



Ron Smith & Associates, Inc.

Testing Division

www.RonSmithandAssociates.com | testing@ronsmithandassociates.com

Summary Report

Latent Print Processing Proficiency Test #22501

Issued: June 1, 2022

On March 11, 2022, Ron Smith and Associates, Inc. (RS&A) shipped the Latent Print Processing Proficiency Test #22501. Participants were required to submit their responses no later than April 22, 2022 in order for them to be included in this summary report.

A total of 69 tests were ordered and shipped, with 63 participants returning their responses. **This summary report is based on 252 individual responses (63 participants returning 4 responses each).** The test included four items for latent print processing.

The results presented in this report reflect whether or not the participants' submitted results agree or disagree with the assigned values garnered from pre-distribution testing and outlined in *The Manufacturer's Report* (Appendix 1). The primary purpose of a Summary Report is to provide an overall documentation of all the submitted responses. It is RS&A's intention to go a step further by providing more meaningful statistical results through analyzing the submitted responses in relation to the demographics obtained from each of the examiners participating in this proficiency test. All results and statistics for this test will be outlined through graphs and charts found in the remainder of this report.

Prior to distribution of this test, all the expected responses were determined, by internal and external consensus, to be either "Friction Ridge Detail **was** Developed" or "Friction Ridge Detail **was not** Developed". In designing this proficiency test, it is understood that sometimes friction ridge detail may be present on an item during the manufacturing process. For this reason, all items are cleaned prior to being included in a test. Because of the latent nature of the prints, it is possible that some portions of friction ridge detail can be missed in the cleaning process. To satisfy this condition for the test, all developed friction ridge detail has to be photographed in order to be given credit. If the photograph is accepted, the participant will be given credit for the friction ridge development in instances when the expected answer was "Friction Ridge Detail **was not** Developed".

RS&A strives to maintain the confidentiality of all its clients and participants. All results are obtained and published using randomly generated test codes. RS&A will not release the identity of any participant without the written consent of the participant and/or the agency involved.

For any questions or further information, please contact our Proficiency Testing Coordinator by emailing testing@ronsmithandassociates.com or by calling toll free at 1-866-832-6772.

Appendix 1

Test Manufacturer's Information **Latent Print Processing Proficiency Test #22501**

This proficiency test consisted of four items labeled as Item #1 (Bottle), Item #2 (Pen), Item #3 (Paper) and Item #4 (Tape). The items were similar to those normally encountered in latent print processing casework. The participant was required to process the items for the presence or absence of friction ridge detail. The assigned values are as follows:

Item #	Assigned Value
Item #1 (Bottle)	Friction Ridge Detail <u>Was</u> Developed – Supported with Electronically Captured Image
Item #2 (Pen)	Friction Ridge Detail <u>Was</u> Developed – Supported with Electronically Captured Image
Item #3 (Paper)	Friction Ridge Detail <u>Was</u> Developed – Supported with Electronically Captured Image
Item #4 (Tape)	Friction Ridge Detail <u>Was</u> Developed – Supported with Electronically Captured Image

The assigned values below were determined through the ground truth information and verified through unanimous agreement during pre-distribution testing.

Known Matrix used:

Item 1: Sebaceous oils, **Item 2:** Sebaceous oils, **Item 3:** Amino Acids, **Item 4:** Sebaceous oils

Individual reports will be provided to participants by mid May 2022. The final summary report for this test will be posted on the Ron Smith and Associates website by early June 2022 using the following link: <http://www.ronsmithandassociates.com/proficiency/lpprocessing.html>

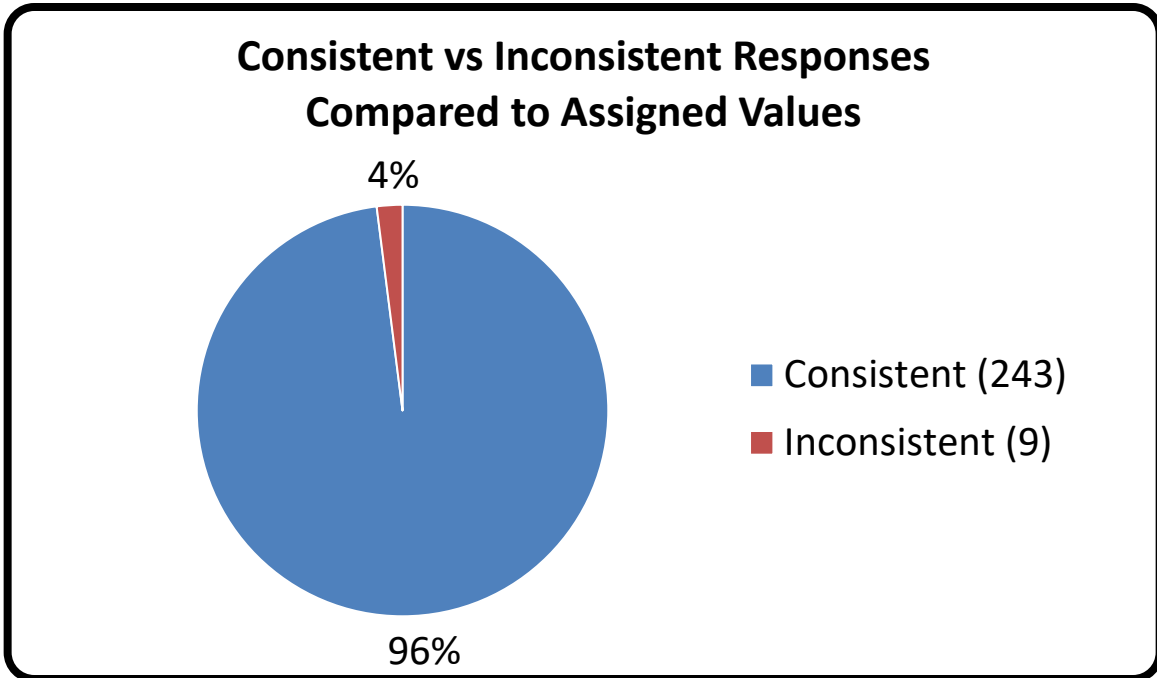
It is recommended to postpone evaluating an individual's performance until after you have received the statistical averages contained in the summary report.

For any questions or further information, contact the Proficiency Testing Coordinator by emailing testing@ronsmithandassociates.com or call toll free at 1-866-832-6772.

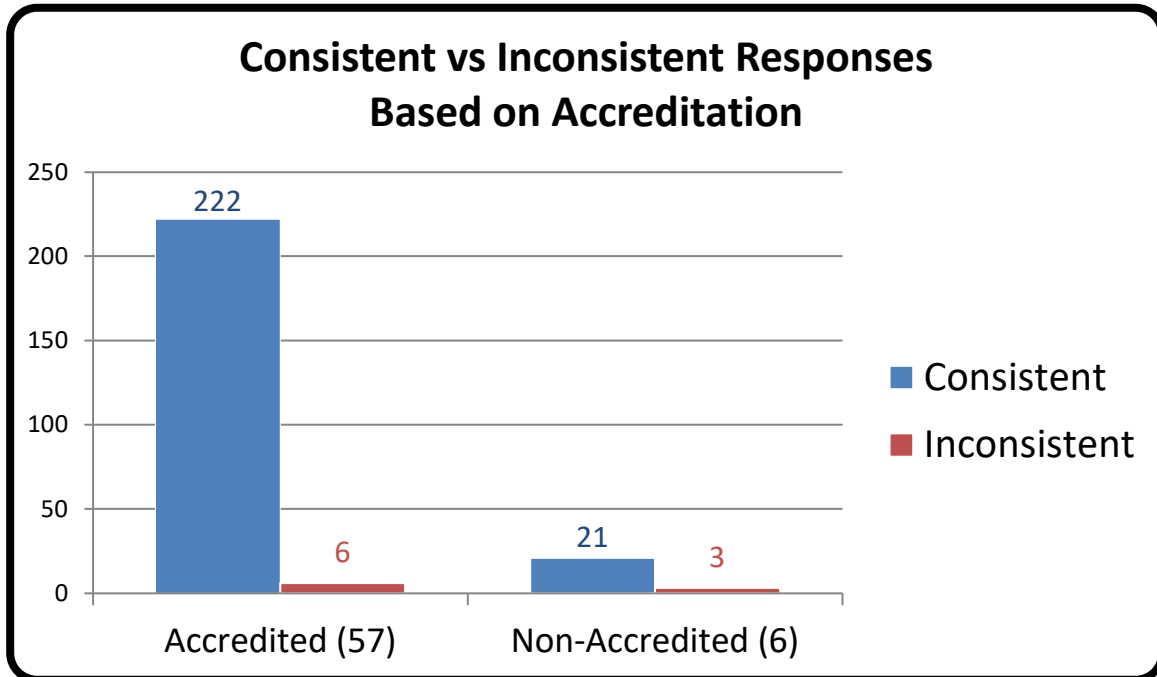
Authorized by: Ron Smith, President

Issue Date: May 11, 2022

Appendix 2



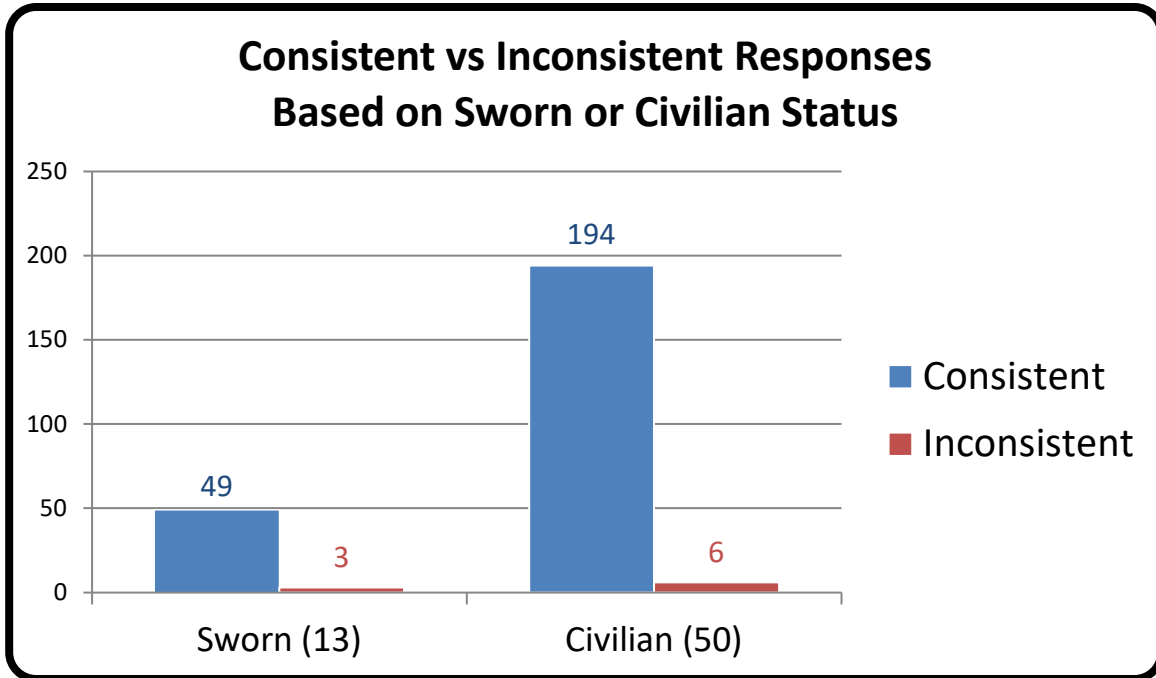
Appendix 3



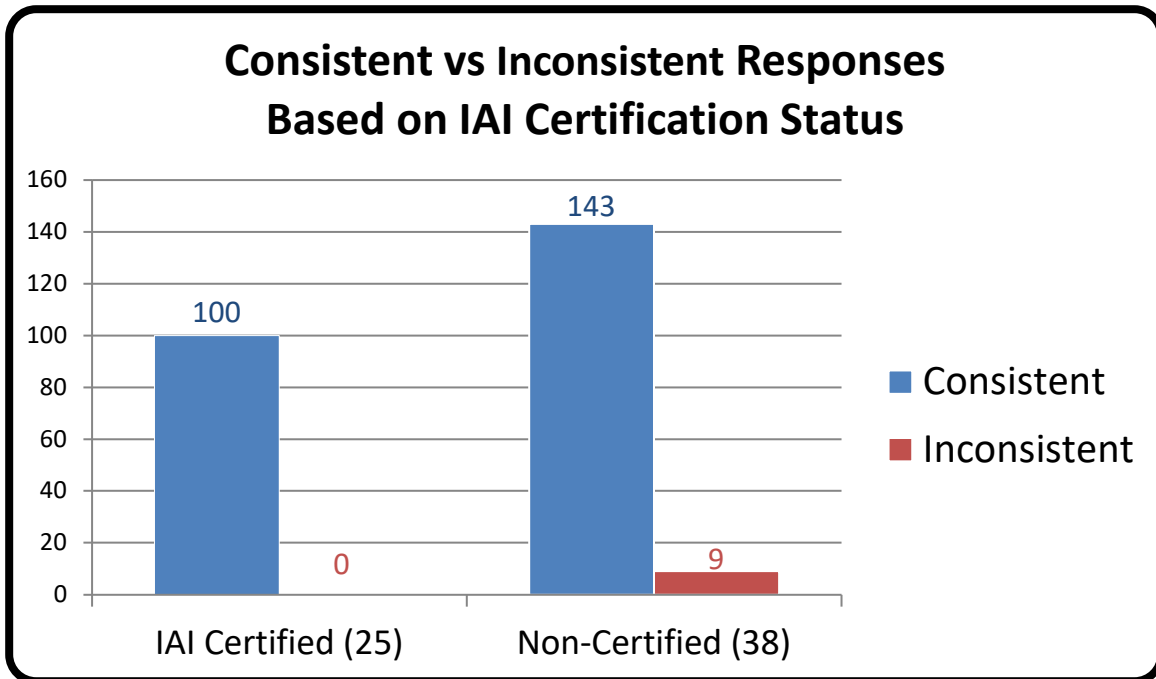
*Numerical values shown are based on **63 participant submissions, each with 4 responses, equaling 252 total responses.**

*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 4



Appendix 5

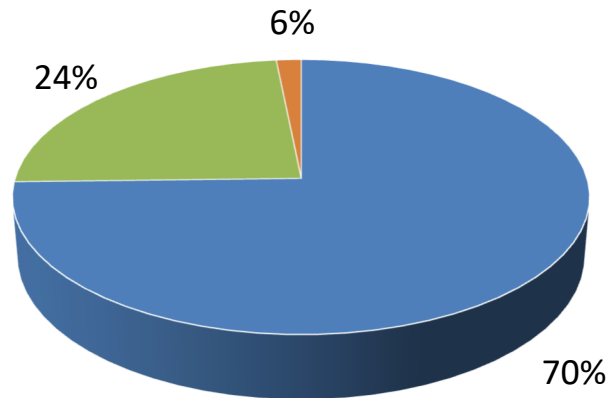


*Numerical values shown are based on **63 participant submissions, each with 4 responses, equaling 252 total responses.**

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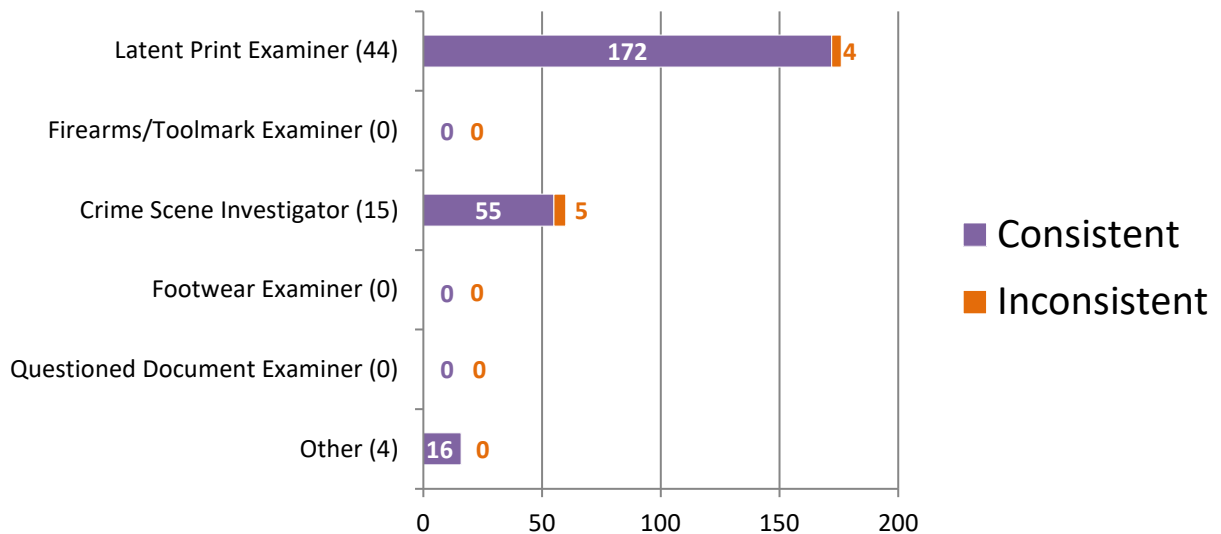
Appendix 6

Percentage of Participants Based on Primary Job Position



9

Consistent vs Inconsistent Responses Based on Primary Job Position

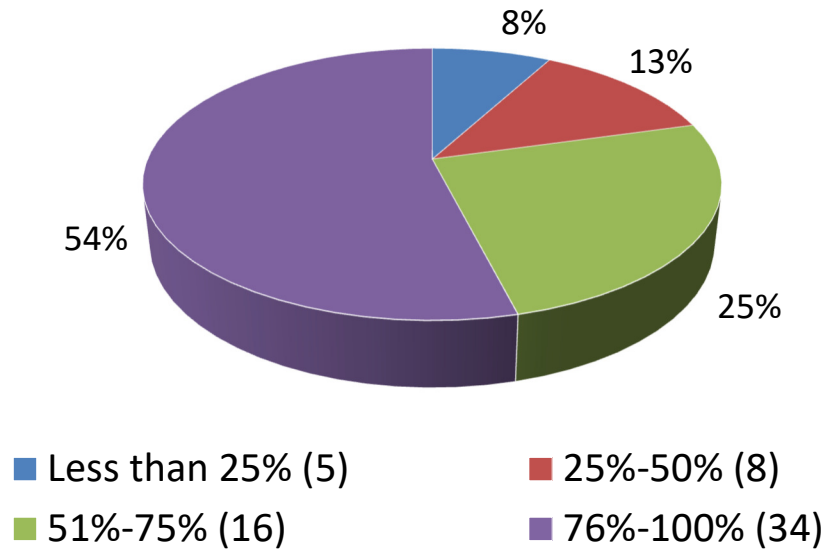


* Numerical values shown are based on **63 participant submissions, each with 4 responses, equaling 252 total responses.**

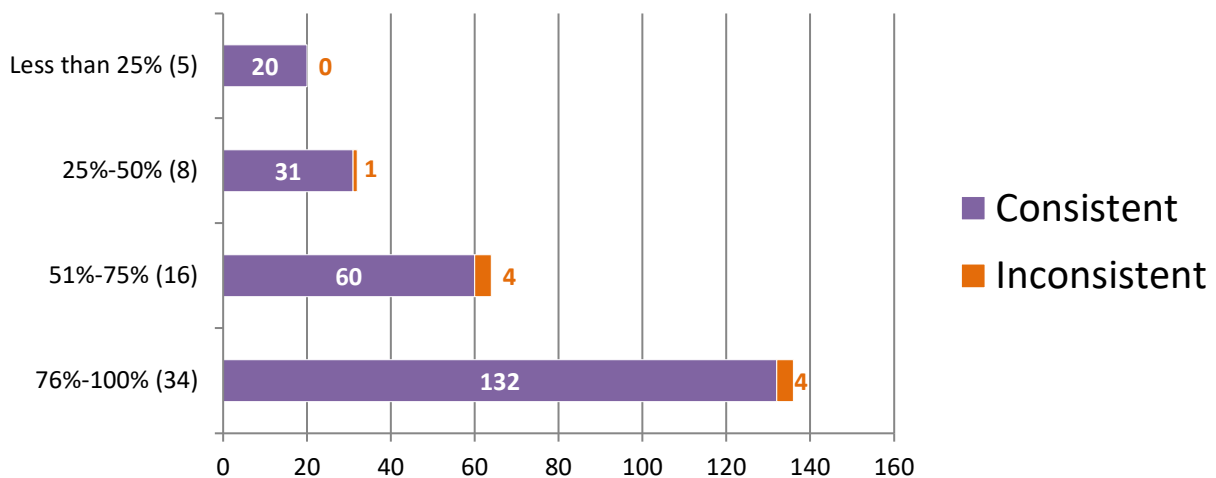
* For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 7

Percentage of Participants Based on Time Devoted to Processing of Latent Print Evidence



Consistent vs Inconsistent Responses Based on Time Devoted to Processing of Latent Print Evidence

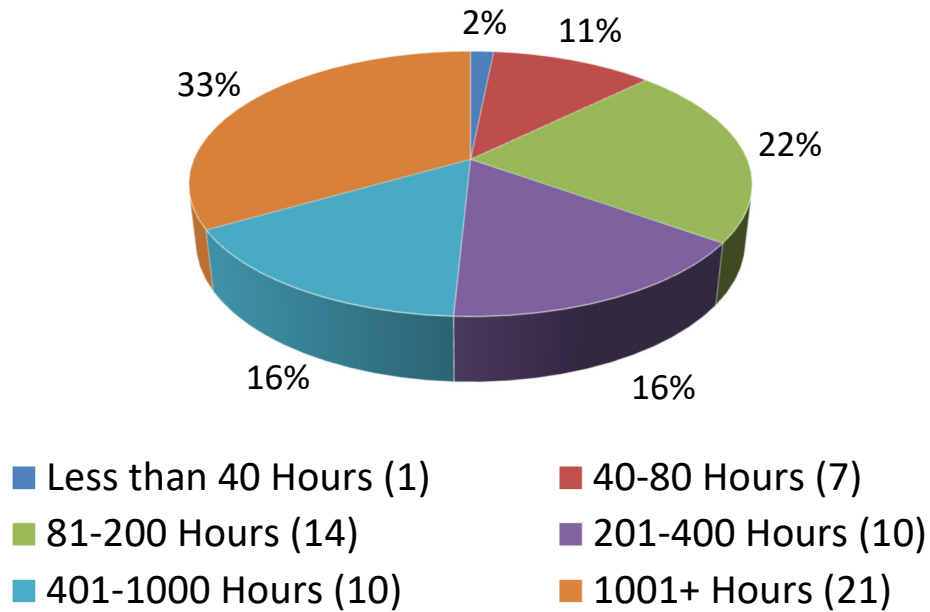


*Numerical values shown are based on **63 participant submissions, each with 4 responses, equaling 252 total responses.**

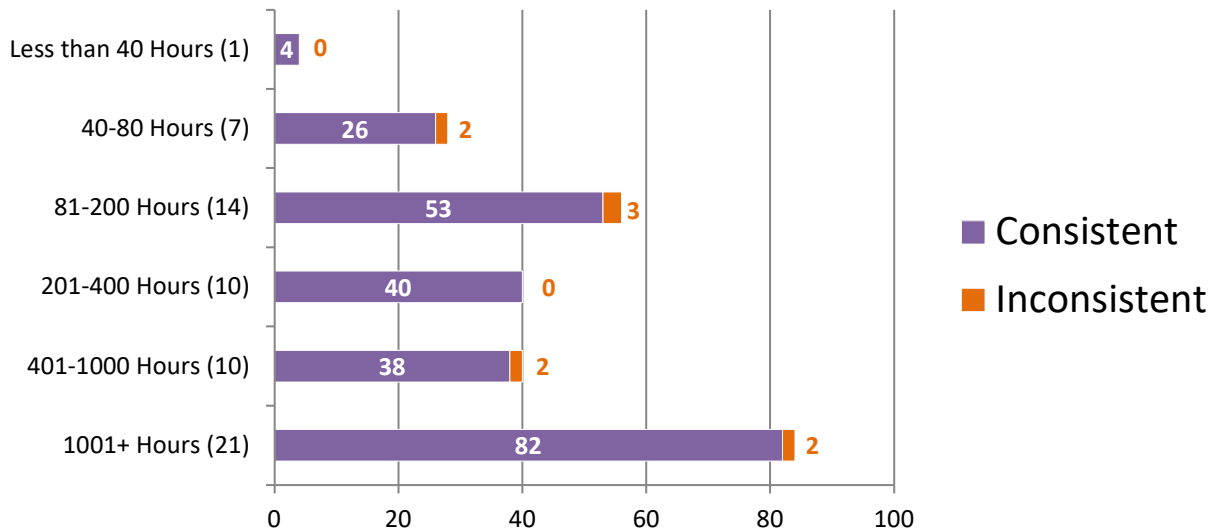
*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 8

Percentage of Participants Based on Hours of Latent Print Processing Training Completed



Consistent vs Inconsistent Responses Based on Hours of Latent Print Processing Training Completed

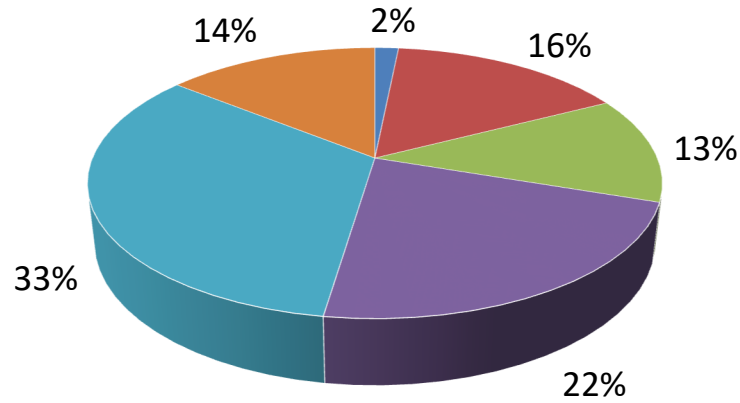


*Numerical values shown are based on **63 participant submissions, each with 4 responses, equaling 252 total responses.**

*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

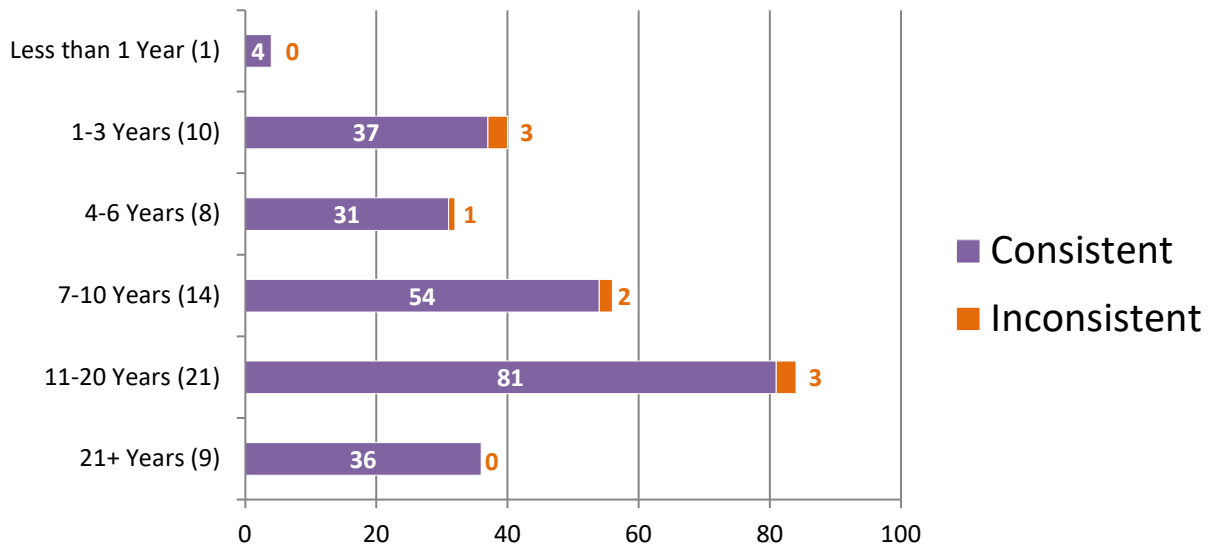
Appendix 9

Percentage of Participants Based on Years of Experience in Latent Print Processing



■ Less than 1 Year (1) ■ 1-3 Years (10) ■ 4-6 Years (8)
■ 7-10 Years (14) ■ 11-20 Years (21) ■ 21+ Years (9)

Consistent vs Inconsistent Responses Based on Years of Experience in Latent Print Processing

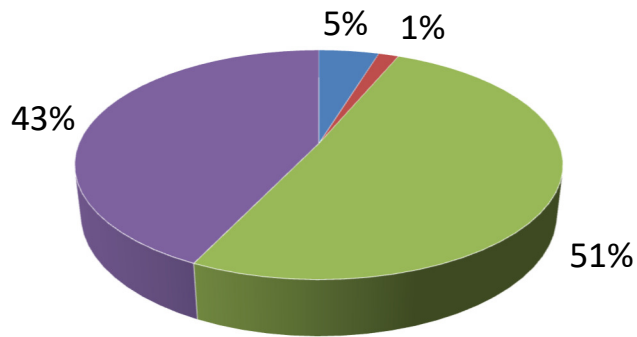


* Numerical values shown are based on **63 participant submissions, each with 4 responses, equaling 252 total responses.**

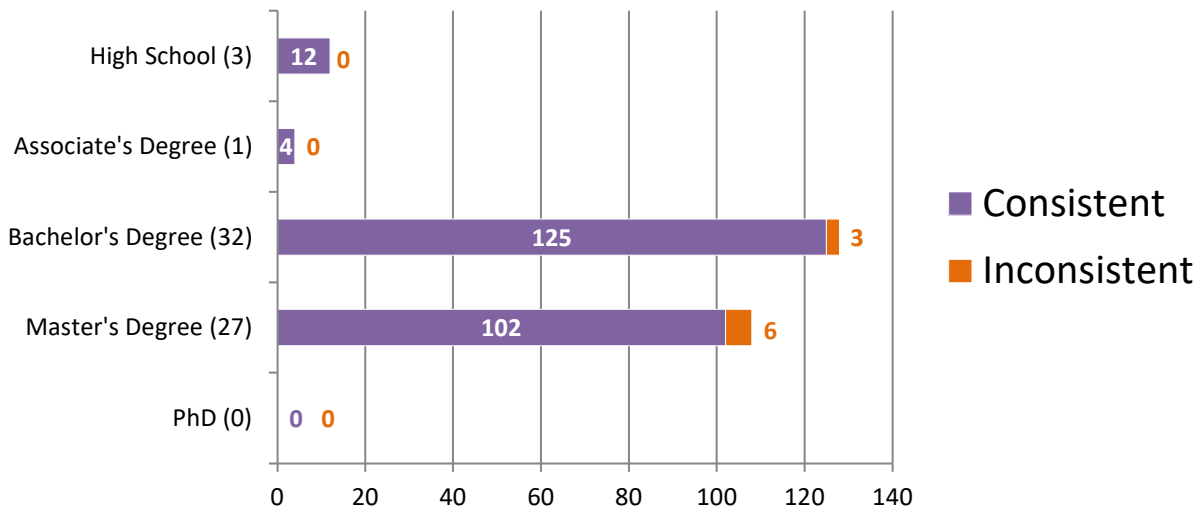
* For further information, please read ***Manufacturer's Additional Observations*** on the final page of this report.

Appendix 10

Percentage of Participants Based on Highest Level of Education Completed



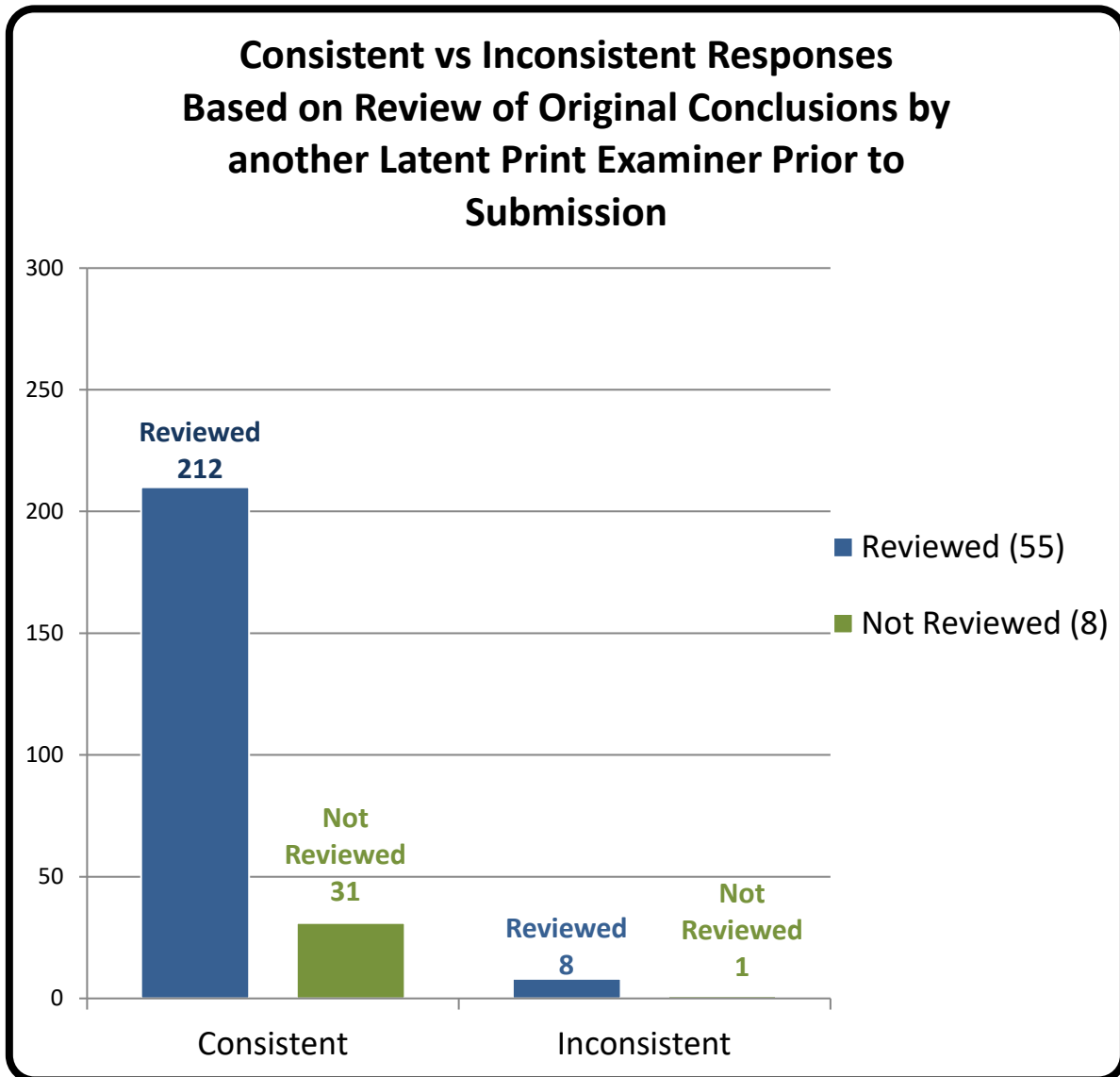
Consistent vs Inconsistent Responses Based on Highest Level of Education Completed



*Numerical values shown are based on **63 participant submissions, each with 4 responses, equaling 252 total responses.**

*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 11



* Numerical values shown are based on **63 participant submissions, each with 4 responses, equaling 252 total responses.**

* For further information, please read ***Manufacturer's Additional Observations*** on the final page of this report.

Appendix 12

Participant Responses Listed by Test Code

Item #	Item #1	Item #2	Item #3	Item #4	
Assigned Values	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Not Developed and Supported with photograph	
Test Code	1034S22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Not Developed
	1074H22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
	125V22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
	1261X22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
	194I22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
	2017V22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
	2089D22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
	2186Y22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
	2445D22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
	275G22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph

7086B22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
7211N22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
7585Q22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was Not</u> Developed
7811O22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
7887N22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
8151X22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
8239I22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
8402R22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
8553N22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
8963P22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Item was not examined for ridge detail per lab policy	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph
8999Y22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was Not</u> Developed
9379E22501	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph	Friction Ridge Detail <u>Was</u> Developed and Supported with photograph

	9459U22501	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Not Developed
	9489R22501	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph
	9532M22501	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph
	9928B22501	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph
	9989U22501	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph

Totals

Item #	Item #1	Item #2	Item #3	Item #4
Assigned Values	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph	Friction Ridge Detail Was Developed and Supported with photograph
Consistent Responses	63	63	63	54
Inconsistent Responses	0	0	0	9
Percentage of Consistent Responses	100%	100%	100%	85.7%

Participant's Additional Comments

Test Code	Comments
1074H22501	On the item 3, three different friction ridge detail developed.
194I22501	I thought this was a great test and I enjoyed how the latent prints were of excellent quality.
3202G22501	Item 2 contains two images: One image of pen with R6G and one image of powder on gel lift used on pen to obtain full ridge detail around the pen.

<p>324I22501</p>	<p>Item#1 – Total 2 marks: Pre-treat x 1 mark on lid (ITEM#1/CTU/1/PFL). Mark on lid improved with SG + DYE (ITEM#1/CTU/1/SGY). A second mark was developed with SG on the neck of the bottle (ITEM#1/CTU/2/SG). Item#2 – Total 1 mark: Pre-treat x 1 mark (ITEM#2/CTU/1/PRE) – Area1-3 SG - no improvement. Gel-lifted & Gel Scanned – no improvement. Mark improved with DYE (ITEM#2/CTU/1/SGY) – Area1-3 Item#3 – Total 1 mark: Pre-treated – 0 marks. 1 x mark developed with DFO (ITEM#3/CTU/1/DFO). Item#4 – Total 1 mark: Pre-treat – 0 marks. 1 x mark developed with PSB (ITEM#4/CTU/1/PSB). Mark also reversed.</p>
<p>4130T22501</p>	<p>En el ítem 4, no se obtuvo ningún elemento lofoscópico ni con revelado químico.</p>
<p>5147S22501</p>	<p>I found Items 1 and 2 unnecessarily difficult to photograph and it seemed like a ploy to get more agencies to buy cylindrical surface unwrappers. I felt this test was of my photography skills more than my latent print processing abilities.</p>
<p>5344L22501</p>	<p>Item 1 - More marks found, but poor quality so thought not to be part of the test. Item 2 - 3rd mark available which shows rest of mark as couldn't capture all in 2.</p>
<p>6897P22501</p>	<p>Para el ítem #1 se utilizó reactivo físico color gris, ítem #2 cianocrilato y reactivo físico color gris, ítem #3 ninhidrina.</p>
<p>6981U22501</p>	<p>EN EL ÍTEM #1 SE UTILIZO REACTIVO FÍSICO (OXIDO) DE COLOR NEGRO. EN EL ÍTEM #2 PRIMERO SE APLICÓ REACTIVO QUÍMICO (CIANOACRILATO) Y POSTERIORMENTE SE APLICÓ REACTIVO FÍSICO (OXIDO) DE COLOR NEGRO. EN EL ÍTEM #3 SE APLICÓ REACTIVO NINHIDRINA.</p>
<p>7086B22501</p>	<p>Each item had one clear fingerprint on its surface; however, on items 1, 2, and 4, other partial ridge detail did develop on other surfaces and was preserved. It appears that the test surfaces were not cleaned of residual ridge detail prior to the test impression(s) being placed.</p>
<p>7211N22501</p>	<p>A possible fingerprint/impression on the adhesive side of the tape (Item #4) was not of great quality, but some ridge detail was present and photographed.</p>
<p>8402R22501</p>	<p>Duct tape was very difficult to remove from acetate sheet.</p>
<p>8963P22501</p>	<p>Item#2 was not examined for fingerprint ridge detail as it is our policy that we do not examine pens for fingerprints. We would consider pens for DNA examination if requested. Fingerprint Impression CEW2 was from ITEM#1 was subsequently lifted to create Lift CEW2-1. I have been unable to upload an image of this lift as your system only allows me to upload two images per item. This is essentially the same impression but it was lifted from the surface of the ITEM#1 due to the challenges with photographing around a curved surface. Both a photograph and a lift were taken for completeness.</p>

Manufacturer's Additional Observations

Based upon a review of the submitted responses, the following observations were noted:

1. There were only nine (9) inconsistent responses, by nine (9) different individuals, that could not be supported. These inconsistent responses were evenly spread out over eight (8) of the ten (10) categories captured resulting in no meaningful patterns.
2. The only two (2) significant patterns for inconsistent responses were as follows; 1) eight (8) of nine (9) inconsistencies were reviewed before submitting, 2) all nine (9) inconsistencies were from individuals who were non-IAI certified.

Authorized by: Ron Smith, President
Date of Issue: June 1, 2022