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AMENDED REPORT Summary Report 2016 Fall Latent Comparison Print Proficiency Test #16102 Issued: January 13, 2017

On August 22, 2016, Ron Smith and Associates, Inc. (RS&A) shipped the 2016 Fall Latent Print Comparison Proficiency Test #16102. Participants were required to submit their responses no later than October 3, 2016 in order for them to be included in this summary report.

A total of 73 tests were ordered and shipped with 50 participants returning their responses. The test was available in both digital and hard copy format and included ten latent prints and four sets of known finger and palm prints.

The results presented in this report reflect whether or not the participants' submitted results are consistent 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 Test #16102 will be outlined through graphs and charts found in the remainder of this report.

Prior to distribution of this test, all of the expected responses were determined to be either "Identification" or "Exclusion"; however, we are aware that some agencies allow for a conclusion of "Inconclusive" in their casework. In designing this Proficiency Test, there was no intention to force a participant to render a conclusion which goes beyond their considered opinion. To satisfy this option, participants were allowed to enter "Inconclusive" as a response. Due to the fact that a participant's "Inconclusive" response is not consistent with the assigned values, it will appear as an inconsistent response in the summary report and be incorporated as such in the statistical analysis. It will be up to each agency to decide if the participant's "Inconclusive" response qualifies as being acceptable under their policies and procedures.

RS&A strives to maintain the confidentiality of all of 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 additional information, please contact the Latent Print Comparison Proficiency Test Coordinator, Brian Dew at briandew@ronsmithandassociates.com or call 910-338-0350.



Test Manufacturer's Information Issued on October 17, 2016

Fall 2016 Latent Print Comparison Proficiency Test #16102

The assigned values are:

Latent Print Number	Conclusion	Subject Number	Specific Finger or Palm
L-1	Identification	K-1	Right Thumb
L-2	Identification	K-1	Right Index
L-3	Exclusion		
L-4	Identification	K-1	Left Middle
L-5	Identification	K-2	Right Thumb
L-6	Exclusion		
L-7	Exclusion		
L-8	Identification	K-2	Left Palm
L-9	Exclusion		
L-10	Exclusion		

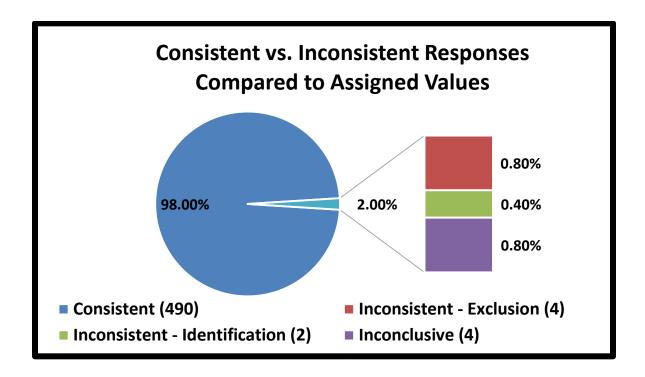
The test consisted of ten latent prints and four sets of known finger and palm prints in hard copy photograph and/or digital image formats. The assigned values were determined through the ground truth information and verified through unanimous agreement during pre-distribution testing.

Individual reports will be provided to participants on or before October 24, 2016. The final summary report for this test will be posted on the Ron Smith and Associates website at

http://www.ronsmithandassociates.com/proficiency/latent print comparison.html by November 7, 2016.

For questions or further information, contact the Proficiency Test Coordinator at testing@ronsmithandassociates.com.





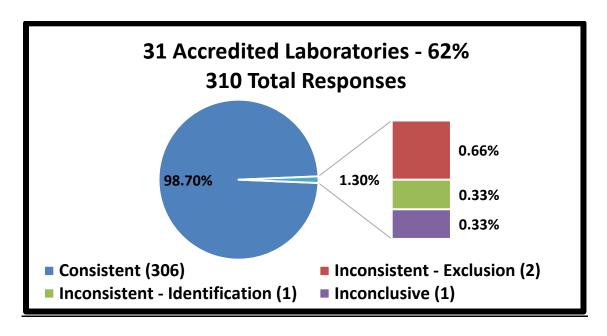
With 50 reporting participants and 10 latent prints in question, a total of 500 individual responses were received. Of these, 490 were consistent with the assigned values (98%).

The 10 responses which were not consistent with the assigned values are broken down as follows:

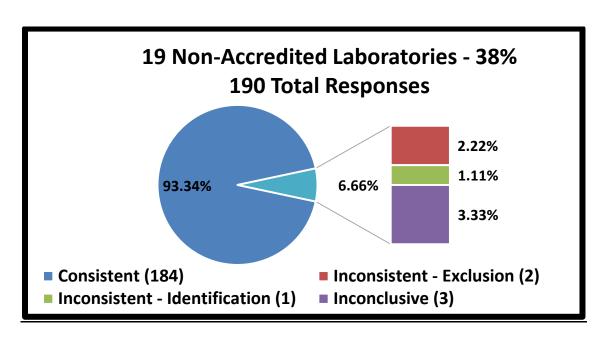
- 4 (0.8%) Exclusion responses submitted for a latent print with an assigned value of identification.
- 4 (0.8%) Inconclusive responses submitted for a latent print with an assigned value of identification.
- 2 (0.4%) Identifications inconsistent with the assigned value (See Manufacturer's Additional Observations for further information on page 15.)



Appendix 3
Accredited vs. Non-Accredited Laboratories



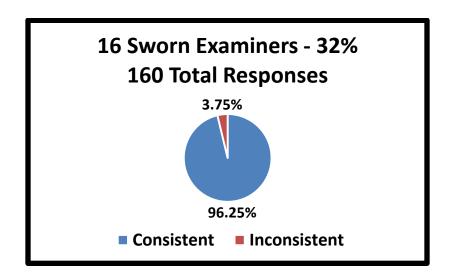
There were a total of 31 participants from accredited laboratories. These participants submitted a total of 310 responses. Of these, 306 responses were consistent with the assigned values (98.70%). One inconsistent response was an identification other than the assigned value, one was inconclusive (when the assigned value was identification) and two were exclusions (when the assigned value was identification).



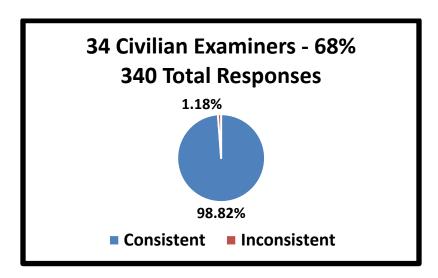
There were a total of 19 participants from non-accredited laboratories. These participants submitted a total of 190 responses. Of these, 184 responses were consistent with the assigned values (93.34%). The six inconsistent responses included two exclusions (when the assigned value was identification), three inconclusive responses (when the assigned value was identification), and one response was an identification other than the assigned value.



Appendix 4 Sworn vs. Civilian Latent Print Examiners



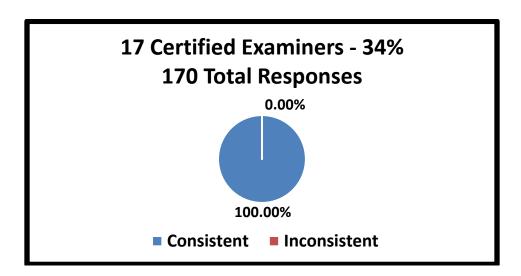
There were a total of 16 participants who reported that they were employed in sworn law enforcement positions. These participants submitted a total of 160 responses. Of these, 154 responses were consistent with the assigned values (96.25%). The six inconsistent responses included two exclusions (when the assigned value was identification), three inconclusive responses (when the assigned value was identification), and one response was an identification other than the assigned value.



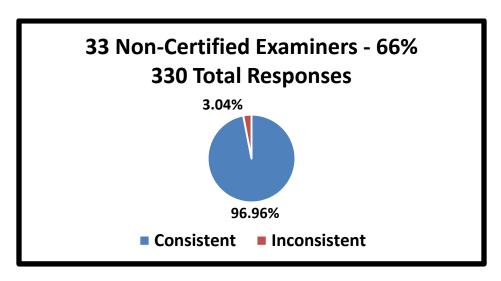
There were a total of 34 participants who reported they were employed in a civilian capacity. These participants submitted a total of 340 responses. Of these, 336 responses were consistent with the assigned value (98.82%). The four inconsistent responses included one response that was an identification other than the assigned value, one inconclusive (when the assigned value was identification), and two exclusions (when the assigned value was identification).



Appendix 5
I.A.I Certified Latent Print Examiners vs. Non-Certified

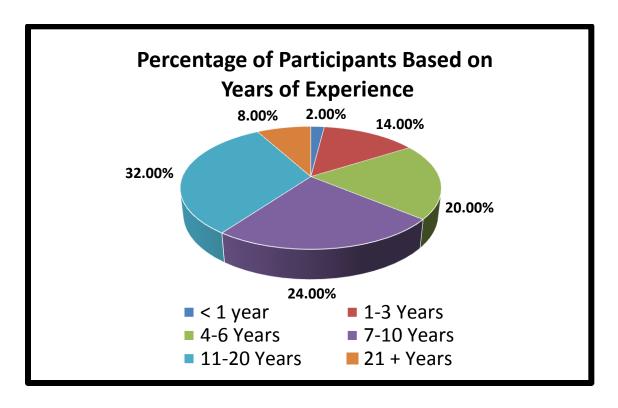


There were a total of 17 participants who reported they were certified as latent print examiners by the International Association for Identification. These participants submitted a total of 170 responses. Of these, all 170 responses were consistent with the assigned value (100%).



There were a total of 33 participants who reported that they were not certified as latent print examiners by the International Association for Identification. These participants submitted a total of 330 responses. Of these, 320 responses were consistent with the assigned values (96.96%). The 10 inconsistent responses included four exclusions (when the assigned value was identification), two responses that were identifications other than the assigned value, and four inconclusive responses (when the assigned value was identification).

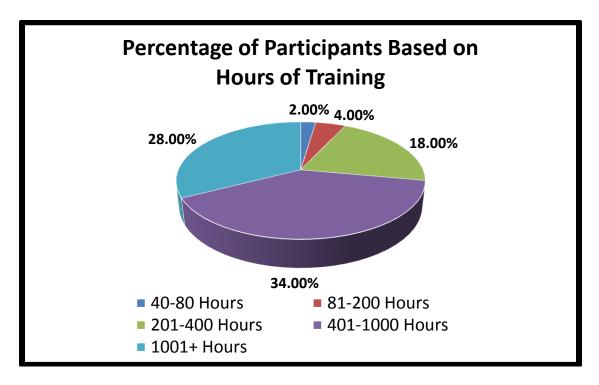




Consistent / Inconsistent Responses Based on Experience Level

Years and # of Participant Responses	Consistent	Exclusion (assigned value of Identification)	Inconsistent Response (Identification)	Inconclusive
Less than 1 Year 1 Participant 10 Responses	100 %	0 %	0 %	0%
1-3 Years 7 Participants 70 Responses	98.57 %	0 %	0 %	1.43%
4-6 Years 10 Participants 100 Responses	98.00 %	1.00 %	0 %	1.00 %
7-10 Years 12 Participants 120 Responses	99.17 %	0.83 %	0 %	0 %
11-20 Years 16 Participants 160 Responses	96.25 %	1.25 %	1.25 %	1.25%
21 + Years 4 Participants 40 Responses	100 %	0 %	0 %	0%





Consistent / Inconsistent Responses Based on Hours of Training

Hours and # of Participant Responses	Consistent	Exclusion (assigned value of Identification)	Inconsistent Response (Identification)	Inconclusive
Less than 40 Hours 1 Participant 10 Responses	100 %	0 %	0 %	0%
40-80 Hours 2 Participants 20 Responses	95.0 %	0 %	0 %	5.0 %
81-200 Hours 9 Participants 90 Responses	94.44 %	2.22 %	1.11 %	2.22 %
201-400 Hours 7 Participants 70 Responses	97.14 %	1.43 %	0 %	1.43 %
401-1000 Hours 17 Participants 170 Responses	98.82 %	0.59 %	0.59 %	0%
1001+ Hours 14 Participants 140 Responses	100 %	0 %	0 %	0%



Appendix 8
Participant Responses listed by Test Code

	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
	ID	ID		ID	ID			ID		
	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
Test Code	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
1022Q16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
1022Q10102	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
1047L16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
1202M16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
1451E16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID			ID	ID			ID		
1571P16102	K-1	INC	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT			LM	RT			LP		
	ID	ID		ID	ID			ID		
1740B16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
2186B16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
2211D16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
2326C16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
2663V16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
2991Y16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		



	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
	ID	ID		ID	ID			ID		
	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
Test Code	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
3150016102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID			ID	ID			ID		
3159E16102	K-1	INC	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT			LM	RT			LP		
	ID	ID		ID	ID			ID		
3171F16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
3187V16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID				ID		
3583Z16102	K-1	K-1	EXC	K-1	EXC	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM				LP		
	ID	ID		ID	ID			ID		
3756T16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
3802S16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID				ID		
4294Q16102	K-1	K-1	EXC	K-1	EXC	EXC	EXC	K-2	EXC	EXC
,	RT	RI		LM				LP		
	ID	ID		ID	ID			ID		
4427016102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
465V16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
4679E16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		



	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
	ID	ID		ID	ID			ID		
	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
Test Code	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
5098L16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
5327P16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
5383T16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
5447B16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RP		LM	RT			LP		
	ID	ID		ID	ID			ID		
5462016102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
5549E16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
5574G16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
5842L16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
5903A16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
5961M16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	LP		LM	RT			LP		
	ID	ID		ID	ID			ID		
6151C16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		



	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
	ID	ID		ID	ID			ID		
	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
Test Code	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
6164T16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID			ID	ID			ID		
6717M16102	K-1	INC	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT			LM	RT			LP		
	ID	ID		ID	ID			ID		
6940J16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
7422B16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
7422010102	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
7581Q16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
7381Q10102	RT	RI		LM	RT			LP		
	ID	ID		ID				ID		
7657S16102	K-1	K-1	EXC	K-1	EXC	EXC	EXC	K-2	EXC	EXC
7037310102	RT	RI		LM				LP		
	ID	ID		ID	ID			ID		
7661N16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
70011410102	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
7737C16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
7737C10102	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
7982R16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
, 302K1010Z	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
8100D16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
0100010102	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
8467Q16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
0 1 0/Q10102	RT	RI		LM	RT			LP		



	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
	ID	ID		ID	ID			ID		
	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
Test Code	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
8589S16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
8389310102	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
8772L16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
8//ZL1010Z	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
8978J16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
8378310102	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
9012016102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
3012010102	RT	RI		LM	RT			LP		
	ID	ID		ID	ID			ID		
9627J16102	K-1	K-1	EXC	K-1	K-2	EXC	EXC	K-2	EXC	EXC
302/110102	RT	RI		LM	RT			LP		
	ID			ID				ID		
9795B16102	K-1	INC	EXC	K-1	EXC	EXC	EXC	K-2	EXC	EXC
3733010102	RT			LM				LP		

Totals

Consistent Responses	50	44	50	50	46	50	50	50	50	50
Inconsistent Responses	0	6	0	0	4	0	0	0	0	0
Percentage of Consistent Reponses	100%	88%	100%	100%	92%	100%	100%	100%	100%	100%



Participant's Additional Comments

Test ID	Comments
1022Q16102	We do not routinely determine or report exclusions at this agency. We report "not identified"
1047L16102	Please note that fingerprint comparison does not appear on our scope of accreditation.
2326C16102	L-2 latent print was identified by right index fingerprint on right palm.
3171F16102	Decent test, but overall too easy. It is definitely unlike any other proficiency tests I have seen, due to the number of exclusions. It is kind of similar to real casework, but the latents are much higher quality than seen in real casework (we might see one or two this high quality, not all latents being this high quality). Also, we would never get as much supporting information in real case work - such as the CCTV stills, and extensive descriptions. Less is more in many circumstances, as bias could start to be introduced by such supporting information. However, if this is looked at as a study in whether bias affects correct decisions, then that is valuable too.
3583Z16102	This is a great test, it was a challenge to add in the work I do day by day. Regarding the latent and known prints, they were great and they have such a good quality. Thank you.
4294Q16102	The clarity of the test images was good. The information provided in the packet exceeded my expectations.
5327P16102	We would appreciate it if images were not saved to disk as JPEG 2000 (JP2). Our digital imaging system does not recognize this format and all images had to be downloaded and converted to TIF prior to upload. Very time consuming. After researching it appears that "support for reading these photos is still fairly limited." Thank you. Additionally, we are transferring accreditation to in January and PT results will need to be submitted to them next year. You currently only allow for submission to and
6717M16102	As we don't analyse all the phalanx ("only" the top phalanx of each finger), we determined the L2 as inconclusive (on K1 right index).
7657\$16102	Difficult test. Simulated actual casework. It was sometimes difficult to determine if the latent prints and known prints were to the same scale



Manufacturer's Additional Observations

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

- 1. The two identifications that were inconsistent with the assigned values were consistent with the assigned subject. However, they were inconsistent with the assigned anatomical area. Both instances involved the latent print labeled L-2 which is a medial and proximal joint. The test instructions stated "Joint fingerprints are to be identified to the corresponding finger and not the corresponding palm (even if a palm card is used to make the identification)." A number of agencies routinely report medial and proximal joint identifications to either the card or the palm to which they are identified.
- 2. Four responses of inconclusive were submitted for L-2. This was the only latent print with inconclusive responses submitted.

Note: This report was amended to highlight the appropriate inconsistent results. Submissions for L-3 were highlighted for two submissions when the highlight should have been directed to L-2. No changes to the statistics were made. **This report replaces the summary report issued on November 15, 2016.**

Authorized by

Ron Smith, President January 13, 2017

Roma Smrith