to mean overall conformity. I believe it should be added to section 4.6 "Source Identification". There is strong correspondence present such that the examiner would not expect to see the same arrangement of features repeated in an impression from another source, "resulting in agreement and overall conformity" (See Annex A, Section SourceIdentification). Suggest adding the "resulting in agreement and overall conformity" to end of last sentence.		Reject. Proposed language would be repetitive of "strong correspondence."

2	5a	E	<p>This limitation rejects all the scientific evidence, the proven track record of successfully establishing sole source identifications, and the ability to report the true results of the examination.</p> <p>There is no scientific evidence to suggest that a latent print examiner cannot identify a latent print to its sole source. It is just the opposite. There is extensive biological research that demonstrates that all areas of friction ridge skin are unique. There is a demonstrated ability to identify latent prints to their sole source that has taken place for more than one hundred years. Putting it plainly, that horse left the barn many years ago.</p> <p>The identification of a latent print to its sole source has been demonstrated, accepted, and embraced by the courts of the world. There is extensive legal precedence because the ability has been demonstrated.</p> <p>The ability to accurately identify friction skin evidence to its sole source is proven and demonstrated every hour of every day. No human endeavor is or can be error free, but this should not be confused with or diminish the proven ability to identify prints to their sole source.</p> <p>Today, there are more than a dozen studies that also demonstrates that the identification of a latent print to its sole source is done with extreme accuracy, more so than most human endeavors.</p> <p>By limiting the examiner to "not assert that two impressions were made by the same source" is requiring that the actual conclusion and the purpose of the examination should not be shared with the trier of fact. It also goes against the science and the proven ability to do so. The role of the expert witness "...is to assist the trier of fact to understand the evidence..." FRE702. The expert witness provides expert opinion evidence that a lay person is not capable of forming. It is up to the trier of fact (jury) to accept or reject the opinion, see any typical expert witness jury instructions.</p> <p>"—there is tremendous variability among prints made by different fingers. This variability clearly provides a scientific basis for using fingerprints to distinguish individuals. AAAS, Forensic Science Assessments: A Quality and Gap Analysis- Latent Fingerprint Examination, P.18, September 2017.</p>		<p>Reject. The uniqueness of friction ridge skin, legal acceptance, high accuracy, and high variability do not justify sole source identifications.</p>
2 (cont.)	5a	E	<p>Even, the 2009 NAS report, Strengthening Forensic Science in the United States: A Path Forward, states that: "Because of the amount of detail available in friction ridges, it seems plausible that a careful comparison of two impressions can accurately discern whether or not they had a common source." Page 142. Nowhere in the report does it suggest that we should abandon the use of sole source identifications. The only recommendation from the report concerning friction ridge identification is the expanded use of the discipline, Recommendation 12.</p> <p>The Evaluation of Forensic DNA Evidence 1996 Committee on DNA Forensic Science: An Update, stated that DNA evidence will soon be reported as a unique identification as fingerprints are now. "We can confidently predict that, in the not-distant future, persons as closely related as brothers will be routinely distinguished, and DNA profiles will be as fully accepted as fingerprints now are. But that time has not yet arrived, and the winds of controversy have not been stilled. Hence this report", Preface of the report.</p> <p>This has now happened, the first sole source testimony for DNA was admitted into evidence and upheld at the appellate court level. People v. Cua (2010), Cal.App.4th [No. A123756, First Dist., Div. Five, Jan. 3, 2011.].</p> <p>The report went on to state: "The history of fingerprints offers some instructive parallels with DNA typing (Stigler 1995). Francis Galton, the first to put fingerprinting on a sound basis, did an analysis 100 years ago that is remarkably modern in its approach". Page 56, NAS DNA report 1996.</p> <p>Just as with DNA evidence today, fingerprint identifications were first supported by a statistical analysis during the early 1900's, for example: "There were twenty-two points of similarity, which leaves no doubt that the two impressions were made by the same finger. Worked out in figures, the possibility of that being made by any other finger in '2384 billion chances to one", The Star, New Zealand, 28 November 1906. That went away as more research and data was amassed that supports the fact that all areas of friction ridge skin are unique.</p> <p>History is now repeating itself with DNA analysis.</p> <p>DNA, just like friction ridge skin is unique to each individual. Biological uniqueness is not proven or disproven by statistics. There is overwhelming evidence that supports the uniqueness of friction ridge skin and more importantly there is no evidence to prove it is not unique.</p> <p>To borrow from the FBI response dated September 20, 2016 to the discredited and rejected PCAST report, what you are proposing in this document ----"Ignores important differences between forensic science disciplines, conflating fundamental differences between class-level and identification-level evidence leading to troubling generalized conclusions". In this case by using statistical analysis to challenge biological uniqueness that has a demonstrated one hundred plus year track record of success in identifying individuals and solving crime is very disturbing at best.</p>	<p>Remove: assert that two impressions were made by the same source</p>	<p>Reject. The uniqueness of friction ridge skin does not justify sole source identifications.</p>

7	5 (d)	E	Update after comma where it states: with "absolute" does not follow the format of the examples' list.	Remove the word "with" after comma or state it as "with absolute" since you are providing a list of example phrases to avoid.	Accept. "with" deleted
8	A.3.1	T	The example states there are ambiguous features in a low clarity area of the questioned print and it is the only target group available that was not present in the corresponding area of the exemplars. However, because the examiner was not confident in the existence of these features in the questioned impression, they would not support a conclusion of Source Exclusion and could therefore conclude Inconclusive with Dissimilarities. This is confusing. To state there is a "target group" indicates the examiner has determined there are minutiae present in the questioned print. Therefore, "ambiguous features" would mean that it is unclear as to the type of minutiae. If the features (minutiae) were not present in the corresponding area of the exemplars then the print could be excluded. If the examiner was not confident in the existence of these features (minutiae) in the questioned print, then accordingly this should have been determined in the Analysis stage of ACE-V and deemed as No Value, at which point the examination would have stopped. To be in the Comparison/Evaluation phase and then say you are not confident in the existence of the features in the first place should mean to re-analyze the print and deem No Value, not Inconclusive with Dissimilarities.	Remove or update the example to define inconclusive with dissimilarities.	Reject. "Ambiguous features" does not only mean that it is unclear as to the type of minutiae. The criteria for no value questioned impressions can be determined by each FSP policy. But some FSPs would proceed with comparison in this situation.
17	A.4.3	E	Misleading commas around "and the evidence against; the subject of the sentence includes the evidence in support as well as the evidence against.	Remove the commas to read: "...the evidence in support and the evidence against are both weak and equally balanced."	Reject. Language is grammatical as is.
18	A.5.1	E	Need additional wording to make a complete sentence. What comes after the semicolon in the 1st sentence must be a complete sentence ("however, insufficient to support a Source Identification.").	Add "the similarities" and "are" to complete the sentence: "however, the similarities are insufficient to support a Source Identification."	Accept
19	A.5.2	E	Need additional wording to make a complete sentence. What comes after the semicolon in the 1st sentence must be a complete sentence ("however, insufficient to support a Source Identification.").	Add "the similarities" and "are" to complete the sentence: "however, the similarities are insufficient to support a Source Identification."	Accept
9	A5.2	E	"i.e. Insufficient for a source identification"	Capitalize Source Identification	Accept
10	A5.3	E	"i.e. Insufficient for a source identification"	Capitalize Source Identification	Accept
20	A.5.3	E	Need additional wording to make a complete sentence. What comes after the semicolon in the 1st sentence must be a complete sentence ("however, insufficient to support a Source Identification.").	Add "the similarities" and "are" to complete the sentence: "however, the similarities are insufficient to support a Source Identification."	Accept
21	A.6.2	E	Incorrect verb placement of "was" in the first sentence: "Consider a situation in which was an accumulation of similarities observed...."	Reorder the placement of "was" to read: "Consider a situation in which an accumulation of similarities was observed...." OR retain the stricken "there" to read: "Consider a situation in which there was an accumulation of similarities observed...."	Accept
11	A6.2	E	"Consider a situation in which was an accumulation"	Revise to, "Consider a situation in which there was an accumulation"	Accept with modification. Sentence edited.
15	Bibliography	T	Elimination of the bibliography is not acceptable. The LTG-member comments on the previous draft suggested a list of references on reporting support-based conclusions. If ASB is purporting to produce science-based standards, they should refer to the scientific literature that underlies them. This one needs such a bibliography lest it be seen as ipse dixit.	Some titles that should be considered as part of a bibliography for a document addressing conclusions and incorporating likelihood ratios are: American Statistical Association, "Position on Statistical Statements for Forensic Evidence," Presented under the guidance of the ASA Forensic Science Advisory Committee, January 2, 2019; PCAST, "Forensic Science in Criminal Courts"; American Association for the Advancement of Science, "Forensic Science Assessments: A Quality and Gap Analysis-Latent Fingerprint Examination," (2017); Defense Forensic Science Center, Information Paper, Subject: Use of the Term Identification in Latent Print Technical Reports, (Nov. 3, 2015); Working Group on Human Factors in Latent Print Analysis, "Latent Print Examination and Human Factors: Improving the Practice through a Systems Approach," National Institute of Justice (2012), Steven P. Lund & Hari Iver, "Likelihood Ratio as Weight of Forensic Evidence: A Closer Look," 122(27) J. Research of Nat'l Ist. Standards & Tech., (2017); Simone Gittelson et al., "A response to "Likelihood ratios as weight of evidence: A closer look," 299 For. Sci. Int'l; John Buckleton & James Curran, "A discussion of the merits of random man not excluded and likelihood ratios," 2 For. Sci. Int'l Genetics 343 (2008); Jonathan J. Koehler, "Proving the Case: The Science of DNA: On Conveying the Probative Value of DNA Evidence: Frequencies, Likelihood Ratios, & Error Rates," 67 U. Colo. L. Rev. 859, (1996); Kristy A. Martire et al., "The Psychology of Interpreting Expert Evaluative Opinions," 45 Australian J. F. Sci. 305 (2013); Kristy A. Martire et al., "The Expression and Interpretation of Uncertain Forensic Evidence: Verbal Equivalence, Evidence Strength, and the Weak Evidence Effect," 37 L. & Human Behav. 197 (2013); Swaminathan et al., "Four model variants within a continuous forensic DNA mixture interpretation framework: Effects on evidential inference & reporting," 13(11) PLOS ONE (2018)**	Reject. Please note that comments on a re-circulation are generally accepted only on revised section of a document. ASB Manual, section 12.1 calls for normative references only if the document cannot be implemented without them and 19.1 says bibliographies are optional.

