



Ron Smith & Associates, Inc.

Testing Division

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Summary Report

CS Presumptive Blood Testing Proficiency Test #23600PBT

Issued: June 12, 2023

On March 27, 2023, Ron Smith and Associates, Inc. (RS&A) shipped the CS Presumptive Blood Testing Proficiency Test #23600PBT. Participants were required to submit their responses no later than May 5, 2023 in order for them to be included in this summary report.

A total of 118 tests were ordered and shipped, with 93 participants returning their responses. **This summary report is based on 372 individual responses (93 participants returning 4 responses each).** The test included four items for presumptive blood testing.

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 analysts 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 "(+) Positive for Blood" or "(-) Negative for Blood"; however, we are aware that some agencies may 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 does not meet the assigned values, it will appear as an inconsistent response in this 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 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 **CS Presumptive Blood Testing Proficiency Test #23600PBT**

This proficiency test consisted of four items labeled as Item #1 (Black Swatch), Item #2 (Gray Swatch), Item #3 (Green Swatch) and Item #4 (Red Swatch). These items were similar to those normally encountered in crime scene processing. The participant was required to process the items for the presumptive presence or absence of blood. The assigned values are as follows:

Item #	Assigned Value
Item #1 (Black Swatch)	Presumptive (+) Positive for Blood
Item #2 (Gray Swatch)	Presumptive (-) Negative for Blood
Item #3 (Green Swatch)	Presumptive (-) Negative for Blood
Item #4 (Red Swatch)	Presumptive (+) Positive for Blood

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

Known Substance used:

Item 1: Human Blood, **Item 2:** Non-blood, **Item 3:** Non-Blood, **Item 4:** Human Blood

Individual reports will be provided to participants by late May 2023. The final summary report for this test will be posted on the Ron Smith and Associates website by early June 2023 using the following link:

www.ronsmithandassociates.com/proficiency/crimesceneprocessing.html

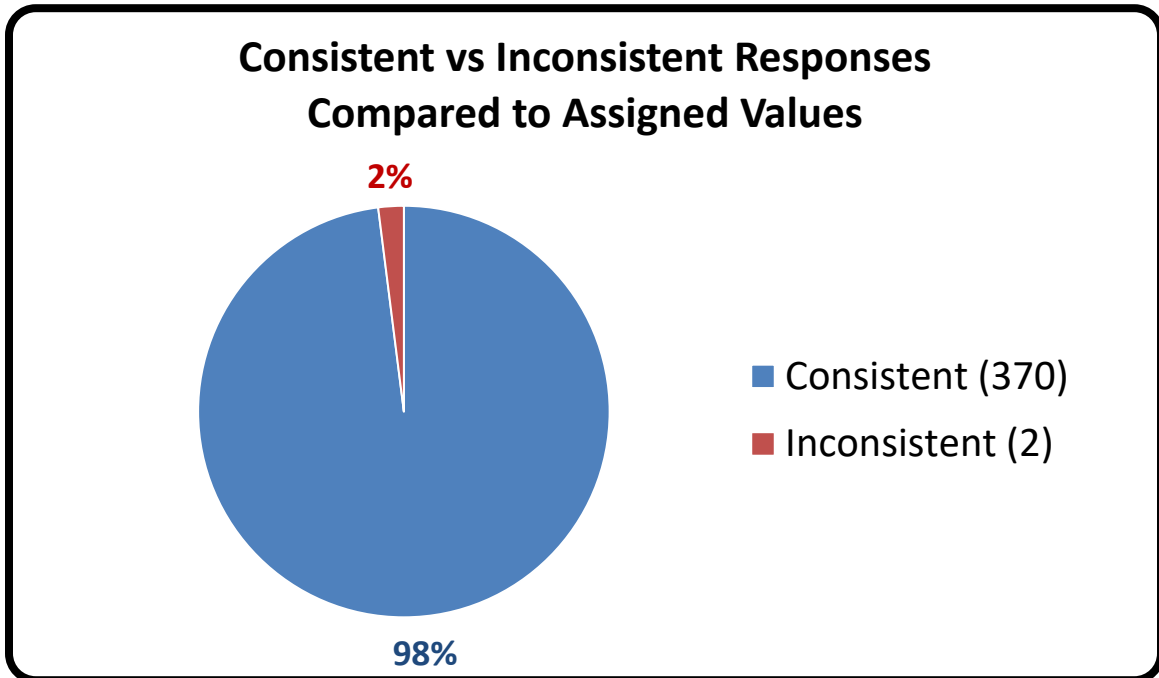
It is recommended to postpone evaluating an individual's performance until after you have received the statistical averages contained in the summary report.

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.

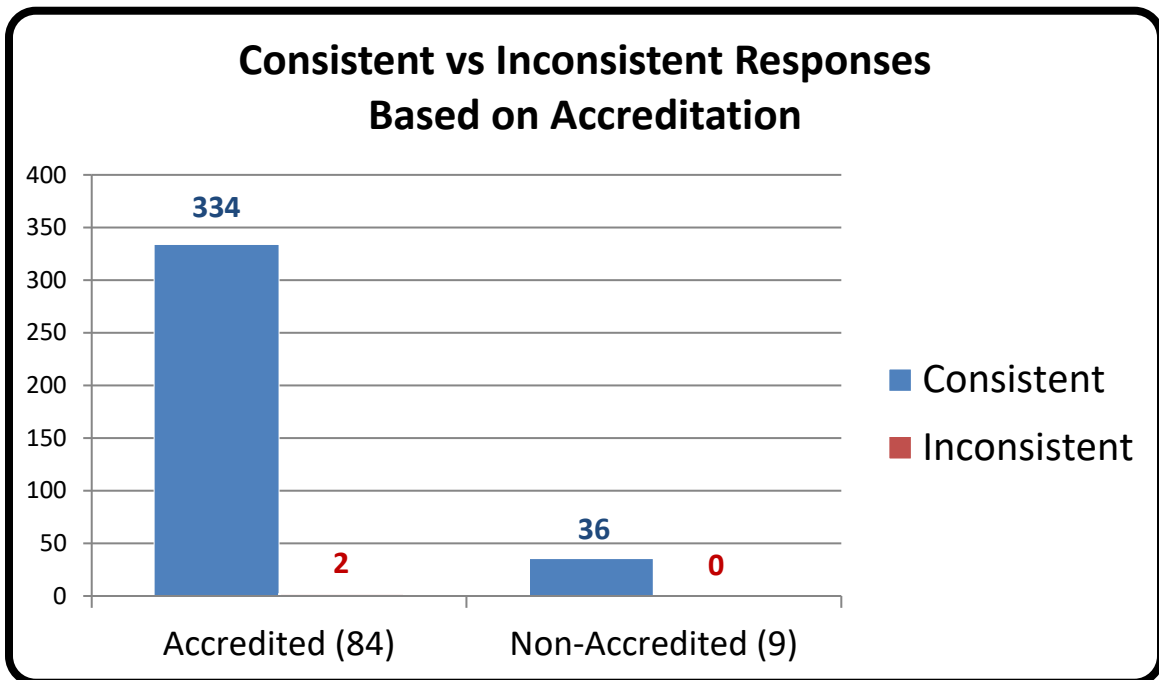
Authorized by: Jon S. Byrd, CEO

Issue Date: May 22, 2023

Appendix 2



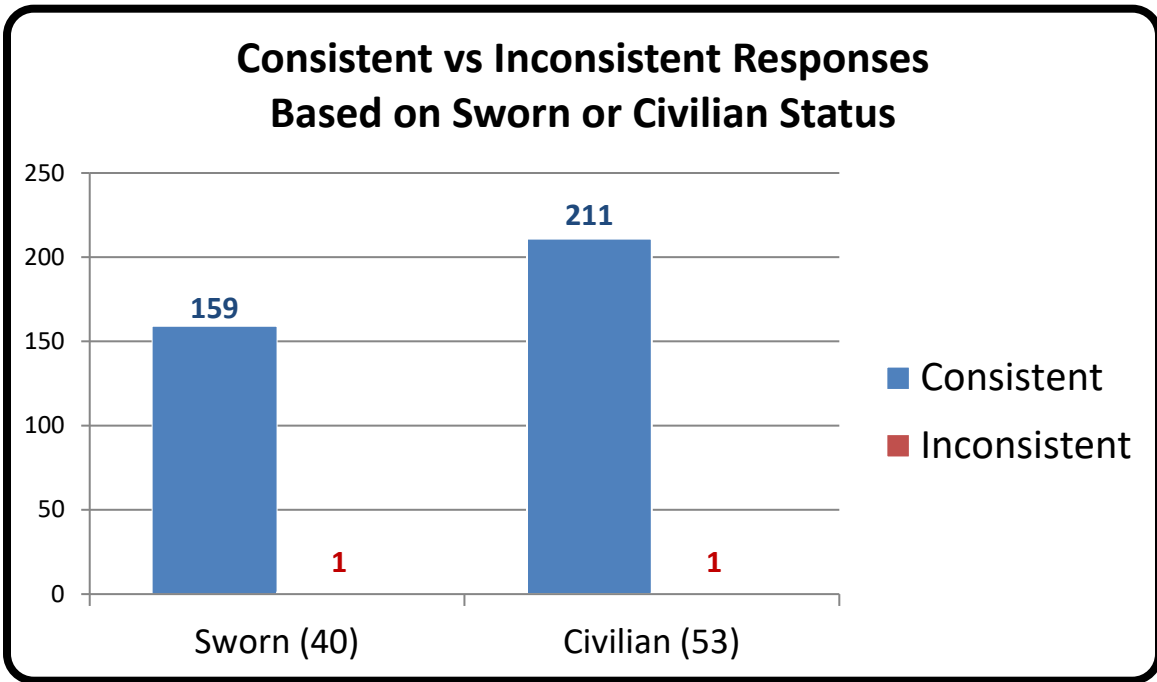
Appendix 3



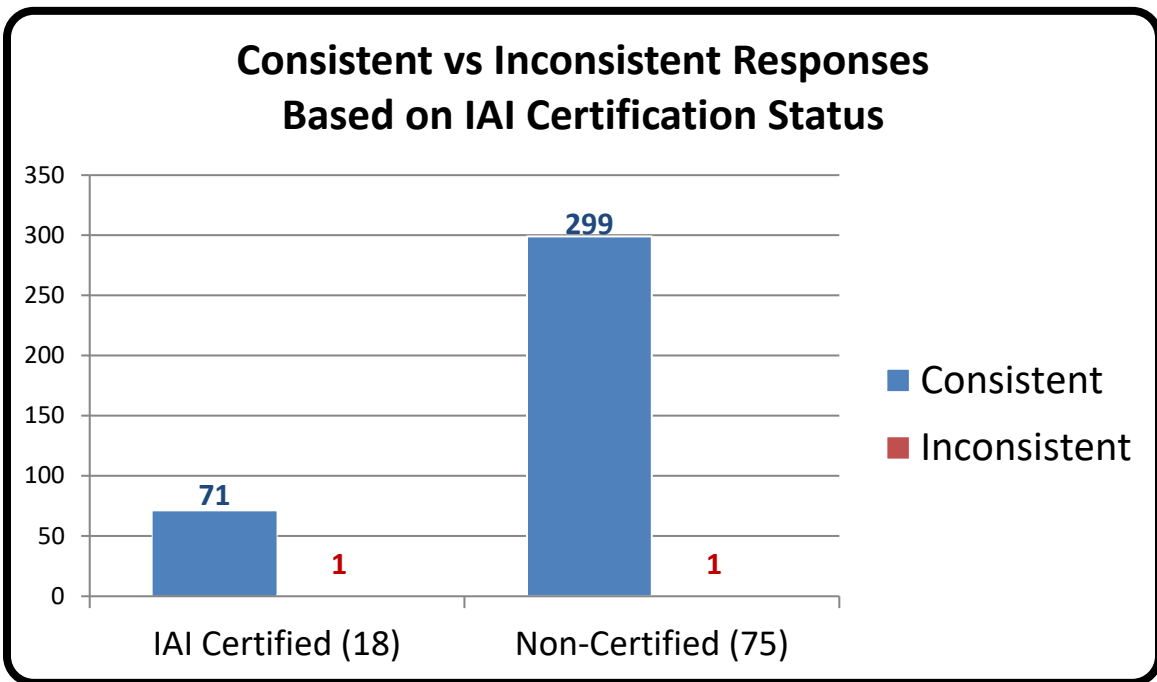
*Numerical values shown are based on 93 participant submissions, each with 4 responses, equaling 372 total responses.

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

Appendix 4



Appendix 5

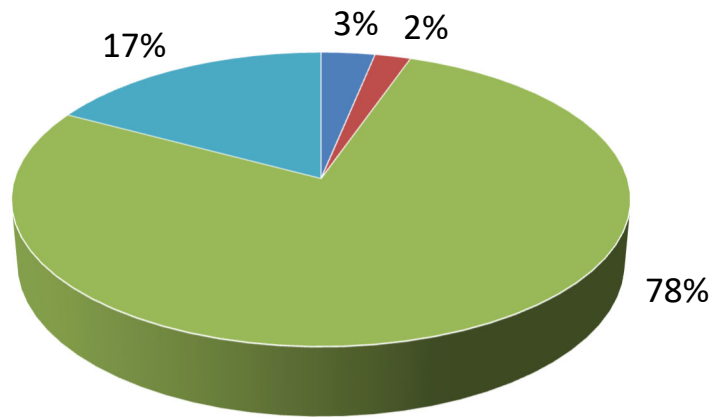


*Numerical values shown are based on 93 participant submissions, each with 4 responses, equaling 372 total responses.

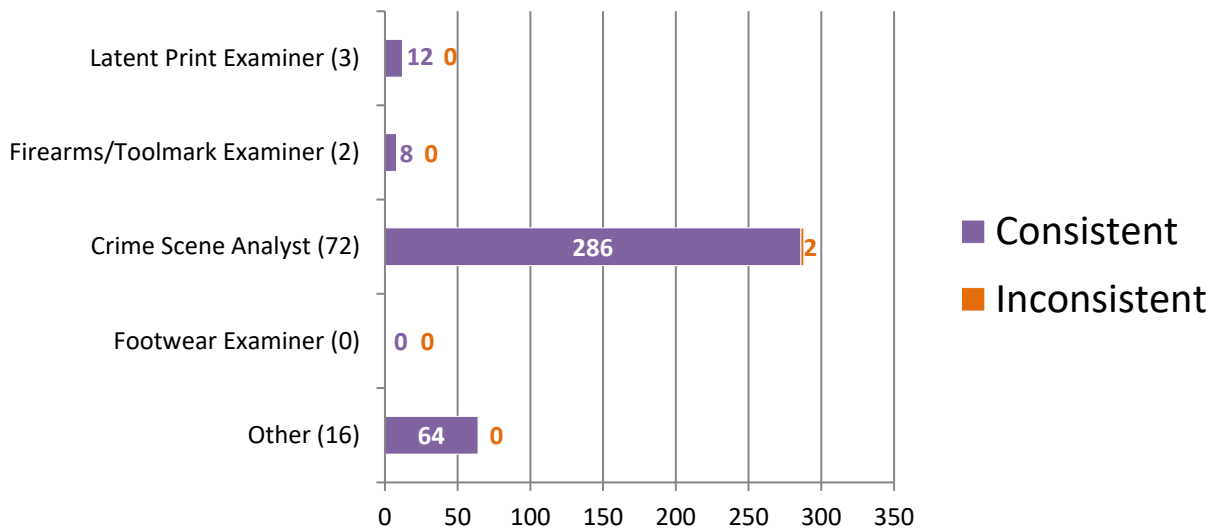
*For further information, please read *Manufacturer's Additional Observations* on the final page of this report.

Appendix 6

Percentage of Participants Based on Primary Job Position



Consistent vs Inconsistent Responses Based on Primary Job Position

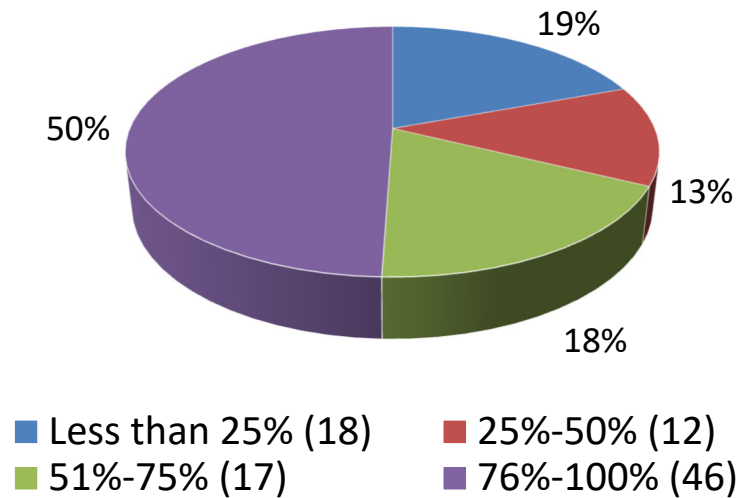


*Numerical values shown are based on **93 participant submissions, each with 4 responses, equaling 372 total responses.**

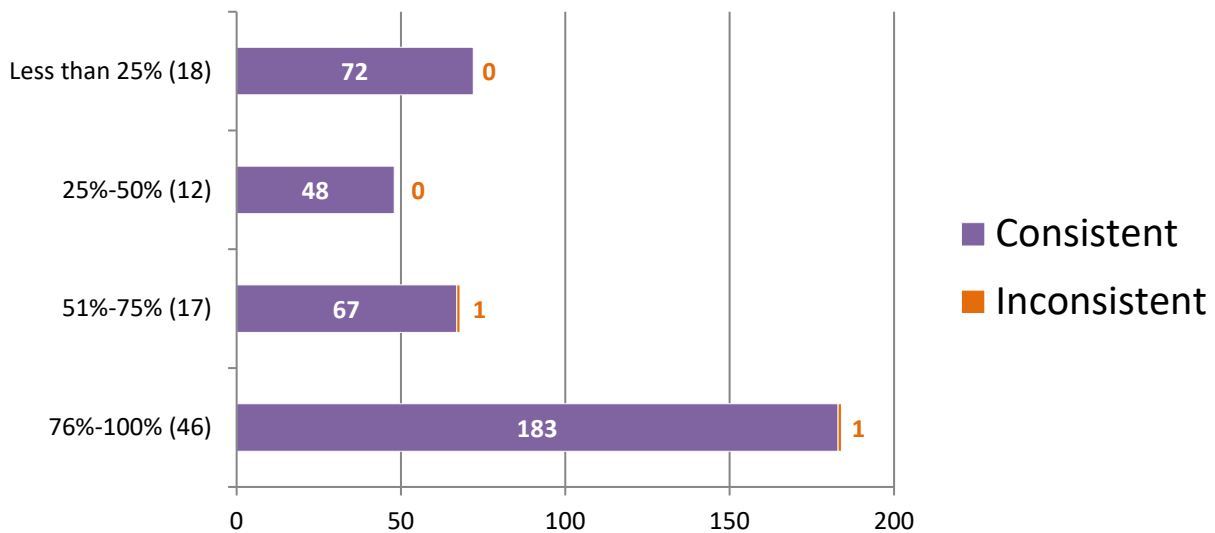
*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 7

Percentage of Participants Based on Time Devoted to Processing Crime Scenes



Consistent vs Inconsistent Responses Based on Time Devoted to Processing Crime Scenes

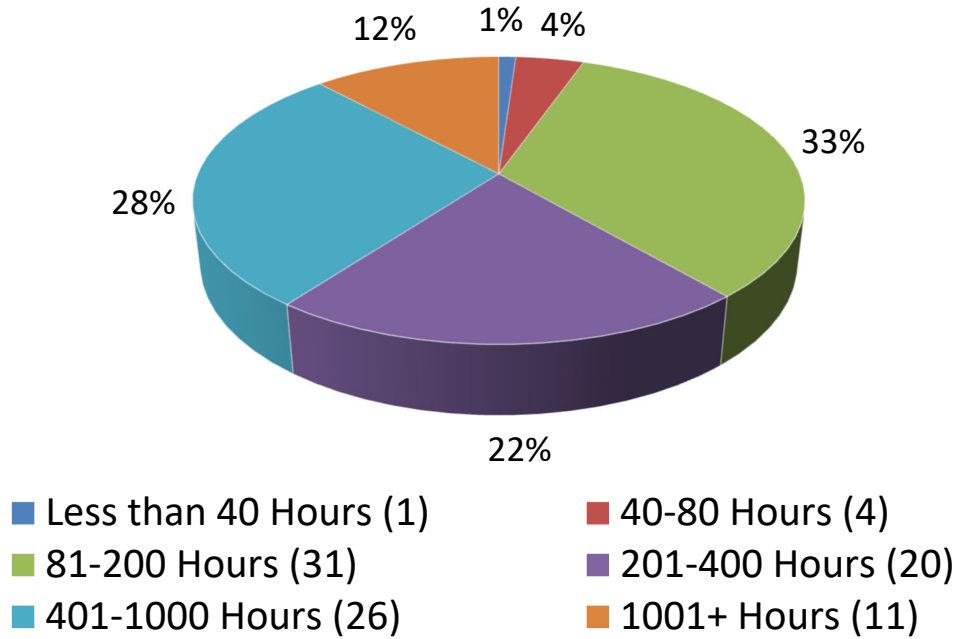


*Numerical values shown are based on 93 participant submissions, each with 4 responses, equaling 372 total responses.

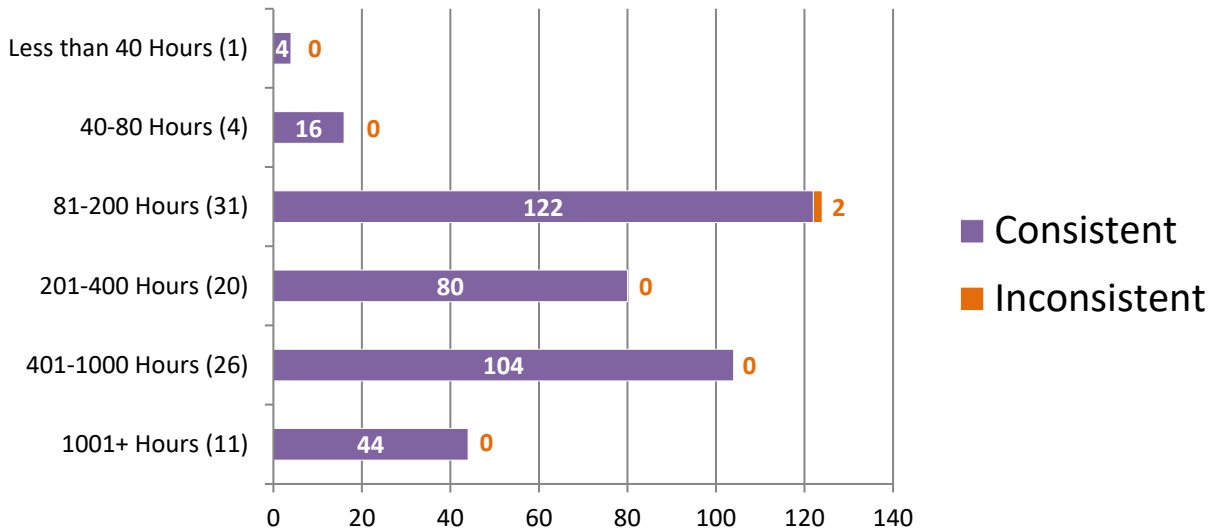
*For further information, please read *Manufacturer's Additional Observations* on the final page of this report.

Appendix 8

Percentage of Participants Based on Hours of Formal Crime Scene Training Completed



Consistent vs Inconsistent Responses Based on Hours of Formal Crime Scene Training Completed

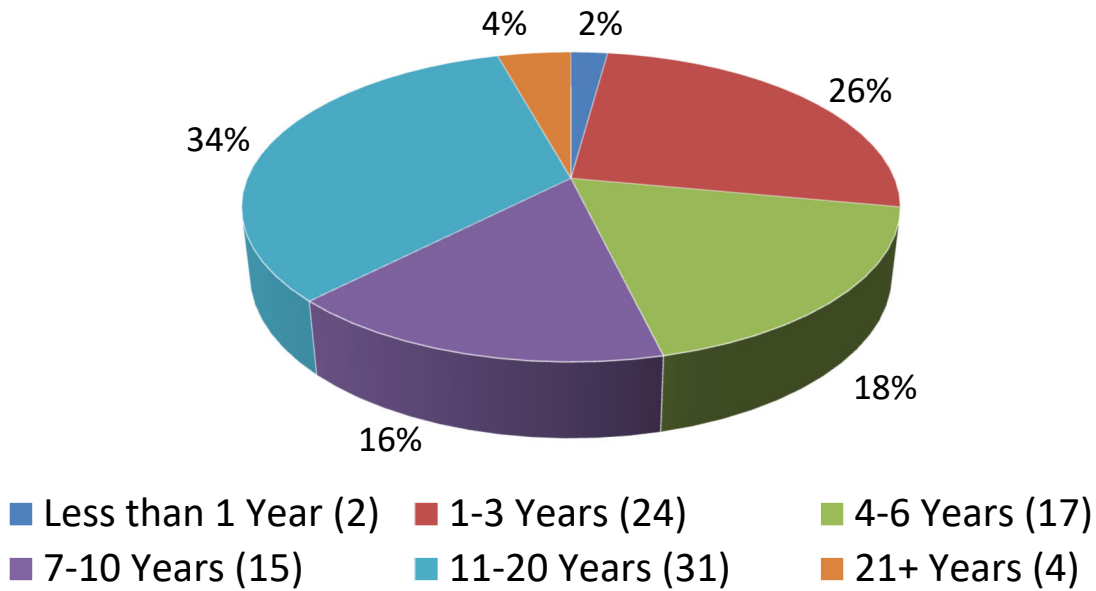


*Numerical values shown are based on 93 participant submissions, each with 4 responses, equaling 372 total responses.

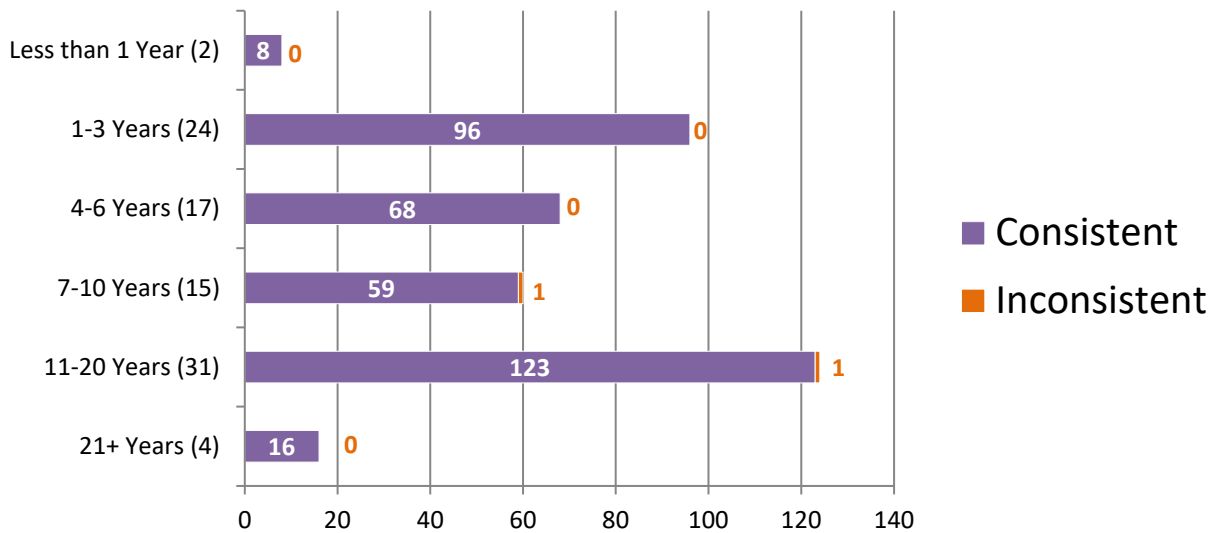
*For further information, please read *Manufacturer's Additional Observations* on the final page of this report.

Appendix 9

Percentage of Participants Based on Years of Experience in Crime Scene Processing



Consistent vs Inconsistent Responses Based on Years of Experience in Crime Scene Processing

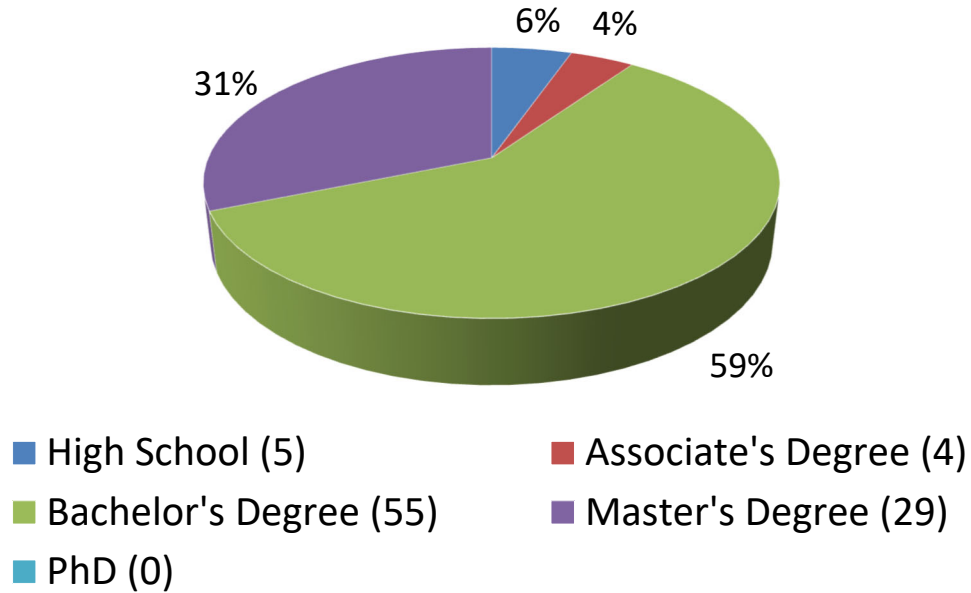


*Numerical values shown are based on 93 participant submissions, each with 4 responses, equaling 372 total responses.

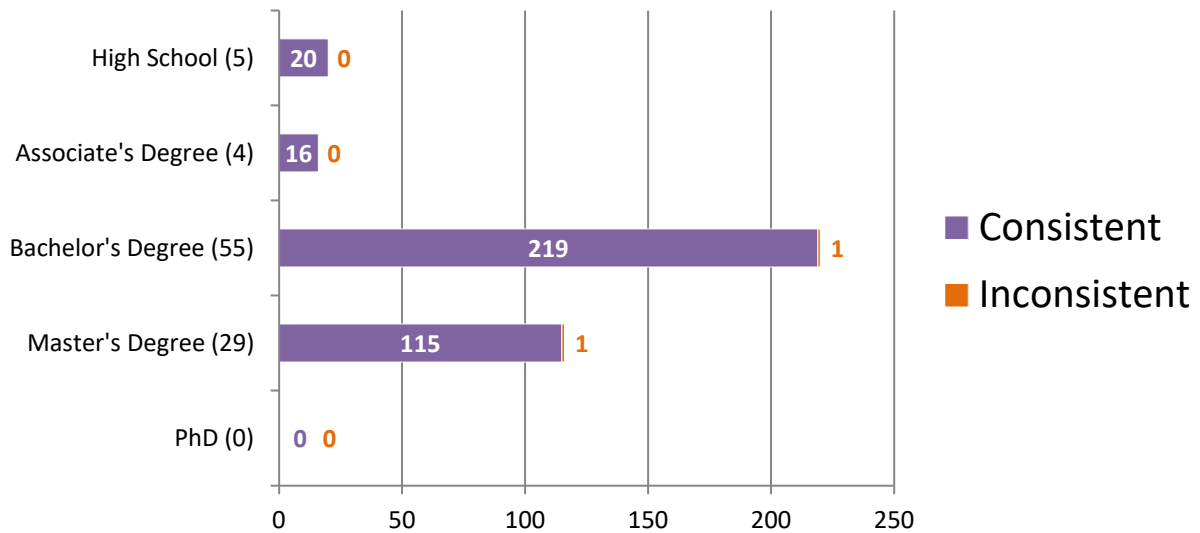
*For further information, please read *Manufacturer's Additional Observations* on the final page of this report.

Appendix 10

Percentage of Participants Based on Highest Level of Education Completed



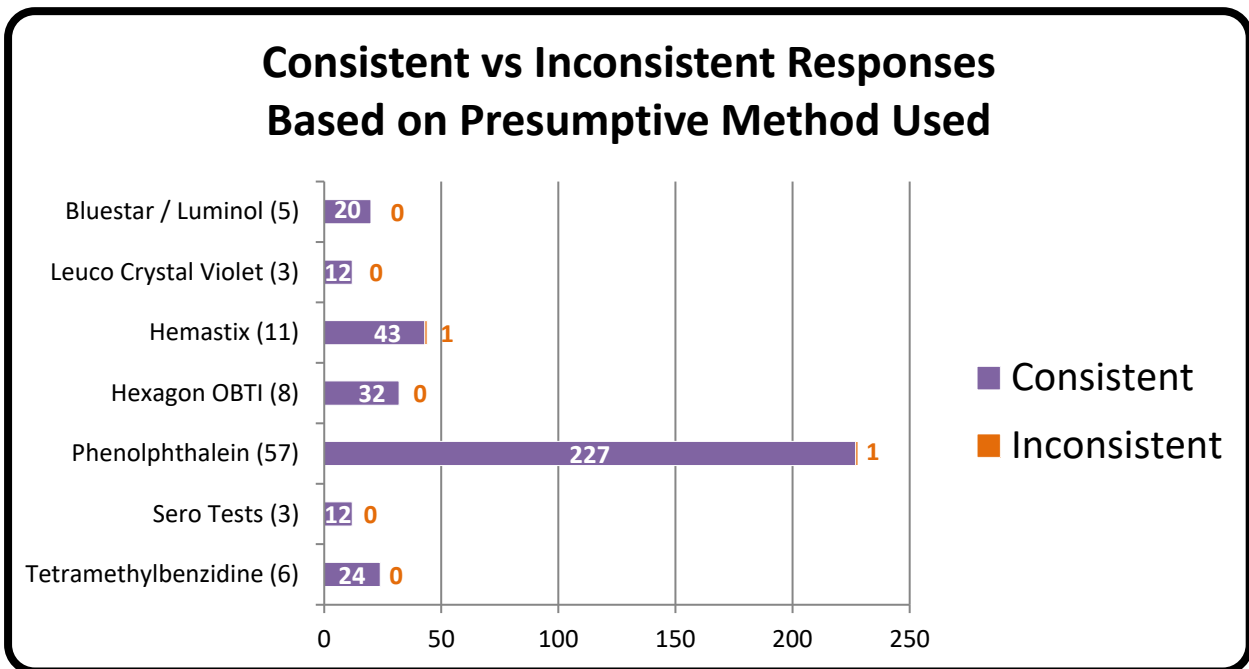
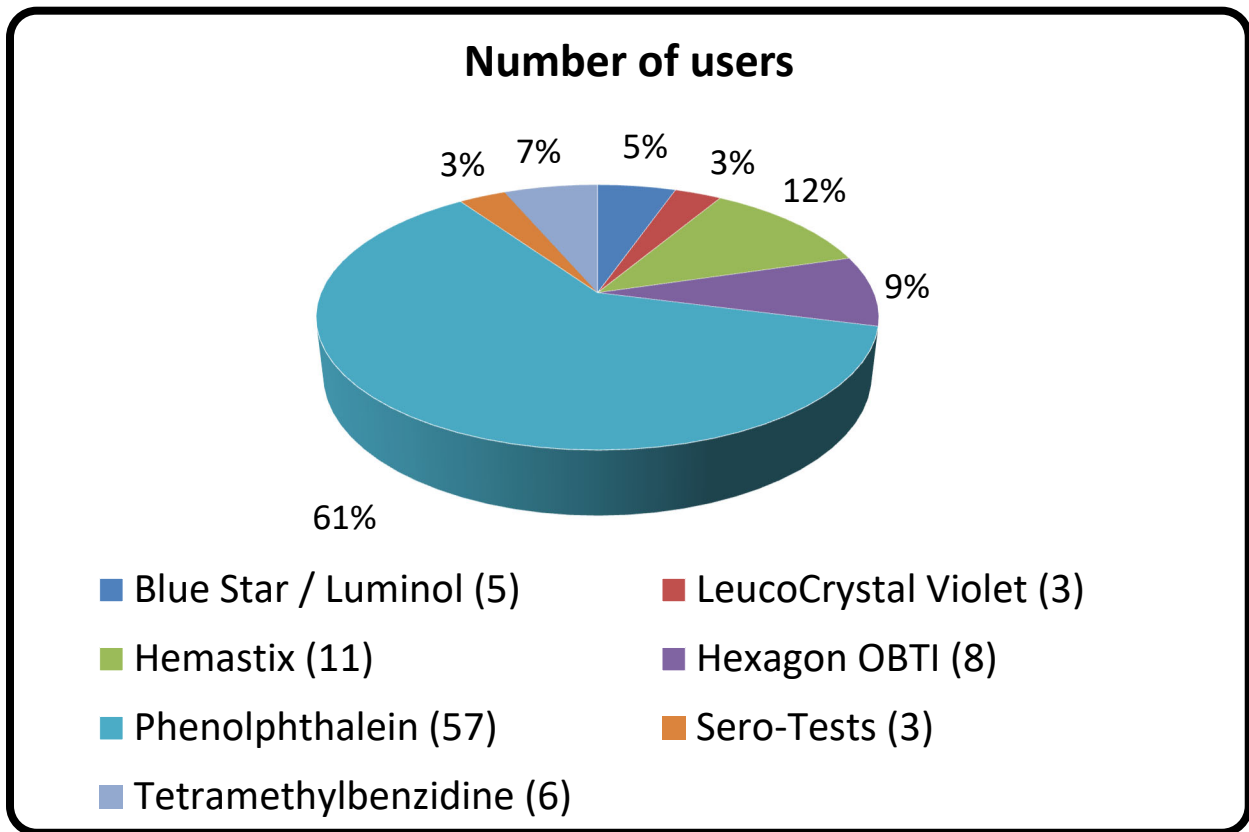
Consistent vs Inconsistent Responses Based on Highest Level of Education Completed



*Numerical values shown are based on **93 participant submissions, each with 4 responses, equaling 372 total responses.**

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

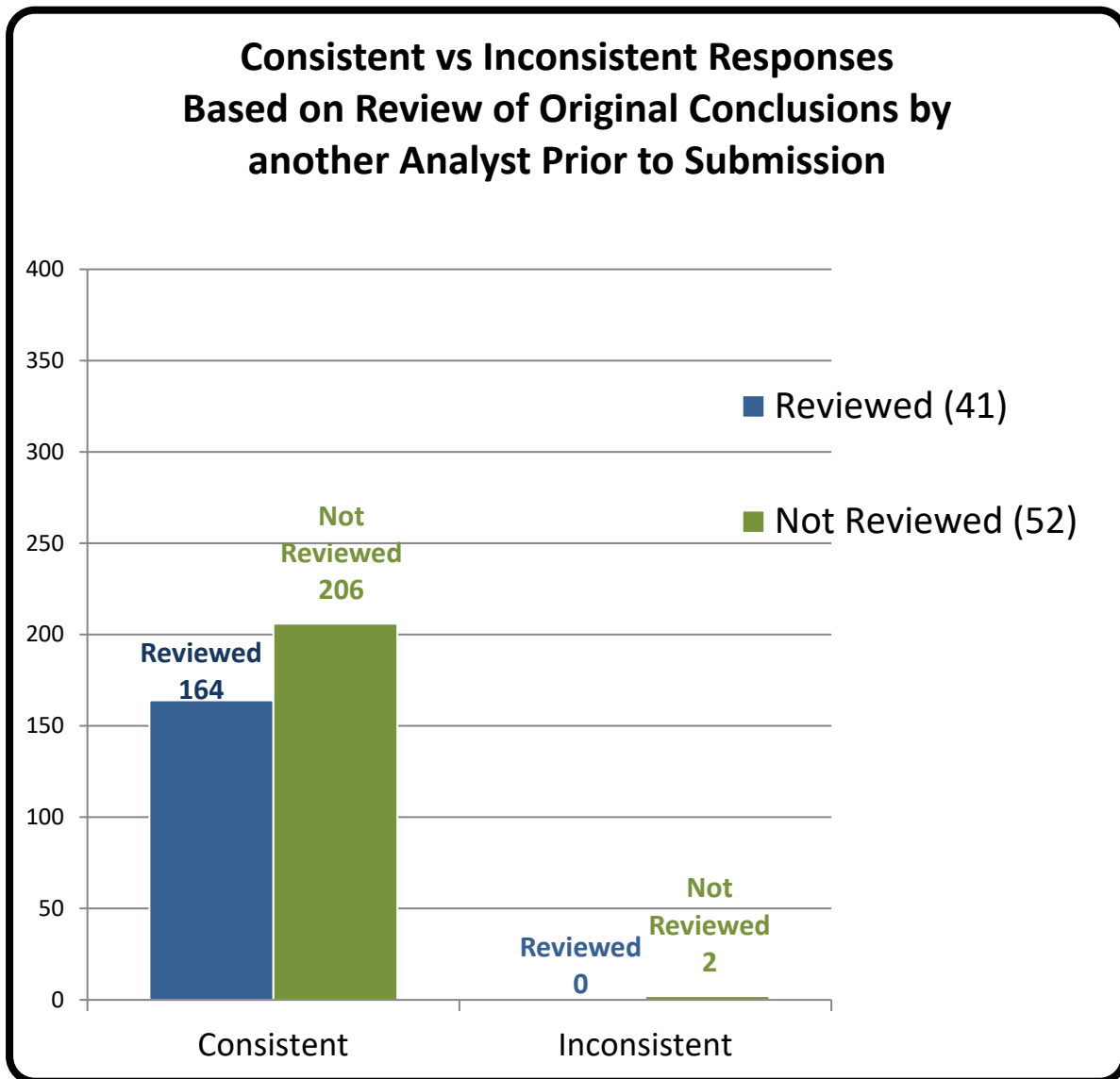
Appendix 11



*Numerical values shown are based on **93 participant submissions, each with 4 responses, equaling 372 total responses.**

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

Appendix 12



*Numerical values shown are based on **93 participant submissions, each with 4 responses, equaling 372 total responses.**

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

Appendix 13

Participant Responses Listed by Test Code

Item #	Item #1	Item #2	Item #3	Item #4
Assigned Values	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
8027F23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
22764F23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
2764F23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
24K23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
8882B23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
2942Z23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
9123B23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
6802E23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3929G23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
109W23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
1742B23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
9668A23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3487Y23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood

Test Code

9950J23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
6043S23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
6567S23600PBT	(+) Positive for Blood	(+) Positive for Blood	(-) Negative for Blood	(+) Positive for Blood
8678D23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
2192R23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
6172B23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
9222H23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
8258A23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
6512J23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
549B23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
9771M23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
5813N23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
5139D23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
9446X23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
5465P23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
106X23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood

1522K23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
9097G23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
7974X23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
6917U23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3920A23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
733F23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
8439Y23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
1810O23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
4458P23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
969O23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
938B23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
5364C23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
7023B23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
8510I23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(-) Negative for Blood
6294K23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
1985Y23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood

6312I23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
4566R23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
1387I23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3839B23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
6817F23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
9413M23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
67F23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3430H23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
9955X23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
5754L23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
4747E23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
8443S23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3611C23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
143N23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3048J23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
1151A23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood

997N23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
291L23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
4475X23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
2729H23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
4457B23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
148O23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
4272T23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
6278P23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
1532Y23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
7990H23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
4692W23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
4170Q23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3192T23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
6514Y23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
409Q23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
843Q23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood

8705K23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
4658W23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
7749C23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3402F23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
254P23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
8629D23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
603L23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3184E23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
9875K23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3084Q23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
4912W23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
1783S23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
1739J23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
5895C23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
3709L23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
8499P23600PBT	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood

Totals

Item #	Item #1	Item #2	Item #3	Item #4
Assigned Values	(+) Positive for Blood	(-) Negative for Blood	(-) Negative for Blood	(+) Positive for Blood
Consistent Responses	93	92	93	92
Inconsistent Responses	0	1	0	1
Percentage of Consistent Responses	100%	99%	100%	99%

Participant's Additional Comments

Test ID	Comments
8027F23600PBT	This unit came out for items 1, 2, 3 and 4 of the HemDirect presumptive test.
2764F23600PBT	BLUESTAR FORENSIC TABLETS WAS USED AS A REAGENT
1742B23600PBT	Para la realización de la prueba se utilizó el reactivo ABACard HemaTrace
9668A23600PBT	Phenolphthalein and Tetramethylbenzidine
3487Y23600PBT	Tetramethylbenzidine (TMB) and Phenolphthalein (P) tests were used for all items.
9950J23600PBT	Tetramethylbenzidine and phenolphthalein were both used
2192R23600PBT	Both Hemastix and Phenolphthalein were used.
6172B23600PBT	Both Hemastix and Phenolphthalein were used for testing.
106X23600PBT	Dentro del alcance de acreditación del laboratorio, en el parámetro de determinación cualitativa, se utiliza el reactivo BLUESTAR para búsqueda de sangre oculta, mismo que se utilizo para realizar la presente prueba de proficiencia, a parte tambien se utilizo el reactivo de fenolftaleina para dicha prueba.
1522K23600PBT	Also used Hemastix on all items with consistent results.
6917U23600PBT	Items 1 and 4 can be submitted to the laboratory for DNA analysis. Items 2 and 3 are negative for blood and should not be submitted to the laboratory.
3920A23600PBT	Where we have selected "Sero-Tests" in the dropdown, Bluestar OBTI was used.
1387I23600PBT	PPE, Positive and Negative Controls Conducted.
5754L23600PBT	Ninguno.

3611C23600PBT	All substrate controls were presumptively negative for blood.
997N23600PBT	Se concluye resultado presunto POSITIVO a sangre para los ítems número 1 y 4 y resultado presunto NEGATIVO a sangre para los ítems número 2 y 3. "LA PRUEBA DE PRESUNCION UTILIZADA FUE EL REACTIVO BLUESTAR FORENSIC".
8705K23600PBT	All items were tested with Leucomalachite Green
254P23600PBT	Se aplicó la PRUEBA DE ADDLER ó REACTIVO DE BENCIDINA, para los cuatro ítems analizados.
8629D23600PBT	OTHER (BLUESTAR)
603L23600PBT	Note: Participant used Hexagon OBTI for testing of all (4) items. This was not an option for Presumptive Test Used.
3184E23600PBT	Note: Participant used Hexagon OBTI for testing of all (4) items. This was not an option for Presumptive Test Used.
9875K23600PBT	Note: Participant used Hexagon OBTI for testing of all (4) items. This was not an option for Presumptive Test Used.
3084Q23600PBT	Note: Participant used Hexagon OBTI for testing all (4) items. This was not an option for Presumptive Test Used.
4912W23600PBT	Note: Participant used Hexagon OBTI for testing of all (4) items. This was not an option for Presumptive Test Used.
1783S23600PBT	Note: Participant used Hexagon OBTI for testing of all (4) items. This was not an option for Presumptive Test Used.
1739J23600PBT	Note: Participant used Hexagon OBTI for testing of all (4) items. This was not an option for Presumptive Test Used.
5895C23600PBT	Note: Participant used Hexagon OBTI for testing of all (4) items. This was not an option for Presumptive Test Used.

Manufacturer's Additional Observations

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

1. There were only 2 inconsistent responses that could not be supported. These inconsistent responses were evenly spread out over all categories captured; therefore, informative or meaningful results could not be obtained.

Authorized by: Jon Byrd, CEO

Date of Issue: June 12, 2023