



Latent Print Processing Test No. 20-5190 Summary Report

Each sample pack contained three pieces of simulated crime scene evidence. Participants were asked to process each piece for latent prints and report their findings. Data were returned from 280 participants and are compiled into the following tables:

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This report contains the data received from the participants in this test. Since these participants are located in many countries around the world, and it is their option how the samples are to be used (e.g., training exercise, known or blind proficiency testing, research and development of new techniques, etc.), the results compiled in the Summary Report are not intended to be an overview of the quality of work performed in the profession and cannot be interpreted as such. The Summary Comments are included for the benefit of participants to assist with maintaining or enhancing the quality of their results. These comments are not intended to reflect the general state of the art within the profession.

Participant results are reported using a randomly assigned "WebCode". This code maintains participant's anonymity, provides linking of the various report sections, and will change with every report.

Manufacturer's Information

Each sample pack consisted of three items of simulated crime scene evidence. Each item was divided into labeled sections and contained one latent fingerprint. The items consisted of a plastic and glass picture frame (Item 1), a glossy photograph (Item 2), and a party invitation on green printer paper (Item 3). Participants were asked to process each item for latent fingerprints, utilizing the method(s) deemed most appropriate for the substrate being examined.

SAMPLE PREPARATION-

The nonporous picture frame was cleaned with water and a paper towel before the latent print was applied. New, sealed packs of photo and printer paper were used for the samples that could not be cleaned. Each item was divided into sections and labeled A, B, C, and D using either a chemical-safe marker or a printer. For each item, either an acid or oil enhancer was applied to the individual's finger prior to deposition to assist in the longevity of the print.

SAMPLE PACK ASSEMBLY-

Each item was packed into its pre-labeled item envelope or heat seal packet with necessary protective materials. Following predistribution testing, each item envelope was sealed with evidence tape and initialed with "CTS" while each heat seal was closed using a heat sealer. These were then placed into a sample pack box and sealed with packaging tape.

VERIFICATION-

A random selection of prepared test items was processed in-house for latent prints to verify their durability and proper latent print location. Predistribution examiners were able to recover ridge detail in the expected section on all three items.

<u>Item No.</u>	<u>Test Material</u>	<u>Enhancer</u>	<u>Print Location</u>	<u>Pattern</u>
1	plastic & glass picture frame	oil	C	arch
2	glossy photograph	oil + acid	B	loop
3	green printer paper	acid	D	loop

Summary Comments

Each sample pack contained three items of evidence to be processed for latent prints: a plastic and glass picture frame (Item 1), a glossy photograph (Item 2), and a party invitation on green printer paper (Item 3). Each item was divided into four sections, which were labeled with the letters A-D. Participants were asked to determine in which of the four sections of each evidence item a latent print was contained. (Refer to the Manufacturer's Information for preparation details).

Due to the tenuous nature of latent fingerprints, it was expected that some participants may not be successful with the recovery of the deposited print on each item. Participants who did not develop a print on an item were therefore not flagged as outliers to the consensus.

Of the 280 responding participants, 198 (71%) were able to successfully recover a print in the expected section for all three items. For Item 1, all but one participant (99.6%) developed a print in section "C" as expected; the one outlier reported a print in section "A."

For Item 2, a consensus was not reached in terms of print recovery, although a majority of participants who tested the item (279) reported ridge detail in section "B" (204 participants, 73.4%). Four participants reported ridge detail in other sections (A - 3, C - 1). Seventy participants were unable to recover the latent print on this item. Several participants noted in their Additional Comments that the poor development contrast to the background image in the photograph made it difficult to visualize and confirm ridge detail. Finally, one participant did not provide an answer for Item 2.

For Item 3, 262 of 278 reporting participants (94.2%) recovered ridge detail in section "D" of the paper. The remaining sixteen participants reported no ridge detail recovered on the item. Eleven of the sixteen participants utilized only one method, powder dusting. Additionally, one of these sixteen only conducted a visual examination.

Summary statistics for the reported development and preservation methods were calculated for each item at the end of each methods table. The techniques included in the summaries are the preloaded options from the CTS web portal, and do not necessarily reflect every answer provided by participants. The summary totals are cumulative for each item; therefore, if a participant listed the same technique multiple times for one item, each occurrence is added into the final total. Additionally, the summary statistics only include those methods that are explicitly identified as the generic methodology found in the dropdown menu. That is to say, a Development Method entry of "Dye Stain" will be tabulated while "Rhodamine 6G" will not.

A visual examination was the primary starting point of print development on all three items for a majority of the participants. Photography was the preferred preservation method, although many participants also elected to lift frequently on Items 1 and 2.

For print development on the glass portion of the picture frame (Item 1), most participants performed cyanoacrylate fuming (reported 231 times), commonly followed by powder dusting (159) or a dye stain (134) to enhance recovered ridge detail. For the glossy photograph (Item 2), nonporous methods of cyanoacrylate fuming (reported 235 times) and powder dusting (233) were used in addition to porous development methods of ninhydrin (70) and 1,2-Indanedione (42) to account for the item's semi-porous surface. Item 3 was processed using a variety of porous development procedures, most commonly ninhydrin (reported 230 times). This was used either alone or in combination with another porous method, such as 1,2-Indanedione (77), DFO (64), or Physical Developer (40).

The First Level Detail section allows participants to report the potential pattern type(s) of each recovered latent print, if

Summary Comments, continued

applicable. Some participants do not perform print pattern analysis in their routine casework and reported "N/A" to the pattern type question; therefore, no consensus is established for any of the items. For those who identified pattern types, the most common responses for each item were: Item 1 - Arch; Item 2 - Loop; Item 3 - Loop. The most frequent response for each item corresponds to the expected results for pattern reporting.

Following internal changes for the purpose of improving print durability, a noticeable increase in the number of participants reporting recovery from the porous item was noted over previous test cycles. These changes will remain in place for future test cycles to ensure improved ability to develop ridge detail for all participants.

Print Location

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
23CFPM	C	3P7LWP	C	6YQH7P	C
24C69Y	C	3PQ3CT	C	72MKBG	C
26KF63	C	3QWUVT	C	74WN6T	C
293TPQ	C	3UYVWQ	C	76L47N	C
2CJ3XN	C	3WPW4Y	C	79RFDP	C
2CMHBN	C	3YRVER	C	7BRRQG	C
2M6742	C	4C2QDN	C	7FQ7FR	C
2RUNFR	C	4E3ZXP	C	7PAKEN	C
2YV2M	C	4GQ3CQ	C	7V2RWW	C
349ZCM	C	4H34RX	C	83E4PN	C
393WZT	C	4ZNL7R	C	87F6UR	C
3ADUBP	C	63PT3P	C	8C4WVT	C
3B43BR	C	6APBJM	C	8L76KQ	C
3DC78P	C	6ED3KN	C	8M2RXU	C
3E674Z	C	6HJFA3	C	8MNYLZ	C
3GDAZW	C	6LVJYJ	C	8UMKBF	C
3J4FGM	C	6LWBWR	C	8WT74L	C
3JYZ4L	C	6QR8FQ	C	8YYN2G	C
3KUNFQ	C	6WZDF4	C	923JJY	C

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
9AU4GK	C	BWXUUM	C	DW9FE9	C
9M3WXP	C	BZJJCE	C	DWNJ8F	C
9NT4EF	C	C6NJ7G	C	E2XE7A	C
9P8CMF	C	C8T8NT	C	E3PF4K	C
9U2BVJ	C	C98PPD	C	E922JK	C
9UE4QL	C	CBVAAM	C	EC38XP	C
9YU9NG	C	CGHZVH	C	EDWX2H	C
9ZLK8M	C	CGY6DG	C	EE73GR	C
A447DF	C	CPC9EN	C	EKVFHF	C
A9UGMD	C	CRGU9F	C	EKVKTH	C
AGA6FU	C	CRJJDD	C	ET7WW8	C
AHK72T	C	CTBJAN	C	F38JLJ	C
AV99JK	C	D23D7L	C	F438XM	C
AXEP2P	C	D6X9KE	C	F8F66A	C
AZ4VGF	C	D9N3RF	C	FLZMXD	C
AZZF6E	C	DDDUUH	C	FPL6HJ	C
B8ELEQ	C	DHT9MH	C	FPLAV8	C
BLX7YK	C	DNF3JF	C	FUEDHJ	C
BQT3GJ	C	DU86RL	C	G3KH8F	C
BT27DF	C	DVDVRA	C	G74MQB	C

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
G8VNNL	C	HZF678	C	LBHWYH	C
G9BRHD	C	J4BB4A	C	LBM9ME	C
GANCC9	C	J7JLZD	C	LJEQY2	C
GAP6BG	C	J96C2H	C	LMYJB4	C
GJP6DM	C	JDZ726	C	LN8VQK	C
GLZR9F	C	JE8L9B	C	LVP7YE	C
GNKYBN	C	JH63K6	C	M3JQK8	C
GPGACJ	C	JHR7J7	C	M3M9MC	C
GR972C	C	JKX3HF	C	M8EF7K	C
GTZ7YN	C	JM3NAM	C	M9PHU6	C
GXAF86	C	JNWCV3	C	MCA8F3	C
H8EUMC	C	JYFJWD	C	MECCNG	C
H8EYXE	C	K46JMD	C	MJBQC7	C
HAKCL8	C	KE74P7	C	MK9UC9	C
HC698C	C	KMGBLA	C	MQTVPZ	C
HERXDB	C	KUYJA7	C	MRNFCZ	C
HF9U7B	C	KVU7MA	C	MRP9B8	C
HUQMUG	C	L2TBTJ	C	MWZLR7	C
HVKH9D	C	L4ZLR9	C	N2PHU3	C
HY4MQ9	C	L7822Z	C	NAL3EH	C

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
NBCGK8	C	R2DWT4	C	TLWG6X	C
NCRF3C	C	R434BE	C	TR9ZT7	C
ND668A	C	R6WRVW	C	TVPE9Z	C
NF8BHA	C	R9W4RV	C	TWEXX6	C
NKMH79	C	R9ZH6V	C	TXU3RW	C
NLVVNA	C	RCAZWW	C	U7YPW2	C
P8Q4B4	C	RCW8K4	C	U9RDJ4	C
PDWRVX	C	RD32U9	C	UDLEJW	C
PF26W6	C	RE2ZE2	C	UHG9GX	C
PGGK7Z	C	RXY6X4	C	UJNNN4	C
PLC73A	C	T2CEAY	C	UN6UMY	C
PX2B4E	C	T2U7L4	C	UVHMVA	C
PX7MRA	C	T6W8L2	C	UYWK2C	C
PXPB96	C	T6YWU6	C	V3DCMX	C
PYCCRX	C	T8KNXU	C	V63DV8	C
Q87MV2	C	TBZBAE	C	V879EA	C
QKAZWY	C	TD2E22	C	V93KF6	C
QP7MR9	C	TKJPAV	C	VADQD7	C
QPQ9KY	C	TKN6MW	C	VAX8T9	C
QTPF6W	C	TLECMY	C	VKX3MX	C

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
VNDBBW	C	XARREY	C	ZNL3V2	C
VRXC23	C	XELP4P	C	ZPYNQW	C
VU6HT7	C	XFBYTX	C	ZVEFRU	C
VVXNY	C	XFH6E2	C		
VYFLPY	C	XJU6EY	C		
W6WHP7	C	XJZ4RW	C		
W7TUQ2	C	XXWHP6	C		
W84WDZ	C	Y3N8P9	C		
W9GN83	C	Y8FCKX	C		
W9U4C3	C	YHZNR4	C		
WB489Z	C	YK2RJQ	C		
WJ2WRP	C	YNLG44	C		
WJM76Z	C	YNRTRZ	C		
WMH6D4	C	YVNLZU	C		
WMWNX2	C	YYNWVU	C		
WNBYRY	C	Z99MVQ	C		
WRC4NR	C	ZBCHEU	C		
WUHTLV	C	ZKH6MU	C		
WXHR6Z	C	ZLXMLT	A		
X446JT	C	ZLYCVW	C		

Item 1 - Response Summary

Total Participants: 280

Location	Total
A	1
B	0
C	279
D	0
None	0
Not Tested	0

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
23CFPM	None	3QWUVT	B	76L47N	B
24C69Y	B	3UYVWQ	B	79RFDP	B
26KF63	B	3WPW4Y	None	7BRRQG	B
293TPQ	B	3YRVER	C	7FQ7FR	None
2CJ3XN	None	4C2QDN	B	7PAKEN	None
2CMHBN	B	4E3ZXP	B	7V2RWW	B
2M6742	B	4GQ3CQ	B	83E4PN	B
2RUNFR	None	4H34RX	B	87F6UR	None
2YV2M	B	4ZNL7R	B	8C4WWT	B
349ZCM	B	63PT3P	None	8L76KQ	None
393WZT	B	6APBJM	B	8M2RXU	B
3ADUBP	B	6ED3KN	B	8MNYLZ	B
3B43BR	B	6HJFA3	B	8UMKBF	None
3DC78P	B	6LVJYJ	B	8WT74L	B
3E674Z	B	6LWBWR	B	8YYN2G	B
3GDAZW	B	6QR8FQ	None	923JJY	B
3JYZ4L	B	6WZDF4	None	9AU4GK	B
3KUNFQ	B	6YQH7P	None	9M3WXP	B
3P7LWP	B	72MKBG	B	9NT4EF	None
3PQ3CT	B	74WN6T	B	9P8CMF	B

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
9U2BVJ	None	C98PPD	B	E922JK	B
9UE4QL	None	CBVAAM	B	EC38XP	B
9YU9NG	None	CGHZVH	B	EDWX2H	B
9ZLK8M	B	CGY6DG	B	EE73GR	B
A447DF	B	CPC9EN	B	EKVFHF	B
A9UGMD	B	CRGU9F	None	EKVKTH	B
AGA6FU	B	CRJJDD	B	ET7WW8	B
AHK72T	B	CTBJAN	B	F38JLJ	B
AV99JK	B	D23D7L	B	F438XM	B
AXEP2P	B	D6X9KE	B	F8F66A	B
AZ4VGF	B	D9N3RF	B	FLZMXD	None
AZZF6E	B	DDDUUH	None	FPL6HJ	B
B8ELEQ	None	DHT9MH	B	FPLAV8	B
BLX7YK	B	DNF3JF	B	FUEDHJ	B
BQT3GJ	B	DU86RL	B	G3KH8F	None
BT27DF	None	DVDVRA	B	G74MQB	B
BWXUUM	B	DW9FE9	B	G8VNNL	B
BZJJCE	B	DWNJ8F	None	G9BRHD	B
C6NJ7G	None	E2XE7A	None	GANCC9	B
C8T8NT	B	E3PF4K	B	GAP6BG	B

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
GJP6DM	None	JDZ726	B	LN8VQK	B
GLZR9F	None	JE8L9B	None	LVP7YE	B
GNKYBN	B	JH63K6	None	M3JQK8	None
GPGACJ	None	JHR7J7	B	M3M9MC	B
GR972C	B	JKX3HF	None	M8EF7K	B
GTZ7YN	B	JM3NAM	None	M9PHU6	B
GXAF86	B	JNWCV3	B	MCA8F3	None
H8EUMC	None	JYFJWD	B	MECCNG	B
H8EYXE	B	K46JMD	B	MJBQC7	None
HAKCL8	B	KE74P7	None	MK9UC9	B
HC698C	None	KMGBLA	None	MQTVPZ	B
HERXDB	None	KUYJA7	B	MRNFCZ	None
HF9U7B	B	KVU7MA	B	MRP9B8	B
HUQMUG	B	L2TBTJ	None	MWZLR7	None
HVKH9D	B	L4ZLR9	B	N2PHU3	None
HY4MQ9	None	L7822Z	B	NAL3EH	None
HZF678	B	LBHWYH	None	NBCGK8	B
J4BB4A	Not Tested	LBM9ME	B	NCRF3C	B
J7JLZD	A	LJEQY2	B	ND668A	B
J96C2H	B	LMYJB4	B	NF8BHA	B

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
NKMH79	B	R9ZH6V	B	TXU3RW	B
NLVVNA	B	RCAZWW	B	U7YPW2	B
P8Q4B4	None	RCW8K4	B	U9RDJ4	B
PDWRVX	B	RD32U9	B	UDLEJW	A
PF26W6	None	RE2ZE2	B	UHG9GX	None
PGGK7Z	B	RXY6X4	B	UJNNN4	B
PLC73A	B	T2CEAY	B	UN6UMY	B
PX2B4E	B	T2U7L4	B	UVHMVA	B
PX7MRA	B	T6W8L2	B	UYWK2C	B
PXPB96	B	T6YWU6	B	V3DCMX	B
PYCCRX	B	T8KNXU	None	V63DV8	B
Q87MV2	None	TBZBAE	B	V879EA	B
QKAZWY	B	TD2E22	B	V93KF6	B
QP7MR9	B	TKJPAV	None	VADQD7	B
QPQ9KY	B	TKN6MW	B	VAX8T9	B
QTPF6W	B	TLECMY	B	VKX3MX	B
R2DWT4	B	TLWG6X	None	VNDBBW	B
R434BE	B	TR9ZT7	None	VRXC23	B
R6WRVW	None	TVPE9Z	None	VU6HT7	B
R9W4RV	None	TWEXX6	None	VVXNY	None

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
VYFLPY	B	XJU6EY	B		
W6WHP7	B	XJZ4RW	B		
W7TUQ2	None	XXWHP6	None		
W84WDZ	B	Y3N8P9	B		
W9GN83	B	Y8FCKX	B		
W9U4C3	A	YHZNR4	B		
WB489Z	B	YK2RJQ	B		
WJ2WRP	B	YNLG44	None		
WJM76Z	B	YNRTRZ	B		
WMH6D4	B	YVNLZU	None		
WMWNX2	B	YYNWVU	B		
WNBYRY	None	Z99MVQ	B		
WRC4NR	B	ZBCHEU	B		
WUHTLV	B	ZKH6MU	B		
WXHR6Z	B	ZLXMLT	None		
X446JT	None	ZLYCVW	None		
XARREY	B	ZNL3V2	B		
XELP4P	B	ZPYNQW	None		
XFBYTX	B	ZVEFRU	B		
XFH6E2	B				

Item 2 - Response Summary		Total Participants: 280
Location	Total	

A	3
B	204
C	1
D	0
None	70
Not Tested	1

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
23CFPM	D	3PQ3CT	D	74WN6T	D
24C69Y	D	3QWUVT	D	76L47N	D
26KF63	D	3UYVWQ	D	79RFDP	D
293TPQ	D	3WPW4Y	D	7BRRQG	D
2CJ3XN	D	3YRVER	D	7FQ7FR	D
2CMHBN	D	4C2QDN	D	7PAKEN	None
2M6742	D	4E3ZXP	D	7V2RWW	D
2RUNFR	D	4GQ3CQ	D	83E4PN	D
2YV2M	D	4H34RX	D	87F6UR	D
349ZCM	D	4ZNL7R	D	8C4WVT	D
393WZT	None	63PT3P	None	8L76KQ	D
3ADUBP	D	6APBJM	D	8M2RXU	D
3B43BR	D	6ED3KN	D	8MNYLZ	D
3DC78P	D	6HJFA3	D	8UMKBF	D
3E674Z	D	6LVJYJ	D	8WT74L	D
3GDAZW	D	6LWBWR	D	8YYN2G	D
3J4FGM	D	6QR8FQ	D	923JJY	D
3JYZ4L	D	6WZDF4	D	9AU4GK	D
3KUNFQ	D	6YQH7P	None	9M3WXP	D
3P7LWP	D	72MKBG	D	9NT4EF	D

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
9P8CMF	D	C8T8NT	D	E3PF4K	D
9U2BVJ	D	C98PPD	D	E922JK	D
9UE4QL	D	CBVAAM	D	EC38XP	D
9YU9NG	D	CGHZVH	D	EDWX2H	D
9ZLK8M	D	CGY6DG	D	EE73GR	D
A447DF	D	CPC9EN	D	EKVFHF	None
A9UGMD	D	CRGU9F	D	EKVKTH	D
AGA6FU	D	CRJDD	D	ET7WW8	D
AHK72T	D	CTBJAN	D	F38JLJ	D
AV99JK	D	D23D7L	D	F438XM	D
AXEP2P	D	D6X9KE	D	F8F66A	D
AZ4VGF	D	D9N3RF	D	FLZMXD	None
AZZF6E	D	DDDUUH	D	FPL6HJ	D
B8ELEQ	D	DHT9MH	D	FPLAV8	D
BLX7YK	D	DNF3JF	D	FUEDHJ	D
BQT3GJ	D	DU86RL	D	G3KH8F	D
BT27DF	D	DVDVRA	D	G74MQB	D
BWXUUM	D	DW9FE9	None	G8VNNL	D
BZJJCE	D	DWNJ8F	D	G9BRHD	D
C6NJ7G	D	E2XE7A	D	GANCC9	D

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
GAP6BG	D	J96C2H	D	LMYJB4	D
GJP6DM	D	JDZ726	D	LN8VQK	D
GLZR9F	D	JE8L9B	Not Tested	LVP7YE	D
GNKYBN	D	JH63K6	D	M3JQK8	None
GPGACJ	D	JHR7J7	D	M3M9MC	D
GR972C	D	JKX3HF	D	M8EF7K	D
GTZ7YN	D	JM3NAM	D	M9PHU6	D
GXAF86	D	JNWCV3	D	MCA8F3	D
H8EUMC	None	JYFJWD	D	MECCNG	D
H8EYXE	D	K46JMD	D	MJBQC7	None
HAKCL8	D	KE74P7	D	MK9UC9	D
HC698C	D	KMGBLA	None	MQTVPZ	D
HERXDB	D	KUYJA7	D	MRNFCZ	D
HF9U7B	D	KVU7MA	D	MRP9B8	D
HUQMUG	D	L2TBTJ	None	MWZLR7	D
HVKH9D	D	L4ZLR9	D	N2PHU3	D
HY4MQ9	D	L7822Z	D	NAL3EH	D
HZF678	D	LBHWYH	D	NBCGK8	D
J4BB4A	D	LBM9ME	D	NCRF3C	D
J7JLZD	D	LJEQY2	D	ND668A	D

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
NF8BHA	D	R9W4RV	D	TWEXX6	D
NKMH79	D	R9ZH6V	D	TXU3RW	D
NLVVNA	D	RCAZWW	D	U7YPW2	D
P8Q4B4	D	RCW8K4	D	U9RDJ4	D
PDWRVX	D	RD32U9	D	UDLEJW	D
PF26W6	D	RE2ZE2	D	UHG9GX	D
PGGK7Z	D	RXY6X4	D	UJNNN4	D
PLC73A	D	T2CEAY	D	UN6UMY	D
PX2B4E	D	T2U7L4	D	UVHMVA	D
PX7MRA	D	T6W8L2	D	UYWK2C	D
PXPB96	None	T6YWU6	D	V3DCMX	D
PYCCRX	None	T8KNXU	None	V63DV8	D
Q87MV2	D	TBZBAE	D	V879EA	D
QKAZWY	D	TD2E22	D	V93KF6	D
QP7MR9	D	TKJPAV	D	VADQD7	D
QPQ9KY	D	TKN6MW	D	VAX8T9	D
QTPF6W	D	TLECMY	D	VKX3MX	D
R2DWT4	D	TLWG6X	D	VNDBBW	D
R434BE	D	TR9ZT7	D	VRXC23	D
R6WRVW	D	TVPE9Z	D	VU6HT7	D

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
VVXNY	None	XFH6E2	D		
VYFLPY	D	XJU6EY	D		
W6WHP7	D	XJZ4RW	D		
W7TUQ2	D	XXWHP6	D		
W84WDZ	D	Y3N8P9	D		
W9GN83	D	Y8FCKX	D		
W9U4C3	D	YHZNR4	D		
WB489Z	D	YK2RJQ	D		
WJ2WRP	D	YNLG44	D		
WJM76Z	D	YNRTRZ	D		
WMH6D4	D	YVNLZU	D		
WMWNX2	D	YYNWWU	D		
WNBYRY	D	Z99MVQ	D		
WRC4NR	D	ZBCHEU	D		
WUHTLV	D	ZKH6MU	Not Tested		
WXHR6Z	D	ZLXMLT	D		
X446JT	D	ZLYCVW	D		
XARREY	D	ZNL3V2	D		
XELP4P	D	ZPYNQW	D		
XFBYTX	D	ZVEFRU	D		

Item 3 - Response Summary Total Participants: 280

Location	Total
A	0
B	0
C	0
D	262
None	16
Not Tested	2

Development Methods

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
23CFPM	Cyanoacrylate Fuming	6/16/20 CAE valid to plastic and glass picture frame Item 1. Processing time was approx 20 min
	Powder Dusting	6/16/20 BP valid.
24C69Y	Alternate Light Source	White light source,cna,by40
	Cyanoacrylate Fuming	
	Dye Stain	By40
26KF63	Visual Examination	White light, daylight, 4X magnification lens
	SPR	SPR (Small particle reagent B86000 black, BVDA). Drying 6 h, + 21 C °
293TPQ	Visual Examination	Using flashlight, LASER, and UV
	Cyanoacrylate Fuming	
	Dye Stain	Ardrox visualized with UV Rhodamine 6G visualized with LASER
	Powder Dusting	
2CJ3XN	Visual Examination	RD noted in Quadrant C (Arch pattern).
	Alternate Light Source	Mini-Crimescope viewed with all available wavelengths of light. No additional RD noted.
	Cyanoacrylate Fuming	Safefume Chamber, let set overnight. No additional RD noted.
	Powder Dusting	Bichromatic powder used. Gave good contrast to print for photograph, no additional RD noted.
	Fluorescent Dye-R6G	Rhodamine 6G- viewed with mini-crimescope at 515nm. No additional RD noted.
2CMHBN	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	Black powder
2M6742	Visual Examination	via forensic light (crimescope)
	Cyanoacrylate Fuming	Fuming for 3mins
2RUNFR	Cyanoacrylate Fuming	Cyanoacrylate fuming chamber (10 minutes fuming, 80 RH)
	Powder Dusting	Black Powder
2YV2M	Cyanoacrylate Fuming	Fumed for 30 mins. White powder on black frame.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
349ZCM	Visual Examination	Visual Examination under ambient light. RD noted in Section C - Arch Pattern Type.
	Alternate Light Source	Mini-Crime Scope (all wavelengths). No add'l RD noted.
	Cyanoacrylate Fuming	Safefume Cyanoacrylate Fuming Chamber (80% humidity, 15 minutes). No add'l RD noted.
	Powder Dusting	Black Magna Powder. No add'l RD noted.
	Dye Stain	Rhodamine 6G (Methanol Based). Visualized with Mini-Crime Scope 515 wavelength. No add'l RD noted.
393WZT	Powder Dusting	Utilized magnetic powder and photographed with and without a scale.
3ADUBP	Visual Examination	
3B43BR	Visual Examination	Visible print
	Cyanoacrylate Fuming	Visible print processing time 5 minutes
	Dye Stain	Visible print Basic Yellow 40
3DC78P	Cyanoacrylate Fuming	
	Powder Dusting	
3E674Z	Visual Examination	White light, oblique angles, magnification
	Alternate Light Source	LASER (532nm), Blue Light (450nm), and UV light
	Cyanoacrylate Fuming	Superglue fuming in chamber for approximately 20 minutes
	Visual Examination	White light, oblique angles, magnification as a follow-up to Superglue fuming
	Alternate Light Source	RUVIS used as a follow-up to Superglue fuming
	Dye Stain	RAM
	Alternate Light Source	LASER (532nm), Blue Light (450nm), and UV light used as a follow-up to RAM dye stain

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
3GDAZW	Visual Examination	The samples were viewed under white light with magnification with a print observed in quadrant "C".
	Cyanoacrylate Fuming	The samples were placed in the Crime Scene Unit CyanoSafe utilizing distilled water and 14 drops of cyanoacrylate for cyanoacrylate fuming and then allowed to set for one hour. A test print was utilized in the chamber with the items which yielded a positive result after processing. The samples were then viewed under white light with magnification with a print observed in quadrant "C".
	Dye Stain	The samples were placed in a tray with RAY dye stain for approximately one minute, rinsed gently, and allowed to dry. Once dry, the samples were viewed under blue light with an orange filter using the Crime Scene Unit Crime-lite ML with a print observed in quadrant "C".
	Powder Dusting	The samples were dusted with black powder and viewed under white light with magnification with one print observed in the quadrant "C".
3J4FGM	Alternate Light Source	455-515nm
	Cyanoacrylate Fuming	vacuum fumed, 30 min.
	Powder Dusting	black powder, fiberglass brush
	Visual Examination	oblique light
3JYZ4L	Visual Examination	Took glass out of the plastic frame. Glass was marked in 4 quadrants A,B,C,D. Viewed Item 1 glass with oblique lighting and could see fingerprint ridge detail only in quadrant C. This took just a couple minutes. Item 1 will be processed as Non Porous.
	Alternate Light Source	Viewed Item 1 glass with Mini Crime Scope for inherent illumination all wavelengths. The fingerprint did not illuminate however on the CSS wavelength the fingerprint seen in the visual examination in quadrant C was photographed with and without a scale. This took approximately 10 minutes.
	Cyanoacrylate Fuming	Item 1 glass was then fumed in the Safe Fume cabinet for a complete cycle. Approximately 15 to 20 minutes. A test print on a small piece of plastic was fumed at the same time.
	Alternate Light Source	Item 1 glass was then viewed with the Mini Crime Scope all wavelengths and the only Fingerprint ridge detail was in Quadrant C. The fingerprint ridge detail was photographed with and without a scale.
	Dye Stain	The next day after the superglue was allowed to dry, Rhodamine 6G was applied and allowed to dry in fume hood about 20 minutes.
	Alternate Light Source	The latent print fluoresced when examined with the Mini Crime Scope at 515 nm with the Orange filter. Photos were taken of the latent with and without a scale. This took around 30 minutes.
	Powder Dusting	The latent print was then dusted with black magnetic powder and print developed. Photographs were taken of the latent with and without a scale.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
3KUNFQ	Visual Examination	
	Alternate Light Source	LASER and RUVIS
	Cyanoacrylate Fuming	
	Visual Examination	
	Alternate Light Source	RUVIS
	Dye Stain	RAM
	Alternate Light Source	LASER
	Powder Dusting	Black magnetic powder on glass. White magnetic powder on picture frame.
3P7LWP	Visual Examination	Side lighting with white light
	Alternate Light Source	Wavelengths 415nm, 450nm, 505nm, & 530nm
	Cyanoacrylate Fuming	Safefume Chamber (20 minutes at ~80% humidity, ~74.4 degrees F.)
3PQ3CT	Visual Examination	Observed a latent print in section C during a visual examination.
	Powder Dusting	Processed using Magnetic Powder to enhance ridge detail.
3QWUVT	Visual Examination	Item 1 was examined using normal and oblique lighting
	Powder Dusting	Black magnetic powder was used to dust for the print
3UYVWQ	Visual Examination	In daylight fingerprint has been disclosed in section C. In a whole spectrum of Polilight PL 500 no fingerprint fluorescence.
	Cyanoacrylate Fuming	Improved fingerprint quality has been achieved.
	Dye Stain	Type of dye stain - Basic Yellow 40, improved fingerprint quality has been achieved.
3WPW4Y	Visual Examination	
	Alternate Light Source	365,450,532,RUVIS
	Cyanoacrylate Fuming	
	Alternate Light Source	RUVIS
	Dye Stain	RAM
	Alternate Light Source	365,450,532
3YRVER	Cyanoacrylate Fuming	Use of CAE tank & Alternate Light Source
	Dye Stain	Basic Yellow Dye Stain

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
4C2QDN	Visual Examination	Latent impression visible
	Cyanoacrylate Fuming	
	Powder Dusting	Black fingerprint powder.
4E3ZXP	Cyanoacrylate Fuming	A fingerprint at quadrant C that was visible to the naked eye was photographed before and after removing it from the plastic box as a precaution if the glass breaks during the extraction process. Then, the control test and the item was processed with cyanoacrylate fuming technique for about 5 min at room temperature and humidity condition. Only one print was observed on quadrant C.
4GQ3CQ	Alternate Light Source	using a light source or the Eviscan machine to check the item before testing it by any further chemicals to see if there is any fingerprint on it.
	Cyanoacrylate Fuming	the method is used by putting the item in to a fuming chamber for 20-30 minutes and if any fingerprint is observed it will be viewed in a white color.
	Dye Stain	a method used after the cyanoacrylate to stain the fingerprint by spraying the item with a flour-scent dye and letting it to be dry then it will be observed with a uv light.
	Powder Dusting	a technique that is used by the black powder with a brush to observe the fingerprint and lifted by gelatine.
4H34RX	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
4ZNL7R	Visual Examination	Item was examined for any visual friction ridge detail using a magnifier and with significant light at various angles. Any friction ridge detail of value will be photographed prior to proceeding to the next step of processing. One (1) print was observed in section C. The print was photographed for preservation.
	Cyanoacrylate Fuming	4-5 drops of cyanoacrylate were placed into each of 3 CYVAC cups (12-15 drops total) and then placed on the heating element. A test print was added to the chamber. All items were placed in a way that will allow for circulation of the CA vapors and exposing the entire surface to them. The cycle ran for 12 minutes and then a 10 minute purge cycle. Item was allowed to sit undisturbed for 60 minutes. The item was then visually examined under magnification and white light. One (1) print was observed in section C. The print observed was photographed for preservation.
	Dye Stain	Item was sprayed with a layer of RAY solution and then the excess was rinsed off with tap water. The item was gently patted dry. The was visually examined using a Crime Lite ML (460nm-510nm): orange filter). One (1) print was observed in section C. The print was photographed for preservation.
	Powder Dusting	Bi-chromatic powder was chosen to allow for contrast with the item. The brush was dipped into the bi-chromatic powder in order to get a small amount of powder on the ends of the brush. Excess powder was shaken off the brush. The brush is lightly run over the item in a circular motion. Item was visually examined under magnification and white light. One (1) print was observed in section C. The print was photographed for preservation.
63PT3P	Powder Dusting	Black volcanic powder with brush and digital photography
6APBJM	Visual Examination	with magnification and white light
	Alternate Light Source	340-530nm
	Cyanoacrylate Fuming	Room temperature, ~80% humidity, 20 minutes
	Powder Dusting	Magnetic Dual-Use
6ED3KN	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	CNA Humidity at 80% 2.5g 15min run
6HJFA3	Visual Examination	
	Cyanoacrylate Fuming	Air Science superglue chamber, 20 minutes, 80% humidity 69° Fahrenheit
	Dye Stain	Rhodamine 6G dye stain, Bright Beam laser exam (532nm/orange goggles)

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
6LVJYJ	Visual Examination	Viewed with oblique light.
	Alternate Light Source	Viewed with Crimescope at 455-515nm.
	Cyanoacrylate Fuming	Fumed in Cyanosafe for 20 minutes.
	Powder Dusting	Applied black powder with a brush.
6LWBWR	Visual Examination	Coaxial & Side Lighting, Digital Photography
	Powder Dusting	Blk Mag PDR, Digital Photography
6QR8FQ	Visual Examination	
	Cyanoacrylate Fuming	
	Dye Stain	R6G Fluorescent Dye Stain on glass and plastic frame
	1,2-Indanedione	1,2-Indanedione on the black cardboard backing of the frame
6WZDF4	Visual Examination	
	[No Methods Reported.]	FSIS
	Cyanoacrylate Fuming	20 minutes, atmospheric
	Visual Examination	
	[No Methods Reported.]	FSIS
	Dye Stain	Basic Yellow 40
	[No Methods Reported.]	LASER
6YQH7P	Powder Dusting	I use black volcanic powder was utilized to process the item. I then documented utilizing digital photography.
72MKBG	Cyanoacrylate Fuming	
74WN6T	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	
	Dye Stain	
76L47N	Visual Examination	white light and fluorescence examination 350nm - 650 nm
	Cyanoacrylate Fuming	processing in fuming cabinet for 12 min. heat superglue to about 120 C and humidity 75%, exam with white, blue light
	Basic Yellow 40	sprayed item, washed it by water, dried and exam with 450 nm

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
79RFDP	Visual Examination	Visual examination under white light and magnification was completed on July 7, 2020. Print was observed in quadrant C.
	Cyanoacrylate Fuming	Processing in the CyanoSafe (Crime Scene Unit) recirculation chamber was completed on July 7, 2020. Processed in the chamber for 12 minutes and let sit for 60 minutes. Test print positive. Examined under white light and magnification. Print was observed in quadrant C.
	Dye Stain	RAY (Batch # 723) processing and examination using Foster + Freeman Crime Lite ML with a 460nm-510nm bandwidth filter and orange barrier was completed on July 8, 2020. Print was observed in quadrant C.
	Powder Dusting	Black powder was applied and examination under white light and magnification was completed on July 8, 2020. Print was observed in quadrant C.
7BRRQG	Cyanoacrylate Fuming	Item 1 - glass/plastic frame. Cyanoacrylate fuming completed first - fuming hood has automatic cycle approximately 40 minutes
	Powder Dusting	dusted with white powder after CAE. Separated a small amount of powder and used disposable brush (this method always used in case additional testing requested for DNA at later date)
7FQ7FR	Visual Examination	Patent print observed in quadrant C using white light.
	Cyanoacrylate Fuming	Enclosed the sample into a cyanoacrylate fuming chamber with added humidity for approximately 8 minutes. White ridge development appeared in quadrant C.
	Dye Stain	Basic Yellow 40 was applied to the sample. Green light (532nm) with an orange curved filter and a FF-1.0 filter were used to observe fluorescence. Fluorescent ridges were observed in quadrant C. The sample was then washed with distilled water and observed again under same conditions as mentioned above.
7PAKEN	Powder Dusting	Used silver black volcanic powder and photographed
7V2RWW	Visual Examination	Visual examination revealed that the print was on the other side of the glass. Glass was removed from the frame and turned around for powder dusting.
	Powder Dusting	Carbon powder
83E4PN	Visual Examination	Oblique light
	Cyanoacrylate Fuming	CA for 16min at 75% humidity
	Dye Stain	RAY
	Powder Dusting	Traditional powder - black
87F6UR	Visual Examination	Examined using oblique white light illumination
	Powder Dusting	Black magnetic latent print powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
8C4WVT	Visual Examination	Used ambient/oblique lighting and observed ridge detail on glass in area "C". Photographs taken.
	Alternate Light Source	Used a forensic light source with UV light (clear goggles) and 505nm wavelength light (orange goggles).
	Cyanoacrylate Fuming	Fumed for approx. 9.5 mins at approx. 76% humidity.
	Visual Examination	Visual exam. post-fuming.
	Dye Stain	Removed paper from behind glass to process with Rhodamine 6G Fluorescent dye-stain.
	Alternate Light Source	505nm wavelength (orange goggles). Photographed with orange camera filter.
8L76KQ	Visual Examination	Visual - Print was visible prior to chemical processing in quadrant "C"
	Cyanoacrylate Fuming	Used Mason Vactron MVC5000 chambers for processing. Print was visible in quadrant "C". Test Print (placed on small aluminum tray) - Positive
	Dye Stain	Rhodamine 6G (also used on test print)
	Alternate Light Source	Print visible in Quadrant "C" Test Print was positive and was photographed.
8M2RXU	Visual Examination	Additional light source of RUVIS used for capture
	Alternate Light Source	UV, LASER, and Blue Forensic Light
	Cyanoacrylate Fuming	RUVIS
	Dye Stain	RAM followed by UV, LASER, and Blue Forensic Light
8MNYLZ	Powder Dusting	Black powder latent, 2 lifts to ensure proper ridge detail.
8UMKBF	Powder Dusting	Black powder
8WT74L	Visual Examination	Visually inspected item and noticed ridge detail in section C of the glass
	Powder Dusting	applied black powder to both sides of the glass and lifted one area of ridge detail in section C
	Cyanoacrylate Fuming	applied CAE to the black plastic frame and glass
	Powder Dusting	applied black powder to the glass and lifted the same area of ridge detail, also lifted the area after applying magnetic powder
	Ninhydrin	applied ninhydrin to the cardstock and received negative results
8YYN2G	Powder Dusting	Black powder applied to glass.
923JJY	Visual Examination	used oblique lighting
	Cyanoacrylate Fuming	15 minutes fume time in chamber #1 at 69 degrees F and 80 percent humidity
	Dye Stain	R6G (methanol base); Laser (Bright Beam) exam / 532nm / used orange goggles

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
9AU4GK	Visual Examination	PHOTOGRAPH, NATURAL LIGHT, WHITE LIGHT
	Cyanoacrylate Fuming	
	Powder Dusting	BLACK POWDER
9M3WXP	Visual Examination	Examined under fluorescent light with magnification. Print observed.
	Cyanoacrylate Fuming	Examined under LED light with magnification. Print enhanced.
	Powder Dusting	Examined under LED light with magnification. Print enhanced.
	Dye Stain	Examined under Crime Lite ML2/orange filter with magnification. Print enhanced.
9NT4EF	Visual Examination	CrimeLite white
	Alternate Light Source	TracER Laser/ PL500
	Cyanoacrylate Fuming	Foster & Freeman MVC 5000 (75 minute cycle)
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black powder
9P8CMF	Visual Examination	Direct, Oblique, and ALS (inherent luminescence) lighting used. Patent observed in Area C. Photographed prior to processing.
	Cyanoacrylate Fuming	Fumed in Chamber. Test Print used on lifter.
	Visual Examination	Item photographed with oblique lighting
	Dye Stain	Yellow Dye. Applied, Rinsed, and allowed to dry.
	Alternate Light Source	Viewed with ALS at 425/455

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
9U2BVJ	Visual Examination	Examination with white light, LASER, RUVIS. L001 observed in box C with white light and RUVIS. Best quality with white light. Photographed with white light.
	Cyanoacrylate Fuming	Vis exam with white light and RUVIS. Improved Quality of L001. Photographed with RUVIS. Additional latents not suitable for capture on black plastic backer and front of glass (box B and D) and back of glass. CAE bottle dated 11/20/19. Performance check positive.
	1,2-Indanedione	On black matte only. Exam with LASER. No ridge detail. Bottle 2 dated 2/7/20. Performance check positive.
	Ninhydrin	On black matte only. Exam with white light. No ridge detail. Bottle 2 dated 1/22/20. Performance check positive.
	Dye Stain	RAM dye stain. Exam with LASER. Did not improve L001. One additional latent print (L003) detected on the black plastic frame. L003 photographed with LASER. Bottle dated 4/20/20. Performance check positive.
	Powder Dusting	Glass and white back of matte proc'd with bi-chromatic powder. Plastic frame and front of matte proc'd with white powder. Did not improve clarity of L001 or L003. No additional lats developed. White powder bottle dated 6/5/07. Bi-Chromatic powder dated 11/12/08. Performance check N/A.
9UE4QL	Cyanoacrylate Fuming	I observed the item. Photographed a latent that I observed prior to processing. I then put the item into the fuming chamber and the auto cycle took approximately 1 hour.
	Powder Dusting	I further processed this with white fingerprint powder.
9YU9NG	Visual Examination	RD noted on Item 1 (quadrant C).
	Alternate Light Source	Inherent Luminescence-all wave lengths. No Additional RD noted on Item 1. Photograph taken of RD.
	Cyanoacrylate Fuming	No Additional RD noted on Item 1. (test print)
	Powder Dusting	Black Manga Powder (test print). No Additional RD noted on Item 1. Photograph taken of RD.
	Dye Stain	R6G- (test print)
	Alternate Light Source	515nm Wave length. No Additional RD noted on Item 1.
	Results	One (1) latent fingerprint was developed and noted on Item 1 (quadrant C).
9ZLK8M	Visual Examination	Visual examination under white light and magnification on June 24, 2020. Prints were observed on section C.
	Cyanoacrylate Fuming	CyanoSafe (Crime Scene Unit) recirculation chamber on June 24, 2020. Test print positive. Prints were observed on section C.
	Dye Stain	RAY (batch #726) processing and examination using Foster + Freeman Crime Lite ML with a 460nm-510nm bandwidth filter and orange barrier on July 16, 2020. Prints were observed on section C.
	Powder Dusting	Black powder on July 16, 2020. Prints were observed on section C.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
A447DF	Visual Examination	Oblique lighting
	Alternate Light Source	455-515 nm (with orange goggles)
	Cyanoacrylate Fuming	20 minute run
	Powder Dusting	black powder
A9UGMD	Visual Examination	I looked at the pane of glass, holding a flashlight from several different angles and located a visible print in quadrant C.
	Cyanoacrylate Fuming	I processed the pane of glass with cyanoacrylate fuming for 15 minutes with a humidity level of 75%.
AGA6FU	Visual Examination	Glass was removed from the frame for better visual examination.
	Alternate Light Source	Plain white light from side and below was enough to reveal the fingerprint.
	Cyanoacrylate Fuming	after print was photographed, cyanoacrylate was used to improve the fingerprint.
AHK72T	Visual Examination	Print was visible but needed enhancement.
	Cyanoacrylate Fuming	Cabinet:Foster + Freeman MVC 3000 D3, time 8 minutes, temperature 120 Celsius, humidity 80 %
	Powder Dusting	Carbon powder.
AV99JK	Cyanoacrylate Fuming	15 mins in fuming chamber with 5 minute chamber purge
	RAY with ALS	Ray dye stain with ALS and orange filter
	Powder Dusting	Traditional silver/black powder and brush
AXEP2P	Visual Examination	Visual examination under white light and magnification.
	Cyanoacrylate Fuming	Cyanosafe set up with four (4) drops of cyanoacrylate in three (3) small metal cups on a hot plate, distilled water well filled, and test print placed inside. Chamber ran for 12 minutes followed by the Purge process. Process complete and item allowed to dry for one (1) hour. Test print positive.
	Powder Dusting	Black powder applied with a brush.
	Dye Stain	RAY batch #726. Item completely covered in RAY stain for approximately one (1) minute, rinsed under water until all excess solution was removed, patted dry with a paper towel, and allowed to air dry completely.
AZ4VGF	Visual Examination	Used oblique lighting with a flashlight to look for visible prints.
	Alternate Light Source	Used Crimescope at 455-515nm to look for naturally fluorescing prints.
	Cyanoacrylate Fuming	Used CyanoSafe for 20 minutes to fume Item 1.
	Powder Dusting	Used black powder to dust for prints.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
AZZF6E	Visual Examination	Overhead lighting LED Flashlight Incandescent lighting ALS (various wave lengths to include white light)
	Cyanoacrylate Fuming	Misonix CA-3000 Fuming Chamber (80% humidity, 20 minutes or less)
	Dye Stain	Rhodamine 6G ALS (455-515 nm, orange filter)
	Powder Dusting	Black Powder
B8ELEQ	Visual Examination	Conducted using natural & oblique lighting while holding the item at differing angles.
	Alternate Light Source	3 different Forensic Light Sources (FLS) were used: LASER (532nm), Blue (450nm) & UV (365nm).
	Cyanoacrylate Fuming	This method also includes looking at the item visually and using a RUVIS (254nm).
	Dye Stain	The RAM Dye Stain method also includes looking at the item visually and using Alternate Light Sources. The three light sources used were the LASER (532nm), Blue Light (450nm) & UV (365nm).
BLX7YK	Visual Examination	Oblique light
	Visual Examination	RUVIS
	Cyanoacrylate Fuming	15 minutes in CA fuming chamber
	Visual Examination	Ambient light
	Dye Stain	RAY dye stain
	Alternate Light Source	Orange 445-515nm; orange goggles and filter
BQT3GJ	Visual Examination	Disclosing of a fingerprint. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white. The fingerprint is visible the best at the white light.
	Cyanoacrylate Fuming	No improvement in fingerprint quality after use Cyanokcrylate Fuming. The fingerprint is steel visible but no better than visual examination.
	Dye Stain	No improvement in fingerprint quality after use Basic Yellow 40. The fingerprint is visible the best in the light source 415 nm with yellow goggles but no better than visual examination.
BT27DF	Visual Examination	Visual inspection in white/room light
	Cyanoacrylate Fuming	Cyanoacrylate fumed
	Dye Stain	Dye stained with rhodamine 6G
BWXUUM	Visual Examination	Under different types of light
	Cyanoacrylate Fuming	Hygrometry > 75 % - 15 minutes
BZJJCE	Visual Examination	
	Cyanoacrylate Fuming	75% RH. 9 mins fume time.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
C6NJ7G	Visual Examination	
	Cyanoacrylate Fuming	20 minutes ,RH 80 %
	Basic Yellow 40	
C8T8NT	Visual Examination	OMNIPRINT OP1000A
	Cyanoacrylate Fuming	PROJECTINA FUMING CAMBER + OMEGA-PRINT Cyanoacrylate Fuming Compound
	Dye Stain	BVDA Basic Yellow 40
	Alternate Light Source	OMNIPRINT OP1000A - 450nm light
C98PPD	Visual Examination	
	Cyanoacrylate Fuming	Rhodamine 6G
	Powder Dusting	Black
CBVAAM	Cyanoacrylate Fuming	Lumicyano (fluorescent)
CGHZVH	Cyanoacrylate Fuming	Superglue fuming (80%RH) + Basic Yellow 40 (Excitation wavelength 415 nm/ viewing filter: yellow)
CGY6DG	Powder Dusting	I visually scanned the item and observed latent print characteristics in Section c. I removed the glass from the frame and processed the area initially with magnetic powder and finished with black powder. I was able to obtain a double lift from this print, preserved on a latent lift card.
CPC9EN	Visual Examination	observed ridge detail on section C. Photos taken.
	Alternate Light Source	Used 505nm, 450nm, and UV with orange and clear glasses
	Cyanoacrylate Fuming	Approx. 10mins at 76% humidity.
	Visual Examination	
	Dye Stain	Rhodamine 6G dye stain and a destain rinse.
	Alternate Light Source	505nm and orange glasses
CRGU9F	Visual Examination	Examined with white light and magnification.
	Cyanoacrylate Fuming	Placed in Cyanosafe on 7/15/20. Examined with white light and magnification.
	Dye Stain	RAY dye stain applied via spray on 7/15/20, Batch #726, rinsed with water, then air dried. Examined with Pollilight 2 450nm and orange filtered goggles.
	Powder Dusting	Dusted with bi-chromatic powder on 7/15/20. Examined with white light and magnification.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
CRJJDD	Cyanoacrylate Fuming	6/23/2020: Cyanoacrylate Fuming Chamber (CFC) Processing. Before Processing: Filter Cycles - 446. Total Cycles - 930. Cleaned prior to starting processing. Target Humidity Value - 70%. Purge Time - 10:00 minutes. Maximum Fume Cycle Time - 10:00 minutes. CFC Processing Start Time - 1600 hours. Target Humidity Value Reached/Fuming Cycle Started - 1604 hours. Fuming Cycle Ended/Purge Cycle Started - 1614 hours. Purge Cycle Ended/CFC Processing Completed Time - 1624 hours. Cyanoacrylate (+) control - Lot #: VP23419, Exp: 01/21.
	Powder Dusting	6/23/2020: Bi-Chromatic Powder Processing. Bi-Chromatic Powder and Fingerprint Brush. Start Time - 1630 hours. End Time - 1635 hours.
CTBJAN	Visual Examination	visual examination in daylight, the forensic light source Polilight PL 500 UV, entire range of wavelength of light and filters. The latent fingerprint was recovered.
	Cyanoacrylate Fuming	Cyanoacrylate Fuming Chamber Catri - hot plate temp. 100C, 15 min., humidity 80%, the forensic light source Polilight PL 500 - white light. The latent fingerprint was recovered.
	Basic Yellow 40	Basic Yellow 40 - spray, the forensic light source Polilight PL 500 - 350-505 nm, orange filter. The latent fingerprint was recovered.
D23D7L	Visual Examination	Visual Exam with room lighting and/or flashlight at an oblique angle.
	Cyanoacrylate Fuming	Item 1 was processed in the CApture BT Chamber. Cyanoacrylate hot plate temperature set to 351 degrees Fahrenheit. The chamber was brought to a relative humidity of 50% and then fumed for 10 minutes. The chamber was purged of the cyanoacrylate fumes for an additional 5 minutes before removing.
	Dye Stain	Item 1 was sprayed with Rhodamine 6G (methanol-based) and then viewed with the green laser (532 nm) & orange goggles/filter
D6X9KE	Visual Examination	
	Alternate Light Source	LASER and RUVIS
	Cyanoacrylate Fuming	Examined under RUVIS for frame (did not use RUVIS on glass)
	Dye Stain	RAM
	Alternate Light Source	LASER

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
D9N3RF	Visual Examination	Item 1 is stored in a 8x10 manila envelope with a red strip of evidence tape with "CTS" written on it. Item 1 was observed to be a plastic and glass picture frame divided into four square quadrants marked A through D.
	Cyanoacrylate Fuming	The item was fumed with Cyanoacrylate in a fuming chamber with a relative humidity of 80% for twenty minutes. A fingerprint impression was developed on the glass in section C.
	Powder Dusting	Item 1 was powder processed with conventional black powder.
DDDUIH	Cyanoacrylate Fuming	In cyanoacrylate fuming chamber for fifteen minutes, with know positive control. Second fuming, for fifteen minute length f time, after first, for a total of thirty minutes. Glue allowed to dry post-fuming, prior to any latent print powder being applied.
	Powder Dusting	Post-fuming, black magnetic powder applied to item, revealing latent prints.
DHT9MH	Visual Examination	Examined under white light and magnification on June 19, 2020.
	Cyanoacrylate Fuming	CyanoSafe (Crime Scene Unit) recirculation chamber on June 19, 2020. Test print positive. Three (3) foil cups containing five (5) drops each of Cyanoacrylate glue and distilled water in the the heating element. Chamber set for run time of 12 minutes and purge cycle for 10 minutes and left to dry for 60 minutes. Item examined after processing.
	Dye Stain	RAY batch#723 was applied to the item on June 19, 2020. A spray bottle was used to apply the dye stain and coat the item. The item was then rinse in water and patted dry. The item was left to dry completely in a fume hood. Item was examined using Foster + Freeman Crime Lite ML with a 460nm-510nm bandwidth filter and orange barrier.
	Powder Dusting	Black powder was applied using a fiberglass latent print brush. The item was then examined under LED light and magnification on July 22, 2020.
DNF3JF	Alternate Light Source	latent mark is in section C
	Cyanoacrylate Fuming	latent mark is in section C

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
DU86RL	Visual Examination	The items was visually examined using a white LED light source under magnification.
	Alternate Light Source	The item was examined for the presence of inherent luminescence using Crime Lite ML (460nm-510nm: Orange Filter) under magnification.
	Cyanoacrylate Fuming	The item was processed by placing approximately 5 drops of cyanoacrylate into 3 metal dishes (Total of 15 drops. The metal dishes were placed onto a heating plate. Distilled water was placed in a reservoir inside the chamber to maintain humidity. A test print was created, and placed inside the chamber. Items were placed into the chamber with consideration to space evidence far enough apart to allow CA vapors to circulate between items. The chamber was set to fume for approximately 12 minutes. The test print was checked for visible development of the latent print. Items were left undisturbed for 60 minutes to allow the CA coating to harden. Items were examined using LED lighting under magnification.
	Dye Stain	A fluorescent dye stain was used, containing Rhodamine 6G, Ardrex Tracer-Tech P133D, and Basic Yellow 40 (RAY). The item was processed by immersing in a tray of RAY, agitating for approximately 1 minute, the item was rinsed off under a gentle flow of cold water. The item was gently patted dry and placed under a fume hood to complete drying. The item was examined using Crime Lite ML (460nm-510nm: Orange Filter) under magnification.
	Powder Dusting	The item was processed by picking up a small amount of powder (black) on the ends of the latent print brush bristles, and shaking off excess powder. The powder (black) was brushed gently over the surface of the item using circular strokes. The item was examined using LED lighting under magnification.
DVDVRA	Visual Examination	White light and fluorescence examination
	Cyanoacrylate Fuming	Processing time: 5 min. Temperature: 120 C Rh: 80%.
	Dye Stain	Basic Yellow 40
DW9FE9	Powder Dusting	Using black magnetic powder one print developed in section C of glass.
DWNJ8F	Visual Examination	Visually examined item with white light, LASER, and UV.
	Cyanoacrylate Fuming	Cyanoacrylate fumed the item and examined under white light and RUVIS.
	Dye Stain	Applied RAM to the item and examined under LASER and UV light.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
E2XE7A	Visual Examination	Examined the item using ambient and oblique lighting with a flashlight.
	Photography	I observed a friction ridge impression, L1, and photographed it using incandescent lighting.
	Lumicyano fume	Fumed using Lumicyano for 35 minutes, 80% humidity
	Alternate Light Source	Examined item with 390-520 nm of light using orange filter. Photographed latent impression L1 at 495 nm with orange filter
	Dye Stain	Ardrox
	Alternate Light Source	Examined item with 350-445 nm light with yellow filter. Photographed latent impression L1 at 415 nm light with yellow filter.
	Powder Dusting	White fingerprint powder. Photographed latent impression L1 using incandescent light.
E3PF4K	Visual Examination	Item 1 was visually inspected for latent prints before processing. One (1) latent print sufficient for further review was observed and photograph before further processing.
	Cyanoacrylate Fuming	Then fumed with cyanoacrylate ester (superglue) in a vacuum chamber for about 40 minutes
	Dye Stain	Dye stained with Rhodamine 6G (R6G) and viewed under a forensic Laser.
E922JK	Cyanoacrylate Fuming	Began 6/8/20 at 2350 hours. Ended 6/9/20 at 0410 hours (after photography and tape lift). Plastic and glass portions of item 1: Cyanoacrylate Fuming, MBD dye stain, and black powder.
	Ninhydrin	Paper insert of item 1: Ninhydrin. No latent prints observed on paper insert.
EC38XP	Visual Examination	Ridge detail was observed in section "C" during visual exam and photographed as is. Marked as L1.
EDWX2H	Visual Examination	
	Powder suspension (iron oxide-based)	The glass was removed from the frame and pre-rinsed with tap water. The suspension was brushed on to the glass and removed after approximately 20 seconds by rinsing with tap water.
EE73GR	Visual Examination	it was observed in section C.
	Alternate Light Source	using ring light or UV light
	Cyanoacrylate Fuming	to enhance development of ridge detail
	Alternate Light Source	using ring light or UV light
EKVFHF	Powder Dusting	Photography, oblique lighting, scale photo
EKVKTH	Visual Examination	White light source
	Cyanoacrylate Fuming	Processing time: 10 minutes
	Dye Stain	Basic Yellow 40 (ethanol based)

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
ET7WW8	Visual Examination	Visual examination - A visible print was observed in section C of the glass. Note page photographs taken.
	Cyanoacrylate Fuming	Mason Vactron MVC 5000 chamber for twenty minutes.
	Powder Dusting	Application of magnetic powder.
	Powder Dusting	Application of black powder.
F38JLJ	Visual Examination	Examination with Superlite Lumatec (UV and visible spectrum), Coherent laser 532 and 577 nm.
	Lumicyano®	Fuming of luminescent cyanoacrylate (Lumicyano, 80% RH and 120°C) in a fuming cabinet then examination in UV with a 325 nm Labino source.
	Dye Stain	Dying with basic yellow 40 dye then rinsed with water. Examination with blue light (Crimescope CS16-400 at 445 nm) and yellow filter.
F438XM	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
F8F66A	Visual Examination	Visual exam on Item 1, LP1-1 observed in quadrant C, photos taken.
	Cyanoacrylate Fuming	Fumed Item 1, improvements to LP1-1, additional photos taken. Due to exceptional quality of print in current state, will not use any further development processes.
FLZMXD	Powder Dusting	Utilized black dust powder
FPL6HJ	Cyanoacrylate Fuming	MVC 3000 Chamber #1. Glue Temp. 120 Celsius. 80 percent humidity. 10 minutes glue time. Lot#201906326.
	Dye Stain	MBD Dye Stain with a squirt bottle. Lot#060120-01.
	Powder Dusting	Standard Black Powder. Lot#201804187.
FPLAV8	black magnetic powder	
FUEDHJ	Visual Examination	
	Cyanoacrylate Fuming	Sirchie OMEGA Print, processing time 12 hrs. in fish-tank chamber
	Powder Dusting	Black powder
G3KH8F	Visual Examination	Item examined visually, ridge detail observed in the portion of the glass
	Cyanoacrylate Fuming	for a 15 minute cycle
	Powder Dusting	Black powder applied

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
G74MQB	Cyanoacrylate Fuming	
G8VNNL	Visual Examination	Print was visible but needed enhancement.
	Cyanoacrylate Fuming	Cabinet: Foster+Freeman MVC 3000, temperature 120 Celsius, time 15 minutes, humidity 80%.
	Powder Dusting	Carbon powder
G9BRHD	Cyanoacrylate Fuming	A control test was performed prior processing the item for cyanoacrylate verification (cat.no: CW200. Verification passed. Item was processed for five (5) minutes in a fuming chamber using cyanoacrylate ester.
GANCC9	Visual Examination	
	Cyanoacrylate Fuming	Fuming chamber processing time 10 min, purge time 10 min. Humidity 70%
	Dye Stain	Rhodamine 6G aqueous solution
	Alternate Light Source	Coherent laser
GAP6BG	Visual Examination	Visual exam with various types of lighting including ALS
	Cyanoacrylate Fuming	FF&F MVC 5000
	Dye Stain	R6G
	Powder Dusting	Black powder
GJP6DM	Cyanoacrylate Fuming	15 minutes of fuming time, surface type of stain
GLZR9F	Visual Examination	green light, blue light and visual light
	Cyanoacrylate Fuming	3 minutes
	Dye Stain	Basic yellow 40.
GNKYBN	Visual Examination	Some ridge detail was visible
	Alternate Light Source	Some ridge detail was visible
	Powder Dusting	Magnetic Powder
GPGACJ	Visual Examination	A visual examination was first conducted on Item #1 to detect ridge development
	Photograph	A photograph was taken of submitted Item #1
	Cyanoacrylate Fuming	Fuming tank was prepared, then Item #1 was placed in tank using Cyanoacrylate Ester, Lot #202003108 Expiration 4/2024, for detection of latent fingerprints.
	Powder Dusting	After 20-25 minutes in fuming tank fingerprint powder was then used to enhance and lift fingerprint.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
GR972C	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	MBD
GTZ7YN	Visual Examination Cyanoacrylate Fuming Powder Dusting	Item 1 was viewed using oblique lighting The plastic and glass parts of the frame were processed with cyanoacrylate fuming using a Safe Fume Air Science chamber. The glass from the picture frame was further processed with black powder.
GXAF86	Visual Examination Cyanoacrylate Fuming Powder Dusting	View glass using white light and magnifier Fume in chamber with superglue and hot plate and boiling water added for humidity, fumed for approximately 10-15 minutes Used regular black powder and fiberglass brush for powder application
H8EUMC	Powder Dusting	I utilized magnetic powder to develop a latent fingerprint.
H8EYXE	Visual Examination	Initial visual examination with white light (and light source blue light). During the visual examination a perfect fingerprint was clearly visible in section C. It was discovered that the fingerprint was on the inside of the plastic and glass item. Although it was visible on the other side as well. The development was in that moment stopped.
HAKCL8	Cyanoacrylate Fuming Powder Dusting	placed in cyanoacrylate tank for approx 10 min with superglue and water on a heating element. used magnetic powder to develop print for lifting
HC698C	Cyanoacrylate Fuming Powder Dusting	cyanoacrylate steaming process for 5 minutes at 120°C, humidity: 80% RH, 15 drops of cyanoacrylate Magnabrush was used to contrast the cyanoacrylate after taking a photograph. After contrasting, another photograph was taken, which was not as good in quality as before.
HERXDB	Visual Examination Cyanoacrylate Fuming Dye Stain	Mark search was done by following ways: 1. White Light/Naked eye. 2. Blue Light (445 nm) using Goggle (495 nm). 3. Green Light (532 nm) using Goggle (550 nm). Print found on Section C by White Light. Processing Time: 20 mins, which includes Humidifying, Fuming and Purging. After 20 mins, Mark search was done using White Light. No additional mark found. Mark on Section C, enhanced. After Dying with BY40, kept to dry for 20 mins in fumehood. After 20 mins, Mark search was done using 445nm light (blue light) with goggle (495nm). No Additional marks found. But the mark on Section C, enhanced.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
HF9U7B	Visual Examination	
	Alternate Light Source	365nm, CSS, 495nm, 505nm
	Alternate Light Source	Laser-532nm
	Cyanoacrylate Fuming	fume time: 15 minutes, humidity setting: 80% RH
	Dye Stain	Ardrox, 365nm
HUQMUG	Visual Examination	Examined the piece of glass and the plastic frame as is using ambient light, flashlight, UV (ultraviolet) light, Laser, and ALS (alternate light source)
	Cyanoacrylate Fuming	Examined both items in Superglue cabinet along with testprint for about 10 minutes.
	Dye Stain	Sprayed Ardrox dye stain on piece of glass and plastic frame. Examined under UV light.
	Dye Stain	Sprayed Rhodamine 6G dye stain on piece of glass and plastic frame. Examined under Laser.
	Powder Dusting	Dusted the entire piece of glass and plastic frame with carbon black powder.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
HVKH9D	Visual Examination	EXHIBIT WAS EXAMINED VISUALLY USING NATURAL LIGHT AND A WHITE CRIMELITE SOURCE. AREAS OF RIDGE DETAIL NOTED IN QUADRANT C. AT THIS POINT IN LIVE CASEWORK I WOULD LABEL THE AREA ASIGN IT AN EXHIBIT REFERENCE AND PHOTOGRAPH THE IMAGE USING A DIGITAL CAPTURE SYSTEM (DCS) AND FORWARD THE IMAGE REMOTELY TO THE REGIONAL IDENTIFICATION UNIT.
	Cyanoacrylate Fuming	GLASS RETURNED BACK TO CORRECT WAY AROUND AND EXHIBIT (GLASS AND PLASTIC FRAME) PLACED INTO MASON VACTRON MVC5000 CABINET (#3) WITH A CONTROL SAMPLE AND 3.25G OF CYANOACRYLATE (BATCH#92869). THE ITEM WAS SUBJECTED TO THE AUTOCYCLE OF THE CABINET WHICH HEATS THE CYANOACRYLATE TO A TEMPERATURE OF 120C AND THE INTERIOR OF THE CABINET TO A RELATIVE HUMIDITY OF 75-90% FOR A PERIOD OF 15 MINUTES. THE CONTROL SAMPLE WAS CHECKED TO CONFIRM SUCCESS OF THE GLUEING CYCLE. IF THIS WAS LIVE CASEWORK AND RELEVANT THEN THE CARD INSERT WOULD BE SUBJECTED TO FURTHER POROUS DEVELOPMENT METHODS BUT AS THE MARK WAS HIGHLIGHTED ON THE GLASS IN QUADRANT C THEN I DID NOT THINK IT WAS NECESSARY TO CONTINUE WITH THE CARD INSERT TREATMENT.
	Dye Stain	UPON REMOVAL FROM THE MVC 5000 CABINET THE GLASS, FRAME AND CONTROL SAMPLE WAS SUBJECTED TO A BASIC YELLOW DYE STAIN (BY40 BATCH#20FEL011) MADE FROM SIRCHIE BY40 AND 96% ETHANOL. THE CONTROL SAMPLE AND THE GLASS AND FRAME WAS THEN EXAMINED USING A BLUE CRIMLITE WITH WAVELENGTH 420-470NM AND FILTER 476NM IN WHICH AN AREA OF RIDGE DETAIL WAS OBSERVED IN QUADRANT C. IN LIVE CASEWORK I WOULD ASSESS TO SEE IF FURTHER AREAS OF RIDGE DETAIL WERE ENHANCED COMPARED TO THE VISUAL MARK IF SO THIS WOULD BE PHOTOGRAPHED IF NOT THEN IT WOULD CARRY ON FOR FURTHER PROCESSING.
	[No Methods Reported.]	SOLVENT BLACK APPLIED TO THE GLASS ONLY (NOT PRACTICAL TO STAIN THE FRAME AS NO CONTRAST COULD BE ACHIEVED) AS A SECOND CHEMICAL SEQUENTIAL PROCESS (SOLVENT BLACK BATCH#20AA2) AS OUR FORCE POLICY WOULD BE TO SEQUENTIALLY TREAT ITEMS FROM SERIOUS CRIME TO MAXIMISE ANY POSSIBLE EVIDENCE. A WHITE CRIMELITE AND NATURAL LIGHT WAS USED TO EXAMINE THE ITEM - NO FURTHER AREAS OF RIDGE DETAIL WERE ENHANCED.
HY4MQ9	Visual Examination	RD latent 1A recovered from quadrant C
	Cyanoacrylate Fuming	Polycyano UV used (25min glue time). visual at 415nm with yellow filter -> RD latent 1A from quadrant C
	Ninhydrin	Ninhydrin HT used on paper in the frame in CARON humidity chamber (80 degrees F, 5mins, 65% Humidity). Visual after chamber -> NegRD (negative ridge detail)

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
HZF678	Cyanoacrylate Fuming	Processing time = approximately 20 mins. CFC chamber at 70% humidity - 10 min. cycle followed by 10 min. purge cycle. CFC positive control tested +. Lot# VP23419 Exp 01/2021.
	Powder Dusting	Processing time = approximately 5 mins. Black powder was used to process Item #1 (plastic and glass picture frame)
J4BB4A	Visual Examination	After photographing the piece of evidence identified with number one, we proceeded with alternating light (white light) to verify if there was a possible fingerprint on the frame glass, finding a possible fingerprint in the space marked with the letter "C".
	Cyanoacrylate Fuming	After identifying the possible fingerprint with alternating light, the glass was placed in a cabin, the cyanoacrylate liquid was placed in an aluminum container, the cabin was sealed and waited for the cyanoacrylate gases to be impregnated in the possible fingerprint. This process lasted around 10 minutes. The glass of the cabin was removed and the fingerprint was found in the box with the letter "C", we proceeded to photograph attached with a ruler.
	Powder Dusting	Following the procedure of the [Laboratory] with number [Number], we proceeded to use the black powder in the box with the letter "C", using the bristle brush we proceeded to develop it, once defined, we proceeded to use the charcoal brush to remove excess dust. It is photographed again along with a ruler.
J7JLZD	Visual Examination	Visual Examination using ambient room light and white light from the Power Lite II High Intensity Illuminator.
	Cyanoacrylate Fuming	Cyanoacrylate Fuming - 10 min/72% Humidity in an Air Science Cyanoacrylate Fuming Chamber. A control was placed in the chamber on a piece of clear acetate. This showed a positive development of friction ridge detail.
J96C2H	Visual Examination	
	Alternate Light Source	532nm, 450nm, 365nm
	Cyanoacrylate Fuming	VIS, RUVIS
	Dye Stain	RAM
JDZ726	Cyanoacrylate Fuming	Fume takes approximately one hour and ten minutes.
	Dye Stain	Yellow Dye
	Alternate Light Source	415 nm, yellow filter
JE8L9B	Powder Dusting	Utilized black volcanic powder. Photographed.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
JH63K6	Visual Examination	Mini-Crimescope White light
	Alternate Light Source	Mini-Crimescope - all wavelengths available
	Cyanoacrylate Fuming	Safefume Chamber, 25 minutes processing time, 77% humidity (test print processed concurrently)
	Powder Dusting	Black powder (photograph taken)
	Dye Stain	Rhodamine 6G, viewed with TracER laser (532 nm) (test print processed concurrently)
JHR7J7	Powder Dusting	Visual examination, Cyanoacrylate fuming, black powder dusting
JKX3HF	Cyanoacrylate Fuming	Vacuum Cyanoacrylate ester Fuming- Fumed for one hour
	Dye Stain	Stained with Rhodamine 6G Viewed with Forensic Laser
JM3NAM	Cyanoacrylate Fuming	Superglue (Foster+Freeman MVC1000 s/n1005 (Auto mode) cyanobloom 10 drop And Black Magnatic powder
JNWCV3	Visual Examination	Item 1 Picture Frame - Ambient light - visible appreciable FRD in "C" quadrant on inside of glass. Arch pattern type fingerprint. Will attempt to image capture reverse print.
	Cyanoacrylate Fuming	Item 1 Picture Frame Glass - Removed glass from picture frame, super glue fuming in CA-6000 at 65% relative humidity for 30 mins.
	Visual Examination	Item 1 Picture Frame Glass - White Light - Post CA Appreciable FRD in quadrant C more visible, white ridges. Will re-image capture.
	Powder Dusting	Item 1 Picture Frame Glass - Black powder on glass using brush method.
	Visual Examination	Item 1 Picture Frame Glass - Black powder only adhered to parts of latent.
	Powder Dusting	Item 1 Picture Frame Glass - Post magnetic powder using magnetic brush, no improvement.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
JYFJWD	Visual Examination	Oblique lighting was used. Control test not applicable. Ridge structure of collection value was observed in quadrant C. Digital photography was used for collection.
	Alternate Light Source	LabKam that emits 254 nm light was used. Control test not applicable. Ridge structure of collection value was observed in quadrant C. Digital photography was used for collection.
	Cyanoacrylate Fuming	Cyanoacrylate chamber was set to approximately 15 minutes of fuming. Control test was positive. Ridge structure of collection value was observed in quadrant C. No photography until the following step.
	Alternate Light Source	LabKam that emits 254 nm light was used. Control test not applicable. Ridge structure of collection value was observed in quadrant C. Digital photography was used for collection.
	Dye Stain	Rhodamine 6G was used. Control test was positive. Results not viewed until following step.
	Alternate Light Source	Crimescope was used at 495 nm with orange google/camera lens. Control test not applicable. Ridge structure of collection value was observed in quadrant C. Digital photography was used for collection. Ridge structure of no collection value was observed in quadrant D. Digital photography was used for collection.
K46JMD	Visual Examination	white light - fingerprint section C
	Alternate Light Source	UV, VIS
	Cyanoacrylate Fuming	approx. 2 min., 120 C degree
	Dye Stain	Basic Yellow - ethanol based
KE74P7	Visual Examination	Examined item with naked eye & alternate light source.
	Cyanoacrylate Fuming	CA chamber with humidity levels set at 65% for 15 minutes.
	Powder Dusting	Black powder
	Dye Stain	MBD dye stain
	Alternate Light Source	Examined item on CCS setting using CrimeScope
KMGBLA	Powder Dusting	utilized Volcanic Black powder. Developed, photographed and lifted one print.
KUYJA7	Powder Dusting	Black powder
KVU7MA	Visual Examination	PoliLight PL500
	Cyanoacrylate Fuming	RH 80%, t-10 min
	Dye Stain	Basic Yellow 40

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
L2TBTJ	Visual Examination	with flashlight
	Cyanoacrylate Fuming	with superglue in fuming tank; approximately 25 minutes
	Visual Examination	with flashlight
	R6G	R6G used
	Laser	visual confirmation with laser and photographed
	Powder Dusting	with mag powder and lifted as LP1
L4ZLR9	Visual Examination	Observed a latent in letter C
	Powder Dusting	Used magnetic black powder
L7822Z	Visual Examination	I performed a visual examination with natural and oblique lighting.
	Cyanoacrylate Fuming	I placed the item in a chamber. I added cyanoacrylate glue into an aluminum dish, which I then placed on the hot plate in the chamber. I also added a beaker of boiling water to the chamber to provide humidity. I turned the chamber on to heat the cyanoacrylate glue into a vapor. I left the item in the chamber for approximately 20 minutes. Once I saw my positive control turn white from the cyanoacrylate fumes, I turned off the hot plate and opened the vent to the chamber. I waited another 10 minutes, then I removed my item from the chamber.
	Powder Dusting	I applied black magnetic powder to the item using a magnetic wand. After taking a few passes over the item, ridge detail began to develop.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
LBHWYH	Visual Examination	White light examination of exhibit as received using ambient laboratory lighting and 'Tiablo' High Power LED Flashlight at varying angles. Item examined in situ. Ridge detail seen in Section C. This was exhibited as GJM/1 and photographed. This was inverted as per instruction. Glass removed from frame and examined. Glass to be treated only.
	Alternate Light Source	Sequential initial High Intensity Light Source (HILS) examination carried out, following dark adaptation, using Green Crime Lite 490nm-560nm with 571 nm viewing filter followed by Blue Crime Lite 420nm-470nm with 476nm viewing filter and UV Crime Lite 350nm- 380nm with 408nm viewing filter. QA adhered to and control test piece passed.
	Cyanoacrylate Fuming	Carried out as per [Organization] validated/internally verified procedure (Foster & Freeman MVC5000 Cabinet, Relative Humidity 80%, Glue time 13 minutes & 3g of superglue used). Following treatment, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass used where required. QA adhered to and control test piece passed. GJM/1 was further enhanced and exhibited as GJM/1AO and photographed.
	Dye Stain	Ethanol-Based BY40 dye used, carried out as per [Organization] validated/ internally verified procedure. BY40 dye applied and left for ~15 seconds. Rinsed with water and left to dry. Examined when dry using blue Crime Lite 420-470nm with 476nm viewing filter, following dark adaptation. QA adhered to and control test piece passed. GJM/1 was further enhanced and exhibited as GJM/1BO and photographed.
	Wet Powder Suspension	Carbon-based powder suspension used, carried out as per [Organization] validated/internally verified procedure. Pre-rinsed non-with water. Powder Suspension applied with soft squirrel hair brush and left for ~10-20 seconds. Powder Suspension rinsed off using gently running water until maximum contrast obtained and then allowed to dry. When dry, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass used where required. QA adhered to and control test piece passed. Titanium Dioxide (white) powder Suspension used, carried out as per [Organization] validated/internally verified procedure. Pre-rinsed with water. Powder Suspension applied with soft squirrel hair brush and left for ~10-20 seconds. Powder Suspension rinsed off using gently running water until maximum contrast obtained and then allowed to dry. When dry, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles. QA adhered to and control test piece passed. No further enhancements were developed.
LBM9ME	Visual Examination	Forensic white light source. One fingerprint is detected
	Cyanoacrylate Fuming	Ten minutes fuming cycle (Lumicyano). White light and UV light observation

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
LJEQY2	Cyanoacrylate Fuming	I conducted a visual exam and photographed the item. I then placed the item into our fuming chamber for one auto cycle which took approximately one hour. Test print/control showed the fuming chamber was working appropriately. One area of friction ridge detail of value was observed in box C.
LMYJB4	Visual Examination	Visually examined the item to determine if latent detail was visible prior to application of processing methods.
	Cyanoacrylate Fuming	Cyanoacrylate Fuming Chamber - 70% humidity, 10 minute fume cycle followed by a 10 min purge cycle. CFC positive control conducted. CFC Lot#: BP23419 Exp: 01/2021.
	Powder Dusting	Application of Bi-chromatic fingerprint powder to enhance and make visible the deposited latent fingerprint.
LN8VQK	Visual Examination	
	Cyanoacrylate Fuming	Temperature on the heating plate 100°C Humidification 80%, time 25 minutes
	Dye Stain	
LVP7YE	Visual Examination	different light sources and filters
	Cyanoacrylate Fuming	temp. 25 C, humidity 80%, time 20 min. natural and white light (Chamber Safefume CA30S)
	Basic Yellow	spray, 350-530 light, yellow filter
M3JQK8	Powder Dusting	Photographed, utilized magnetic powder, lifted latent print, packaged, and submitted to regional laboratory for analysis.
M3M9MC	Visual Examination	Using Oblique lighting, UV light, LASER, and ALS
	Cyanoacrylate Fuming	Fumed for approximately 10 minutes
	Dye Stain	Ardrox with UV light
	Dye Stain	Rhodamine with LASER
	Powder Dusting	Black powder
M8EF7K	Visual Examination	21/06/2020 @ 9:45 am using white light for examination
	Cyanoacrylate Fuming	21/06/2020 @ 10:00 am Fuming chamber @ 80 RH, 120 C plate temperature examination using the white light
	Dye Stain	21/06/2020 @ 11:30 am Treated using Basic Yellow 40 dying stain examination using the blue light with suitable goggles
	Dye Stain	21/06/2020 @ 12:00 pm Treated using Crystal Violet dying stain examination using the white light
	Dye Stain	21/06/2020 @ 12:30 pm Treated using Sudan Black dying stain examination using the white light
	Powder Dusting	21/06/2020 @ 01:30 pm examination using the white light

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
M9PHU6	Visual Examination	Glass, plastic frame, and paper separated to facilitate processing. Processing Date: 7/22/2020. Control: N/A
	Alternate Light Source	Processing Date: 7/22/2020. Control: N/A
	Cyanoacrylate Fuming	Glass and frame only. Processing Date: 7/22/2020. Control: Pos.
	Powder Dusting	Black Magnetic Powder Applied to glass only. Processing Date: 7/22/2020. Control: N/A
	Powder Dusting	Coinbox/Galvanic Powder Applied to frame only. Processing Date: 7/22/2020. Control: 7/22/2020
	Dye Stain	MRM-10 Applied to glass and frame only. Processing Date: 7/22/2020. Control: Pos.
	DFO	Applied to paper only. Processing Date: 7/24/2020. Control: Pos.
	Ninhydrin	Applied to paper only. Processing Date: 7/24/2020. Control: Pos.
	Silver Nitrate	Applied to paper only. Processing Date: 7/24/2020. Control: Pos.
MCA8F3	Powder Dusting	black powder
	DFO	
MECCNG	Visual Examination	Episcopic coaxial illumination (macroscope)
	Cyanoacrylate Fuming	Relative humidity=80%; cyano glue=0.83g; exposure time=3minutes.
	Powder Dusting	Black powder
MJBQC7	Powder Dusting	black dust
MK9UC9	Visual Examination	Item was examined under white light and magnification.
	Alternate Light Source	Item was examined using Foster + Freeman Crime Lite ML2 with a 420nm-470nm bandwidth filter and an orange barrier.
	Cyanoacrylate Fuming	Item was processed in the CyanoSafe recirculation chamber for 20 minutes. The test print was positive.
	Powder Dusting	Black magnetic print powder was applied to item.
	Dye Stain	Item was treated with RAY batch #721 and examined using Foster + Freeman Crime Lite ML2 with a 420nm-470nm bandwidth filter and an orange barrier.
MQTVPZ	Visual Examination	Visible print in Quadrant C.
	Cyanoacrylate Fuming	MVC 5000 Superglue Chamber for 20 minutes.
	Powder Dusting	Used magnetic powder, then black powder.
MRNFCZ	Powder Dusting	1 minute processing time, Magnetic Powder.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
MRP9B8	Visual Examination Cyanoacrylate Fuming Powder Dusting	Black powder
MWZLR7	Visual Examination Cyanoacrylate Fuming Powder Dusting	room lighting, 450 nm light and UV light fumed about 5 minutes black powder
N2PHU3	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	Print was visible with side-lighting in quadrant C. Superglue fume time 30 minutes, control +, Lot#201904100 Rhodamine 6G dye stain with methanol rinse, control +, Lot#R6G061520 Black powder & magnetic powder
NAL3EH	Cyanoacrylate Fuming [No Methods Reported.]	Cyanoacrylate Fuming.---20 minutes 1- Visual Examination. 2-alternate light Source. 3- Cyanoacrylate Fuming. 4-Powder Dusting total processing time --45 minutes
NBCGK8	Visual Examination Alternate Light Source Cyanoacrylate Fuming Alternate Light Source Dye Stain Alternate Light Source	No control. Bright light was used. One latent print of collection value observed in "Box C". No collection method used. No control. Alternate light source - Labkam. One latent print of collection value observed in "Box C". Collection method - photography with Labkam. Bright light was used. Positive control. One latent print of collection value observed in "Box C". No collection method used. Alternate light source - Labkam. One latent print of collection value observed in "Box C". Collection method - photography with Labkam. RAY - Rhodamine 6G, Ardrex, Basic Yellow 40. Apply to surface, rinse with water, and let dry. Positive control under Crimescope. No ridge structure visible. No collection method used. Alternate light source - Crimescope at 455 nm with orange goggles. Positive control. One latent print of collection value in "Box C". Collection method - Digital photography.
NCRF3C	Powder Dusting	black powder
ND668A	Visual Examination Cyanoacrylate Fuming Powder Dusting Dye Stain	Visual examination under white light and magnification revealed print in section C. Fuming in CyanoSafe recirculation chamber. Print in section C. Black magnetic powder. Print in section C. RAY dye stain. Print in section C. Viewed with polilight 450 nm with orange filter.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
NF8BHA	Visual Examination	Oblique lighting
	Alternate Light Source	Inherent fluorescence examination with Coherent TracER
	Cyanoacrylate Fuming	CA placed onto aluminum dish and heated with a hot plate. Fuming performed within Fisher Hamilton fuming chamber.
	Dye Stain	Rhodamine 6G
	Alternate Light Source	Dye stain fluorescence examination with Coherent TracER
	Powder Dusting	Magnetic & Black Powder
NKM79	Visual Examination	Visual examination conducted with bright light source and magnification. Ridge structure of value observed.
	Alternate Light Source	Examination with LabKam. Ridge structure of value observed.
	Cyanoacrylate Fuming	Item processed with cyanoacrylate fuming in chamber. Positive control developed. Ridge structure of value observed.
	Alternate Light Source	Examination with LabKam. Ridge structure of value observed.
	Dye Stain	Rhodamine 6G used to enhance ridge structure. Positive control enhanced.
	Alternate Light Source	Item visualized at 515nm with orange goggles. Positive control observed. Ridge structure of value observed.
NLVNA	Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 06/07/2020.
	Cyanoacrylate Fuming	Lumicyano Powder™ (frame not disassembled). Glue temperature = 118°C. Relative humidity = 78 %. Processing time = 40 mn. Date analyzed : 07/07/2020.
	Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 07/07/2020.
	Cyanoacrylate Fuming	Lumicyano Powder™ (frame disassembled). Glue temperature = 118°C. Relative humidity = 78 %. Processing time = 40 mn. Date analyzed : 08/07/2020.
	Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 08/07/2020.
P8Q4B4	Visual Examination	
	Alternate Light Source	(415 nm, Yellow Filter)
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	Ardrox (415 nm, Yellow Filter)
PDWRVX	Cyanoacrylate Fuming	Approximately 1 Hour fuming time.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
PF26W6	Visual Examination	
	Alternate Light Source	(415 nm, Yellow Filter)
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	Ardrox (415 nm, Yellow Filter)
PGGK7Z	Visual Examination	Used a flashlight with white light and used ambient lighting.
	Cyanoacrylate Fuming	Used a vacuum chamber set to 25 PSI and fumed for twenty minutes.
	Visual Examination	Used a flashlight with white light and used ambient lighting.
	Wet Powder Suspension	Used Wetwop White - brushed a diluted amount of Wetwop onto item and allowed it to sit for approximately 10 seconds before rinsing off with tap water.
	Visual Examination	Used a flashlight with white light and used ambient lighting.
	R.A.M. dye stain	Used dye stain to spray item and then allowed to dry.
	Alternate Light Source	Examined item with a Rofin Polilight PL500 at 505nm with orange goggles.
PLC73A	Visual Examination	
	Cyanoacrylate Fuming	10 minutes in fuming chamber
	Powder Dusting	
PX2B4E	Visual Examination	Light: UV, white, green, blue/green Lens: red, yellow, orange
	Cyanoacrylate Fuming	Cyanoacrylate Temperature: 120°C / Time: 20 minutes / Humidity: 80
	Visual Examination	Light: UV, white, green, blue/green Lens: red, yellow, orange
PX7MRA	Visual Examination	with polarising filters, colored lights and filters, low angled enlightments.
	Cyanoacrylate Fuming	Lumicyano fumes + polarising filters, colored lights and filters, low angles enlightments.
	Rhodamine 6G	= lumicyano dye + fluorescence examination.
PXPB96	Powder Dusting	Oblique lighting utilized print was visible. Dusted with volcanic ash to further develop the print.
PYCCRX	Cyanoacrylate Fuming	FUMED WITH CAE APPROXIMATELY 15MINS-DYE STAIN NOT NEEDED

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
Q87MV2	Visual Examination	visual with naked eye and white side lighting - detail of potential value for comparison observed
	Cyanoacrylate Fuming	cae chamber sample was positive - detail of potential value for comparison observed
	Dye Stain	RAM, sample was positive, "visualized" using TraCER LASER - no detail of potential value observed
	Powder Dusting	used regular powder brush in conjunction with black powder - no detail of potential value observed
QKAZWY	Visual Examination	
	Photo	Digital photos taken with the glass in the as received orientation and after removing the glass and inverting the fingerprint
	Gel lift	Black gel lift of entire marked glass surface
	Gel scan	GLScan
	Cyanoacrylate Fuming	Over fumed
	Gel lift	Black gel lift x2
	Gel scan	GLScan
QP7MR9	Visual Examination	Visual exam using oblique lighting, Laser light, and UV light.
	Cyanoacrylate Fuming	Processed for approximately 5 minutes. (Glass and frame only)
	Dye Stain	Ardrox, examined using a UV light. (Glass and frame only)
	Dye Stain	Rhodamine 6G, visualized using a Laser. (Glass and frame only)
	Powder Dusting	Black fingerprint powder. (Glass and frame only)
QPQ9KY	Visual Examination	
	Alternate Light Source	Mini-Crimescope was utilized; all wavelengths.
	Cyanoacrylate Fuming	SafeFume Superglue Chamber was utilized. Evidence was left sitting after removal from chamber for at least 24 hours (per lab policy) prior to moving on to next method.
	Powder Dusting	Regular black powder was utilized.
	Dye Stain	Rhodamine 6G was utilized with a Mini-Crimescope at 515 nm.
QTPF6W	Visual Examination	Visual examination with white light. Ridge detail was seen in quadrant C.
	Cyanoacrylate Fuming	Fumed in chamber with superglue and hot water for humidity for approximately 20 minutes.
	Powder Dusting	Applied black powder with brush to the item.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
R2DWT4	Visual Examination	RUVIS
	Cyanoacrylate Fuming	15 minutes, 80% humidity, examined with RUVIS, frame and glass only
	Dye Stain	Lumicyano, ALS with orange goggles, frame and glass only
	Powder Dusting	silver/black magnetic powder, frame and glass only
	DFO	100C, 20 minutes, laser with orange goggles, paper backing only
	Ninhydrin	80C and 70% humidity, 20 minutes, paper backing only
	Oil Red O	1 hour, paper backing only
R434BE	Cyanoacrylate Fuming	I processed item 001 with cyanoacrylate inside an 'Air Science' fuming chamber which took approximately 15-20 minutes. Friction ridge detail was observed in box C.
	Powder Dusting	Following fuming I further processed item 001 with black magnetic fingerprint powder. Friction ridge detail was observed in box C.
R6WRVW	Powder Dusting	Used black magnetic powder and wand.
R9W4RV	Powder Dusting	Glass from picture framed dusted with magnetic powder using a magnetic wand until a print was developed.
R9ZH6V	Visual Examination	A visible print was observed on the glass of the frame. A photograph was taken before continuing on in the processing sequence.
	Cyanoacrylate Fuming	MVC 5000/D - Fumed for 15 minutes.
	Powder Dusting	Magnetic powder was applied to the evidence. A lift of developed prints was collected before continuing on in the processing sequence.
	Powder Dusting	Black powder was applied to the evidence. A lift of developed prints was collected as the final step.
RCAZWW	Cyanoacrylate Fuming	Positive control. Humidity 70%, CFC fuming 10 minutes, purge 10 minutes
RCW8K4	Visual Examination	(+)result
	Powder Dusting	Magnetic Powder, (+)results
RD32U9	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	
RE2ZE2	Cyanoacrylate Fuming	

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
RXY6X4	Visual Examination	Usable latent print(UL)observed and photographed
	Cyanoacrylate Fuming	CA fuming in chamber for approximately 15 minutes. No latent print improvement observed, UL.
	Dye Stain	Rhodamine 6G dye stain utilized. No latent print improvement observed, UL.
	Alternate Light Source	Coherent Tracer laser utilized 532nm. No latent print improvement observed, UL photographed.
	Powder Dusting	Black fingerprint powder utilized. Enhancement observed, UL, latent print lifted and latent print image scanned.
T2CEAY	Cyanoacrylate Fuming	Visual examination (000-495); photography; basic yellow; humidity 80.8%; temperature 130°c
T2U7L4	Visual Examination	White light
	Alternate Light Source	poly light 440-520nm
	Cyanoacrylate Fuming	11min, 80% humidity, 160c
	Dye Stain	BY40
	Dye Stain	CV
T6W8L2	Visual Examination	unaided visual examination; ridge detail observed
	Cyanoacrylate Fuming	CAE, MVC5000 chamber, about 1 hour, ridge detail observed (Test print: C+B-)
	Dye Stain	R6g, TracER laser, barrier filters, clear print observed (Test print: C+B-)
T6YWU6	Visual Examination	White light and ALS
	Cyanoacrylate Fuming	Foster+Freeman cabinet ~70 minute auto cycle
	Dye Stain	Rhodamine-6-G stain
	Powder Dusting	Black powder
T8KNXU	Visual Examination	Visual Examination using direct and oblique lighting
	Alternate Light Source	ALS frequency 450
	Cyanoacrylate Fuming	processing time 1 Hour
	Visual Examination	Visual Examination using direct and oblique lighting
	Dye Stain	Yellow Dye
	Visual Examination	Alternate Light source, yellow goggles.
TBZBAE	Visual Examination	observed ridge detail
	Cyanoacrylate Fuming	
TD2E22	Visual Examination	white light, UV - 555nm - Polilight PL 500, suitable goggles

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
TKJPAV	Visual Examination	
	Cyanoacrylate Fuming	Lumicyano
	Alternate Light Source	CSS, orange filter
	Powder Dusting	Black powder, lifted print
TKN6MW	Visual Examination	Laser and flashlight used
	Cyanoacrylate Fuming	Flashlight used. 70 Minutes, Foster and Freeman chamber used
	Dye Stain	Rhodamine 6G, Laser used along with filter.
	Powder Dusting	Black powder
TLECMY	Visual Examination	Visual examined and was able to see a latent print in quadrant "C".
	Powder Dusting	I used black/silver fingerprint powder to develop a latent print from the glass, which was in quadrant "C".
TLWG6X	Cyanoacrylate Fuming	Fumed with cyanoacrylate
TR9ZT7	Visual Examination	
	Cyanoacrylate Fuming	CA processed for a 12 minute cycle. Allowed to set for 1 hour.
	Dye Stain	Ray batch 726. Stain applied, allowed to sit for 30 seconds. Rinsed with water and allowed to air dry.
	Powder Dusting	Black powder was used.
TVPE9Z	Cyanoacrylate Fuming	
TWEXX6	Visual Examination	Used TracER Laser (532nm) with orange goggles and Crimescope CS-16-500 with orange, red and yellow goggles to look for inherent fluorescence.
	Cyanoacrylate Fuming	Viewed with White light
	Dye Stain	Rhodamine 6G. Viewed with TracER Laser (532nm) with orange goggles
TXU3RW	Visual Examination	Direct and oblique lighting
	Cyanoacrylate Fuming	Added humidity to reach a relative humidity level of ~70%. Followed by visual exam
	Dye Stain	R6G MeOH and H2O. Used Laser @ 532 nm with orange barrier filter for exam

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
U7YPW2	Visual Examination	Ridge structure - collection value. Collected with digital photography.
	Cyanoacrylate Fuming	Control test positive. Ridge structure - collection value. Collected with digital photography. Fuming specifications: 120 degrees Celsius, 78% relative humidity, approximately 15 minutes fuming time (total running time including heating, gluing, and purge is approximately 1 hour).
	Alternate Light Source	LabKam, clear goggles. Ridge structure - collection value. Collected with digital photography.
	Dye Stain	Basic yellow 40, control test positive
	Alternate Light Source	Crime scope, 415 nm, yellow goggles. Ridge structure - collection value. Collected with digital photography.
	Powder Dusting	Black powder. Ridge structure - collection value. Not collected because it was not enhanced from previous steps.
U9RDJ4	Visual Examination	1 image, section C
	Cyanoacrylate Fuming	cyanosafe
	Dye Stain	RAY, batch#721
	Powder Dusting	black
UDLEJW	Cyanoacrylate Fuming	14 minute fume time 20 minute purge
UHG9GX	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	Chamber
	Dye Stain	RAM
	Alternate Light Source	
	Powder Dusting	Black powder
UJNNN4	Visual Examination	Examined using natural light, flash light, UV, ALS, LASER, and FSIS.
	Cyanoacrylate Fuming	Development was approximately 10 minutes. Examined using natural light, flash light, UV, ALS, LASER, and FSIS.
	Dye Stain	Ardrox with UV excitation.
	Dye Stain	Rhodamine 6G with LASER excitation.
	Powder Dusting	Applied black fingerprint powder and lifted.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
UN6UMY	Visual Examination	One fingerprint with good details, including 3rd level, was visible by first glance. Early morning sunlight gleaming through my window enhanced the visibility of the details, better than the regular flashlight. I decided to preserve the print by photo before further developing methods were used.
	Cyanoacrylate Fuming	Humidity: 75%. Fuming time: 10 minutes. The glue gave the fingerprint poorer quality in the third level details.
	Dye Stain	I used Basic Yellow 40. The glass was dipped in the solution, rinsed with water, and then placed into a drying cabinet for approximately 1 hour.
	Alternate Light Source	After using Basic Yellow 40, optimal fluorescence was achieved with 445 nm light source, and yellow filters.
UVHMVA	Visual Examination	Visual light, detected fingerprint photographed.
	Lumicyano	Using Foster+Freeman MVC 3000 fuming cabinet: 120 degrees, first allowing distilled water to vaporise and then fuming with 8 % mixture. Total process time 25 minutes.
UYWK2C	Visual Examination	Initial Visual Daylight + Fluorescent Exam. Fluorescent exam using Blue crime-lite 82 revealed impression in BOX c.
V3DCMX	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	R.A.M. (395 nm, Yellow Filter)
V63DV8	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
V879EA	Powder Dusting	using a powder brush and conventional black powder
	Visual Examination	print was seen under normal lighting conditions
V93KF6	Powder Dusting	
VADQD7	Cyanoacrylate Fuming	FosterFreeman MCV3000. Humidity 80%, temperature 120°C, processing time 15 minutes.
VAX8T9	Visual Examination	Reflected UV (350nm - 380nm)
VKX3MX	Cyanoacrylate Fuming	Item 1 was processed using cyanoacrylate fuming on 7/24/2020 at 0900 hours. A test print was conducted with positive results.
	Powder Dusting	After processing with cyanoacrylate fuming, Item 1 was processed using black powder on 7/24/2020 at 0900 hours.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
VNDBBW	Cyanoacrylate Fuming	The item and control test print was fumed for 5 minutes with cyanoacrylate ester (superglue). A positive result was obtained for the test print.
VRXC23	Visual Examination	Visual examination - something on glass but no detail.
	Cyanoacrylate Fuming	17 minutes processing - allowed to sit overnight so the glue could harden.
	Powder Dusting	Magnetic powder was used - print visualized in quadrant C.
VU6HT7	Visual Examination	White light
	Cyanoacrylate Fuming	Glue heating at 120 degrees Celsius for 5 minutes in 80% humidity
	Dye Stain	Basic Yellow 40, 100% Ethanol
VVXNY	Powder Dusting	Photographed, lifted, and submitted to the Regional Laboratory for additional analysis.
VYFLPY	Visual Examination	White light from flashlight, ambient lighting
	Powder Dusting	magnetic powder and black powder combined and applied to the exterior of glass in frame; note glass is in the frame upside down based on letters in the grid pattern
	Visual Examination	White light from flashlight, ambient lighting
	Cyanoacrylate Fuming	Glass was removed from frame and both processed for 15 minutes of active fume time in an Air Science CA chamber @80% humidity
	Visual Examination	White light from flashlight, ambient lighting
W6WHP7	Visual Examination	Separate glass-surface on Karlsson's box, use of white light from below.
W7TUQ2	Visual Examination	1 minute. glass turned back to correct position - Latent impression observed in Quad C
	Cyanoacrylate Fuming	Fume 15 minutes. Purge 15 minutes
	Visual Examination	1 minute. Light used. Latent impression observed in Quad C
	Powder Dusting	1 minute. Black Powder. Latent impression observed in Quad C
	Visual Examination	1 minute. Prepare to lift. Latent impression observed in Quad C
W84WDZ	Visual Examination	
	Cyanoacrylate Fuming	Lumicyano (Pink Stuff) 20 Min. 80% rel. h.
W9GN83	Visual Examination	Incandescent/ Flood Lighting
	Cyanoacrylate Fuming	Cyanosafe, Fluorescent Lighting
	Powder Dusting	Magnetic Powder, Fluorescent Lighting
	Dye Stain	RAY dye stain, Polilight 2 (orange filter)

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
W9U4C3	Visual Examination	Visual examination of the glass evidence submitted
	Cyanoacrylate Fuming	Item was placed in the Cyvac cyanoacrylate fuming chamber for 1 hr.
	Dye Stain	Item was visually examined then dye stained with Rhodamine R6G and let dry for 20 min
	Alternate Light Source	Item was then viewed with Alternate light source where a fingerprint was observed in Section C
WB489Z	Visual Examination	Impression in quadrant C.
	Alternate Light Source	Inherent Luminescence Examination at multiple wavelengths with Polilight PL500.
	Cyanoacrylate Fuming	CA fume in vacuum.
	Dye Stain	Rhodamine 6G dye-stain and fluorescence exam using Polilight PL500 at 505nm. Impression in quadrant C developed.
	Powder Dusting	Black magnetic powder dusting. Impression in quadrant C developed.
WJ2WRP	Visual	Visual examination of the photo frame. Ridge detail was observed in quadrant C on the glass.
	Cyanoacrylate Fuming	Fumed the item in the chamber for approximately 20 minutes with hot water for humidity.
	Powder Dusting	Applied magnetic powder with magnetic wand to the item and further developed ridge detail in quadrant C. No other ridge detail observed.
WJM76Z	Powder Dusting	Item #1 was processed for the development of latent prints using black magnetic powder. Latent prints of possible value was observed only on area labeled C.
WMH6D4	Visual Examination	White light, UV
	Cyanoacrylate Fuming	Lumicyano (CTS)/ Fuming cabinet CA30S (Safefume)
WMW NX2	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	Lumicyano -- combination of cyanoacrylate and fluorescent dye, ALS w/ dye
	Powder Dusting	Black powder
WNBYRY	Cyanoacrylate Fuming	Visual Examination (White Light/ALS, Cyanoacrylate Fuming for approximately 25 minutes, Visual Examination, Fingerprint Powder, Visual Examination.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
WRC4NR	Visual Examination	RD noted in Quadrant C (arch).
	Alternate Light Source	Mini Crime scope- all wavelengths. No additional RD noted.
	Cyanoacrylate Fuming	Cyanovac fuming chamber. Left overnight before further processing. No additional RD noted.
	Powder Dusting	Black Powder. One (1) photograph taken of RD noted in Quadrant C (arch).
	Dye Stain	R6G- let dry.
	Alternate Light Source	Viewed with mini crime scope at 515 wave length. No additional RD noted.
WUHTLV	Visual Examination	White light
	Cyanoacrylate Fuming	20 - 30 mins in glue chamber. Item was fumed to preserve visible print on glass.
WXHR6Z	Visual Examination	visible print on underside of glass in quadrant C
	laser	print in quadrant C visible under laser
	Powder Dusting	removed glass, applied black magnetic powder => 1st lift
	Powder Dusting	applied black non-magnetic powder => 2nd lift
X446JT	Cyanoacrylate Fuming	Cyanoacrylate fumed
	Dye Stain	Dye stained with basic yellow 40
XARREY	Visual Examination	White light
	Alternate Light Source	Polylight 440-520nm scan
	Cyanoacrylate Fuming	11min 80% humidity 160c
	Dye Stain	BY40
	Dye Stain	CV
XELP4P	Visual Examination	Visually inspected the item for ridge detail before processing. Ridge detail was present with visual examination before any processing.
	Cyanoacrylate Fuming	Used CA fuming to further develop the ridge detail found on the item. The item was fumed for 15 min at ~75% humidity. Further development of ridge detail was observed with this process.
	Dye Stain	Applied MRM-10 to further develop the ridge detail and allowed the dye stain to dry (~2 minutes drying time). The results were observed using an alternate light source.
	Alternate Light Source	Used an alternate light source at 450 nm while viewing the item through an orange filter. This was done after applying MRM-10. Further development of ridge detail was observed with this process.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
XFBYTX	Visual Examination	Viewed sample under natural and forensic lights. The Plastic and the glass were treated separated.
	Cyanoacrylate Fuming	The fuming was initiated in the fuming chamber at least 15 minutes with 65% humidity. After that, The sample is viewed with natural and forensic lights. We observe a fingerprint in the other side of the crystal.
	Dye Stain	Staining with basic yellow with a spray application, washed and air dried.
	Alternate Light Source	Viewed with forensic light at 415 nm using yellow goggles.
XFH6E2	Alternate Light Source	A visual exam was preformed using UV, Laser, ALS, SUV, and flashlight. Using the short wave UV and the FSIS camera, I took one digital photo.
	Cyanoacrylate Fuming	The item was then place in the superglue chamber and fumed for approximately 10 minutes. One digital photo was taken of the same latent.
	Dye Stain	Applied Ardrex and used UV light. One digital photo was taken of the same latent. Applied Rhodamine 6G and used laser light. One digital photo was taken of the same latent.
	Powder Dusting	Applied black powder. One latent lift was collected from the same latent.
XJU6EY	Visual Examination	Visual examination using a Crimelite and a TracER Laser.
	Cyanoacrylate Fuming	
	Dye Stain	Rhodamine 6G used
	Powder Dusting	Black powder used
XJZ4RW	Visual Examination	Visible print found in section C
	Cyanoacrylate Fuming	Cyanosafe 15 mins; print observed
	Powder Dusting	black powder; print observed
	Dye Stain	RAY (batch 721); Polylight Flare 2 450NM, orange filter; print observed
XXWHP6	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
Y3N8P9	Visual Examination	White light and FSIS poor quality, not photograph. 1300 HRS
	Cyanoacrylate Fuming	1305 HRS

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
Y8FCKX	Cyanoacrylate Fuming	After visually examining Item 1, it was CA fumed for 17 minutes under 80 percent humidity in chamber. A latent print was visible at conclusion of fuming process.
	Powder Dusting	Black latent fingerprint powder applied with feather duster to further enhance the developed print to be of value.
YHZNR4	Visual Examination	
	Cyanoacrylate Fuming	
	Dye Stain	Rhodamine 6G
	Laser	
	Powder Dusting	Black fingerprint powder
YK2RJQ	Cyanoacrylate Fuming	The item was placed into the superglue tank for 10 minutes. There was also a control in the tank to verify that the superglue was processing correctly.
	Powder Dusting	The item was then processed with black fingerprint powder.
YNLG44	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
YNRTRZ	Alternate Light Source	Use of polilight, crime lite and lasers to carry out a visual search
	Cyanoacrylate Fuming	Cyanoacrylate fuming - viewed with white light
	Dye Stain	Rhodamine 6 G stain - viewed with laser
	Dye Stain	Gentian Violet - viewed with white light and laser
	Dye Stain	BY40 - viewed with laser
	Powder Dusting	Black powder - viewed with white light
YVNLZU	Visual Examination	
	Alternate Light Source	UV and Crimescope at 495nm
	Cyanoacrylate Fuming	25 minutes fuming.
	Dye Stain	Used R.A.M. Captured with ALS at 515 nanometers.
	Powder Dusting	Used black powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
YYNWWU	Visual Examination	
	Alternate Light Source	CS @ 515nm & UV light
	Cyanoacrylate Fuming	microburst
	Dye Stain	RAM
	Powder Dusting	Gray Powder
Z99MVQ	Visual Examination	Oblique light and diffused light
	Alternate Light Source	FSIS unit - short wave ultra violet light at 245nm and a UV filter
	Cyanoacrylate Fuming	Vacuum fumed for an hour in a CyVac M
	Dye Stain	Rhodamine 6G dye stain
	Alternate Light Source	Tracer green laser at 532nm and an orange band pass filter
ZBCHEU	Cyanoacrylate Fuming	Fumed for 15 minutes
ZKH6MU	Powder Dusting	Utilized bi-chromatic black powder, photographed with and without a scale.
ZLXMLT	Forensic ligths	The evidence is checked using "Lumatec 400" forensic light with all spectrum. 23°C room temperatura.
	Cyanoacrylate Fuming	Vaporization of cyanoacrylate in fuming chamber for about 8 minutes. 120°C temperatura, 75% humidity.
	Forensic ligths	The evidence is checked again using forensic light with all spectrum.
	Forensic ligths	The cardboard that covers the glass is checked using "Lumatec 400" forensic light with all spectrum. 23°C room temperatura.
	DFO	The cardboard that covers the glass is sprayed with DFO. Natural drying. The oven is used to visualice the developed latent print. 100°C Temeperature. 0% humidity.
	Forensic ligths	The cardboard that covers the glass is checked again using forensic light with all spectrum.
	Ninhydrin	The cardboard that covers the glass is sprayed with Ninhydrin. Natural drying. The oven is used to visualice the developed latent print. 80°C Temperature. 65% Humidity.
	Forensic ligths	The cardboard that covers the glass is checked again using "Lumatec 400" forensic light with all spectrum.
ZLYCWV	Visual Examination	Crimelite and TracER Laser
	Cyanoacrylate Fuming	70 minutes in F+F MVC 5000 chamber
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
ZNL3V2	Visual Examination	Visual examination with light source, detected fingerprint photographed with a measure.
	Powder Dusting	Carbon powder (ostrich feather brush), photographed with a measure.
ZPYNQW	Visual Examination	Crimelight flashlight
	Alternate Light Source	PL500 ALS at 530nm
	Cyanoacrylate Fuming	70 minutes
	Dye Stain	Rhodamine 6G, Methanol rinse on glass
	Powder Dusting	Black powder
ZVEFRU	Visual Examination	Exhibit examined with a white light source. Ridge detail observed in Box C. Exhibit consisted of 1x glass cover with quadrant on, 1x black plastic frame and 1x card insert (black on one side, white on the other). Frame separated out for treatment. Under live casework circumstances, the ridge detail found would have been captured using the DCS camera system.
	Cyanoacrylate Fuming	Mason Vactron MVC5000 cabinet No. 4. Superglue batch No. 92869 (SURELOC CA5 #092869). 3.24g of superglue used. Auto cycle processing applied which undergoes a 15 minute fuming cycle. 120C superglue heating plate, RH range of 75-90% with an ambient cabinet temperature. Control test positive. Glass cover and black plastic frame treated with SG/Dye. If this was live casework, the card insert would undergo paper treatments, however as PT test displays the quadrant for mark development on the glass- card not treated.
	Dye Stain	Basic Yellow Dye Stain - BY40 (SIRCHIE) applied after cyanoacrylate fuming. The Dye stain contains Ethanol 96% and Basic Yellow Stain. Exhibit stained, then washed off with tap water. BY40 batch No. 20FEL010. Control test positive.
	Solvent Black	Solvent Black applied post SG/Dye treatment to glass cover only due to lack of contrast that would be achieved with the black frame. This displays the sequential processing as would be utilised for serious/major crime. Exhibit processed with SB3 then washed with tap water. Solution contains Solvent Black 3, Methoxy-2-Propanol (PGME) and water. SB3 Batch No. 20AA2. Control sample positive.

Item 1 - Development Response Summary

Participants: 280

Methods Utilized

Alternate Light Source	104	Physical Developer	0
Cyanoacrylate Fuming	231	Powder Dusting	159
DFO	4	Visual Examination	224
Dye Stain	134	Wet Powder Suspension	2
Ninhydrin	7	1,2-Indanedione	2

****Note:** Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
23CFPM	Cyanoacrylate Fuming	6/17/20 CAE valid to glossy photograph Item 2. Processing time was approx. 20 min.
	Powder Dusting	6/17/20 Mag and BP valid. 6/17/20 green and red florescent mag and green and red florescent power valid
	Dye Stain	6/17/20 Solution Stain (RAM Lot 20.1) and laser and Crime Scope.
24C69Y	Met dep	
	1,2-Indanedione	
26KF63	Visual Examination	White light, daylight, 4X magnification lens
	Cyanoacrylate Fuming	Safefume 48 S cyanoacrylate fuming chambres (30 min., humidity 80 %), cyanoacrylate B-83050 (BVDA)
	Powder Dusting	Fingerprint powder magnetic black
293TPQ	Visual Examination	Used flashlight, LASER, UV
	Cyanoacrylate Fuming	
	Powder Dusting	
	Dye Stain	Ardrox visualized with UV Rhodamine 6G visualized with LASER
	DFO	Visualized with LASER, waited 24 hours
	Ninhydrin	waited 24 hours
	Zinc Chloride	visualized with ALS, waited 24 hours
	Physical Developer (PD)	
2CJ3XN	Visual Examination	No RD noted in any quadrant.
	Alternate Light Source	Mini-Crimescope- all available wavelengths. No RD noted.
	Cyanoacrylate Fuming	Safefume Chamber, allowed to set overnight. No RD noted.
	Powder Dusting	Bichromatic powder. No RD noted.
	1,2-Indanedione	Sprayed and allowed to set overnight. No RD noted.
	Ninhydrin	Sprayed and allowed to set overnight inside a plastic bag for added humidity. No RD noted.
	Fluorescent dye- R6G	Rhodamine 6G- viewed with mini-crimescope at 515nm. No RD noted.
2CMHBN	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	magnetic powder
	Powder Dusting	fluorescent magnetic powder

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
2M6742	Visual Examination	via forensic light (Crimescope)
	Cyanoacrylate Fuming	fuming for 3min
2RUNFR	Cyanoacrylate Fuming	cyanoacrylate fuming (10 minutes, 80 RH)
	Powder Dusting	Black magnetic powder
2YV2M	Cyanoacrylate Fuming	Fumed for 30 mins. Black powder.
349ZCM	Visual Examination	Visual Examination using ambient light. RD noted in Section B.
	Alternate Light Source	Mini Crime Scope (all wavelengths). No add'l RD noted.
	Cyanoacrylate Fuming	Safefume Cyanoacrylate Fuming Chamber (80% humidity, 15 mins). No add'l RD noted.
	Powder Dusting	Black Magna Powder. No add'l RD noted (pattern type further developed - left loop).
	Dye Stain	Rhodamine 6G (Methanol Based). No add'l RD noted.
	1,2-Indanedione	Visualized with Mini Crime Scope 515 wavelength. No add'l RD noted.
	Ninhydrin	Ninhydrin-HFE 7100. No add'l RD noted.
393WZT	Powder Dusting	Utilized magnetic powder and attempted to photograph unsuccessfully.
3ADUBP	Visual Examination	
	Cyanoacrylate Fuming	
	Dye Stain	Dye Stain Aqueous Rhodamine 6G visualized with LASER 532 NM
	Powder Dusting	Black Magnetic Powder
3B43BR	Visual Examination	Weak print
	Cyanoacrylate Fuming	Weak print processing time 8 minutes
	Powder Dusting	Visible print
	1,2-Indanedione	Nothing
	Ninhydrin	Weak print
3DC78P	Cyanoacrylate Fuming	
	Powder Dusting	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
3E674Z	Visual Examination	White light, oblique angles, magnification
	Alternate Light Source	LASER (532nm), Blue Light (450nm), and UV light
	Cyanoacrylate Fuming	Superglue fuming in chamber for approximately 20 minutes
	Visual Examination	White light, oblique angles, magnification as a follow-up to Superglue fuming
	Alternate Light Source	RUVIS as a follow-up to Superglue fuming
	Magnetic powder	Black Magnetic Powder
	1,2-Indanedione	Placed into oven for approximately 15 minutes
	Visual Examination	White light, oblique angles, magnification as a follow-up to IND
	Alternate Light Source	LASER (532nm) as a follow-up to IND
	Dye Stain	RAM
	Alternate Light Source	LASER (532nm), Blue Light (450nm), and UV light as a follow-up to RAM dye stain
	Physical Developer (PD)	Maleic acid bath for approximately 15 minutes, PDV/Redox solution for approximately 15 minutes, initial water bath for approximately 5 minutes, and second water bath for approximately 5 minutes. Place on dryer for approximately 10 minutes. *Note: solution check was successful.
3GDAZW	Visual Examination	The samples were viewed under white light with magnification with no prints observed.
	Cyanoacrylate Fuming	The samples were placed in the Crime Scene Unit CyanoSafe utilizing distilled water and 13 drops of cyanoacrylate for cyanoacrylate fuming and then allowed to set for one hour. A test print was utilized in the chamber with the items which yielded a positive result after processing. The samples were then viewed under white light with magnification with a print observed in quadrant "B".
	Powder Dusting	The samples were dusted with black magnetic powder and viewed under white light with magnification with one print observed in quadrant "B".
	Ninhydrin	The samples were completely submerged in a tray containing ninhydrin (batch# 297) briefly, allowed to dry in a fume hood, and then placed in the Caron chamber for approximately 35 minutes at 60 degrees Celsius with 60% humidity. The samples were then viewed under white light with magnification with no print enhancement observed.
	Physical Developer (PD)	The samples were transferred to the Latent Print Unit for Physical Developer (PD) processing. PD processing was performed by Latent Print Technician [Analyst] on 06/25/20 using batch# 477. The samples were then transferred back into my custody where I viewed them under white light and magnification. No print enhancements were observed.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
3J4FGM	Alternate Light Source	455-515nm
	Cyanoacrylate Fuming	vacuum and cyanoacrylate fuming chamber fumed
	Powder Dusting	black powder, fiberglass brush bi-chromatic powder, fiberglass brush magnetic powder, magnetic powder applicator fluorescent powder, feather brush
	Dye Stain	rhodamine 6G, methanol based stain with methanol rinse
	DFO	dipped
	Ninhydrin	sprayed
	Visual Examination	oblique light
3JYZ4L	Visual Examination	Viewed Item 2 photograph. It was a photograph of a fall forest scene marked off with 4 quadrants A,B,C,D. I viewed the photograph with oblique lighting and could not see any ridge detail. This took just a couple minutes. Item 2 will be processed as Semi Porous.
	Alternate Light Source	Viewed Item 2 photograph with the Mini Crime Scope for inherent illumination all wavelengths. There was no ridge detail noted in any quadrant. A photograph was shown of Item 2 at CSS NM just for illustrative purposes since no ridge detail was noted.
	Cyanoacrylate Fuming	Item 2 photograph was then fumed in the Safe Fume cabinet for a complete cycle. Approximately 15 or 20 minutes. A test print on a small piece of plastic was fumed at the same time.
	Alternate Light Source	Viewed Item 2 photograph examined with Mini Crime Scope all wavelengths. No ridge detail noted. A photograph was taken using 515 nm to just illustrate that no ridge detail was noted. This took around 15 minutes.
	Powder Dusting	Item 2 photograph was dusted with Magnetic powder. I could see ridge detail in quadrant B at a oblique angle only with overhead lighting. Photographs were taken with and without a scale. This took around 15 minutes.
	Ninhydrin	Item 2 photograph was then examined with Ninhydrin, allowed to dry, steam from a steam iron was applied. No ridge detail was noted. This took about 30 to 40 minutes.
	Dye Stain	Item 2 photograph was then processed with Rhodamine 6G and allowed to dry. This took around 30 to 40 minutes.
	Alternate Light Source	Item 2 photograph was then examined with the Mini Crime Scope at 515 NM and orange filter and no ridge detail fluoresced. Photographs were taken with and without a scale to show no ridge detail. This took around 15 minutes. Note: There was a positive reaction with the test print.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
3KUNFQ	Visual Examination	
	Alternate Light Source	LASER and RUVIS
	Cyanoacrylate Fuming	
	Visual Examination	
	Alternate Light Source	RUVIS
	Powder Dusting	Black magnetic powder
	Visual Examination	
	1,2-Indanedione	10 minutes in humidity chamber
	Alternate Light Source	LASER
	Ninhydrin	10 minutes in humidity chamber
	Visual Examination	
	Dye Stain	RAM
	Alternate Light Source	LASER
	Physical Developer (PD)	10 minutes in water, 10 minutes in Malic acid, 15 minutes in PD
Visual Examination		
3P7LWP	Visual Examination	Side lighting with white light
	Alternate Light Source	Wavelengths 415nm, 450nm, 505nm, & 530nm
	Cyanoacrylate Fuming	SafeFume Chamber (20 minutes at ~80% humidity, ~74.4 degrees F.)
	Powder Dusting	Fluorescent Magnetic Black Powder
3PQ3CT	Visual Examination	No ridge detail observed during a Visual examination using a Krimesite Imager.
	Vacuum Metal Deposition	Item was placed in a Vacuum Metal Deposition chamber and treated with Silver and Zinc. Ridge detail was observed in section B.
3QWUVT	Visual Examination	Item 2 was examined using normal and oblique lighting
	Powder Dusting	Item 2 was dusted using powder
3UYVWQ	Visual Examination	In daylight fingerprint has been disclosed in section B. In a whole spectrum of Polilight PL 500 no fingerprint fluorescence.
	Cyanoacrylate Fuming	Improved fingerprint quality has been achieved.
	Powder Dusting	Type of powder - Black Emerald, no improved fingerprint quality has been achieved.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
3WPW4Y	Visual Examination	
	Alternate Light Source	365,450,532,RUVIS
	Cyanoacrylate Fuming	
	Alternate Light Source	RUVIS
	Powder Dusting	White magnetic powder
	1,2-Indanedione	
	Alternate Light Source	532nm
	Dye Stain	RAM
	Alternate Light Source	365,450,532
3YRVER	Cyanoacrylate Fuming	alternate light source search and CAE fuming
	Dye Stain	Basic Yellow Dye Stain
4C2QDN	Visual Examination	No impressions observed.
	Powder Dusting	Black magnetic powder. Latent impression developed.
4E3ZXP	Cyanoacrylate Fuming	A fingerprint at quadrant B that was visible using 254nm wavelength was photographed before processing. Then, the control test and the item was processed with cyanoacrylate fuming technique for about 5 min at room temperature and humidity condition. Only one print was observed on quadrant B.
4GQ3CQ	Alternate Light Source	using a light source or the Eviscan machine to check the item before testing it by any further chemicals to see if there is any fingerprint on it.
	Cyanoacrylate Fuming	the method is used by putting the item in to a fuming chamber for 20-30 minutes and if any fingerprint is observed it will be viewed in a white color.
	Dye Stain	a method used after the cyanoacrylate to stain the fingerprint by spraying the item with a flour-scent dye and letting it to be dry then it will be observed with a uv light.
	Powder Dusting	a technique that is used by the black powder with a brush to observe the fingerprint and lifted by gelatine.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
4H34RX	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	Magnetic
	1,2-Indanedione	
	Dye Stain	
	Physical Developer (PD)	
4ZNL7R	Visual Examination	Item was examined for any visual friction ridge detail using a magnifier and with significant light at various angles. Any friction ridge detail of value will be photographed prior to proceeding to the next step of processing. No prints were observed.
	Cyanoacrylate Fuming	4-5 drops of cyanoacrylate were placed into each of 3 CYVAC cups (12-15 drops total) and then placed on the heating element. A test print was added to the chamber. All items were placed in a way that will allow for circulation of the CA vapors and exposing the entire surface to them. The cycle ran for 12 minutes and then a 10 minute purge cycle. Item was allowed to sit undisturbed for 60 minutes. The item was then visually examined under magnification and white light. An area of friction ridge detail was observed and photographed for preservation.
	Powder Dusting	Bi-chromatic magnetic powder was chosen to allow for contrast with the item. Bi-chromatic magnetic powder was applied to the item with a magnetic wand. The wand with the magnetic powder attached was lightly run over the item in a circular motion. The item was visually examined under magnification and white light. A very small area of friction ridge detail was observed but was very faint. An additional powder was chosen in hopes of further developing the friction ridges. The brush was dipped into the bi-chromatic powder in order to get a small amount of powder on the ends of the brush. Excess powder was shaken off the brush. The brush is lightly run over the item in a circular motion. The item was visually examined under magnification and white light. An area of friction ridge detail was observed and photographed for preservation.
	Ninhydrin	The item was immersed in a small tray of solution in order for the items entire surface to be completely wet (approximately 5 seconds). Item was allowed to completely dry in a fume hood. Once the CARON chamber reached 60 degrees Celsius and 60 % humidity the item was placed inside for approximately 30 minutes and then visually examined with magnification and white light. No friction ridge detail of value was observed. Item was placed back into the chamber for an additional 15 minutes. Item was removed and visually examined under magnification and white light. No further enhancement.
	Physical Developer (PD)	Processing was completed by Latent Print Technician [Analyst] on 07/15/2020, Batch # 478. Item was examined with magnification and white light there was no further enhancement.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
63PT3P	Powder Dusting	Utilized black, white, and fluorescent powder. no print was located.
6APBJM	Visual Examination	with magnification and white light
	Alternate Light Source	340-530nm
	Cyanoacrylate Fuming	room temp, ~80% humidity, 20 minutes
	Powder Dusting	Magnetic Dual-Use
6ED3KN	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	Humidity at 80% 2.5g 15min run
	DFO	100 degrees for 20mins
	Ninhydrin	SVC +/- 2 degrees, 62% +/- 5% 4 mins
6HJFA3	Visual Examination	
	Cyanoacrylate Fuming	Air Science superglue chamber, 20 minutes, 80% humidity 69° Fahrenheit
	Dye Stain	Rhodamine 6G dye stain, Bright Beam laser exam (532nm/orange goggles)
6LVJYJ	Visual Examination	Viewed with oblique light. Examined for indented writing with negative results.
	Alternate Light Source	Viewed with Crimescope at 455-515nm. Areas of photo fluoresced orange.
	DFO	Working solution made 7/16/20. Viewed with Alternate light source on 7/16/20 and 7/20/20.
	Alternate Light Source	Viewed with Crimescope at 455-515nm on 7/16/20 and 7/20/20.
	Ninhydrin	Stock solution made 7/5/19. Working solution made 7/16/20.
6LWBWR	Visual Examination	w/ALS no FRD of Value Found.
	Cyanoacrylate Fuming	CA 12min @ 70% humidity revealed latent of value via reflective hot lighting. Documented with digital photography.
	Powder Dusting	Black PDR revealed latent of value via reflective hot lighting. Documented with digital photography.
6QR8FQ	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	black magna powder on the emulsion side of photo
	Ninhydrin	on the paper side of photo

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
6WZDF4	Visual Examination	
	[No Methods Reported.]	FSIS
	Cyanoacrylate Fuming	20 minutes, atmospheric
	Visual Examination	
	[No Methods Reported.]	FSIS
	Dye Stain	Basic Yellow 40
	[No Methods Reported.]	LASER
6YQH7P	Powder Dusting	Utilized white and fluorescent powder. No print was located.
72MKBG	Cyanoacrylate Fuming	White powder. oblique lighting Basic yellow filter CSSS-ALS
74WN6T	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	
	Dye Stain	
76L47N	Visual Examination	white light and fluorescence examination 350nm - 650 nm
	Cyanoacrylate Fuming	processing in fuming cabinet for 25 min. heat multiband to about 240 C and humidity 75%, exam with white and blue light 450nm
	Powder Dusting	black powder and exam with white light
79RFDP	Visual Examination	Visual examination under white light and magnification was completed on July 7, 2020. No prints were observed.
	Cyanoacrylate Fuming	Processing in the CyanoSafe (Crime Scene Unit) recirculation chamber was completed on July 7, 2020. Processed in the chamber for 12 minutes and let sit for 60 minutes. Test print positive. Examined under white light and magnification. No prints were observed.
	Dye Stain	Ardrox and water (Batch # 99) processing and examination using Foster + Freeman Crime Lite ML with a 460nm-510nm bandwidth filter and orange barrier was completed on July 8, 2020. No prints were observed.
	Powder Dusting	Black powder was applied and examination under white light and magnification was completed on July 20, 2020. Print was observed in quadrant B.
7BRRQG	Cyanoacrylate Fuming	Photo Cyanoacrylate fuming completed first - fuming hood has automatic cycle approximately 40 minutes
	Powder Dusting	dusted with white powder after CAE Separated a small amount of powder and used disposable brush (this method always used in case additional testing requested for DNA at later date)

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
7FQ7FR	Visual Examination	Used white light and green light(532nm)/orange filter in an attempt to visualize patent prints. No patent prints were observed.
	Cyanoacrylate Fuming	Enclosed in a cyanoacrylate fuming chamber with added humidity for approximately 20 minutes. No ridge detail formed.
	Powder Dusting	Applied orange fluorescent magnetic powder to the sample. Used blue light (450nm) with an orange filter, but no ridge detail was observed.
	1,2-Indanedione	The paper was then soaked in an Indanedione rinse, set inside an oven at 100 degrees Celsius for 15 minutes, and viewed using green light (532nm) with a curved orange filter and a FF-1.0 filter. No ridge detail was observed.
7PAKEN	Powder Dusting	Utilized magnetic powder and no print was located. Sent item to regional laboratory for further analysis.
7V2RWW	Visual Examination	With different light sources and wavelenghts. print was visible under daylight and when the item was examined in certain angle.
	Cyanoacrylate Fuming	Cabinet: Foster&Freeman MVC3000, humidity 80%, temperature 120 degrees, time 15 minutes
	Powder Dusting	Magnetic jet black and Carbon powder.
83E4PN	Visual Examination	Oblique light RUVIS
	Cyanoacrylate Fuming	CA for 16min at 75% humidity
	Powder Dusting	Magnetic powder
	DFO	100 degree oven
	Ninhydrin	80 degrees 70% humidity
	Dye Stain	RAY
	Oil Red O	ORO stain with shaker - then into buffer solution
87F6UR	Visual Examination	Using oblique white light illumination and 10X magnification over surface
	Alternate Light Source	Scanned from 300 -550 nm using ALS and 10X magnification over surface
	Powder Dusting	FLuoresent yellow with U/V illumination
	Cyanoacrylate Fuming	12 minutes at 80% relative humidity followed by observation using 10X magnification over surface.
8C4WVT	Visual Examination	Visually examined evidence with ambient/oblique lighting.
	Alternate Light Source	Visually examined evidence with a forensic light source with UV light (clear goggles) and 505nm wavelength (orange goggles.
	Cyanoacrylate Fuming	Fumed for approx. 9.5 mins at approx. 76% humidity.
	Powder Dusting	Dusted with black finger print powder. Ridge detail observed in area "B".

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
8L76KQ	Visual Examination	No Prints Visible
	RUVIS	No Prints Visible
	Alternate Light Source	No Prints Visible. ALS was used on all settings (Rofin Polilight) with four different barriers filters.
	Cyanoacrylate Fuming	No Prints Visible. Test Print placed on Photo paper similar to Item #2
	Dye Stain	Rhodamine 6G Dye Stain
	Alternate Light Source	No Prints Visible. Test Print on Photo paper similar to Item #2 - Positive
	Powder Dusting	Orange Fluorescent Powder - No Prints Visible. Test Print on Photo paper (white) similar to Item #2 - Positive Test Prints in Fluorescent and in Black Powder.
	Alternate Light Source	Used with Fluorescent Powder (Various ALS Settings and Barriers) - No Prints Visible. Test Print on Photo paper similar to Item #2 - Positive
8M2RXU	Visual Examination	
	Alternate Light Source	UV, LASER, and Blue Forensic Light
	Cyanoacrylate Fuming	RUVIS
	Powder Dusting	Magnetic Black Powder
	1,2-Indanedione	Oven, LASER
	Dye Stain	RAM followed by UV, LASER, and Blue Forensic Light
	Physical Developer (PD)	
8MNYLZ	FSIS	FSIS- CA ~ 30 minutes- DFO with oven for 35 minutes- FSIS
	Cyanoacrylate Fuming	
	DFO	
	Alternate Light Source	
8UMKBF	Powder Dusting	Magnetic powder
8WT74L	Visual Examination	Visual examination had negative results
	Powder Dusting	Magnetic powder applied, (1) lift collected with no ridge detail
	Cyanoacrylate Fuming	CAE applied for 20 minutes (valid), Negative results
	Powder Dusting	attempted to lift visible ridge detail, no ridge detail collected
	Powder Dusting	fluorescent powder applied (neon green), negative results
	Alternate Light Source	negative results with Crime Lite 2
	Ninhydrin	negative results
8YYN2G	Powder Dusting	Magnetic powder applied to photograph.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
923JJY	Visual Examination	oblique lighting
	Cyanoacrylate Fuming	15 minutes fume time in chamber #1 at 69 degrees F and 80 percent humidity
	Dye Stain	R6G (water base); Laser (Bright Beam) exam / 532nm / used orange goggles
9AU4GK	Visual Examination	WHITE LIGHT, NATURAL LIGHT, PHOTOGRAPH
	Cyanoacrylate Fuming	
	Powder Dusting	SILVER POWDER
9M3WXP	Visual Examination	Examined under fluorescent light with magnification. Print was observed.
	Cyanoacrylate Fuming	L/P Cyanosafe. Examined under fluorescent lighting with magnification.
	Powder Dusting	Examined under LED light with magnification. Print was enhanced.
	Dye Stain	Ardrox & Water, batch #99. Examined under Crime Lite ML2/orange filter with magnification. No print observed. No enhancement, no new prints.
9NT4EF	Visual Examination	CrimeLite white
	Alternate Light Source	TracER Laser/ PL500
	Cyanoacrylate Fuming	Foster & Freeman MVC 5000 (75 minute cycle)
	Powder Dusting	Magnetic bichromatic followed by fluorescent red (redwop)
	DFO	20 minutes
	Ninhydrin	5 days
9P8CMF	Visual Examination	Direct, Oblique, and ALS (inherent luminescence) lighting used. No friction ridge detail visible.
	Cyanoacrylate Fuming	Fumed in Chamber. Test Print used on lifter.
	Powder Dusting	Item dusted with white powder. Then photographed see below [Table 3 - Preservation Methods].
	Dye Stain	Yellow Dye. Applied, Rinsed, and allowed to dry.
	Alternate Light Source	Viewed with ALS at 425/455 and yellow glasses

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
9U2BVJ	Visual Examination	Exam with White light, LASER and RUVIS. No ridge detail detected.
	Cyanoacrylate Fuming	Exam with white light and RUVIS. Possible ridges viewed in box C & D with RUVIS. Possible ridges viewed on back of the item with white light. None of the possible ridges are suitable for capture. CAE bottle dated 11/20/19. Control test positive.
	1,2-Indanedione	Exam with LASER. No ridge detail detected. Bottle 2 dated 2/7/20. Performance check positive.
	Ninhydrin	Exam with white light. No ridge detail detected. Bottle 2 dated 1/22/20. Performance check positive.
	Dye Stain	RAM dye stain. Exam with LASER. No ridge detail detected. Bottle dated 4/20/20. Performance check positive.
	Powder Dusting	Bi-Chromatic mag powder. Exam with white light. Possible smudged ridges on back of item. Not suitable for capture. Bottle dated 11/12/08. Performance check N/A.
9UE4QL	Cyanoacrylate Fuming	I observed the item. I then put it into the fuming chamber on auto cycle for approximately 1 hour.
	Powder Dusting	I processed this item with Black magnetic powder.
9YU9NG	Visual Examination	No RD noted on Item 2 (A-D).
	Alternate Light Source	Inherent Luminescence- all wave lengths. No RD noted on Item 2 (A-D).
	Cyanoacrylate Fuming	(test print) No RD noted on Item 2 (A-D).
	Powder Dusting	(test print) No RD noted on Item 2 (A-D).
	1,2-Indanedione	(test print) No RD noted on Item 2 (A-D). Alternate Light Source-Wave length- 515nm
	Ninhydrin	(test print)- purple color change noted. No RD noted on Item 2 (A-D).
	Dye Stain	R6G- (test print) No RD noted on Item 2 (A-D).
	Alternate Light Source	515nm Wave length- No RD noted on Item 2 (A-D).
9ZLK8M	Visual Examination	Visual examination under white light and magnification on June 24, 2020. No prints were observed.
	Ninhydrin	Ninhydrin (batch #297) and processing in the CARON on July 16, 2020. Prints were observed on section B.
	Physical Developer (PD)	Physical Developer (batch #479) on July 22, 2020 by [Analyst]. No prints were observed.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
A447DF	Visual Examination	Oblique lighting
	Alternate Light Source	455-515 nm (with orange goggles)
	Cyanoacrylate Fuming	20 minute run
	Powder Dusting	magnetic powder
	Dye Stain	Rhodamine 6G (methanol-based)
	Alternate Light Source	455-515 nm (with orange goggles)
A9UGMD	Visual Examination	I looked at the glossy photograph with a flashlight from several different angles and located a visible print in quadrant B.
	Cyanoacrylate Fuming	I processed the glossy photograph with cyanoacrylate for 15 minutes with a humidity level of 75%.
	Dye Stain	I tested MRM-10 prior to applying it to the print in quadrant B and it performed as expected. I applied MRM-10 to the print in quadrant B.
AGA6FU	Visual Examination	Sample was visually examined
	Alternate Light Source	Use of plain white-, UV-, blue- and IR-lights with different filters.
	Cyanoacrylate Fuming	
	Powder Dusting	carbon and magnetic powders
	Wet Powder Suspension	Wet powder white
	basic yellow	
AHK72T	Visual Examination	with different light sources (white light, 365nm, 415nm) print was slightly visible but needed enhancement.
	Cyanoacrylate Fuming	Polycyano method. Cabinet: Labrum Klimat, time 20 minutes, temperature 220 Celsius, humidity 80 %
	Powder Dusting	Magnetic jet black
AV99JK	Cyanoacrylate Fuming	15 mins in fuming chamber with 5 minute chamber purge
	Powder Dusting	Black magnetic powder and brush
	DFO	In oven at 100C for 20 mins
	Ninhydrin	In oven at 80C and 80% humidity for 20 mins
	Dye Stain	RAY dye stain with ALS and orange filter
	Oil Red O	Oil Red O with agitator for 15 mins

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
AXEP2P	Visual Examination	Visual examination under white light and magnification.
	Cyanoacrylate Fuming	CyanoSafe set up with four (4) drops of cyanoacrylate in three (3) small metal cups on a hot plate, distilled water well filled, and test print placed inside. Chamber ran for 12 minutes followed by the Purge process. Process complete and item allowed to dry for one (1) hour. Test print positive.
	Powder Dusting	Bi-Chromatic Magnetic powder applied with a magnetic wand. Bi-Chromatic powder applied with a brush.
	Ninhydrin	Ninhydrin batch #297. Item was immersed in a tray of solution until all surfaces were completely wet. Item was air dried thoroughly. Item was placed in the CARON chamber at 60 degrees F and 60% humidity for one (1) hour, checking after 30 minutes.
	Physical Developer (PD)	Physical Developer batch #478. Processing completed by Latent Print Technician [Analyst].
AZ4VGF	Visual Examination	Used oblique lighting with a flashlight to look for visible prints or indented writing.
	Visual Examination	Used Crimescope at 455-515nm to look for naturally fluorescing prints.
	Cyanoacrylate Fuming	Used CyanoSafe for 20 minutes to fume Item 1.
	Powder Dusting	Used black powder to dust for prints.
AZZF6E	Visual Examination	Overhead lighting LED Flashlight Incandescent lighting ALS (various wave lengths to include white light)
	Cyanoacrylate Fuming	Misonix CA-3000 fuming chamber (80% humidity, 20 minutes or less)
	Dye Stain	Ardrox Dye Stain ALS (350-445nm, yellow filter)
	Powder Dusting	Redwop Powder ALS (515 nm, orange filter)
B8ELEQ	Visual Examination	Conducted using natural & oblique lighting while holding the item at differing angles.
	Alternate Light Source	3 different Forensic Light Sources (FLS) were used: LASER (532nm), Blue (450nm) & UV (365nm).
	Cyanoacrylate Fuming	This method also includes looking at the item visually and using a RUVIS (254nm).
	Powder Dusting	Specifically Magnetic Powder.
	1,2-Indanedione	This method also includes looking at the item visually and using a LASER (532nm).
	Dye Stain	The RAM Dye Stain method also includes looking at the item visually and using Alternate Light Sources. The three light sources used were the LASER (532nm), Blue Light (450nm) & UV (365nm).
	Physical Developer (PD)	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
BLX7YK	Visual Examination	Ambient light used
	Cyanoacrylate Fuming	15 minutes in CA fuming chamber
	Visual Examination	RUVIS
	Powder Dusting	Magnetic powder; silver/black; emulsion side
	Visual Examination	Ambient light
	DFO	20 minutes in oven at 100 degrees C; paper side
	Alternate Light Source	Orange 445-515nm; orange filter and goggles
	Ninhydrin	20 minutes in oven at dry bulb temperature 80 degrees C and wet bulb temperature 70 degrees C; paper side
	Visual Examination	Ambient light
	Dye Stain	RAY dye stain; emulsion side
	Alternate Light Source	Orange 445-515nm; orange goggles and filter
BQT3GJ	Visual Examination	No fingerprint. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white.
	Cyanoacrylate Fuming	No fingerprint. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white.
	Vacuum Metal Deposition	Disclosing of a fingerprint after Gold/Zinc sequence and little better after Silver. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white. The fingerprint is visible the best at the white light.
BT27DF	Visual Examination	Visual inspection in white/room light. Visual inspection with full spectrum imaging system with short and long wave UV light
	Cyanoacrylate Fuming	Cyanoacrylate fumed
	Dye Stain	Dye stained with rhodamine 6G
BWXUUM	Visual Examination	Under different types of light
	Cyanoacrylate Fuming	Hygrometry > 75 % - 15 minutes
	1,2-Indanedione	room temperature - 48 h development
	Ninhydrin	room temperature - 48 h development
BZJJCE	Visual Examination	
	Cyanoacrylate Fuming	75% RH. 9 mins fume time.
	1,2-Indanedione	Zinc Chloride. Heat press ~160 degrees for 10 seconds. Laser exam at 532nm with orange barrier filter.
	Dye Stain	Water based R6G. Light source exam at 445, 490, 505, 532, 605, 655nm with orange barrier and A-FF-1 barrier filter (on all except 532nm).

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
C6NJ7G	Visual Examination	
	Cyanoacrylate Fuming	20 minutes ,RH 80 %
	Powder Dusting	
C8T8NT	Visual Examination	OMNIPRINT OP1000A
	Cyanoacrylate Fuming	PROJECTINA FUMING CAMBER + OMEGA-PRINT Cyanoacrylate Fuming Compound
	Dye Stain	BVDA Basic Yellow 40
	Alternate Light Source	OMNIPRINT OP1000A - 450nm light
C98PPD	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	Magnetic bichromatic
	DFO	
	Ninhydrin	
CBVAAM	DFO	1h30, 60 °C
CGHZVH	Cyanoacrylate Fuming	1. Preliminary visual examination (alternate light source). 2. Superglue fuming (80%RH) + Powders (Magnetic). Result: weak and faint fingerprint. 3. Finally, Indandione (Negative result)
CGY6DG	Powder Dusting	I visually scanned the item and observed latent print characteristics in Section B. I processed the area initially with magnetic powder and finished black powder. The print was lifted and preserved on a latent lift card.
CPC9EN	Visual Examination	
	Alternate Light Source	Used 505nm, 450nm, and UV with orange and clear glasses.
	Cyanoacrylate Fuming	Approx. 10mins at 76% humidity.
	Visual Examination	Faint ridge detail observed on section B.
	Dye Stain	Aqueous Rhodamine 6G dye stain and destain rinse.
	Alternate Light Source	505nm and orange glasses.
	Powder Dusting	Black fingerprint powder. Clear ridge detail observed.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
CRGU9F	Visual Examination	Examined with white light and magnification.
	Cyanoacrylate Fuming	Placed in Cyanosafe on 6/19/20. Examined with white light and magnification.
	Powder Dusting	Dusted with black magnetic powder on 6/19/20. Examined with white light and magnification.
	Ninhydrin	Submerged in Ninhydrin, Batch #296, then air dried on 6/19/20. Placed in humidifying machine: CARON Examined with white light and magnification.
	Physical Developer (PD)	Processed by LPT [Analyst] on 6/25/20, Batch #477. Examined with white light and magnification.
CRJJDD	Cyanoacrylate Fuming	6/23/2020: Cyanoacrylate Fuming Chamber (CFC) Processing. Before Processing: Filter Cycles - 446. Total Cycles - 930. Cleaned prior to starting processing. Target Humidity Value - 70%. Purge Time - 10:00 minutes. Maximum Fume Cycle Time - 10:00 minutes. CFC Processing Start Time - 1600 hours. Target Humidity Value Reached/Fuming Cycle Started - 1604 hours. Fuming Cycle Ended/Purge Cycle Started - 1614 hours. Purge Cycle Ended/CFC Processing Completed Time - 1624 hours. Cyanoacrylate (+) control - Lot #: VP23419, Exp: 01/21.
	Powder Dusting	6/23/2020: Black Magnetic Powder Processing. Black Magnetic Powder and Magnetic Powder Applicator. Start Time - 1635 hours. End Time - 1645 hours.
CTBJAN	Visual Examination	visual examination in daylight, the forensic light source Polilight PL 500 UV, entire range of wavelenght of light and filtres. The latent fingerprint was recovered.
	Cyanoacrylate Fuming	Cyanoacrylate Fuming VAC200 Vacuum Chamber: time 30 min., the forensic light source Polilight PL 500 - white light. The latent fingerprint was recovered.
	Powder Dusting	Magnetic fingerprint powder Blitz-Red. The forensic light source Polilihgt PL 500 - 350-505 nm, orange, red filteres. No improvement in visibility and quality.
D23D7L	Visual Examination	Visual Exam with room lighting and/or flashlight at an oblique angle.
	Cyanoacrylate Fuming	Item 1 was processed in the CApture BT Chamber. Cyanoacrylate hot plate temperature set to 351 degrees Fahrenheit. The chamber was brought to a relative humidity of 50% and then fumed for 10 minutes. The chamber was purged of the cyanoacrylate fumes for an additional 5 minutes before removing.
	Powder Dusting	Item 2 was powdered with magnetic black powder.
	1,2-Indanedione	Item 2 was processed with 1,2-Indanedione-Zinc Chloride. Dry heat was applied using a heat press and then the item was viewed with the green laser (532 nm) & orange goggles/filter.
	Ninhydrin	Item 2 was processed with Ninhydrin and heat was applied with a steam iron.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
D6X9KE	Visual Examination	
	Alternate Light Source	LASER, RUVIS
	Powder Dusting	Black magnetic powder
	1,2-Indanedione	Placed in humidity chamber 20 min
	Alternate Light Source	LASER
	Ninhydrin	Placed in humidity chamber 20 min
	Dye Stain	RAM
	Alternate Light Source	LASER
D9N3RF	Visual Examination	Item 2 is stored in a 8x10 manila envelope with a red strip of evidence tape with "CTS" written on it. Item 2 was observed to be a glossy photograph divided into four square quadrants marked A through D.
	Alternate Light Source	Item 2 was examined under a krimesite imagery with ultraviolet light. A fingerprint impression was located in section B.
	Cyanoacrylate Fuming	The item was fumed with Cyanoacrylate in a fuming chamber with a relative humidity of 80% for twenty minutes. A fingerprint impression was developed in section B.
	Powder Dusting	Item 2 was powder processed with conventional black powder.
DDDUEH	Visual Examination	Initial examination was visual, with negative results.
	Alternate Light Source	Prior to any processing, the item was then visualized under an alternate light source, with negative results.
	Cyanoacrylate Fuming	Item was fumed in cyanoacrylate chamber for 15 minutes with a known positive control, and then was placed into cyanochamber for a second set of fifteen minutes, for a total of thirty minutes. A visual examination of the item was then done, with and without oblique lighting, with negative results, and under an alternate light source, with negative results.
	Powder Dusting	The item was, post-fuming, and after allowing the superglue to dry for thirty minutes, lightly processed with black magnetic powder, with negative results.
	Powder Dusting	The items was dusted with fluorescent powder, with negative results.
	RUVIS Krimesite Imager	The item was visualized using a Reflected Ultra-Violet Imaging System (RUVIS) Krimesite Imager, with negative results.
	Dye Stain	The item was finally cyanoacrylate fumed one final time for a length of twenty minutes with a known positive control, and dye stained using Rhodamine 6G, with negative results.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
DHT9MH	Visual Examination	Examined under white light and magnification on June 19, 2020.
	Cyanoacrylate Fuming	CyanoSafe (Crime Scene Unit) recirculation chamber on June 19, 2020. Test print positive. Three (3) foil cups containing five (5) drops each of Cyanoacrylate glue and distilled water in the the heating element. Chamber set for run time of 12 minutes and purge cycle for 10 minutes and left to dry for 60 minutes. Item examined after processing.
	Dye Stain	Ardrox batch#99 was applied to the item on July 22, 2020. A spray bottle was used to apply the dye stain and coat the item. The item was then rinse in water and patted dry. The item was left to dry completely in a fume hood. Item was examined using Foster + Freeman Crime Lite ML with a 460nm-510nm bandwidth filter and orange barrier.
	Powder Dusting	Magnetic black powder was applied to the item using a fiberglass latent print brush.
DNF3JF	Alternate Light Source	latent mark is partly visible in section B
	Cyanoacrylate Fuming	The used method did not improved visibility of the latent mark
	Fluorescent dye Basic Yellow 40	The used method did not improved visibility of the latent mark

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
DU86RL	Visual Examination	The items was visually examined using a white LED light source under magnification.
	Alternate Light Source	The item was examined for the presence of inherent luminescence using Crime Lite ML (460nm-510nm: Orange Filter) under magnification.
	Cyanoacrylate Fuming	The item was processed by placing approximately 5 drops of cyanoacrylate into 3 metal dishes (Total of 15 drops. The metal dishes were placed onto a heating plate. Distilled water was placed in a reservoir inside the chamber to maintain humidity. A test print was created, and placed inside the chamber. Items were placed into the chamber with consideration to space evidence far enough apart to allow CA vapors to circulate between items. The chamber was set to fume for approximately 12 minutes. The test print was checked for visible development of the latent print. Items were left undisturbed for 60 minutes to allow the CA coating to harden. Items were examined using LED lighting under magnification.
	Powder Dusting	The item was processed by picking up a small amount of powder (magnetic) on the end of the magnetic wand, forming a small ball of powder (magnetic) on the end of the wand. The powder (magnetic) was brushed gently over the surface of the item using circular strokes. Excess powder was picked up using an empty wand. The item was examined using LED lighting under magnification.
	Powder Dusting	The item was processed by picking up a small amount of powder (black) on the ends of the latent print brush bristles, and shaking off excess powder. The powder (black) was brushed gently over the surface of the item using circular strokes. The item was examined using LED lighting under magnification.
	Dye Stain	A fluorescent dye stain was used, containing one (1) milliliter of Ardrex Tracer-Tech P133D and ninety-nine (99) milliliters of distilled water. The item was processed using a gentle stream of the fluorescent dye stain over the item for approximately 1 minute, the item was rinsed off under a gentle stream of distilled water. The item was patted dry and placed under a fume hood to complete drying. The item was examined using Crime Lite ML (460-510nm: Orange Filter) under magnification.
DVDVRA	Visual Examination	White light and fluorescence examination
	Cyanoacrylate Fuming	Processing time: 5+5+30 min (longer time than normal procedure). Temperature: 120 C Rh: 80%
	Powder Dusting	Black Magnetic
	Ninhydrin	Processing time: 2 min. Temperature: 81 C Rh: 57%
	Physical Developer (PD)	Processing time in working solution: 15 min
DW9FE9	Cyanoacrylate Fuming	Placed item in chamber for 10 minutes with negative and positive controls. Print developed in section B of photograph.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
DWNJ8F	Visual Examination	Visually examined with white light, LASER, and UV light.
	Cyanoacrylate Fuming	Cyanoacrylate fumed item. Examined with white light and RUVIS.
	Powder Dusting	Applied white magnetic powder to the item and visually examined it.
	1,2-Indanedione	Applied 1,2-Indanedione and placed item in humidity chamber. Examined item under white light and LASER.
	Ninhydrin	Applied Ninhydrin to item and placed in humidity chamber. Examined with white light.
	Dye Stain	Applied RAM to item and examined using LASER and UV light.
	Physical Developer (PD)	Processed item with physical developer.
E2XE7A	Visual Examination	Examined the item using ambient and oblique lighting with a flashlight.
	Lumicyano fume	Fumed using Lumicyano for 35 minutes, 80% humidity
	Alternate Light Source	Examined item with 390-520 nm of light using orange and yellow filters
	Dye Stain	Ardrox
	Alternate Light Source	Examined item with 350-445 nm light with yellow filter
	Powder Dusting	First dusted a small portion with Red-wop fluorescent powder. Upon observing contrast was not ideal, then dusted with Green-wop
	Alternate Light Source	Observed both Red-wop and Green-wop with 415-490 nm of light with orange and yellow filters.
E3PF4K	Visual Examination	Item 2 was visually inspected for latent prints before processing.
	Cyanoacrylate Fuming	Then fumed with cyanoacrylate ester (superglue) in a vacuum chamber for about 40 minutes.
	Alternate Light Source	Item 2 was inspected for latent prints using the FSIS and one (1) latent print sufficient for further review was observed.
E922JK	Ninhydrin	Ninhydrin
EC38XP	Visual Examination	Ridge detail was observed during visual exam, however was very faint and difficult to see.
	Lumicyano	Latent was developed in section "B". Latent was difficult to see and only visible under certain lighting conditions. Latent was marked as L1.
	Alternate Light Source	Latent was not visible using ALS.
	Visual Examination	Oblique lighting utilized to observe L1.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
EDWX2H	Visual Examination	
	Alternate Light Source	Blue light 420-470 nm Green light 490-560 nm
	Cyanoacrylate Fuming	Approx. 2 minutes CNA-fuming at 80% RH.
	Powder Dusting	Magnetic powder
	1,2-Indanedione	The photograph was dipped in the solution and left to dry for 5 minutes and then developed with a heat press at 165 degrees Celsius for 15 seconds.
	Ninhydrin	The photograph was dipped in the solution and left to dry for 5 minutes and then developed in a climate chamber at 80 degrees Celsius with 65% RH for 5 minutes.
EE73GR	Visual Examination	it was observed in section B and using coaxial light to prevent reflection.
	Cyanoacrylate Fuming	to enhance development of ridge detail
	Visual Examination	using coaxial light or UV
	Powder Dusting	white magnetic powder
EKVFHF	Powder Dusting	photography, dust with magnetic powder, photograph with scale
EKVKTH	Visual Examination	White light source
	Cyanoacrylate Fuming	Processing time: 10 minutes
	Powder Dusting	Black magnetic powder
ET7WW8	Visual Examination	Note page photographs taken.
	Cyanoacrylate Fuming	Mason Vactron MVC 5000 chamber for 20 minutes.
	Powder Dusting	Application of magnetic powder.
	Powder Dusting	Application of black powder.
F38JLJ	Visual Examination	Examination with Superlite Lumatec (UV and visible spectrum), Coherent laser 532 and 577 nm.
	Lumicyano®	Fuming of luminescent cyanoacrylate (Lumicyano, 80% RH and 120°C) in a fuming cabinet then examination in UV with a 325 nm Labino source
	Vacuum Metal Deposit	vacuum metallization with gold and zinc and then silver and zinc. / Immersion in the reactive solution then heating at 165°C during 10 s
	1,2-Indanedione	Immersion in the reactive solution then examination with green light (Coherent laser at 532 nm) and orange filter
	Ninhydrin	Immersion in the reactive solution then stored during 48 hours in the dark (in a sealed plastique bag). Examination with white light.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
F438XM	Visual Examination Alternate Light Source Cyanoacrylate Fuming Magnetic Powder 1,2-Indanedione Dye Stain Physical Developer (PD)	
F8F66A	Visual Examination Cyanoacrylate Fuming Powder Dusting	Visual exam on Item 2, no ridge detail observed. Item 2 fumed, fragments of ridge detail observed, insufficient quantity and quality for further examination, no photos taken. Item 2 dusted with grey magnetic powder, LP2-1 designated in quadrant B, photos taken.
FLZMXD	Powder Dusting	Volcanic, magnetic and fluorescent powders utilized, along with alternate light source. No latent prints found.
FPL6HJ	Cyanoacrylate Fuming Powder Dusting Powder Dusting Dye Stain	MVC 3000 Chamber #1. Glue Temp. 120 Celsius. 80 percent humidity. 10 minutes glue time. Lot#201906326 Black Mag Powder. Lot# 201504053-04 Standard Black Powder. Lot#201804187 MBD Dye Stain with a squirt bottle. Lot#060120-01
FPLAV8	black magnetic powder	
FUEDHJ	Visual Examination Cyanoacrylate Fuming Powder Dusting	Sirchie OMEGA Print, processing time 12 hrs. in fish-tank chamber Black powder
G3KH8F	Visual Examination Cyanoacrylate Fuming Powder Dusting Powder Dusting	Item examined visually no ridge detail observed 15 minute cycle no ridge detail observed Black fluorescent powder viewed under 455 475, and 495 light with orange filter no ridge detail observed Black powder no ridge detail observed
G74MQB	Cyanoacrylate Fuming	
G8VNNL	Visual Examination Cyanoacrylate Fuming Powder Dusting	No visible print. Cabinet: Foster+Freeman MVC 3000, temperature 120 Celsius, humidity 80%, time 15 minutes. Ferrioxide.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
G9BRHD	Cyanoacrylate Fuming	A control test was performed prior processing the item for cyanoacrylate verification. Verification passed. Item was processed for five minutes in a fuming chamber using cyanoacrylate ester.
GANCC9	Visual Examination	
	Cyanoacrylate Fuming	Fuming chamber processing time 10 min, purge time 10 min. Humidity 70%
	Powder Dusting	Fluorescent magnetic fingerprint powder
	Powder Dusting	Fluorescent fingerprint powder
	Alternate Light Source	Coherent laser
	Dye Stain	Rhodamine 6G aqueous solution
	Alternate Light Source	Coherent laser
GAP6BG	Visual Examination	Visual exam with various types of lighting including ALS
	Cyanoacrylate Fuming	F&F MVC 5000
	Powder Dusting	Fluorescent powder
	DFO	20 mins in chamber
	Ninhydrin	Approx 2 hours of time to develop
GJP6DM	Cyanoacrylate Fuming	2 fuming cycles, 15 minutes and 20 minutes
GLZR9F	Visual Examination	green light, blue light and visual light
	Cyanoacrylate Fuming	45 minutes
	[No Methods Reported.]	Uv-ref and UV-ir
	Powder Dusting	carbon and magnetic powder
	1,2-Indanedione	10 minutes
	Ninhydrin	2 minutes
GNKYBN	Visual Examination	No ridge detail was visible
	Alternate Light Source	Some ridge detail was visible
	Cyanoacrylate Fuming	Some ridge detail was visible
	Dye Stain	R6G, too much background
	Powder Dusting	Magnetic powder

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
GPGACJ	Visual Examination	Visual examination conducted on Item #2 to detect ridge development
	Photograph	A photograph was taken of submitted Item #2
	Cyanoacrylate Fuming	Fuming tank was prepared, then Item #2 was placed in tank using Cyanoacrylate Ester, Lot #202003108 Expiration 4/2024, for detection of latent fingerprints.
	Powder Dusting	After 20-25 minutes in fuming tank fingerprint powder was then used to enhance and lift fingerprint. Results "NEGATIVE"
GR972C	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	
GTZ7YN	Visual Examination	Item 2 was viewed with oblique lighting
	Alternate Light Source	Viewed at various wavelengths for inherent luminescence
	Cyanoacrylate Fuming	Item 2 was fumed using a Safe Fume Air Science chamber.
	Powder Dusting	Magnetic powder
	Dye Stain	Gentian Violet was applied for 1 to 2 minutes then rinsed- no further development of friction ridge detail was observed.
GXAF86	Visual Examination	Viewed with white light and magnifier
	Cyanoacrylate Fuming	Fume in chamber with superglue and hot plate and boiling water added for humidity, fumed for approximately 10-15 minutes
	Alternate Light Source	Viewed using reflective UV lighting technique after superglue fuming and before black powder application
	Powder Dusting	Used regular black powder and fiberglass brush for powder application
H8EUMC	Powder Dusting	I utilized magnetic powder and didn't locate fingerprints.
H8EYXE	Visual Examination	Initial visual examination with white light and light source, blue and green light. No visible fingerprint.
	Cyanoacrylate Fuming	CNA - 2 g glue, humidity 80%, heat 120 degrees, 5 min processing time. Teststrip positive. No visible fingerprint.
HAKCL8	Cyanoacrylate Fuming	evidence place in cyanoacrylate tank for approximately 10 min with superglue and water on a heating element.
	Powder Dusting	magnetic powder used to develop print for lifting
HC698C	Cyanoacrylate Fuming	cyanoacrylate steaming process for 5 minutes at 120°C, humidity: 80% RH, 15 drops of cyanoacrylate
	1,2-Indanedione	1,2-Indanedione-zinc formulation, storage in the climatic chamber at 50°C, humidity 40% RH for 3 hours
	Ninhydrin	Ninhydrin spraying process, storage in the climatic chamber at 26°C, humidity 65% RH for 3 hours

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
HERXDB	Visual Examination	1. White Light/Naked eye. 2. Blue Light (445 nm) with goggle (495nm). 3. Green Light (550 nm) with goggle (550nm). No Mark found.
	Cyanoacrylate Fuming	Processing Time: 20 mins, which includes Humidifying, Fuming and Purging. After 20 mins, Mark search was done using white light. No Mark found.
	Dye Stain	After Dying with BY40, kept to dry for 20 mins in fumehood. After 20 mins, Mark search was done using 445nm light (blue light) with goggle (495nm). No Mark found.
	Dye Stain	After Dying with R6G, kept to dry for 20 mins in fumehood. After 20 mins, Mark search was done using 532nm light (green light) with goggle (550nm). No Mark found.
HF9U7B	Visual Examination	
	Alternate Light Source	365nm, CSS, 495nm, 505nm
	Alternate Light Source	Laser-532nm
	Cyanoacrylate Fuming	fume time: 15 minutes, humidity setting: 80% RH
	Powder Dusting	black magnetic powder
	Powder Dusting	Infrared fluorescent powder, 850nm
	Ninhydrin	20 minutes in humidity chamber within range of set points: temperature set point 70C and RH set point 65%RH
HUQMUG	Visual Examination	Examined the glossy photograph paper as is using ambient light, flashlight, UV (ultraviolet) light, Laser, and ALS (alternate light source).
	Cyanoacrylate Fuming	Examined the item in Superglue cabinet along with testprint for about 10 minutes.
	Dye Stain	Sprayed Ardrex MEK dye stain on item. Examined under UV light.
	Dye Stain	Sprayed Aqueous Rhodamine 6G dye stain on item. Examined under Laser.
	Powder Dusting	Dusted the entire glossy photograph paper with carbon black powder.
	DFO	Dipped the item twice in DFO, let it dry for a few seconds, then put it in the oven (100°C) for about 20 minutes. Examined under Laser & Shortwave UV/FSIS camera.
	Ninhydrin	Dipped the item in Ninhydrin, let it dry for a few seconds, then put it in the humidity chamber (70°C) for about 10 minutes or until the latent impression turns Ruhemman's Purple.
	Zinc Chloride	Sprayed item with Zinc Chloride. Examined under ALS.
	Physical Developer (PD)	Dipped item in Maleic Acid first for about 5 minutes, and then dipped the item into PD for 20 minutes. Let it dry under lights.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
HVKH9D	Visual Examination	THE GLOSSY PHOTOGRAPH WAS EXAMINED VISUALLY USING NATURAL LIGHT AT OBLIQUE ANGLES, AND WHITE CRIMELITE. AREA OF RIDGE DETAIL WAS VIEWED IN QUADRANT B. AT THIS POINT IN LIVE CASEWORK I WOULD LABEL THE AREA ASIGN IT AN EXHIBIT REFERENCE AND PHOTOGRAPH THE IMAGE USING A DIGITAL CAPTURE SYSTEM (DCS) AND FORWARD THE IMAGE REMOTELY TO THE REGIONAL IDENTIFICATION UNIT.
	Cyanoacrylate Fuming	THE PHOTOGRAPH WAS PLACED INTO MASON VACTRON MVC5000 CABINET(#3) WITH A CONTROL SAMPLE AND 3.25G OF CYANOACRYLATE(BATCH#92869). THE ITEM WAS SUBJECTED TO THE AUTOCYCLE OF THE CABINET WHICH HEATS THE CYANOACRYLATE TO A TEMPERATURE OF 120C AND THE INTERIOR OF THE CABINET TO A RELATIVE HUMIDITY OF 75-90% FOR A PERIOD OF 15 MINUTES. THE CONTROL SAMPLE WAS CHECKED TO CONFIRM SUCCESS OF THE GLUEING CYCLE. AREA OF RIDGE DETAIL WAS OBSERVED IN QUADRANT B. IF THIS WAS LIVE CASEWORK AND RELEVANT THEN THE PHOTOGRAPH WOULD BE SUBJECTED TO FURTHER POROUS DEVELOPMENT METHODS SUCH AS INDANDIONE AND NINHYDRIN BUT AS THE MARK WAS HIGHLIGHTED AT VISUAL EXAMINATION ON THE FRONT OF THE PHOTOGRAPH IN QUADRANT B THEN I DID NOT THINK IT WAS NECESSARY TO CONTINUE WITH THE POROUS SIDE OF TREATMENT.
	Powder Dusting	THE PHOTOGRAPH WAS HIGHLY COLOURED AND CONTRASTING SO I APPLIED BLACK MAGNETIC POWDER THE ITEM TO TRY TO ENHANCE THE CONTRAST OF THE AREA OF RIDGE DETAIL IN QUADRANT B.
HY4MQ9	Visual Examination	visual with flash light -> neg RD (negative ridge detail)
	Cyanoacrylate Fuming	Polycyano UV used (25min glue time) visual at 415nm with yellow filter -> neg RD
	Ninhydrin	NinhydrinHT used on back side in CARON chamber (80degrees F, 5mins, 65% humidity) visual -> negRD
	Powder Dusting	white magnetic used on the front (picture side) - visual -> RDNSC (not suitable for capture) in quadrant B black magnetic used on the back - visual -> NegRD
	Dye Stain	Ardrox used, visual at 415nm with yellow filter -> RDNSC (not suitable for capture) in quadrant B
HZF678	Cyanoacrylate Fuming	Processing time = approximately 20 mins. CFC chamber at 70% humidity - 10 min. cycle followed by 10 min. purge cycle. CFC positive control tested +. Lot# VP23419 Exp 01/2021.
	Powder Dusting	Processing time = approximately 5 mins. Magnetic powder and Black powder were used to process Item #2 (glossy photograph)

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
J7JLZD	Visual Examination	Vial Examination using ambient light in room, white light from a ALS and a Laser at 445nm and 532nm.
	1,2-Indanedione	Prior to the application of indanedione on the photograph, I tested a control using indanedione from a mist spray, placed in an oven at 100 degrees for 10 minutes, viewed under a Laser at 445nm and 532nm and wearing orange viewing goggles. This demonstrated positive results. Indanedione was applied to the photograph with a mist spray, placed in an oven at 100 degrees for 10 minutes. The photograph was viewed under a Laser at 445nm and 532nm and wearing orange viewing goggles.
	Ninhydrin	Prior to the application of ninhydrin on the photograph, I tested the same control from indanedione using premixed ninhydrin with a pump spray, placed in a humidity oven at 80 degrees, 60% humidity and observed development. This demonstrated positive results. Ninhydrin was applied to the photograph with a pump spray, placed in a humidity oven at 80 degrees, 60% humidity.
	Cyanoacrylate Fuming	Cyanoacrylate Fuming - 10 min/72% Humidity in an Air Science Cyanoacrylate Fuming Chamber. A control was not necessary, as the result of the reagent was previously tested on item 1 on the same day.
	Dye Stain	Prior to the application of RAY (dye stain) on the photograph, I tested the same control which was placed in the cyanoacrylate chamber (item 1). I applied RAY to the acetate, rinsed the surface with dH ₂ O, viewed it under a Laser at 445nm and 532nm and wearing orange viewing goggles. This showed a positive enhancement of friction ridge detail. Only an area where friction ridge detail was observed, in divided section A, was treated with RAY. I applied RAY to the specific area, rinsed the surface with dH ₂ O, viewed it under a Laser at 445nm and 532nm wearing orange viewing goggles.
	Powder Dusting	White magnetic powder was applied to the glossy side of the photograph then followed with fluorescent red magnetic powder. The photograph was viewed under a Laser at 445nm and 532nm wearing orange viewing goggles.
	Oil Red O	Prior to the application of Oil Red O on the photograph, I tested the same control from ninhydrin. This showed positive, yet faint development of friction ridge detail. The photograph was placed in a glass tray and Oil Red O stain was poured in. Following approx. 20 min and minimal red staining was apparent, Oil Red O Buffer was poured in the tray.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
J96C2H	Visual Examination	
	Alternate Light Source	532nm, 450nm, 365nm
	Cyanoacrylate Fuming	VIS, RUVIS
	Powder Dusting	Magnetic powder
	1,2-Indanedione	VIS, 532nm
	Dye Stain	RAM
	Physical Developer (PD)	
JDZ726	Cyanoacrylate Fuming	Fume takes approximately one hour and ten minutes
	Powder Dusting	White powder
JE8L9B	Powder Dusting	Utilized black volcanic powder. Nothing located. Will send item to regionallaboratory for further testing.
JH63K6	Visual Examination	Mini-Crimescope White light
	Alternate Light Source	Mini-Crimescope - all wavelengths available
	Cyanoacrylate Fuming	Safefume Chamber, 25 minutes processing time, 77% humidity (test print processed concurrently)
	Powder Dusting	Bi-chromatic powder
	1,2-Indanedione	1,2-indanedione-zinc, viewed with TracER laser (532 nm) (test print processed concurrently)
	Ninhydrin	Ninhydrin-HFE, viewed with white light (test print processed concurrently)
	Dye Stain	Rhodamine 6G, viewed with TracER laser (532 nm) (test print processed concurrently)
JHR7J7	Dye Stain	Visual examination, cyanoacrylate fuming, magnetic powder, Ardrex, photograh, DFO
JKX3HF	Cyanoacrylate Fuming	Vacuum Cyanoacrylate Fuming for one hour
	Dye Stain	Rhodamine 6G Dye Stain
	DFO	DFO, developed in an oven at 100 degree C for 20 minutes
	Ninhydrin	Ninhydrin, developed in a humidified oven at 80 degree C and 65% RH for 3 minutes.
	Powder Dusting	Powder
JM3NAM	Cyanoacrylate Fuming	Superglue (Foster+Freeman MVC1000 s/n1005 (Auto mode) cyanobloom 10 drop

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
JNWCV3	Visual Examination	Item 2 Glossy Photograph - White light - Appreciable FRD visible in quadrant B, glossy side. Will attempt to image capture. Unable to image capture.
	Alternate Light Source	Item 2 Glossy Photograph - Crimelite ML2 - no improvement to FRD using green/blue light and orange filter. Slight orange inherent fluorescence of photograph.
	Cyanoacrylate Fuming	Item 2 Glossy Photograph - Super glue fumed using CA-6000 at 65% relative humidity for 30 mins.
	Visual Examination	Item 2 Glossy Photograph - White light - Post CA FRD in quadrant B slight improvement. Will attempt to image capture.
	Powder Dusting	Item 2 Glossy Photograph - Black powder using brush method.
	Visual Examination	Item 2 Glossy Photograph - Post black powder FRD marginal clarity.
JYFJWD	Visual Examination	Oblique lighting was used. Control test not applicable. Ridge structure of no collection value was observed in quadrant B. Photograph was not collected due to background interference.
	Alternate Light Source	LabKam that emits 254 nm of light was used. Control test not applicable. Ridge structure of collection value was observed in quadrant B. Digital photography was used for collection.
	Cyanoacrylate Fuming	Cyanoacrylate chamber was set to approximately 15 minutes of fuming. Control test was positive. Ridge structure of collection value was observed in quadrant B. No photography until the following step.
	Alternate Light Source	LabKam that emits 254 nm of light was used. Control test not applicable. Ridge structure of collection value was observed in quadrant B. Digital photography was used for collection.
	Powder Dusting	Red magnetic fluorescent powder was used. Magnetic wand and traditional brush were used for application/development. Control test not applicable. Ridge structure of no collection value was observed in quadrant B. Collection was not done until after following step.
	Alternate Light Source	Crimescope at various wavelengths was used. 495 nm was determined to be best wavelength for visualization. Control test not applicable. Ridge structure of no collection value was observed in quadrant B. Digital photography and a black gel lift were used for collection.
K46JMD	Visual Examination	white light
	Alternate Light Source	UV, VIS, episcopic light illumination - fingerprint - section B
	Vacuum Metal Depositon	Au/Zn
	DFO	CAST solution, 100 Celsius degree, 20 minutes
	Physical Developer (PD)	Sirchie solution

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
KE74P7	Visual Examination	Visual examination of item
	Alternate Light Source	Examined item on CCS setting using CrimeScope
	Cyanoacrylate Fuming	CA chamber with humidity set at 65% for 20 minutes
	Powder Dusting	Black powder
	Dye Stain	MBD dye stain
	Alternate Light Source	Examined item on CCS setting using CrimeScope
KMGBLA	Powder Dusting	Utilized a magnetic powder on the photograph.
KUYJA7	Powder Dusting	Magnetic powder
	Powder Dusting	Black powder
KVU7MA	Visual Examination	PoliLight PL500
	Cyanoacrylate Fuming	RH 80%, t-10 min
	Powder Dusting	Bi-chromatic fingerprint powder
L2TBTJ	Visual Examination	with flashlight
	Cyanoacrylate Fuming	with flashlight
	Visual Examination	with flashlight
	R6G	with laser
	Laser	
	Powder Dusting	visually
L4ZLR9	Visual Examination	Observed latent in letter B (very little detail)
	Powder Dusting	Used magnetic black powder (very little detail)
	Alternate Light Source	no improvement
	Cyanoacrylate Fuming	40 drops, placed in fuming chamber for 21 minutes - very little detail

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
L7822Z	Visual Examination	I performed a visual examination with natural and oblique lighting.
	Cyanoacrylate Fuming	I placed the item in a chamber. I added cyanoacrylate glue into an aluminum dish, which I then placed on the hot plate in the chamber. I also added a beaker of boiling water to the chamber to provide humidity. I turned the chamber on to heat the cyanoacrylate glue into a vapor. I left the item in the chamber for approximately 20 minutes. Once I saw my positive control turn white from the cyanoacrylate fumes, I turned off the hot plate and opened the vent to the chamber. I waited another 10 minutes, then I removed my item from the chamber.
	Powder Dusting	I applied black magnetic powder to the item using a magnetic wand. After taking a few passes over the item, ridge detail began to develop.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
LBHWYH	Visual Examination	White light examination of exhibit as received using ambient laboratory lighting and 'Tiablo' High Power LED Flashlight at varying angles. No useful marks were visible.
	Alternate Light Source	Sequential initial High Intensity Light Source (HILS) examination carried out, following dark adaptation, using Green Crime Lite 490nm-560nm with 571 nm viewing filter followed by Blue Crime Lite 420nm-470nm with 476nm viewing filter and UV Crime Lite 350nm- 380nm with 408nm viewing filter. QA adhered to and control test pieces passed. No useful marks were visible
	Cyanoacrylate Fuming	Carried out as per [Organization] validated/internally verified procedure (Foster & Freeman MVC5000 Cabinet, Relative Humidity 80%, Glue time 13 minutes & 3g of superglue used). Following treatment, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles. QA adhered to and control test piece passed. No useful marks were developed.
	Powder Dusting	Carried out as per [Organization] validated/ internally verified procedure, Aluminium Powder used with Zephyr brush. Following treatment, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles. QA adhered to and control test piece passed. No useful marks were developed.
	DFO	Carried out as per [Organization] validated/internally verified procedure. Treated with DFO, allowed to dry, and then placed in oven for 23 minutes (3 minutes recovery time included in time) at 100°C. Following dark adaptation, examined using Green Crime Lite 82S 490-560nm with 571 nm viewing filter. QA adhered to throughout and control test piece passed. No useful marks were developed.
	Ninhydrin	Carried out as per [Organization] validated/internally verified procedure. Treated with Ninhydrin and allowed to dry. Treated in oven set at 62%RH & 80°C for 7 minutes. Examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles on same day and periodically checked over 5 days. QA adhered to and control test piece passed. No useful marks were developed.
	Wet Powder Suspension	Carbon-based powder suspension used, carried out as per [Organization] validated/internally verified procedure. Pre-rinsed with water. Powder Suspension applied with soft squirrel hair brush and left for ~10-20 seconds. Powder Suspension rinsed off using gently running water until maximum contrast obtained and then allowed to dry. When dry, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass used where required. QA adhered to and control test piece passed. Titanium Dioxide (white) powder Suspension used, carried out as per [Organization] validated/internally verified procedure. Pre-rinsed with water. Powder Suspension applied with soft squirrel hair brush and left for ~10-20 seconds. Powder Suspension rinsed off using gently running water until maximum contrast obtained and then allowed to dry. When dry, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles. QA adhered to and control test piece passed.
	Physical Developer (PD)	Carried out as per [Organization] validated/internally verified

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
		procedure. Ensured all solutions and room temperature >17°C. Pre-treated with Maleic Acid for 10 minutes, treated with Physical Developer Working Solution for 20 minutes followed by 3 x water rinses as per procedure. All treatment stages carried out on rockers so exhibit was constantly agitated throughout. When dry, item was examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles. QA adhered to and control test piece passed. No useful marks were developed.
LBM9ME	Visual Examination	Forensic white light source. One fingerprint is detected
	Cyanoacrylate Fuming	Ten minutes fuming cycle (Lumicyano). White light and UV light observation
	1,2-Indanedione	After spraying and drying, placing in an oven at 100 °C for 20 minutes. Observation with 460-510 nm lighting.
	Ninhydrin	After spraying and drying, placing in an oven at room temperature for 24 hours. White light observation.
	Wet Powder Suspension	The three previous methods did not reveal the detected fingerprint, visibly sebaceous mark. The fingerprint is processed with wetwop. White light observation.
LJEQY2	Cyanoacrylate Fuming	I conducted a visual exam and photographed the item. I then placed the item into our fuming chamber for one auto cycle which, took approximately one hour. Test print/control showed the fuming chamber was working appropriately.
	Powder Dusting	No friction ridge detail was observed, item was further processed with black magnetic powder. Friction ridge was observed in box B, photographed, and lifted with a white gel lifter.
LMYJB4	Visual Examination	Visually examined the item to determine if latent detail was visible prior to application of processing methods.
	Cyanoacrylate Fuming	Cyanoacrylate Fuming Chamber - 70% humidity, 10 minute fume cycle followed by a 10 min purge cycle. CFC positive control conducted. CFC Lot#: BP23419 Exp: 01/2021.
	Powder Dusting	Application of Bi-chromatic fingerprint powder to enhance and make visible the deposited latent fingerprint.
LN8VQK	Visual Examination	
	Cyanoacrylate Fuming	Temperature on the heating plate 100°C Humidification 80%, time 25 minutes
	Powder Dusting	
LVP7YE	Visual Examination	different light sources and filters
	Cyanoacrylate Fuming	temp. 25 C, humidity 80%, time 20 min. natural and white light (Chamber Safefume CA30S)
	Powder Dusting	Black magnetic powder, magnetic applicator, natural and white light
M3JQK8	Powder Dusting	Photographed and utilized magnetic powder. No latent image recovered. Repackaged and sent to regional laboratory for further analysis.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
M3M9MC	Visual Examination	Using Oblique lighting, UV light, LASER, and ALS
	Cyanoacrylate Fuming	Fumed for approximately 10 minutes
	Dye Stain	MEK Ardrex with UV light
	Dye Stain	Aqueous Rhodamine with LASER
	Powder Dusting	Black powder
	DFO	
	Ninhydrin	
	Zinc Chloride	
	Physical Developer (PD)	
M8EF7K	Visual Examination	21/06/2020 @ 9:50 am using white light for examination
	Cyanoacrylate Fuming	21/06/2020 @ 10:00 am Fuming chamber @ 80 RH, 120 C plate temperature examination using the white light
	Powder Dusting	21/06/2020 @ 11:45 am examination using the white light
M9PHU6	Visual Examination	Processing Date: 7/22/2020. Control: N/A
	Alternate Light Source	Processing Date: 7/22/2020. Control: N/A
	Cyanoacrylate Fuming	Processing Date: 7/22/2020. Control: Pos.
	Powder Dusting	Black magnetic powder. Processing Date: 7/22/2020. Control: N/A
	Dye Stain	MRM-10. Processing Date: 7/22/2020. Control: Pos.
MCA8F3	Powder Dusting	magnetic powder
	Ninhydrin	
MECCNG	Visual Examination	Episcopic coaxial illumination. Fluorescence verification for wave lengths 495, 515 535 nm.
	Cyanoacrylate Fuming	Relative humidity 80%; cyano glue= 0.87g; exposure time=9 minutes.
	Powder Dusting	Black powder
	1,2-Indanedione	Exposure time=24 hours; relative humidity=50%; temperature=50°C
MJBQC7	Powder Dusting	Volcanic, magnetic, and fluorescent powders used. Light and alternate light sources utilized. No prints found.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
MK9UC9	Visual Examination	Item was examined under white light and magnification.
	Alternate Light Source	Item was examined using Foster + Freeman Crime Lite ML2 with a 420nm-470nm bandwidth filter and an orange barrier.
	Cyanoacrylate Fuming	Item was processed in the CyanoSafe recirculation chamber. The test print was positive.
	Powder Dusting	Bi-chromatic magnetic print powder was applied to the item.
	Dye Stain	Item was treated with Ardrex and Water solution #99 and examined using Foster + Freeman Crime Lite ML2 with a 420nm-470nm bandwidth filter and an orange barrier.
MQTVPZ	Visual Examination	
	Cyanoacrylate Fuming	MVC 5000 Superglue Chamber for 20 minutes.
	Powder Dusting	Used magnetic powder, then black powder.
MRNFCZ	Powder Dusting	Processed with black magnetic powder for several minutes. No prints were developed. Attempted this method twice, second time with heavier powder same results.
MRP9B8	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	Black powder
	Dye Stain	Basic yellow
MWZLR7	Visual Examination	room lighting, 450 nm light and UV light
	Cyanoacrylate Fuming	Fumed about 10 minutes. Latent print developed for positive control.
	Magnetic powder	Dusted with magnetic powder. Latent print developed for positive control.
	Powder Dusting	Black dusting powder. Latent print developed for positive control.
N2PHU3	Visual Examination	No latents visible upon visual examination
	Cyanoacrylate Fuming	Cyanoacrylate fuming, control +, Lot#201904100, no latents found.
	Dye Stain	Rhodamine 6G dye stain, control +, Lot#R6G061520, no latents found.
	Powder Dusting	Black powder and magnetic powder, no latents found.
NAL3EH	Powder Dusting	total processing time --60 minutes fluorescent powder

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
NBCGK8	Visual Examination	No control. Bright light was used. No ridge structure observed. No collection method used.
	Alternate Light Source	No control. Alternate light source - Labkam. No ridge structure observed. No collection method used.
	Cyanoacrylate Fuming	Bright light was used. Positive control. No ridge structure observed. No collection method used.
	Alternate Light Source	Alternate light source - Labkam. One latent print of collection value observed in "Box B". Collection method - photography with Labkam.
	Dye Stain	RAY - Rhodamine 6G, Ardrex, Basic Yellow 40. Apply to surface, rinse with water, and let dry. Positive control under Crimescope. No ridge structure visible. No collection method used.
	Alternate Light Source	Alternate light source - Crimescope at 455 nm with orange goggles. Positive control. No ridge structure visible. No collection method used.
NCRF3C	Cyanoacrylate Fuming	72 hours
	Powder Dusting	black powder
ND668A	Visual Examination	White light and magnification, print observed in section B.
	Cyanoacrylate Fuming	Processing in CyanoSafe fuming chamber. Print observed in section B.
	Powder Dusting	Black magnetic powder revealed print in section B.
	Dye Stain	Ardrex used on item revealed no further enhancement of print.
NF8BHA	Visual Examination	Oblique lighting
	Alternate Light Source	Inherent fluorescence examination with SPEX CrimeScope CS-16-400
	Iodine	Iodine fuming wand
	Cyanoacrylate Fuming	CA placed onto aluminum dish and heated with a hot plate. Fuming performed within Fisher Hamilton fuming chamber.
	Dye Stain	RAM
	Alternate Light Source	Dye stain fluorescence examination with SPEX CS-16-400; multiple wavelengths used.
	Powder Dusting	Magnetic fluorescent Powder with SPEX CrimeScope CS-16-400 Magnetic black powder

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
NKM79	Visual Examination	Visual examination conducted with bright light source and magnification.
	Alternate Light Source	Examination with LabKam
	Cyanoacrylate Fuming	Item processed with cyanoacrylate fuming in chamber. Positive control developed.
	Alternate Light Source	Examination with LabKam. Ridge structure of value observed.
	Dye Stain	Rhodamine 6G used to enhance ridge structure. Positive control enhanced.
	Alternate Light Source	Item visualized at 515nm with orange goggles. Positive control observed.
	Powder Dusting	Magnetic black powder used to further develop ridge structure.
NLVNA	Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 06/07/2020.
	Cyanoacrylate Fuming	Lumicyano Powder™. Glue temperature = 118°C. Relative humidity = 78 %. Processing time = 40 mn. Date analyzed : 07/07/2020.
	Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 07/07/2020.
	Cyanoacrylate Fuming	Lumicyano Powder™. Glue temperature = 118°C. Relative humidity = 78 %. Processing time = 40 mn. Date analyzed : 08/07/2020.
	Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 08/07/2020.
	Powder Dusting	Magnetic fluorescent powder. Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 08/07/2020.
	Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 08/07/2020.
	1,2-Indanedione	+ zinc chloride. Solution deposited only on the area of the fingerprint. 48 h development : in the dark, at room temperature (22°), with a relative humidity of 64 %. Date analyzed : 08/07/2020.
Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 13/07/2020.	
P8Q4B4	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	Ardrox

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
PDWRVX	Cyanoacrylate Fuming Powder Dusting	
PF26W6	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting Dye Stain	(120°C ± 5°, 75% Relative Humidity ± 15%) Black Powder R.A.M.
PGGK7Z	Visual Examination Cyanoacrylate Fuming Visual Examination Standard Black Powder Visual Examination R.A.M. dye stain Alternate Light Source	Used a flashlight with white light and used ambient lighting. Used a vacuum chamber set to 25 PSI and fumed for twenty minutes. Used a flashlight with white light and used ambient lighting. Used a flashlight with white light and used ambient lighting. Used dye stain to spray item and then allowed to dry. Examined item with a Rofin Polilight PL500 at 505nm with orange goggles.
PLC73A	Visual Examination Cyanoacrylate Fuming Powder Dusting	10 minute in chamber
PX2B4E	Visual Examination Cyanoacrylate Fuming Visual Examination Cyanoacrylate Fuming Visual Examination Powder Dusting Visual Examination	Light: UV, white, green, blue/green. Lens: red, yellow, orange Polycyano Temperature: 230°C/ Time: 20 minutes / Humidity: 80 Light: UV, white, green, blue/green. Lens: red, yellow, orange Cyanoacrylate Temperature: 120°C / Time: 12 minutes / Humidity: 80 Carbon powder
PX7MRA	Visual Examination Cyanoacrylate Fuming Powder Dusting Ninhydrin	Polarising filters, colored lights and filters, low angled enlightments. Lumicyano fumes + Polarising filters, colored lights and filters, low angled enlightenment and coaxial episcopy Orange-red magnetic powder + UV light with HFE-711 solvent, 12 to 15 hours processing in an obscur and humid environment.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
PXPB96	Powder Dusting	Used magnet fingerprint powder to develop the print
PYCCRX	Cyanoacrylate Fuming Powder Dusting	FUMED WITH CAE FOR APPROXIMATELY 15MINS USED BLACK AND WHITE FINGERPRINT POWDER
Q87MV2	Visual Examination Cyanoacrylate Fuming black magnetic powder Powder Dusting Dye Stain 1,2-Indanedione	visual using the naked eye - no detail observed cae chamber sample was positive - no detail observed used magnetic powder brush in conjunction with black magnetic powder - no detail observed used regular powder brush in conjunction with black powder - no detail observed RAM sample was positive, used TraCER LASER to "visualize" - no detail observed IND sample was positive, humidity chamber used TraCER LASER to "visualize" - no detail observed
QKAZWY	Cyanoacrylate Fuming Gel lift Gel scan Powder Dusting Gel lift Gel scan Powder Dusting Gel lift Gel scan	Over fumed Black gel lift of entire glossy photograph surface GLScan Red and green fluorescent powder and fluorescent magnetic powder were used while visualizing using an ALS at various wavelengths. Two black gel lifts: first lifting the residual powder from the visible ridge detail. Second lift with no additional powder used on the ridge detail GLScan Regular black powder White gel lift of black powder on the visible ridge detail GLScan

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
QP7MR9	Visual Examination	Visual exam using oblique lighting, Laser light, and UV light.
	Cyanoacrylate Fuming	Processed for approximately 5 minutes. I could see slight ridge detail and I visualized it using the Short wave UV camera and light.
	Powder Dusting	Black fingerprint powder.
	Dye Stain	MEK Ardrex, examined using a UV light.
	Dye Stain	Aqueous Rhodamine 6G, visualized using a Laser.
	DFO	Dipped in DFO, dried, placed in the oven for approximately 15 minutes. visualized with a Laser. waited 24 hours before the next chemical.
	Ninhydrin	Dipped in Ninhydrin, dried, placed in a humidity chamber at 70% humidity and 70 degrees for approximately 10 minutes. waited 24 hours before the next chemical.
	Zinc Chloride	Sprayed Zinc Chloride on the item and placed in a humidity chamber at 70% humidity and 70 degrees for approximately 10 minutes. visualized with the ALS. waited 24 hours before the next chemical.
	Physical Developer (PD)	Maleic Prewash for approximately 5 minutes, PD solution for approximately 15 minutes, rinsed with water and allowed to dry.
QPQ9KY	Visual Examination	
	Alternate Light Source	Mini-Crimescope was utilized; all wavelengths.
	Cyanoacrylate Fuming	SafeFume Superglue Chamber was utilized. Evidence was left sitting after removal from chamber for at least 24 hours (per lab policy) prior to moving on to next method.
	1,2-Indanedione	Humidity chamber was utilized (to provide heat) to aid development. Evidence was then viewed using Mini-Crimescope at 515nm.
	Dye Stain	Rhodamine 6G was utilized with a Mini-Crimescope at 515 nm.
	Powder Dusting	Regular black powder was utilized.
QTPF6W	Visual Examination	Visual examination with white light.
	Cyanoacrylate Fuming	Fumed in chamber with superglue and hot water for humidity for approximately 20 minutes.
	Powder Dusting	Applied black powder with brush to the item.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
R2DWT4	Visual Examination	RUVIS
	Cyanoacrylate Fuming	15 minutes, 80% humidity, examined with RUVIS
	Dye Stain	lumicyano, ALS and orange goggles
	Powder Dusting	silver/black magnetic powder, glossy side only
	DFO	100C, 20 minutes, laser and orange goggles, paper side only
	Ninhydrin	80C and 70% humidity, 20 minutes, paper side only
	Oil Red O	1 hour
R434BE	Cyanoacrylate Fuming	I processed item 002 with cyanoacrylate inside an 'Air Science' fuming chamber which took approximately 15-20 minutes. With the use of oblique lighting I observed possible friction ridge detail in box B.
	Powder Dusting	Following fuming I further processed item 002 with black magnetic fingerprint powder. I observed possible friction ridge detail in box B.
	Dye Stain	I further processed item 002 with the dye stain Ardrex and utilized an alternate light source to view possible ridge detail in box B on item 002.
R6WRVW	Powder Dusting	Used black magnetic powder and wand. Turned off lights and used flashlight to use oblique lighting technique to check for possible prints
R9W4RV	Powder Dusting	Glossy picture dusted with magnetic powder using a magnetic wand no latent prints developed.
R9ZH6V	Visual Examination	No visible prints observed.
	Cyanoacrylate Fuming	MVC 5000/D - Fumed for 15 minutes.
	Powder Dusting	Magnetic powder was applied to the item. A lift of developed prints was collected before continuing on in the processing sequence.
	Powder Dusting	Black powder was applied to the item. A lift of developed print was collected as the final step.
RCAZWW	Cyanoacrylate Fuming	Positive control. Humidity 70%, CFC fuming 10 minutes, purge 10 minutes
RCW8K4	Visual Examination	(-) result
	Powder Dusting	Magnetic Powder, (+) result, very faint
	Alternate Light Source	(-) enhancement result; 415, 450, 470, 490
	Cyanoacrylate Fuming	Cyano Safe Fuming Chamber; 40 drops cyanoacrylate, H ₂ O, test strip, 20 minutes, (+) slight enhancement

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
RD32U9	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting	
RE2ZE2	Cyanoacrylate Fuming	R6G, LASER, RUVIS, Black Powder (x2)
RXY6X4	Visual Examination Cyanoacrylate Fuming Powder Dusting Vacuum Metal Deposition	No latent prints observed. CA fuming chamber for approximately 15 minutes. No latent prints observed. Black fingerprint powder utilized. Enhancement observed, UL, latent print lifted and latent print image scanned. Vacuum Metal Deposition (VMD) utilizing silver followed by zinc. No improvement, friction ridge detail of no value observed.
T2CEAY	[No Methods Reported.]	Visual examination (000-495); photography; Vacuum metal deposition; CYANOACRYLATE (humidity 80,8%; temperature 130°C); DFO (100°C)
T2U7L4	Visual Examination Alternate Light Source Alternate Light Source Cyanoacrylate Fuming VMD Dye Stain	White light poly light 440-520nm RUVIS 254nm 11min, 80%humidity, 160c 30 sec Gold coating followed by Zinc coating CV
T6W8L2	Visual Examination Cyanoacrylate Fuming Powder Dusting Ninhydrin Dye Stain	no visible ridge detail (semi-porous but glossy) CAE, MVC5000, about 1 hour, possible ridge detail observed (Test print: C+B-) magnetic black powder, possible ridge detail observed - not clear (Test print: C+B-) attempt to develop with porous technique: Nin sat for 72 hours but did not further develop ridge detail (Test print: C+B-) R6G with TracER laser/ barrier filters - print enhanced for photo; but very poor quality (Test print: C+B-)
T6YWU6	Visual Examination Cyanoacrylate Fuming Powder Dusting DFO Ninhydrin	White light and ALS Foster+Freeman cabinet ~70 minute auto cycle Tried magnetic, black, and fluorescent powders Two applications of DFO, 20 minutes in dry oven at 100 C. Evaluated after removing from oven and 24 hours later Two applications of Ninhydrin.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
T8KNXU	Visual Examination	Direct and Oblique Lighting
	Alternate Light Source	ALS Frequency 450 for inherent UV florescence
	Cyanoacrylate Fuming	processing time - 1Hr
	Visual Examination	Direct and Oblique Lighting
	Powder Dusting	White Magnetic Powder
TBZBAE	Visual Examination	nothing observed
	Cyanoacrylate Fuming	nothing observed
	Alternate Light Source	nothing observed
	Dye Stain	nothing observed
	Powder Dusting	mag powder ridge detail observed
TD2E22	Visual Examination	white light, UV - 555nm - Polilight PL 500, suitable goggles
	Cyanoacrylate Fuming	processing time - 15 minutes, humidity - 80%
	Visual Examination	white light
	Powder Dusting	Mag. Black Ruby
	Visual Examination	white light, UV
TKJPAV	Visual Examination	
	Cyanoacrylate Fuming	Lumicyano
	Alternate Light Source	CSS, orange filter
	Ninhydrin	
	Powder Dusting	Black powder
TKN6MW	Visual Examination	Laser and flashlight used
	Cyanoacrylate Fuming	Flashlight used. 70 Minutes, Foster and Freeman chamber used
	Powder Dusting	Black powder used
	DFO	Laser used along with filter
	Ninhydrin	Two days, humidity chamber was not used
TLECMY	Visual Examination	Visually examined with no results.
	Powder Dusting	Processed with florescent (green) powder, with a faint partial print in quadrant "B".
	Cyanoacrylate Fuming	I processed this piece inside the cyanoacrylate fuming chamber, and could see a faint partial print in quadrant "B".
	Dye Stain	I processed this piece using yellow dye stain after fuming in the cyanoacrylate chamber and could see a faint partial print in quadrant "B".

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
TLWG6X	Cyanoacrylate Fuming	Fumed with cyanoacrylate
	Powder Dusting	Magnetic black powder
	Dye Stain	Basic yellow premixed
TR9ZT7	Visual Examination	
	Cyanoacrylate Fuming	CA processed for a 12 minute cycle. Allowed to set for 1 hour.
	Powder Dusting	Black magnetic powder.
	Ninhydrin	Batch 296. Doused in NIN, allowed to air dry for 30 minutes. CARON chamber for approximately 40 minutes.
	Physical Developer (PD)	Processed by LPT [Analyst]. Batch 477.
TVPE9Z	Cyanoacrylate Fuming	
TWEXX6	Visual Examination	Used TracER Laser (532nm) with orange goggles and Crimescope CS-16-500 with orange, red and yellow goggles to look for inherent fluorescence.
	Cyanoacrylate Fuming	Viewed with White light
	1,2-Indanedione	Sprayed indanedione on item and placed in oven for approximately 20 minutes. Viewed with TracER Laser (532nm) and orange goggles
	Ninhydrin	Examine with white light
	Dye Stain	Water based rhodamine. Examine with TracER Laser (532 nm) with orange goggles
TXU3RW	Visual Examination	Direct and oblique lighting
	Cyanoacrylate Fuming	Added humidity to reach a relative humidity level of ~70%. Followed by visual exam
	Powder Dusting	Light colored magnetic powder. Followed by visual exam
U7YPW2	Visual Examination	Ridge structure - no collection value. Not collected - not easily visualized.
	Alternate Light Source	LabKam, clear goggles. Ridge structure - no collection value. Not collected - not easily visualized.
	Cyanoacrylate Fuming	Control test positive. Ridge structure - no collection value. Not collected - not easily visualized. Fuming specifications: 120 degrees Celsius, 78% relative humidity, approximately 15 minutes fuming time (total running time including heating, gluing, and purge is approximately 1 hour).
	Alternate Light Source	LabKam, clear goggles. Ridge structure - no collection value. Collected with digital photography.
	Powder Dusting	Fluorescent orange powder
	Alternate Light Source	Crime scope, 495-515 nm, orange goggles. No ridge structure.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
U9RDJ4	Visual Examination	
	FSIS	Full Spectrum Imaging System, UV light, 1 image, section B
	Cyanoacrylate Fuming	cyanosafe
	Powder Dusting	black magnetic
	Dye Stain	Ardrox/water, batch #99
UDLEJW	Cyanoacrylate Fuming	14 minute fume time 20 purge time
	Dye Stain	Basic Yellow premixed solution dye stain
UHG9GX	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	Magnetic
	DFO	
	Alternate Light Source	
	Ninhydrin	
	Dye Stain	RAM
Alternate Light Source		
UJNNN4	Visual Examination	Examined using natural light, flash light, UV, ALS, LASER, and FSIS.
	Cyanoacrylate Fuming	Development was approximately 10 minutes. Examined using natural light, flash light, UV, ALS, LASER, and FSIS.
	Dye Stain	Dye stains were used in this order: Ardrox with UV excitation > Ardrox MEK with UV excitation > Rhodamine 6G with LASER excitation > Rhodamine 6G Aqueous with LASER excitation. A corner of the item was tested using the above dye stains; however, background staining was observed. Processing with these techniques were deferred.
	Powder Dusting	Applied black fingerprint powder.
	DFO	with LASER excitation
	Ninhydrin	
	Zinc Chloride	with ALS excitation
	Physical Developer (PD)	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
UN6UMY	Visual Examination	Firstly, I searched for prints by use of oblique white light. No prints were detected.
	Alternate Light Source	I used different lightsources, in the entire crimescope spectrum. It was evident that the broad variety of colours in the image/photography made the task more difficult. Different segments of the photograph gave fluorescence in different wavelengths. In this examination, no fingerprint was detected, but the experience of the fluorescence proved fruitful in the later examinations.
	Cyanoacrylate Fuming	Humidity 75%, Fuming time: 10 minutes.
	Visual Examination	I searched for prints by use of oblique white light. After glue I detected what seemed to be two small parts of one fingerprint, with the middle part missing, in section B.
	Powder Dusting	Because no prints were detected in the other sections, I tested two types of magnetic powder, blitz green and blitz red, in the other sections where the background image had similar quality s the area of interest in section B. Blitz red proved best.
	Alternate Light Source	The partial print developed in section B was dusted with blitz red, and further examined by use of alternate light Source. Optimal fluorescence was achieved with 505 nm light source, and orange filters.
UVHMVA	Visual Examination	Visible light. No clear visible mark.
	Lumicyano	Using Foster+Freeman MVC 3000 fuming cabinet: 120 degrees, first allowing distilled water to vaporise and then fuming 8 % mixture. Total proress time 25 minutes. Light source (blue and green and UV CrimeLites) used but still no clear visible mark.
	Wet Powder Suspension	Mixture of black and white wet powder suspension. Still not able to get clear visible mark.
	Powder Dusting	Concentrated black.
UYWK2C	Cyanoacrylate Fuming	Exhibit subjected to Superglue Fuming process followed by powdering (dusting) with Black granular carbon powder.
V3DCMX	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	Ardrox

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
V63DV8	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting 1,2-Indanedione Dye Stain Physical Developer (PD)	
V879EA	1,2-Indanedione Alternate Light Source	the item and a test print had indanedione placed on it with a pipette, allowed to dry, then a second coat was applied. they were then put in an environmental chamber at 80 degrees Celsius/65% humidity for 15 minutes using the coherent tracer laser, the print was visualized on the item and the test print
V93KF6	Powder Dusting	
VADQD7	Cyanoacrylate Fuming	FosterFreeman MCV3000. Humidity 80%, temperature 120°C, processing time 15 minutes.
VAX8T9	Cyanoacrylate Fuming	After Cyanoacrylate fuming, examination with UV-light (380nm-380nm), using Coaxial light box and half-mirror.
VKX3MX	Cyanoacrylate Fuming Powder Dusting	Item 2 was processed using cyanoacrylate fuming on 7/24/2020 at 0900 hours. A test print was conducted with positive results After processing with cyanoacrylate fuming, Item 2 was processed using black powder on 7/24/2020 at 0900 hours.
VNDBBW	Cyanoacrylate Fuming	The item and control test print was fumed for 5 minutes with cyanoacrylate ester (superglue). A positive result was obtained for the test print.
VRXC23	Visual Examination Cyanoacrylate Fuming Powder Dusting Ninhydrin	No print was initially visible. The item was semi-porous, so both non-porous methods were done (cyanoacrylate and powder). A print was visualized in quadrant B after powder processing. Porous processing was performed after non-porous methods (cyanoacrylate and powder).
VU6HT7	Alternate Light Source Cyanoacrylate Fuming Powder Dusting	White, blue and green light Glue heating at 120 degrees Celsius for 5 minutes in 80% humidity Magna Jet Black
VVXNY	Powder Dusting	No clear print was located, submitted item to Regional Laboratory for further testing.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
VYFLPY	Visual Examination	White light, ambient light, alternate forensic light source over a range of wavelengths (475-515 nm)
	Cyanoacrylate Fuming	Active fume time 15 minutes in an Air Science CA chamber @80% humidity
	Visual Examination	White light, ambient light, alternate forensic light source over a range of wavelengths (475-515 nm)
	Powder Dusting	A combination of magnetic powder and black powder was applied to the glossy side of the photograph
	Visual Examination	White light and ambient light used
W6WHP7	LumiCyano	After visual examination; use of LumiCyano Fuming. Examination with Violet light (395nm - 425nm) + Violet google BP(415nm).
W7TUQ2	Visual Examination	1 minute. Light used. Fingerprint not observed
	Cyanoacrylate Fuming	Fume 15 minutes. Purge 15 minutes.
	Visual Examination	1 minute. Light used. Fingerprint not observed.
	Dye Stain	1 minute. 7-P-methoxybenzylamino-4-nitrobenz-2-oxa-1-3-diazole (MBD).
	Alternate Light Source	1 minute. Orange shades. 415nm and 450nm.
	Visual Examination	1 minute. Fingerprint Not Observed. Fingerprint not observed.
W84WDZ	Visual Examination	
	1,2-Indanedione	50°C 40% rel. h. 3 hours
	Ninhydrin	26°C 65% rel. h. 4 Days
W9GN83	Visual Examination	Incandescent/ Flood Lighting
	Cyanoacrylate Fuming	Cyanosafe, Fluorescent Lighting
	Powder Dusting	Magnetic Powder, Fluorescent Lighting
	Dye Stain	Ardrox dye stain, Polilight 2 (orange filter)
W9U4C3	Visual Examination	Photograph was visual examined and no latent was observed.
	Dye Stain	Photograph was dye stained with DFO and let dry for 20 min, then placed in a drying chamber for 20 min at 80 degrees.
	Alternate Light Source	Photograph was then viewed with Alternate light source and a small area in Section A had some ridge area.
	Ninhydrin	Photograph was further processed with dye stain Ninhydrin and left to dry for 20 min. Photo was then placed into the humidity chamber with 70% humidity and 80 degrees for 20 min
	Visual Examination	No further development was found.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
WB489Z	Visual Examination	No impressions detected.
	Alternate Light Source	Inherent luminescence exam using Polilight PL500 at multiple wavelengths.
	Cyanoacrylate Fuming	CA fume in vacuum due to semi-glossy appearance.
	Powder Dusting	Magnetic dual-use powder. Faint development in quadrant B of fragmentary friction ridge impression. Difficult to photograph.
	Iodine Fuming	No enhancement to impression in quadrant B. No other impressions developed.
	1,2-Indanedione	Dipping method followed by heat in oven at 212 degrees Fahrenheit for 20 minutes. Examine with alternate light source at multiple wavelengths. No impressions developed.
WJ2WRP	Visual	Visual examination of the photograph, no ridge detail observed.
	Cyanoacrylate Fuming	Fumed the item in the chamber for approximately 20 minutes with hot water for humidity.
	Powder Dusting	Applied magnetic powder with magnetic wand to the item and further developed ridge detail in quadrant B. No other ridge detail observed.
WJM76Z	Powder Dusting	Item #2 was processed for the development of latent prints using black powder. Latent prints of possible value was observed only on the area labeled B.
WMH6D4	Visual Examination	white light, UV, crimescope, Crimelite 82S blue-green
	Cyanoacrylate Fuming	Lumicyano (CTS)/ Fuming cabinet CA30S (Safefume)
	1,2-Indanedione	RT, 24h
	Ninhydrin	RT, 48h
WMWNX2	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	Lumicyano -- combination of cyanoacrylate and fluorescent dye, ALS w/ dye
	Powder Dusting	magnetic black, then black
	DFO	
	Ninhydrin	
WNBRY	Cyanoacrylate Fuming	Visual Examination : White Light / Alternate Light Source, (No Friction ridge detail Observed). Sample processed with Cyanoacrylate Fuming for approximately 15 Minutes, Visual Examination White light / Alternate Light Source, (No friction ridge detail observed) Fluorescent Powder processing, Visual examination White Light / Alternate light source. Note: There were No Friction Ridge detail observed or developed on the surface of the photographs. Quadrants A thru D

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
WRC4NR	Visual Examination	No RD noted.
	Alternate Light Source	Viewed with mini crime scope at all wavelengths. No RD noted.
	Cyanoacrylate Fuming	Cyanovac fuming chamber. Left overnight before further processing. RD noted in quadrant B (loop).
	Powder Dusting	Black Powder. Additional RD noted in Quadrant B (loop). One (1) photograph taken.
	Dye Stain	R6G. Allowed to dry.
	Alternate Light Source	Wavelength 515. No additional RD noted.
	1,2-Indanedione	Allowed to dry.
	Alternate Light Source	Wavelength ALL. No additional RD noted.
	Ninhydrin	Humidity added to aid development. No additional RD noted.
WUHTLV	Visual Examination	White light
	Cyanoacrylate Fuming	20 - 30 mins in glue chamber
WXHR6Z	Visual Examination	no ridge detail noted
	Visual Examination	visual + hot breath, no ridge detail noted
	Powder Dusting	applied non-magnetic black powder => 1st lift
	Powder Dusting	applied black magnetic powder using hot breath huffing method => 2nd lift
X446JT	Cyanoacrylate Fuming	Cyanoacrylate fumed
	Powder Dusting	Black magnetic powder
	Powder Dusting	white magnetic powder
XARREY	Visual Examination	White light
	Alternate Light Source	Poly light 440-520nm
	Alternate Light Source	RUVIS 254nm
	Cyanoacrylate Fuming	11min, 80% humidity, 160c
	VMD	30 sec Gold coating followed by Zinc coating
	Dye Stain	CV

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
XELP4P	Visual Examination	Visually inspected the item for ridge detail before processing. Ridge detail was present with visual examination before any processing.
	Alternate Light Source	Used an alternate light source at varying wavelengths with the corresponding barrier filters to view the item. This was done before and after processing.
	Cyanoacrylate Fuming	Used CA fuming on the photograph to further develop the ridge detail. The ridge detail did not appear to benefit from the process. The item was fumed for 15 min at ~75% humidity.
	Powder Dusting	Used fluorescent powder to attempt to further develop the ridge detail. The item appeared to benefit from the process.
	Dye Stain	Applied MRM-10 to further develop the ridge detail but it did not benefit from the process.
XFBYTX	Visual Examination	Viewed sample under natural and forensic lights.
	Alternate Light Source	We have tried to find a fingerprint with forensic lights, and then we used a multispectral camera. We have seen a part of a fingerprint in section B.
	[No Methods Reported.]	After that the sample was treated with DFO and Ninhydrin without results.
XFH6E2	Visual Examination	A visual exam was conducted using UV, Laser, ALS, SUV, and flashlight. No latents observed.
	Cyanoacrylate Fuming	The item was placed in the superglue chamber and fumed for approximately 10 minutes. No latent observed.
	Dye Stain	Ardrox (MEK) was applied and one digital photo was taken using the SUV and FSIS camera. Rhodamine (Aqueous) was applied and one digital photo was taken using SUV and FSIS camera. Latent very faint.
	Powder Dusting	The photo was dusted with black powder. No latent observed.
	DFO	The photo was processed with DFO, placed in an oven for only a few minutes, taken out for fear of curling and melting. Sat over night. No latent observed.
	Ninhydrin	The photo was processed with Ninhydrin. Placed in humidity chamber. No latent observed.
	Zinc Chloride	The photo was sprayed with Zinc Chloride and observed using ALS. No latent observed.
	Physical Developer (PD)	Lastly, the photo was processed using PD. No latent observed.
XJU6EY	Visual Examination	Visual examination using a Crimelite and a TracER Laser.
	Cyanoacrylate Fuming	
	Powder Dusting	Magnetic Black powder used.
	DFO	TracER Laser used and curved filter
	Ninhydrin	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
XJZ4RW	Visual Examination	No prints found
	Cyanoacrylate Fuming	Cyanosafe 15 mins; no prints
	Powder Dusting	magnetic powder; print developed
	Dye Stain	Ardrox and water, batch 99, no prints found
XXWHP6	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	Magnetic powder
	1,2-Indanedione	
	Dye Stain	
Y3N8P9	Physical Developer (PD)	
	Visual Examination	White Light & FSIS 1300 HRS
	Cyanoacrylate Fuming	1305 HRS
Y8FCKX	Dye Stain	R6G 1445HRS
	Cyanoacrylate Fuming	After visually examining Item 2, it was fumed for 17 minutes under 80 percent humidity in chamber. No friction ridge detail could be observed at conclusion of this method.
	Powder Dusting	Black latent fingerprint powder was applied with a feather duster and faint ridge detail could be seen when viewing the item at an oblique angle. Additional powder did not improve the print.
YHZNR4	Dye Stain	Basic Yellow 40 dye stain and the use of alternate light sources were employed; however, this procedure resulted in no further enhancement of the latent print.
	Visual Examination	
	Laser	Item fluoresced under laser examination
YK2RJQ	Cyanoacrylate Fuming	
	Powder Dusting	Black magnetic fingerprint powder
YK2RJQ	Powder Dusting	I dust the photograph with black magnetic powder to enhance the visibility of the latent print.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
YNLG44	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	
	1,2-Indanedione	
	Dye Stain	
	Physical Developer (PD)	
YNRTRZ	Alternate Light Source	Use of polilight, crime lite and lasers to carry out a visual search
	Cyanoacrylate Fuming	Cyanoacrylate fuming - viewed in white light
	1,2-Indanedione	Indanedione fuming - viewed with laser
	Ninhydrin	Ninhydrin - viewed in white light
	Dye Stain	Rhodamine 6 G - viewed with laser
	ISOMARK	ISOMARK casting method - once casted, viewed with white light
	Physical Developer (PD)	PD - viewed with white light
	Dye Stain	BY40 - viewed with laser
YVNLZU	Powder Dusting	Black powder - viewed with white light
	Visual Examination	
	Alternate Light Source	UV light and Crime Scope from 455 to 600 nm
	Cyanoacrylate Fuming	
	Powder Dusting	Gray Magnetic Powder
	DFO	Placed in heating chamber to enhance reaction.
	Ninhydrin	
Dye Stain	Used R.A.M.	
YYNWWU	Visual Examination	
	Alternate Light Source	CS @ 515nm & UV light
	Cyanoacrylate Fuming	microburst
	Powder Dusting	gray & black mag powder
	Dye Stain	RAM
	DFO	Iron
	Ninhydrin	Iron
	Powder Dusting	Gray Powder

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
Z99MVQ	Visual Examination	Oblique and diffuse laboratory light
	Alternate Light Source	FSIS unit with short wave ultra violet light at 245 nm and a UV filter
	Cyanoacrylate Fuming	Vacuum fumed in a CyVac M for a hour
	1,2-Indanedione	Indandione with ZnCl in petroleum ether with added heat and humidity
	Alternate Light Source	Viewed indandione with tracer green laser at 532 nm and an orange band pass filter
	Ninhydrin	Ninhydrin in petroleum ether with added heat and humidity, viewed with visible light
	Dye Stain	Rhodamine G6 stained and viewed with the tracer green laser at 532 nm and an orange band pass filter
	Powder Dusting	Black powder and lifted
ZBCHEU	Powder Dusting	magnetic powder, brushed on the surface of item
ZKH6MU	Powder Dusting	Utilized magnetic powder, photographed with and without scale. Sent to regional laboratory for further analysis.
ZLXMLT	Forensic ligths	The evidence is checked using "Lumatec 400" forensic light with all spectrum. 23°C room temperatura.
	Cyanoacrylate Fuming	Vaporization of cyanoacrylate in fuming chamber for about 7 minutes. 120°C temperatura, 80% humidity.
	Forensic ligths	The evidence is checked again using forensic light with all spectrum.
	DFO	The evidence is immersed in a DFO solution. Natural drying. The oven is used to visualice the developed latent print. 100°C Temeperature. 0% humidity.
	Forensic ligths	The evidence is checked again using forensic light with all spectrum.
	Ninhydrin	The evidence is sprayed with Ninhydrin. Natural drying. The oven is used to visualice the developed latent print. 80°C Temperature. 65% Humidity.
	Forensic ligths	The evidence is checked again using "Lumatec 400" forensic light with all spectrum.
ZLYCW	Visual Examination	Crimelite and TracER Laser
	Cyanoacrylate Fuming	70 minutes in F+F MVC 5000 chamber
	Powder Dusting	magnetic powder
	DFO	100 degrees Celsius for 20 minutes
	Ninhydrin	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
ZNL3V2	Visual Examination	Visual examination with light source, detected fingerprint photographed with a measure.
	Powder Dusting	Carbon powder (ostrich feather brush), photographed with a measure.
	Wet Powder Suspension	Using white wet powder after carbon powder.
ZPYNQW	Visual Examination	Crimelight flashlight
	Alternate Light Source	PL500 ALS at 530nm
	Cyanoacrylate Fuming	70 minutes
	Powder Dusting	Magnetic black powder
	DFO	Dipped and dried twice, 20 minutes in the heat chamber, LASER at 532nm to visualize potential latent print areas
	Ninhydrin	Dipped and dried twice, left out for two weeks (no humidity chamber available)
ZVEFRU	Visual Examination	Exhibit examined with a white light source. Ridge detail observed in Box B. If live casework, this mark would have been captured using the DCS camera system.
	Cyanoacrylate Fuming	Mason Vactron MVC5000 cabinet No. 4. Superglue batch No. 92869 (SURELOC CA5 #092869). 3.24g of superglue used. Auto cycle processing applied which undergoes a 15 minute fuming cycle. 120C superglue heating plate, RH range of 75-90% with an ambient cabinet temperature. Control test positive. If this was live casework, the back of the photograph would undergo paper treatments post SG, however as PT test displays the quadrant for mark development on the front, back not treated.
	Powder Dusting	Due to the background of the photograph creating poor contrast with the mark, Jet Black Magnetic Powder was applied to the front of the exhibit.
	Gel Lifting	The ridge detail developed in Box B was then lifted using a Black coloured Gel Lift (Scenesafe BVDA Gellifters). This was to allow the mark to be visualised without the interference from the background image on the exhibit.

Item 2 - Development Response Summary

Participants: 279

Methods Utilized

Alternate Light Source	130	Physical Developer	28
Cyanoacrylate Fuming	235	Powder Dusting	233
DFO	31	Visual Examination	232
Dye Stain	104	Wet Powder Suspension	5
Ninhydrin	70	1,2-Indanedione	42

****Note:** Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
23CFPM	DFO	6/17/20 DFO (Lot 19.2) and laser to half sheet of green copy paper. Processing time was approx. 20 min.
	Ninhydrin	6/17/20 Ninhydrin (Lot 19.5). Processing time was approx. 20 min.
24C69Y	1,2-Indanedione	
	Ninhydrin	
26KF63	Visual Examination	White light, daylight, 4X magnification lens
	Ninhydrin	Ninhydrin spry "NIN-PRINT" (B-78500, BVDA) + 21 C °, 8 h
293TPQ	Visual Examination	used flashlight, LASER, and UV
	DFO	visualized with LASER, waited 24 hours
	Ninhydrin	waited 24 hours
	Zinc Chloride	visualized with ALS, waited 24 hours
	Physical Developer (PD)	
2CJ3XN	Visual Examination	No RD noted in any quadrant.
	Alternate Light Source	Mini-Crimescope- all available wavelengths viewed. No RD noted in any quadrant.
	1,2-Indanedione	Sprayed and allowed to set overnight. RD noted in quadrant D. (Right loop pattern)
	Ninhydrin	Sprayed and allowed to set overnight in plastic bag for added humidity. No additional RD noted.
2CMHBN	Visual Examination	
	Ninhydrin	
	Time	development time
	Visual Examination	examined item at 8 days development time
	Time	development time
2M6742	Visual Examination	examined item at 27 days
	1,2-Indanedione	spraying Ind/Zn, developing time 20mins, Temp 85°C, rel. Humidity 65%, forensic light (450-570nm, orange filter)
2RUNFR	Ninhydrin	Sprayed with ninhydrin, allowed to dry 10 minutes Placed into ninhydrin chamber (80 degrees celsius, 65% humidity) for three minutes
2YVV2M	Ninhydrin	Sprayed with Ninhydrin.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
349ZCM	Visual Examination	Visualized using ambient light. No RD noted.
	Alternate Light Source	Mini Crime Scope (all wavelengths). No RD noted.
	1,2-Indanedione	Visualized with Mini Crime Scope 515 wavelength. RD noted in Section D - Unknown Pattern Type.
	Ninhydrin	Ninhydrin-HFE 7100 Add'l RD developed in Section D - Unknown Pattern Type.
393WZT	Powder Dusting	Utilized magnetic powder nothing located, sent to regional laboratory for further analysis.
3ADUBP	Visual Examination	
	Ninhydrin	Heat and Humidity 30 min
3B43BR	Visual Examination	Weak print
	1,2-Indanedione	Weak print
	Ninhydrin	Visible print
3DC78P	Ninhydrin	
3E674Z	Visual Examination	White light, oblique angles, magnification.
	Alternate Light Source	LASER (532nm), Blue Light (450nm), and UV light
	1,2-Indanedione	Placed into oven for approximately 15 minutes
	Visual Examination	White light, oblique angles, magnification
	Alternate Light Source	LASER (532nm) as a follow-up to IND
	Physical Developer (PD)	Maleic acid bath for approximately 15 minutes, PDV/Redox solution for approximately 15 minutes, initial water bath for approximately 5 minutes, and second water bath for approximately 5 minutes. Place on dryer for approximately 10 minutes. *Note: solution check was successful.
3GDAZW	Visual Examination	The samples were viewed under white light with magnification with no prints observed.
	Ninhydrin	The samples were completely submerged in a tray containing ninhydrin (batch# 297) briefly, allowed to dry in a fume hood, and then placed in the Caron chamber for approximately 35 minutes at 60 degrees Celsius with 60% humidity. The samples were then viewed under white light with magnification with a print observed in quadrant "D".
	Physical Developer (PD)	The samples were transferred to the Latent Print Unit for Physical Developer (PD) processing. PD processing was performed by Latent Print Technician [Analyst] on 06/25/20 using batch# 477. The samples were then transferred back into my custody where I viewed them under white light and magnification. No print enhancements were observed.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
3J4FGM	Alternate Light Source	455-515nm
	Ninhydrin	sprayed
	Visual Examination	oblique light
3JYZ4L	Visual Examination	Item 3 Green sheet of copy paper was marked in 4 quadrants A,B,C,D. No ridge detail was noted. This took a minute. A photograph was taken to show no ridge detail in any quadrant. Item 3 will be processed as Porous.
	Alternate Light Source	Viewed Item 3 paper with the Mini Crime Scope for inherent illumination using all wavelengths. There was no ridge detail illuminated in any quadrant. A photograph was taken of Item 3 at CSS NM just for illustrative purposes since no ridge detail was seen.
	1,2-Indanedione	Item 3 paper was then dipped in 1,2-Indanedione for about 10 seconds and allowed to dry in the fume hood. Approximately 15 minutes. Item 3 was then processed with a steam Iron and allowed to dry approximately 15 minutes. A test print on a separate piece of paper was processed in the same manner prior to processing the evidence. Test prints positive.
	Alternate Light Source	Item 3 paper and test print were then examined using the Mini Crime Scope at 515 NM with a orange filter. A fingerprint fluoresced in Quadrant D. The fingerprint was photographed with and without a scale. The test print fluoresced also. The core/center of the fingerprint in Quadrant D was smudged and I could not tell the pattern type.
	Ninhydrin	Item 3 paper was processed and very little ridge detail developed on the print in quadrant D. The print was photographed with and without a scale.
3KUNFQ	Visual Examination	
	Alternate Light Source	LASER
	1,2-Indanedione	10 minutes in humidity chamber
	Alternate Light Source	LASER
	Ninhydrin	10 minutes in humidity chamber
	Visual Examination	
	Physical Developer (PD)	10 minutes in water, 10 minutes in Malic acid, 15 minutes in PD
Visual Examination		
3P7LWP	Visual Examination	Side lighting with white light
	Alternate Light Source	Wavelengths 415nm, 450nm, 5050nm, & 530nm
	Ninhydrin	Acetone carrier, sprayed, Oven (~69 degrees C. for 20 minutes)

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
3PQ3CT	Visual Examination	No ridge detail observed during a visual examination using a Krimesite Imager.
	1,2-Indanedione	The item was treated with 1,2-Indanedione and allowed to air dry for 5 minutes. The item was placed in a fingerprint chamber at 100 degrees Celsius and zero percent humidity for 10 minutes. The item was removed from the chamber and allowed to cool for 3 minutes. The item was treated with Zinc Chloride and allowed to air dry for 5 minutes.
	Alternate Light Source	The item was examined with an alternate light source using 505nm light spectrum while wearing orange UV goggles. Ridge detail was observed in section D.
3QWUVT	Visual Examination	Item 3 was examined using normal and oblique lighting
	Ninhydrin	Item 3 was submerged in Ninhydrin (Novec) solution for 3-5 seconds, and air dried
3UYVWQ	Visual Examination	In daylight none fingerprint. In the light of the Polilight PL 500 (505 nm) illuminator visible fluorescence of several fingerprints in section D.
	DFO	A fingerprint has been disclosed, section D.
	Ninhydrin	Improvement in a fingerprint quality.
3WPW4Y	Visual Examination	
	Alternate Light Source	365,450,532
	1,2-Indanedione	
	Alternate Light Source	532nm
	Physical Developer (PD)	
3YRVER	Ninhydrin	Ninhydrin (2 treatments over approximately one hour time frame with iron as heat source).
4C2QDN	Visual Examination	No impression visible.
	Vacuum Metal Deposition Chamber - Gold/Zinc	No impression developed.
	Vacuum Metal Deposition Chamber - Silver	No impression developed.
	Iodine	Latent impression developed.
	Ninhydrin	Left to process overnight
	Indirect moist heat	
4E3ZXP	Ninhydrin	The control test and item was sprayed with ninhydrin technique from eight inches away, then it was left to air dry for 24hrs at temperature and humidity room condition. Only one print was observed on quadrant D.
4GQ3CQ	Ninhydrin	spraying the item with ninhydrin and letting it to be wet for couple of hours.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
4H34RX	Visual Examination Alternate Light Source 1,2-Indanedione Physical Developer (PD)	
4ZNL7R	Visual Examination Ninhydrin Physical Developer (PD)	Item was examined for any visual friction ridge detail using a magnifier and with significant light at various angles. Any friction ridge detail of value will be photographed prior to proceeding to the next step of processing. No prints were observed. Item was immersed in a small tray of solution in order for the items entire surface to be completely wet (approximately 5 seconds). Item was allowed to completely dry in a fume hood. Once the CARON chamber reached 60 degrees Celsius and 60 % humidity the item was placed inside for approximately 30 minutes and then visually examined. Friction ridge detail was observed but was very light. Item was placed back into the chamber for an additional 15 minutes. Item was then visually examined with magnification and white light again. A print was observed and was photographed for preservation. Processing was completed by Latent Print Technician [Analyst] on 07/15/2020, Batch # 478. Item was examined with magnification and white light there was no further enhancement.
63PT3P	Powder Dusting	Utilized magnetic powder. No print located.
6APBJM	Visual Examination Alternate Light Source Ninhydrin	Magnification, white light 340-530nm Acetone carrier, sprayed on. Let dry and applied heat/steam for ~5 minutes. Checked for further development the following day.
6ED3KN	Visual Examination Alternate Light Source DFO	100 degrees 20mins
6HJFA3	Visual Examination 1,2-Indanedione Ninhydrin	Heat press, Bright Beam laser exam (532nm/orange goggles) Steam iron, visual exam
6LVJYJ	Visual Examination Alternate Light Source Ninhydrin	Viewed with oblique light. Examined for indented writing with negative results. Viewed with Crimescope at 455-515nm. Stock solution made 7/5/19. Working solution made 7/16/20.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
6LWBWR	Visual Examination	w/Laser @ 532nm revealed slight florescence of FRD in section "D", documented with digital photography and OCB Filter.
	1,2-Indanedione	w/Laser @ 532nm revealed florescence FRD of value in section "D", documented with digital photography and OCB Filter.
6QR8FQ	Visual Examination	
	Ninhydrin	
6WZDF4	Visual Examination	
	[No Methods Reported.]	FSIS
	DFO	20 minutes; 100 degrees C
	[No Methods Reported.]	LASER
	Ninhydrin	20 minutes; 80 degrees F/ 80% RH
	Visual Examination	
6YQH7P	Powder Dusting	Utilized magnetic powder.
72MKBG	DFO	ALS Orange Filter 300-400, Ninhydrin
74WN6T	Visual Examination	
	Ninhydrin	
	Physical Developer (PD)	
76L47N	Visual Examination	white light and fluorescence examination 350nm - 650 nm.
	DFO	Item dipped in the liqiud, heated in oven for 15 min. at 95 C examine with light 505 nm.
	Ninhydrin	Item dipped in the liqiud, heated in oven for 15 min. at 75 C 65% Rh examine with white light.
79RFDP	Visual Examination	Visual examination under white light and magnification was completed on July 7, 2020. No prints were observed.
	Ninhydrin	Ninhydrin (batch #297) and processing in the CARON chamber (approximately 60 degrees Celsius/60% humidity) for 60 minutes was completed on July 8, 2020. Item was examined under white light and magnification. Print was observed in quadrant D.
	Physical Developer (PD)	Processing completed on July 15, 2020, by Latent Print Technician [Analyst], PD Batch# 478. Item was examined under white light and magnification on July 20, 2020. No prints were observed.
7BRRQG	Ninhydrin	item sprayed with Ninhydrin and left to dry. approximately 10 minutes. Used moist heat to accelerate the process. Impression visible

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
7FQ7FR	Visual Examination	Used white light and green light (532nm)/orange filter to look for patent prints. No patent prints were observed.
	1,2-Indanedione	Rinsed paper with Indanedione reagent, set in a 100 degree Celsius oven for 15 minutes, and used a green light (532nm) coupled with a curved orange filter and a FF-1.0 filter. Fluorescent latent prints were observed in quadrant D.
7PAKEN	Powder Dusting	Utilized magnetic powder and no print was located. Sent item to regional laboratory for further analysis.
7V2RWW	Visual Examination	No prints visible.
	1,2-Indanedione	Cabinet Nincha M31, temperature 90 degrees, humidity 65%, time 15 minutes.
83E4PN	Visual Examination	Oblique light
	DFO	DFO oven temp 100 degrees
	Ninhydrin	80 degrees with 70% humidity
	Oil Red O	ORO stain in shaker - then into buffer solution
87F6UR	Visual Examination	Using white light illumination and 10X magnification
	1,2-Indanedione	Using ALS at 515 nm with orange barrier filter
	Ninhydrin	Using white light illumination and 10X magnification
8C4WWT	Visual Examination	Visually examined with ambient and oblique lighting.
	Alternate Light Source	Visually examined with forensic light source with UV light (clear goggles) and 505nm wavelength (orange goggles).
	DFO	Processed using DFO and placed in Caron Development Chamber for approx. 15 mins at 100 degrees with no humidity.
	Alternate Light Source	Visually examined with forensic light source 505nm wavelength (orange goggles). Faint ridge detail observed in area "D" and photographed.
	Ninhydrin	Processed using Ninhydrin and placed in Caron Development Chamber for approx. 5 mins at 80 degrees and 65% humidity.
	Visual Examination	Visually examined with both ambient/oblique lighting and a forensic light source 505nm wavelength and orange filters. Photographed ridge detail in area "D" with ambient lighting.
8L76KQ	Visual Examination	No Print Visible
	DFO	DFO and Oven (Fisher Scientific Iso-Temp Oven - 100 Degree Celsius/10 minutes)
	Alternate Light Source	Faint print (No Ridge Detail) in Quadrant "D" (Rofin Polilight). Positive Test Print
	Ninhydrin	Ninhydrin (with steam Iron). Faint print (No Ridge Detail) in Quadrant "D". Positive Test Print

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
8M2RXU	Visual Examination Alternate Light Source 1,2-Indanedione Physical Developer (PD)	UV, LASER, and Blue Forensic Light Oven, Laser
8MNYLZ	Ninhydrin	Ninhydrin- Humidity oven ~40 minutes. Test print- Positive
8UMKBF	Ninhydrin	Liquid ninhydrin.
8WT74L	Visual Examination Ninhydrin	negative ridge detail observed One area of ridge detail developed
8YYN2G	DFO Ninhydrin	Dip in DFO, allow to dry, dip in DFO, allow to dry. Placed into a heating chamber at 100 degrees for 20 minutes. Used a LASER to search for ridge detail. Dip in Ninhydrin and allowed to dry. Placed into a heat and humidity chamber for 20 minutes.
923JJY	Visual Examination 1,2-Indanedione Ninhydrin	used normal lighting used heat press followed by Laser (Bright Beam) exam / 532nm / used orange goggles used steam iron - no enhancement of existing ridge detail from this step
9AU4GK	Visual Examination Ninhydrin	NATURAL LIGHT, WHITE LIGHT, PHOTOGRAPHY
9M3WXP	Visual Examination Ninhydrin Physical Developer (PD)	Examined under fluorescent light with magnification. No prints. Batch #296. Approx. 30 seconds in Ninhydrin. Approx. 30 min. in Caron Chamber. Prints were observed. Examined under fluorescent lighting. No enhancement of print, no new prints.
9NT4EF	Visual Examination Alternate Light Source DFO Ninhydrin	CrimeLite white TracER Laser/ PL500 20 minutes 5 days
9P8CMF	Visual Examination DFO Alternate Light Source Ninhydrin	Direct, Oblique, and ALS (inherent luminescence) lighting used. No friction ridge detail visible. Sprayed with DFO and allowed to dry. Item baked at 100 Degrees Celsius for 20 minutes. Viewed with ALS at 520 with orange glasses Item Sprayed and allowed to dry. Same developed with moist heat.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
9U2BVJ	Visual Examination	Exam with white light and LASER. no ridge detail.
	1,2-Indanedione	Exam with LASER. Latent print (L002) detected in Box D. L002 photographed with LASER. Bottle 2 dated 2/7/20. Performance check positive.
	Ninhydrin	Exam with white light. L002 developed but NIN did not improve clarity of L002. No additional photography. No additional latent prints detected. Bottle 2 dated 1/22/20. Performance check positive.
	Physical Developer (PD)	Exam with white light. No ridge detail detected. Bottle 12 dated 6/19/20. Performance check positive.
9UE4QL	DFO	I observed the evidence and documented it with photography. I then processed this item with DFO and then put it in the DFO oven for approximately 20 mins.
	Ninhydrin	After observing some area of latent evidence I then further processed this item with Ninhydrin.
9YU9NG	Visual Examination	No RD noted on Item 3 (A-D).
	Alternate Light Source	Inherent Luminescence- all wave lengths. No RD noted on Item 3 (A-D).
	1,2-Indanedione	(test print) Fragmentary RD noted on Item 3 (quadrant D). Pattern type cannot be determined. Alternate Light Source- Wave length- 515nm Photograph taken.
	Ninhydrin	(test print)- purple color change noted. Fragmentary RD noted on Item 3 (quadrant D). Pattern type cannot be determined. Photograph taken.
9ZLK8M	Visual Examination	Visual examination under white light and magnification on June 24, 2020. No prints were observed.
	Ninhydrin	Ninhydrin (batch #297) and processing in the CARON on July 16, 2020. Prints were observed on section D.
	Physical Developer (PD)	Physical Developer (batch #479) on July 22, 2020 by [Analyst]. No prints were observed.
A447DF	Visual Examination	Oblique lighting
	Alternate Light Source	455-515 nm (with orange goggles)
	Ninhydrin	Item dipped twice, followed by steam. Sample sat for several days
A9UGMD	Visual Examination	I looked at the green paper with ambient light.
	Ninhydrin	I applied two coats of ninhydrin to both sides of the green paper on 6/18/2020. On 6/23/2020, I observed possible ridge detail that had developed in quadrant D, however it was not of a recordable level. I applied steam to the green paper and further ridge detail developed in quadrant D.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
AGA6FU	Visual Examination Alternate Light Source 1,2-Indanedione	UV-, IR- and blue light with different filters.
AHK72T	Visual Examination Ninhydrin	Print was not visible. Cabinet: Labrum Klimat FKC-MK4, humidity 65%, temperature 72 Celsius, time 6 minutes.
AV99JK	DFO Ninhydrin Oil Red O	In oven at 100C for 20 mins In oven at 80C and 80% humidity for 20 mins Oil Red O with agitator for 15 mins
AXEP2P	Visual Examination Ninhydrin Physical Developer (PD)	Visual examination under white light and magnification. Ninhydrin batch #297. Item was immersed in a tray of solution until all surfaces were completely wet. Item was air dried thoroughly. Item was placed in the CARON chamber at 60 degrees F and 60% humidity for one (1) hour, checking after 30 minutes. Physical Developer batch #478. Processing completed by Latent Print Technician [Analyst].
AZ4VGF	Visual Examination Visual Examination Ninhydrin Heat	Used oblique lighting with a flashlight to look for visible prints or indented writing. Used Crimescope at 455-515nm to look for naturally fluorescing prints. Sprayed Ninhydrin working solution onto paper. Checked at 24 hours and saw some development of a print. Check at 48 hours and did not see any more development of the print. Used an iron to heat paper to try to better develop Ninhydrin print.
AZZF6E	Ninhydrin Physical Developer (PD)	Heat and humidity added via steam iron
B8ELEQ	Visual Examination Alternate Light Source 1,2-Indanedione Physical Developer (PD)	Conducted using natural & oblique lighting while holding the item at differing angles. 3 different Forensic Light Sources (FLS) were used: LASER (532nm), Blue (450nm) & UV (365nm). This method also includes looking at the item visually and using a LASER (532nm).

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
BLX7YK	Visual Examination	RUVIS
	DFO	20 minutes in oven at 100 degrees C
	Alternate Light Source	Red 515-555nm; red goggles and filter
	Ninhydrin	20 minutes in oven at dry bulb temperature 80 degrees C and wet bulb temperature 70 degrees C
	Visual Examination	Ambient light
	DFO	20 minutes in oven at 100 degrees C
	Alternate Light Source	Red 515-555nm; red goggles and filter
BQT3GJ	Visual Examination	Disclosing of a fingerprint. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white. The fingerprint is visible the best at the labeled wavelength 415 nm and 450 nm with yellow goggles.
	DFO	Improvement in fingerprint quality after use DFO. The fingerprint is visible in the light source 505 nm with orange goggles.
	Ninhydrin	Improvement in fingerprint quality after use Ninhydrin. The fingerprint is visible in the light white source.
BT27DF	Visual Examination	Visual inspection in white/room light
	DFO	Dye stained with DFO
	Ninhydrin	Dye stained with ninhydrin
BWXUUM	Visual Examination	Under different types of light
	1,2-Indanedione	200° F - 20 minutes
	Ninhydrin	room temperature - 48 h development
BZJJCE	Visual Examination	
	1,2-Indanedione	Zinc Chloride. Heat press ~160 degrees for 10 seconds. Laser exam at 532nm with orange barrier filter.
	Ninhydrin	Overnight development and heat/humidity from iron.
C6NJ7G	Visual Examination	
	DFO	20 minutes, 100 C
	Ninhydrin	30 minutes, 80 C, RH 65%
C8T8NT	Visual Examination	OMNIPRINT OP1000A
	Ninhydrin	Sirchie
C98PPD	Visual Examination	
	DFO	
	Ninhydrin	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
CBVAAM	DFO	1h30, 60 °C
CGHZVH	1,2-Indanedione	1,2 Indandione (100°C/10'/ Excitation wavelenght 495/ Viewing filter : orange) Then ninhydrine (RH 62%/80°C/5')
CGY6DG	Ninhydrin	I visually scanned the item and observed no latent print characteristics. The paper was immersed in petroleum ether ninhydrin, allowed to dry in the vent hood for a short time and placed in a plastic, zip top bag to continue to process. The bag was secured in the Firearm vault pending process completion. The evidence was removed on 06/22/2020 with a latent print having developed in the "D" quadrant.
CPC9EN	Visual Examination Alternate Light Source Ninhydrin Visual Examination	Used 505nm, 450nm, and UV with orange and clear glasses. Caron Development Chamber for 5min at 80 degrees and 65% humidity. Ridge detail observed.
CRGU9F	Visual Examination Ninhydrin Physical Developer (PD)	Examined with white light and magnification. Submerged in Ninhydrin, Batch #296, then air dried on 6/19/20. Placed in humidifying machine: CARON Examined with white light and magnification. Processed by LPT [Analyst] on 6/25/20, Batch #477. Examined with white light and magnification.
CRJJDD	Ninhydrin	6/23/2020: Ninhydrin Processing. Item placed into Humidity Chamber at 1615 hours with Humidity Control at 45.0%. Humidity Control back to 45.0% at 1629 hours. Item removed from Humidity Chamber at 1710 hours with Humidity Control at 48.6%. Humidity Chamber: Humidity Control set to 90%. Temperature Control set to 32.2 degrees Celsius. Ninhydrin (+) control - Lot #: 04162020, Exp: 4/16/2021
CTBJAN	Visual Examination DFO Ninhydrin	visual examination in daylight, the forensic light source Polilight PL 500 - white light, UV, entire range of wavelenght of light and filtros. The ridge detail was recovered. DFO - spray, DFO/Ninhydrin Development Control Chamber temp. 100C, 20 min., illuminator Polilight PL 500 - 505-530 nm, orange filter. The latent fingerprint was recovered. Ninhydrina - spray, DFO/Ninhydrin Development Control Chamber temp. 80C, 3 min., humidity 65%, visual examination in daylight, the forensic light source Polilight PL 500: white light. The latent fingerprint was recovered.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
D23D7L	Visual Examination	Visual Exam with room lighting and/or flashlight at an oblique angle. Item 3 was also examined Visually with green laser (532 nm) & orange goggles/filter and then with a blue laser (445 nm) & orange goggles/filter
	1,2-Indanedione	Item 3 was processed with 1,2-Indanedione-Zinc Chloride. Dry heat was applied using a heat press and the item was then viewed with the green laser (532 nm) & orange goggles/filter.
	Ninhydrin	Item 3 was processed with Ninhydrin and heat was applied with a steam iron.
D6X9KE	Visual Examination	
	Alternate Light Source	LASER, RUVIS
	1,2-Indanedione	humidity chamber 20 min
	Alternate Light Source	LASER
	Ninhydrin	humidity chamber 20 min
D9N3RF	Visual Examination	Item 3 is stored in a brown sealed envelope. Item 3 was observed to be a green sheet of paper with written on the front. The paper was divided into four sections marked A through D.
	Iodine fume	Item 3 was processed with an iodine fuming gun (DF2016), with the entire surface treated. A friction ridge patterns was developed in section D.
	Ninhydrin	Item 3 was processed with Ninhydrin (lot # 1546061219), and allowed to dry in a venting system, then subjected to a Ninhydrin heat and humidity chamber for a total of one hour. A fingerprint impression was further developed in section D.
DDDUUH	Ninhydrin	sprayed with ninhydrin for ten seconds, allowed to air-dry (no heat applied)
DHT9MH	Visual Examination	Examined under white light and magnification on June 19, 2020.
	Ninhydrin	Item was immersed in Ninhydrin batch#296 on June 19, 2020 for approximately 5 seconds and then was dried in a fume hood. Item was then placed in the Caron chamber for 60 minutes at 60% humidity and 60 degrees.
	Physical Developer (PD)	Physical developer batch#477 was completed on June 25, 2020 by LPT [Analyst]. Item was immersed in Maleic acid prewash for 10 minutes, then transferred to the physical developer tray and gently agitated and then transferred to the water rinse tray for approximately 10 minutes. Item then left to dry.
DNF3JF	Alternate Light Source	
	Ninhydrin	latent mark is in section D

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
DU86RL	Visual Examination	The items was visually examined using a white LED light source under magnification.
	Alternate Light Source	The item was examined for the presence of inherent luminescence using Crime Lite ML (460nm-510nm: Orange Filter) under magnification.
	Ninhydrin	The item was processed by immersing in a tray of Ninhydrin solution for approximately 5 seconds, the item was dried in a fume hood, and placed inside a Caron chamber for accelerated development. The conditions of the Caron chamber were set for 60 degrees Celsius and 60% relative humidity. The item was check for accelerated development at approximately 30 minutes. (No Prints were observed) The item was left in the Caron Chamber for an additional 30 minutes.
	Physical Developer (PD)	PD processing was completed by Latent Print Technician [Analyst] on July 15, 2020. The batch this item was completed under was batch number 478.
DVDVRA	Visual Examination	White light and fluorescence examination
	1,2-Indanedione	Processing time: 10 min Temperature: 99 C Rh: <20%
	Ninhydrin	Processing time: 2 min Temperature: 80 C Rh: 59%
	Physical Developer (PD)	Processing time in working solution: 35 min
DW9FE9	Ninhydrin	Green paper soaked in ninhydrin. Heat and moisture apply using steam iron, No prints were developed on the paper.
DWNJ8F	Visual Examination	Visually examined item with white light, LASER, and UV light.
	1,2-Indanedione	Applied 1,2-Indanedione to item and placed in humidity chamber. Examined item with white light and LASER.
	Ninhydrin	Applied Ninhydrin to the item and placed in humidity chamber. Examined item with white light.
E2XE7A	Visual Examination	Examined the item using ambient and oblique lighting with a flashlight.
	Ninhydrin	Latent impression L2 developed without application of heat and humidity during the drying phase. Placed in the oven (80 degrees Celsius and 65% humidity) for approximately 5 minutes to further develop but avoid over-development.
E3PF4K	Visual Examination	Item 3 was visually inspected for latent prints before processing.
	DFO	Then Dye stained with DFO, put in the oven at 100 degree C for 20 minutes. and viewed under a forensic Laser.
E922JK	Ninhydrin	Ninhydrin

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
EC38XP	Visual Examination	No ridge detail was observed.
	Ninhydrin	Item was checked after 3 hours. Ridge detail was visible in section "D", marked as L1 and photographed. Steam was applied to the developing latent impression, resulting in further development of ridge detail, which was photographed. After one week, the latent impression was photographed for a 3rd and final time after the latent had developed fully.
EDWX2H	Visual Examination	
	Alternate Light Source	Blue light 420-470 nm. Green light 490-560 nm. Some fluorescence was spotted in section D with the green light. No details were visible.
	1,2-Indanedione	The paper was dipped in the solution and left to dry for 5 minutes and then developed with a heat press at 165 degrees Celsius for 15 seconds.
	Ninhydrin	The paper was dipped in the solution and left to dry for 5 minutes then developed in a climate chamber at 80 degrees Celsius and 65% RH for 5 minutes.
EE73GR	Alternate Light Source	using florescent at 529 nm, print was observed in D section
	1,2-Indanedione	it was dipped in the solution for 10 min.
	Alternate Light Source	using florescent at 529 nm, no print was observed.
	Ninhydrin	fingerprint was clearly observed
EKVFHF	Powder Dusting	photographs, dusted paper with magnetic powder
EKVKTH	Visual Examination	White light source
	1,2-Indanedione	Processing time: 10 minutes, 100 degrees C
	Ninhydrin	Processing time: 2 minutes, 80 degrees C, 62% RH
ET7WW8	Visual Examination	Note page photographs taken.
	Ninhydrin	Heptane ninhydrin was applied. Let the paper dry for one hour.
	Caron chamber	Placed sheet of paper in Caron chamber for 10 minutes.
F38JLJ	Visual Examination	Examination with Superlite Lumatec (UV and visible spectrum), Coherent laser 532 and 577 nm.
	1,2-Indanedione	Immersion in the reactive solution then heating at 165°C during 10 s. Examination with green light (Coherent laser at 532 nm) and orange filter.
	Ninhydrin	Immersion in the reactive solution then stored during 48 hours in the dark (in a sealed plastique bag). Examination with with light.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
F438XM	Visual Examination Alternate Light Source 1,2-Indanedione Physical Developer (PD)	
F8F66A	Visual Examination 1,2-Indanedione Ninhydrin	Visual exam on Item 3, no ridge detail observed. Indanedione applied, LP3-1 located in quadrant D when viewed with laser at 532nm and orange barrier filter, photos taken. Ninhydrin applied, LP3-1 showed minimal improvements, additional photos taken.
FLZMXD	Powder Dusting	Volcanic, magnetic and fluorescent powders utilized, along with alternate light source. No latent prints found.
FPL6HJ	Ninhydrin	80 degrees Celsius. 75 percent humidity. 5 minutes. Caron Chamber. Lot#030420-01.
FPLAV8	Ninhydrin	
FUEDHJ	Visual Examination Ninhydrin	Sirchie Special Formula HT
G3KH8F	Visual Examination Ninhydrin Ninhydrin	Visually examined the item and did not observe ridge detail. Treated with DFO, allowed to dry, then placed in oven at 212 degrees for 20 minutes. Viewed with 455-495 nm light and orange filter. Faint ridges observed. Treated with ninhydrin allowed to air dry and process for approx. 40 hours. Ridge detail observed with white light.
G74MQB	1,2-Indanedione	Humidity 80%, 100 C, processing time 25 minutes
G8VNNL	Visual Examination Ninhydrin	No visible print. Cabinet: NINcha M31, temperature 72 Celsius, humidity 65%, time 7 minutes
G9BRHD	Ninhydrin	A control test was performed prior processing the item for ninhydrin solution verification. Verification passed. The item was sprayed uniformly with ninhydrin solution and air dried.
GANCC9	Visual Examination Ninhydrin	Hexane solution Humidity chamber processing time of 20 min at 70% humidity and 70 degrees
GAP6BG	Visual Examination DFO Ninhydrin	Visual exam with various types of lighting including ALS 20 mins in chamber Approx 2 hours room temp to develop

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
GJP6DM	Ninhydrin	40 minutes of processing time
GLZR9F	Visual Examination	green light, blue light and visual light
	1,2-Indanedione	10 minutes
	Ninhydrin	2 minutes
GNKYBN	Visual Examination	No ridge detail was visible
	Ninhydrin	Ridge detail was visible
GPGACJ	Visual Examination	Visual examination conducted on Item #3 to detect ridge development
	Photograph	A photograph was taken of submitted Item #3
	Ninhydrin	Submitted Item #3 was placed in metal tray after which Ninhydrin, Lot #A0387670D-1 Exp. 4/2021, was added to develop fingerprint.
	Photograph	Photograph was then taken of fingerprint located in Area "D".
GR972C	Visual Examination	
	Ninhydrin	
	Physical Developer (PD)	
GTZ7YN	Visual Examination	Viewed with oblique lighting
	Alternate Light Source	Viewed at various wavelengths for inherent luminescence
	Iodine Crystals	Item 3 was placed in a zip top bag with approximately 1/2 teaspoon of iodine crystals. Fumes were passed over the evidence and no development of friction ridge detail was observed.
	Ninhydrin	Item 3 was placed into a tray of Ninhydrin, allowed to dry, then introduced heat and humidity.
GXAF86	Visual Examination	Used white light and magnifier to view item
	Ninhydrin	Used non-running ninhydrin. Applied to paper using rinse bottle, allowed to dry. Placed item in Caron chamber at 80 degrees Celsius and 65% relative humidity for approximately 10 minutes.
H8EUMC	Powder Dusting	I dusted the item with magnetic powder and failed to develop latent fingerprints.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
H8EYXE	Visual Examination	Initial examination with white light and light source, blue and green light. No visible fingerprint. The item was photographed before the next development method (the method could destroy the text).
	1,2-Indanedione	Indandion 100 degrees C, 10 min. Teststrip positive. Indandion 100 degrees C, 10 min. Item green copy paper. A fingerprint was visible in section D. Not very clear in the middle of the print but although a loop. The item was kept in a dark place after the development with Indandion before it was photographed.
	Photography	The fingerprint was photographed.
	Ninhydrin	Ninhydrin 80 degrees C, 62% humidity, 2 min. Teststrip positive. Ninhydrin 80 degrees C, 62% humidity, 2 min. Item green copy paper. A fingerprint was still visible in section D. But not improved after this method. No photograph.
HAKCL8	Ninhydrin	ninhydrin was applied to evidence and allowed to dry. Once dry, moist heat was applied to develop the latent print.
HC698C	Ninhydrin	Ninhydrin spraying process, storage in the climatic chamber at 26°C, humidity 65% RH for 3 hours
HERXDB	Visual Examination	1. White Light/Naked eye. 2. Blue Light (445 nm) with goggle (495 nm). 3. Green Light (532 nm) with goggle (550 nm). No Mark found.
	1,2-Indanedione	Sprayed with 1,2 Indanedione, kept in Oven for 20 mins to dry at 100C temperature, with 0% humidity. After 20 mins, Mark search was done by using 532nm light (green) with goggle (550nm), Mark found on Section D.
	Ninhydrin	Sprayed with Ninhydrin, kept in Oven for 20 mins to dry at 80C temperature, with 65% humidity. After 20 mins, Mark search was done by using Naked eye and White light, no additional mark found
HF9U7B	Visual Examination	
	Alternate Light Source	365nm, CSS, 495nm, 505nm
	Alternate Light Source	Laser-532nm
	1,2-Indanedione-Zinc Chloride	20 minutes in humidity chamber within range of set points: temperature set point 70C and RH set point 65%RH

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
HUQMUG	Visual Examination	Examined the piece of green paper with typed writing as is using ambient light, flashlight, UV (ultraviolet) light, Laser, and ALS (alternate light source)
	DFO	Dipped the item twice in DFO, let it dry for a few seconds, then put it in the oven (100°C) for about 20 minutes. Examined under Laser.
	Ninhydrin	Dipped the item in Ninhydrin, let it dry for a few seconds, then put it in the humidity chamber (70°C) for about 10 minutes or until the latent impression turns Ruhemman's Purple.
	Zinc Chloride	Sprayed item with Zinc Chloride. Examined under ALS.
	Physical Developer (PD)	Dipped item in Maleic Acid first for about 5 minutes, and then dipped the item into PD for 20 minutes. Let it dry under lights.
HVKH9D	Visual Examination	I VISUALLY EXAMINED THE PAPER USING NATURAL LIGHT AND WHITE CRIMELITE FOR POSSIBLE AREAS OF RIDGE DETAIL IN A CONTAMINANT. - THIS PROVED NEGATIVE.
	ESDA	I SUBJECTED THE PIECE OF PAPER TO A NON DESTRUCTIVE PROCESS OF ELECTROSTATIC DETECTION APPARATUS USING TONER BATCH#A49/02 AFTER TESTING A CONTROL SAMPLE PIECE OF PAPER TO PROVE THE MACHINE FUNCTIONED CORRECTLY. I ENHANCED AN AREA OF RIDGE DETAIL IN QUADRANT D.
	1,2-Indanedione	A CONTROL SAMPLE AND THE PIECE OF PAPER WAS PLACED INTO A TROUGH WITH A SOLUTION OF 1,2 INDANDIONE SOLUTION (BATCH#20FEL008, THIS WAS ALLOWED TO DRY ON A FLAT SURFACE AND THEN PLACED INTO A WEISS GALLENCAMP OVEN#1 FOR 10 MINS AT A TEMPERATURE OF 100C WITHOUT ANY HUMIDITY.
	Ninhydrin	A CONTROL SAMPLE AND THE PIECE OF PAPER WAS PLACED INTO A TROUGH WITH A SOLUTION OF NINHYDRIN (BATCH 143121, THIS WAS ALLOWED TO DRY ON A FLAT SURFACE AND THEN PLACED INTO A WEISS GALLENCAMP OVEN#3 FOR 6MINS AT A TEMPERATURE OF 80C AND A RELATIVE HUMIDTY OF 62%. AN AREA OF RIDGE DETAIL WAS ENHANCED IN QUADRANT D.
HY4MQ9	Visual Examination	visual -> negRD (negative ridge detail)
	Ninhydrin	NinhydrinHT used in CARON chamber (80degrees F, 5mins, 65% humidity) visual -> RD latent 3A in quadrant D
HZF678	Ninhydrin	Processing time = approximately 30 mins. Humidity chamber at 32.2 degrees Celsius at 90% humidity. Ninhydrin positive control tested +. Lot #04162020 Exp 04/16/2021

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
J4BB4A	Visual Examination	After photographing the piece of evidence identified with the number three, we proceeded with alternating light (white light) to verify if there was a possible fingerprint on the green piece of paper, finding a possible fingerprint in the space marked with the letter "D".
	Ninhydrin	Following the procedure of the [Laboratory] with number [Number] indicates that the method to be used for the development of the fingerprint is Ninhydrin, in an open area the Ninhydrin was sprayed onto the green paper, the paper was subsequently placed in an area ventilated and under the sun to dry it. After drying the paper, the fingerprint was found in the box with the letter "D". The fingerprint was photographed. A ruler was used when photographing the fingerprint.
J7JLZD	Visual Examination	Vial Examination using ambient light in room.
	1,2-Indanedione	Indanedione was applied to the paper with a mist spray, placed in an oven at 100 degrees for 10 minutes. A control was not necessary, as the result of the reagent was previously tested on item 2 on the same day. The paper was viewed under a Laser at 445nm and 532nm and wearing orange viewing goggles.
J96C2H	Visual Examination	
	Alternate Light Source	532nm, 450nm, 365nm
	1,2-Indanedione	VIS, 532nm
	Physical Developer (PD)	
JDZ726	Ninhydrin	Evidence sprayed, moist heat applied with iron
JH63K6	Visual Examination	Mini-Crimescope White light
	Alternate Light Source	Mini-Crimescope - all wavelengths available
	1,2-Indanedione	1,2-indanedione-zinc, viewed with TracER laser (532 nm) (test print processed concurrently) (photograph taken)
	Ninhydrin	Ninhydrin-HFE, viewed with white light (test print processed concurrently)
JHR7J7	Ninhydrin	Visual examination, ninhydrin, photograph, time 06/19/20. Visual examination, photograph, time 06/23/20. Visual examination 06/29/20.
JKX3HF	DFO	DFO, developed in an oven at 100 degree for 20 minutes. Viewed with Forensic Laser
JM3NAM	Ninhydrin	Ninhydrin (Acetone base) and Caron Product & Service inc (6105-3 s/n 021313-6105-3-245)

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
JNWCV3	Visual Examination	Item 3 Green Copy Paper - Ambient light, no visible FRD.
	Alternate Light Source	Item 3 Green Copy Paper - Crimelite ML2, no fluorescent FRD, no inherent fluorescence using green/blue light and orange filter.
	Ninhydrin	Item 3 Green Copy Paper - Dipped in Ninhydrin petroleum ether placed in environmental chamber FDC060 at 80 degrees C and 65% relative humidity for 7 mins. Development of dark purple ridges was achieved in 7 mins so item was removed after full development.
	Visual Examination	Item 3 Green Copy Paper - Post Nin - ambient light - Appreciable FRD developed in quadrant D, will image capture.
JYFJWD	Visual Examination	Overhead light was used. Control test not applicable. No ridge structure was observed.
	Alternate Light Source	LabKam that emits 254 nm of light was used. Control test not applicable. No ridge structure was observed.
	1,2-Indanedione	Control test was positive. A heat press set to approximately 165 degrees Celsius was applied for approximately 10 seconds. Results were not viewed until following step.
	Alternate Light Source	Crimescope was used at a wavelength of 495 nm with orange goggles/camera lens. Control test not applicable. Ridge structure of no collection value was observed in quadrant D. Digital photography was used for collection.
	Ninhydrin	Control test was positive. A humidity chamber set to 80 degrees Celsius and 70 percent humidity was used. The item was processed for approximately 10 minutes once settings were reached. Ridge structure of collection value was observed in quadrant D. Digital photography was used for collection. No additional ridge structure was observed after 48 hour wait.
K46JMD	Visual Examination	white light
	Alternate Light Source	UV, VIS
	DFO	CAST solution, 100 Celsius degree, 20 minutes - fingerprint section D
	Ninhydrin	CAST solution, 80 Celsius degree, 62% Relative Humidity
KE74P7	Visual Examination	Item visually examined.
	Alternate Light Source	Examined item on various settings using CrimeScope
	Ninhydrin	item immersed & allowed to air dry; item placed in zippered plastic bag for 24 hours; steam ironed item.
KMGBLA	Powder Dusting	Utilized a magnetic powder to examine paper, no latent prints were developed.
KUYJA7	Ninhydrin	Liquid Ninhydrin

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
KVU7MA	Visual Examination	Polilight PL500
	DFO	temp-100°C t-10 min
	Ninhydrin	temp-55°C RH-60% t-60 min
L2TBTJ	Visual Examination	by sight
	Ninhydrin	by sight; allowed to set overnight for possible further development
	Powder Dusting	mag powder used
L4ZLR9	Visual Examination	No detail - no latent located
	Powder Dusting	Used black magnetic powder - no latent located
	Alternate Light Source	Used numerous alternative light sources and could not locate a latent
	Ninhydrin	Sprayed with ninhydrin, then placed into chamber @ 80 degrees celcius, 65% RH, @ 3 minutes - latent located in letter "D"
L7822Z	Visual Examination	I performed a visual examination with natural and oblique lighting.
	Ninhydrin	After performing a quality control, I applied running ninhydrin to the item using a squirt bottle. After soaking the item, I hung the item up in the fume hood to dry. I then placed the item into the Caron chamber at a set temperature of 80 degrees Fahrenheit and 65% humidity. After approximately 4 minutes, I began to see ridge detail develop. I left the item in the chamber for approximately 8 minutes after noticing the ridge detail was not developing any further.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
LBHWYH	Visual Examination	White light examination of exhibit as received using ambient laboratory lighting and 'Tiablo' High Power LED Flashlight at varying angles. No useful marks were visible.
	Alternate Light Source	Sequential initial High Intensity Light Source (HILS) examination carried out, following dark adaptation, using Green Crime Lite 490nm-560nm with 571 nm viewing filter followed by Blue Crime Lite 420nm-470nm with 476nm viewing filter and UV Crime Lite 350nm- 380nm with 408nm viewing filter. QA adhered to and control test pieces passed. No useful marks were visible.
	DFO	Carried out as per [Organization] validated/internally verified procedure. Treated with DFO, allowed to dry, and then placed in oven for 20 minutes at 100°C. Following dark adaptation, examined using Green Crime Lite 82S 490-560nm with 571 nm viewing filter and magnifying eyeglass where required. QA adhered to throughout and control test piece passed. Ridge detail was observed in section D. This was exhibited as GJM/2 and photographed.
	Ninhydrin	Carried out as per [Organization] validated/internally verified procedure. Treated with Ninhydrin and allowed to dry. Treated in oven set at 62%RH & 80°C for 7 minutes. Examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles. QA adhered to and control test piece passed. GJM/2 was further enhanced and exhibited as GJM/2AO. This was photographed.
	Physical Developer (PD)	Carried out as per [Organization] validated/internally verified procedure. Ensured all solutions and room temperature > 17°C. Pre-treated with Maleic Acid for 10 minutes, treated with Physical Developer Working Solution for 20 minutes followed by 3 x water rinses as per procedure. All treatment stages carried out on rockers so exhibit was constantly agitated throughout. When dry, item was examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles. QA adhered to and control test piece passed. No further enhancements were developed.
LBM9ME	Visual Examination	White light, UV light and lighting at 445-510 nm
	1,2-Indanedione	After spraying and drying, placing in an oven at 100 °C for 20 minutes. Observation with 460-510 nm lighting.
	Ninhydrin	After spraying and drying, placing in an oven at room temperature for 24 hours. White light observation.
LJEQY2	DFO	I conducted a visual exam and photographed the item. I then processed the item with DFO and placed it into our DFO oven at 200 degrees fahrenheit for approximately 20 minutes. Test print/control shows chemical to be working appropriately
	Ninhydrin	After observing a small area of friction ridge detail I further processed the item with Ninhydrin. Test print/control shows chemical to be working appropriately

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
LMYJB4	Ninhydrin	Positive control was created on white paper. Humidity chamber temperature was set to 32.2 degrees with 90% humidity. Control placed in humidity chamber when settings were met. Positive reaction (print development) on the control after 20 minutes. Ninhydrin applied to the item with a spray bottle, and item was allowed to dry prior to placing in the humidity chamber. Item remained in chamber for 30 minutes, was removed and transferred to a temporary holding locker for 48 hours. Re-examined for latent fingerprint development at this time.
LN8VQK	Visual Examination	
	DFO	Temperature 90°C, Humidification 10%, time 10 minutes.
	Ninhydrin	Temperature 60°C, Humidification 65%, time 30 minutes.
LVP7YE	Visual Examination	different light sources and filters
	DFO	spray, temp. 90 C, time 10 min, 505-530 light, orange filters
	Ninhydrin	spray, temp. 80 C, time 10 min, humidity 65 %, time 7 min, natural and white light (Chamber Nincha S31)
M3JQK8	Powder Dusting	Photographed and utilized magnetic powder. No latent image recovered. Repackaged and sent to regional laboratory for further analysis.
M3M9MC	Visual Examination	Using UV light, LASER, and ALS
	DFO	
	Ninhydrin	
	Zinc Chloride	
	Physical Developer (PD)	
M8EF7K	Visual Examination	21/06/2020 @ 10:15 am using white light for examination
	DFO	21/06/2020 @ 10:20 am: Treated with DFO and let to dry completely. 21/06/2020 @ 10:40 am: Used humidity chamber to develop @ 100 C. Green light used for examination
	Ninhydrin	22/06/2020 @ 10:30 am: Treated with Ninhydrin and let to dry completely. 22/06/2020 @ 10:50 am: Used humidity chamber to develop @ 75 C & 65 RH. White light used for examination
M9PHU6	Visual Examination	Processing Date: 7/22/2020. Control: N/A
	Alternate Light Source	Processing Date: 7/22/2020. Control: N/A
	DFO	Processing Date: 7/24/2020. Control: Pos.
	Ninhydrin	Processing Date: 7/24/2020. Control: Pos.
	Silver Nitrate	Processing Date: 7/24/2020. Control: Pos.
MCA8F3	Ninhydrin	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
MECCNG	Visual Examination	Direct white light; fluorescence verification at wave lengths 495, 515, 535 nm.
	1,2-Indanedione	Hot press treatment = 10seconds; temperature = 165°C
	Ninhydrin	Relative humidity=80%; temperature=25°C; exposure time=24 hours.
MJBQC7	Powder Dusting	Volcanic, magnetic, and fluorescent powders used. Light and alternate light sources utilized. No prints found.
MK9UC9	Visual Examination	Item was examined under white light and magnification.
	Alternate Light Source	Item was examined using Foster + Freeman Crime Lite ML2 with a 420nm-470nm bandwidth filter and an orange barrier.
	Ninhydrin	Item was treated with Ninhydrin batch #296 and processed in the CARON at 60 degrees F with 60% humidity for 45 minutes.
	Physical Developer (PD)	Item was treated with Physical Developer batch #477. Item was soaked in Maleic Acid solution for 10 minutes, soaked in Physical Developer for 10 minutes and then rinsed for 10 minutes.
MQTVPZ	Visual Examination	
	Ninhydrin	Used Heptane Ninhydrin.
	CARON development chamber	Developed in Caron chamber for 10 minutes.
MRNFCZ	Ninhydrin	Item processed with wet chemical. Allowed to air dry. A heat / humidity source applied. Latent print developed.
MRP9B8	Visual Examination	
	Ninhydrin	Aerosol ninhydrin, let dry hanging in hood overnight.
MWZLR7	Visual Examination	room lighting
	1,2-Indanedione	Wetted with 1,2-Indanedione/ZnCl solution, dried, and then placed under 320F for 10 seconds. Print visible under room light, visualized under 505nm light with orange filter, no other print seen.
N2PHU3	Visual Examination	No latents visible on visual examination.
	Ninhydrin	Ninhydrin dip method, control +, Lot#LININ030329, processing time of 30 minutes in humidity chamber, one latent print found in quadrant D.
NAL3EH	[No Methods Reported.]	1-Iodine. 2- Ninhydrin-- Spray. 3- heat source. 4-Magnetic Powder. total processing time 30 minutes

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
NBCGK8	Visual Examination	No control. Bright light was used. No ridge structure observed. No collection method used.
	1,2-Indanedione	320 degrees F on a heat press for 20 seconds. Positive control. No ridge structure observed. No collection method used.
	Alternate Light Source	Alternate light source - Crimescope at 515 nm with orange goggles. Positive control under Crimescope. One latent print of collection value observed in "Box D". Collection method - Digital photography with an orange filter.
	Ninhydrin	80 degrees Celsius, ~80% humidity, for 4 minutes in a humidity chamber. Positive control. Ridge structure not of collection value in "Box D". Collection method - Digital photography.
	Ninhydrin	48 hour wait to check. Ninhydrin results again. Ridge structure not of collection value. No collection method used.
NCRF3C	Ninhydrin	immersion
	Steam Iron	
ND668A	Visual Examination	White light and magnification, no prints observed.
	Ninhydrin	Processed with ninhydrin and then air dried. Further processing in the caron chamber for about 45 minutes. Print developed in section D
	Physical Developer (PD)	Item processed with Physical Developer and then air dried (malaeic acid wash 10 minutes, physical developer 10 minutes, water rinse 10 minutes and then air dried). No prints.
NF8BHA	Visual Examination	Examined with white light
	Alternate Light Source	Inherent fluorescence examination with Coherent TracER
	Iodine	Iodine fuming wand
	DFO	100°f, 10 minutes, in Caron 6105 Fingerprint Development Chamber
	Alternate Light Source	DFO fluorescence examination with Coherent TracER
	Ninhydrin	80°f, 65% RH, visually monitored development, in Caron 6105 Fingerprint Development Chamber
NKM79	Visual Examination	Visual examination conducted with bright light source and magnification.
	1,2-Indanedione	Item processed with 1,2-Indanedione and developed using a heat press at 160 degrees C for 10 seconds. Positive control was developed.
	Alternate Light Source	Item was visualized at 515nm with orange goggles. Positive control was observed. Ridge structure of value observed.
	Ninhydrin	Item was processed with Ninhydrin and developed in the chamber at 80 degrees C with 80% humidity for 10 minutes. Positive control was developed. Ninhydrin was observed 48hrs after processing for further development.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
NLVNA	Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 06/07/2020.
	1,2-Indanedione	+ zinc chloride. Immersion of the whole item. Dry heat press at 165°C for 10 seconds. Date analyzed : 06/07/2020.
	Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 06/07/2020.
	Ninhydrin	Immersion of the whole item. 48 h development : in the dark, at room temperature (22°C), with a relative humidity of 64 %. Date analyzed : 06/07/2020
	Visual Examination	Visual examination (visible reflection + fluorescence). Room temperature = 22°C. Relative humidity = 60 %. Date analyzed : 13/07/2020.
P8Q4B4	Visual Examination	
	Alternate Light Source	
	DFO	(200°F ± 5°, Ambient Relative Humidity)(535nm, Red Filter)
	Ninhydrin	(80°C ± 5°, 65% Relative Humidity ± 5%, 3 min.)(Green Filter)
PDWRVX	DFO	415-445 ALS
	Ninhydrin	
PF26W6	Visual Examination	
	Alternate Light Source	
	Iodine	
	Ninhydrin	(80°C ± 5°, 65% Relative Humidity ± 5%, 3 min.)

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
PGGK7Z	Visual Examination	Used ambient lighting.
	Alternate Light Source	Examined item with a Rofin Polilight PL500 at UV with clear goggles.
	DFO	The paper was saturated by dipping it in DFO working solution. Once removed, the item was allowed to dry in a fume hood at room temperature before placing it into an oven set for 100 degrees Celcius for 20 minutes.
	Alternate Light Source	Examined item with a Rofin Polilight PL500 at 505nm and 530nm with orange goggles.
	Ninhydrin	The paper was saturated with Ninhydrin working solution by use of a squirt/wash bottle. The item was allowed to dry in a fume hood at room temperature before being subjected to steam and heat from an iron. The item was then stored in a dark and secure location for at least 24 hours before an examination was performed.
	Visual Examination	Used a flashlight with white light and ambient lighting.
	Oil Red O	The paper was immersed in a bath of Oil Red O stain solution for 90 minutes. After the stain solution was drained off of the item, it was immersed in a buffer solution for 5 minutes. After the buffer solution, the item was immersed in water, and then allowed to completely dry before an examination was performed.
	Visual Examination	Used ambient lighting.
	Physical Developer	The paper was immersed in a maleic acid wash pre-treatment for 10 minutes. The paper was then immersed in Physical Developer working solution for approximately 5 minutes and continuously agitated with a bench rocker. The paper was then rinsed with water and allowed to air dry before an examination was performed.
	Visual Examination	Used ambient lighting.
PLC73A	Visual Examination	
	DFO	20 minutes in chamber. 100C with no humidity.
	Ninhydrin	10 minutes in chamber. 70C and 65% humidity.
PX2B4E	Visual Examination	Light: UV, white, green, blue/green Lens: red, yellow, orange
	1,2-Indanedione	Temperature: 65°C/ Time: 30 minutes / Humidity: 65
	Visual Examination	Light: UV, green Lens: red, orange, red
PX7MRA	Visual Examination	Polarising filters, colored lights and filters, low angled enlightments.
	1,2-Indanedione	Spray solution, then use hot press for 10 seconds at 165°C and observation of results in luminescence. (with 515nm light and 570 blocking filter)
	Ninhydrin	With HFE-7100 solvent. 12 to 15 hours processing in a obscur and humid environment.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
PXPB96	Powder Dusting	No latent fingerprint developed using magnetic powder.
PYCCRX	Ninhydrin	
Q87MV2	Visual Examination 1,2-Indanedione Ninhydrin	Visual using the naked eye - no detail observed IND sample was positive, humidity chamber - detail of potential value for comparison observed NIN sample was positive, humidity chamber - no detail of potential value for comparison observed
QKAZWY	Ninhydrin Steam heat	Nin-print Steam iron
QP7MR9	Visual Examination DFO Ninhydrin Zinc Chloride Physical Developer (PD)	Visual exam using oblique lighting, Laser light, and UV light. Dipped in DFO, dried, placed in the oven for approximately 15 minutes. visualized with a Laser. waited 24 hours before the next chemical. Dipped in Ninhydrin, dried, placed in a humidity chamber at 70% humidity and 70 degrees for approximately 10 minutes. waited 24 hours before the next chemical. Sprayed Zinc Chloride on the item and placed in a humidity chamber at 70% humidity and 70 degrees for approximately 10 minutes. visualized with the ALS. waited 24 hours before the next chemical. Maleic Prewash for approximately 5 minutes, PD solution for approximately 15 minutes, rinsed with water and allowed to dry.
QPQ9KY	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin	Mini-Crimescope was utilized; all wavelengths. Humidity chamber was utilized to aid development. Evidence was then viewed using Mini-Crimescope at 515nm. Humidity chamber was utilized to aid development.
QTPF6W	Visual Examination Ninhydrin	Visual examination with white light. Sprayed the item with Non-running Ninhydrin. Let it air dry then placed the item in the oven at 80 degrees with 65% humidity for approximately 10 minutes.
R2DWT4	Visual Examination DFO Ninhydrin Oil Red O	Laser and orange goggles 100C, 20 minutes, Laser and orange goggles 80C and 70% humidity, 20 minutes 1 hour
R434BE	Ninhydrin	I processed item 003 with Ninhydrin and secured it in an evidence locker to develop. Ridge detail was observed in box D on item 003.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
R6WRVV	Ninhydrin	Dipped the half sheet of paper in the ninhydrin liquid for approximately 10 seconds
R9W4RV	Ninhydrin	One piece of green paper processed with liquid ninhydrin by squeeze bottle until the paper was wet about 10 seconds. Paper then hung in in fuming hood to air dry 10 minutes. Hand steam iron used for humidity held approximately 4 inches away from evidence that had a piece of brown craft paper over it to protect it. Processed time with steam iron about 30 seconds.
R9ZH6V	Visual Examination	No visible prints observed.
	Ninhydrin	Heptane ninhydrin was applied and allowed to dry. Scan of item was taken after drying period (did not want to over develop with chamber.
	Caron Fingerprint Development Chamber	The evidence was placed in the Caron Fingerprint Development Chamber for a period of 10 minutes at a temperature of 80 degrees Celsius and 65% relative humidity. (No additional prints developed - another scan not taken).
RCAZWW	Ninhydrin	Positive control. Humidity chamber set to 80% for 30 minutes, followed by 24 hours in secured locker
RCW8K4	Visual Examination	(-) result
	Powder Dusting	Standard Black Powder, (-) result
	Alternate Light Source	(-) result, 415, 450, 470, 490
	Ninhydrin	(+) result; 80 degree C, 65%RH, 5 minutes
RD32U9	Visual Examination	
	Alternate Light Source	
	Iodine fuming	
	Ninhydrin	
RE2ZE2	Ninhydrin	
RXY6X4	Visual Examination	No latent prints observed.
	Ninhydrin	No latent prints observed.
	Heat/humidity	Heat/humidity applied. 80 degrees Celsius and 65% humidity for 3 minutes. Enhancement observed, UL, latent print photographed.
T2CEAY	DFO	Visual examination (000-590nm); photography; 100 °c

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
T2U7L4	Visual Examination	White light
	Alternate Light Source	poly light 440-520nm
	1,2-Indanedione	520nm
	Ninhydrin	
T6W8L2	Visual Examination	unaided visual exam = no visible ridge detail
	Ninhydrin	porous development (72 hours) (Test print: C+B-)
T6YWU6	Visual Examination	White light and ALS
	DFO	Two applications of DFO, 20 minutes in dry oven at 100 C. Evaluated after removing from oven and 24 hours later
	Ninhydrin	Two applications of Ninhydrin.
T8KNXU	Visual Examination	direct and Oblique Lighting
	Alternate Light Source	ALS Frequency 450- inherent florescence
	DFO	Heat Oven to 212 Celsius, treat item with DFO. Heat in DFO Oven for 25 minutes at 212 Celsius, according to manufactures instructions.
	Alternate Light Source	ALS Frequency 520 with orange filter
Ninhydrin	Saturate item with ninhydrin solution.	
	TBZBAE	Visual Examination
Ninhydrin	ridge detail observed	
	TD2E22	Visual Examination
DFO		processing time - 20 minutes, temperature - 95 degree Celsius
Visual Examination		495 - 530 nm, orange coloured google
Ninhydrin		processing time - 3 hours, humidity - 70%, temperature 25 - 30 degree Celsius
Visual Examination		white light
TKJPAV	Visual Examination	
	Iodine fuming	
	Ninhydrin	
TKN6MW	Visual Examination	Laser and flashlight used
	DFO	Laser used along with filter
	Ninhydrin	Two days

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
TLECMY	Visual Examination	Visually examined with no results
	1,2-Indanedione	Processed using indanedione, and recovered a latent print...after applying dry head from an iron.
	[No Methods Reported.]	I used a dry iron to process the indanedione.
TLWG6X	DFO	Stained with DFO, oven dried
	Ninhydrin	
TR9ZT7	Visual Examination	
	Ninhydrin	Batch 296. Doused in NIN, allowed to air dry for 30 minutes. CARON chamber for approximately 40 minutes.
	Physical Developer (PD)	Batch number 477. Processed by LPT [Analyst].
TVPE9Z	Ninhydrin	
TWEXX6	Visual Examination	Used TracER Laser with orange goggles and Crimescope CS-16-500 with orange, red and yellow goggles to look for inherent fluorescence.
	1,2-Indanedione	Sprayed indanedione on item and placed in oven for approximately 20 minutes. Viewed with TracER Laser (532nm) and orange goggles
	Ninhydrin	Sprayed ninhydrin on item and used steam iron to develop friction ridge detail. Examined with white light.
TXU3RW	Visual Examination	Direct and oblique lighting
	1,2-Indanedione	With Zinc Chloride Heat Press applied @~163 Celsius for ~ 10 seconds Used Laser @ 532 nm with orange barrier filter for exam
	Ninhydrin	Steam iron Followed by visual exam
U7YPW2	Visual Examination	No ridge structure
	1,2-Indanedione	Control test positive. Indanedione specifications: heat press set at 160 degrees Celsius, evidence pressed for 10 seconds (in between two pieces of white printer paper)
	Alternate Light Source	Crime scope, 505 nm, orange goggles. Ridge structure - collection value. Collected with digital photography
	Ninhydrin	Ninhydrin (hexanes), control test positive. Ridge structure - no collection value. Not collected. Ninhydrin specifications: Caron humidity chamber set to 80 degrees Celsius and 60% relative humidity, placed in chamber for approximately 30-60 seconds.
	Ninhydrin	Ninhydrin 48 hour check. Ridge structure - no collection value. Not collected.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
U9RDJ4	Visual Examination	
	FSIS	Full Spectrum Imaging System, UV light
	Ninhydrin	placed in Carron chamber, 1 image, section D, batch #296
	Physical Developer (PD)	batch #477
UDLEJW	DFO	After staining, dry in oven at 100 C for 20 minutes
UHG9GX	Visual Examination	
	Alternate Light Source	
	DFO	
	Alternate Light Source	
UJNNN4	Visual Examination	Examined using natural light, flash light, UV, ALS, LASER, and FSIS.
	ESDA	Electrostatic Detection Apparatus (ESDA) for indented writing examination.
	DFO	with LASER excitation.
	Ninhydrin	
	Zinc Chloride	with ALS excitation.
UN6UMY	Visual Examination	I made a quick visual examination. No fingerprints or stains were detected. The piece of paper had no damages or creases, that could indicate exposure to water/moisture. Thus using Physical Developer was not an option.
	1,2-Indanedione	Item 3 was processed with Indanedione (with Zinc). The green copy paper was dipped in the solution, and left to dry for a few minutes. Then placed in a humidity cabinet for 15 minutes. Temperature: approximately 80 degrees celsius. Humidity: 75 %. A faint, pink fingerprint was detected in section D.
	Alternate Light Source	After using Indanedione, the item was examined with 505 nm light and orange filters. The fingerprint detected in section D had details of good quality, quantity and clarity.
	Ninhydrin	Since use of Indandione Zink followed by Ninhydrin is part of our "best practise routine", I then proceeded to ninhydrin. The green copy paper was dipped in the solution, and left to dry for a few minutes. Then placed in a humidity cabinet for 5 minutes. Temperature: approximately 80 degrees celsius. Humidity: 75 %. This process did not enhance the quality of the fingerprint.
UVHMVA	Visual Examination	Visible light. No findings.
	Ninhydrin	NINcha M31 climatic cabinet. Humidity 65%, temperature 65 degrees. Processing time in the climatic cabinet 7 minutes.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
UYWK2C	1,2-Indanedione	Exhibit subjected to Indandione process followed by fluorescent light examination using Green crime-lite 82S.
V3DCMX	Visual Examination Alternate Light Source DFO Ninhydrin	(200°F ± 5°, Ambient Relative Humidity) (80°C ± 5°, 65% Relative Humidity ± 5%, 3 min.)
V63DV8	Visual Examination Alternate Light Source 1,2-Indanedione Physical Developer (PD)	
V879EA	Ninhydrin Visual Examination	the item and a test print had ninhydrin placed on it with a pipette, and allowed to dry. they were then put in an environmental chamber at 80 degrees Celsius/65% humidity for 5 minutes print was seen under normal lighting conditions
V93KF6	Ninhydrin	
VADQD7	1,2-Indanedione	Nincha M31. Humidity 65%, temperature 65'C, processing time 30 minutes.
VAX8T9	1,2-Indanedione	After 1,2-Indanedione method, examination with green light (480nm-560nm) and red goggles.
VKX3MX	Ninhydrin	Item 3 was processed using ninhydrin on 7/24/2020 at 0900 hours. A test print was conducted with positive results.
VNDBBW	Ninhydrin	The item and control test print was processed with ninhydrin solution. The ninhydrin solution was applied to both and air dried. A positive result was obtained for the test print.
VRXC23	Visual Examination Ninhydrin	The item was porous/paper and ninhydrin was used after visual examination. A print was located in quadrant D after ninhydrin processing. A humidity chamber was used for 3 minutes to help develop the print.
VU6HT7	Alternate Light Source 1,2-Indanedione Ninhydrin	White, blue and green light 100 degrees Celsius for 10 minutes 80 degrees Celsius, 62% humidity for 2 minutes
VVXNY	Visual Examination	I would submit this paper item to the Regional Laboratory for proper processing. I am not equipped in the field to do chemical and heat application.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
VYFLPY	Visual Examination	White light from flashlight, ambient lighting
	Ninhydrin	A steam iron was used after the application of Ninhydrin
	Visual Examination	White light from flashlight, ambient lighting
W6WHP7	1,2-Indanedione	1,2 Indanedione method (65%, 65°C, 30min). Examination with Green lighth (480nm - 560nm) + red and orange goggles.
W7TUQ2	Visual Examination	1 Minute --Fingerprint not observed
	Ninhydrin	1 Minute - Spray Method
	Heat and Humidity Chamber	30 Minutes
	Visual Examination	1 Minute -Latent print observed in Quad D
W84WDZ	Visual Examination	
	Ninhydrin	26°C 65% rel. h. 2 Days
W9GN83	Visual Examination	Incandescent/ Flood Lighting
	Ninhydrin	Fluorescent Lighting
	Physical Developer (PD)	Fluorescent Lighting
W9U4C3	Visual Examination	A visual examination of the paper was made.
	DFO	The paper was then processed with DFO and left to dry for 20 min, the paper was then transferred to the drying chamber at 80 deg. for 20 min.
	Alternate Light Source	then viewed with Alternate Light source. Nothing observed.
	Ninhydrin	Paper was then further processed with Ninhydrin and left to dry 20 min, then placed into the Humidity chamber at 70% humidity, 80 deg. for 20 min.
	Visual Examination	One partial latent was found in section D
WB489Z	Visual Examination	No impressions detected.
	Alternate Light Source	Inherent luminescence exam using Polilight PL500 at multiple wavelengths.
	Iodine Fuming	Impression developed in quadrant D.
	1,2-Indanedione	Dipping method followed by heat in oven at 212 degrees Fahrenheit for 20 minutes. Examine with alternate light source at multiple wavelengths. No development or enhancement of impression in quadrant D.
WJ2WRP	Visual	Visual examination of the paper, no ridge detail observed.
	Ninhydrin	Applied Ninhydrin to the item and let dry approximately 15 minutes. Placed the item in the Caron chamber at 80 degrees F and 65% humidity for approximately 10 minutes.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
WJM76Z	Ninhydrin	Item #3 was processed with Ninhydrin for the development of latent prints. The item was then secured within an evidence locker to allow for development (at least over a 24 hour period). On 07/07/20 the item was removed from the locker and an area of possible latent value was developed only on the area labeled D.
WMH6D4	Visual Examination	white light, UV
	1,2-Indanedione	160°C, 10 sec
	Ninhydrin	RT, 48h
WMW NX2	Visual Examination	
	Alternate Light Source	
	DFO	
	Ninhydrin	
WNBYRY	Ninhydrin	Visual examination: White light / Alternate light source (no details visible). Sample processed with Ninhydrin (dipping Method). sample allowed to dry 10 minutes. Sample was then placed in Humidity chamber between 70 - 80 deg.C 80% humidity for approximately 15 minutes until details can be visualized. Visual examination: White light or Alternate light source.
WRC4NR	Visual Examination	No RD noted.
	Alternate Light Source	Mini crime scope. All wavelengths. No RD noted.
	1,2-Indanedione	Allowed to dry.
	Alternate Light Source	Mini crime scope. All wavelengths. RD noted in Quadrant D.
	Ninhydrin	Humidity added to aid development. One (1) photograph taken. Additional RD noted in Quadrant D (pattern type not discernible/tip area above core present/smudging through core).
WUHTLV	Visual Examination	White light
	1,2-Indanedione	30 mins in humidity chamber
WXHR6Z	Visual Examination	no ridge detail noted
	Ninhydrin	latent print developed
X446JT	Dye Stain	Dye stained with basic yellow 40
XARREY	Visual Examination	White light
	Alternate Light Source	Poly light 440-520nm
	1,2-Indanedione	520nm
	Ninhydrin	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
XELP4P	Visual Examination	Visually inspected the item for any ridge detail present before processing. No ridge detail was present before processing.
	Alternate Light Source	Used an alternate light source at varying wavelengths with the corresponding barrier filters to view the item. This was done before and after processing.
	Ninhydrin	Applied ninhydrin and allowed at least 72 hours of processing time after application to allow any ridge detail to develop. Further developed the ridge detail with the application of steam after the 72 hour development period.
XFBYTX	Visual Examination	Viewed sample under natural and forensic lights.
	DFO	Combine technique. First the sample was sprayed with DFO solution and placed into the oven at 100° C for 20 minutes. After that the sample was viewed with forensic lights at 515 nm using orange goggles.
	Ninhydrin	The second treatment in order to improve the quality of the sample. It was sprayed with ninhydrin and placed again into the oven with 80° C temperature and 65% humidity. Later we put the sample into a bag for 24 hours in order to minimize the exposure to the lighth. Finally we viewed the sample with natural light.
XFH6E2	Visual Examination	A visual examination was done using UV, laser, ALS, SUV, and flashlight. No latent observed.
	DFO	The piece of paper was processed using DFO and placed in an oven for approximately 10 minutes. One digital photo was taken of latent.
	Ninhydrin	The piece of paper was processed with Ninhydrin and placed on a humidity chamber. The same latent turned a faint purple, but the quality was less than that of DFO. No photo taken.
	Zinc Chloride	The piece of paper was processed with Zinc Chloride and placed on a humidity chamber. Used ALS. The same latent turned a faint pink, but the quality was less than that of DFO. No photo taken.
	Physical Developer (PD)	The piece of paper was processed with PD. No latent observed.
XJU6EY	Visual Examination	Visual examination using a Crimelite and a TracER Laser.
	DFO	TracER Laser used and curved filter
	Ninhydrin	
XJZ4RW	Visual Examination	no prints found
	Ninhydrin	Batch 296; Caron chamber 30 mins
	Physical Developer (PD)	Batch 477; processed by LPT [Analyst]; no prints observed

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
XXWHP6	Visual Examination Alternate Light Source 1,2-Indanedione Physical Developer (PD)	
Y3N8P9	Visual Examination DFO	White Light and FSIS 1300 HRS 1330 HRS
Y8FCKX	Ninhydrin	After visually examining Item 3, Ninhydrin (Heptane carrier) was brush applied and allowed to dry for 30 minutes. The item was then exposed to heat/humidity via steam iron that resulted in immediate development of a latent print of value.
YHZNR4	Visual Examination Ninhydrin	Ninhydrin Hexane solution. Used steam iron for heat and humidity source.
YK2RJQ	Ninhydrin	The piece of paper was saturated with Ninhydrin. It was hung to dry before using the iron. The steam from the iron was then used to activate the Ninhydrin on the latent print. The piece of paper would then be sent to the latent print unit for further analysis.
YNLG44	Visual Examination Alternate Light Source 1,2-Indanedione Physical Developer (PD)	
YNRTRZ	Alternate Light Source 1,2-Indanedione Ninhydrin Physical Developer (PD)	Use of polilight, crimelite and lasers to carry out a visual search Indandione fuming - viewed with laser Ninhydrin - viewed with white light PD - viewed with white light
YVNLZU	Visual Examination Alternate Light Source DFO Ninhydrin	UV & Crime Scope @455 through 600nm Placed in heating chamber to enhance reaction. Captured with photography and ALS at 495nm
YYNWWU	Visual Examination Alternate Light Source DFO Ninhydrin	CS @ 515nm & UV iron iron

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
Z99MVQ	Visual Examination	Oblique and diffused laboratory light
	Alternate Light Source	FSIS unit with short wave ultra violet light at 245nm and a VU filter
	1,2-Indanedione	Indandione with ZnCl in petroleum ether with added heat and humidity
	Alternate Light Source	Viewed with the tracer green laser at 532 nm and an orange band pass filter
	Ninhydrin	Ninhydrin solution in petroleum ether with added heat and humidity
ZBCHEU	Ninhydrin	Ninhydrin - methanol base sprayed on the item, dried evidence, placed in humidity chamber 80 deg C/ 65% humidity
ZLXMLT	Forensic ligths	The evidence is checked using "Lumatec 400" forensic light with all spectrum. 24°C room temperatura.
	DFO	The evidence is immersed in a DFO solution. Natural drying. The oven is used to visualice the developed latent print. 100°C Temeperature. 0% humidity.
	Forensic ligths	The evidence is checked again using forensic light with all spectrum.
	Ninhydrin	The evidence is sprayed with Ninhydrin. Natural drying. The oven is used to visualice the developed latent print. 80°C Temperature. 65% Humidity.
	Forensic ligths	The evidence is checked again using "Lumatec 400" forensic light with all spectrum.
ZLYCVW	Visual Examination	Crimelite and TracER Laser
	DFO	100 degrees Celsius for 20 minutes
	Ninhydrin	
ZNL3V2	Visual Examination	Visual examination with visible light, no visible marks.
	Alternate Light Source	Using different colored light sources with glasses, no discoveries / foundings.
	Ninhydrin	Using attestor Nincha M31 Forensic Climate Chamber: 72°c degrees, humidity 65% RH. Total proress time 8 minutes, visible fingerprint in section D.
ZPYNQW	Visual Examination	Crimelight flashlight
	Alternate Light Source	PL500 ALS at 530nm
	DFO	Dipped and dried twice, 20 minutes in the heat chamber, LASER at 532nm to visualize latent print area
	Ninhydrin	Dipped and dried twice, left out for two weeks (no humidity chamber available)

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
ZVEFRU	ESDA	Electrostatic Detection Apparatus was used to allow for a range of treatments to be CTS tested. ESDA2 instrument used along with Foster & Freeman Cascade 2 Developer. Batch No. A49/02. Control sample positive.
	1,2-Indanedione	Indandione chemical batch No. 20FEL008. Solution contains 1,2-indandione, Ethyl Acetate, Methanol, Acetic Acid, HFE7100, Zinc Chloride. Oven No. 1 used for development. This is a Weiss Gallenkamp Oven. Temperature 100C, Humidity was disabled. Processing time was 10 minutes. Control sample positive.
	Ninhydrin	Ninhydrin chemical batch No.143121. Solution contains Ethyl Acetate, Ethanol 99.7%, Ninhydrin Crystals, Acetic Acid, HFE7100. Oven No. 3 used for processing. This is a Weiss Gallenkamp oven. Temperature 80C, Relative Humidity 62%. Processing time was 6 minutes. Control sample positive. Ninhydrin was used to simulate sequential processing for a Serious/major crime.

Item 3 - Development Response Summary	Participants: 278
Methods Utilized	

Alternate Light Source	90	Physical Developer	40	**Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.
Cyanoacrylate Fuming	0	Powder Dusting	14	
DFO	64	Visual Examination	215	
Dye Stain	1	Wet Powder Suspension	0	
Ninhydrin	230	1,2-Indanedione	77	

Preservation Methods

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
23CFPM	Photography	6/16/20 one (1) area of ridge detail developed and digitally captured labelled CAE1 Section C.
	Lifting	6/16/20 one (1) area of ridge detail enhanced and lifted BP1 (same detail as CAE1) section C.
24C69Y	Photography	
26KF63	Photography	Camera Canon 700D, oblique light
293TPQ	Photography	
2CJ3XN	Photography	Photographs taken after each processing step.
2CMHBN	Lifting	clear fingerprint tape
2M6742	Photography	
2RUNFR	Photography	Photographed, Imported in Foray, Enhanced in Photoshop, Printed on Noritsu printer
	Lifting	Black powder, lift tape, and latent print card
2YV2M	Photography	One latent observed and photographed on glass.
349ZCM	Photography	Item 1 was photographed after each processing method.
393WZT	Lifting	lifted and packaged and sent to regional laboratory for further analysis.
3ADUBP	Photography	Photographed digital camera under white light illumination. Print was under glass and in reversed position. Corrected with image processing software.
3B43BR	Photography	
3DC78P	Lifting	
	Photography	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
3GDAZW	Photography Lifting	The print in quadrant "C" was photographed using Camera 3/Lens 3 in the Crime Scene Unit after each process that a print was observed (Visual, Cyanoacrylate Fuming, Dye Stain, and Powder Dusting, respectively). Six (6) photographs were taken in total consisting of: two (2) visual process photographs using bounce lighting, one (1) cyanoacrylate fuming photograph using bounce lighting, one (1) dye staining process photograph using direct lighting, and two (2) powder dusting process photographs using direct and transmitted lighting. One (1) tape lift of the print in quadrant "C" was taken using clear in color lift tape and placed on a white in color latent print lift card marked with identifying information.
3J4FGM	Lifting	frosted tape lift
3JYZ4L	Photography	The latent print in quadrant C was photographed with and without a scale after visual exam and Alternate light source, Cyanoacrylate and Alternate light source, Rhodamine 6G and Alternate light source and finally Powder processing.
3KUNFQ	Photography	Oblique lighting
3P7LWP	Photography	Adobe Photoshop
3PQ3CT	Photography Lifting	The developed latent print was photographed with a metric scale. Lifted developed print and placed on a lift card after photography.
3QWUVT	Photography	The print was photographed using a macro lens
3UYVWQ	Photography	The fingerprint was photographed at every step of a research.
3WPW4Y	Photography	FSIS camera system
3YRVER	Photography	Documented with a scale marking latent as 1-1.1. Use of Alternate Light Source during search (455-CSS) and photography of latent with A.L.S.
4C2QDN	Photography Lifting	Photograph of impression after visual examination (item #1-LP1) and after Cyanoacrylate processing (item #1-LP2). Lift taken (item #1-LL1) after processing with black fingerprint powder.
4E3ZXP	Photography	Before processing the print was photo lifted with the Nikon 850 camera. After processing the print was photo lifted using the Full Spectrum Imaging System (FSIS) and 254nm wavelength.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
4GQ3CQ	Photography	using a digital camera (60mm).
4ZNL7R	Photography	4 photographs were taken on Camera3/Lens 3. One (1) photograph was taken after each processing step.
63PT3P	Lifting	Lifted print and submitted to regional laboratory for additional analysis.
6APBJM	Scanning	Photoshop
6ED3KN	Photography	Photoshop software
6HJFA3	Photography	Nikon D7000, side/oblique lighting, Bright Beam laser (532nm with orange and FF1 filters)
6LVJYJ	Lifting	One latent print lift prepared.
6LWBWR	Photography	Copy Stand w/Digital Photography & Marco Lens
6QR8FQ	Photography	
6WZDF4	Photography	Digital Imaging
6YQH7P	Lifting	Lifted print and submitted to regional laboratory for additional analysis.
72MKBG	Photography	
74WN6T	Photography	
76L47N	Photography	lens Nikon AF Micro Nikkor 60mm, light appropriate to the method used (white, blue - after method cyanoacrylate fuming, blue 450nm with orange filter after method Basic Yellow 40)
79RFDP	Photography	Visual Examination: One (1) digital image taken with camera/lens three on July 7, 2020 using bounce/tented and oblique white and LED lighting. See image metadata for settings. Cyanoacrylate Fuming: Two (2) digital images taken with camera/lens three on July 8, 2020 using bounce white and LED lighting. See image metadata for settings. RAY: Three (3) digital images taken with camera/lens three on July 8, 2020 using Rofin Polilight FLARE Plus 2 (450nm filter) with ProMaster Orange YA2 camera filter. See image metadata for settings. Black Powder: Three (3) digital images taken with camera/lens three on July 8, 2020 using transmitted white lighting. See image metadata for settings.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
7BRRQG	Photography	appropriate digital photographs taken of latent impression recovered. Photos taken in Raw and Fine per policy for comparison photographs. scale placed next to latent impression. Impression given appropriate markings.
7FQ7FR	Photography	Photographs were taken of each step in the process: the patent print, the cyanoacrylate print, and the basic yellow 40 print mentioned above.
7PAKEN	Lifting	Lifted, packaged and sent to regional laboratory for additional analysis.
7V2RWW	Photography	
83E4PN	Photography	Nikon D2x ALS with orange filter
87F6UR	Lifting	Placed on latent lift card
	Scanning	Scanned at 1200 dpi
8C4WVT	Photography	Photographed with macro lens prior to any processing using oblique lighting. Photographed with macro lens post dye-stain. ISO 200, F/11
8L76KQ	Photography	Print in quadrant "C" was photographed.
8M2RXU	Photography	Utilized the FSIS to capture prints following VIS, Cyanoacrylate Fuming, and Dye Stain (RAM)
8MNYLZ	Photography	Photo as visible latent
	Lifting	Lifted powder print/ latent
8UMKBF	Lifting	Latent lift tape
8WT74L	Lifting	3 lifts were collected from the same area of ridge detail.
8YYN2G	Lifting	Tape lift placed onto latent print card.
923JJY	Photography	oblique lighting for visible and Orange and FF1 filters with Laser (Bright Beam) / 532nm
9AU4GK	Photography	
	Lifting	TAPE LIFT

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
9M3WXP	Photography	6/17/20: Visual photographs: 2 photos were taken with LP camera 9/lens 2. 1 fluorescent with fiber optics lighting and 1 incandescent with fiber optic lighting, both direct reflection. 6/17/20: 1 CA photo taken with L/P camera 9/lens 2, direct relection with flood lamp. 6/17/20: 1 powder photo taken on copy stand fluorescent light box. 6/17/20: 1 Ray photo taken, camera 9/lens 2 with Polilight 2 with orange filter.
9NT4EF	Photography Lifting	After cyanoacrylate fuming and after rhodamine 6G After powder dusting
9P8CMF	Photography	Item photographed with macro lens, yellow filter, with a scale, and in raw and fine. Item marked with "1".
9U2BVJ	Photography	L001 photographed with VIS/ White light. Re-photographed with RUVIS after CAE. L003 photographed with LASER.
9UE4QL	Photography	I photographed this item before I processed it and then numerous times after for documentation of latent evidence.
9YU9NG	Photography	The methodology utilized includes: visual examination, chemical and physical processing, viewing with an alternate light source, digital retention, and ACE-V.
9ZLK8M	Photography	Visual Examination: One (1) digital image taken with camera/lens three on June 24, 2020. See image metadata for settings. (Section C) Cyanoacrylate Fuming: One (1) digital image taken with camera/lens three on July 16, 2020. See image metadata for settings. (Section C) Dye Stain: One (1) digital image taken with camera/lens three on July 16, 2020 using Rofin Polilight FLARE Plus 2(450nm filter) with ProMaster Orange YA2 camera filter. See image metadata for settings. (Section C) Powder Dusting: One (1) digital image taken with camera/lens three on July 16, 2020. See image metadata for settings. (Section C)
A447DF	Lifting	Two latent print lift cards (of a single fingerprint) prepared
A9UGMD	Photography	I photographed the visible print in quadrant C prior to processing with cyanoacrylate. I used side lighting with a flashlight as well as axial lighting. I used RAW file formatting and a 100mm lens with a sensor to surface distance of no more than .49 meters. I also photographed the print after processing with cyanoacrylate.
AGA6FU	Photography	
AHK72T	Lifting	with fingerprint tape.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
AV99JK	Photography	Nikon D2Xs; direct lighting after CA fuming Nikon D2Xs; ALS with orange filter after RAY
AXEP2P	Photography	Photographed using Camera 3/Lens 3. Visual and Cyanoacrylate photographs taken under bounced and tented LED light. Powder photograph taken under oblique/side LED light. RAY photographs taken under direct fluorescent light with an orange filter.
AZ4VGF	Lifting	Used tape to lift developed print.
AZZF6E	Photography	Nikon D850, TIF format
	Photography	Nikon D850, TIF format
	Photography	Nikon D850, TIF format
	Lifting	Transparent hinged lift
BLX7YK	Photography	Nikon D7200 using oblique light after initial visual examination
	Photography	Nikon D7200 using ambient light after Cyanoacrylate fuming
BQT3GJ	Photography	The fingerprint was photographed at every stage of research after disclosure.
BT27DF	Photography	Digital image captured with Nikon D850. After dye staining, digital image captured with Nikon D850 and imaged with dual beam laser
BWXUUM	Photography	White light DCS4
BZJJCE	Photography	Photography in visual exam and post CA fume.
C6NJ7G	Photography	
C8T8NT	Photography	NIKON D5600 + AF-S DX Micro Nikkor 85mm f/3.5G ED VR lens + Marumi Y2 (Yellow) 52mm filter
C98PPD	Photography	
	Lifting	
CBVAAM	Photography	D700
CGHZVH	Photography	
CGY6DG	Lifting	Applied lift tape x2 and preserved on Latent Card.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
CPC9EN	Photography	Macro lens used. ISO 200 and F8.
CRGU9F	Photography	Photographed with a scale containing case number, date, item number, processed used, and initials.
CRJJDD	Lifting	6/23/2020 Lifting tape and white backing card
CTBJAN	Photography	Camera Nikon D800e, photographic lens AF Nikkor 105 mm with photo evidence ruler. After every method the fingerprint was protected by photography.
D23D7L	Photography	After the visual examination, the ridge detail located on Item 1 was photographed using fiber optic lighting.
	Photography	After Cyanoacrylate fuming, the ridge detail developed on Item 1 was photographed again using fiber optic lighting.
	Photography	After all processing steps were completed, an overall image was taken of Item 1 to show where ridge detail had been developed.
D6X9KE	Photography	
D9N3RF	Photography	Item 1 was photographed prior to processing, and after each processing method.
	Lifting	The suitable fingerprint impression observed on section C was lifted with two inch fingerprint tape and transferred to a latent fingerprint card.
DHT9MH	Photography	One (1) digital image taken with camera 3/lens 3 in the crime scene unit on June 19, 2020. The image was captured using bounce LED lighting after visual examination was conducted.
	Photography	One (1) digital image taken with camera 3/lens 3 in the crime scene unit on June 19, 2020. The image was captured using bounce LED lighting after CA fuming was completed.
	Photography	One (1) digital image taken with camera 3/lens 3 on June 19, 2020 using Rofin Polilight FLARE Plus 2 (450nm filter) with ProMaster Orange YA2 camera filter. See image metadata for settings.
	Photography	One (1) digital image taken with camera 3/lens 3 on July 22, 2020 using direct incandescent/flood lighting.
DNF3JF	Photography	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
DU86RL	Photography	The item was photographed using a Nikon D300 camera with a Micro Nikkor 105mm Lens, mounted to an adjustable column. The resolution was adjusted greater than 1000 pixels per inch for comparison quality. The area was focused using a prepared template that show the maximum image area for the camera, A scale was used to document, Case Number, Item Number, Process Used, Date of Photograph and Initialed. Photographs were subsequently uploaded to the [Laboratory] Latent Print Image Server.
	Lifting	Excess powder (black) particles were blown away from the surface of the item. SCOTCH branded book tape was applied smoothly and rubbed into the surface of the print. The tape was slowly removed and affixed to a latent print lift card, avoiding air bubbles and wrinkles. Initials were placed across the edges of the tape. Information sections on the latent print lift card were completed. The front and back of the item were scanned using a scanner set to a resolution of 1200 pixels per square inch for comparison quality. A scan was subsequently uploaded to the [Laboratory] Latent Print Image Server.
DVDVRA	Photography	Visual Examination (white light examination)
	Photography	Cyanoacrylate Fuming (white light examination)
	Photography	Dye Stain- Basic yellow 40 (fluorescence examination)
DW9FE9	Lifting	Lifted print from glass with lifting tape and placed on latent lift card
DWNJ8F	Photography	Photographed the detected latent print after it was seen visually with white light. Also photographed latent print after it was cyanoacrylate fumed using the RUVIS.
E2XE7A	Photography	Photographed latent impression L1 after each processing stage, as mentioned above [Table 2 - Development Methods].
E3PF4K	Photography	One (1) latent print sufficient for further review was developed from Item 1 area C, photograph and saved the image in a CD.
E922JK	Photography	Digitally photographed
	Lifting	Tape lift after photographing
EC38XP	Photography	Photography with oblique lighting was the only method used/needed to preserve the impression.
EDWX2H	Photography	After visual examination: White light + 365nm UV-reflection (Direct UV). After powder suspension: White light
EE73GR	Photography	using DCS systems

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
EKVHFH	Lifting	Used tape lift to preserve latent print
EKVKTH	Photography	Fingerprint could be seen during visual examination (as well as after Cyanoacrylate Fuming and Dye staining).
ET7VW8	Photography	One digital image was taken of the visible print, prior to processing at F/8 125. The one to one image is at 1150.62 PPI.
	Lifting	Two latent print cards containing lifts of developed prints were collected.
F38JLJ	Photography	With Nikon D5, 105mm.
F8F66A	Photography	Photos taken of LP1-1 and saved to a secure image drive.
FLZMXD	Lifting	utilized Mikrosil to lift latent print from glass
FPL6HJ	Photography	DCS4 System blue light with yellow filter. Printed 1:1. L01, L02 - duplicate
	Lifting	Placed onto white lift card using clear 2 inch tape. L03 - duplicate
FPLAV8	Lifting	
FUEDHJ	Photography	Photographed with macro-lens
	Lifting	Black powder
G3KH8F	Lifting	Lifted with clear tape and placed on a white card
G8VNNL	Photography	
G9BRHD	Photography	Photography with Nikon D850 camera at 20-25C. Image Quality: tiff
GANCC9	Photography	Macro photography
GAP6BG	Photography	Photographs taken at visual, CA, and R6G (with LASER) steps.
	Lifting	Black powder tape lift
GJP6DM	Photography	Detailed micro photography
GLZR9F	Photography	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
GNKYBN	Lifting	
GPGACJ	Photography	Since print was inverted on Item #1, technician was not able to lift print, a photograph was taken of fingerprint in Area "C". Item was then submitted for evidence.
GR972C	Photography Lifting	
GTZ7YN	Photography Lifting	Friction ridge detail was photographed following cyanoacrylate fuming. One lift card was obtained from the same area following black powder.
GXAF86	Photography Lifting	Photographed using the DCS-5 with white light after visual examination Used adhesive tape and white lift card to lift and preserve print from glass
H8EUMC	Lifting	I utilized a 2 X 2 tape lift to capture latent print and took technical photograph.
H8EYXE	Photography	The fingerprint in section C was photographed (photo on the inside of the item).
HAKCL8	Lifting	Used fingerprint tape to lift and preserve print for analysis.
HC698C	Photography	crime light white, inverting
HERXDB	Photography	1. Initially, Mark found on section C by visual examination. It was photographed with the help of white light. 2. After Cyanoacrylate fuming, Mark was photographed again using White light. 2. After Dye Stain, Mark photographed after Dying using 445nm light with 495nm Filter.
HF9U7B	Photography	Nikon D800 DSLR camera, 60mm lens
HUQMUG	Photography Lifting	Took one digital photograph of latent impressions on the piece of glass at Visual Exam step with scale. Took one digital photograph of latent impressions on the piece of glass at CAE Fuming step with scale. Took one digital photograph of latent impressions on the piece of glass at Ardrex/UV with scale. Took one digital photograph of latent impressions on the piece of glass at Rhodamine 6G/ Laser with scale Lifted the latent impression off of the piece of glass and taped it onto a latent lift card.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
HVKH9D	Photography	AT EACH STAGE OF PROCESSING IF ANY AREAS OF RIDGE DETAIL WERE ENHANCED THEN THE AREA WOULD BE LABELLED WITH A UNIQUE EXHIBIT REFERENCE RELEVANT TO THE PROCESS TYPE, IT WOULD BE PHOTOGRAPHED USING A DIGITAL CAPTURE SYSTEM (DCS4) AND ANY IMAGES WOULD BE REMOTELY TRANSFERRED TO OUR REGIONAL IDENTIFICATION UNIT FOR COMPARISON. FOR THE VISUAL MARK A WHITE CRIMELITE SOURCE WAS USED TO CAPTURE A GOOD CONTRAST OF THE IMAGE. FOR THE BY40 DYE A BLUE CRIMELITE WITH WAVELENGTH (420-470NM)AND FILTER (476NM)WAS USED TO EXAMINE THE ITEM AND PHOTOGRAPH.
HY4MQ9	Photography	
HZF678	Lifting	Item was lifted, placed onto a lift card and entered into the Traq system
J4BB4A	Lifting	Using a plastic patch with a white background, the fingerprint was removed. The patch is put on and the patch is lifted. Then proceed to the back of the patch to write the information regarding the case, (date, hour, injured, complaint number, pathology number if applicable, location of removal of fingerprint and person who developed and raised the fingerprint). This patch is then submitted to the [State] police at the fingerprint laboratory, attached with the fingerprint analysis document.
J7JLZD	Photography	Photographed visible friction ridge detail in divided section C with a Nikon D7500 camera and white light from the Power Lite II High Intensity Illuminator. Photographed cyanoacrylate control on acetate with a Nikon D7500 camera and ambient room light. Photographed friction ridge detail in divided section C, following Cyanoacrylate Fuming with a Nikon D7500 camera and white light from an ALS.
JDZ726	Photography	Digital photograph with scale
JE8L9B	Lifting	Utilized print lift and backer. Packaged and sent to Regional Laboratory for further analysis.
JH63K6	Photography	Photograph taken after powder step using white light
JHR7J7	Lifting	Lifted with standard tape lift
JKX3HF	Photography	Photographed with a Fuji FinePix S3 Pro equipped with a Nikon Macro lens and a Forensic Laser light filter.
JM3NAM	Photography	Foster+Freeman DCS4 (ring light)

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
JNWCV3	Photography	Item 1 Picture Frame Glass - Image Capture using bounce white light, Nikon D810, Camera Control Pro 2 greater than 1000 ppi saved as NEF. Image Processing using Adobe Photoshop CC, metadata saved, saved as TIF. Reverse print captured.
	Photography	Item 1 Picture Frame Glass - Post CA - Image Capture using bounce white light, Nikon D810, Camera Control Pro 2 greater than 1000 ppi saved as NEF. Image Processing using Adobe Photoshop CC, metadata saved, saved as TIF. One image printed using EPSON SC P5000 greater than 1000 dpi.
	Lifting	Item 1 Picture Frame Glass - Post black powder - Unable to lift all detail, placed on white backing card. One lift.
JYFJWD	Photography	Digital cameras were used.
K46JMD	Photography	episcopic light illumination (white light)
KE74P7	Lifting	Lifted with tape & placed on lift card
	Photography	Photographed with orange filter using preset camera settings.
KMGBLA	Lifting	Photographed print prior to lifting. Packaged to be sent to laboratory for further analysis.
KUYJA7	Lifting	Lift tape
KVU7MA	Photography	Nikon D750 + Nikkor 60mm f2.8 Macro
L2TBTJ	Photography	After R6G, print was viewed with a laser and photographed for comparative purposes.
	Lifting	After mag powder was used, tape was applied and print was lifted as "LP1"
L4ZLR9	Photography	took digital photograph
	Lifting	lifted with latent lifting tape - submitted as evidence
L7822Z	Lifting	I applied a piece of tape to the item where I observed ridge detail had developed and smoothed out any creases or air bubbles. I then lifted the piece of tape and adhered it to a lift card. Lastly, I filled out the case information on the reverse side of the lift card.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
LBHWYH	Photography	Any suitable marks developed throughout sequential treatment were marked up and photographed 1:1 using a D810 Nikon digital camera with an AF-5 micro nikkor 105mm lens, 8x4 Crime Lite light source(s) and appropriate camera filter(s). The camera is linked to DCS5 (Digital Capture System 5) software where the images are exhibited with full audit trails and further DCS5 enhancement tools can be used to improve contrast/remove background interference where applicable. Exhibited images then submitted to the Fingerprint Bureau for further analysis and comparison.
	Lifting	Once all treatments had been completed, a black gel lift was taken on the side of the mark and exhibited as GJM/1CO.
LBM9ME	Photography	Before cyanoacrylate fuming one fingerprint is detected. Backup photography : The glass plate is tilted, photography with forensic white light source (optical fiber)and shift lens.
	Photography	After cyanoacrylate fuming : one photograph with white neon lighting and one photograph with UV lighting at 325 nm and orange filter
LJEQY2	Photography	Latent marked with a scale as 1-1.1 and photographed (Jpeg and Raw).
LMYJB4	Lifting	Clear fingerprint tape applied to area of latent fingerprint development. After ensuring the tape was firmly applied to the developed area, the tape was slowly removed from item and secured on a pre-labeled fingerprint card. Case information, date, time and location of latent fingerprint added to the back of the card.
LN8VQK	Photography	
LVP7YE	Photography	Photo Evidence Scale
M3JQK8	Lifting	
M3M9MC	Photography	Digitally photographs during visual examination and after superglue fuming.
M8EF7K	Photography	DCS5 photography system used to preserve the marks after each treatment. using suitable light source and filter based on the treatment examination mentioned above [Table 2 - Development Methods].
	Lifting	The mark was preserved after powder dusting using powder lift

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
M9PHU6	Photography	Three images captured at visual step on glass and preserved in MIDEO database.
	Photography	One image captured at cyanoacrylate fuming step on glass and preserved in MIDEO database.
	Photography	One image captured at powder dusting (black magnetic powder) step on glass and preserved in MIDEO database.
	Photography	One image captured at Dye Stain (MRM-10) step on glass and preserved in MIDEO database.
MCA8F3	Lifting	
MECCNG	Photography	
MJBQC7	Lifting	tape lift
MK9UC9	Photography	Photographs taken with Camera9/Lens2. Visual photo taken with diffused lighting, CA photo taken using direct reflection, powder photo taken with transmitted lighting and the Dye Stain photo taken using a Polilight 2 (450nm) with orange filter on the lens.
MQTVPZ	Photography	One digital image of a visible print taken at 1368 dpi using a Foster + Freeman DCS5.
	Lifting	Lifted developed print with tape.
MRNFCZ	Lifting	Clear evidence lifting tape / placed on latent lift card.
MRP9B8	Photography	3 photos total. First photo was "as is". Second photo was after CA fuming. Third photo was after dusting with powder.
MWZLR7	Lifting	Lifting tape used and placed onto latent print card.
N2PHU3	Photography	Photographs taken after Cyanoacrylate fuming, ALS side-lighting, white light, no filter. Photographs taken after Rhodamine 6G staining, ALS side-lighting @525nm, orange filter.
	Lifting	Lifted using 2-inch clear tape and placed on latent lift card.
NAL3EH	Lifting	1- Photography. 2-lifting.
NBCGK8	Photography	Photography of the latent print was taken after Labkam, Cyanoacrylate with labkam, and dye stain (orange filter used for dye stain photography). An overall photo of the item was also taken

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
NCRF3C	Lifting	tape
ND668A	Photography	Print was photographed using Nikon 810 camera using direct lighting, transmitted lighting, Polilight 2 with 450 nm filter and orange filter.
NF8BHA	Photography Lifting	Latent print photographed during Visual Examination, CA, and Dye Stain/ALS sequences. Latent print lifted with standard lifting tape and adhered to a white backing card.
NKMH79	Photography	Photographs of all ridge structure of value were taken including scale and case details written on scale. Overall photographs were also taken of each item indicating location of ridge structure.
NLVNA	Photography Safe packaging and storage	A photograph of the fingermark was conducted (DCS 4 system) after the second cyanoacrylate fuming
P8Q4B4	Photography	
PDWRVX	Photography	
PF26W6	Photography	
PGGK7Z	Photography	The print observed in section 1C was photographed with a digital camera after the initial visual examination, after cyanoacrylate fuming, after wet powder suspension, and after dye stain. The print was imaged after dye stain with an alternate light source at 505nm and an orange filter on the camera lens. The remaining images were taken with white light.
PLC73A	Lifting Photography	
PX2B4E	Photography	White light source. f/32, 3,2 s, ISO 200
PX7MRA	Photography	Macro shooting after each enhancement step, Location photography of marks on their support.
PXPB96	Lifting	Used a 2x4 tape lift to recover the fingerprint impression.
PYCCRX	Photography	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
Q87MV2	Photography	see photo branch notes [Notes not included by participant.]
	Photography	digital imaging visual with naked eye and white side lighting
QKAZWY	Lifting	Black gel lift after ca fuming
	Scanning	GLScan
QP7MR9	Photography	A photograph was taken during the visual exam, after cyanoacrylate fuming, and again after Rhodamine dye staining.
QPQ9KY	Photography	Photographs were taken after the following steps: visual examination, cyanoacrylate fuming, powder, and dye staining.
QTPF6W	Photography	Photographed ridge detail seen in quadrant C during visual examination and after Cyanoacrylate Fuming using the DCS-5.
	Lifting	Lifted ridge detail seen in quadrant C with tape and placed on a lift card.
R2DWT4	Photography	Nikon D610, RUVIS photo, ALS and orange filter photo
R434BE	Photography	I photographed the ridge detail in box C on item 001 with the use of white light, after processing with black magnetic fingerprint powder.
	Lifting	I then lifted the print in box C on item 001 and scanned the lift.
R6WRVV	Lifting	Lifted with standard lifting tape, placed on latent lift card
R9W4RV	Lifting	Latent Lift collected with latent print tape then placed on latent lift card.
R9ZH6V	Photography	Nikon D810 was used to photograph a visible print at, at least, 1000 ppi.
	Lifting	Two tape lifts of developed prints were collected; one after magnetic powder and one after black powder.
RCAZWW	Lifting	Magnetic powder, tape lift
RCW8K4	Photography	1:1
	Lifting	Lifting Tape on to white card. Document card
	Evidence Room	Package, tape, log into evidence
RD32U9	Lifting	
RE2ZE2	Scanning	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
RXY6X4	Photography	Images saved in JPEG and RAW at 1000 dpi, and transferred to DVD-ROM.
	Lifting	Latent print lifted with 1 1/2 inch Evident fingerprint tape and transferred onto an Evident 3" by 5" fingerprint latent lift card.
	Scanning	Latent print scanned with Epson scanner at 1200 dpi, 16-bit greyscale, Documented/analysis utilizing CSI Pix software and printed out.
T2CEAY	Photography	
T2U7L4	Photography	1:1, gray scale, 1000dpi
T6W8L2	Photography	One digital image captured (Camera A)
T6YWU6	Photography	
	Lifting	
T8KNXU	Photography	ISO 400 Image Quality Raw and Fine
TBZBAE	Photography	
TD2E22	Photography	
TKJPAV	Photography	After each step
	Lifting	After powder processing
TKN6MW	Photography	Camera
	Lifting	Tape and lift card
TLECMY	Photography	Photograph was taken, with scale.
	Lifting	After photographing latent print, I lifted the print with a grip-lifter and placed on a white backing card.
TLWG6X	Photography	Digital image captured with Nikon D850
TR9ZT7	Photography	1 image each taken for VIS, CA, and Powder using an LED light source and Oblique/Side lighting technique. For the VIS and powder photos a white background was used and for CA a black background was used. 1 RAY photo was taken using a direct Polilight 2 (450nm filter): Orange filter light source.
TVPE9Z	Photography	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
TWEXX6	Photography	Used Nikon D800 camera to photograph latent.
TXU3RW	Photography	Used Laser @ 532 nm and orange barrier filter for R6G photography
U7YPW2	Photography	Photograph taken after visual, cyanoacrylate, LabKam, and dye stain (basic yellow 40) with the Crime Scope Alternate Light Source (with yellow filter/goggles)
U9RDJ4	Photography	1 image, section C, LED, direct lighting
UDLEJW	Photography	Standard white light
UHG9GX	Photography	
UJNNN4	Photography Lifting	Four digital photographs of latent impression from quadrant C of glass from picture frame stored on a compact disc. One latent lift card.
UN6UMY	Photography	I photographed the print in high resolution after each treatment, to compare the quality, quantity and clarity of the details. I used oblique light in a dark room, for the preservation of the print, after both visual examination and cyanoacrylate fuming. After the use of Basic Yellow, I used yellow filters and 445 nm light source in a dark room. The three images of the fingerprint all contained a ruler in level with the print. The first photo, taken after visual examination, proved the best. I also made one photo of the entire item, to describe the position of the fingerprint detected. The latter photo was taken in a photostudio, using photography grey background, three lightsources (left, right and bounced)and aperture 8 for optimal plan detail. The photo contained a ruler marked with the case details.
UVHMVA	Photography	Photographed.
UYWK2C	Photography	Nikon D3 (DSLR) 60mm micro lens lighting - Blue crime-lite 82S and appropriate yellow filter on camera lens
V3DCMX	Photography	
V879EA	Lifting	fingerprint tape was put over the lift, photographed, lifted off the surface, then put on a lift card
V93KF6	Scanning	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
VADQD7	Photography	Visual examination of fingerprint and photographing directly from surface (no filters).
VAX8T9	Photography	Modified camera for detecting UV and IR-light.
VKX3MX	Lifting	The latent fingerprint that was developed in Quadrant C using cyanoacrylate fuming and black powder was lifted using clear tape.
VNDBBW	Photography	Digital capture: Camera Nikon D810. Image quality: tiff.
VRXC23	Photography	The print was photographed prior to lifting with tape.
	Lifting	The lift was better than the photo, and therefore kept.
VVXNY	Lifting	Photographed, lifted, and submitted to the Regional Laboratory for additional analysis.
VYFLPY	Photography	During visualization a photograph was taken of one latent print
	Lifting	A lift was created after application of powder, no ridge detail present
	Photography	A photograph was taken of one latent print after CA processing
W6WHP7	Photography	Canon EOS 5D Mark IV + 100mm L.28 Macro + EOS Utility 3.0
W84WDZ	Photography	500-550 nm/ 529 nm (orange Filter)
W9GN83	Photography	Visible- direct reflection with diffused lighting and used incandescent/flood lighting CA- direct reflection and used incandescent/flood lighting MP- used overhead fluorescent lighting RAY- direct reflection with polilight 2 (orange filter)
W9U4C3	Photography	The latent print found in section C was then photographed for preservation.
WB489Z	Photography	Digital
	Lifting	Tape lift and affixed to lift card.
WJ2WRP	Photography	Photographed the ridge detail in quadrant C and overall photograph taken using the DCS-5 prior to processing and after CAE fuming. No other ridge detail observed.
	Lifting	Lifted the developed ridge detail from quadrant C with tape and placed the tape on a lift card.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
WJM76Z	Lifting	Lifted the areas of possible latent value using frosted tape, which was then placed on a latent lift card.
WMH6D4	Photography	co-axial light, DCS5
WMWNX2	Photography	visual/white light; ALS w/ filter
	Lifting	Lift was scanned
WNBYRY	Photography	Digital Photography 1:1 with and without scale, Powder and lift to preserve latent impression.
WRC4NR	Photography	One (1) photograph taken of RD noted in Quadrant C (arch).
WUHTLV	Photography	Camera
	Scanning	Epson Perfection V550 Photo scanner.
WXHR6Z	Lifting	two lifts taken
X446JT	Photography	Digital image captured with Nikon D850 with white light
XARREY	Photography	1:1, gray scale, 1000dpi
XELP4P	Photography	Visible ridge detail was photographed before processing using axial lighting with a diffused fluorescent light. Ridge detail was further developed with CA fuming and was photographed. Applied MRM-10 to further develop the ridge detail. Photographed the results using a 450 nm wavelength alternate light source using an orange #21 filter. Close up photographs of ridge detail were taken with the surface to camera sensor distance of no greater than .49 meters.
XFBYTX	Photography	A photo of the print was taken in digital format and saved it. Then the photo was treated in order to clearly identify the print.
XFH6E2	Photography	Photographs were taken at Visual, Cyanoacrylate, Ardrex, and Rhodamine stages.
	Lifting	One latent lift was collected after powder.
XJU6EY	Photography	Twelve images taken. Three overall images taken.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
XJZ4RW	Photography	Diffused direct reflection -camera 9/lens 2. incandescent light-visible
	Photography	direct reflection -camera 9/lens 2. incandescent light-CA
	Photography	overhead lighting/fluorescent lighting -camera 9/lens 2. incandescent light-powder
	Photography	RAY photography, polylight flare 2, 450 nm, orange YA2 filter -camera 9/lens 2. RAY print
Y3N8P9	Photography	Examined with FSIS- Latent #1 C 1305HRS
Y8FCKX	Scanning	Developed latent print was covered with clear lifting tape for protection and digitally scanned at 1200 using a flatbed scanner.
YHZNR4	Photography	Photographs of the latent impression were taken after CA and after dusting with fingerprint powder.
YK2RJQ	Lifting	The fingerprint was lifted using fingerprint tape.
YNRTRZ	Photography	Imprint labelled 1A, photographed and printed
YVNLZU	Photography	Captured images after visual, Cyanoacrylate fuming, R.A.M. and Black powder
YYNWVU	Photography	Photographed VIS & SGF. No Enhanced development after SGF.
Z99MVQ	Photography	1) FSIS UV camera, 2) Nikon D4 camera with white light, 3) Nikon D4 with laser light and orange band pass filter
ZBCHEU	Photography	scale in photograph taken with a Nikon camera
ZKH6MU	Lifting	Lifted, packaged, and sent to regional laboratory for analysis.
ZLXMLT	Photography	TM "1A1" in A section. White light is used (400-700nm) to photograph the developed latent print (partial as well as detail.)
ZLYCVW	Photography	raw images using fx camera
ZNL3V2	Photography	High quality fingerprint photographed with a measure.
	Lifting	Fingerprint lifted to tape, placed on the fingerprint card.
	Scanning	Fingerprint from card scanned.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
ZPYNQW	Photography	Photography after each stage of processing
ZVEFRU	Blue Light Examination	Ridge detail visible under white light after Cyanoacrylate fuming. Dye stain was used in accordance with lab processes to further enhance the quality. This was then viewed under a blue light source (430-470nm) using 495nm viewing goggles. Under circumstances of live casework, the ridge detail developed would have been captured using this light wavelength on the DCS capture system.
	White Light Examination	After SB3 treatment, the glass was examined with White Light. The ridge detail mentioned previously was still visible but no improvement in the quality of the mark was seen.

Item 1 - Preservation Response Summary	Participants: 268
Methods Utilized	

Lifting	101
Photography	231
Scanning	9

****Note:** Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
24C69Y	Photography	
26KF63	Photography	Camera Canon 700D, oblique light
293TPQ	Photography Lifting	
2CJ3XN	Photography	Photographs taken after each processing step.
2CMHBN	Lifting	clear fingerprint tape
2M6742	Photography	
2YVW2M	Lifting	One latent developed but unable to capture imaged with camera. Lifted with gel lifter. Gel lifter photographed.
349ZCM	Photography	Item 2 was photographed after each processing method.
393WZT	[No Methods Reported.]	Packaged and sent to regional laboratory for further analysis.
3ADUBP	Lifting	
3B43BR	Lifting Photography	
3DC78P	Lifting Photography	
3GDAZW	Photography	The print in quadrant "B" was photographed using Camera 3/Lens 3 in the Crime Scene Unit after each process that a print was observed (Cyanoacrylate Fuming, and Powder Dusting, respectively). Four (4) photographs were taken in total consisting of: two (2) cyanoacrylate fuming process photographs using oblique lighting and two (2) powder dusting process photographs using bounce lighting.
3JYZ4L	Photography	Photographs were taken after visual examination and alternate light source to show no ridge detail noted. After Cyanoacrylate processing and Alternate light source to show no ridge detail. After magnetic powder showing ridge detail. After Rhodamine 6G processing and Alternate light source to show no ridge detail noted.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
3KUNFQ	Photography	RUVIS
3P7LWP	Photography	Adobe Photoshop
3PQ3CT	Photography	The developed latent print was photographed with a metric scale.
3QWUVT	Photography	The print was photographed using macro lens
3UYVWQ	Photography	
3YRVER	Photography	Use of alternate light source (455-CSS) and photo of section C including a scale.
4C2QDN	Photography Lifting	Photograph (item #2-LP1) taken after processing with black magnetic fingerprint powder. Lift (item #2-LL1) taken after processing with black magnetic fingerprint powder.
4E3ZXP	Photography	The print was photo lifted using the Full Spectrum Imaging System (FSIS) and 254nm wavelength.
4GQ3CQ	Photography	using a digital camera (60mm).
4ZNL7R	Photography	2 photographs were taken on camera 3/Lens 3 after CA fuming and powder dusting.
63PT3P	[No Methods Reported.]	Submitted to regional laboratory for additional analysis.
6APBJM	Lifting Scanning	One lift photoshop
6ED3KN	Photography	Photoshop software
6LVJYJ	Photography	Photographed fluorescing print in section B using Pentax camera and orange filters with alternate light source at 515nm. Edited in Lightroom to black and white and printed 1:1.
6LWBWR	Lifting	Black GEL Lift provided superior documentation from powder processing by utilizing side lighting and digital photography as additional recording method.
6WZDF4	Photography	Digital Imaging
6YQH7P	[No Methods Reported.]	Submitted to the regional laboratory for additional analysis.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
72MKBG	Photography	
74WN6T	Photography	
76L47N	Photography Lifting	lens Nikon AF Micro Nikkor 60mm, light appropriate to the method used (white, blue light with orange filter - after method cyanoacrylate fuming, white light after method powder dusting white dactyloscopic foil.
79RFDP	Photography	Black Powder: Four (4) digital images taken with camera/lens three on July 20, 2020 using direct reflection LED lighting. See image metadata for settings.
7BRRQG	Lifting Photography	The latent impression was difficult to see. if the photograph was tipped sideways and at the right angle an impression was visible. But this was extremely difficult to photograph. I used a black gel lifter to lift the impression off the photograph. I then took appropriate digital photographs of the impression. Impression photographed off of a black gel lifter. Camera settings to Raw and fine per policy. appropriate scale and markings added to impression prior to photographing. Because impressions are reversed when using a gel lifter. Impression reversed in Photoshop to show proper orientation.
7FQ7FR	[No Methods Reported.]	Sample was photographed to show that no prints were developed on this item.
7V2RWW	Photography	
83E4PN	Photography	Nikon D2x
87F6UR	None	No friction ridge impressions were identified.
8C4WVT	Photography Lifting	Photographed with macro lens. ISO 200, F/3.5 Lifted using small white gel lifter. Photograph of lift also taken.
8L76KQ	None	No Prints were visible to be photographed, lifted or scanned.
8M2RXU	Photography	FSIS
8MNYLZ	Photography	Photo overall and sections- Test print positive FSIS

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
8WT74L	Lifting	(2) lifts collected with magnetic powder (neither collected ridge detail)
	Photography	partial ridge detail captured.
8YYN2G	Lifting	Tape lift placed onto latent print card.
923JJY	Photography	oblique lighting for visible and Orange and FF1 filters with Laser (Bright Beam) / 532nm
9AU4GK	Photography	
	Lifting	TAPE LIFT
9M3WXP	Photography	6/17/20: Visual photograph: 1 photos were taken with LP camera 9/lens 2. 1 photo with flood lamp, direct reflection. 6/17/20: Magnetic Powder photography. 2 photos taken with LP camera 9/lens 2, with direct reflection & flood lamp.
9P8CMF	Photography	Item photographed with macro lens, with a scale, and in raw and fine. Item marked with "2".
9U2BVJ	[No Methods Reported.]	Possible ridges detected on back of the item and in boxes C & D not suitable for capture.
9UE4QL	Photography	I photographed the item prior to processing. I did not observe latent evidence so no latent evidence was documented after processing.
9YU9NG	Photography	The methodology utilized includes: visual examination, chemical and physical processing, viewing with an alternate light source, digital retention, and ACE-V.
9ZLK8M	Scanning	Ninhydrin: One(1) digital image taken with scanner thirteen on July 20, 2020. See image metadata for settings. (Section B)
A447DF	Lifting	One latent print lift card prepared
A9UGMD	Photography	I attempted to photograph the print with MRM-10, however the ridge detail was not visible with the alternative light source. I photographed the print in quadrant B after processing with cyanacrylate and MRM-10 using axial lighting with a flashlight. I used RAW file formatting and a 100mm lens with a sensor to surface distance of no more than .49 meters.
AGA6FU	Photography	
	Lifting	white footprint foil

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
AHK72T	Lifting	with white silicone.
AV99JK	Photography	NIKON D2Xs with oblique lighting
AXEP2P	Photography	Photographed using Camera 3/Lens 3. Visual, Cyanoacrylate, and Powder photographs taken under bounced and tented LED light.
AZ4VGF	Lifting	Used tape to lift developed print.
AZZF6E	Photography	Nikon D850, TIF format
	Photography	Nikon D850, TIF format
	Photography	Nikon D850, TIF format
	Lifting	Transparent hinged lift
BLX7YK	Photography	Nikon D7200 using RUVIS after Cyanoacrylate fuming
BQT3GJ	Photography	The fingerprint was photographed at every stage of research after disclosure.
BT27DF	[No Methods Reported.]	No latent prints were developed
BWXUUM	Photography	High shutter speed ; high ISO
BZJJCE	Photography	Photography post CA fuming.
C8T8NT	Photography	NIKON D5600 + AF-S DX Micro Nikkor 85mm f/3.5G ED VR lens + Marumi Y2 (Yellow) 52mm filter
C98PPD	Photography	
CBVAAM	Photography	D700
CGHZVH	Photography	
CGY6DG	Lifting	Applied lift tape and preserved on latent card
CPC9EN	Photography	Macro lens used. ISO 200 and F8.
	Lifting	small white gel lifter
CRJJDD	Lifting	6/23/2020 Lifting tape and white backing card

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
CTBJAN	Photography	Camera Nikon D800e, photographic lens AF Nikkor 105 mm with photo evidence ruler. After every method the fingerprint was protected by photography.
D23D7L	Photography	After processing Item 2 with black magnetic powder, the ridge detail developed on Item 2 was photographed using the coaxial lightbox.
	Photography	After all processing steps were completed, an overall image was taken of Item 2 to show where ridge detail had been developed.
D6X9KE	Photography	
D9N3RF	Photography	Item 2 was photographed prior to processing, and after each processing method.
	Lifting	The suitable fingerprint impression observed on section B was lifted with two inch fingerprint tape and transferred to a latent fingerprint card.
DHT9MH	Photography	Print was observed after powder dusting and one (1) digital image taken using camera 3/lens 3 in the crime scene unit. The image was captured using direct reflection fluorescent lighting.
DNF3JF	Photography	
DU86RL	Photography	The item was photographed using a Nikon D300 camera with a Micro Nikkor 105mm Lens, mounted to an adjustable column. The resolution was adjusted greater than 1000 pixels per inch for comparison quality. The area was focused using a prepared template that show the maximum image area for the camera, A scale was used to document, Case Number, Item Number, Process Used, Date of Photograph and Initialed. Photographs were subsequently uploaded to the [Laboratory] Latent Print Image Server.
DVDVRA	Photography	Cyanoacrylate Fuming (UV reflection)
	Photography	Powder Dusting (white light examination)
	Photography	Physical Developer (white light examination)
DW9FE9	Lifting	Black magnetic powder was used on the photo. Print lifted using lifting tape and place on latent lift card.
E2XE7A	None	No friction ridge detail developed.
E3PF4K	Photography	One (1) latent print sufficient for further review was developed from item 2 area B, photograph and saved the image in a CD.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
E922JK	Photography	Digitally photographed
EC38XP	Photography	Latent was photographed with oblique lighting.
EDWX2H	Photography	White light + coaxial light (after CNA-fuming and powder dusting)
EE73GR	Photography	and Lifting
EKVFHF	tape lift placed over LP on photo	Photograph with scale, placed tape lift over latent print and left it there to preserve LP
EKVKTH	Photography	
ET7WW8	Lifting	Two latent print cards containing lifts of developed prints were collected.
F38JLJ	Photography	With a Nikon D5, 105mm
F8F66A	Photography Lifting	Photos taken of LP2-1 and saved to a secure image drive. Lift was also taken of LP2-1, however, photos are better quality than lift, lift was not scanned in or sub-itemized.
FLZMXD	packaged for lab examination	visual observation done, packaged and submitted to lab for further examination.
FPL6HJ	Lifting	Placed onto white lift card using 2 inch clear tape L04
FPLAV8	Lifting	
FUEDHJ	Photography Lifting	Photographed with macro-lens Black powder
G3KH8F	[No Methods Reported.]	None used, no ridge detail observed
G8VNNL	Photography	
G9BRHD	Photography	Photography with Nikon D850 camera at 20-25C. Image quality:tiff
GANCC9	Photography	Macro photography
GAP6BG	Photography	Photographs taken during CA stage.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
GJP6DM	Photography	
GNKYBN	Lifting	
GPGACJ	Photography	Photograph taken of submitted item #2. After steps taken to detect ridge development, unable to detect fingerprint in area A-D
GR972C	Lifting	
GTZ7YN	Lifting	Two lift cards were obtained of the same area following magnetic powder
GXAF86	Lifting	Used adhesive tape and white lift card to lift and preserve print from photograph
H8EUMC	Photography	I took overall photos. Item packaged and submitted to the Lab for further analysis.
H8EYXE	Powder dusting Photography	Powder dusting, magnetic jet black powder was used. A fingerprint was clearly visible in section B. The fingerprint in section B was photographed.
HAKCL8	Lifting	fingerprint tape was used to lift and preserve print for analysis
HC698C	[No Methods Reported.]	No ridge detail was recovered, so no preservation method was used
HF9U7B	Photography	Nikon D800 DSLR camera, 60mm lens
HUQMUG	Photography	Took one digital photograph of latent impressions with scale at DFO step with shortwave UV light and FSIS camera.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
HVKH9D	Photography Lifting	AT EACH STAGE OF PROCESSING IF ANY AREAS OF RIDGE DETAIL WERE ENHANCED THEN THE AREA WOULD BE LABELLED WITH A UNIQUE EXHIBIT REFERENCE RELEVANT TO THE PROCESS TYPE, IT WOULD BE PHOTOGRAPHED USING A DIGITAL CAPTURE SYSTEM (DCS4) AND ANY IMAGES WOULD BE REMOTELY TRANSFERRED TO OUR REGIONAL IDENTIFICATION UNIT FOR COMPARISON. FOR THE VISUAL MARK A WHITE CRIMELITE SOURCE WAS USED TO CAPTURE A GOOD CONTRAST OF THE IMAGE. I GEL LIFTED THE AREA OF RIDGE DETAIL AFTER CYANOACRYLATE FUMING/MAGNETIC POWDER SO THAT A GOOD CONTRAST COULD BE ACHIEVED FOR PHOTOGRAPHY. IF THIS WAS A LIVE CASE THEN I WOULD CAPTURE THE AREA OF RIDGE DETAIL USING THE DCS SYSTEM AND MIRROR THE GEL LIFT IMAGE TO CREATE AN IMAGE THAT WAS CORRECT FOR DIRECTION. THE GEL LIFT WOULD THEN SAVED WITH THE PHOTOGRAPH IN THE EXHIBIT BAG.
HZF678	Lifting	Item was lifted, placed onto a lift card and entered into the Traq system
J7JLZD	Photography	The controls demonstrated from the applications of indanedione and RAY (dye stain) were photographed using a Nikon D7500 camera, orange camera filter, a Laser at 532nm and wearing orange viewing goggles. The controls demonstrated from the applications of ninhydrin and Oil Red O were photographed using Nikon D7500 camera and white light from an ALS. Photographed minimal friction ridge detail in divided section A, following Cyanoacrylate Fuming with a Nikon D7500 camera and white light from an ALS.
JDZ726	Photography	Digital photograph with scale
JHR7J7	Photography	used a standard tape lift following magnetic powder, photographed following Ardrex dye stain
JKX3HF	No Prints developed	NA- No prints developed
JM3NAM	Photography	Foster+Freeman DCS4 (ring light)
JNWCV3	Photography Lifting	Item 2 Glossy Photograph - Post CA Vague FRD captured using bounce white light, Nikon D810, Camera Control Pro 2, greater than 1000 ppi saved as NEF. Image processing using Adobe Photoshop CC metadata saved. Item 2 Glossy Photograph - Post black powder two lifts of FRD marginal clarity, placed on white backing cards.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
JYFJWD	Photography	Digital cameras were used.
	Lifting	Black gel lift used.
K46JMD	Photography	episcopic light illumination
KMGBLA	Oblique lighting	No latent print was developed on the photograph. This item was re-packaged and sent forward to the laboratory for further examination.
KUYJA7	Lifting	Lift tape
	Submitted item	Submitted item
KVU7MA	Photography	Nikon D750 + Nikkor 60mm f2.8 Macro
L2TBTJ	No latent prints were developed	
L4ZLR9	Photography	took digital photographs, and submitted to photolab
L7822Z	Lifting	I mixed and applied a white casting material, known as Mikrosil, to the item where I observed ridge detail had developed and smoothed out the wet casting material to prevent air bubbles. I then lifted the casting material and adhered it to a lift card. Lastly, I filled out the case information on the reverse side of the lift card.
LBM9ME	Photography	Before methods of development. Backup photography : The glossy photograph is tilted, photography with forensic white light source (flashlight)and shift lens.
	Photography	After wet powder suspension, photography with white neon lighting
LJEQY2	Photography	The latent was photographed on the white gel lifter with a scale and further itemized as 1-2.1.1.
LMYJB4	Lifting	Clear fingerprint tape applied to area of latent fingerprint development. After ensuring the tape was firmly applied to the developed area, the tape was slowly removed from item and secured on a pre-labeled fingerprint card. Case information, date, time and location of latent fingerprint added to the back of the card.
LN8VQK	Photography	
LVP7YE	Photography	Photo Evidence Scale

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
M3M9MC	Photography	Digital photograph with FSIS (FULL SPECTRUM IMAGING SYSTEM)
M8EF7K	Photography Lifting	DCS5 photography system used to preserve the marks after powder dusting. using white light source. The mark was preserved after powder dusting using powder lift
M9PHU6	Photography	One photo captured at Powder Dusting (black magnetic powder) step and preserved in MIDEO database.
MECCNG	Photography	
MJBQC7	no print found	Visual observation preformed, no prints found. Packaged and submitted to laboratory for further examination
MK9UC9	Photography	Photos were taken with Camera9/Lens2. CA photo was taken using Direct Reflection lighting and the powder photo was taken using Diffused lighting, both with an incandescent flood light.
MQTPVZ	Lifting	First lift done with tape. Noticed damage to photo, used Mikrosil for second lift.
MRNFCZ	N/A	No prints developed.
MRP9B8	Photography	One photo using tungsten lights.
NAL3EH	[No Methods Reported.]	1-Visual Examination. 2-Powder Dusting. 3-alternate light Source
NBCGK8	Photography	Photography of the latent print was taken with labkam after Cyanoacrylate fuming. An overall photo of the item was also taken
NCRF3C	Lifting	hinge lifter
ND668A	Photography	Print was photographed at 1:1 with Nikon D810 using direct lighting.
NF8BHA	Photography Lifting	Latent print photographed during Dye Stain/ALS sequence using the "Crime Scene Search" setting on the SPEX CS-16-400. Latent print lifted with standard lifting tape and adhered to a white backing card.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
NKMH79	Photography	Photographs of all ridge structure of value were taken including scale and case details written on scale. Overall photographs were also taken of each item indicating location of ridge structure.
NLWNA	Photography Safe packaging and storage	A photograph of the fingermark was conducted (DCS 4 system) after the second cyanoacrylate fuming
PDWRVX	Lifting Photography	Black powder with black gel-lifter
PGGK7Z	Photography Gel Lift	The print observed in section 2B was photographed with a digital camera after powder processing/dusting using white light and a bounce light technique. A gel lift was collected after the print was developed with powder and imaged. The print on the gel lift was also imaged with white light.
PLC73A	Lifting Photography	
PX2B4E	Lifting Photography	Forensic Sil silicone, white f/14, 1/8 s, ISO-100 Reversed
PX7MRA	Photography	Macro shooting after each enhancement step, Location photography of marks on their support.
PXPB96	Photography	Took a scale photograph. I placed a tape lift over the print to preserve it.
PYCCRX	Lifting	USED GEL LIFT
Q87MV2	[No Methods Reported.]	no detail observed
QKAZWY	Lifting Scanning	Gel lift Gel scan using GLScan
QP7MR9	Photography Lifting	I photographed the latent after cyanoacrylate fuming using the Shortwave UV camera and light. I lifted after processing with black fingerprint powder.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
QPQ9KY	Photography	Photographs were taken after the following steps: visual examination, cyanoacrylate fuming, 1,2-Indanedione, and dye staining.
QTPF6W	Lifting	Lifted ridge detail seen in quadrant B with tape and placed on a lift card.
R2DWT4	Photography	Nikon D610, RUVIS photograph
R434BE	Photography	I documented possible friction ridge detail in box B on item 002 with photography after processing with black magnetic fingerprint powder and again with an alternate light source after dye staining.
R6WRVV	[No Methods Reported.]	N/A - No prints developed
R9ZH6V	Lifting	Two tape lifts of developed prints were collected; one after magnetic powder and one after black powder.
RCAZWW	Lifting	Magnetic powder, followed by black powder, followed by bichromatic powder, tape lift
RCW8K4	Photography Evidence Room	1:1 Package, tape, log into evidence
RD32U9	Lifting	
RE2ZE2	Photography	Opaque diffusion gel lighting
RXY6X4	Lifting Scanning	Latent print lifted with 1 1/2 inch Evident fingerprint tape and transferred onto an Evident 3" by 5" fingerprint latent lift card. Latent print scanned with Epson scanner at 1200 dpi, 16-bit greyscale. Documented/analysis utilizing CSI Pix software and printed out.
T2CEAY	Photography	
T2U7L4	Photography	1:1, gray scale, 1000dpi
T6W8L2	Photography	One digital image (Camera A)
T6YWU6	Photography	
T8KNXU	None - No Ridge Detail of value observed	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
TBZBAE	Photography Lifting	
TD2E22	Photography	
TKN6MW	Photography	Camera
TLECMY	Photography	I photographed the print with scale.
TWEXX6	[No Methods Reported.]	No ridge detail seen
TXU3RW	Photography	
U7YPW2	Photography	Photography of latent print taken after LabKam (after cyanoacrylate fuming) (clear goggles)
U9RDJ4	Photography	FSIS, 1 image, section B, UV direct lighting
UDLEJW	Photography	Blue laser light source 515 filter
UHG9GX	[No Methods Reported.]	nothing was visible
UJNNN4	Photography	One digital photograph of latent impression from quadrant B of the glossy photograph stored on a compact disc.
UN6UMY	[No Methods Reported.]	The partial print in section B did not contain sufficient ridge details. Therefore the print was not preserved.
UVHMVA	Photography	Photographed.
UYWK2C	Photography	Nikon D600 + 60mm micro lens using white light sources.
V3DCMX	Photography	
V879EA	Photography	the print was photographed with the appropriate label, with camera settings RAW, f/stop 16, ISO 100 and at 15" and 30"
V93KF6	Scanning	
VADQD7	Lifting	MagnaJetBlack (magnetic powder). Visual examination of fingerprint and photographing directly from surface (no filters). After this lifted on Scotch 845 fingerprint-tape and scanned.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
VAX8T9	Photography	Modified Camera for detecting UV- and IR-light.
VKX3MX	Lifting	The latent fingerprint that was developed in Quadrant B using cyanoacrylate fuming and black powder was lifted using clear tape.
VNDBBW	Photography	Digital Capture: Camera Nikon D810 Image quality: tiff
VRXC23	Lifting	A tape lift was used to collect the print. A photograph was not taken because of the background.
VYFLPY	Lifting	One lift was created after powder processing
W6WHP7	Photography	Canon EOS 5D Mark IV + 100mm L2.8 Macro + Violet filter (415)
W9GN83	Photography	MP- used overheard fluorescent lighting
WB489Z	Photography	Digital
WJ2WRP	Photography	Photographed the ridge detail in quadrant B and overall taken using the DCS-5 after CAE fuming. No other ridge detail observed.
	Lifting	Applied Accutrans silicone casting material over developed ridge detail and waited approximately 10 minutes for the silicone to dry. Lifted silicone material and stapled to lift card.
WJM76Z	Lifting	Lifted the area of possible latent value using frosted tape, which was then placed on a latent lift card. For the case file, a copy of the photograph was made (after the area was already lifted) and the area that was lifted was indicated on the photograph with a black marker.
WMH6D4	Photography	co-axial light
WMWNX2	Unable to capture	Unsuitable and unable to capture FRD noted under visual; subsequent processing had no improvement
WRC4NR	Photography	One (1) photograph taken of Quadrant B after powder processing (loop).
WUHTLV	Photography	Lighting: UV/RUVIS
WXHR6Z	Lifting	two lifts taken
X446JT	Photography	Digital image captured with white light

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
XARREY	Photography	1:1, gray scale, 1000dpi
XELP4P	Photography	Photographed the item packaging as received and the item before processing. Photographed the item with a flashlight and using a diffused fluorescent light. The diffused fluorescent delivered the best result. Close up photographs of ridge detail were taken with the surface to camera sensor distance of no greater than .49 meters.
XFBYTX	Photography	A photo of the print was taken in digital format and saved it. Then the photo was treated in order to clearly identify the print.
XFH6E2	Photography	Using the FSIS camera system and SUV lighting, two photographs were taken of the same latent impression. Very faint.
XJU6EY	Photography	Twenty-one images taken. Two overall images taken.
XJZ4RW	Photography	overhead lighting, fluorescent lighting; camera 9/lens 2 -magnetic powder print
Y3N8P9	Photography	Examined with FSIS- Latent #3 B, at Cyanoacrylate step 1330 HRS
Y8FCKX	Unsuccessful	Ridge detail was very limited and faint and could only be viewed obliquely under ambient light. Multiple lighting, digital photography and scanning efforts were unsuccessful in capture of the ridge detail.
YHZNR4	Photography	Photographs taken after applying fingerprint powder. Latent impression was faint and oblique lighting was used.
YK2RJQ	Lifting	I used fingerprint tape to then lift the print.
YNRTRZ	Photography	Imprint labelled 2A, photographed and printed
Z99MVQ	Photography Lifting	FSIS unit with short wave UV light at 245 nm and a UV filter Black powder hinge lifter
ZBCHEU	Photography	scale in photograph taken with a Nikon camera
ZKH6MU	Did not attempt.	Would not attempt to examine this item but would sent to the regional laboratory for analysis.
ZLYCVW	Photography	raw images using fx camera

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
ZNL3V2	Photography	Photographed with a measure.
	Lifting	Delicate / weak fingerprint lifted to tape, placed on the fingerprint card.
	Scanning	Fingerprint from card scanned.
ZPYNQW	Photography	Photography after each stage of processing if latents were observed and/or developed
ZVEFRU	White Light Examination	After each process was applied, the exhibit was subject to white light examination. If this had been live casework, the mark in Box B would have been photographed after SG treatment. The gel lift would also have been photographed as this showed higher quality detail as the background was no longer interfering.

Item 2 - Preservation Response Summary	Participants: 230
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Methods Utilized	
Lifting	68
Photography	165
Scanning	6

****Note:** Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
23CFPM	Photography No enhancement with Ninhydrin. Nothing further done.	6/17/20 One (1) area of ridge detail developed and digitally captured labelled D1 in Section D. 6/17/20 No enhancement with Ninhydrin. Nothing further done.
24C69Y	Photography	
26KF63	Photography	Camera Canon 700D, oblique light
293TPQ	Photography	
2CJ3XN	Photography	Photographs were taken after each processing step.
2CMHBN	Photography	
2M6742	Photography	forensic light (450-570nm, orange filter)
2RUNFR	Photography	Photographed, imported into Foray Enhanced in Photoshop and printed on Noritsu printer
2YV2M	Photography	One latent developed and photographed
349ZCM	Photography	Item 3 was photographed after each processing method.
3ADUBP	Scanning	
3B43BR	Photography	
3DC78P	Photography	
3GDAZW	Scanning	Quadrant "D" was scanned using Scanner 13 in the Crime Scene Unit after ninhydrin processing. One (1) scan was taken of the print observed in quadrant "D".
3J4FGM	Photography	
3JYZ4L	Photography	Photographs were taken after the visual exam and alternate light source for illustrative purposes to show no ridge detail. Then photographs were taken after 1,2-Indanedione and alternate light source at 515 nm orange filter so show latent print in quadrant D with and without a scale. Photographs were taken after the Ninhydrin showing very little ridge detail with and without a scale.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
3KUNFQ	Photography	LASER
3P7LWP	Scanning	Adobe Photoshop
3PQ3CT	Photography	The developed latent print was photographed with a metric scale.
3QWUVT	Photography	The print was photographed using macro lens
3UYVWQ	Photography	DFO, Ninhydrin
3WPW4Y	Photography	FSIS Camera System
3YRVER	Photography	Documented latent 1-3.1 on section D with scale and case information then photographed.
	Scanning	Scanned at 1200DPI to saved to case DVD
4C2QDN	Photography	Photograph (item #3-LP1) taken after processing with iodine.
4E3ZXP	Photography	The latent print was photo lifted using the Nikon 850 camera.
4GQ3CQ	Scanning	the fingerprint will be scanned and printed for the comparison test.
4ZNL7R	Scanning	One (1) image was taken with Scanner 13 after the completion of Ninhydrin.
63PT3P	[No Methods Reported.]	Submitted to regional laboratory for additional analysis.
6APBJM	Scanning	Photoshop
6ED3KN	Photography	Photoshop software
6HJFA3	Photography	Nikon D7000, Bright Beam laser (532nm with orange and FF1 filters)
6LVJYJ	Photography	Photographed print in section D using Pentax camera. Edited in Lightroom to black and white and printed 1:1.
6LWBWR	Photography	Macro Lens w/OCB Filter, Laser light @ 532nm.
6QR8FQ	Photography	

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
6WZDF4	Photography	Digital Imaging
6YQH7P	[No Methods Reported.]	Submitted to regional laboratory for additional analysis.
72MKBG	Photography	
74WN6T	Photography	
76L47N	Photography	lens Nikon AF Micro Nikkor 60mm, light appropriate to the method used.
79RFDP	Scanning	Ninhydrin: One (1) digital image taken with scanner thirteen on July 8, 2020. See image metadata for settings.
7BRRQG	Photography	impression photographed Camera settings to Raw and fine per policy. appropriate scale and markings added to impression prior to photographing
7FQ7FR	Photography	Latent prints in quadrant D were photographed using green light (532nm) coupled with a curved orange filter and a FF-1.0 filter.
7V2RWW	Photography	
83E4PN	Photography	Nikon D2x with ALS at 555nm and red filter
87F6UR	Photography Scanning	Photography used to document 1,2-Indanedione development Scanning used to document ninhydrin development
8C4WWT	Photography	Photographed with forensic light source 505nm wavelength and orange camera filter - ISO 200, F/11. Photographed with ambient light - ISO 200, F/5
8L76KQ	Photography	Print Photographed in Quadrant "D" - no ridge detail and very faint.
8M2RXU	Photography	FSIS
8MNYLZ	Photography	Photo overall and latent- Retook photos has some did not save properly
8UMKBF	Submit evidence	
8WT74L	Photography	Ninhydrin enhanced ridge detail captured with photography

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
8YYN2G	Photography	Photographed the DFO developed ridge detail and scanned the Ninhydrin ridge detail (same ridge detail for both methods).
923JJY	Photography	Orange and FF1 filters with Laser (Bright Beam) / 532nm
9AU4GK	Photography	
9M3WXP	Photography	2 Ninhydrin photographs. LP camera 9/lens 2. Incandescent flood lighting, direct lighting.
9NT4EF	Photography	After DFO and Ninhydrin
9P8CMF	Photography	Item photographed with macro lens, orange filter, with a scale, and in raw and fine. Item marked with "3".
9U2BVJ	Photography	L002 photographed with LASER.
9UE4QL	Photography	I photographed this evidence prior to processing and then again after processed when I observed an area of friction ridge impression.
9YU9NG	Photography	The methodology utilized includes: visual examination, chemical and physical processing, viewing with an alternate light source, digital retention, and ACE-V.
9ZLK8M	Scanning	Ninhydrin: One(1) digital image taken with scanner thirteen on July 20, 2020. See image metadata for settings. (Section D)
A447DF	Photography	Photographed (two photos of a single print) in 1:1 ratio
A9UGMD	Photography	I photographed the print in quadrant D after ninhydrin development and application of steam. I used RAW file formatting and a 100mm lens with a sensor to surface distance of no more than .49 meters.
AGA6FU	Photography	
AHK72T	Scanning	
AV99JK	Photography	Nikon D2Xs; ALS with orange after DFO Nikon D2Xs; Ninhydrin with direct lighting
AXEP2P	Scanning	Ninhydrin print scanned using Scanner 13.
AZ4VGF	Photography	Took photo of print with a scale. Prepared a 1:1 black & white photo of developed print.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
AZZF6E	Photography	Nikon D850, TIF format
	Photography	Nikon D850, TIF format
BLX7YK	Photography	Nikon D7200 using red filter at 555nm (ALS) after initial DFO
BQT3GJ	Photography	The fingerprint was photographed at every stage of research after disclosure.
BT27DF	Photography	Digital image captured with Nikon D850 in white light and under a green filter
BWXUUM	Photography	blue green light - orange filter - DCS 4
BZJJCE	Photography	Photography in indanedione (532nm and orange barrier filter) and ninhydrin.
C6NJ7G	Photography	
C8T8NT	Photography	NIKON D5600 + AF-S DX Micro Nikkor 85mm f/3.5G ED VR lens
C98PPD	Photography	
CBVAAM	Photography	D700
CGHZVH	Photography	
CGY6DG	Photography	The latent print was digitally photographed using scale and lab protocol labeling. Photos were obtained with and without green color filter.
CPC9EN	Photography	Macro lens used. ISO 200 and F8.
CRGU9F	Scanning	Scanned with a scale containing case number, date, item number, processed used, and initials.
CRJJDD	Photography	6/24/2020: Nikon D300 camera on copy stand, RAW format, Aperture priority, 90 degrees to item, Angled lighting. Photographs captured - Overall of front side, overall of back side, and area near "(555-703-9824)" in quadrant "D" on front side with scale present. Photographs captured uploaded into Digital TraQ. Photograph of area near "(555-703-9824)" in quadrant "D" on front side with scale present enhanced in Photoshop. Enhancement calibrated 1:1 in TraQ and printed

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
CTBJAN	Photography	Camera Nikon D800e, photographic lens AF Nikkor 105 mm with photo evidence ruler. After every method the fingerprint was protected by photography.
D23D7L	Photography	After Item 3 was processed with 1,2-Indanedione-zinc Chloride, the developed ridge detail was photographed with the green laser (532 nm) & orange filter.
	Photography	After all processing steps were completed, an overall image was taken of Item 3 to show where ridge detail had been developed.
D6X9KE	Photography	
D9N3RF	Photography	Item 3 was photographed prior to processing, and after each processing method. The fingerprint impression was photographed.
	Ninhydrin Fixative	Item 3 was sprayed with a Ninhydrin fixative (NFS200) (lot number 201612059) and allowed to dry in a venting system. The fingerprint impression was then photographed with a scale.
DHT9MH	Scanning	After the ninhydrin processing, one (1) digital image was taken using scanner 13 in the crime scene unit. See metadata for settings.
DNF3JF	Photography	
DU86RL	Scanning	The item was scanned using a scanner set to a resolution of 1200 pixels per square inch for comparison quality. A scan was subsequently uploaded to the [Laboratory] Latent Print Image Server.
DVDVRA	Photography	1,2-Indanedione (fluorescence examination)
	Photography	Ninhydrin (white light examination)
DW9FE9	No Prints	No prints developed on the paper.
DWNJ8F	Photography	Item photographed using LASER light.
E2XE7A	Photography	Latent impression L2 photographed using incandescent lighting.
E3PF4K	Photography	One (1) latent print sufficient for further review was developed from Item 3 area D, photograph and saved the image in a CD.
E922JK	Photography	Digitally Photographed

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
EC38XP	Photography	The latent impression was photographed.
EDWX2H	Photography	1,2-Indanedione was photographed with green light. Ninhydrin was photographed with white light.
EE73GR	Photography	Using DCS system with ring light
EKVFHF	visual examination	No latent print found on paper. The item will be sent to the regional laboratory for further testing.
EKVKTH	Photography	
ET7WW8	Scanning	One scan of developed latent prints was taken at 1000 PPI.
F38JLJ	Photography	With a Nikon D5, 105mm
F8F66A	Photography	Photos taken of LP3-1 and saved to a secure image drive.
FLZMXD	packaged for lab	visual observation done, packaged and submitted to lab for further examination
FPL6HJ	Photography	DCS4 System white light with green filter Printed 1:1 L05
FPLAV8	moisture steam	
FUEDHJ	Photography	Photographed with macro-lens
G3KH8F	Photography	Photographed using ISO 100, F/11, shutter speed varied for bracketing. Scale placed in photograph. After DFO and after ninhydrin treatments.
G8VNNL	Photography	
G9BRHD	Photography	Photography with Nikon D850 camera from 20 to 25C. Image quality:tiff
GANCC9	Photography	Macro photography
GAP6BG	Photography	Photographs taken at the DFO and NIN stages
GJP6DM	Photography	
GLZR9F	Photography	

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
GNKYBN	Photography	
GPGACJ	Photography	Item #3 submitted into evidence with detected fingerprint located in Area "D"
GR972C	Photography	
GTZ7YN	Scanning	Resolution was set to 1200 dpi and saved as a TIF file.
GXAF86	Photography	Used DCS-5 to photograph print using white light
H8EUMC	Photography	I took overall photos of the item of evidence. I packaged the item and submitted to Lab for further analysis.
H8EYXE	Photography	The fingerprint was photographed after the Indandion method.
HC698C	Photography	crimelite violet, 410 nm
HERXDB	Photography	Mark found on section D after 1,2-Indanedione. Photographed using 532nm light (green light) and camera filter 550nm.
HF9U7B	Photography	Nikon D800 DSLR camera, 60mm lens
HUQMUG	Photography	Took 1 digital photograph of latent impressions on the piece of green paper with typed writing at the DFO/Laser step with scale. Took 1 digital photograph of latent impressions on the piece of green paper with typed writing at the Ninhydrin step with scale.
HVKH9D	Lifting	I LIFTED THE AREA OF RIDGE DETAIL FROM QUADRANT D ON THE ESDA TEST USING A SPECIFIC ESDA FIXING FILM. THIS PRESERVES ANY RIDGE DETAIL AND OTHER INDENTED IMPRESSIONS. IF THIS WAS A LIVE CASE THEN I WOULD HAVE PHOTOGRAPHED THE LABELLED AREA OF RIDGE DETAIL USING THE DCS SYSTEM.
	Photography	AFTER INDANDIONE TREATMENT I EXAMINED THE CONTROL SAMPLE (POSITIVE) PAPER USING A GREEN CRIMELITE (490-560NM) AND VIEWING FILTER (590NM). AN AREA OF RIDGE DETAIL WAS ENHANCED IN QUADRANT D. AFTER NINHYDRIN TREATMENT I EXAMINED THE CONTROL SAMPLE(POSITIVE) AND THE PAPER USING NATURAL LIGHT AND WHITE CRIMELITE - AREAS OF RIDGE DETAIL WAS ENHANCED IN QUADRANT D. IF THIS WAS LIVE CASEWORK THEN ALL AREAS OF RIDGE DETAIL WOULD BE CAPTURED USING A DIGITAL CAPTURE SYSTEM (DCS) AND FORWARDED REMOTELY USING A FORENSIC IMAGE SCANNING HUB SYSTEM(FISH)TO THE REGIONAL IDENTIFICATION BUREAU FOR COMPARISON.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
HY4MQ9	Photography	
HZF678	Photography	Item placed into Locker #9 overnight for prints to develop. On 06/23/2020, item was transferred "in-analysis" and documented using photography. Overall, midrange, and extreme close up of the print was photographed. Print was then enhanced using Photoshop and entered into the Traq system
J4BB4A	Photography	Evidence number three is photographed using a rule close to fingerprint, later the photographs are recorded on a disc, this disc is documented with the information regarding the criminal case on its cover (date, hour, injured, complaint number, pathology number if applicable, location of removal of fingerprint and person who developed and raised the fingerprint). Later, the disc is taken to the [State] police, to the fingerprint laboratory. The document of the laboratory of fingerprints is filled so that they can be analyzed.
J7JLZD	Photography	Photographed friction ridge detail in divided section D, following indanedione with a Nikon D7500 camera, orange camera filter, wearing orange viewing goggles and a Laser at 532nm.
JDZ726	Photography	Digital photograph with scale
JH63K6	Photography	Photograph taken after 1,2-indanedione-zinc step using TracER (532 nm)
JHR7J7	Photography	Photographed on 06/19/20 and 06/23/20
JKX3HF	Photography	Photographed with a Fuji FinePix S3 Pro equipped with a Nikon Macro lens and a forensic Laser filter
JM3NAM	Photography	Foster+Freeman DCS4 (ring light and crime light)
JNWCV3	Scanning	Item 3 Green Copy Paper - High resolution 1200 dpi scan using EPSON Perfection V800, EPSON scan software saved as Tif. Image processing using Adobe Photoshop CC, metadata saved. One image printed using EPSON SC P5000 greater than 1000 dpi.
JYFJWD	Photography	Digital photography was used.
K46JMD	Photography	excitation 475 - 520 nm, OG550 AG
KE74P7	Photography	Item photographed w/green filter on preset camera settings.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
KMGBLA	[No Methods Reported.]	This item will be submitted to the Regional Laboratory for further examination.
KUYJA7	Submitted item	Submitted item
KVU7MA	Photography	Nikon D750 + Nikkor 60mm f2.8 Macro
L2TBTJ	No latent prints were developed	
L4ZLR9	Photography	Digital photograph taken - submitted as evidence
L7822Z	Photography	Using the Digital Capturing System 5, I took one close-up and one overall photograph of the ridge detail using a scale.
LBHWYH	Photography	Any suitable marks developed throughout sequential treatment were marked up and photographed 1:1 using a D810 Nikon digital camera with an AF-5 micro nikkor 105mm lens, 8x4 Crime Lite light source(s) and appropriate camera filter(s). The camera is linked to DCS5 (Digital Capture System 5) software where the images are exhibited with full audit trails and further DCS5 enhancement tools can be used to improve contrast/remove background interference where applicable. Exhibited images then submitted to the Fingerprint Bureau for further analysis and comparison.
LBM9ME	Photography Photography	After 1,2-indanedione, photography with forensic light at 500 nm and orange filter After Ninhydrin, one photograph with white light and one photograph with white light and green filter
LJEQY2	Photography	Pre and post processing photographs were taken. One small area of friction ridge detail was observed and determined to be of no value for comparison.
LMYJB4	Photography	Front and back of item was photographed. A close-up photograph, with scale, was captured of the area of development. The photographs were uploaded to the Digital Traq system. Once in the system with a chain of custody established, the close-up photograph was enhanced through Photoshop, printed out and submitted for analysis.
LN8VQK	Photography	
LVP7YE	Photography	Photo Evidence Scale
M3M9MC	Photography	Digital photography

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
M8EF7K	Photography	DCS5 photography system used to preserve the marks after each treatment. using suitable light source and filter based on the treatment examination mentioned above [Table 2 - Development Methods].
M9PHU6	Photography	One image captured at DFO step and preserved in MIDEO database.
	Photography	One image captured at Ninhydrin step and preserved in MIDEO database.
MCA8F3	Scanning	
MECCNG	Photography	Crimescope wave length=515 nm
MJBQC7	no print found	Visual observation preformed, no prints found. Packaged and submitted to laboratory for further examination
MK9UC9	Photography	Photos were taken with Camera9/Lens2. The ninhydrin print was taken with Direct lighting, using an incandescent flood light.
MQTPVZ	Scanning	One digital scan of the developed print at 1000 dpi.
MRNFCZ	Placed back in packaging. Transferred to Latent print section.	
MRP9B8	Photography	one photo
MWZLR7	Photography	
N2PHU3	Photography	Photograph latent using white light, scale, and macro lens.
NAL3EH	Photography	Photography
NBCGK8	Photography	Digital photography was taken with the Crimescope after Indanedione processing (using an orange filter) and digital photography after Ninhydrin processing. An overall photo of the item was also taken
NCRF3C	Scanning	Photo Copy
ND668A	Scanning	Item was scanned on a flatbed scanner at 1200 dpi and saved as a Tiff file. See image metadata for scanner settings.
NF8BHA	Photography	Latent print photographed during DFO & Ninhydrin sequences.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
NKMH79	Photography	Photographs of all ridge structure of value were taken including scale and case details written on scale. Overall photographs were also taken of each item indicating location of ridge structure.
NLWNA	Photography	A photograph of the fingermark was conducted (DCS 4 system) after indanedione + zinc chloride treatment
P8Q4B4	Photography	
PDWRVX	Photography	
PF26W6	Photography	
PGGK7Z	Photography	The print observed in section 3D was photographed with a digital camera after DFO (with an alternate light source Rofin Polilight PL500 at 530nm with an orange filter) and Ninhydrin (with white light).
PLC73A	Photography	
PX2B4E	Photography	f/32, 30s, ISO-200 Light: Green Lens: Bright red
PX7MRA	Photography	Macro shooting after each enhancement step, Location photography of marks on their support.
PXPB96	[No Methods Reported.]	No latent fingerprint was developed. Item 3 will be sent to the laboratory for further analysis.
PYCCRX	Photography	
Q87MV2	Photography	see photo branch notes [Notes not included by participant.]
QKAZWY	Scanning	1000 ppi scan of evidence surface showing developed ridge detail
QP7MR9	Photography	I photographed the latent impression after DFO using the laser and an orange filter.
QPQ9KY	Photography	Photographs were taken after the following steps: 1,2-Indanedione and Ninhydrin.
QTPF6W	Photography	Photographed ridge detail seen in quadrant D after Ninhydrin using DCS-5.
R2DWT4	Photography	Nikon D610, Laser and orange filter photo

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
R434BE	Photography	I documented the ridge detail in box D on item 002 with photography.
	Scanning	I further documented the ridge detail in box D on item 002 by scanning.
R6WRVW	Submission of evidence	Repacked item to be submitted entirely to the lab
R9W4RV	[No Methods Reported.]	Piece of paper repacked in original packaging for preservation.
R9ZH6V	Scanning	One scan was taken of the item using the Epson V700 scanner.
RCAZWW	Photography	Digital photography. Digital enhancement and printing to 1:1 scale
RCW8K4	Photography	1:1
	Evidence Room	Package, tape, log into evidence
RD32U9	Scanning	
RE2ZE2	Scanning	
RXY6X4	Photography	Images saved in JPEG and RAW at 1000 dpi, and transferred to DVD-ROM.
T2CEAY	Photography	
T2U7L4	Photography	1:1, gray scale, 1000dpi
T6W8L2	Photography	one digital image (Camera A) - smudged print possible R/W
T6YWU6	Photography	
T8KNXU	none - No latent prints of value observed	
TBZBAE	Photography	
TD2E22	Photography	
TKJPAV	Photography	After Ninhydrin processing
TKN6MW	Photography	Camera used

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
TLECMY	Photography	I photographed the print, with scale
TLWG6X	Photography	Digital image captured with Nikon D850 using blue laser with yellow filter
TR9ZT7	Scanning	1 scanned image taken after NIN processing. PD yielded no enhancement.
TVPE9Z	Photography	
TWEXX6	Photography	Used Nikon D800 camera to photograph latent.
TXU3RW	Photography	Used Laser @ 532 nm with orange barrier filter for Indanedione photography
U7YPW2	Photography	Photography of latent print after Indanedione/Alternate Light Source (Crime scope) (with orange goggles/filter)
U9RDJ4	Scanning	Ninhydrin, scanner 12, 1 image
UDLEJW	Photography	Blue laser light source 515 filter
UJNNN4	Lifting	Two ESDA lifts.
	Photography	Three digital photographs of latent impression from quadrant D of green paper stored on a compact disc.
UN6UMY	Photography	I photographed the print in high resolution after the Indanedione treatment. I used orange filters and 505 nm light source in a dark room. This photo contained a ruler in level with the print. I also made one photo of the entire item, to describe the position of the fingerprint detected. The latter photo was taken in a photostudio, using photography grey background, three lightsources (left, right and bounced) and aperture 8 for optimal plan detail. The photo contained a ruler marked with the case details.
UVHMVA	Photography	Photographed.
UYWK2C	Photography	Nikon D3 + Nikon 60mm micro lens using Green crime-lite 82 for illumination and appropriate viewing filter (orange).
V3DCMX	Photography	
V879EA	Photography	the print was photographed with the appropriate label, with camera settings RAW, f/stop 16, ISO 100 and at 13"

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
V93KF6	Scanning	
VADQD7	Photography	Visual examination with red goggles + Crime-Lite 82s OG590/480-560nm. Photographing directly from surface (red filter + Crime-Lite 82s OG590/480-560nm).
VAX8T9	Photography	Canon EOS with red filter.
VKX3MX	Scanning	The latent fingerprint that was developed using ninhydrin was scanned into Foray and printed.
VNDBBW	Photography	Digital capture: Camera Nikon D810 Image Quality: tiff
VRXC23	Photography	The print was photographed with a scale.
VYFLPY	Scanning	One image was scanned after Ninhydrin processing
W6WHP7	Photography	Canon EOS 5D Mark IV + 100m L2.8 Macro + red filter (571 nm)
W84WDZ	Photography	500-550 nm
W9GN83	Scanning	Used scanner 9 (1200ppi)
W9U4C3	Scanning	or photography. The partial latent found in Section D was scanned for preservation.
WB489Z	Photography	Digital
WJ2WRP	Photography	Photographed ridge detail in quadrant D and overall using the DCS-5. No other ridge detail observed.
WJM76Z	Photography	The area of possible latent value was photographed on a copy stand with and without a scale, and a macro lens. The item was then heat sealed in clear plastic. A copy of the invitation was made after it was heat sealed and maintained in the case file for documentation.
WMH6D4	Photography	green light, orange filter, DCS5
WMWNX2	Scanning	
WNBYRY	Photography	Digital Photography is the method of preservation. Ridge detail photographed 1:1 with and without a scale. developed latent prints can also be scanned into AFIS for further examination.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
WRC4NR	Photography	One (1) photograph taken of quadrant D after ninhydrin processing.
WUHTLV	Photography	Lighting: Green LASER
WXHR6Z	Scanning	Epson V700 photo scanner
X446JT	Photography	Digital image captured with Nikon D850 with blue laser using yellow filter
XARREY	Photography	1:1, gray scale, 1000dpi
XELP4P	Photography	Photographed the item packaging as received and the item before processing. Photographed the results of the ninhydrin process before and after the application of steam. Tested different wavelengths and filters but none were photographed other than visible light from fluorescent lights without a filter. Close up photographs of ridge detail were taken with the surface to camera sensor distance of no greater than .49 meters.
XFBYTX	Photography	A photo of the print was taken in digital format and saved it. Then the photo was treated in order to clearly identify the print.
XFH6E2	Photography	The latent was photographed at the DFO stage.
XJU6EY	Photography	Two photographs taken. Two overall images taken.
XJZ4RW	Scanning	Epson scan V600 (scanner 11); 1200 ppi
Y3N8P9	Photography	Examined with a Laser- Latent #2 D 1340 HRS
Y8FCKX	Scanning	Latent print captured at 1200 using flatbed scanner.
YHZNR4	Scanning	The latent impression was scanned after ninhydrin. The impression was scanned at 1200 dpi and saved as a .tif image.
YNRTRZ	Photography	Imprint labelled 3A, photographed and printed
YVNLZU	Photography	Captured after DFO and NIN
Z99MVQ	Photography	Nikon D4 camera with green laser at 532 nm and an orange band pass filter

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
ZBCHEU	Photography	scale in photograph taken with Nikon camera
ZLXMLT	Photography	TM "3D1" in D section. White light is used (400-700nm) to photograph the developed latent print (partial as well as detail.)
ZLYCWW	Photography	raw images using fx camera
ZNL3V2	Photography	High quality fingerprint photographed with a measure.
ZPYNQW	Photography	Photography after each stage of processing
ZVEFRU	Light Examination	White light was used during the ESDA process. I was able to visualise an area that appeared to be the outline of a fingerprint with a small amount of detail in Box D. This would not be suitable for recovery on live casework - ESDA lift not recovered. After IND treatment, Item 3 was viewed under a green light source (490-560nm) using 590nm viewing goggles. Under circumstances of live casework, the ridge detail developed in Box D would have been captured using this light wavelength on the DCS capture system. White Light was used to examine Item 3 after Ninhydrin treatment. No improvement was seen compared with the mark after IND, therefore the mark would not be recaptured.

Item 3 - Preservation Response Summary

Participants: 258

Methods Utilized

Lifting	2
Photography	210
Scanning	39

****Note:** Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.

First-Level Detail Findings

TABLE 4 - Item 1

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
23CFPM	N/A				4E3ZXP	N/A			
24C69Y		✓			4GQ3CQ		✓		
26KF63		✓			4H34RX		✓		
293TPQ		✓			4ZNL7R	N/A			
2CJ3XN		✓			63PT3P	N/A			
2CMHBN	N/A				6APBJM		✓		
2M6742	Not Suitable				6ED3KN	N/A			
2RUNFR	N/A				6HJFA3		✓		
2YW2M		✓			6LVJYJ		✓		
349ZCM		✓			6LWBWR		✓		
393WZT	N/A				6QR8FQ		✓	✓	
3ADUBP		✓			6WZDF4		✓		
3B43BR		✓			6YQH7P	N/A			
3DC78P	N/A				72MKBG				✓
3E674Z		✓			74WN6T	N/A			
3GDAZW	N/A				76L47N		✓		
3J4FGM	N/A				79RFDP	N/A			
3JYZ4L		✓			7BRRQG				✓
3KUNFQ		✓	✓		7FQ7FR	N/A			
3P7LWP		✓			7PAKEN	N/A			
3PQ3CT		✓			7V2RWW	N/A			
3QWUVT		✓			83E4PN		✓		
3UYVWQ		✓			87F6UR	N/A			
3WPW4Y		✓	✓		8C4WVT		✓		
3YRVER		✓			8L76KQ	Not Suitable			
4C2QDN		✓	✓		8M2RXU		✓		

TABLE 4 - Item 1

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
8MNYLZ		✓			C8T8NT		✓		
8UMKBF	N/A				C98PPD	N/A			
8WT74L		✓			CBVAAM		✓		
8YYN2G	N/A				CGHZVH		✓		
923JJY		✓			CGY6DG		✓		
9AU4GK	N/A				CPC9EN		✓		
9NT4EF	N/A				CRGU9F	N/A			
9P8CMF		✓			CRJJDD	N/A			
9U2BVJ		✓			CTBJAN		✓		
9UE4QL		✓			D23D7L	N/A			
9YU9NG		✓			D6X9KE		✓		
9ZLK8M	N/A				D9N3RF		✓		
A447DF	N/A				DDDUUH	N/A			
A9UGMD	N/A				DHT9MH	N/A			
AGA6FU	N/A				DNF3JF		✓		
AHK72T	N/A				DU86RL	N/A			
AV99JK			✓		DVDVRA		✓		
AXEP2P	N/A				DW9FE9	N/A			
AZ4VGF	N/A				DWNJ8F		✓	✓	
AZZF6E		✓			E2XE7A		✓		
B8ELEQ		✓	✓		E3PF4K	N/A			
BLX7YK		✓	✓		E922JK	N/A			
BQT3GJ		✓			EC38XP		✓		
BT27DF		✓			EDWX2H	N/A			
BWXUUM		✓			EE73GR		✓		
BZJJCE		✓	✓		EKVFHF	N/A			
C6NJ7G		✓			EKVKTH	N/A			

TABLE 4 - Item 1

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
ET7WW8	N/A				HUQMUG			✓	
F38JLJ		✓			HVKH9D	N/A			
F438XM		✓			HY4MQ9			✓	
F8F66A		✓			HZF678	N/A			
FLZMXD	N/A				J4BB4A	N/A			
FPL6HJ	N/A				J7JLZD			✓	
FPLAV8	N/A				J96C2H			✓	
FUEDHJ		✓			JDZ726			✓	
G3KH8F	N/A				JE8L9B	N/A			
G74MQB		✓			JH63K6			✓	
G8VNNL	N/A				JHR7J7	N/A			
G9BRHD	N/A				JKX3HF	N/A			
GANCC9		✓	✓		JM3NAM			✓	
GAP6BG	N/A				JNWCV3			✓	
GJP6DM		✓			JYFJWD		✓	✓	
GLZR9F	N/A				K46JMD			✓	
GNKYBN	N/A				KE74P7			✓	
GPGACJ	N/A				KMGBLA	N/A			
GR972C	N/A				KUYJA7	N/A			
GTZ7YN	N/A				KVU7MA			✓	
GXAF86	N/A				L2TBTJ	N/A			
H8EUMC	N/A				L4ZLR9	N/A			
H8EYXE		✓			L7822Z	N/A			
HAKCL8		✓			LBHWYH			✓	
HC698C		✓	✓		LBM9ME			✓	
HERXDB		✓			LJEQY2			✓	
HF9U7B	N/A				LMYJB4	N/A			

TABLE 4 - Item 1

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
LN8VQK		✓			PX2B4E	N/A			
LVP7YE		✓			PX7MRA			✓	
M3JQK8	N/A				PXPB96	N/A			
M3M9MC		✓			PYCCRX		✓		
M8EF7K		✓			Q87MV2		✓		
M9PHU6	N/A				QKAZWY		✓		
MCA8F3		✓			QP7MR9		✓		
MECCNG	N/A				QPQ9KY		✓	✓	
MJBQC7	N/A				QTPF6W	N/A			
MK9UC9	N/A				R2DWT4		✓	✓	
MQTVPZ	N/A				R434BE	N/A			
MRNFCZ	N/A				R6WRVW	N/A			
MRP9B8	N/A				R9W4RV		✓		
MWZLR7	N/A				R9ZH6V	N/A			
N2PHU3		✓			RCAZWW	N/A			
NAL3EH		✓			RCW8K4	N/A			
NBCGK8	N/A				RD32U9		✓		
NCRF3C		✓	✓		RE2ZE2		✓		
ND668A	N/A				RXY6X4		✓		
NF8BHA	N/A				T2CEAY		✓		
NKMH79		✓			T2U7L4	N/A			
NLVNA		✓			T6W8L2		✓		
P8Q4B4		✓			T6YWU6	N/A			
PDWRVX		✓			T8KNXU		✓		
PF26W6		✓			TBZBAE		✓	✓	
PGGK7Z		✓			TD2E22		✓		
PLC73A	N/A				TKJPAV		✓		

TABLE 4 - Item 1

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
TKN6MW	N/A				W84WDZ			✓	
TLWG6X	N/A				W9GN83			✓	
TR9ZT7	N/A				W9U4C3			✓	
TVPE9Z		✓			WB489Z			✓	
TXU3RW		✓			WJ2WRP	N/A			
U7YPW2	N/A				WJM76Z	N/A			
U9RDJ4		✓	✓		WMH6D4			✓	
UDLEJW	N/A				WMWNX2	N/A			
UHG9GX		✓			WNBYRY			✓	
UJNNN4	N/A				WRC4NR			✓	
UN6UMY		✓			WUHTLV			✓	
UVHMVA	N/A				WXHR6Z			✓	
UYWK2C		✓			X446JT	N/A			
V3DCMX		✓			XARREY	N/A			
V63DV8		✓			XELP4P	N/A			
V879EA	N/A				XFBYTX			✓	
V93KF6		✓	✓		XFH6E2			✓	
VADQD7	N/A				XJU6EY	N/A			
VAX8T9	N/A				XJZ4RW			✓	
VKX3MX	N/A				XXWHP6			✓	
VNDBBW	N/A				Y3N8P9			✓	
VRXC23	N/A				Y8FCKX			✓	
VU6HT7	N/A				YHZNR4			✓	
VVXNY	N/A				YK2RJQ	N/A			
VYFLPY		✓	✓		YNLG44			✓	
W6WHP7	N/A				YNRTRZ	N/A			
W7TUQ2		✓			YVNLZU			✓	

TABLE 4 - Item 1

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
YYNWVU		✓							
Z99MVQ	N/A								
ZBCHEU		✓							
ZKH6MU	N/A								
ZLXMLT		✓							
ZLYCVW	N/A								
ZNL3V2	N/A								
ZPYNQW	N/A								
ZVEFRU	N/A								

Item 1 - Findings Summary				Total Participants: 280	
1st Level	Arch	Loop	Whorl	Not Suitable	N/A
Total	145	25	0	2	124

**NOTE: These numbers may not add up to the total # of participants, as a participant may have selected more than one pattern option.*

TABLE 4 - Item 2

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
23CFPM	N/A			4GQ3CQ		✓	
24C69Y		✓		4H34RX		✓	
26KF63		✓		4ZNL7R	N/A		
293TPQ		✓		63PT3P	N/A		
2CJ3XN	Not Suitable			6APBJM		✓	
2CMHBN	N/A			6ED3KN	Not Suitable		
2M6742		✓		6HJFA3	Not Suitable		
2RUNFR	N/A			6LVJYJ	Not Suitable		
2YW2M		✓		6LWBWR		✓	
349ZCM		✓		6QR8FQ	Not Suitable		
393WZT	N/A			6WZDF4	Not Suitable		
3ADUBP		✓		6YQH7P	N/A		
3B43BR		✓		72MKBG	Not Suitable		
3DC78P	N/A			74WN6T	N/A		
3E674Z		✓		76L47N		✓	
3GDAZW	N/A			79RFDP	N/A		
3J4FGM	N/A			7BRRQG		✓	
3JYZ4L		✓		7FQ7FR	N/A		
3KUNFQ		✓	✓	7PAKEN	N/A		
3P7LWP	Not Suitable			7V2RWW	N/A		
3PQ3CT		✓		83E4PN		✓	✓
3QWUVT	Not Suitable			87F6UR	N/A		
3UYVWQ	Not Suitable			8C4WVT		✓	
3WPW4Y	Not Suitable			8L76KQ	N/A		
3YRVER	Not Suitable			8M2RXU	Not Suitable		
4C2QDN		✓		8MNYLZ	Not Suitable		
4E3ZXP	N/A			8UMKBF	N/A		

TABLE 4 - Item 2

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
8WT74L	Not Suitable			CBVAAM	Not Suitable		
8YYN2G	N/A			CGHZVH	Not Suitable		
923JJY		✓		CGY6DG		✓	
9AU4GK	N/A			CPC9EN		✓	
9NT4EF	N/A			CRGU9F	N/A		
9P8CMF		✓		CRJDD	N/A		
9U2BVJ	Not Suitable			CTBJAN		✓	
9UE4QL	Not Suitable			D23D7L	Not Suitable		
9YU9NG	Not Suitable			D6X9KE		✓	
9ZLK8M	N/A			D9N3RF		✓	
A447DF	N/A			DDDUUH	N/A		
A9UGMD	N/A			DHT9MH	N/A		
AGA6FU	N/A			DNF3JF	Not Suitable		
AHK72T	N/A			DU86RL	N/A		
AV99JK	Not Suitable			DVDVRA		✓	
AXEP2P	N/A			DW9FE9	N/A		
AZ4VGF	N/A			DWNJ8F	Not Suitable		
AZZF6E		✓		E2XE7A	Not Suitable		
B8ELEQ	Not Suitable			E3PF4K	N/A		
BLX7YK		✓		E922JK	N/A		
BQT3GJ		✓		EC38XP		✓	
BT27DF	N/A			EDWX2H	N/A		
BWXUUM		✓		EE73GR		✓	
BZJJCE		✓	✓	EKVHFH	N/A		
C6NJ7G	Not Suitable			EKVKTH	N/A		
C8T8NT		✓		ET7WW8	N/A		
C98PPD	N/A			F38JLJ		✓	

TABLE 4 - Item 2

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
F438XM		✓		HZF678	N/A		
F8F66A		✓	✓	J4BB4A	N/A		
FLZMXD	N/A			J7JLZD	Not Suitable		
FPL6HJ	N/A			J96C2H		✓	
FPLAV8	N/A			JDZ726		✓	
FUEDHJ		✓		JE8L9B	N/A		
G3KH8F	N/A			JH63K6	Not Suitable		
G74MQB		✓		JHR7J7	N/A		
G8VNNL	N/A			JKX3HF	N/A		
G9BRHD	N/A			JM3NAM	N/A		
GANCC9		✓	✓	JNWCV3		✓	
GAP6BG	N/A			JYFJWD		✓	✓
GLZR9F	Not Suitable			K46JMD		✓	
GNKYBN	N/A			KE74P7	N/A		
GPGACJ	N/A			KMGBLA	N/A		
GR972C	N/A			KUYJA7	N/A		
GTZ7YN	N/A			KVU7MA		✓	
GXAF86	N/A			L2TBTJ	N/A		
H8EUMC	N/A			L4ZLR9	N/A		
H8EYXE		✓		L7822Z	N/A		
HAKCL8		✓		LBHWYH	Not Suitable		
HC698C	Not Suitable			LBM9ME		✓	
HERXDB	Not Suitable			LJEQY2		✓	
HF9U7B	N/A			LMYJB4	N/A		
HUQMUG	Not Suitable			LN8VQK		✓	
HVKH9D	N/A			LVP7YE		✓	
HY4MQ9	N/A			M3JQK8	N/A		

TABLE 4 - Item 2

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
M3M9MC		✓		Q87MV2	Not Suitable		
M8EF7K	Not Suitable			QKAZWY			✓
M9PHU6	N/A			QP7MR9			✓
MCA8F3	N/A			QPQ9KY			✓
MECCNG	N/A			QTPF6W	N/A		
MJBQC7	N/A			R2DWT4			✓
MK9UC9	N/A			R434BE	N/A		
MQTVPZ	N/A			R6WRVW	N/A		
MRNFCZ	N/A			R9ZH6V	N/A		
MRP9B8	N/A			RCAZWW	N/A		
MWZLR7	N/A			RCW8K4	N/A		
N2PHU3	Not Suitable			RD32U9	Not Suitable		
NBCGK8	N/A			RE2ZE2	Not Suitable		
NCRF3C		✓		RXY6X4			✓
ND668A	N/A			T2CEAY			✓
NF8BHA	N/A			T2U7L4	N/A		
NKMH79	Not Suitable			T6W8L2	Not Suitable		
NLVNA		✓		T6YWU6	N/A		
P8Q4B4	Not Suitable			T8KNXU	N/A		
PDWRVX		✓		TBZBAE			✓
PF26W6	Not Suitable			TD2E22	Not Suitable		
PGGK7Z		✓		TKJPAV	Not Suitable		
PLC73A	N/A			TKN6MW	N/A		
PX2B4E	N/A			TLWG6X	N/A		
PX7MRA	Not Suitable			TR9ZT7	N/A		
PXPB96	N/A			TVPE9Z	N/A		
PYCCRX		✓		TWEXX6	N/A		

TABLE 4 - Item 2

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
TXU3RW		✓		WJM76Z	N/A		
U7YPW2	N/A			WMH6D4		✓	
U9RDJ4	✓	✓		WMWNX2	N/A		
UDLEJW	N/A			WRC4NR		✓	
UHG9GX	Not Suitable			WUHTLV		✓	
UJNNN4	N/A			WXHR6Z		✓	
UN6UMY	Not Suitable			X446JT	N/A		
UVHMVA	N/A			XARREY	N/A		
UYWK2C		✓		XELP4P	N/A		
V3DCMX	Not Suitable			XFBYTX	Not Suitable		
V63DV8		✓		XFH6E2		✓	
V879EA	N/A			XJU6EY	N/A		
V93KF6		✓	✓	XJZ4RW		✓	
VADQD7	N/A			XXWHP6	Not Suitable		
VAX8T9	N/A			Y3N8P9		✓	
VKX3MX	N/A			Y8FCKX	Not Suitable		
VNDBBW	N/A			YHZNR4		✓	
VRXC23	N/A			YK2RJQ	N/A		
VU6HT7	N/A			YNLG44	Not Suitable		
VVXNY	N/A			YNRTRZ	N/A		
VYFLPY		✓	✓	YVNLZU	Not Suitable		
W6WHP7	N/A			YYNWVU	Not Suitable		
W84WDZ	Not Suitable			Z99MVQ	N/A		
W9GN83		✓		ZBCHEU		✓	✓
W9U4C3	Not Suitable			ZKH6MU	N/A		
WB489Z	Not Suitable			ZLXMLT	Not Suitable		
WJ2WRP	N/A			ZLYCVW	N/A		

TABLE 4 - Item 2

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
ZNL3V2	N/A						
ZPYNQW	N/A						
ZVEFRU	N/A						

Item 2 - Findings Summary				Total Participants: 280	
1st Level	Arch	Loop	Whorl	Not Suitable	N/A
Total	1	84	9	59	130

**NOTE: These numbers may not add up to the total # of participants, as a participant may have selected more than one pattern option.*

TABLE 4 - Item 3

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
23CFPM	N/A				4GQ3CQ			✓	
24C69Y			✓		4H34RX			✓	
26KF63			✓		4ZNL7R	N/A			
293TPQ			✓		63PT3P	N/A			
2CJ3XN			✓		6APBJM	Not Suitable			
2CMHBN	N/A				6ED3KN			✓	
2M6742	Not Suitable				6HJFA3			✓	
2RUNFR	N/A				6LVJYJ			✓	
2YW2M			✓		6LWBWR			✓	
349ZCM	Not Suitable				6QR8FQ			✓ ✓	
393WZT	N/A				6WZDF4			✓	
3ADUBP			✓		6YQH7P	N/A			
3B43BR			✓		72MKBG	Not Suitable			
3DC78P	N/A				74WN6T	N/A			
3E674Z			✓		76L47N			✓	
3GDAZW	N/A				79RFDP	N/A			
3J4FGM	N/A				7BRRQG			✓	
3JYZ4L	Not Suitable				7FQ7FR	N/A			
3KUNFQ			✓	✓	7PAKEN	N/A			
3P7LWP			✓		7V2RWW	N/A			
3PQ3CT			✓		83E4PN			✓	
3QWUVT			✓		87F6UR	N/A			
3UYVWQ			✓		8C4WVT	Not Suitable			
3WPW4Y			✓		8L76KQ	Not Suitable			
3YRVER			✓		8M2RXU			✓	
4C2QDN	Not Suitable				8MNYLZ			✓	
4E3ZXP	N/A				8UMKBF	N/A			

TABLE 4 - Item 3

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
8WT74L			✓		CBVAAM			✓	
8YYN2G	N/A				CGHZVH			✓	
923JJY			✓		CGY6DG			✓	
9AU4GK	N/A				CPC9EN			✓	
9NT4EF	N/A				CRGU9F	N/A			
9P8CMF	Not Suitable				CRJJDD	N/A			
9U2BVJ			✓		CTBJAN			✓	
9UE4QL	Not Suitable				D23D7L	N/A			
9YU9NG	Not Suitable				D6X9KE			✓	
9ZLK8M	N/A				D9N3RF			✓	
A447DF	N/A				DDDUUH	N/A			
A9UGMD	N/A				DHT9MH	N/A			
AGA6FU	N/A				DNF3JF	Not Suitable			
AHK72T	N/A				DU86RL	N/A			
AV99JK			✓		DVDVRA			✓	
AXEP2P	N/A				DW9FE9	N/A			
AZ4VGF	N/A				DWNJ8F			✓	
AZZF6E			✓	✓	E2XE7A			✓	
B8ELEQ			✓		E3PF4K	N/A			
BLX7YK	Not Suitable				E922JK	N/A			
BQT3GJ			✓		EC38XP			✓	
BT27DF			✓		EDWX2H	N/A			
BWXUUM			✓		EE73GR			✓	
BZJJCE			✓		EKFVHF	N/A			
C6NJ7G			✓		EKVKTH	N/A			
C8T8NT			✓		ET7WW8	N/A			
C98PPD	N/A				F38JLJ			✓	

TABLE 4 - Item 3

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
F438XM			✓		HY4MQ9			✓	
F8F66A			✓		HZF678	N/A			
FLZMXD	N/A				J4BB4A	N/A			
FPL6HJ	N/A				J7JLZD			✓	
FPLAV8	N/A				J96C2H			✓	
FUEDHJ	Not Suitable				JDZ726			✓	
G3KH8F	N/A				JH63K6			✓	
G74MQB	Not Suitable				JHR7J7	N/A			
G8VNNL	N/A				JKX3HF	N/A			
G9BRHD	N/A				JM3NAM			✓	
GANCC9			✓		JNWCV3			✓	
GAP6BG	N/A				JYFJWD			✓	
GJP6DM	Not Suitable				K46JMD			✓	
GLZR9F	N/A				KE74P7			✓	
GNKYBN	N/A				KMGBLA	N/A			
GPGACJ	N/A				KUYJA7	N/A			
GR972C	N/A				KVU7MA			✓	
GTZ7YN	N/A				L2TBTJ	N/A			
GXAF86	N/A				L4ZLR9	N/A			
H8EUMC	N/A				L7822Z	N/A			
H8EYXE			✓		LBHWYH			✓	
HAKCL8	Not Suitable				LBM9ME			✓	
HC698C			✓		LJEQY2	Not Suitable			
HERXDB			✓		LMYJB4	N/A			
HF9U7B	N/A				LN8VQK			✓	
HUQMUG			✓		LVP7YE			✓	
HVKH9D	N/A				M3JQK8	N/A			

TABLE 4 - Item 3

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
M3M9MC	Not Suitable			PYCCRX	Not Suitable		
M8EF7K		✓		Q87MV2		✓	
M9PHU6	N/A			QKAZWY	Not Suitable		
MCA8F3		✓		QP7MR9		✓	✓
MECCNG	N/A			QPQ9KY		✓	
MJBQC7	N/A			QTPF6W	N/A		
MK9UC9	N/A			R2DWT4		✓	
MQTVPZ	N/A			R434BE	N/A		
MRNFCZ	N/A			R6WRVW	N/A		
MRP9B8	N/A			R9W4RV	Not Suitable		
MWZLR7	N/A			R9ZH6V	N/A		
N2PHU3		✓		RCAZWW	N/A		
NAL3EH	Not Suitable			RCW8K4	N/A		
NBCGK8	N/A			RD32U9		✓	
NCRF3C	Not Suitable			RE2ZE2	Not Suitable		
ND668A	N/A			RXY6X4		✓	
NF8BHA	N/A			T2CEAY		✓	
NKMH79		✓		T2U7L4	N/A		
NLVNA		✓		T6W8L2	Not Suitable		
P8Q4B4		✓		T6YWU6	N/A		
PDWRVX	Not Suitable			T8KNXU	N/A		
PF26W6		✓		TBZBAE		✓	
PGGK7Z		✓		TD2E22		✓	
PLC73A	N/A			TKJPAV		✓	
PX2B4E	N/A			TKN6MW	N/A		
PX7MRA		✓		TLWG6X	N/A		
PXPB96	N/A			TR9ZT7	N/A		

TABLE 4 - Item 3

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
TVPE9Z	Not Suitable			W9U4C3	Not Suitable		
TWEXX6		✓		WB489Z	✓	✓	
TXU3RW		✓		WJ2WRP	N/A		
U7YPW2	N/A			WJM76Z	N/A		
U9RDJ4	✓	✓		WMH6D4		✓	
UDLEJW	N/A			WMWNX2	N/A		
UHG9GX	Not Suitable			WNBYRY		✓	
UJNNN4	N/A			WRC4NR	Not Suitable		
UN6UMY		✓		WUHTLV		✓	
UVHMVA	N/A			WXHR6Z		✓	
UYWK2C		✓		X446JT	N/A		
V3DCMX		✓		XARREY	N/A		
V63DV8		✓		XELP4P	N/A		
V879EA	N/A			XFBYTX		✓	
V93KF6		✓	✓	XFH6E2		✓	
VADQD7	N/A			XJU6EY	N/A		
VAX8T9	N/A			XJZ4RW		✓	
VKX3MX	N/A			XXWHP6	✓	✓	✓
VNDBBW	N/A			Y3N8P9		✓	
VRXC23	N/A			Y8FCKX		✓	
VU6HT7	N/A			YHZNR4		✓	
VVXNY	N/A			YK2RJQ	N/A		
VYFLPY		✓		YNLG44		✓	
W6WHP7	N/A			YNRTRZ	N/A		
W7TUQ2		✓		YVNLZU	Not Suitable		
W84WDZ		✓		YYNWWU	Not Suitable		
W9GN83		✓		Z99MVQ	N/A		

TABLE 4 - Item 3

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
ZBCHEU		✓					
ZLXMLT		✓					
ZLYCVW	N/A						
ZNL3V2	N/A						
ZPYNQW	N/A						
ZVEFRU	N/A						

Item 3 - Findings Summary				Total Participants: 280	
1st Level	Arch	Loop	Whorl	Not Suitable	N/A
Total	3	121	6	33	122

**NOTE: These numbers may not add up to the total # of participants, as a participant may have selected more than one pattern option.*

Additional Comments

TABLE 5

WebCode	Additional Comments
293TPQ	The black cardboard backing from Item 1 was processed. The following methods were used: Visual (flashlight, LASER, and UV), DFO (LASER, waited 24 hours), Ninhydrin (waited 24 hours), Zinc Chloride (ALS, waited 24 hours). No latents developed.
3QWUVT	Item 1: The print was visible under normal lighting. Item 3: The middle portion of the print was smudged. A delta was visible on the bottom left of the print.
3UYVWQ	The fingerprint trace revealed in the glossy photograph is identifiable but only the top part has been revealed, so it is impossible to determine its pattern.
6APBJM	Sufficient ridge detail for comparison was present on item 3 and loop patterns on references would be searched first.
6LWBWR	Pertaining to Item 2 (glossy photo), this impression could have been easily missed due to extremely poor development contrast with both CA and Powder processing. If not examined with Hot Light technique or RUVIS, there may not have been any indication to follow up with a gel lifter. I would not be surprised if some agencies missed this impression if the development strength was the same as in my case.
6WZDF4	All chemicals and instruments used on test impressions for item 2 (i.e. Cyanoacrylate, Dye stain, FSIS, LASER) were all positive for reaction or function.
76L47N	Fluorescence examination was with Polilight PL 500. To preserve we used camera Nikon D610
79RFDP	On 6/5/2020 I received a white box, closed with brown tape, marked "2020 CTS Forensic Testing Program", "TEST No. 20-5190: LATENT PRINT PROCESSING", "Sample Pack: LAP1". The contents of the box were examined on 7/7/2020. The box contains two yellow envelopes, one brown envelope and clear bubble wrap. The yellow envelopes are marked "Test No. 20-5190, Item 1" and "Test No. 20-5190, Item 2", and are both sealed with red evidence tape with "CTS" written over the seal in black marker. The brown envelope is marked "Test No. 20-5190, Item 3" and is factory sealed. The envelope marked "Item 1" contains one (1) black plastic frame approximately 6" x 4" with a clear glass insert, divided into four quadrants (A-D) with black marker, and a black cardboard backing. The envelope marked "Item 2" contains one (1) multicolored photograph depicting several trees and scenery, divided into four quadrants (A-D) with white printing, approximately 7.5" x 5.25". The envelope marked "Item 3" contains one (1) piece of green paper with black printing marked "You're Invited", with additional information for a party, divided into four quadrants (A-D), approximately 7.75" x 4.75".
8WT74L	Ridge detail observed on the glossy photograph unable to collect/preserve to be used in identification
9NT4EF	The photograph (Item 2) was not packaged in a way to preserve prints (as Items 1 and 3 were). Assuming that a print was deposited on the item, it was horribly done, as it was impossible to find any print at all.
9U2BVJ	Item 1, L003 was developed outside of the testing boxes. The latent print was detected on the side of the black plastic frame, preserved, analyzed and determined to be suitable the same as would be done in casework. For Item 2 possible ridge detail detected in boxes C & D and on the back of the item. Possible ridges are of very low quality and would not be considered suitable for capture in true casework and therefore not suitable for capture in this simulated case.
A9UGMD	I am not trained to make fingerprint pattern determinations in the course of casework. I am trained in development and preservation of latent prints.
BQT3GJ	During the tests we use the following equipment: POLILIGHT PL 500 SC made by Rofin - it's a high intensity light source that emit light in a controlled spectrum centered at the labeled wavelength 350-650 nm, white and IR. MVC 3000 made by Foster+Freeman - it's cyanokarylate fuming chamber. NINcha S31 made by Attestor Forensics - it's forensic climate chamber for Ninhydrin and DFO treated fingerprint evidence. VMD 360 made by West Technology Forensics - it,s Vacuum Metal Deposition

TABLE 5

WebCode	Additional Comments
	chamber utilizes vacuum coating technology for the thermal evaporation of metals and deposition of thin metal films.
BWXUUM	For Item 3 recovered latent print, the image processing carried out using the various functions of the DCS4 has made it possible to improve the quality of the fingerprint, particularly at the pattern type. It has been determined as a loop due to the ridges movement and the presence of a delta in the left.
CBVAAM	The print was visible on photography (Item 2) but ridges were not clear enough (because of ink?).
D23D7L	"N/A" was selected for pattern determination because our laboratory does not make this determination during processing. This additional step is a part of our latent print analysis workflow. It is in our standard operating procedures and management system manual to work a proficiency test as completely or as close to actual casework.
D6X9KE	The cardboard backing included with Item 1 was also processed: VIS, Laser, 1,2-Indanedione, Ninhydrin. No latents were detected.
DDDUUH	Positive controls utilized for each chemical and other process throughout processing
EDWX2H	Item 1: the print was clearly visible during the visual examination and estimated to be identifiable. The details were a bit more visible after powder suspension. Item 2: the print did not develop with 1,2-Indanedione or Ninhydrin but it was estimated to be identifiable with CNA and powder dusting. Item 3: the fingerprint had a better development with 1,2-Indanedione than with Ninhydrin. Both were estimated to be identifiable.
GAP6BG	Item 2, the glossy photograph had a print that was extremely hard to visualize and photograph. This could be due to the quality of the print or the substrate.
GNKYBN	For the areas of 'some ridge detail was visible' there was not enough detail worth documenting/photographing. Further development was needed to be suitable for recovery.
HUQMUG	There was a piece of black cardboard that was part of Item 1 with the piece of glass and the plastic frame. I processed it as well. Date received: 6/17/20. Date examined: 6/26/20-7/2/20. I did visual examination as is using ambient light, flashlight, UV (ultraviolet) light, Laser, and ALS (alternate light source). I dipped the item twice in DFO, let it dry for a few seconds, then put it in the oven (100°C) for about 20 minutes. Examined under Laser. I dipped the item in Ninhydrin, let it dry for a few seconds, then put it in the humidity chamber (70°C) for about 10 minutes or until the latent impression turns Ruhemman's Purple. Then I sprayed the item with Zinc Chloride and examined it under ALS. There was no latent impressions found on that piece of black cardboard.
HVKH9D	ALL RELEVANT HEALTH AND SAFETY PROCEDURES, PPE AND EQUIPMENT WERE UTILISED DURING PROCESSING AND EXAMINATION. THE PROCESSING UNDERTAKEN WAS IN ACCORDANCE WITH OUR FORCE AND [Organization] POLICIES AND TECHNICAL PROCEDURES. I HAVE SEQUENTIALLY PROCESSED THE ITEMS AS IF THEY WERE RECEIVED FROM A SERIOUS CRIME TYPE, AND HAVE KEPT APPROPRIATE RECEORDS ON OUR SECURE CRIME MANAGEMENT SYSTEM.
HY4MQ9	For item 2, I could see there was potential ridge detail present in quadrant B, but the quality of detail developed was not at a level that would require collection through photography per our work procedures. It appeared that the item may have been touched but there was not enough ridge detail to recover.
HZF678	After processing Item #3, an area of development consistent with a "finger mark" was developed in Quadrant "D" of the copy paper. No ridge detail was observed at this time. In this lab, this item would be deemed as "not of value" (NOV), and no further analysis would be conducted.
J4BB4A	The evidence identified with number two (glossy photograph) cannot be fully analyzed, because the [Laboratory] does not have available alternate lights with the required 330 degree spectrum. A white light was used to find the fingerprint, located in the box with the letter "B". The 330 degree spectrum was necessary because the fingerprint of the photograph could be highlighted and photographed. In evidence number one, the glass in the frame was marked with the letters facing inward.

TABLE 5

WebCode	Additional Comments
J7JLZD	Item 2: It was apparent that the divided section marked A showed friction ridge detail. However, due to distortion, smudging and lack of sufficient detail, the impression was not suitable for analysis.
JE8L9B	I was unable to enter text under Item 3. I would not have attempted to locate/lift a print from the paper item. I would have sent the item to the lab for fingerprint analysis.
JYFJWD	Additional ridge structure of no collection value was located in quadrant D of Item 1 after processing with Rhodamine 6G and Crimescope. The ridge structure was collected with photography.
LVP7YE	All chemicals used during Latent Print Processing on items nr: 1, 2, 3 were tested on similar types of surfaces with positive results.
M3M9MC	The latent developed on Item 3 (half sheet of green copy paper) pattern looks like it could be a loop, due to smudges it could be an arch. For Item 1 the backing was processed. The following methods were used Visual examination (Using UV light, LASER, and ALS), DFO, Ninhydrin, Zinc Chloride, and Physical Developer. No suitable latent impressions were developed
MECCNG	Process controls were positive. Item 2: Fingermark was visible after cyanoacrylate fuming, but we had issues taking photographs of the fingermark.
NAL3EH	no lophoscopic fragments were found in item 2
NCRF3C	Item 3 central area of the print was not clear-not suitable for determination.
NF8BHA	Friction ridge detail developed on test item #2 (Glossy photograph) was difficult to photograph. Subsequent powder development and lifting captured more friction ridge detail than the photograph.
NLVNA	Item 1 : The fingermark was visible during visual examination before cyanoacrylate fuming (visible reflection), on the inside face of the glass (geographic inversion). So it was necessary to dismantle the frame. The fingermark was visible after cyanoacrylate fuming with a correct orientation. The photography was easier after cyanoacrylate fuming treatment. Item 2 : The fingermark was not visible during visual examination before cyanoacrylate fuming. The fingermark was observed after the first cyanoacrylate fuming and was improved after the second cyanoacrylate fuming. The photography was very difficult and we used a specific « Tilt & Shift » lens. Item 3 : The fingermark was not visible during visual examination before Indanedione + Zinc chloride treatment. The fingermark was observed after Indanedione + Zinc chloride treatment. No improvement was observed after Ninhydrin treatment.
QKAZWY	After ca fuming of items 1 and 2 it was discovered that the ca chamber was not venting correctly which resulted in items 1 and 2 being over fumed. The additional fuming did not adversely affect the suitability of the ridge detail for comparison.
QP7MR9	The cardboard backing of the frame was processed the exact same as Item 3. visual (with oblique, laser, uv lighting), DFO (laser), Ninhydrin, Zinc Chloride (ALS), and PD (maleic acid prewash)- no latent impressions found on cardboard backing.
QPQ9KY	Additional fragmentary ridge detail was noted on Item 1 in quadrant D.
RCAZWW	For item 2, the glossy photograph, using first magnetic powder and then using black powder, no discernible ridge detail was visible. Using bichromatic powder, very faint ridge detail was just visible. Tape lift of print is difficult to see. Normally I would not bother submitting the latent card to our latent print examination unit.
RE2ZE2	The print developed on Item #2 was very faint and could not be visualized after CA, R6G, LASER, and RUVIS. A few ridges were seen after the second application of black powder and opaque diffusion gel lighting. Photography of this image was very difficult. The print developed on Item #3 was of the tip area only.
T6W8L2	Item 2 was very poorly deposited and difficult to develop using a variety of techniques. Item 1 was placed into the frame backwards and required me to break the frame to remove the glass for processing.
T6YWU6	Item 2 (the photograph) was challenging to process. No ridge detail was observed during the visual

TABLE 5

WebCode	Additional Comments
	exam. Development was observed after CA fuming, but was very faint. No further development/enhancement was achieved with powders, DFO, or Ninhydrin.
TKN6MW	Item 2 was extremely difficult to develop and locate the latent print.
TLECMY	A CD was made of all the photographs taken during this process.
TR9ZT7	For processing of item 1, the glass window was removed from the plastic frame and paper backing for processing purposes. All processing was completed on the glass window only.
UJNNN4	The black and white cardboard paper from the picture frame of Item 1 was processed for the presence of latent impressions using the following methods of development in this order: (1) Visual examined using natural light, flash light, UV, ALS, LASER, and FSIS. (2) DFO with LASER excitation. (3) Ninhydrin. (4) Zinc Chloride with ALS excitation. (5) Physical Developer. Result: Examination of this item revealed no latent impressions.
UVHMVA	With Sample two we would like to know which methods were recommend to use, thank you.
V93KF6	Pattern classifications is not part of our normal casework. Allowing 2 options to be marked is the only reason the questions can be answered on this proficiency. Items 2 and 3 did not have clear core areas to allow specific pattern recognition and Item 1 is borderline arch/tented arch/loop pattern.
VADQD7	We recovered ridge details but we don't make pattern determinations in our lab. [Laboratory] analyzes fingerprints.
WB489Z	Item 2: the only friction ridge impression detected or developed on the color photograph was in quadrant B. This impression was extremely faint and fragmentary. Enhancement efforts failed to yield sufficient contrast or clarity and photography met with poor results. Item 3: Impression appears to be a loop pattern but the core is obscured, possibly by excessive pressure. As such, Arch was listed as a reference.
WJM76Z	Once the initial cardboard packaging was opened, each item was sealed in a separate envelope. After each item had been processed in its entirety, each item was then repackaged in its respective envelope. Item #1 and #2 were submitted to the Evidence Unit. Item #3 and the two latent lift cards collected, were submitted to the Latent Unit. The photographs taken of Item #3 were uploaded to the Commander server.
WMH6D4	Item 2: fingerprint seemed to be placed before printing the paper (no relief, no reaction with lumicyano)
XELP4P	Pattern determinations are not a normal procedure in the course of our casework. This is why the questions 1-5, 2-5 and 3-5 (3-5.) (What first-level pattern(s) are referenced in the recovered latent print?) were answered as N/A.
XFH6E2	Item 1: The plastic picture frame was processed using the same techniques as used on the glass. No latent impressions were observed. The cardboard backing of the picture frame from Item 1 was processed using the same techniques as used on Item 3, piece of paper. No latent impressions were observed.
XJU6EY	Took images of two additional areas on Item 1 labeled A02 and A03 that I would have considered latent print areas, but were not added into the section "LATENT RIDGE DETAIL RECOVERED"
Y3N8P9	Latent on item #2 is only a partial.
YHZNR4	Item 1, the glass portion of the picture frame, was received broken. Once the glass was removed from the plastic frame there were three pieces of broken glass from sections C and D.
YNRTRZ	Marks and discs are retained in the file
YYNWVU	The potential impression on item 2 was only visible through extreme oblique lighting. Unsuitable for capture and further analysis of potential ridge detail.

TABLE 5

WebCode	Additional Comments
ZKH6MU	Item 3: Did not examine item 3. Would send to the regional laboratory for analysis.
ZVEFRU	PPE was worn at all times and all processes were carried out in accordance with laboratory policies and Technical Procedures. I have completed sequential examinations as per instructions advising me this test was to simulate a serious/major crime. There was no indication these items had been wet, therefore processes were selected accordingly. Control samples were treated for each chemical process applied and all provided positive results. I have maintained appropriate records on our Forensic Case Management System and saved correspondence in the correct locations. Item 1 - Visual mark of very high quality present prior to treatment in box C. Under live casework circumstances, this would have been captured at this stage using the DCS software and then submitted to the Regional Fingerprint Bureau. I would then have recaptured this at SG/Dye due to better contrast from the background, but not after Solvent Black due to no further improvement. Item 2 - Visual mark of high quality in Box B would have been captured prior to treatment as well as after superglue. The gel lift would have also been captured as this provided a clear visualisation of the mark without the interfering background. Item 3 - ESDA provided very poor development of ridge detail in Box D but the outline of a fingerprint could be seen. This was not sufficient for the recovery of the ESDA lift and capture of the mark. The mark was highly fluorescent at Indandione demonstrating very good development which would require capture on live casework. Ninhydrin did not improve the quality of this mark.

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 20-5190: Latent Print Processing

DATA MUST BE SUBMITTED BY **Aug. 3, 2020, 11:59 p.m.** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: EW8ZNU

The Accreditation Release section can be accessed by using the "Continue to Final Submission" button above. This information can be entered at any time prior to submitting to CTS.

Scenario:

During the week of 18 May 2020, several items of evidence were recovered from a crime scene. Police have requested that you process each item of evidence for latent prints. These items will not undergo additional testing in other departments, so you may use destructive testing if necessary.

All item packaging has been labeled with a CTS item number and each item divided into four sections, which have been indicated as A-D. A single latent print has been deposited in one of these areas for each item.

Packaging and protective material is not intended to be processed.

Items Submitted (Sample Pack LAP1):

Item 1: Plastic and glass picture frame, divided into sections A-D (glass inverted to protect print).

Item 2: Glossy photograph, divided into sections A-D.

Item 3: Half sheet of green copy paper, divided into sections A-D.

Please inspect your sample sets upon receipt. If the packaging of any of your individual items appears to be compromised, please contact CTS for replacement samples.

1.) For each item, in which section (A, B, C, D) was the latent ridge detail recovered?

Please indicate only the single letter of your determined location from the dropdown menu. Further explanation may be provided in the Additional Comments. If no ridge detail was recovered, please select "None." If you do not process the type of evidence offered, please select "Not Tested". *A selection of "Not Tested" for an item will lock the corresponding methodology tab for that item. No methodology data will be captured in the report for that item.*

Item 1

Item 2

Item 3

Results for Item 1:

Plastic and glass picture frame, divided into sections A-D (glass inverted to protect print).

1-1.) Date Samples Received:

1-2.) Date(s) Samples Analyzed:

1-3.) What method(s) of development were used during your examination?
Please list in order used.

Method Used

Methodology-specific information
(ex. processing time, type of dye stain)

1-4.) What method(s) of preservation were used, if any, following latent print development?
Please list in order used.

Method Used

Methodology-specific information

1-5.) What first-level pattern(s) are referenced in the recovered latent print?

If ridge detail was recovered, choose up to 2 pattern types. If ridge detail was not sufficiently recovered, please select "Not suitable for determination." If you are not trained to make pattern determinations, please select "N/A".

Arch Loop Whorl

Not suitable for determination N/A

Results for Item 2:

Glossy photograph, divided into sections A-D.

2-1.) Date Samples Received:

2-2.) Date(s) Samples Analyzed:

2-3.) What method(s) of development were used during your examination?
Please list in order used.

Method Used

Methodology-specific information
(ex. processing time, type of dye stain)

2-4.) What method(s) of preservation were used, if any, following latent print development?
Please list in order used.

Method Used

Methodology-specific information

2-5.) What first-level pattern(s) are referenced in the recovered latent print?

If ridge detail was recovered, choose up to 2 pattern types. If ridge detail was not sufficiently recovered, please select "Not suitable for determination." If you are not trained to make pattern determinations, please select "N/A".

Arch Loop Whorl

Not suitable for determination N/A

Results for Item 3:

Half sheet of green copy paper, divided into sections A-D.

3-1.) Date Samples Received:

3-2.) Date(s) Samples Analyzed:

3-3.) What method(s) of development were used during your examination?
Please list in order used.

Method Used

Methodology-specific information
(ex. processing time, type of dye stain)

3-4.) What method(s) of preservation were used, if any, following latent print development?
Please list in order used.

Method Used

Methodology-specific information

3-5.) What first-level pattern(s) are referenced in the recovered latent print?

If ridge detail was recovered, choose up to 2 pattern types. If ridge detail was not sufficiently recovered, please select "Not suitable for determination." If you are not trained to make pattern determinations, please select "N/A".

Arch Loop Whorl

Not suitable for determination N/A

4.) Additional Comments

Please note: Any additional formatting applied in the free form space below will not transfer to the Summary Report and may cause your information to be illegible. This includes additional spacing and returns that present your responses in lists and tabular formats.

RELEASE OF DATA TO ACCREDITATION BODIES

The Accreditation Release is accessed by pressing the "Continue to Final Submission" button online and can be completed at any time prior to submission to CTS.

CTS submits external proficiency test data directly to ASCLD/LAB, ANAB, and/or A2LA. Please select one of the following statements to ensure your data is handled appropriately.

- This participant's data is intended for submission to ASCLD/LAB, ANAB, and/or A2LA. (Accreditation Release section below must be completed.)
- This participant's data is **not** intended for submission to ASCLD/LAB, ANAB, and/or A2LA.

Have the laboratory's designated individual complete the following steps **only if your laboratory is accredited in this testing/calibration discipline** by one or more of the following Accreditation Bodies.

Step 1: Provide the applicable Accreditation Certificate Number(s) for your laboratory.

ANAB Certificate No.
(Include ASCLD/LAB Certificate here)

A2LA Certificate No.

Step 2: Complete the Laboratory Identifying Information in its entirety.

Authorized Contact Person and Title

Laboratory Name

Location (City/State)