# SUPERIOR COURT OF THE DISTRICT OF COLUMBIA

**Criminal Division - Felony Branch**

**UNITED STATES OF AMERICA :**

**:**

**: Docket No. XXXXXXXXXXX**

**v. : JudgeXXXXXXXX**

**: Status: XXXXXXXXXXXX**

**XXXXXXXXXXXXXX :**

**MOTION TO EXCLUDE FIREARMS EVIDENCE FOR LACK OF DOCUMENTATION**

Defendant XXXXXXXXXXXX, through undersigned counsel, respectfully moves this Court, pursuant to the Sixth Amendment to the United States Constitution and *Dyas v. United States*, 376 A.2d 827 (D.C. 1977), to exclude the proposed firearms evidence in this case. The defense requests a hearing on this motion. In support of this Motion counsel states:

1. XXXXXX is charged with XXXXXXXXXXXXX.
2. The government has informed the defense that it intends to call a firearms examiner to testify that a bullet from the crime scene and a bullet test-fired from the defendant’s gun “matched” to a reasonable degree of certainty in the area of firearms and toolmarks analysis.

[GET exact words]

1. As part of discovery, the defense has received a single bullet/cartridge worksheet describing the bullets in question. The defense has received no other documentation relating to the purported match between the bullet found on the crime scene and the bullet test-fired by MPD.
2. Based on the limited amount of documentation received, the defense does not know what steps the examiner followed to reach such a conclusion or whether such steps conformed to generally accepted methods of firearms and toolmark analysis. The lack of

documentation, however, falls well below documentation standards required in the relevant scientific community.

1. The relevant scientific community requires that documentation include depictions or descriptions of the agreement or disagreement of the projectile’s characteristics such that another qualified firearm and toolmark examiner, without the benefit of the evidence itself, can review the case record, understand what was compared, and evaluate why the examiner arrived at the reported conclusion. Such documentation is absent here.
2. The lack of proper documentation also denies the Sixth Amendment right for the defendant to confront the witnesses against him by effectively preventing any meaningful cross- examination.
3. WHEREFORE, for the reasons stated above, as well as any other reasons that become apparent to the Court, the proposed testimony regarding [bullet/cartridge] comparison should be excluded.

Respectfully submitted,

XXXXXXXXXX

Counsel for XXXXXXXXXXXX Public Defender Service

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# MEMORANDUM IN SUPPORT OF MOTION TO EXCLUDE FIREARMS EVIDENCE

**FOR LACK OF DOCUMENTATION**

1. **The lack of documentation in this case is not generally accepted in the relevant scientific community.**

The D.C. Court of Appeals has set forth three requirements for the admission of expert testimony:

[T]he subject matter “must be so distinctively related to some science, profession, business or occupation as to be beyond the ken of the average layman”; (2) “the witness must have sufficient skill, knowledge, or experience in that field or calling as to make it appear that his opinion or inference will probably aid the trier in his search for truth” and (3) expert testimony is not admissible if “the state of the pertinent art or scientific knowledge does not permit a reasonable opinion to be asserted even by an expert.”

*Dyas v. United States*, 376 A.2d 827, 832 (D.C. 1977) (quoting McCormick on Evidence § 13, at 29-31 (2d ed. 1972)).

*Dyas*, incorporating *Frye*, requires that for expert testimony to be admissible, the methodology, technique, procedure, or theory must be generally accepted in the relevant scientific community. *Ibn-Tamas v. United States*, 407 A.2d 626, 638 (D.C. 1979). *See Roberts v. United States*, 916 A.2d 922, 933 (D.C. 2007); *Haidak v. Corso*, 841 A.2d 316, 327 (D.C.

2004); *Jones v. United States*, 990 A.2d 970, 977 (D.C. 2010). Under such a paradigm, the court must first identify the relevant scientific community, and then measure general acceptance.

The relevant scientific community encompasses all those “whose scientific background and training are sufficient to allow them to comprehend and understand the process and form a judgment about it.” *United States v. Porter*, 618 A.2d 629, 634 (D.C. 1992). For example, “[i]t is simply not creditable to argue … that general acceptance may be premised simply on the opinion of forensic scientists.” *Porter*, 618 A.2d at 634; *see also Ramirez v. State*, 810 A.2d 836, 851 (Fla. 2002) (“general scientific recognition requires the testimony of impartial experts or

scientists”). For purposes of evaluating firearm-related tool mark identification methodology, the relevant scientific community includes, at a minimum, examiners, metallurgists, material scientists, statisticians, and mechanical engineers.

The general acceptance requirement focuses “primarily on counting scientists' votes, rather than on verifying the soundness of a scientific conclusion.” *Jones v. United States*, 548 A.2d 35, 42 (D.C. 1988). In other words, the issue is “consensus versus controversy” – not validity. *Id.* “If scientists significant either in number or expertise publically oppose a new technique or method as unreliable, then that technique or method does not pass muster under *Frye*.” *United States v. Jenkins*, 887 A.2d 1013, 1022 (D.C. 2005) citing *Porter*, 618 A.2d at 634 (internal quotations and citations omitted). “It is not the court's role to resolve disputes within the scientific community. The very existence of a dispute precludes admission.” *Jenkins*, 887 A.2d at 1022 (internal citations omitted).

Firearm and toolmark examination generally involves an attempt to identify a particular tool as the unique source of a set of markings left on an object. Frequently, the goal is to determine whether a particular firearm produced the markings found on a bullet or cartridge casing associated with a crime. Firearms examiners claim, if there are sufficient markings for comparison, to be able to identify a bullet or cartridge casing as having been fired from a particular gun to the exclusion of every other gun in the world. *See* National Research Council, *Strengthening Forensic Science in the United States: A Path Forward* 150-55 (2009).

To attempt to reach this goal, firearms examiners must proceed through a series of steps. To compare a questioned and a known bullet, the process begins by consecutively firing multiple bullets from a weapon and microscopically comparing those bullets to eachother. Faigman et al., ed., Modern Scientific Evidence Vol. 4: Forensics §30:58 90 (2010-11); Brian J. Heard,

Handbook of Firearms and Ballistics: Examining and Interpreting Forensic Evidence 182 (2008). The examiner also fires bullets from weapons of the same manufacturer and model as the recovered gun. Modern Scientific Evidence at 90. The examiner then searches for a representative bullet to compare with the crime scene bullet, and compares the representative

test-fired bullet to the questioned one. Handbook of Firearms and Ballistics: Examining and Interpreting Forensic Evidence at 182-83. Finally, each one of the other test-fired bullets must be compared to the questioned bullet. *Id.* at 183. In any one case, many microscopic comparisons must be made.[1](#_bookmark0)

Most significantly, throughout each of these steps the examiner must document his findings as part of the examination procedure. See SWGGUN Standardization of Comparison Documentation; AFTE; ASC/LAB. It is not optional. “Firearms examiners are required to document their results and have their work reviewed by another examiner. These requirements ensure the reliability and the reproducibility of the examiner's results.” *United States v.*

*Monteiro*, 407 F. Supp. 2d 351, 368 (D. Mass. 2006).

1. *The lack of documentation falls below generally accepted standards applicable to all scientific procedures.*

Firearms and toolmark examination strives to be a scientific discipline just like any other, and it must be treated like one. “[I]f the science is removed from the witness, then that witness has no legitimate role to play in the courtroom, and no business being there…. *If there is no science, there can be no forensic science.*” (emphasis in original). Modern Scientific Evidence at 45.

1 Discovery does not reveal whether *any* microscopic comparisons were made in this case.

It should go without saying that documentation is an integral part of any scientific process. Indeed, documentation is an integral part of any process that seeks to be reliable, consistent, and transparent. “[S]cientists have a solemn responsibility to describe the methods they use as fully and accurately as possible.” David Goodstein, “How Science Works”, Reference Manual on Scientific Evidence, 48 (2011). Proper documentation ensures that appropriate procedures have been followed, permits other experts to reconstruct the procedure, and ensures the integrity of the scientist. “Most scientists are rigorously honest where honesty matters most to them: in the reporting of scientiﬁc procedures and data in peer- reviewed publications.” *Id.* at 50. Without it, all of the aspects of modern science – peer review, estimates of error, the maintenance of standards and procedures, etc. – are impossible. Proper documentation helps to ensure the reliability and reproducibility of a scientist’s – or examiner’s – results. *See e.g.*, *Monteiro*, *supra*, at 368.

Forensic scientists are not exempt from such requirements:

“The forensic scientist must always bear the burden of responsibility of justifying an opinion and the work that has led to that opinion. If this work is not properly documented, it deserves to be rejected. It is not within the perogatives of the forensic scientist to waive this requirement, and no one has the right to release the forensic scientist from this burden. Notetaking and other forms of documentation are as important to the forensic scientist as a proper grounding in chemistry, biology or other discipline. In general, documentation to support conclusions must be such that in the absence of the original examiner, another competent examiner could evaluate what was done and interpret the data.”

Modern Scientific Evidence at 55. Again and again, the National Research Council, the principal operating agency of the National Academies of Science and Engineering, has emphasized the value of transparency for evaluating scientific claims. Reference Manual on Scientific Evidence at 125-126.

Meticulous documentation is fundamental to control error. *See Thomas v. Allen*, 614 F.Supp.2d 1257 (N.D.Ala. 2009) (“‘A key task for the ... analyst applying a scientific method to conduct a particular analysis, is to identify as many sources of error as possible, to control or to eliminate as many as possible, and to estimate the magnitude of remaining errors so that the conclusions drawn from the study are valid.’”). Appropriate documentation can dramatically decrease false positive rates, particularly for comparison-based disciplines. *See*, *e.g.*, Langenberg et al., *Informing the Judgments of Fingerprint Analysts Using Quality Metric and Statistical Assessment Tools* (2010) (finding that false positive rates for fingerprint examiners who did not annotate and document were over five times higher than for those who did). The highly subjective nature of disciplines like firearm and toolmark examination or fingerprint analysis makes the requirement of proper documentation more pressing – not less. *See Monteiro*, *supra*, at 368.

1. *The lack of documentation falls below generally accepted standards in the firearms and toolmark identification field specifically.*

According to the Scientific Working Group on Firearms and Toolmark Examination (SWGGUN), and the Association of Firearm and Toolmark Examiners (AFTE), examiners should generate sufficient documentation that would allow a fellow examiner to completely reconstruct, understand, and evaluate the examination without the benefit of the evidence itself. The discovery received in this case does not meet this standard.

The Scientific Working Group on Firearms and Toolmarks (SWGGUN) is an international body of firearm and toolmark experts created by the FBI in 1998 that has been tasked, along with other Scientific Working Groups, with the establishment of standardized

procedures and protocols in forensic science. Preamble, *SWGGUN Systematic Requirements/Recommendations for the Forensic Firearm and Toolmark Laboratory* (2009) available at [http://www.swggun.org/swg/index.php?option=com\_content&view=article&id=3&Itemid=10.](http://www.swggun.org/swg/index.php?option=com_content&amp;view=article&amp;id=3&amp;Itemid=10)

*See* Strengthening Forensic Science at 202-206. In 2008, SWGGUN promulgated guidelines on comparison documentation:

“At a minimum, the documentation must include depictions or descriptions of the agreement or disagreement of individual and/or class characteristics to the extent that another qualified firearm and toolmark examiner, without the benefit of the evidence itself, can review the case record, understand what was compared, and evaluate why the examiner arrived at the reported conclusion.”

SWGGUN, *Guidelines for the Standardization of Comparison Documentation*, 2.2 (Approved 10/23/08) available at [http://www.swggun.org/swg/index.php?option=com\_content&view=article&id=26:guidelines-](http://www.swggun.org/swg/index.php?option=com_content&amp;view=article&amp;id=26%3Aguidelines-for-the-standardizationof-comparison-documentation&amp;catid=10%3Aguidelines-adopted&amp;Itemid=6)

[for-the-standardizationof-comparison-documentation&catid=10:guidelines-adopted&Itemid=6.](http://www.swggun.org/swg/index.php?option=com_content&amp;view=article&amp;id=26%3Aguidelines-for-the-standardizationof-comparison-documentation&amp;catid=10%3Aguidelines-adopted&amp;Itemid=6)

SWGGUN’s technical review guidelines provide that:

“[a] laboratory shall have policies in place for the technical review of examination documentation and reports within the firearm and toolmark discipline. The procedure shall ensure that the conclusions of an examiner are reasonable, within the constraints of validated scientific knowledge, and supported by the examination documentation. The procedure shall define the scope of the technical review, establish the parameters of the review process, specify how technical reviews are documented, and describe a course of action to be taken if a discrepancy is found.”

SWGGUN, *Quality Assurance Guidelines*, 9.2 (revised 04/07/09) available at [http://www.swggun.org/swg/index.php?option=com\_content&view=article&id=27:swggun-](http://www.swggun.org/swg/index.php?option=com_content&amp;view=article&amp;id=27%3Aswggun-quality-assurance-guidelines&amp;catid=10%3Aguidelines-adopted&amp;Itemid=6)

[quality-assurance-guidelines&catid=10:guidelines-adopted&Itemid=6.](http://www.swggun.org/swg/index.php?option=com_content&amp;view=article&amp;id=27%3Aswggun-quality-assurance-guidelines&amp;catid=10%3Aguidelines-adopted&amp;Itemid=6) The documentation

provided in this case cannot meet this standard either: what examination documentation exists makes it impossible for another examiner to determine whether the conclusions are reasonable or unreasonable, within the constraints of validated scientific knowledge or not.

The Association of Firearm and Toolmark Examiners (AFTE) requires the very same level of documentation. The AFTE standard requires that the case record contain documentation of the observations that serve as the basis for the reported conclusion.[2](#_bookmark1) *Standardization of Comparison Documentation*, 38(1) AFTE Journal 72 (2006). While laboraties have some degree of latitude as to how this is accomplished, at a minimum, “the documentation must include interpretable depictions or descriptions of the agreement or disagreement of individual and/or class characteristics to the extent that another qualified firearm and toolmark examiner, without the benefit of the evidence itself, can review the case record, understand what was compared, and evaluate why the examiner arrived at the reported conclusion The case record must clearly

describe or label what items are depicted.” *Id.*, at 72-73. *See United States v. Mouzone*, 696 F. Supp. 2d 536, 561 (D. Md. 2009). Furthermore, “photography is the preferred method of documentation.” *Standardization of Comparison Documentation* at 73; *see* National Research Council, *Ballistic Imaging* 86 (2008).

The American Society of Crime Laboratory Directors Laboratory Accreditation Board (ASCLD/LAB) is the nationally recognized accreditation body for crime laboratories. It is the oldest and most well-known forensic laboratory accrediting body in the world, and it currently

2 The defense has received no documentation of *any* observations; only the conclusion that two bullets “matched.”

accredits most of the federal, state, and local laboratories in the United States. ASCLD/LAB website, “About Us” <http://www.ascld-lab.org/about_us/aboutoverview.html>(last accessed

October 24, 2011). Speaking about forensic disciplines in general, ASCLD/LAB requires that:

2.4 When opinions and interpretations are included [in a report], the laboratory shall document the basis upon which the opinions and interpretations have been made. Opinions and interpretations shall be clearly marked as such in the test report.

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*, 2 ed., 5.10.5: Opinions and Interpretations 22 (2005) (adopted by ASCLD/LAB in 2008). No documents support Mr. XXX’s opinion that the bullets matched in this case.

Contrast the level of documentation the defense has received in this case with the documentation the defense receives in every DNA case. For testimony related to a DNA analysis, the defense receives the latest standard operating procedures and validation studies, all of the raw data comprising the analysis, relevant communications between the analyst and the government regarding what was tested and when, and all of the electropherograms for all controls and samples tested. DNA discovery permits the defense to recreate every step that the DNA analyst took without ever having to consult an outside expert. The discovery received in this case prevents the defense from doing anything of the sort. DNA analysis is also more complex, more costly, and more resource-intensive than firearms identification; the steps firearms examiners would have to take to conform to the standards of the profession are straightfoward, cheap, and easy to perform. *See* Bruce Moran, *Photo Documentation of Toolmark Identifications – An Argument in Support* 35(2) AFTE Journal 174, 184-87 (Spring 2003).[3](#_bookmark2)

3 Bruce Moran is a coauthor of the Firearm & Toolmark Identification section of Modern Scientific Evidence, a distinguished member of AFTE, a former member of SWGGUN, and an examiner with the Sacramento County District Attorney’s Laboratory of Forensic Services.

Photographic documentation specifically has been an integral part of the discipline since at least 1912, when Victor Balthazard developed a macrographic method for bullet comparison. *Id.* at 175. Major Calvin Goddard, considered the father of firearm and toolmark identification in the United States, considered photographs to be an essential ingredient to insuring the reliability and verifiability of his opinions: “When we have nothing but an ‘opinion’ to put forward, even though certain of its correctness, we much prefer to withdraw from a case altogether. We offer, in place of opinions, photographic evidence which tells its story mutely and dispassionately.” *Id.* at 174 *citing* Scientific Firearm Identification in Civil and Criminal Cases (a pamphlet advertising Major Calvin Goddard and Associates, circa 1927). By 1935, photomicrography was the generally accepted practice among firearm and toolmark examiners: “[t]his matter of pohotographing through a microscope is common laboratory practice, and is called Photomicrography.” Julian S. Hatcher, Textbook of Firearms Investigation, Identification, and Evidence: Together With the Textbook of Pistols and Revolvers, Volume 2, 182 (1935).

It is not difficult to imagine why. “[A]ny evidence unsupported by photographs cannot be regarded as being anything more than an expression of opinion. Photographs are, accordingly, essential: and such as are deemed necessary must be taken through the microscope.” Major Gerald Burrard, The Identification of Firearms and Forensic Ballistics 175 (1962). Requiring photographs of the comparison is “the best way to guard against serious error.” E.E. Hodge, Guarding Against Error, 20(3) AFTE Journal 290 (July 1988). For examiners, photography memorializes the basis of the examiner’s opinion, provides quality assurance by allowing other examiners to review the work, and creates more accurate testimony by both refreshing the examiner’s memory and serving as a trial exhibit. Photographs ground the subjective opinion of the examiner on objective facts: “[t]he competent examiner should always strive to reduce

subjectivity to a minimum whilst accentuating the objectivity, for example, scientific aspects, of his examination as much as possible…. ‘objectivity is everything’; subjectivity alone counts for nothing.” Handbook of Firearms and Ballistics at 191.

The zeal for microphotography had subsided in subsequent decades, becoming a matter of personal and agency taste, in part because courts relaxed the already limited amount of scrutiny they had been exercising over such evidence. But “the technique has existed hand in hand with the very beginnings of [the] profession and marks an essential part of its underpinnings as a reliable science.” Photo Documentation, *supra*, at 174. In 2005, AFTE approved a standardization of comparison documentation declaring that “photography is the preferred method of documentation.” *Ballistic Imaging*, *supra*, at 86 .

“*I can think of no better way to represent what we see than to document those patterns photographically. This form of documentation is superior to all other forms of documentation in terms of demonstrating what we have seen that provides a basis for our conclusions because it replicates most closely what registers on the retinas of our eyes.*

Notes, sketches, written descriptions and diagrams of toolmark agreement are only secondary to photographs in that they can supplement what we are basing our opinion on by qualifying the photographic documentation, assisting the examiner in relocating the areas of significant agreement, associating the toolmark in question to the source of the mark on the tool surface, etc.” (emphasis in original)

Photo Documentation at 181.

To now state, as firearms examiners have in recent cases, that photographs cannot accurately depict the basis of a projectile match is preposterous and embarrassing. Examiners in Superior Court have testified that objects viewed through a comparison microscope are three-

dimensional and two-dimensional pictures cannot represent the three-dimensional nature of what

is perceived. See e.g. [?]. Putting aside for the moment the fact that we all routinely take two- dimensional photographs of three-dimensional objects without too much trouble, images seen through a comparison microscope are emphatically *not three-dimensional*. Photo Documentation at 184. Viewing an object three dimensionally is only possible with stereoscopic viewing. *Id*. To the extent that examiners are concerned with capturing the depth-of-field, they can simply adjust the camera or take several pictures with differing levels of focus. *Id*. at 183.

Modern technology has only made microphotography easier and less costly. Most comparison microscopes have integrated photographic systems for recording striation matches. Handbook of Firearms and Ballistics at 149. Digital cameras can capture the straitions of a bullet at a fraction of the cost of conventional photography. *Id.* at 185. Microphotography is the basis for IBIS, the Integrated Ballistic Identification System developed in the early nineties by the Bureau of Alcohol, Tobacco, and Firearms and later adopted by the FBI. *See* Strengthening Forensic Science at 153.

In short, nothing prevents examiners from photographing their projectile comparisons and reaching the relatively modest standards demanded by so many in the relevant scientific community.

The government may argue that the defense has the opportunity to independently compare the projectile using its own expert, but that, of course, is a non-sequitur. The evidence being proposed is the one being scrutinized and employing an expert is a matter of defense strategy (and cost). Imagine the argument in the DNA context: “The DNA analysts the government uses do not have to conform to generally accepted procedures because the defense has the right to independently test such evidence.” Such a position is absurd. The admissibility of

expert evidence is not dependent on strategies and evidence marshalled by the other side. *See Dyas, supra,* and its progeny.

# The lack of documentation in this case effectively prevents meaningful cross- examination.

The Confrontation Clause of the Sixth Amendment requires that testimonial witnesses against the defendant must be subject to meaningful cross-examination. *Crawford v. Washington*, 541 U.S. 36 (U.S. 2004). *Melendez-Diaz* and its progeny have established that forensic scientists are testimonial witnesses for purposes of the Confrontation Clause. *Melendez-Diaz v.*

*Massachusetts*, 129 S. Ct. 2527 (U.S. 2009). Cross-examination, however, must be “meaningful.” *See Kaliku v. United States*, 994 A.2d 765, 785 (D.C. 2010). It is “the right to ask probing, adversarial cross-examination questions that lies at the core of an American criminal trial's truth-seeking function.” *Coronado v. State*, 2011 Tex. Crim. App. LEXIS 1248, 28-29 (Tex. Crim. App. Sept. 14, 2011).

The absense of appropriate documentation in this case, however, effectively insulates examiners from such probing questions. The following exchange is illustrative of what happens when an expert testifies solely from experience, having little to no documentation to support his claims:

|  |  |  |
| --- | --- | --- |
| Question | Answer | Translation |
| Is this situation unusual? | I have never seen a similar instance. | You don’t know what I have seen and what I haven’t, so I can say this and get away with it. |
| What is the basis of your opinion? | My 26 years of experience in the field. | It’s really a surmise on my part. I believe it to be ture, but I can’t really tell you why I  think that. It’s really more of an impression that I have than |

|  |  |  |
| --- | --- | --- |
|  |  | anything else but I can’t say that it’s a surmise or a vague impression, could I? |
| Can you tell us how many cases of this type you have examined? | Many hundreds. | I don’t know, and I certainly don’t know how many of them would support my current position, and I might not be able to tell even if I went back and pulled the files.[4](#_bookmark3) |
| Can you supply us with a list of all those cases? | Oh, no, I don’t think so. They go back many years. | No way. You don’t have any way of smoking those cases out of me, and even if I was ordered to do so, I could come up with plenty of reasons not  to comply. |
| Can you supply us with the raw data on all those cases. | I don’t think so. Some of them were when I was in my previous job. And some might be on microfilm. And it would take weeks or months to locate  all of them. | Not a chance. |
| Were those cases subjected to independent scrutiny for technical correctness? | All of them were reviewed by my supervisors. I don’t have any reason to believe that their review wasn’t adequate. | No. And also, now you’re going to have to argue with those nameless, facelss supervisors that I have alluded to but haven’t identified. |

Excerpted from *The General Assumptions and Raionale of Forensic Identification*, 4 Modern Scientific Evidence: The Law and Science of Expert Testimony § 30:32, at 44-45 (David L. Faigman et al., eds., 2010-11 ed.). Examiners cannot be permitted to shield themselves from meaningful cross-examination by simply failing to document:

“When an expert testifies to an opinion, and bases that opinion on ‘years of experience,’ the practical result is that the witness is immunized against effective cross-examination… Many witnesses have learned to invoke experience as a means of circumventing the

4 Appropriate documentation promotes consistency across cases.

responsibility of supporting an opinion with hard facts. For the witness, it eases cross- examination. But it also removes the scientific basis for the opinion.”

*Id.* at 44.

Unfortunately, “[t]he more courts admit this type of toolmark evidence without requiring documentation, proficiency testing, or evidence of reliability, the more sloppy practices will endure; we should require more.” *U.S. v. Mouzone*, 696 F. Supp. 2d 536, 564 (D. Md. 2009). The release of the National Academy of Sciences report *Strengthening Forensic Science in the United States: A Path Forward* only “heightens these concerns.” *Id.* at 565. Documentation “ensure[s] that defense counsel will be able to challenge the results through their own testing and effective cross examination.” *United States v. Monteiro*, 407 F. Supp. 2d 351, 369 (D. Mass.

2006).

Many courts exclude firearms testimony unsupported by adequate documentation. *See e.g.*, *U.S. v. Smallwood*, 2010 U.S. Dist. LEXIS 108671, at \*29-30 (W.D. Ky. Oct. 12, 2010)

(finding that, in the absence of photographs depicting what the examiner saw under the microscope, “[g]iven that the Supreme Court requires ‘that reliability be assessed in a particular manner: by testing in the crucible of cross-examination,’ the inability to conduct meaningful cross-examination weighs strongly against admissibility.”) (citations omitted); *Commonwealth v. Pytou Heang*, 458 Mass. 827, 847-48 (Mass. 2011) (requiring that the examiner “adequately document the findings or observations that support the examiner’s ultimate opinion,” and noting that comparison photography is the “best of all” method to accomplish this.); *Commonwealth v. Meeks*, Nos. 2002-10961, 2003-10575, 2006 WL 2819423, at \* 50 (Mass. Super. Ct. Sept. 28,

2006) (permitting firearms identification evidence “only if that evidence includes a detailed

statement of the reasons for those opinions together with appropriate documentation.”).

WHEREFORE, for the foregoing reasons and any other that this Honorable Court may deem just and proper, Mr. XXX, through undersigned counsel, respectfully requests that this Court preclude the government from introducing expert testimony regarding a firearms “match.”

# CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Opposition has been served by hand and by email on XXXXXXXXXXXXXXX, to the Assigned Assistant Attorney XXXXXXXXXXXXX.

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