



Latent Print Processing - Varied Surfaces

Test No. 23-5191 Summary Report

Each sample set contained three items of simulated crime scene evidence. Participants were asked to process each item for latent prints and report their findings. Data were returned from 247 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 set 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 piece of wrapping paper (Item 1), sunglasses (Item 2), and a small white envelope (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 sunglasses were cleaned with a paper towel before the latent print was applied. New, sealed wrapping paper and white envelopes were used for the samples that could not be cleaned. Each item was divided into sections labeled A, B, C, and D using a chemical-safe marker. For each item, either an acid and/or oil enhancer was applied to the individual's finger prior to deposition to assist in the longevity of the print.

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.

SAMPLE SET ASSEMBLY: Each item was individually packed into its pre-labeled item envelope or heat seal packet with necessary protective materials. Following predistribution testing, each item envelope was sealed and initialed. These were then placed into a sample set box with bubble wrap and sealed.

Item No.	Test Material	Enhancer	Print Location	Pattern
1	Wrapping Paper	Acid & Oil	D	Loop
2	Sunglasses	Oil	B	Whorl
3	Small White Envelope	Acid	A	Whorl

Summary Comments

The purpose of this test was to allow participants to assess their proficiency in the processing and/or development of latent prints on pieces of evidence. Each sample set contained three items of evidence to be processed for latent prints: wrapping paper (Item 1), sunglasses (Item 2), and a small white envelope (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 contained a latent print. During the creation of this test, latent prints were purposefully deposited in section "D" for Item 1, section "B" for Item 2, and section "A" for Item 3. (Refer to the Manufacturer's Information for preparation details.)

Of the 247 responding participants, 225 (91.1%) tested all three items and were able to successfully recover a latent print in the expected location for each. Twelve participants did not recover latent ridge detail on an item and one reported ridge detail in a section that differed from the consensus for one item. Participants who did not develop a print on an item were not marked as outliers.

For Item 1, 246 of 247 participants (99.6%) recovered a latent print in section "D" of the wrapping paper and one participant did not recover ridge detail. During development, Visual Examination or Alternate Light Source (ALS) (reported 175 times) was reported as the first step by the majority of participants. Cyanoacrylate Fuming (87) was the most prevalent second method of development. During preservation, Photography (reported 167 times) was the most prevalent first method reported.

For Item 2, 245 of 246 participants (99.6%) that tested this item, recovered a latent print in section "B" of the sunglasses. One participant reported ridge detail in section "A." During development, Visual Examination or ALS (reported 177 times) was reported as the first step by the majority of participants. Cyanoacrylate Fuming (97) was the most prevalent second method of development. During preservation, Photography (reported 163 times) was the most prevalent first method reported.

For Item 3, 227 of 238 participants (95.4%) that tested this item, recovered a latent print in section "A" of the small white envelope. Eleven participants recovered no ridge detail. During development, Visual Examination or ALS (reported 155 times) was reported as the first step by the majority of participants. Ninhydrin (49) and 1,2-Indanedione (45) were reported as the most prevalent second method of development reported by participants. During preservation, Photography (reported 190 times) was the most prevalent method reported.

The Table 4 First-Level Detail Findings section allows participants to report the pattern type(s) of each recovered latent print. Some participants do not perform print pattern analysis in their routine casework and reported "N/A" for 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 - Loop; Item 2 - Whorl; Item 3 - Whorl. The most frequent response for each item corresponds to the manufacturer's expected results for pattern reporting.

Print Location

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
23UZ76	D	4FN9VH	D	8A8XEJ	D
24JDNM	D	4FRQ3U	D	8ABEPC	D
26J63H	D	4GZT38	D	8BM7KD	D
2AAEDG	D	4KEMFJ	D	8E6J62	D
2MWXH7	D	4PVV4H	D	8E77X9	D
2NAK37	D	4PYBGJ	D	8JEL8W	D
2TPNDH	D	4WTMCC	D	8R8WJD	D
2VMHLJ	D	4YKJ27	D	8XEEZE	D
336737	D	4ZEFCL	D	973JJD	D
338RXL	D	6262HH	D	978XWE	D
38H3NV	D	69LJRJ	D	9APBG2	D
3AMGAF	D	69MA7E	D	9GB4UM	D
3CXACU	D	6B7B2Z	D	9KN4QE	D
3TFH6H	D	6G4PW3	D	9MAQJ2	None
3VMU7T	D	6JKAJH	D	9NRPVD	D
3Y6V77	D	6MM9UB	D	9PZRRB	D
42RREW	D	6RFAVP	D	9UY7CE	D
43HZEZ	D	7HTEUN	D	9YMYYE	D
44T33K	D	7M2U4D	D	A96WJC	D
46AAAM	D	7VWW7N	D	A9MZZP	D
48TB69	D	7W7VEC	D	AA7MY8	D
4CPQ3W	D	7YD6UN	D	ACPNTT	D
4F9WDD	D	84HHQD	D	AHW6DF	D
4FKTHH	D	88MVNE	D	AJP8T4	D

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
B3ZBFF	D	ER4HD7	D	HRCWAP	D
BDZZWG	D	F2NDM6	D	HTQDBA	D
BGYEK7	D	FCADJ3	D	HUJFRX	D
BJJFET	D	FCREBB	D	HVAE7W	D
BKZMLV	D	FECF6X	D	J348RV	D
BLRJBP	D	FG4CUR	D	J6D3JE	D
BPBK7B	D	FK2VXB	D	JB4CVY	D
C7VTL7	D	FMNK4A	D	JCWECL	D
C9KR9G	D	FQ9CFC	D	JN8RR2	D
CBMZ6E	D	FQRFNC	D	JVCHJ8	D
CCMQJA	D	FXRP7X	D	JZME3N	D
CL3RQ3	D	FZG4KZ	D	K2QUMY	D
CNDKUH	D	G8C7MC	D	K42PG4	D
CNEEDN	D	GAW8GX	D	K9EBNP	D
CQXLN6	D	GCKY7A	D	KANCAN	D
CX2K2F	D	GDEPCN	D	KB3N78	D
D2G6UM	D	GGMH2M	D	KBXCHB	D
DFCW6P	D	GGZ7U9	D	KJ74NZ	D
DGQ4Q7	D	GJ3662	D	KNMBCY	D
DL8GJ8	D	GLPN7Y	D	KNQQNZ	D
DMGDZ6	D	GRY6FM	D	KPH6VP	D
DNT4CU	D	GUMC4Q	D	KR27PB	D
DR749L	D	GV2WW2	D	KUR8XK	D
DR8ZJG	D	GYGD76	D	KV6YP2	D
DVQ2E4	D	H62XK6	D	KV8GWD	D
ENLKHN	D			KVZJDZ	D

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
KXRHQY	D	P6AH97	D	UJZZTD	D
L4DV6R	D	P9AT67	D	UKDDVN	D
L8VTXN	D	P9ZJGF	D	UKTK6D	D
LAJFG4	D	PDBNDA	D	UMHYMV	D
LD2LRK	D	PH3WEV	D	UMWKWW	D
LEWZMP	D	PJ2VX4	D	UNQB3C	D
LQL2VJ	D	PRBMZ7	D	UP6HNT	D
LX9UA4	D	PT3HPZ	D	URDTKW	D
M4BB4B	D	PTQLKV	D	UZ9L24	D
M6KBCX	D	PW6GX8	D	VELE6Z	D
MGGG7W	D	QA32PV	D	VKB3EC	D
MYWMGT	D	QEHADV	D	VKNRHN	D
MZ7RVG	D	QTFGCW	D	VW79BV	D
N3DKB2	D	R76QH3	D	VY9ADD	D
N87CVQ	D	RAGN2H	D	WG7K33	D
N87EKV	D	RK6EQV	D	WJBMFK	D
NELDUZ	D	RTE2KG	D	WUB4D2	D
NJLCD7	D	RUN7X7	D	X3NE7T	D
NKDBR4	D	T7GPEW	D	X4FBVM	D
NVWPTL	D	TEPGGY	D	XBCEEQ	D
NW7U9V	D	TJK9PW	D	XC76J6	D
NXL3B4	D	TK26HW	D	XCNWTP	D
NYFTGH	D	TNJP3Q	D	XFRM3P	D
P3NVFJ	D	TNXTWH	D	XLDKQD	D
P3PGEK	D	U2JNPM	D	XLY4JQ	D
		UH6F7E	D		

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
XR2DQJ	D				
XULEK6	D				
XWVEPC	D				
XX8W3Q	D				
XXLMPF	D				
Y24VY2	D				
Y8PXV6	D				
YFKZXG	D				
YHCVMB	D				
YKLU7J	D				
YM6V3R	D				
YQMFML	D				
YTAYNJ	D				
YUH8VH	D				
YWQCGJ	D				
Z4MEBH	D				
Z7AXCF	D				
ZB6RAG	D				
ZQ3Y8J	D				
ZQXJVH	D				
ZUVMNQ	D				
ZWPL3N	D				

Item 1 - Location Response Summary		
Location	Total	Total Participants: 247
A	0	<i>NOTE: Tallies may not add up to the total number of participants, if a participant did not report a response.</i>
B	0	
C	0	
D	246	
None	1	
Not Tested	0	

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
23UZ76	B	4GZT38	B	8E6J62	B
24JDNM	B	4KEMFJ	B	8E77X9	B
26J63H	B	4PVV4H	B	8JEL8W	B
2AAEDG	B	4PYBGJ	B	8R8WJD	B
2MWXH7	B	4WTMCC	B	8XEEZE	B
2NAK37	B	4YKJ27	B	973JJD	B
2TPNDH	B	4ZEFCL	B	978XWE	B
2VMHLJ	B	6262HH	B	9APBG2	B
336737	B	69LJRJ	B	9GB4UM	B
338RXL	B	69MA7E	B	9KN4QE	B
38H3NV	B	6B7B2Z	B	9MAQJ2	B
3AMGAF	B	6G4PW3	B	9NRPVD	B
3CXACU	B	6JKAJH	B	9PZRRB	B
3TFH6H	B	6MM9UB	B	9UY7CE	B
3VMU7T	B	6RFAVP	B	9YMYYE	B
3Y6V77	B	7HTEUN	B	A96WJC	B
42RREW	B	7M2U4D	B	A9MZZP	B
43HZEZ	B	7VWW7N	B	AA7MY8	B
44T33K	B	7W7VEC	B	ACPNTT	B
46AAAM	B	7YD6UN	B	AHW6DF	B
48TB69	B	84HHQD	B	AJP8T4	B
4CPQ3W	B	88MVNE	B	B3ZBFF	B
4F9WDD	B	8A8XEJ	B	BDZZWG	B
4FKTHH	B	8ABEPC	B	BGYEK7	B
4FN9VH	B	8BM7KD	B	BJJFET	B
4FRQ3U	B			BKZMLV	B

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
BLRJBP	B	FECF6X	B	J6D3JE	B
BPBK7B	B	FG4CUR	B	JB4CVY	B
C7VTL7	B	FK2VXB	B	JCWECL	B
C9KR9G	B	FMNK4A	B	JN8RR2	B
CBMZ6E	B	FQ9CFC	B	JVCHJ8	B
CCMQJA	B	FQRFNC	B	JZME3N	B
CL3RQ3	B	FXRP7X	B	K2QUMY	B
CNDKUH	B	FZG4KZ	B	K42PG4	B
CNEEDN	B	G8C7MC	B	K9EBNP	B
CQXLN6	B	GAW8GX	B	KANCAN	B
CX2K2F	B	GCKY7A	B	KB3N78	B
D2G6UM	B	GDEPCN	B	KBXCHB	B
DFCW6P	A	GGMH2M	B	KJ74NZ	B
DGQ4Q7	B	GGZ7U9	B	KNMBCY	B
DL8GJ8	B	GJ3662	B	KNQQNZ	B
DMGDZ6	B	GLPN7Y	B	KPH6VP	B
DNT4CU	B	GRY6FM	B	KR27PB	B
DR749L	B	GUMC4Q	B	KUR8XK	B
DR8ZJG	B	GV2WW2	B	KV6YP2	B
DVQ2E4	B	GYGD76	B	KV8GWD	B
ENLKHN	B	H62XK6	B	KVZJDZ	B
ER4HD7	B	HRCWAP	B	KXRHQY	B
F2NDM6	B	HTQDBA	B	L4DV6R	B
FCADJ3	B	HUJFRX	B	L8VTXN	B
FCREBB	B	HVAE7W	B	LAJFG4	B
		J348RV	B		

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
LD2LRK	B	PJ2VX4	B	UMWKWW	B
LEWZMP	B	PRBMZ7	B	UNQB3C	B
LQL2VJ	B	PT3HPZ	B	UP6HNT	B
LX9UA4	B	PTQLKV	B	URDTKW	B
M4BB4B	B	PW6GX8	B	UZ9L24	B
M6KBCX	B	QA32PV	B	VELE6Z	B
MGGG7W	B	QEHADV	B	VKB3EC	B
MYWMGT	B	QTFGCW	B	VKNRHN	B
MZ7RVG	B	R76QH3	B	VV79BV	B
N3DKB2	B	RAGN2H	B	VY9ADD	B
N87CVQ	B	RK6EQV	B	WG7K33	B
N87EKV	B	RTE2KG	B	WJBMFK	B
NELDUZ	B	RUN7X7	B	WUB4D2	B
NJLCD7	B	T7GPEW	B	X3NE7T	B
NKDBR4	B	TEPGGY	B	X4FBVM	B
NVWPTL	B	TJK9PW	B	XBCEEQ	B
NW7U9V	B	TK26HW	B	XC76J6	B
NXL3B4	B	TNJP3Q	B	XCNWTP	B
NYFTGH	B	TNXTWH	B	XFRM3P	B
P3NVFJ	B	U2JNPM	Not Tested	XLDKQD	B
P3PGEK	B	UH6F7E	B	XLY4JQ	B
P6AH97	B	UJZZTD	B	XR2DQJ	B
P9AT67	B	UKDDVN	B	XULEK6	B
P9ZJGF	B	UKTK6D	B	XWVEPC	B
PDBNDA	B	UMHYMV	B	XX8W3Q	B
PH3WEV	B			XXLMPF	B

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
Y24VY2	B				
Y8PXV6	B				
YFKZXG	B				
YHCVMB	B				
YKLU7J	B				
YM6V3R	B				
YQMFML	B				
YTAYNJ	B				
YUH8VH	B				
YWQCGJ	B				
Z4MEBH	B				
Z7AXCF	B				
ZB6RAG	B				
ZQ3Y8J	B				
ZQXJVH	B				
ZUYMNQ	B				
ZWPL3N	B				

Item 2 - Location Response Summary		
Location	Total	Total Participants: 247
A	1	NOTE: Tallies may not add up to the total number of participants, if a participant did not report a response.
B	245	
C	0	
D	0	
None	0	
Not Tested	1	

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
23UZ76	A	4GZT38	Not Tested	8E6J62	A
24JDNM	A	4KEMFJ	A	8E77X9	A
26J63H	A	4PVV4H	A	8JEL8W	A
2AAEDG	A	4PYBGJ	A	8R8WJD	A
2MWXH7	A	4WTMCC	A	8XEEZE	A
2NAK37	A	4YKJ27	A	973JJD	A
2TPNDH	A	4ZEFCL	A	978XWE	A
2VMHLJ	A	6262HH	A	9APBG2	A
336737	A	69LJRJ	A	9GB4UM	A
338RXL	A	69MA7E	A	9KN4QE	A
38H3NV	A	6B7B2Z	A	9MAQJ2	A
3AMGAF	A	6G4PW3	A	9NRPVD	A
3CXACU	A	6JKAJH	A	9PZRRB	A
3TFH6H	A	6MM9UB	A	9UY7CE	A
3VMU7T	A	6RFAVP	A	9YMYYE	A
3Y6V77	A	7HTEUN	A	A96WJC	A
42RREW	A	7M2U4D	A	A9MZZP	A
43HZEZ	A	7VWW7N	A	AA7MY8	A
44T33K	A	7W7VEC	A	ACPNTT	A
46AAAM	A	7YD6UN	A	AHW6DF	A
48TB69	A	84HHQD	A	AJP8T4	A
4CPQ3W	None	88MVNE	A	B3ZBFF	A
4F9WDD	A	8A8XEJ	A	BDZZWG	A
4FKTHH	A	8ABEPC	A	BGYEK7	A
4FN9VH	A	8BM7KD	A	BJJFET	A
4FRQ3U	A			BKZMLV	A

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
BLRJBP	A	FECF6X	A	J6D3JE	A
BPBK7B	A	FG4CUR	A	JB4CVY	A
C7VTL7	A	FK2VXB	A	JCWECL	A
C9KR9G	None	FMNK4A	A	JN8RR2	A
CBMZ6E	A	FQ9CFC	A	JVCHJ8	A
CCMQJA	None	FQRFNC	A	JZME3N	A
CL3RQ3	A	FXRP7X	A	K2QUMY	A
CNDKUH	A	FZG4KZ	A	K42PG4	A
CNEEDN	A	G8C7MC	A	K9EBNP	A
CQXLN6	A	GAW8GX	A	KANCAN	A
CX2K2F	A	GCKY7A	A	KB3N78	A
D2G6UM	A	GDEPCN	None	KBXCHB	A
DFCW6P	Not Tested	GGMH2M	A	KJ74NZ	A
DGQ4Q7	A	GGZ7U9	A	KNMBCY	A
DL8GJ8	A	GJ3662	A	KNQQNZ	None
DMGDZ6	A	GLPN7Y	A	KPH6VP	A
DNT4CU	A	GRY6FM	A	KR27PB	A
DR749L	A	GUMC4Q	A	KUR8XK	A
DR8ZJG	A	GV2WW2	A	KV6YP2	A
DVQ2E4	A	GYGD76	A	KV8GWD	A
ENLKHN	A	H62XK6	A	KVZJDZ	A
ER4HD7	A	HRCWAP	A	KXRHQY	A
F2NDM6	A	HTQDBA	A	L4DV6R	A
FCADJ3	None	HUJFRX	A	L8VTXN	Not Tested
FCREBB	Not Tested	HVAE7W	A	LAJFG4	A
		J348RV	A		

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
LD2LRK	A	PJ2VX4	A	UMWKWW	A
LEWZMP	A	PRBMZ7	A	UNQB3C	A
LQL2VJ	A	PT3HPZ	A	UP6HNT	A
LX9UA4	A	PTQLKV	A	URDTKW	A
M4BB4B	A	PW6GX8	A	UZ9L24	A
M6KBCX	None	QA32PV	A	VELE6Z	A
MGGG7W	A	QEHADV	None	VKB3EC	A
MYWMGT	A	QTFGCW	A	VKNRHN	A
MZ7RVG	Not Tested	R76QH3	A	VV79BV	A
N3DKB2	A	RAGN2H	Not Tested	VY9ADD	A
N87CVQ	A	RK6EQV	None	WG7K33	A
N87EKV	A	RTE2KG	A	WJBMFK	A
NELDUZ	A	RUN7X7	None	WUB4D2	A
NJLCD7	A	T7GPEW	A	X3NE7T	A
NKDBR4	A	TEPGGY	A	X4FBVM	A
NVWPTL	A	TJK9PW	A	XBCEEQ	A
NW7U9V	A	TK26HW	A	XC76J6	A
NXL3B4	A	TNJP3Q	A	XCNWTP	A
NYFTGH	A	TNXTWH	A	XFRM3P	A
P3NVFJ	A	U2JNPM	A	XLDKQD	Not Tested
P3PGEK	A	UH6F7E	A	XLY4JQ	A
P6AH97	A	UJZZTD	Not Tested	XR2DQJ	A
P9AT67	A	UKDDVN	A	XULEK6	A
P9ZJGF	A	UKTK6D	A	XWVEPC	A
PDBNDA	A	UMHYMV	A	XX8W3Q	A
PH3WEV	A			XXLMPF	A

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
Y24VY2	A				
Y8PXV6	Not Tested				
YFKZXG	A				
YHCVMB	A				
YKLU7J	A				
YM6V3R	A				
YQMFML	A				
YTAYNJ	A				
YUH8VH	None				
YWQCGJ	A				
Z4MEBH	A				
Z7AXCF	A				
ZB6RAG	A				
ZQ3Y8J	A				
ZQXJVH	A				
ZUYMNQ	A				
ZWPL3N	A				

Item 3 - Location Response Summary		
Location	Total	Total Participants: 247
A	227	NOTE: Tallies may not add up to the total number of participants, if a participant did not report a response.
B	0	
C	0	
D	0	
None	11	
Not Tested	9	

Development Methods

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
23UZ76	Visual Examination	Examined item using a strong white light source
	Alternate Light Source	Examined item using a Crime Scope CS-16-500
	Cyanoacrylate Fuming	Item was fumed in a CA chamber
	Powder Dusting	Black magnetic fingerprint powder was applied.
	Dye Stain	MRM-10 fluorescent dye stain was applied
24JDNM	Powder Dusting	Item was treated using silk black fingerprint powder with a fiberglass filament brush.
26J63H	Visual Examination	10/26/2023: ambient light. Fingermark observed in section D.
	Lumicyano fuming	10/26/2023: Fluorescent CA fuming in a Foster + Freeman MVC1000/D2. Humidity cycle - 10 minutes. Glue cycle - 15 minutes.
	Alternate Light Source	10/26/2023: Laser (green/532nm)
2AAEDG	Visual Examination	
	Powder Dusting	Black magnetic
2MWXH7	Powder Dusting	I dusted the wrapping paper (item 1) entirely with black magnetic powder. I observed an impression in quadrant A.
2NAK37	Visual Examination	Initial visual examination conducted to determine if there were any visible prints prior to processing. One impression was visible in Quadrant D. A visual exam was also conducted after cyanoacrylate ester fuming and the result showed additional detail on this same impression. Photography was used to capture images each time (Images 1 and 2)
	Cyanoacrylate Fuming	Cyanoacrylate fuming chamber (Mystaire CA-300) was used (cycle was approximately 30-40 minutes). A control was placed in the chamber along with this item. Glue was placed in the chamber, the remaining steps in the process were automatically conducted by the fuming chamber.
	Powder Dusting	After taking a digital image of the impression in Quadrant D (after it was processed with cyanoacrylate ester fuming), the entire item was dusted with black powder. The image in Quadrant D showed additional detail. No other impressions were visible.
2TPNDH	Visual Examination	
2VMHLJ	Visual Examination	We found latent print with visual examination
	Powder Dusting	Enhanced with Magnet powder.
336737	Powder Dusting	Magnetic Powder
338RXL	Visual Examination	The item was visually examined, both with and without an alternate light source (white light). A patent print was observed in section D of the item.
	Powder Dusting	After visual examination, the item was dusted using dual use magnetic powder. Ridge detail was developed in section D of the item.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
38H3NV	Powder Dusting	Magnetic Powder
3AMGAF	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting	humidity 80%, temperature of the heating plate 100 degrees Celsius, time - 35 minutes fluorescent magnetic print powder
3CXACU	Visual Examination Full Spectrum Image System Cyanoacrylate Fuming Full Spectrum Image System Powder Dusting Dye Stain Alternate Light Source	Ultraviolet imaging CApture BT Fuming Chamger Ultraviolet imaging Rhodamine6G
3TFH6H	Visual Examination Alternate Light Source Powder Dusting	The piece of evidence began to be worked on at 4:26pm, with a visual examination, giving a negative result for papillary ridges. After having started with a visual examination, I proceeded to use alternating white light, giving a negative result in the piece of evidence. I used black graphite powder on the entire piece of evidence, testing positive for papillary baskets in section D.
3VMU7T	Visual Examination Cyanoacrylate Fuming Powder Dusting Ninhydrin Physical Developer (PD)	Visually examined item for prints under fluorescent and LED lighting. CSU CA tank for a 12 minute cycle. Left to sit for 1 hour and observed under direct fluorescent and LED lighting. Black magnetic powder. Observed under fluorescent lighting. Batch: 313. Dipped in Nin and allowed to air dry. Put into CARON chamber for 30 minutes. Observed under fluorescent lighting. Batch #523. Performed by LPT [Name]
3Y6V77	Visual Examination Cyanoacrylate Fuming Visual Examination	Natural light, white light/angle light, optical instruments. Processing time: 10 min, humidity: 80% Natural light, white light/angle light, optical instruments.
42RREW	Visual Examination UV Light /FSIS Cyanoacrylate Fuming UV Light/FSIS Powder Dusting	Used the Tin Drop method on the CApture BT Chamber

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
43HZEZ	Cyanoacrylate Fuming	17 minutes, 78% humidity
	Powder Dusting	Magnetic powder
44T33K	Powder Dusting	the sample were dusted using magnetic powder and the fingerprint developed on section D on the evidence.
46AAAM	Alternate Light Source	Viewed at 455nm, 475nm, CSS, 495nm, and 515nm. No fluorescing prints.
	Cyanoacrylate Fuming	Fumed in CyanoSafe for 20 minutes.
	Powder Dusting	Dusted with black powder.
48TB69	Visual Examination	VIS with white light. Photographed latent 1L1.
	Cyanoacrylate Fuming	VIS with white light. Photographed latent 1L1.
	1,2-Indanedione	VIS with LASER and orange filter. Photographed latent 1L1.
	Ninhydrin	VIS with white light.
	Dye Stain	Rhodamine 6G. VIS with LASER and orange filter.
4CPQ3W	Powder Dusting	Mag powder
4F9WDD	Visual Examination	Visual Exam with white light.
	Cyanoacrylate Fuming	Placed in fuming chamber at 80% humidity, temperature of 248 degrees and 0.30 grams of Cyanoacrylate (CAE).
	Dye Stain	Rinsed with fluorescent dye (R.A.M.)
4FKTHH	Cyanoacrylate Fuming	POR TIPO DE SUPERFICIE SE INGRESO EL ITEM A LA CAMARA DE CYANOCRILATO
4FN9VH	Powder Dusting	A visual inspection was made with alternative light for the piece of evidence. The piece of evidence was worked with black magnetic powder.
4FRQ3U	Powder Dusting	I made my initial observations of the item and then used black powder and a brush for latent print processing.
4GZT38	Powder Dusting	I used black magnetic powder, applied with the magnetic pencil.
4KEMFJ	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	
	1,2-Indanedione	
	Ninhydrin	
	Dye Stain	
	Physical Developer (PD)	

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
4PVV4H	Cyanoacrylate Fuming	el item 1,se proceso mediante el reactivo de cyanocritalo, el cual revelo de manera uniforme el fragmento lofoscopico
4PYBGJ	Visual Examination	First, I began to examine the piece of evidence, wrapping paper, divided into sections A-D in all its parts.
	Alternate Light Source	Use an oblique alternate white light and blue light source to examine.
	Powder Dusting	Use black powder to enhance the contrast of finger print.
4WTMCC	Alternate Light Source	white light, 340nm-587nm, UV, coaxially reflected
	Cyanoacrylate Fuming	Humidity 80%: Humidity Cycle 15 min, Glue Cycle 15 min, purge cycle 40 min
	Alternate Light Source	white light source
	Dye Stain	Staining with Rhodamine 6G
	Alternate Light Source	Fluorescence examination with polylight (491nm-548nm)
4YKJ27	Alternate Light Source	examen lumière blanche directe + UV (Trasoscan)
	Cyanoacrylate Fuming	120 °C, 25 min glue time, 80 % RH
	Powder Dusting	Black powder
4ZEFCL	Cyanoacrylate Fuming	
	1,2-Indanedione	
	Ninhydrin	
	Fluorescent Dye Stain	Fluorescent Dye Stain- Rhodamine 6G
6262HH	Visual Examination	10/31/2023-Ambient lighting. Observed ridge detail in section D and photographed
	Lumicyano fuming	10/31/2023-Fluorescent CA fuming using Foster and Freeman 1000 fuming chamber auto cycle settings
	Alternate Light Source	10/31/2023-Laser green wavelength
69LJRJ	Visual Examination	A visual inspection of the piece of evidence is performed and a fingerprint is located in section D.
	Powder Dusting	Black graphite powder is used for fingerprint development. The brushes are used according to the procedure and the fingerprint is developed, photodocumented and lifted for preservation.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
69MA7E	Visual Examination	Prints found.
	Alternate Light Source	Used DCS-5 Device - General Screen through wavelengths
	Cyanoacrylate Fuming	
	Alternate Light Source	Used DCS-5 Device - Reflective UV
	Powder Dusting	
	Alternate Light Source	DCS-5 Device
	1,2-Indanedione	
	Alternate Light Source	Polilight and DCS-5
	Ninhydrin	
	Visual Examination	10 days after Ninhydrin treatment
6B7B2Z	Visual Examination	White light, blue light with yellow filter and green light with red filter.
	Cyanoacrylate Fuming	80% humidity, 120 degrees C, 10 minutes.
	Powder Dusting	Magnetic black powder (Magnetic Jet Black fingerprint powder) and charcoal powder (Latent fingerprint powder black, charcoal based).
	1,2-Indanedione	10 minutes, 100 degrees C.
	Ninhydrin	2 minutes, 80 degrees C, 62% humidity.
6G4PW3	Visual Examination	Ridge detail was visible on the wrapping paper in section D before any chemical processing was performed. This was seen using ambient room light and a flashlight. Before any chemical processing was performed on the wrapping paper, a separate scrap of wrapping paper was tested to see how it reacted with cyanoacrylate fuming, MRM-10, and then ninhydrin.
	Alternate Light Source	An alternate light source (ALS) was used before chemical processing, but no fluorescence or better contrasting ridge detail was observed after using several wavelengths and the corresponding barrier filters. MRM-10 was applied to the item after CA fuming and documentation. ALS was used at 450 nm to make the dye stain fluoresce. This was used in conjunction with orange goggles and an orange lens filter. The ALS was tested, for each day it was used, against a standard before using it on case evidence and each time it performed as expected.
	Cyanoacrylate Fuming	Cyanoacrylate fuming (CA) was used after the visual exam and visible ridge detail photography. Ridge detail further developed with the CA process and lift #2 was photographed again. A standard was run in parallel with the CA fuming process and performed as expected.
	Dye Stain	MRM-10 was applied after the photography was completed for the CA process. It was then viewed through an orange barrier filter with an ALS set to a 450 nm wavelength. The ridge detail fluoresced. MRM-10 was applied to a standard before applying to case evidence and performed as expected.
	Ninhydrin	Ninhydrin (NIN) was applied to the item after the visual exam, ALS, CA and MRM-10 processes were performed. This was done assuming the item was semi-porous. NIN did not work to improve ridge detail. NIN was applied to a standard before applying it to case evidence and performed as expected.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
6JKAJH	Visual Examination	
	Alternate Light Source	UV/475nm
	Cyanoacrylate Fuming	Viewed under 475nm with double orange filter
	BiChromatic Powder	
	1,2-Indanedione	Viewed under 475nm with double orange filter
	Zinc Chloride	Viewed under 475nm with double orange filter
6MM9UB	Visual Examination	
6RFAVP	Visual Examination	Used oblique lighting from a Crimelite flashlight (white light), then used a Coherent TracER LASER with a curved orange KV550 lens filter to image any potential latent print. Also, incandescent lighting was used to avoid any hotspots when imaging.
	Lumicyano Acrylate Fuming	The item was placed inside a Foster & Freeman MVC-5000 superglue chamber along with a control. Dissolved 5 level spoons of Lumicyano powder into 4 grams of CST Cyanoacrylate glue in a tin disk. After the powder was dissolved, the tin dish was placed on the heating element of the superglue chamber and set on an autocycle program for 70 minutes. Using a Crimelite flashlight (white light), oblique lighting was applied to the wrapping paper.
	Powder Dusting	Magnetic Black powder was applied on the wrapping paper. Oblique lighting from a Crimelite flashlight and incandescent lighting was used to image any potential latent prints.
	DFO	On the wrapping paper and on a semiporous control, A 3 second soaking of 1,8-Diazafloren-9-one (DFO) was applied. After the item dried, the soaking step was repeated and placed into the Sanyo Gallankamp oven and set at 100 degrees Celsius for 20 minutes. A Coherent TracER LASER and a curved orange KV550 lens filter was used to image the latent print. The item was re-examined with the LASER after a 24 hour sit-time to allow complete development of DFO.
	Ninhydrin	On the wrapping paper and on a semiporous control, A 3 second soaking of Ninhydrin was applied. After the item dried, the soaking step was repeated and placed into an oven for 3 minutes set at 80 degrees Celsius and having 65 percent relative humidity. Incandescent lighting, Oblique lighting from a Crimelite flashlight, and fluorescent lighting was used to image any potential latent prints. The item was re-examined after 24 hours of sit-time to allow complete development of Ninhydrin.
7HTEUN	Powder Dusting	item 1 was dusted with black powder and a fiber fingerprint brush
7M2U4D	Visual Examination	No visible print observed
	Powder Dusting	Black magnetic powder. Lot# 201504053-04. Tested and working

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
7VWW7N	Visual Examination	White light and LASER
	Cyanoacrylate Fuming	With Fluorescent CA, 70 minute fuming time, observed with white light and LASER.
	Powder Dusting	Black powder
	DFO	20 minutes in dry oven, observed with LASER
	Ninhydrin	3 minutes in wet oven, observed with incandescent light
7W7VEC	Visual Examination	
	Cyanoacrylate Fuming	5 minutes, 80 %Rh, cyanoacrylate glue heated to 120 degrees celsius
	Powder Dusting	
7YD6UN	Visual Examination	Visually inspected the surface of the orange colored wrapping paper and did not visualize any possible friction ridge detail.
	Cyanoacrylate Fuming	Placed orange colored wrapping paper in the superglue fuming chamber with superglue on an aluminum tin, distilled water, and a control print. Chamber ran for ~40 minutes. Friction ridge detail was observed at this step.
	Dye Stain	Sprayed the orange colored wrapping paper with Rhodamine 6G to cover the entire surface area and let it dry.
	Alternate Light Source	Viewed the orange colored wrapping paper under the laser (550nm with orange filter goggles). Friction ridge detail was observed at this step.
84HHQD	Visual Examination	white light
	Cyanoacrylate Fuming	11 minutes, 80% humidity
	Powder Dusting	Black magnetic powder
88MVNE	Powder Dusting	Item was treated using black magnetic powder.
8A8XEJ	Visual Examination	Oblique lighting.
	Alternate Light Source	455-515nm
	Cyanoacrylate Fuming	20 minutes
	Powder Dusting	Black powder and brush

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
8ABEPC	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Alternate Light Source	
	Powder Dusting	Mag powder
	1,2-Indanedione	oven #1 was utilized as development method
	Ninhydrin	humidity cabinet #4 was utilized as development method
	Dye Stain	RMO
	Physical Developer (PD)	
8BM7KD	Visual Examination	A visual inspection of the piece of evidence is performed and a fingerprint is located.
	Powder Dusting	Black graphite powder is used for the development of the fingerprint.
8E6J62	Visual Examination	
	Powder Dusting	fluorescent magnetic powder
8E77X9	Visual Examination	The item 1 was visually inspected and examined following our LPPM.
	Cyanoacrylate Fuming	A control test of reagent and solution were performed at the same time with item 1. Positive result of cyanoacrylate. Item was processing twenty minutes in cyanoacrylate atmospheric fuming with cyanoacrylate compound.
8JEL8W	Cyanoacrylate Fuming	40 min, white stain
	Powder Dusting	White Magnetic powder.
8R8WJD	Powder Dusting	Item was processed in five minutes approximately, using black magnetic powder.
8XEEZE	Cyanoacrylate Fuming	processed by cyanoacrylate ester (superglue) under a vacuum for over 1 hour, allowed to cure for 2 hours.
	Dye Stain	Dye stained with Rhodamine 6G (R6G) and viewed using a 530nm/green forensic laser.
973JJD	Visual Examination	Rofin Polylight 450, photo with red filter. Further examination was not necessary.
	Powder Dusting	Magnetic powder, lifting with a silicone casting.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
978XWE	Visual Examination	When working on the piece, I began to use all the necessary equipment, I documented the piece of evidence with a general photograph, to show how it was received and each of its packaging, then I performed a visual inspection.
	Alternate Light Source	Using alternating white light, to verify the fingerprint identification, a simple view could be seen in section D, fragments of fingerprint.
	Powder Dusting	I began to work on each of the sections with black graphite powder Ref. BPP-09128 to create contrast and highlight the impression, managing to develop a fingerprint.
9APBG2	Visual Examination	I performed a visual examination by looking at the item using natural lighting and oblique lighting at different angles to see if any ridge detail is present.
	Cyanoacrylate Fuming	I placed the item into the superglue chamber. I added superglue into an aluminum dish and placed that onto a hot plate inside the chamber. I also added a glass beaker with hot water into the chamber to provide humidity. I placed a control print onto the interior of the glass of the chamber to ensure the superglue was fuming properly. I turned the chamber on and let the hot water rehydrate any ridge detail that is present, and the superglue fumes adhered to any ridge detail. I left the item inside the chamber for approximately 15 minutes. Once I observed the control turn white from the superglue fumes, I turned the chamber off and vented the chamber.
	Powder Dusting	Using magnetic powder and a magnetic wand I powdered the item and ridge detail developed.
9GB4UM	Visual Examination	white light & LASER & Polilight
	Cyanoacrylate Fuming	CST Lumicyano solution
	Powder Dusting	black powder
	DFO	
	Ninhydrin	
9KN4QE	Visual Examination	White light
	Lumicyano fuming	1.5 scoops of Lumicyano Powder. 26 drops of Lumicyano solution. MVC 1000, Humidity Cycle ≤ 10 mins RH~80%, Glue 15 mins 120 degrees F RH=80%, Purge <math>< 80</math>% Humidity
	Alternate Light Source	Brightbeam laser. Green 525nm
9MAQJ2	Visual Examination	On 11/09/23
	Photocopy	On 11/09/23
	Cyanoacrylate Fuming	On 11/09/23
	DFO	On 11/15/23, dipped in DFO then hung to dry, heated, visualized with alternate light
	Dye Stain	On 11/15/23, Ardrex, sprayed with Ardrex, rinsed, then hung to dry, visualized with alternate light

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
9NRPVD	Visual Examination	Se procedió a sacar el ítem 1 de su embalaje, se realizó inspección visual, se fotografió. Item 1 was removed from its packaging, a visual inspection was carried out, and it was photographed.
	Alternate Light Source	Se utilizó luz alterna y se logró observar una impresión dactilar en la sección D. Alternating light was used and a fingerprint was observed in section D.
	Magnetic Black Powder	Se procedió a trabajar, para el desarrollo de la impresión dactilar, utilizando polvo magnético negro, desarrollandose la impresión en la sección D. Work was carried out to develop the fingerprint, using black magnetic powder, developing the impression in section D.
9PZRRB	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	magnetic powder
9UY7CE	Visual Examination	Utilized a combination of bounced and oblique lighting with white light; ridge detail observed in section D
	Lumicyano fuming	Deionized water lot 43031177 exp 3/14/28. Lumicyano powder lot U090422 exp 3/2024 1.5 scoops. Lumicyano solution lot 21066D exp 4/2024 26 drops. F&F MVC 1000-D2 fuming chamber serial number 1083-53977. fuming time = 15 minutes
	Visual Examination	Brightbeam Laser serial number SN1127 wavelength 532nm (green); no additional ridge detail observed. ridge detail in section D fluoresced.
9YMYYE	Visual Examination	
	Alternate Light Source	520nm, 445nm, 365nm
	Cyanoacrylate Fuming	
	Powder Dusting	Black Magnetic Powder
	1,2-Indanedione	
	Ninhydrin	
	Dye Stain	RMO
Physical Developer (PD)		
A96WJC	Visual Examination	First I did a visual examination to locate the latent print and it was visible in the letter D.
	Alternate Light Source	Then I used an alternate white light source to highlight the latent print.
	Magnetic Black Powder	To develop the latent print I used magnetic black powder dusting and a magnetic brush.
A9MZZP	Visual Examination	flashlight
	Cyanoacrylate Fuming	10 minutes
	Dye Stain	R6G
	Alternate Light Source	Coherent TracER laser

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
AA7MY8	Visual Examination	white light and Polylight - faint Finger Print
	Cyanoacrylate Fuming	strong Finger Print
ACPNTT	Visual Examination	White light
	Cyanoacrylate Fuming	aprox. 3-4 min
	Powder Dusting	Black magnetic powder
AHW6DF	Visual Examination	Friction ridge impression visible in section "D" upon visual examination with and without oblique lighting.
	Powder Dusting	Black magnetic powder applied further enhancing the friction ridge impression in section "D".
AJP8T4	Visual Examination	Vis exam with white light and FSIS/UV. Latent 1L1 detected in Box D. Photographed FSIS/UV
	Cyanoacrylate Fuming	Vis with FSIF/UV. Improved clarity of 1L1. Re-photographed FSIS/UV. No additional lats
	1,2-Indanedione	Vis with LASER. Did not improve 1L1. No additional lats
	Ninhydrin	Vis with white light. Did not improve 1L1. No additional lats
	Dye Stain	R6G dye stain. Vis with LASER. Did not improve 1L1. No additional lats
B3ZBFF	Cyanoacrylate Fuming	For appx 30 mins + 30 mins of curing. Visual exam under white light.
	1,2-Indanedione	Placed into humidity chamber for approximately 15 mins. Visual exam with green laser and orange filter.
	Ninhydrin	Place into humidity chamber for approximately 15 mins. Visual exam under white light.
	RHODAMINE with methanol	Sprayed and let dry. Visual exam with orange filter and green laser.
BDZZWG	Visual Examination	Tungsten/Incandescent, fluorescent, and TracER laser used to view item
	Cyanoacrylate Fuming	F&F MVC 5000 chamber for 70 min
	Powder Dusting	Black Powder
	DFO	Oven @ 100 degrees C for 20min
	Ninhydrin	Oven @ 80 degrees C and 65% wet bulb for 3 min
BGYEK7	Visual Examination	

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
BJJFET	Alternate Light Source	RUVis
	Cyanoacrylate Fuming	78% humidity for 15 minutes
	Alternate Light Source	
	Powder Dusting	black powder
	Dye Stain	ARDROX
	Alternate Light Source	yellow and orange filters at various wavelengths
BKZMLV	Visual Examination	Item was visually inspected for visible prints under a magnifier with light source.
	Cyanoacrylate Fuming	Item was placed into a CA chamber for fuming. A container with steaming water was placed into the chamber for several minutes prior to placing the CA into the chamber. Several drops of Cyanoacrylate were placed into a small tin and placed onto a warmer inside the chamber. After approximately eight minutes the warmer was unplugged and the chamber vent was opened. Once the chamber was properly vented the item was removed and then inspected using a magnifier with a light source.
	Dye Stain	I applied MRM-10 dye stain to the item and viewed it under a magnifier with a FLS with an orange filter.
	Dye Stain	Next I applied Basic Yellow dye stain to the item and viewed it under a magnifier with a FLS with an orange filter.
	Methanol	A methanol rinse was applied to the item, then viewed under a magnifier with a FLS and an orange filter. No photos were taken after this process.
BLRJBP	Visual Examination	White Light & ALS
	Cyanoacrylate Fuming	15 min @ 80% RH
	Powder Dusting	Magnetic
BPBK7B	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	VIS and 254 FSIS
	Powder Dusting	Magnetic
	1,2-Indanedione	Oven
	Ninhydrin	
	Dye Stain	RhoMeOH
	Physical Developer (PD)	
C7VTL7	Powder Dusting	Item was processed in about five minutes using magnetic powder and a feather duster.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
C9KR9G	Visual Examination	
	Powder Dusting	Item was processed using Bichromatic Powder and a fingerprint brush.
	Alternate Light Source	Item was examined using oblique light from a flashlight.
CBMZ6E	Alternate Light Source	Mark search was done by following ways: 1. Blue Light (445 nm) using Goggle (495 nm). 2. Green Light (532 nm) using Goggle (550 nm). 3. White light source. Marks was found on section D.
	Cyanoacrylate Fuming	Processing Time: 45 mins, which includes Humidifying, Fuming and Purging. After 45 mins, Mark search was done using White Light. No additional mark found. Mark on Section D, enhanced
CCMQJA	Cyanoacrylate Fuming	
	Powder Dusting	Black
	Dye Stain	Ardox w/UV (365nm)
CL3RQ3	Visual Examination	visual examination of the semi-porous, shiny surface
	Powder Dusting	dusted a light coating of black print powder on each quadrant of the surface to enhance and capture ridge detail
CNDKUH	[No Methods Reported.]	black magnetic powder
CNEEDN	Visual Examination	*Please note that gloves were worn at all times throughout processing. Item 1 was first removed from its packaging and visually examined. Possible ridge detail was observed in quadrant "D" at this time.
	Cyanoacrylate Fuming	*Please note that gloves were worn at all times throughout this processing. Because Item 1 was observed to have a coated surface during visual examination, cyanoacrylate fuming was selected to use. A Cyanoacrylate fuming chamber was cleaned prior to use with isopropyl alcohol. A clean sheet of butcher paper was placed at the bottom of the chamber. A positive control was created utilizing black, non-porous cardstock and was hung from a clip inside the chamber. Several drops of liquid superglue (Lot#YM27419, Exp: 01/2024) were placed into a small metallic container, which was placed on top of a small heating plate inside the chamber. Sufficient water levels were observed in the machine. Item 1 was placed into the fuming chamber. The chamber was then closed and a fuming cycle was started. The control and item 1 were fumed for ten minutes at a 70% humidity level. Once complete, the chamber then purged the fumes for an additional ten minutes. Positive results were observed on the control. Item 1 was visually examined and ridge detail was clearly observed in the "D" quadrant.
	Powder Dusting	*Please note that gloves were worn at all times throughout this processing. In order to attempt lifting the observed ridge detail, black magnetic powder was selected to apply to item 1. The item was placed on a clean sheet of butcher paper and black magnetic powder was applied to the surface using a magnetic wand. Ridge detail became clearly visible in the "D" quadrant.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
CQXLN6	Visual Examination	Visual examination with natural light.
	Cyanoacrylate Fuming	Hot plate temp. Approx. 400 degrees fahrenheit. Approx. 70% humidity. 5 drops of cyanoacrylate. Three minute fuming time. Fan used for circulation during fuming.
	Powder Dusting	Black powder. Dye stain not used due to possible stripping of the finish on the item.
CX2K2F	Visual Examination	The item was first examined utilizing Ambient / Oblique lighting, and ridge detail was observed in section D.
	Full Spectrum Imaging System	The item was then examined utilizing the Full Spectrum Imaging System (FSIS) at 254NM, and ridge detail was observed in section D.
	Cyanoacrylate Fuming	The item was then placed into a fuming chamber, and fumed with heated cyanoacrylate (Superglue). The item was then re-examined utilizing Ambient / Oblique lighting, and ridge detail was observed in section D.
	Full Spectrum Imaging System	The item was then re-examined utilizing the Full Spectrum Imaging System (FSIS) at 254NM, and ridge detail was observed in section D.
	Powder Dusting	The item was then processed utilizing magnetic powder, and ridge detail was observed in section D.
D2G6UM	Visual Examination	Item viewed under white light and with flashlight.
	Cyanoacrylate Fuming	Item fumed in a Mystaire chamber for approximately 11 minutes at 80% humidity and viewed with white light and a flashlight.
	1,2-Indanedione	1,2-Indanedione was applied to the item and developed in a Caron oven at 80 degrees C for 20 minutes and viewed with a TracER laser.
	Ninhydrin	Ninhydrin was applied to the item and developed a in a Caron humidity oven at 80 degrees C and 80% humidity for 20 minutes.
	Dye Stain	Water based Rhodamine 6G was applied to the item and viewed with the TracER laser.
DFCW6P	Powder Dusting	It was used a conventional powder, black powder in item 1
DGQ4Q7	Visual Examination	I used natural light to perform a visual examination of the item.
	Cyanoacrylate Fuming	Cyanoacrylate fuming process performed over a 40 minute period with the chamber set to 80% humidity and 248 degrees for glue heating. One latent print developed in section D.
	Powder Dusting	I used black magnetic powder to further process the super glue developed latent print.
DL8GJ8	Visual Examination	White oblique light - A patent print was observed.
	Cyanoacrylate Fuming	15 minutes in sgf chamber - The existing print was still visible, but without additional development.
	Powder Dusting	Black magnetic powder - The existing print was further enhanced.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
DMGDZ6	Visual Examination	White Light
	Alternate Light Source	Blue and green light
	Cyanoacrylate Fuming	Approx 8 min at 80% RH
	Powder Dusting	black magnetic powder
	1,2-Indanedione	10 min at 100°C
	Ninhydrin	2 min at 80°C and 62 RH%
	Dye Stain	Basic Yellow 40
DNT4CU	Visual Examination	A visual examination of the wrapping paper was done using oblique lighting. No ridge detail was visualized.
	Cyanoacrylate Fuming	A control was created by placing a print on the interior portion of the glass of the fuming chamber. Superglue was placed in an aluminum tray and then placed in a heating source, and a beaker with hot water was placed inside to create humidity. The evidence was placed into the chamber for approximately 20 minutes. The control developed white ridge detail.
	Powder Dusting	The semi-porous side of the wrapping paper was dusted with black magnetic powder. Ridge detail developed on section D of the evidence.
DR749L	Visual Examination	Viewed with white light, ALS, and laser
	Cyanoacrylate Fuming	
	Indanedione	Catalyzed in Oven
	Ninhydrin	Catalyzed in Humidity Chamber
	Dye Stain	Rhodamine 6G - Water Based
DR8ZJG	Visual Examination	Crime-lite, LASER
	Cyanoacrylate Fuming	
	Powder Dusting	Black powder
	DFO	
	Ninhydrin	
DVQ2E4	Visual Examination	Forensic light sources (white, green, blue)
	Cyanoacrylate Fuming	7 min
	Powder Dusting	Magnetic powder (jet black)
	1,2-Indanedione	100 degrees celcius, 10 min
	Ninhydrin	80 degrees celcius, 62 RH%, 2 min
ENLKHN	Visual Examination	Direct and oblique white light
	Cyanoacrylate Fuming	Relative humidity: 80-83% ; Temperature: 120 °C ; Cyano glue quantity : 0.62 g; Exposure time : 6 min

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
ER4HD7	Cyanoacrylate Fuming	fumed with cyanoacrylate for 20 min at 80% RH and 120 degree Celsius.
F2NDM6	Powder Dusting	Magnetic powder (due to inability to test types of metals found in foil and possible chemical separation due to double replacement reactions; this was determined to be the best option).
FCADJ3	Visual Examination, Cyanoacrylate Fuming, Powder Dusting	Visual Examination with white oblique lighting, Cyanowand (cyanoacrylate ester fuming), and Black Magnetic Powder.
FCREBB	Visual Examination	Oblique lighting with a flashlight
	Powder Dusting	Silver dusting powder
FECF6X	Visual Examination	Conducted VIS with Ambient and White Lighting.
	Cyanoacrylate Fuming	Conducted CAE processing with the Foster + Freeman MVC 1000 Chamber. Utilized FSIS - UV Light and White Light to visualize.
	Powder Dusting	Conducted Powder processing with Black Magnetic Powder. Utilized White Light to visualize.
	1,2-Indanedione	Conducted IND processing by performing the spray method and allowing the item to air dry. Placed the item into the Caron Forensics Humidity Chamber (Model: 6105-2) with heat and humidity for 10 minutes to expedite the development of LPs. Utilized TracER LASER to visualize.
	Ninhydrin	Conducted NIN processing by performing the spray method and allowing the item to air dry. Placed the item into the Caron Forensics Humidity Chamber (Model: 6105-2) with heat and humidity for 10 minutes to expedite the development of LPs. Utilized White Light to visualize.
	Dye Stain	Conducted Rhodamine 6G (R6G) processing by performing the spray method and allowing the item to air dry. Utilized the TracER LASER to visualize.
FG4CUR	Visual Examination	I could visualize a partial impression with oblique lighting.
	Powder Dusting	I utilized dual contrast magnetic fingerprint powder.
FK2VXB	Visual Examination	Initial examination with white light and light source (blue and green light). Visible latent fingerprint in section D with white light.
	Cyanoacrylate Fuming	2g glue, humidity 80%, heat 120 degrees, 7min processing time. Teststrip positive. Visible fingerprint in section D.
	Powder Dusting	Magnetic jet black powder was used. No visible fingerprint.
	1,2-Indanedione	100 degrees, 10min processing time. Teststrip positive. Fractions of fingerprint was visible in section D. No fingerprint was preserved.
	Ninhydrin	80 degrees, humidity 62%, 2min processing time. Teststrip positive. Fractions of fingerprint was visible in section D. No fingerprint was preserved.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
FMNK4A	Visual Examination	visual with white light (+)
	Alternate Light Source	FSIS (+)
	Cyanoacrylate Fuming	CAE fumed ~20mins 80% humidity (+)
	Dye Stain	BY40 stained (+)
FQ9CFC	Visual Examination	
	Cyanoacrylate Fuming	Lumincyano ester fuming
	Powder Dusting	
	DFO	
	Ninhydrin	
FQRFNC	Sequential Processing	CAE (with heat & humidity for 20 minutes), followed by magnetic powder (where print was developed and lifted with tape and placed on a white lift card) and finally RAM Solution Stain and LASER (no further enhancement of ridge detail).
FXRP7X	Visual Examination	
	Powder Dusting	Magnetic powder
FZG4KZ	Visual Examination	
G8C7MC	Visual Examination	Regular fluorescent lighting 11/17/23 - NRD
	Visual Examination	FSIS - 11/17/23 - NRD
	Cyanoacrylate Fuming	Used Air Science Fume Chamber (tank 3) on 11/17/23. 80% humidity. 30 minutes fuming, 30 minutes purging. Ridge detail developed and photographed. (lot# CA230821)
	Visual Examination	FSIS - 11/17/23 - Ridge detail developed and photographed.
	Dye Stain	MStar - 11/17/23 - Ridge detail developed and photographed (lot# MS231109).
	Powder Dusting	White regular powder - 11/28/23 - Ridge detail developed and photographed.
GAW8GX	Cyanoacrylate Fuming	Fumed with cyanoacrylate
	Dye Stain	Dye stained with basic yellow and viewed with a forensic laser. Test print positive.
GCKY7A	Visual Examination	visual exam using side lighting with flashlight
	Cyanoacrylate Fuming	15 minutes, 70 degrees F at 80% humidity
	Powder Dusting	black magnetic powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
GDEPCN	Visual Examination	Visualised with a white crime-lite
	Alternate Light Source	Laser, UV & Blue crime-lite. FRD visualised with BCL only
	Powder Dusting	Powdered with Black Magnetic Powder. Enhanced FRD visualised at visual and fluorescence
GGMH2M	Powder Dusting	- Wear personal protective equipment (PPE) and check if the package was well sealed; - Apply a digital photography with camera canon 1100D to record the received package; - Open the package which contains 3 items; - Apply a digital photography with camera canon 1100D for the item 1; - Open the item 1 which contains wrapping paper; - Proceed with visual examination of the wrapping paper; - Apply a digital photography with camera canon 1100D for the wrapping paper; - Dusting with green fluorescent powder by using camel hair brush after wearing appropriate ppe; - Apply a digital photography with camera, reproduction table with ruler closer to the latent print for recording the developed latent print ; - Enhancement by using DCS-5 machine with 8×4(2) light source of 445 nm GG495 and filter of OG 590 AG; - Apply a digital photography using DCS-5 camera Nikon D6 to save enhanced latent print developed; - Processing time for all steps was 40 minutes; - Fluorescent powder was used.
GGZ7U9	Cyanoacrylate Fuming	
	Powder Dusting	
	1,2-Indanedione	
	Ninhydrin	
	Physical Developer (PD)	
GJ3662	Black Magnetic Powder.	The piece was observed, white artificial light was used, and black magnetic powder was used to develop the fingerprint. The fingerprint was quickly observed in the box identified with the letter D.
GLPN7Y	Visual Examination	A latent was visually observed in the D quadrant and photographed as L1.
	Alternate Light Source	No ridge detail visible.
	Cyanoacrylate Fuming	Insufficient ridge detail at this stage for L1 in quadrant D. It didn't improve in quality from the first visual photographed latent of L1.
	Powder Dusting	Magnetic Powder was used. Latent developed further (L1) in quadrant D. I photographed and lifted the latent L1.
GRY6FM	Visual Examination	Examination under white light and latent print was appeared on D position and loop shape. So, taken photo by using UV crime lite (350 – 380 nm) with Foster + Freeman DCS5 imaging system.
	Cyanoacrylate Fuming	The fuming was initiated in the fuming chamber at least 15 minutes with 80 % humidity. The latent print was clearer under white light. Cyanoacrylate will crystallizes the water that resulting from sweat secretions.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
GUMC4Q	Visual Examination	
	Cyanoacrylate Fuming	120°C +/- 5°, relative humidity 75% +/- 15%
	Dye Stain	Ardrox, 365 nm
GV2WW2	Visual Examination	Oblique lighting used to detect latent print CG1 in quadrant D.
	Cyanoacrylate Fuming	Item 1 processed with cyanoacrylate fuming with the following parameters: 0.2g cyanoacrylate, 80% humidity, 4 minute fume time, 5 minute purge time. CG1 still detected in quadrant D.
	Powder Dusting	Item 1 processed with black magnetic powder. CG1 most visible after processing with powder in quadrant D.
GYGD76	Powder Dusting	Performed a visual inspection, locating the latent print in plain view, then black graphite powder was used to lift the latent print with a clear plastic patch. It was then preserved in photo. The latent print was located in the letter D.
H62XK6	Visual Examination	
	Alternate Light Source	520nm, 445nm, 365nm, 254nm
	Cyanoacrylate Fuming	
	Alternate Light Source	254nm
	Powder Dusting	Magnetic powder
	1,2-Indanedione	Oven for 20 min
	Alternate Light Source	520nm
	Ninhydrin	Humidity chamber for 20 min
	Dye Stain	RhoMeOH
	Alternate Light Source	520nm, 445nm
	Physical Developer (PD)	
HRCWAP	Visual Examination	under white light
	Alternate Light Source	fluorescence examination (350nm-650nm under appropriate colour barrier filters)
	Cyanoacrylate Fuming	in the fuming chamber with a humidity 80% for 10 minutes visual examination under white light and fluorescence examination in alternate light source (350nm-650nm)
	Powder Dusting	magnetic powder Bi-Chromatic; visual examination under white light

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
HTQDBA	Visual Examination	Visually examined the evidence, using natural light source
	Cyanoacrylate Fuming	Used cyanoacrylate fuming tank, getting the tank up to 80% relative humidity, fuming for 30 minutes with cyanoacrylate and purging the tank for 30 minutes (CA230821)
	Dye Stain	used dye stain M-star on the latent print after cyanoacrylate fuming (MS231109), then used a crime scope to visually see the fluorescent latent print
	Powder Dusting	Dusted the latent print with latent fingerprint powder
HUJFRX	Visual Examination	Performed visual examination with white light and alternate light sources.
	Cyanoacrylate Fuming	Placed the item in an airtight superglue chamber using Foster & Freeman MVC FFLEX S with Humidity at 80% RH, Superglue at 248 Fahrenheit and at a 42 minute superglue process.
	Visual Examination	Performed visual examination of the developed latent print using Foster Freeman DCS 5 with white light and alternate light source.
	Dye Stain	Sprayed fluorescent dye stain (RAM - Rhodamine G6, Ardrox, MBD) and let it sit for about 10 minutes.
	Alternate Light Source	Performed visual examination of the developed latent print using Foster Freeman DCS 5 with alternate light source.
HVAE7W	Cyanoacrylate Fuming	Following cyanoacrylate ester (CA) fuming (45 minutes, 20 minute curing), no print observed.
	DFO	Sprayed with DFO and viewed under green light laser (no friction detail observed)
	Ninhydrin	followed with Ninhydrin and placed in humidity chamber at 80 degree C for minimum of 20 minutes. Visual ninhydrin stain observed, however, friction detail not observed as significant. Test print positive.
	Dye Stain	Additional treatment performed in attempt to further enhance print following Ninhydrin by introducing CA print to Rhodamine 6G and Basic Yellow. No additional detail achieved.
J348RV	Visual Examination	The item 1 was visually inspected and examined following LPPM using a 254 nm wavelength UV light and filter. One visible print was observed on quadrant D.
J6D3JE	Visual Examination	Item was visually examined prior to processing.
	Cyanoacrylate Fuming	CFC Lot #YM27419, EXP: 01/2024. Positive and negative controls reacted appropriately. Fuming 10 minutes at 70% humidity, Purging 10 minutes
	Powder Dusting	Black magnetic powder was applied to the item to develop and visualize latent print. Latent fingerprint visualized in quadrant D.
JB4CVY	Visual Examination	Faint ridge detail in quadrant D.
	Lumicyano	Processed in a fuming tank for approximately 10 minutes with 80% humidity and 120 degrees Celsius
	Alternate Light Source	Orange barrier filter at 459nm

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
JCWECL	Visual Examination	Using white light
	Cyanoacrylate Fuming	RH 80%. Glue time = 25 minutes. Glue temperature = 120°C. Hold time = 5 minutes.
	Powder Dusting	Fingerprint Powder Swedish Black (BVDA)
	Dye Stain	Basic Yellow 40 (formulation with petroleum ether)
JN8RR2	Visual Examination	negative with visual examination
	Alternate Light Source	negative with ALS
	Cyanoacrylate Fuming	processed in CA tank
	Rhodamine-6-G	Rhodamine-6-G applied and examined with laser
JVCHJ8	Visual Examination	Visually examined item and could see friction ridge detail in quadrant D.
	Powder Dusting	Dusted with bichromatic powder. Friction ridge detail of possible value was developed in quadrant D.
JZME3N	Cyanoacrylate Fuming	
K2QUMY	Visual Examination	2 minutes using flashlight; white light.
	Cyanoacrylate Fuming	40 minutes inside Foster Freeman MVC FFLEX S chamber
	Visual Examination	3 minutes using flashlight; white light
	Dye Stain	1 minute application of R.A.M. using squirt bottle method
	Fuming Hood	20 minutes dry time
	Alternate Light Source	10 minutes - Foster Freeman DCS-5 Crime Lite 550nm filter
K42PG4	Visual Examination	Viewed in visible light.
	FULL SPECTRUM IMAGIN SYSTEM (FSIS)	Examined with a FSIS using UV light and a filter.
	Cyanoacrylate Fuming	Vacuum fumed with cyanoacrylate ester (superglue) in a CyVac chamber for ~1 hour and allowed to cure for ~30 min.
	1,2-Indanedione	Saturated with IND (heat and humidity added) and examined with laser light at 532 nm and an orange filter.
	Ninhydrin	Stained with NIN (heat and humidity added) and viewed with visible light.
	RHODAMINE	Saturated with RHO and examined with laser light at 532 nm and an orange filter.
K9EBNP	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	black powder with a fiberglass brush

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
KANCAN	Alternate Light Source	Examined using Crimelites white, blue and green. Latent fingerprint observed in Section D
	Cyanoacrylate Fuming	Treated in MVC1000 - 6 minutes with positive control
	Alternate Light Source	Examined using Crimelites white, blue. Nil additional latent fingerprints observed
	Dye Stain	Sprayed with Rhodamine 6G
	Alternate Light Source	Examined using Crimelite green and orange goggles. Nil additional latent fingerprints observed
KB3N78	Visual Examination	I conducted a visual exam of the surface of item # 1, gold foil wrapping paper. I observed a fingerprint in quadrant D.
	Alternate Light Source	I used an alternate light source at oblique angles to search for additional latent prints. No further prints were observed.
	Cyanoacrylate Fuming	I used an air science chamber with a controlled environment of 70' degrees Fahrenheit and 70% humidity with a heated tray of superglue to fume the item for 15 minutes. The unit was vented for 5 minutes. The visible fingerprint developed. I photographically preserved the print and proceeded to further development with dye stain.
	Dye Stain	I used R.A.M. to dye stain, Evident, lot # 3649, to enhance the now visible fingerprint. I utilized a handheld spray bottle to apply the RAM to the surface of the item. I allowed it to dry for thirty minutes. I used a darkened room and an alternate light source at CSS setting and an orange barrier filter to view the latent print. I used a digital format camera with an orange barrier filter to preserve the image.
KBXCHB	Visual Examination	white light, uv 415-590 nm
	Cyanoacrylate Fuming	white light
	Powder Dusting	magnetic powder black, white light
KJ74NZ	Cyanoacrylate Fuming	Cyanoacrylate was applied in the Cyanoacrylate Fumming Chamber. Fixation technique through the scanner, model V700 PHOTO with image caption to 800 PPP resolution.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
KNMBCY	Visual Examination	Visually looked at the item for any prints
	Alternate Light Source	Used 520nm Laser, 445nm Blue light, and 365nm UV
	Cyanoacrylate Fuming	Performed a visual examination and then used the RUVIS (254nm)
	Powder Dusting	Magnetic powder was applied and item was visually looked at for any prints
	1,2-Indanedione	Used Indanedione and placed the item in the oven for 20 minutes, afterwards used the 520nm Laser
	Ninhydrin	Used Ninhydrin and then placed the item in the humidity cabinet for 15 minutes and then performed a visual examination
	Dye Stain	Used RMO on the item and used the 520nm Laser and 445nm blue light to visualize
	Physical Developer (PD)	Used physical developer on the item and then performed a visual examination
KNQQNZ	Visual Examination	visual examination using oblique lighting and Alternate Light Source under multiple wavelengths
	Cyanoacrylate Fuming	CAE using Sirchie Omega Print, used in fuming chamber with humidity and heat source for 15 minutes.
	Powder Dusting	Sirchie black powder and brush used to develop latent print impression.
KPH6VP	Visual Examination	
	Photocopy	
	Powder Dusting	Eight minutes at 80% humidity
	Powder Dusting	Clean (sterile) black powder and a clean (sterile) brush
KR27PB	Cyanoacrylate Fuming	Cyanoacrylate ester processing time 15min
	Powder Dusting	Black magnetic powder
	Dye Stain	Rhodamine 6G dye stain
	Alternate Light Source	Fluorescent dye stain viewed under green light
KUR8XK	Cyanoacrylate Fuming	
KV6YP2	Visual Examination	Examine the piece of evidence, wrapping paper, divided in sections A-D
	Alternate Light Source	Use an oblique alternate light and blue light source to examine.
	Powder Dusting	Use black powder to enhance the contrast of finger print.
KV8GWD	Powder Dusting	Processed using black powder and brush
KVZJDZ	Visual Examination	Rofin Polylight White light.
	Powder Dusting	Magnet Powder.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
KXRHQY	Visual Examination	Used flashlight
	Cyanoacrylate Fuming	40 minutes
	Powder Dusting	2 minutes
L4DV6R	Visual Examination	Item was photographed. Under ambient light, a latent mark was clear in section D
	Powder Dusting	Black powder was applied to the whole item and the mark is clearly visible
L8VTXN	Powder Dusting	it was used black magnetic latent print powder applied with magnetic pencil
LAJFG4	Cyanoacrylate Fuming	CAE Fuming chamber
	Dye Stain	Basic Yellow staining (pre-mixed solution)
LD2LRK	Visual Examination	White light, different angles
	Alternate Light Source	Blue light 420 – 470 nm, yellow viewing filter 495 nm. Green light 490 – 560 nm, orange viewing filter 570 nm
	Cyanoacrylate Fuming	Process time: 7 minutes. Temperature of heater block: 119°C. Relative humidity: 80%
	Powder Dusting	Magnetic powder
	1,2-Indanedione	Process time: 10 minutes. Temperature: 100°C. Relative humidity: 0%
	Ninhydrin	Process time: 2 minutes. Temperature: 80°C. Relative humidity: 62%
	Dye Stain	Basic yellow 40
LEWZMP	Visual Examination	After opening the evidence envelope, I visually examined the item using oblique lighting.
	Cyanoacrylate Fuming	I carefully hung the item in the superglue chamber, created a quality control (on glass), added superglue to the hot plate and hot water. I let the chamber run for approximately 18 minutes.
	Powder Dusting	I dusted the evidence item using magnetic powder.
LQL2VJ	Visual Examination	noticed possible ridge detail in quadrant D
	Cyanoacrylate Fuming	placed in Foster+Freeman MVC3000 superglue chamber set for AUTO; print located in quadrant D
	Dye Stain	Rhodamine-6G dye stain and examined with ALS at 515nm; print located in quadrant D
	Powder Dusting	black powder dusting and tape lift
LX9UA4	Visual Examination	Conducted visual examination on the item using white, UV, 450, 505 (ROFIN ALS) and laser (LaseR ALS) with yellow, orange and laser filters, prior to processing.
	Cyanoacrylate Fuming	Placed item in AirScience Sumerfume cyanoacrylate chamber. Used white light (ROFIN ALS) to visualize areas of ridge detail.
	Powder Dusting	Processed item using magnetic fingerprint powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
M4BB4B	Powder Dusting	item processed with magnetic powder.
M6KBCX	Powder Dusting	Latent print revealed with gray magnetic powder dusting applied with a magnetic brush. Latent print was revealed in quadrant D. The folder was open with the wrapping Golden colored paper divided into quadrant A, B, C, and D.
MGGG7W	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting 1,2-Indanedione Ninhydrin Dye Stain Physical Developer (PD)	
MYWMGT	Cyanoacrylate Fuming Dye Stain Alternate Light Source	Fumed with superglue in the safe fume chamber at 25°C, 75% humidity for 15 minutes (manufacturer speed). Dye stained with Rhodamine 6G. Viewed under green laser. Test print was positive.
MZ7RVG	Magnetic Latent Print Powder	Item one is found inside a brown paper envelope, it has a label attached with the data test 23-5191 item 1, it is opened and with tweezers a brown cardboard base with a fragment attached is removed from the inside. of gold metallic paper divided into four sections with the letters A, B, C and D, verification of magnetic latent print powder reagent is carried out before being applied to item 1, so the result of the control test is positive, immediately The reagent is applied to each section of item 1, obtaining friction ridges in section D.
N3DKB2	Cyanoacrylate Fuming Dye Stain	fumed for 14 minutes at 80% relative humidity Basic Yellow 40 premixed solution
N87CVQ	Cyanoacrylate Fuming Dye Stain Alternate Light Source	Item was fumed with cyanoacrylate using safefume fuming chamber Dye stained with basic yellow Viewed with forensic laser. Test print was positive.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
N87EKV	Visual Examination	
	Alternate Light Source	532nm laser, 450nm Blu light, and 365nm UV
	Cyanoacrylate Fuming	Cabinet 12
	Powder Dusting	Magnetic powder
	1,2-Indanedione	Developed in oven, examined under 532nm laser
	Dye Stain	RMO, examined under 532nm laser and 450nm Blu light
	Physical Developer (PD)	
NELDUZ	Powder Dusting	Item was treated using black magnetic powder using a fiberglass brush.
NJLCD7	Cyanoacrylate Fuming	Fumed in superglue chamber for approximately 30 minutes.
NKDBR4	Visual Examination	I did a visual exam of the item prior to processing using a flashlight and oblique lighting with negative results.
	Cyanoacrylate Fuming	The item was placed in the cyanoacrylate chamber. The chamber was heated to 37° C. A test print was placed on the glass, DI water and CAE were added. The item was fumed for 20 minutes. A print was observed on section D of the paper.
	Powder Dusting	The item was processed with magnetic powder using a magnetic brush. A print was observed on section D of the paper.
	Dye Stain	The item was processed with RAM solution stain (Lot #23.2), then viewed with the LASER at 532nm with negative results.
NVWPTL	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	magnetic powder-black
NW7U9V	Visual Examination	White light, Laser 532 nm, Laser 577 nm, FLS
	Cyanoacrylate Fuming	Luminescent cyanoacrylate CST (Fumigation chamber MVC 3000 FOSTER+FREEMAN - Automatic Mode)
	Alternate Light Source	White light. LABINO Superxenon 325 nm + Yellow filter
	1,2-Indanedione	1,2,Indanedione/ZnCl ₂ (Ramotowski, 2009), Heating press 165°C – 10 seconds
	Alternate Light Source	Laser 532 nm – Orange filter
	Ninhydrin	- 4 g ninhydrin. - 20 ml ethanol. - 10 ml acetic acid. - 70 ml ethyl acetate. - 900 ml petroleum ether. 30 min : Temperature = 80°C, RH = 62%
	Alternate Light Source	White light and green light
NXL3B4	Cyanoacrylate Fuming	processing time : 30 min. Dye stain : superglue and MBD solution. The reaction needs 75-80 percent humidity
NYFTGH	Cyanoacrylate Fuming	

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
P3NVFJ	Visual Examination	First visualisation with white light and then after with blue-green light (445-510 nm) + yellow filter and blue light (420-470 nm) + yellow filter
	Cyanoacrylate Fuming	Cyanoacrylate glue : 1,014 g. Fumigation cast conditions : - relative humidity : 80%. - humidify time : 15 min. - glue temperature : 120°C. - glue time : 25 min. - hold time : 5 min.
P3PGEK	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	magnetic powder
P6AH97	Cyanoacrylate Fuming	Superglue fumed in safefume chamber
	Powder Dusting	Processed with black magnetic powder.
P9AT67	Powder Dusting	(doble tone black/silver) 10 minutes
P9ZJGF	Cyanoacrylate Fuming	
PDBNDA	Visual Examination	Visualized latent in section marked "D" using oblique lighting
	Cyanoacrylate Fuming	Positive and negative controls; approximately 20 minutes of processing time. Lot# YM27419, Exp: 01/24
	Alternate Light Source	Visualized latent in section marked "D" with alternate light source (no filter); photographed with scale prior to processing with powder; uploaded photos to Digital TraQ system
	Powder Dusting	Processed with magnetic powder; lifted with tape and adhered to latent lift card; entered lift card into TraQ under Item LP-01
PH3WEV	Powder Dusting	Evidence was treated using latent print black magnetic powder.
PJ2VX4	Visual Examination	Visual exam using available light and a flashlight. Processing time: 5 minutes.
	DFO	Dipped item once in DFO. Item was air dried. I decided to choose different method for processing. Processing time: 10 minutes.
	Cyanoacrylate Fuming	Item placed inside CAE chamber and processed with CAE fuming. Processing time: 20 minutes.
	Powder Dusting	Item was processed using magnetic powder with a magnetic wand. Processing time: 5 minutes
	Dye Stain	Item was RAM solution stained and LASER was used to search for further enhancement and/or additional fingerprints. Processing time: 10 minutes.
PRBMZ7	Visual Examination	white light used for exam. no RD observed. no photos taken
	Cyanoacrylate Fuming	Temp: 120 degrees Celsius. Humidity: 70% with 10 minute saturation time. CA Processing Time: 15 minutes. photos taken of LP in Quadrant D
	Powder Dusting	used black powder. photos taken of LP in Quadrant D
PT3HPZ	Cyanoacrylate Fuming	

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
PTQLKV	Visual Examination	When observed in white light, the trace visible as a faint mark. When observed in the wavelength range 430-550 nm through orange filter, the trace was not visible at all.
	Cyanoacrylate Fuming	MVC 3000 Foster+Freeman, sets 80% RH, 120°C, 8 min. fuming time, process interrupted when the trace got visible enough.
PW6GX8	Visual Examination	11/14/23: Magnifier lamp and magnifier loop: Exhibit 1: FRD is visible in only Section D of the wrapping paper. Image capture will be performed.
	Alternate Light Source	11/15/23: CRIMESCOPE CS-16-500: 350-535 nm with clear, yellow, orange, and red goggles: Exhibit 1: FRD is visible in only Section D of the wrapping paper. No improvement to previously viewed FRD; no additional FRD. No image capture.
	Cyanoacrylate Fuming	11/16/23: Exhibit 1: Cyanoacrylate fuming performed in the CA-6000 at approximately 65% relative humidity for 12 minutes. Removed to prevent overprocessing.
	Visual Examination	11/16/23: Exhibit 1: Post CA: Magnifier lamp and magnifier loop: No improvement to previously viewed FRD. No additional FRD. No image capture.
	Powder Dusting	11/16/23: Exhibit 1: Dusted with black magnetic powder.
	Visual Examination	11/16/23: Exhibit 1: Post Powder: Magnifier lamp and magnifier loop: Slight improvement in contrast of previously viewed FRD, but not sufficient for image capture. No additional FRD.
	Ninhydrin	11/17/23: Exhibit 1: Ninhydrin Working Solution (Petroleum Ether) was applied to the wrapping paper by squeeze bottle method. Allowed to dry in the fume hood. Steam iron used briefly to accelerate the reaction.
	Visual Examination	11/17/23: Exhibit 1: Post Ninhydrin: Magnifier lamp and magnifier loop: No improvement to previously viewed FRD. No additional FRD. No image capture.
	Dye Stain	11/17/23: Exhibit 1: Ardrex is applied using a squeeze bottle. Allowed to dry several minutes in the fume hood.
	Alternate Light Source	11/17/23: Exhibit 1: Post Ardrex: CRIMESCOPE CS-16-500: 350-475 nm wavelength with clear (UV protectant) and yellow goggles: No improvement to previously viewed FRD. No additional FRD. No image capture.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
QA32PV	Visual Examination	Used oblique lighting and a bright white light. A check occurred during VIS.
	Alternate Light Source	Used 365nm (UV light) and the Dual 77 (445nm and 520nm).
	Cyanoacrylate Fuming	Item was placed in the superglue fuming chamber and then examined with oblique lighting/bright white light and FSIS (+254nm).
	Powder Dusting	A magnetic wand was used with black magnetic powder to process the item and then examined item using oblique lighting/bright white light.
	1,2-Indanedione	Item was processed with 1,2-Indanedione using a squirt bottle and then allowed to dry. Item was placed in the 100-degree Celsius oven for approximately 20 minutes. The item was then examined with bright white light and the Dual 77 (520nm).
	Ninhydrin	Item was processed with Ninhydrin using a squirt bottle and then allowed to dry. Item was placed in the 76% relative humidity chamber for 15 minutes. The item was then examined with bright white light.
	Dye Stain	Item was processed with RMO using a squirt bottle and then allowed to dry. The item was then examined using the Dual 77 (445nm and 520nm).
	Physical Developer (PD)	Item was processed with physical developer. Item was placed in a maleic acid bath for 15 minutes. The item was then removed and placed in a Redox Working solution for 15 minutes. The item was then placed in a distilled water rinse for a few minutes and moved to a second water rinse. Once the item was dry (used a drum-dryer), it was examined using bright white light.
QEHADV	Visual Examination	A visual examination was conducted on the wrapping paper and visible ridge detail was located on the exterior (gold) side in the section labeled "D". This process took approximately 5-10 minutes.
	Cyanoacrylate Fuming	Following the visual examination, the wrapping paper was placed inside of our cyanoacrylate fuming tank, along with a foil cup containing liquid cyanoacrylate ester, and chemically processed to enhance the ridge detail. This process took approximately 28 minutes.
	Dye Stain	Following the cyanoacrylate ester processing, the wrapping paper was further chemically processed using Rhodamine 6G. The chemical was pipetted on the exterior (gold) side of the wrapping paper and allowed to dry (this step was conducted twice). The wrapping paper was then examined using the Coherent Tracer laser. This process took approximately 10-15 minutes.
QTFGCW	Cyanoacrylate Fuming	Evidence was photographed, initially examined using oblique lighting and then subjected to cyanoacrylate fuming.
R76QH3	Visual Examination	
	Cyanoacrylate Fuming	
	1,2-Indanedione	
	Alternate Light Source	LASER
	Ninhydrin	
RAGN2H	Powder Dusting	I used silk black latent print powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
RK6EQV	Visual Examination	Upon visual inspection ridge detail observed in section D
	Powder Dusting	Magnetic powder applied and ridge detail developed..
RTE2KG	Visual Examination	Visual examination of the item, 5 minutes processing time
	Cyanoacrylate Fuming	Placed item in cyanoacrylate fuming chamber, estimation of 25 minutes.
	Magnetic Dusting	Dusted for prints using magnetic fingerprint powder, 7-minute processing time.
RUN7X7	Visual Examination	Visual examination completed of item 1 and observations were documented in the field notes.
	Powder Dusting	Magnetic fingerprint powder lightly swirled over item 1.
T7GPEW	Visual Examination	The item was photographed and documented as per lab procedure. The item was first analyzed with oblique lighting and a possible area of touch located in section D
	Powder Dusting	The item was processed with black powder.
TEPGGY	Visual Examination	Friction ridge detail of possible value
	Cyanoacrylate Fuming	MYSTAIRE Cyanoacrylate Fuming Chamber used. - 70% humidity. - Cycle time 10:00 minutes. - Purge time 10:00 minutes. Friction ridge detail of possible value.
	Powder Dusting	Fluorescent magnetic powder used. Friction ridge detail of possible value
TJK9PW	Cyanoacrylate Fuming	Fumed at 80% humidity for 14 minutes
	Powder Dusting	Black powder
TK26HW	Powder Dusting	The item was processed using black magnetic powder.
TNJP3Q	Visual Examination	The item was visually examined using ambient and oblique lighting. Possible ridge detail was observed in section D.
	Cyanoacrylate Fuming	The item was placed in the cyanoacrylate chamber for 11 minutes at an 80% humidity. The possible ridge detail was observed in section D when using oblique white lighting. A test print was ran at the same time and yielded a positive result.
	Powder Dusting	The item was powder processed with standard black fingerprint powder and a brush. A latent print was observed in section D. The test print was powder processed prior to the item and yielded a positive result.
TNXTWH	Visual Examination	Examined under white light and magnifier
	Cyanoacrylate Fuming	Placed in chamber with superglue on heat plate, near-boiling water in beaker, and control on plastic. Waited approximately 10-15 minutes before removing item.
	Powder Dusting	Used black powder on entire front surface of item.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
U2JNPM	Visual Examination	Examined document for presence of latent print.
	Cyanoacrylate Fuming	Fuming chamber used; 5 minute processing time. Positive control with positive results.
	Powder Dusting	Positive control with positive results. Enhanced cyanoacrylate print using Silk Black fingerprint powder to enhance detail present.
UH6F7E	Visual Examination	light white
	Cyanoacrylate Fuming	temp. 21 C, humidity 80%, time 15 min
	Powder Dusting	light 350-415 nm
UJZZTD	Powder Dusting	it was used regular black magnetic latent print powder applied with magnetic pencil
UKDDVN	Visual Examination	
	Cyanoacrylate Fuming	10 MIN
	Powder Dusting	BP/MP
UKTK6D	Alternate Light Source	Polilight PL500, white light
	Cyanoacrylate Fuming	MVC-1000, 80% RH, 120°C, Cyanobloom
UMHYMV	Powder Dusting	I applied the magnetic powder to the piece of golden paper. Then I proceed to use a brush to clean the area.
UMWKWW	Visual Examination	1) Observation with the naked eye of the surface of the wrapping paper, under different inclinations. We observe a papillary trace in the "D" box. We can't determinate the pattern group. We don't see any other traces elsewhere.
	Alternate Light Source	2) We illuminate the support with the Crimescope MCS-400 at different frequencies with the appropriate colored glasses and at different inclinations. The same papillary trace is observed in box "D" with white light, not with the others frequencies. We do not see other traces elsewhere.
	Cyanoacrylate Fuming	3) In view of semi-porous support, we place the wrapping paper in the fumigation tank. Autocycle for 2g of solution of Lumicyano 8% during 1 hour. A contrôle trace is placed in the tank.
	Visual Examination	4) We observe with naked eye a white deposit of Lumicyano on the wrapping paper in case "D". We don't observe other traces elsewhere on the object.
	Alternate Light Source	5) We illuminate the object using the Crimescope MCS-400 at different wavelengths and wearing glasses of appropriate colors. The fingerprint in the "D" box is even more visibly illuminated in white light or in CSS luminescent manner. We do not observe other papillary traces elsewhere on the object.
UNQB3C	Cyanoacrylate Fuming	The cyanoacrlate fuming was followed by white powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
UP6HNT	Visual Examination	Visually examined for ridge detail.
	Alternate Light Source	Examined item with 365nm, 445nm and 520nm wavelengths.
	Cyanoacrylate Fuming	CA fumed item in CA chamber then examined visually and with 254nm wavelength.
	Powder Dusting	Dusted item with black magnetic powder and visually examined.
	1,2-Indanedione	Applied Indanedione, allowed to dry, placed in oven for 20min, then examined item visually and with 520nm wavelength.
	Ninhydrin	Applied Ninhydrin, allowed to dry, placed in humidity chamber for 15min, then examined item visually.
	Dye Stain	Applied RMO dye stain, allowed to dry, then examined item under 445nm and 520nm wavelengths.
	Physical Developer (PD)	Submerged item in Maleic Acid wash, transferred to Physical Developer working solution, rinsed item with water then allowed to dry before visually examining the item.
URDTKW	Visual Examination	White light examination
	Alternate Light Source	Blue (420-470nm), Green (480-560nm), UV(350-380nm)
	Cyanoacrylate Fuming	120 C , Relative humidity 80%, glue time 15 mins
UZ9L24	Visual Examination	White light/flashlight
	Cyanoacrylate Fuming	Approximately ~75% humidity for approximately ~8 minutes. Visual exam utilized white light/flashlight
	Powder Dusting	Black magnetic powder
VELE6Z	Visual Examination	Visual Examination of Item 1 was conducted through ambient room light.
	Cyanoacrylate Fuming	Item 1 was placed in an automated Air Science Cyanoacrylate Chamber for 10 minutes and vented for an additional 7 minutes upon completion of the process. A test print deposited on clear acetate was placed inside the Cyanoacrylate Chamber to ensure that the process achieved positive results.
	Powder Dusting	Black Magnetic Powder was applied to Item 1 using a magnetic wand. This process was performed under an Air Science Downdraft Workstation.
VKB3EC	Visual Examination	
	Alternate Light Source	Oblique Lighting
	Powder Dusting	Magnetic Fingerprint Powder
VKNRHN	Powder Dusting	Item was processed using black magnetic fingerprint powder.
VV79BV	Visual Examination	White light
	Alternate Light Source	Polilight - all available wavelengths
	Cyanoacrylate Fuming	Processing time 15 min
	Powder Dusting	Magnetic Jet Black, Swedish Black

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
VY9ADD	Visual Examination	Processing time: 2 minutes. No friction ridge detail was observed
	Cyanoacrylate Fuming	Processing time: approximately 30 minutes. Friction ridge detail was visible, but the item needed to be further processed
	Vacuum Metal Deposition	Processing time: approximately 45 minutes - 1 hour
WG7K33	Visual Examination	Ambient lighting and ring lamp with magnification was used. FRD is present in square D.
	Alternate Light Source	Crime Lite ML2 used with orange filter green & blue light; slight improvement;no fluorescent FRD; FRD is present in square D.
	Cyanoacrylate Fuming	Wrapping paper processed with cyanoacrylate ester in the Misonix CA-6000 chamber; 65% RH;80C;30 min. exposure; FRD is present in square D
	Visual Examination	Ambient lighting and ring lamp with magnification was used; FRD is present in square D;Crime Lite ML2 used with orange filter - white light- some improvement; orange filter with blue light- (420nm-470nm GG495) no improvement; orange filter with green light -(480 nm-560 nm OG590)-some improvement; FRD to be captured
WJBMFK	Visual Examination	white light
	Cyanoacrylate Fuming	10 minute intervals, processing time 20 minutes
	Visual Examination	white light
	Dye Stain	Rhodamine 6G, 20 minute processing time
	Alternate Light Source	Blue-Green (445-510 wavelength)
	Powder Dusting	Black powder
	Visual Examination	white light
WUB4D2	Visual Examination	Friction ridge detail observed in quadrant "D".
	Cyanoacrylate Fuming	Fumed for 8 minutes.
	Powder Dusting	Magnetic powder applied. Friction ridge detail was developed in quadrant "D".
	Dye Stain	Rhodamine 6G was applied after the print was lifted.
	Alternate Light Source	ALS used at 495nm - Friction ridge detail was developed in quadrant "D".
X3NE7T	Visual Examination	Visible ridge detail with oblique lighting.
	Alternate Light Source	No fluorescing latent prints visible.
	Cyanoacrylate Fuming	White residue was observed on a latent print.
	Powder Dusting	The latent print was dusted and lifted, LP1.
	Ninhydrin	No purple/color change observed on the Item 1.
X4FBVM	Superglue fuming (SGF)	Bright beam laser 532 nm (green)/orange curved filter.
	Rhodamine-6-G (R6G) (w/Di water rinse)	FF. 1.0 Narrow band pass filter used for R6G dye stain.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
XBCEEQ	Visual Examination	Visual Examination with White Alternate Light .
	Powder Dusting	Development with Black Graphite Powder.
XC76J6	Cyanoacrylate Fuming	Put item 1 into the fuming chamber, and heat cyanoacrylate at 120°C with 80% Rh, which make the chamber filled the cyanoacrylate fuming. The fingerprint pattern would be covered by the cyanoacrylate polymer and turn white.
	Powder Dusting	Furthermore, use a magnetic brush to apply a small amount of magnetic black powder, gently brush it over Item 1, and remove excess powder. A latent fingerprint in D section can be found.
XCNWTP	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	Magnetic Powder
	1,2-Indanedione	
	Ninhydrin	
	Dye Stain	RMO
Physical Developer (PD)		
XFRM3P	Cyanoacrylate Fuming	Visual first and in between each process.
	Powder Dusting	
XLDKQD	Powder Dusting	The processing time was immediate, because it was used magnetic powder, applied with the magnetic pencil. The type of powder used was Sirchie regular black.
XLY4JQ	Cyanoacrylate Fuming	1. Development using a cyanoacrylate vacuum chamber (processing time is 25 minutes). 2. After 24 hours, dye using Basic Yellow 40
XR2DQJ	Visual Examination	white light
XULEK6	Cyanoacrylate Fuming	
	Iodine crystals	
	Alternate Light Source	RUvis
	Powder Dusting	Black powder
	Dye Stain	ARDROX
Alternate Light Source	White and yellow filters at 415	

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
XWVEPC	Visual Examination	The item was viewed and rotated under white light.
	Cyanoacrylate Fuming	Item was placed in the fuming chamber with a beaker of hot water and cyanoacrylate was placed on the hot plate. A control was placed on the glass. It was fumed for approximately 15 minutes. The control resulted in white ridges that were visible on the glass.
	Powder Dusting	Black magnetic powder was used.
XX8W3Q	Visual Examination	flashlight used at oblique angles
	Cyanoacrylate Fuming	MVC5000 chamber used
	Powder Dusting	black powder processing
XXLMFP	Visual Examination	Visible white light, RUVIS, LASER
	Lumicyano	Temperature 250F, Time 30:00, Humidity 75%. White light, RUVIS, LASER
	1,2-Indanedione	Dry heat press, 2 minutes, LASER
	Ninhydrin	Steam heat, white light
Y24VY2	Cyanoacrylate Fuming	
	Powder Dusting	Black Magnetic Fluorescent Powder
Y8PXV6	Powder Dusting	The packaging is carefully opened, item number one is placed on the work table, a "reagent verification" test is carried out before applying it to the item, upon obtaining expected results (positive) with the black silk reagent, it is applied to the item. in sections A - D, obtaining friction crests in quadrant D
YFKZXG	Powder Dusting	Black Powder
YHCVMB	Visual Examination	Visual examination with a flashlight.
	Cyanoacrylate Fuming	Automated program: 1. RH: 80% . 2. Humidify time: 15'. 3. Glue temperature: 120 °C. 4. Glue time: 25'. 5. Hold time: 5'
	Powder Dusting	Fingerprint powder: Instant White (brand: BVDA)
YKLU7J	Visual Examination	
	Powder Dusting	Black powder
YM6V3R	Visual Examination	white light
	Cyanoacrylate Fuming	white light
	Dye Stain	Rhodamine, laser, and laser filter
	Powder Dusting	Black magnetic powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
YQMFML	Visual Examination	Piece or item #1 was removed from its packaging, photographed, visually inspected,
	Alternate Light Source	Then observed using alternating light,
	Magnetic Black Powder	and worked on with Magnetic Black Powder; the latent print is identified in section D at 10:00AM
YTAYNJ	Visual Examination	Print was visible enough to see it exists, but it needed more contrast for photography.
	Powder Dusting	Scenesafe SupraNano red fluorescent powder. Print turned out to be so greasy that some small gaps between lines became obstructed, and fluorescent were so strong that those parts became blurry, and there was a need to reduce fluorescent.
	Powder Dusting	Magnetic powder black.
YUH8VH	Visual Examination	I first took photographs of item and then I did a visual examination.
	Polycyano	Evidence item was placed in a super glue chamber and polycyano was used to enhance the latent print.
	DCS5	DCS5 was used as a way to look for ridge detail and a photograph was taken with the DCS5 filter.
YWQCGJ	Visual Examination	Lightsearch of item using white light.
	Alternate Light Source	Lightsearch of item at various wavelengths.
	Cyanoacrylate Fuming	Foster and Freeman 1000 cabinet used for atmospheric superglue fuming. Lightsearch of item carried out using white light.
	1,2-Indanedione	Heat press used as heat source, viewed using 532nm laser.
	Ninhydrin	Nincha cabinet used, viewed using white light.
	VMD	VMD used to improve contrast, viewed using white light.
	Physical Developer (PD)	Shaker used to apply reagent, viewed using white light.
Z4MEBH	Visual Examination	First, I began to examine the piece of evidence, wrapping paper, divided into sections A-D in all its parts..
	Alternate Light Source	Use an oblique alternate white light and blue light source to examine..
	Powder Dusting	Use black powder to enhance the contrast of finger print.
Z7AXCF	Visual Examination	Visual examination using oblique lighting with positive results in section D.
	Cyanoacrylate Fuming	Cyanoacrylate fuming in vacuum chamber for 40 minutes, 30 minutes to cure prior to processing with additional methods. Visible latent print observed in section D.
	Powder Dusting	Magnetic powder used to enhance print in section D, no other ridge detail noted.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
ZB6RAG	Visual Examination	The item was examined under white light.
	Cyanoacrylate Fuming	The item was placed in fish tank for application of superglue fuming for 2.5 hours for development of latent prints. The evidence item was observed time to time to avoid over development.
	Visual Examination	The item was examined under white light.
	Rhodamine 6-G	Rhodamine 6-G was sprayed on super glued evidence item and rinsed with deionized water.
	Visual Examination	The item was examined under Forray Adma's imaging system at 505 nm to 515 nm with orange filter 21.
ZQ3Y8J	Visual Examination	~1 minute viewing item
	Cyanoacrylate Fuming	15 minutes fuming at 70% humidity. 5 minutes purge cycle
	Powder Dusting	Magnetic powder applied / ~3 minutes applying MP with wand, collecting excess powder, viewing under magnification
ZQXJVH	Visual Examination	The lights that were used in visual examination for locating the possible fingerprint are bright light, green light and UV-light. The last two clearly showed the correct location.
ZUYMNQ	Visual Examination	in natural light - no prints, in light from forensic illuminator a latent prints was observed in section D (450 nm - 490 nm)
	Cyanoacrylate Fuming	time 15 min., RH - 80% - discovered fingerprint mark was improved
	Powder Dusting	Red Charge applied with brush - the observed fingerprint mark did not improve (viewed in 350 nm UV light)
ZWPL3N	Powder Dusting	Item was treated using black magnetic powder.

Item 1 - Development Response Summary				Participants: 247
Methods Utilized				
Alternate Light Source	85	Physical Developer	14	Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.
Cyanoacrylate Fuming	160	Powder Dusting	165	
DFO	9	Visual Examination	184	
Dye Stain	57	Wet Powder Suspension	0	
Ninhydrin	40	1,2-Indanedione	31	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
23UZ76	Visual Examination	Item was examined using a strong white light source.
	Alternate Light Source	Item was examined using a Crime Scope CS-16-500
	Cyanoacrylate Fuming	Item was fumed in a CA chamber
	Dye Stain	MRM-10 dye stain was applied after CA fuming
24JDNM	Powder Dusting	Item was treated using silk gray fingerprint powder with a fiberglass filament brush.
26J63H	Visual Examination	10/26/2023: Ambient and oblique lighting
	Lumicyano Fuming	11/30/2023: Fluorescent CA fuming in a Foster + Freeman MVC1000/D2. Humidity cycle - 10 minutes. Glue cycle - 15 minutes.
	Alternate Light Source	11/30/2023: Insufficient contrast with 532 nm laser
2AAEDG	Visual Examination	
	Powder Dusting	White magnetic
2MWXH7	Alternate Light Source	I visualized an impression in quadrant B on the sunglasses (item 2) using an ALS. I then enhanced the impression with white magnetic powder.
2NAK37	Visual Examination	Initial visual examination was conducted to determine if there were any visible prints prior to processing. An impression was visible in Quadrant B (left lens of the sunglasses, interior side). A visual exam was also conducted after cyanoacrylate ester fuming and the results showed additional detail on this same impression. Photography was used to capture images each time (Images 3 and 4)
	Cyanoacrylate Fuming	Cyanoacrylate fuming chamber (Mystaire CA-300) was used (cycle was approximately 30-40 minutes). A control was placed in the chamber along with this item. Glue was placed in the chamber, the remaining steps in the process were automatically conducted by the fuming chamber.
	Powder Dusting	After taking a digital image of the impression in Quadrant B (after the item was processed with cyanoacrylate ester fuming), the entire item was dusted with black powder. The image in Quadrant B showed additional detail. No other impressions were visible.
2TPNDH	Visual Examination	
2VMHLJ	Visual Examination	Examined with white light
336737	Powder Dusting	Black powder

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
338RXL	Visual Examination	The item was first visually examined, both with and without an alternate light source (white light). During the visual examination, a patent print was noted in section B of the sunglasses.
	Cyanoacrylate Fuming	Once initially photographed, the sunglasses were processed using cyanoacrylate (super glue) fuming. Our chamber is set with targets of 26 minutes and 55% humidity and the item was allowed to fume until the purge cycle completed (~30 min total). A test print was also processed to ensure accuracy with the fuming, which had a positive result. A print was developed in section B.
	Powder Dusting	After fuming and digital photography documentation, the latent print in section B was processed using dual use magnetic powder as well, in order to attempt to lift the print for submission.
38H3NV	Powder Dusting	Magnetic Powder
3AMGAF	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	humidity 80%, temperature of the heating plate 100 degrees Celsius, time - 35 minutes
	Dye Stain	Basic Yellow 40
3CXACU	Visual Examination	
	Full Spectrum Image System	Ultraviolet imaging
	Cyanoacrylate Fuming	CApture BT Fuming Chamber
	Full Spectrum Image System	Ultraviolet imaging
	Powder Dusting	
	Dye Stain	Rhodamine6G
	Alternate Light Source	
3TFH6H	Visual Examination	I began working with the piece of evidence at 4:40pm, and through visual inspection, I was able to see papillary ridges in section B.
	Powder Dusting	After the visual inspection, I used orange neon graphite powder to preserve and highlight the fingerprint, since the surface was black.
3VMU7T	Visual Examination	Visually examined item for prints under fluorescent and LED lighting.
	Cyanoacrylate Fuming	CSU CA tank for a 12 minute cycle. Left to sit for 1 hour and observed under direct fluorescent and LED lighting.
	Dye Stain	RAY Batch #816. Stained for 30 seconds, rinsed with water. Let air dry. Observed with 460-510nm orange filter.
	Powder Dusting	Bi-chrome powder.
3Y6V77	Visual Examination	Natural light, white light/angle light, optical instruments.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
42RREW	Visual Examination UV Light/FSIS Cyanoacrylate Fuming UV Light/FSIS Powder Dusting	Used the Tin Drop method with the CAPture BT Chamber
43HZEZ	Cyanoacrylate Fuming Powder Dusting Dye Stain	Black powder ARDROX
44T33K	Powder Dusting	the sample were dusted using black powder and the fingerprint developed on section B of the evidence.
46AAAM	Alternate Light Source Cyanoacrylate Fuming Powder Dusting	Viewed at 455nm, 475nm, CSS, 495nm, and 515nm. No fluorescing prints. Fumed in CyanoSafe for 20 minutes. Dusted with black powder.
48TB69	Visual Examination Cyanoacrylate Fuming Dye Stain	VIS with white light. Photographed latent 2L1. VIS with white light. Rhodamine 6G. VIS with LASER and orange filter.
4CPQ3W	Powder Dusting	
4F9WDD	Visual Examination Cyanoacrylate Fuming Dye Stain	Visual Exam with white light. Placed in fuming chamber at 80% humidity, temperature of 248 degrees and 0.30 grams of Cyanoacrylate (CAE). Rinsed with fluorescent dye (R.A.M.)
4FKTHH	Cyanoacrylate Fuming	POR TIPO DE SUPERFICIE SE INGRESO EL ITEM A LA CAMARA DE CYANOCRILATO REVELANDO FRAGMENTO DACTILAR
4FN9VH	Powder Dusting	A visual inspection was made with alternative light for the piece of evidence. The piece of evidence was worked with black magnetic powder.
4FRQ3U	Powder Dusting	I made my initial observations of the item and then used black powder and a brush for latent print processing.
4GZT38	Powder Dusting	it was used gold metallic latent print powder
4KEMFJ	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
4PVV4H	Cyanoacrylate Fuming	por el tipo de superficie e indicio, se coloco en la camara de cyanocrilato, la cual revelo de manera uniforme y clara el fragmento
4PYBGJ	Visual Examination	First, I began to examine the piece of evidence, sunglasses, divided into sections A-D in all its parts.
	Alternate Light Source	Use an oblique alternate white light and blue light source to examine.
	Powder Dusting	Use black powder to enhance the contrast of finger print.
4WTMCC	Alternate Light Source	white light, 340nm-587nm, UV, coaxially reflected
	Cyanoacrylate Fuming	Humidity 80%: Humidity Cycle 15 min, Glue Cycle 15 min, purge cycle 40 min
	Alternate Light Source	white light source
	Dye Stain	Staining with Rhodamine 6G
	Alternate Light Source	Fluorescence examination with polylight (491nm-548nm)
4YKJ27	Alternate Light Source	Trasoscan (lumière blanche)
	Cyanoacrylate Fuming	120 °C, 25 min glue time, 80 % RH
	Powder Dusting	White powder
4ZEFCL	Cyanoacrylate Fuming	
	Fluorescent Dye Stain	Fluorescent Dye Stain- Rhodamine 6G
6262HH	Visual Examination	10/31/2023-Ambient lighting. Observed ridge detail in section B
	Lumicyano fuming	10/31/2023-Fluorescent CA fuming using Foster and Freeman 1000 fuming chamber auto cycle settings
	Alternate Light Source	10/31/2023-Laser green wavelength
69LJRJ	Visual Examination	It begins with a visual inspection of the piece of evidence to locate a fingerprint, which was visible in section B.
	Powder Dusting	Orange graphite powder is used to develop the fingerprint, since the surface is black and thus the fingerprint can be highlighted.
69MA7E	Visual Examination	Prints Found
	Alternate Light Source	DCS-5 General Screen
	Cyanoacrylate Fuming	
	Alternate Light Source	DCS-5 Reflective UV
	Dye Stain	Rhodamine RG6
	Alternate Light Source	Polilight and DCS-5

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
6B7B2Z	Visual Examination	White light, blue light with yellow filter and green light with red filter.
	Cyanoacrylate Fuming	80% humidity, 120 degrees C, 10 minutes.
	Dye Stain	Basic Yellow 40 in ethanol. Stain was applied to the item and processed for 20 seconds. Excess stain was rinsed with cold tap water.
6G4PW3	Visual Examination	Ridge detail was visible on the sunglasses in section B before any chemical processing was performed. This was seen using ambient room light and a flashlight.
	Alternate Light Source	An alternate light source (ALS) was used before chemical processing, but no fluorescence or better contrasting ridge detail was observed after using several wavelengths and the corresponding barrier filters. Fluorescent red powder (FLP) was applied and photographed after Cyanoacrylate (CA) didn't appear to develop the ridge detail further. MRM-10 was applied to the item after FLP and photographed. ALS was used at 450 nm to make both the FLP and the MRM-10 fluoresce. This was used in conjunction with orange goggles and an orange lens filter. The ALS was tested, for each day it was used, against a standard before using it on case evidence and each time it performed as expected.
	Cyanoacrylate Fuming	Cyanoacrylate fuming (CA) was used after the visual exam and photography of the visible ridge detail. Ridge detail further developed with the CA process and lift #1 was photographed again. A standard was run in parallel with the CA fuming process and performed as expected.
	Powder Dusting	CA fuming didn't appear to develop the ridge detail further than what was seen with the visual exam. Since the item was dark, fluorescent red powder (FLP) was applied to the side of the lens of the sunglasses where the ridge detail was seen. The results were photographed. A standard was tested before applying the FLP to the case evidence and performed as expected.
	Dye Stain	MRM-10 was applied after the photography was completed for the CA process and the application of FLP. MRM-10 was applied to a standard before applying to case evidence and performed as expected.
6JKAJH	Visual Examination	
	Alternate Light Source	UV/475nm
	Cyanoacrylate Fuming	Viewed under UV
	Ardox	Viewed under UV
6MM9UB	Visual Examination	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
6RFAVP	Visual Examination	Used oblique lighting from a Crimelite flashlight (white light), then used a Coherent TracER LASER with a curved orange KV550 lens filter to image any potential latent print. Also, incandescent lighting was used to avoid any hotspots when imaging.
	Lumicyano Acrylate Fumming	The item was placed inside a Foster & Freeman MVC-5000 superglue chamber along with a control. Dissolved 5 level spoons of Lumicyano powder into 4 grams of CST Cyanoacrylate glue in a tin disk. After the powder was dissolved, the tin dish was placed on the heating element of the superglue chamber and set on an autocycle program for 70 minutes. Using a Crimelite flashlight (white light), oblique lighting was applied to the wrapping paper.
	Dye Stain	Rhodamine 6G was applied on the pair of sunglasses and on a nonporous control. 30 minutes was allowed for the stain to air-dry. A Coherent TracER LASER and a curved orange KV550 lens filter was used to image any potential latent prints.
	Powder Dusting	Using an arrowhead forensics powder brush, white powder was applied on the pair of sunglasses. Oblique lighting from a Crimelite flashlight and incandescent lighting was used to image any potential latent prints.
7HTEUN	Powder Dusting	item 2 was dusted with black powder and a fiber fingerprint brush
7M2U4D	Visual Examination	Visible untreated print observed
	Powder Dusting	Black standard powder. Lot# 201804187. Tested and working
7VWW7N	Visual Examination	white light and LASER
	Cyanoacrylate Fuming	With fluorescent CA, 70 minute run time, observed with white light
	Dye Stain	Rhodamine 6G dye stain, observed with LASER
	Powder Dusting	Black powder
7W7VEC	Visual Examination	
	Cyanoacrylate Fuming	5 minutes, 80 %Rh, cyanoacrylate glue heated to 120 degrees celsius
	Dye Stain	BY40
7YD6UN	Visual Examination	Visually inspected the surface of the sunglasses and did not visualize any possible friction ridge detail.
	Cyanoacrylate Fuming	Placed sunglasses in the superglue fuming chamber with superglue on an aluminum tin, distilled water, and a control print. Chamber ran for ~40 minutes. Friction ridge detail was not observed at this step.
	Dye Stain	Sprayed the sunglasses with Rhodamine 6G to cover the entire surface area and let it dry.
	Alternate Light Source	Viewed the sunglasses under the laser (550nm with orange filter goggles). Friction ridge detail was observed at this step.
84HHQD	Visual Examination	white light
	Cyanoacrylate Fuming	11 minutes, 80% humidity (x2)

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
88MVNE	Powder Dusting	Item was treated using silk gray latent print powder and a fiberglass brush
8A8XEJ	Visual Examination	Oblique lighting.
	Alternate Light Source	455-515nm
	Cyanoacrylate Fuming	20 minutes
	Powder Dusting	Black powder and brush
8ABEPC	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Alternate Light Source	
	Dye Stain	RMO
8BM7KD	Visual Examination	A fingerprint is located in section B by visual inspection.
	Powder Dusting	Black graphite powder is used for the development of the fingerprint.
8E6J62	Visual Examination	
	Powder Dusting	fluorescent magnetic powder
8E77X9	Visual Examination	The item 2 was visually inspected and examined following our LPPM.
	Cyanoacrylate Fuming	A control test of reagent and solution were performed at the same time with item 2. Positive result of cyanoacrylate. Item was processing twenty minutes in cyanoacrylate atmospheric fuming with cyanoacrylate compound.
8JEL8W	Cyanoacrylate Fuming	40 min, white stain
	Powder Dusting	White Magnetic powder.
8R8WJD	Cyanoacrylate Fuming	Item was processed for approximately a half hour and then used grey latent print powder for developing and lifting.
8XEEZE	Cyanoacrylate Fuming	processed by cyanoacrylate ester (superglue) under a vacuum for over 1 hour, allowed to cure for 2 hours.
	Dye Stain	Dye stained with Rhodamine 6G (R6G) and viewed using a 530nm/green forensic laser
973JJJ	Visual Examination	Rofin Polylight white, photo without filters. Further examination was not necessary.
	Powder Dusting	Magnetic powder, lifting with a silicone casting.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
978XWE	Visual Examination	When working on the piece, I began using all the necessary equipment, documenting the piece of evidence with a general photograph, to capture how it was received and each of its packaging, then I performed a visual inspection.
	Alternate Light Source	using white alternating light, to verify the identification of the fingerprint, fragments of the fingerprint could be seen with the naked eye in section B,
	Powder Dusting	I began to work each of the sections with neon orange graphite powder to create contrast and highlight the impression, managing to develop a fingerprint
9APBG2	Visual Examination	I performed a visual examination by looking at the item using natural Lighting and oblique lighting at different angles to see if any ridge detail is present.
	Cyanoacrylate Fuming	I placed the item into the superglue chamber. I added superglue into an aluminum dish and placed that onto a hot plate inside the chamber. I also added a glass beaker with hot water into the chamber to provide humidity. I placed a control print onto the interior of the glass of the chamber to ensure the superglue was fuming properly. I turned the chamber on and let the hot water rehydrate any ridge detail that is present, and the superglue fumes adhered to any ridge detail. I left the item inside the chamber for approximately 15 minutes. Once I observed the control turn white from the superglue fumes, I turned the chamber off and vented the chamber.
	Powder Dusting	Using magnetic powder and a magnetic wand I powdered the item and ridge detail developed.
9GB4UM	Visual Examination	white light & LASER & Polilight
	Cyanoacrylate Fuming	CST Lumicyano solution
	Dye Stain	Rhodamine 6G
	Powder Dusting	black powder
9KN4QE	Visual Examination	White light
	Lumicyano Fuming	1.5 scoops of Lumicyano Powder. 26 drops of Lumicyano solution. MVC 1000, Humidity Cycle< /=10 mins RH~80%, Glue 15 mins 120 degrees F RH=80%, Purge <80% Humidity
	Alternate Light Source	Brightbeam laser. Green 525nm
9MAQJ2	Visual Examination	On 11/09/23 and 11/22/23
	Cyanoacrylate Fuming	On 11/22/23, 8 minutes
	Powder Dusting	On 11/22/23, dusted with black powder, lifted with latent tape
9NRPVD	Magnetic black powder	Se procedió a sacar el ítem 2 de su embalaje, se realizó una inspección visual, se fotografió, se utilizó luz alterna y se logró observar una impresión en la sección B. Item 2 was removed from its packaging, a visual inspection was carried out, it was photographed, alternating light was used and an impression was observed in section B.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
9PZRRB	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source Powder Dusting	Rhodamine Aqueous Laser-green Black
9UY7CE	Visual Examination Lumicyano fuming Visual Examination	Utilized a combination of bounced, direct and diffused lighting with white light. Ridge detail was observed in section B Deionized water lot 43031177 exp 3/14/28. Lumicyano powder lot U090422 exp 3/2024 1.5 scoops. Lumicyano solution lot 21066D exp 4/2024 26 drops. F&F MVC 1000-D2 fuming chamber serial number 1083-53977. fuming time = 15 minutes Brightbeam Laser serial number SN1127 wavelength 532nm (green). Fluorescence not observed; lenses fluoresced under laser suspected UV coating present.
9YMYE	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain	520nm, 445nm, 365nm RMO
A96WJC	Visual Examination Alternate Light Source Powder Dusting	First I made a visual examination to locate the latent print and it was visible in the letter B. Then I used an alternate white light source obliquely to highlight the latent print. To develop the latent print, I used orange powder dusting and two brushes. (Marabou brush and squirrel brush)
A9MZZP	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source	flashlight 10 minutes R6G Coherent TracER laser
AA7MY8	Visual Examination	White Light - strong finger print
ACPNTT	Visual Examination Cyanoacrylate Fuming Dye Stain	White light aprox. 5 min Basic Yellow 40
AHW6DF	Visual Examination Powder Dusting	Friction ridge impression visible in section "B" upon visual examination with and without oblique lighting. Black magnetic powder applied further enhancing the friction ridge impression in section "B".

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
AJP8T4	Visual Examination	Vis exam with white light and FSIS/UV. Latent 2L1 detected in Box B. Photographed FSIS/UV
	Cyanoacrylate Fuming	Vis with FSIS/UV. Did not improve 2L1. No additional lats detected.
	Dye Stain	R6G dye stain. Vis with LASER. Did not improve 2L1. No additional lats
B3ZBFF	Cyanoacrylate Fuming	VISUAL EXAM W/WHITE LIGHT, SUPERGLUE FUMED APROX. 30MIN. CURED FOR APPROXIMATELY 30 MINUTES. ADDITIONAL VISUAL EXAM WITH WHITE LIGHT.
	RHODAMINE	Sprayed and let dry. Visual exam with orange filter and green laser.
BDZZWG	Visual Examination	Tungsten/Incandescent, fluorescent, and TracER laser used to view item
	Cyanoacrylate Fuming	F&F MVC 5000 chamber for 70 min
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black Powder
BGYEK7	Visual Examination	
BJJFET	Alternate Light Source	RUVis
	Cyanoacrylate Fuming	78% humidity at 15 minutes
	Alternate Light Source	RUVis re-exam
	Powder Dusting	black powder
	Dye Stain	ARDROX
	Alternate Light Source	yellow and orange filters at various wavelengths
BKZMLV	Visual Examination	Item was visually inspected for visible prints under a magnifier with light source.
	Cyanoacrylate Fuming	Item was placed into a CA chamber for fuming. A container with steaming water was placed into the chamber for several minutes prior to placing the CA into the chamber. Several drops of Cyanoacrylate were placed into a small tin and placed onto a warmer inside the chamber. After approximately eight minutes the warmer was unplugged and the chamber vent was opened. Once the chamber was properly vented the item was removed and then inspected using a magnifier with a light source.
	Dye Stain	I applied MRM-10 dye stain to the item, then viewed it under a magnifier with a FLS with an orange filter.
	Dye Stain	I applied Basic Yellow dye stain to the item, then viewed it under a magnifier with a FLS with and orange filter.
BLRJBP	Visual Examination	White Light & ALS
	Cyanoacrylate Fuming	15 min @ 80% RH
	Dye Stain	Rhodamine 6G

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
BPBK7B	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	VIS and 254 FSIS
	Dye Stain	RhoMeOH
C7VTL7	Cyanoacrylate Fuming	Item was processed for about half an hour and then used silk grey latent print powder for lifting.
C9KR9G	Visual Examination	
	Alternate Light Source	Item was examined using oblique light from a flashlight.
	Cyanoacrylate Fuming	Item was processed using the Mistaire CA Fuming chamber set with a processing time of 10 minutes fume time with 70% humidity and a purge time of 10 minutes.
	Dye Stain	Item was sprayed with Rhodamine 6G methanol solution and rinsed with methanol.
	Alternate Light Source	Item was examined using a Coherent Laser light source and orange filter.
CBMZ6E	Alternate Light Source	Mark search was done by following ways: 1. Blue Light (445 nm) using Goggle (495 nm). 2. Green Light (532 nm) using Goggle (550 nm). 3. White light source. Marks was found on section B.
	Cyanoacrylate Fuming	Processing Time: 45 mins, which includes Humidifying, Fuming and Purging. After 45 mins, Mark search was done using White Light. No additional mark found. Mark on Section B, enhanced
	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 Additional marks found. But the mark on Section B, enhanced
CCMQJA	Cyanoacrylate Fuming	
	Dye Stain	Ardox under UV (365nm)
CL3RQ3	Cyanoacrylate Fuming	Fumed non-porous item in cyvac with cyanoacrylate ester for 40 min
	Dye Stain	Basic yellow was applied to surface quadrants and viewed with forensic laser
CNDKUH	[No Methods Reported.]	black magnetic powder

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
CNEEDN	Visual Examination	*Please note that gloves were worn at all times throughout this processing. Item 2 was first removed from its packaging and visually examined. Possible ridge detail was observed in quadrant "B" on the interior of the left eye piece at this time.
	Cyanoacrylate Fuming	*Please note that gloves were worn at all times throughout this processing. Because Item 2 was observed to be plastic during visual examination, cyanoacrylate fuming was selected to use. A Cyanoacrylate fuming chamber was cleaned prior to use with isopropyl alcohol. A clean sheet of butcher paper was placed at the bottom of the chamber. A positive control was created utilizing black, non-porous cardstock and was hung from a clip inside the chamber. Several drops of liquid superglue (Lot#YM27419, Exp: 01/2024) were placed into a small metallic container, which was placed on top of a small heating plate inside the chamber. Sufficient water levels were observed in the machine. Item 2 was placed into the fuming chamber. The chamber was then closed and a fuming cycle was started. The control and item 2 were fumed for ten minutes at a 70% humidity level. Once complete, the chamber then purged the fumes for an additional ten minutes. Positive results were observed on the control. Item 2 was visually examined and ridge detail was clearly observed in the "B" quadrant.
	Powder Dusting	*Please note that gloves were worn at all times throughout this processing. In order to attempt lifting the observed ridge detail, bichromatic powder was selected to apply to item 2. The item was placed on a clean sheet of butcher paper and bichromatic powder was applied to the surface using a fingerprint brush. Ridge detail became clearly visible in the "B" quadrant.
CQXLN6	Visual Examination	Visual examination with natural light.
	Cyanoacrylate Fuming	Hot plate temp. Approx. 400 degrees fahrenheit. Approx. 70% humidity. 5 drops of cyanoacrylate. Three minute fuming time. Fan used for circulation during fuming.
	Dye Stain	R.A.M. with squirt bottle
CX2K2F	Visual Examination	The item was first examined utilizing Ambient / Oblique lighting, and ridge detail was observed in section B.
	Full Spectrum Imaging System	The item was then examined utilizing the Full Spectrum Imaging System (FSIS) at 254NM, and ridge detail was observed in section B.
	Cyanoacrylate Fuming	The item was then placed into a fuming chamber, and fumed with heated cyanoacrylate (Superglue). The item was then re-examined utilizing Ambient / Oblique lighting, and ridge detail was observed in section B.
	Full Spectrum Imaging System	The item was then re-examined utilizing the Full Spectrum Imaging System (FSIS) at 254NM, and ridge detail was observed in section B.
	Powder Dusting	The item was then processed utilizing black powder, and ridge detail was observed in section B.
D2G6UM	Visual Examination	Item viewed under white light and with flashlight.
	Cyanoacrylate Fuming	Item fumed in a Mystaire chamber for approximately 11 minutes at 80% humidity and viewed with white light and a flashlight.
	Dye Stain	Methanol based Rhodamine 6G was applied to the item and viewed with the TracER laser.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
DFCW6P	Powder Dusting	It was used a conventional powder, grey powder in item 2
DGQ4Q7	Visual Examination	I used natural light to perform a visual examination of the item.
	Cyanoacrylate Fuming	Cyanoacrylate fuming process performed over a 40 minute period with the chamber set to 80% humidity and 248 degrees for glue heating. One latent print developed in section B.
	Dye Stain	I used a dye stain to further process the super glue developed latent print.
DL8GJ8	Visual Examination	White oblique light - A patent print was observed.
	Cyanoacrylate Fuming	SGF chamber for 15 minutes- The existing print was further enhanced.
	Powder Dusting	Gray powder - The existing print was further enhanced.
DMGDZ6	Visual Examination	White light
	Alternate Light Source	Blue and green light
	Cyanoacrylate Fuming	Approx 8 min at 80% RH
	Dye Stain	Basic Yellow 40
DNT4CU	Visual Examination	A visual examination of the sunglasses was done using oblique lighting. No ridge detail visualized.
	Cyanoacrylate Fuming	A control was created by placing a print on the interior portion of the glass of the fuming chamber. Superglue was placed in an aluminum tray and then placed in a heating source, and a beaker with hot water was placed inside to create humidity. The evidence was placed into the chamber for approximately 20 minutes. The control developed white ridge detail.
	Powder Dusting	The sunglasses were dusted with black magnetic powder. Ridge detail developed on section B of the evidence.
DR749L	Visual Examination	Viewed with white light
	Cyanoacrylate Fuming	
	Dye Stain	Rhodamine 6G - Methanol Based
DR8ZJG	Visual Examination	Crime-lite, LASER
	Cyanoacrylate Fuming	
	Dye Stain	Rhodamine
	Powder Dusting	Black powder
DVQ2E4	Visual Examination	Forensic light sources (white, green, blue)
	Cyanoacrylate Fuming	7 min
	Dye Stain	Basic yellow 40
ENLKHN	Visual Examination	Direct and oblique white light
	Cyanoacrylate Fuming	Relative humidity: 80-83% ; Temperature: 120 °C ; Cyano glue quantity : 0.62 g; Exposure time : 6 min

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
ER4HD7	Visual Examination	The fingerprint was observed when illuminated from the back in white light.
	Cyanoacrylate Fuming	fumed with cyanoacrylate for 20 min at 80% RH and 120 degree Celsius.
F2NDM6	Cyanoacrylate Fuming	Visual (photographed), Cyanoacrylate (results photographed)
	R6G	R6G (results photographed)
	Alternate Light Source	Laser
FCADJ3	Visual Examination, Cyanoacrylate Fuming, Powder Dusting	Visual Examination with white oblique lighting, Cyanowand (cyanoacrylate ester fuming), and Black Magnetic Powder.
FCREBB	Visual Examination	Oblique lighting
	Cyanoacrylate Fuming	Cyanowand
	Powder Dusting	Silver/gray powder
FECF6X	Visual Examination	Conducted VIS with Ambient and White Lighting.
	Cyanoacrylate Fuming	Conducted CAE processing with the Foster + Freeman MVC 1000 Chamber. Utilized FSIS - UV Light and White Light to visualize.
	Dye Stain	Conducted Rhodamine 6G (R6G) processing by performing the spray method and allowing the item to air dry. Utilized the TracER LASER to visualize.
FG4CUR	Visual Examination	A partial impression could be visualized on the lens of the sunglasses.
	Powder Dusting	I utilized white magnetic fingerprint powder to develop the impression due to the my belief white powder would provide the greatest contrast on a black lens. Cyanoacrylate processing also could have been utilized.
FK2VXB	Visual Examination	Initial examination with white light and light source (blue and green light). Visible latent fingerprint in section B with white light.
	Cyanoacrylate Fuming	2g glue, humidity 80%, heat 120 degrees, 7min processing time. Teststrip positive. Visible fingerprint in section B.
	Dye Stain	Dye stain using Basic Yellow 40. Visible fingerprint in section B with blue light and yellow filter.
FMNK4A	Visual Examination	visual with white light (+)
	Alternate Light Source	FSIS (+)
	Cyanoacrylate Fuming	CAE fumed ~20mins 80% humidity (+)
	Dye Stain	BY40 stained (+)
FQ9CFC	Visual Examination	
	Cyanoacrylate Fuming	
	Dye Stain	R6G
	Powder Dusting	White

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
FQRFNC	Sequential Processing	CAE (with heat & humidity for 20 minutes), followed by Black Powder (where print was developed and lifted with tape and placed on a white lift card) and finally RAM Solution Stain and LASER (no further enhancement of ridge detail).
FXRP7X	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source	Basic yellow 445nm laser w/ orange filter
FZG4KZ	Visual Examination	
G8C7MC	Visual Examination Visual Examination Cyanoacrylate Fuming Visual Examination Dye Stain Powder Dusting	Regular fluorescent lighting - 11/17/2023- Ridge detail noted and photographed. FSIS - 11/17/2023 - Ridge detail noted and photographed. Used Air Science Fume Chamber (tank 3) on 11/17/23. 80% humidity. 30 minutes fuming, 30 minutes purging. Ridge detail developed and photographed. (lot# CA230821) FSIS - 11/17/2023 - Ridge detail noted and photographed. MStar - 11/17/23 - Ridge detail developed and photographed (lot# MS231109). White regular powder - 11/28/23 - Ridge detail developed and photographed.
GAW8GX	Visual Examination Alternate Light Source	Visually inspected. Print located and marked. Viewed using UV light (long wave). Test print positive.
GCKY7A	Visual Examination Cyanoacrylate Fuming Dye Stain	used side lighting with flashlight 15 minutes at 70 degrees and 80% humidity used R6G in methanol - viewed ridge detail with a BrightBeam laser / 532nm / used orange goggles
GDEPCN	Visual Examination Alternate Light Source Powder Dusting	Visualised with a white crime-lite Laser, UV & Blue crime-lite. no FRD visualised Powdered with Aluminium Powder

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
GGMH2M	Powder Dusting	- Wear personal protective equipment (PPE) and check if the package was well sealed; - Apply a digital photography with camera canon 1100D for recording the package; - Open the package which contains 3 items; - Apply a digital photography with camera canon 1100D for item 2; - Open item 2 containing sun glass; - Proceed with visual examination of the sun glass; - Apply a digital photography with camera canon 1100D for the sun glass; - Dusting with green fluorescent powder by using camel hair brush after wearing appropriate ppe; - Apply digital photography with camera, reproduction table with ruler closer to the latent print for recording developed latent print ; - Apply a tape lifter to record developed latent print; - Enhancement by using DCS-5 machine with 8×4(2) light source of 445 nm GG495 and filter of OG590AG; - Apply a digital photography using DCS-5 camera Nikon D6 to save enhanced and developed latent print; - Processing time for all steps was 50 minutes; - Green fluorescent powder was used.
GGZ7U9	Visual Examination Cyanoacrylate Fuming Basic Yellow 40	
GJ3662	Omega Print Fuming Compound and Black Dusting Powder	The piece was observed, white artificial light was used, use Omega Print Fuming Compound and Black Dusting Powder was used to develop the fingerprint. The fingerprint was observed with the Omega Print about 10 minutes, in the left lent of the sunglasses, identified in the sections with the letter B.
GLPN7Y	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain	A latent was observed very faint in the B quadrant. I photographed this latent as L1. No ridge detail was observed. Latent L1 was still visible but had not improved in quality. No documentation was taken at this step. Rhodamine was applied to the item. L1 was developed further and photographed.
GRY6FM	Visual Examination Cyanoacrylate Fuming	Examination under white light and latent print was appeared on B position and whorl shape. So, taken photo by using UV crime lite (350 – 380 nm) with Foster + Freeman DCS5 imaging system. The fuming was initiated in the fuming chamber at least 15 minutes with 80 % humidity. The latent print was observed clearer on B position under natural light. Cyanoacrylate will crystallizes the water that resulting from sweat secretions.
GUMC4Q	Visual Examination Cyanoacrylate Fuming Dye Stain	120°C +/- 5°, relative humidity 75% +/- 15% Ardrox, 365 nm

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
GV2WW2	Visual Examination	Oblique lighting used to detect latent print CG2 in quadrant B.
	Cyanoacrylate Fuming	Item 2 processed with cyanoacrylate fuming with the following parameters: 0.2g cyanoacrylate, 80% humidity, 4 minute fume time, 5 minute purge time. CG2 still detected in quadrant B.
	Dye Stain	Item 2 was dye stained with Basic Yellow 40 for roughly 5 seconds and rinsed with water for roughly 10 seconds.
	Alternate Light Source	Item 2 was observed using an alternate light source set at 415nm and using yellow goggles. CG2 still detected in quadrant B.
GYGD76	Powder Dusting	Performed a visual inspection, locating the latent print in plain view, then orange graphite powder was used to lift the latent print with a black plastic patch. It was then preserved in photo. The latent print was located in the letter B.
H62XK6	Visual Examination	
	Alternate Light Source	520nm, 445nm, 365nm, 254nm
	Cyanoacrylate Fuming	
	Alternate Light Source	254nm
	Dye Stain	RhoMeOH
	Alternate Light Source	520nm, 445nm
HRCWAP	Visual Examination	under white light
	Alternate Light Source	fluorescence examination (350nm-650nm under appropriate colour barrier filters)
	Cyanoacrylate Fuming	in the fuming chamber with a humidity 80% for 10 minutes visual examination under white light and fluorescence examination in alternate light source (350nm-650nm)
	Basic Yellow 40	fluorescence examination in alternate light source (350nm-505nm under yellow or orange colour barrier filters)
HTQDBA	Visual Examination	Visually examined the evidence, using natural light source
	Cyanoacrylate Fuming	Used cyanoacrylate fuming tank, getting the tank up to 80% relative humidity, fuming for 30 minutes with cyanoacrylate and purging the tank for 30 minutes (CA230821)
	Dye Stain	used dye stain M-star on the latent print after cyanoacrylate fuming (MS231109), then used a crime scope to visually see the fluorescent latent print
	Powder Dusting	Dusted the latent print with latent fingerprint powder

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
HUJFRX	Visual Examination	Performed visual examination with white light and alternate light sources.
	Cyanoacrylate Fuming	Placed the item in an airtight superglue chamber using Foster & Freeman MVC FFLEX S with Humidity at 80% RH, Superglue at 248 Fahrenheit and at a 42 minute superglue process.
	Visual Examination	Performed visual examination of the developed latent print using Foster Freeman DCS 5 with white light and alternate light source.
	Dye Stain	Sprayed fluorescent dye stain (RAM - Rhodamine G6, Ardrex, MBD) and let it sit for about 10 minutes.
	Alternate Light Source	Performed visual examination of the developed latent print using Foster Freeman DCS 5 with alternate light source.
HVAE7W	Cyanoacrylate Fuming	CA fumed for 45 minutes, 20 minute curing
	Dye Stain	Dye stained with Rhodamine 6G and viewed under green light laser. Test print positive.
J348RV	Visual Examination	The item 2 was visually inspected and examined following our LPPM using a 254nm wavelength UV light and filter. One visible print was observed on quadrant B.
J6D3JE	Visual Examination	Item was visually examined prior to processing.
	Cyanoacrylate Fuming	CFC Lot #YM27419, EXP: 01/2024. Positive and negative controls reacted appropriately. Fuming 10 minutes at 70% humidity, Purging 10 minutes
	Powder Dusting	Bichromatic powder was applied to the item to develop and visualize latent print. Latent fingerprint visualized in quadrant B.
JB4CVY	Visual Examination	Ridge detail observed in area marked B. Photographed at this stage.
	Lumicyano	Processed in a fuming tank for approximately 10 minutes with 80% humidity and 120 degrees Celsius. Additional photos taken.
	Alternate Light Source	Orange barrier filter at 495nm. Additional photos taken.
JCWECL	Visual Examination	Using white light
	Cyanoacrylate Fuming	RH 80%. Glue time = 25 minutes. Glue temperature = 120°C. Hold time = 5 minutes.
	Powder Dusting	Fingerprint powder Instant white (BVDA)
	Dye Stain	Basic Yellow 40 (formulation with petroleum ether)
JN8RR2	Visual Examination	positive on visual examination
	Cyanoacrylate Fuming	processed in cyanoacrylate tank
	Rhodamine-6-G	processed with Rhodamine-6-G and then visualized with laser

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
JVCHJ8	Visual Examination	Visually examined item and could see friction ridge detail in quadrant B.
	Cyanoacrylate Fuming	Fumed Item 2 and a control in Mystaire fuming chamber at 70% humidity for 10 minutes. Friction ridge detail of possible value was developed.
	Dye Stain	Sprayed item 2 and control with R6G methanol solution and rinsed with methanol then looked at with a lazer with orange filter. Friction ridge detail of possible value was developed.
JZME3N	Visual Examination	direct white light
	Cyanoacrylate Fuming	
K2QUMY	Visual Examination	2 minutes - Natural light
	Cyanoacrylate Fuming	40 minutes in Foster Freeman MVC FFLEX S chamber
	Visual Examination	2 minutes using flashlight; white light
	Dye Stain	2 minutes application R.A.M. using squirt bottle
	Fume Hood	5 minutes dry time
	Alternate Light Source	20 minutes using DCS -5 Crime Lite, 550nm filter
K42PG4	Visual Examination	Viewed in visible light.
	FULL SPECTRUM IMAGIN SYSTEM (FSIS)	Examined with a FSIS using UV light and a filter,
	Cyanoacrylate Fuming	Vacuum fumed with cyanoacrylate ester (superglue) in a CyVac chamber for ~1 hour and allowed to cure for ~30 min.
	RHODAMINE (RHO) dye	Saturated with RHO and examined with laser light at 532 nm and an orange filter.
K9EBNP	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	black powder with fiberglass brush
KANCAN	Alternate Light Source	Examined using Crimelites white, blue and green. Latent fingerprint observed in Section B
	Cyanoacrylate Fuming	Treated in MVC1000 - 6 minutes with positive control
	Alternate Light Source	Examined using Crimelites white, blue. Nil additional latent fingerprints observed
	Dye Stain	Sprayed with Rhodamine 6G
	Alternate Light Source	Examined using Crimelite green and orange goggles. Nil additional latent fingerprints observed

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
KB3N78	Visual Examination	I visually examined the item, a pair of sunglasses. I observed a fingerprint on the interior of the left eye lense in the quadrant marked B. I photographed the print.
	Cyanoacrylate Fuming	I used evident, lot # 3027 superglue, in an Air science chamber with a controlled environment of 70 degrees Fahrenheit and 70% humidity. The item fumed for 15 minutes and vented for 5 minutes. I removed the item from the chamber and photographically preserved the fingerprint with a digital format camera.
	Dye Stain	I used R.A.M. dye stain, Evident, lot # 3649, to enhance the fingerprint. I utilized a handheld spray bottle to apply the RAM to the surface of the item. I allowed it to dry. I used a darkened room and alternate light source on the CSS setting and an orange barrier filter to view the latent print. I used a digital format camera with an orange barrier filter to preserve the image.
	Powder Dusting	I used black fingerprint powder and a synthetic fingerprint brush to enhance the fingerprint. I used clear tape and a white fingerprint card to lift and preserve the fingerprint designated as L-2.
KBXCHB	Visual Examination	white light, uv 415-590 nm
	Cyanoacrylate Fuming	white light
	Dye Stain	Basic Yellow 40 - uv - 450 light
KJ74NZ	Cyanoacrylate Fuming	Cyanoacrylate was applied in the Cyanoacrylate Fumming Chamber. Fixation technique through the scanner, model V700 PHOTO with image caption to 800 PPP resolution.
KNMBCY	Visual Examination	Visually looked at the item for any prints
	Alternate Light Source	Used 520nm Laser, 445nm Blue light, and 365nm UV
	Cyanoacrylate Fuming	Performed a visual examination and then used the RUVIS (254nm)
	Dye Stain	Used RMO on the item and used the 520nm Laser and 445nm blue light to visualize
KNQQNZ	Visual Examination	visual examination using oblique lighting and Alternate Light Source under multiple wavelengths
	Cyanoacrylate Fuming	CAE using Sirchie Omega Print, used in fuming chamber with humidity and heat source for 15 minutes.
	Powder Dusting	Sirchie black powder and brush used to develop latent print impression.
KPH6VP	Visual Examination	
	Cyanoacrylate Fuming	Eight minutes at 80% humidity
	Powder Dusting	Clean (sterile) black powder and clean (sterile) brush
	Dye Stain	Ardrox
	Photograph	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
KR27PB	Cyanoacrylate Fuming	Cyanoacrylate ester processing time: 15min
	Dye Stain	Rhodamine 6G
	Alternate Light Source	Viewed under green light
KUR8XK	Cyanoacrylate Fuming	
KV6YP2	Visual Examination	Examine the piece of evidence, Sunglasses, divided in sections A-D in all parts
	Alternate Light Source	Use an oblique alternate white light and blue light source to examine.
	Powder Dusting	Use orange powder to enhance the contrast of fingerprint.
KV8GWD	Powder Dusting	Processed with black powder and brush
KVZJDZ	Visual Examination	Rofin Polilight white Light.
KXRHQY	Visual Examination	used ambient light
	Cyanoacrylate Fuming	40 minutes
	Dye Stain	RAM dye stain
	Alternate Light Source	Used Foster Freeman 8 x 4 crime light with orange filter
L4DV6R	Visual Examination	Item photographed. Under ambient light, a latent mark was clear in section B
	Powder Dusting	silver powder was applied to the whole item and the mark is clearly visible
L8VTXN	Powder Dusting	it was used fluorescent latent print powder, yellow escent color, aplied with laten print brush
LAJFG4	Cyanoacrylate Fuming	CAE fuming chamber
	Dye Stain	Basic Yellow stain (pre-mixed solution)
LD2LRK	Visual Examination	White light, different angles
	Alternate Light Source	Blue light 420 – 470 nm, yellow viewing filter 495 nm. Green light 490 – 560 nm, orange viewing filter 570 nm
	Cyanoacrylate Fuming	Process time: 7 minutes. Temperature of heater block: 119°C. Relative humidity: 80%
	Dye Stain	Basic yellow 40
LEWZMP	Visual Examination	After opening the evidence envelope, I visually examined the item using oblique lighting.
	Cyanoacrylate Fuming	I carefully placed the item in the superglue chamber, created a quality control (on glass), added superglue to the hot plate and hot water. I let the chamber run for approximately 18 minutes.
	Powder Dusting	I dusted the evidence item using black powder.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
LQL2VJ	Visual Examination	white light examination; notable ridge detail in quadrant B
	Cyanoacrylate Fuming	placed in Foster+Freeman MVC3000 superglue chamber set for AUTO; print located in quadrant B
	Dye Stain	Rhodamine-6G dye stain and examined with ALS at 515nm; print located in quadrant B
	Powder Dusting	negative results
LX9UA4	Visual Examination	Conducted visual examination on the item using white, UV, 450, 505 (ROFIN ALS) and laser (LaseR ALS) with yellow, orange and laser filters, prior to processing.
	Cyanoacrylate Fuming	Placed item in AirScience Sumerfume cyanoacrylate chamber. Used white light (ROFIN ALS) to visualize areas of ridge detail.
	Dye Stain	Used Rhodamine and 505 light source (ROFIN ALS) with an orange filter, to visualize areas of ridge detail.
	Powder Dusting	Processed item using black fingerprint powder.
M4BB4B	Powder Dusting	Black magnetic powder
M6KBCX	Cyanoacrylate Fuming	Latent print revealed in dark sunglasses. The cyanoacrylate fuming was applied using an electric heater, cyanoacrylate base glue, a box, and water to hydrate the latent print. A latent print was revealed in quadrant B. The folder was open with the dark sunglasses divided into squares A, B, C, and D. To begin, 10 drops of cyanoacrylate-based glue were placed on a small plate, and 10 drops of water were added to hydrate the latent print. Then, the electric heater turned on and the box was placed on top to wait for latent prints to be revealed with the cyanoacrylate fuming.
MGGG7W	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
MYWMGT	Cyanoacrylate Fuming	Fumed item with superglue in the safefume chamber at 25°C, 75% Humidity for 15 mins (manufacturer speed).
	Dye Stain	Dye stained with Rhodamine R6G.
	Alternate Light Source	Viewed under green laser. Test print was positive.
MZ7RVG	Powder Dusting	Photographic documentation is made of the yellow paper envelope that presents a label with the test data number 23-5191. It is opened and black plastic glasses can be seen inside, which are extracted with tweezers, which can be seen damaged in sections. with the letters A, B, C, D in the internal part of the mica, the reagent control is then carried out before being applied to the surface of item two, so when the expected results are obtained, it is applied to the internal surfaces of the glasses in the remaining sections, observed in section B friction ridges

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
N3DKB2	Cyanoacrylate Fuming	fumed for 14 minutes at 80% relative humidity
	Dye Stain	Basic Yellow 40 premixed solution
N87CVQ	Cyanoacrylate Fuming	Item was fumed with cyanoacrylate using safefume fuming chamber
	Dye Stain	Dye stained with basic yellow
	Alternate Light Source	Viewed with forensic laser. Test print was positive.
N87EKV	Visual Examination	
	Alternate Light Source	532nm laser, 450nm Blu light, and 365nm UV
	Cyanoacrylate Fuming	Cabinet 12
	Dye Stain	RMO, examined under 532nm laser and 450nm Blu light
NELDUZ	Powder Dusting	Item was treated using yellow magnetic powder using a fiberglass brush.
NJLCD7	Powder Dusting	Black Powder
NKDBR4	Visual Examination	I did a visual exam of the item prior to processing using a flashlight and oblique lighting. A patent print was observed on section B.
	Cyanoacrylate Fuming	The item was placed in the cyanoacrylate chamber. The chamber was heated to 37° C. A test print was placed on the glass, DI water and CAE were added. The item was fumed for 20 minutes. A CAE print was observed on section B.
	Powder Dusting	The item was processed using black powder and a fiberglass brush with negative results.
	Dye Stain	The item was processed with RAM solution stain (Lot #23.2), then viewed with the LASER at 532nm with negative results.
NWWPTL	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	fluorescent magnetic powder- red/black
NW7U9V	Cyanoacrylate Fuming	Luminescent cyanoacrylate CST (Fumigation chamber MVC 3000 FOSTER+FREEMAN - Automatic Mode)
	Alternate Light Source	White light. LABINO Superxenon 325 nm + Yellow filter
	Dye Stain	Basic Yellow 40
	Alternate Light Source	Crimelite 8x4 - FOSTER + FREEMAN (445nm) and Yellow Filter
NXL3B4	Cyanoacrylate Fuming	processing time : 30 min. Dye stain : superglue and MBD solution. The reaction needs 75-80 percent humidity
NYFTGH	Cyanoacrylate Fuming	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
P3NVFJ	Visual Examination	First visualisation with white light and then after with blue-green light (445-510 nm) + yellow filter and blue light (420-470 nm) + yellow filter
	Cyanoacrylate Fuming	Cyanoacrylate glue : 1,014 g. Fumigation cast conditions : - relative humidity : 80%. - humidify time : 15 min. - glue temperature : 120°C. - glue time : 25 min. - hold time : 5 min.
P3PGEK	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	
P6AH97	Cyanoacrylate Fuming	Superglue fumed in safefume chamber
	Visual Examination	Viewed with oblique lighting
P9AT67	Cyanoacrylate Fuming	40 minutes
P9ZJGF	Cyanoacrylate Fuming	
PDBNDA	Visual Examination	Visualized latent in section marked "B" using oblique lighting
	Cyanoacrylate Fuming	Positive and negative controls; approximately 20 minutes of processing time. Lot# YM27419, Exp: 01/24
	Powder Dusting	Processed with bichromatic powder; lifted with tape and adhered to latent lift card; entered lift card into TraQ under Item LP-01
PH3WEV	Cyanoacrylate Fuming	Evidence was treated using a cyanoacrylate wand in a closed container for about half an hour, then used silk grey latent print powder for lifting.
PJ2VX4	Visual Examination	Visual exam using available light and a flashlight. Processing time: 5 minutes.
	Cyanoacrylate Fuming	Item placed inside CAE chamber and processed with CAE fuming. Processing time: 20 minutes.
	Powder Dusting	Black powder using a fiberglass brush was used on item. Processing time: 5 minutes.
	Dye Stain	Used RAM solution stain and LASER to search for further enhancement and/or additional fingerprints. Processing time: 10 minutes.
PRBMZ7	Visual Examination	white light used for exam. RD observed. photos taken of LP in Quadrant B
	Cyanoacrylate Fuming	Temp: 120 degrees Celsius. Humidity: 70% with 10 minute saturation time. CA Processing Time: 15 minutes. photos taken of LP in Quadrant B
	Dye Stain	Rhodamin 6G dye stain (MeOH-based) used. LASER exam at 532 nm with orange barrier filter. photos taken of LP in Quadrant B
PT3HPZ	Cyanoacrylate Fuming	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
PTQLKV	Visual Examination	When observed in white light, the trace very well visible. When observed in the wavelength range 430-550 nm through orange filter, the trace was not visible at all.
	Cyanoacrylate Fuming	MVC 3000 Foster+Freeman, sets 80% RH, 120°C, 10 min. fuming time (full cycle)
PW6GX8	Visual Examination	11/14/23: Magnifier lamp and magnifier loop: Exhibit 2: FRD is visible in only Section B of the sunglasses. Image capture will be performed.
	Alternate Light Source	11/15/23: CRIMESCOPE CS-16-500: 350-535 nm with clear, yellow, orange, and red goggles: Exhibit 2: FRD is visible in only Section B of the sunglasses. No improvement to previously viewed FRD; no additional FRD. No image capture.
	Cyanoacrylate Fuming	11/16/23: Exhibit 2: Cyanoacrylate fuming performed in the CA-6000 at approximately 65% relative humidity for 12 minutes. Removed to prevent overprocessing.
	Visual Examination	11/16/23: Exhibit 2: Post CA: Magnifier lamp and magnifier loop: No improvement to previously viewed FRD. No additional FRD. No image capture.
	Dye Stain	11/17/23: Exhibit 2: Ardrex is applied using a squeeze bottle. Allowed to dry several minutes in the fume hood.
	Alternate Light Source	11/17/23: Exhibit 2: Post Ardrex: CRIMESCOPE CS-16-500: 350-475 nm wavelength with clear (UV protectant) and yellow goggles: No improvement to previously viewed FRD. No additional FRD. No image capture.
QA32PV	Visual Examination	Used oblique lighting and a bright white light. A check occurred during VIS.
	Alternate Light Source	Used 365nm (UV light) and the Dual 77 (445nm and 520nm).
	Cyanoacrylate Fuming	Item was placed in the superglue fuming chamber and then examined with oblique lighting/bright white light and FSIS (+254nm).
	Dye Stain	Item was processed with RMO using a squirt bottle and then allowed to dry. The item was then examined using the Dual 77 (445nm and 520nm).
QEHADV	Visual Examination	A visual examination was conducted on the sunglasses and visible ridge detail was located on the interior side of the left lens in the section labeled "B". This process took approximately 5-10 minutes.
	Cyanoacrylate Fuming	Following the visual examination, the sunglasses were placed inside of our cyanoacrylate fuming tank, along with a foil cup containing liquid cyanoacrylate ester, and chemically processed to enhance the ridge detail. This process took approximately 28 minutes.
	Dye Stain	Following the cyanoacrylate ester processing, the sunglasses were further chemically processed using Rhodamine 6G. The chemical was pipetted on the exterior of the sunglasses and allowed to dry (this step was conducted two times). The sunglasses were then examined using the Coherent Tracer laser. This process took approximately 10-15 minutes.
QTFGCW	Cyanoacrylate Fuming	Evidence was photographed, initially examined using oblique lighting and then subjected to cyanoacrylate fuming.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
R76QH3	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source	R6G LASER
RAGN2H	Powder Dusting	it was used the green fluorescent magnetic latent print powder with alternate light source
RK6EQV	Visual Examination Powder Dusting	visual exam showed ridge detail in section B magnetic powder applied
RTE2KG	Visual Examination Cyanoacrylate Fuming Powder Dusting	Visual examination of the item, 5 minutes processing time Placed item in cyanoacrylate fuming chamber, estimation of 25 minutes. Dusted for prints using black fingerprint powder, 7-minute processing time
RUN7X7	Visual Examination Powder Dusting	Visual examination completed of item 2 and observations were documented in the field notes Magnetic fingerprint powder lightly swirled over item 2.
T7GPEW	Visual Examination Powder Dusting	The item was photographed and documented as per lab procedure. The item was first analyzed with oblique lighting and a possible area of touch located in section B The item was dusted with black powder and a latent lift was revealed in section B.
TEPGGY	Visual Examination Cyanoacrylate Fuming Powder Dusting	Friction ridge detail of possible value MYSTAIRE Cyanoacrylate Fuming Chamber used. - 70% humidity. - Cycle time 10:00 minutes. - Purge time 10:00 minutes. Friction ridge detail of possible value Fluorescent magnetic powder used. Friction ridge detail of possible value
TJK9PW	Cyanoacrylate Fuming Dye Stain	Fumed at 80% humidity for 14 minutes. Visual examination Basic yellow. View with laser (ALS)
TK26HW	Powder Dusting	I processed the item using black powder.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
TNJP3Q	Visual Examination	The item was visually examined using ambient and oblique lighting. A latent print was observed in section B of the item.
	Cyanoacrylate Fuming	The item was placed in the cyanoacrylate chamber for 11 minutes at an 80% humidity. The latent print was observed in section B. A test print was ran at the same time and yielded a positive result.
	Dye Stain	The item was dye stained with MBD and set to dry. The test print was dyed prior.
	Alternate Light Source	Using an alternate light source, blue light and orange/yellow filter, the latent print was observed in section B. The test print was dyed and visualized prior with a positive result.
	Powder Dusting	The item was powder processed with black magnetic powder and a magnetic wand. The latent print was observed in section B. The test print was powder processed prior and yielded a positive result.
TNXTWH	Visual Examination	Examined under white light and magnifier
	Cyanoacrylate Fuming	Placed in chamber with superglue on heat plate, near-boiling water in a beaker, and control on plastic. Waited approximately 10-15 minutes before removing item.
	Powder Dusting	Used black powder on entire surface of item.
UH6F7E	Visual Examination	light white
	Cyanoacrylate Fuming	temp. 21C, humidity 80%, time 15 min
	Dye Stain	light 350-415 nm
UJZZTD	Powder Dusting	it was used yellow escent fluorescent laten print powder aplied with laten print brush
UKDDVN	Visual Examination	
	Cyanoacrylate Fuming	10 MIN
	Powder Dusting	BP/MP
UKTK6D	Alternate Light Source	Polilight PL500, white light
	Cyanoacrylate Fuming	MVC-1000, 80% RH, 120°C, Cyanobloom
UMHYMV	Powder Dusting	First I applied the grey powder to the sunglasses. Then I used the brush to clean the area.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
UMWKWW	Visual Examination	1) Observation with the naked eye of the surface of the sunglasses, under different inclinations. We observe a papillary trace in the "B" box. We do not see any other traces elsewhere.
	Alternate Light Source	2) We illuminate the support with the Crimescope MCS-400 at different frequencies with the appropriate colored glasses and at different inclinations. The same papillary trace is observed in box "B" with white light, not with the others frequencies. We do not see other traces elsewhere.
	Cyanoacrylate Fuming	3) In view of non-porous support, we place the sunglasses in the fumigation tank. Autocycle for 2g of solution of Lumicyano 8% during 1 hour. A contrôle trace is placed in the tank.
	Visual Examination	4) We observe with naked eye a white deposit of Lumicyano on the sunglasses in case "B". We don't observe other traces elsewhere on the object.
	Alternate Light Source	5) We illuminate the object using the Crimescope MCS-400 at different wavelengths and wearing glasses of appropriate colors. The fingerprint in the "B" box is even more visibly illuminated in white light or in CSS luminescent manner. We do not observe other papillary traces elsewhere on the object.
	Powder Dusting	6) We apply white magnetic powder on the entire object and to enhance the fingerprint in the "D" box.
	Visual Examination	7) We observe very clearly the fingerprint on the sunglasses in case "B". We don't observe other traces elsewhere on the object.
UNQB3C	Powder Dusting	white powder
UP6HNT	Visual Examination	Visually examined for ridge detail.
	Alternate Light Source	Examined item with 365nm, 445nm and 520nm wavelengths.
	Cyanoacrylate Fuming	CA fumed item in CA chamber then examined visually and with 254nm wavelength.
	Dye Stain	Applied RMO dye stain, allowed to dry, then examined item under 445nm and 520nm wavelengths.
URDTKW	Visual Examination	White light examination
	Alternate Light Source	Blue (420-470nm), Green (480-560nm), UV(350-380nm)
	Cyanoacrylate Fuming	120 C, relative humidity %, 15 min glue time
	Dye Stain	BY40, ethanol based
UZ9L24	Visual Examination	White light/flashlight
	Cyanoacrylate Fuming	Approximately ~75% humidity for approximately ~8 minutes. Visual exam utilized white light/flashlight
	Dye Stain	Rhodamine 6G, methanol based. Light source exam: Laser at 532nm using orange barrier filter

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
VELE6Z	Visual Examination	Visual Examination of Item 2 was conducted through the use of ambient room light and LED lights attached to a camara stand.
	Cyanoacrylate Fuming	Item 2 was placed in an automated Air Science Cyanoacrylate Chamber for 10 minutes and vented for an additional 7 minutes upon completion of the process. (A test print used for Item 1 ensured that the process achieved positive results. Item 2 was analyzed on the same day and a test print did not have to be repeated.)
	Dye Stain	A dye stain, RAY, was applied to a cyanoacrylate test print deposited on clear acetate to ensure that the process achieved positive results. This involved spraying RAY over the acetate, rinsing with dH2O and blotting the surface dry. The acetate was viewed in a dark room while wearing appropriate PPE, which included a lab coat, approved protection and viewing goggles and latex gloves. The test print achieved a positive result while being illuminated under 532nm emitted from a Bright Beam Laser. RAY was sprayed on Item 2, rinsed with dH2O and blotted dry. The item was viewed in a dark room under 532nm emitted from a Bright Beam Laser. An area of developed friction ridge detail was noted.
VKB3EC	Visual Examination	
	Alternate Light Source	Oblique Lighting
	Cyanoacrylate Fuming	Processing time - 16 minutes in fuming chamber
VKNRHN	Cyanoacrylate Fuming	Item was treated with a cyanoacrilate wand for about half an hour in a sealed space. The latent print was developed with silk gray fingerprint powder.
VV79BV	Visual Examination	White light
	Cyanoacrylate Fuming	Processing time 15 min
	Dye Stain	Basic Yellow 40
VY9ADD	Visual Examination	Processing time: 2 minutes. No friction ridge detail was visible
	Cyanoacrylate Fuming	Processing time: approximately 30 minutes. Friction ridge detail was visible, but the item needed to be further processed
	Powder Dusting	Processing time: 5 minutes. with black fingerprint powder
WG7K33	Visual Examination	Ambient lighting and ring lamp with magnification was used; FRD is present in Square B of the left lens.
	Alternate Light Source	Crime Lite ML2 used with orange filter with green and blue light; no improvement of FRD; no fluorescent FRD.
	Cyanoacrylate Fuming	Processed with Cyanoacrylate Ester in the Misonix CA- 6000 chamber; 65% RH; 30 min. exposure; FRD is present in section B.
	Visual Examination	Ambient lighting and ring lamp was used: FRD is present in square B. Crime Lite ML2 was used with orange filter and green (480nm-560nm OG590) and blue light (420nm-470nm GG495) No improvement to FRD. FRD to be captured.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
WJBMFK	Visual Examination	white light
	Cyanoacrylate Fuming	10 minute intervals, processing time 20 minutes
	Visual Examination	white light
	Powder Dusting	Fluorescent powder
	Alternate Light Source	Blue (420-470 wavelength)
	Visual Examination	
WUB4D2	Visual Examination	Friction ridge detail was observed in quadrant "B".
	Cyanoacrylate Fuming	Fumed for 8 minutes.
	Dye Stain	Rhodamine 6G was applied.
	Alternate Light Source	ALS used at 495nm - friction ridge detail was developed in quadrant "B".
X3NE7T	Visual Examination	Visible ridge detail with oblique lighting.
	Alternate Light Source	No fluorescing latent prints visible.
	Cyanoacrylate Fuming	White residue was observed on a latent print.
	Powder Dusting	The latent print was dusted and lifted, LP2.
X4FBVM	Superglue Fuming (SGF)	Bright beam laser 532 nm (green)/ orange curved filter.
	Rhodamine-6-G (R6G) (w/ di water rinse)	FF 1.0 Narrow band pass filter used for R6G dye stain.
XBC EEQ	Visual Examination	Visual Examination on both sides.
	Alternate Light Source	Visual Examination with Alternate white Light on both sides.
	Cyanoacrylate Fuming	Encapsulated with Cyanoacrylate for 15 minutes.
	Powder Dusting	Developed with black magnetic black graphite powder. And then, developed with regular black graphite powder.
XC76J6	Visual Examination	In direct reflective lighting, the light is reflected directly off the latent print into the lens. The light is less reflected directly off the background due to that the sunglasses lens is transparent, which is done by placing Item 2 at a about 10-degree angle from the camera lens to film plane and placing the light source at a about 10-degree angle from the subject. The light source reflects at an approximate 20-degree angle into the camera lens.
	Cyanoacrylate Fuming	Put the sunglasses in fuming chamber and heat cyanoacrylate at 120°C with 80% Rh, which make the chamber filled the cyanoacrylate fuming. The fingerprint pattern would be covered by the cyanoacrylate polymer.
	Powder Dusting	Furthermore, use a feather brush to apply a small amount of latent print white powder, the fingerprint pattern would be covered by the powder and turn white.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
XCNWTP	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	RMO
XFRM3P	Cyanoacrylate Fuming	Visual first and in between each process.
	Dye Stain	R6G
	Laser	
XLDKQD	Powder Dusting	The processing time was immediate, because it was used magnetic powder, applied with the magnetic pencil. The type of powder used was Sirchie Green Fluorescent latent print powder.
XLY4JQ	Cyanoacrylate Fuming	1. Development using a cyanoacrylate vacuum chamber (processing time is 25 minutes). 2. After 24 hours, dye using Basic Yellow 40
XR2DQJ	Visual Examination	white light
XULEK6	Cyanoacrylate Fuming	
	Alternate Light Source	RUVIS
	Dye Stain	ARDROX
	Alternate Light Source	White and yellow filters at 415
	Powder Dusting	Black powder
XWVEPC	Visual Examination	The item was viewed and rotated under white light.
	Cyanoacrylate Fuming	Item was placed in the fuming chamber with a beaker of hot water and cyanoacrylate was placed on the hot plate. A control was placed on the glass. It was fumed for approximately 15 minutes. The control resulted in white ridges that were visible on the glass.
	Powder Dusting	Black magnetic powder was used.
XX8W3Q	Visual Examination	flashlight used at oblique angles
	Cyanoacrylate Fuming	MVC5000 chamber used
	Dye Stain	Rhodamine 6G used and visualized with laser
XXLMPF	Visual Examination	Visual white light, RUVIS
	Lumicyano	Temperature 250F, Time 17:00, Humidity 75%. White light, RUVIS, LASER
Y24VY2	Cyanoacrylate Fuming	
	Dye Stain	Basic Yellow

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
Y8PXV6	Visual Examination	The packaging of item two is carefully opened, placed on the work table, carrying out visual inspection with a white light lamp, "reagent verification" is carried out (before applying to the surface of the item), so once the expected result, HI - Fi white indestructible is applied in sections A - D, obtaining friction ridges in quadrant B
YFKZXG	Cyanoacrylate Fuming Powder Dusting Dye Stain	Black Powder - 1 Latent Lift Card Ardrox
YHCVMB	Visual Examination Cyanoacrylate Fuming Powder Dusting	Visual examination with a flashlight. Automated program: 1. RH80%. 2. Humidify time: 15'. 3. Glue temperature: 120 °C. 4. Glue time: 25'. 5. Hold time: 5'. Fingerprint powder: Instant White (brand: BVDA). The best result was obtained after Powder Dusting. The interfering dust particles on the papillary lines were removed by the powder. This also improved the contrast, making it easier to photograph.
YKLU7J	Visual Examination Powder Dusting	Black powder
YM6V3R	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	Rhodamine Black magnetic powder
YQMFML	Visual Examination Alternate Light Source Powder Dusting	Piece or item #2 was removed from the packaging and a visual examination was carried out. Observed using alternating light source, piece or item #2 is photographed before being worked on. The left lens of the glasses was removed, carefully to work it comfortably, Black Graphite Powder was used to work on it. It is identified inside in Section B, left side, at 10:08am.
YTAYNJ	Visual Examination	Print was visible and ready for photography without any development.
YUH8VH	Visual Examination Polycyano Powder Dusting	Item was first photographed and then looked at Evidence item was placed in a super glue chamber and polycyano was used to enhance the latent print. Black powder was used to enhance the latent print

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
YWQCGJ	Visual Examination	Lightsearch carried out using white light.
	Alternate Light Source	Lightsearch carried out using different wavelengths of light.
	Cyanoacrylate Fuming	Foster and Freeman 1000 atmospheric superglue cabinet use. Viewed using white light.
	Dye Stain	Rhodamine 6 G (aqueous) applied, viewed using 532nm laser.
	Dye Stain	Gentian Violet applied, viewed using white light and 577nm laser.
	Dye Stain	BY40 applied, viewed using 460nm laser.
	Powder Dusting	Powder applied, viewed using white light.
Z4MEBH	Visual Examination	First, I began to examine the piece of evidence, sunglasses, divided into sections A-D in all its parts.
	Alternate Light Source	Use an oblique alternate white light and blue light source to examine.
	Powder Dusting	Use orange powder dusting to enhance the contrast of finger print
Z7AXCF	Visual Examination	Visual examination using oblique lighting. Latent print observed in section B.
	Cyanoacrylate Fuming	Cyanoacrylate fuming using vacuum chamber for 40 mins, 30 minutes of cure time before processing with additional methods. Visible print observed in section B.
	Powder Dusting	Magnetic powder used to enhance print in section B, no other ridge detail noted.
ZB6RAG	Visual Examination	The item was examined under white light.
	Cyanoacrylate Fuming	The item was placed in fish tank for application of superglue fuming for 2.5 hours for development of latent prints. The evidence item was observed time to time to avoid over development.
	Visual Examination	The item was examined under white light.
	Rhodamine 6-G	Rhodamine 6-G was sprayed on super glued evidence item and rinsed with deionized water.
	Visual Examination	The item was examined under Forray Adma's imaging system at 505 nm to 515 nm with orange filter 21.
ZQ3Y8J	Visual Examination	~1 minute viewing item
	Cyanoacrylate Fuming	15 minutes fuming at 70% humidity. 5 minutes purge cycle.
	Powder Dusting	Black powder / ~3 minutes applying BP with fiberglass brush, clearing excess powder, viewing under magnification.
ZQXJVH	Visual Examination	The fingerprint was found in visual examination with the bright light.
ZUYMNQ	Visual Examination	in natural light and light from forensic illuminator a latent print was observed in section B (white light)
	Cyanoacrylate Fuming	time 15 min., RH 80% - discovered fingerprint mark was improved
	Dye Stain	Basic Yellow 40 - to achieve even better contrast - negative result (viewed with orange goggle at 450 nm)

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
ZWPL3N	Cyanoacrylate Fuming	Item was exposed to cyanoacrilate fumes using a cyano wand and a latent print was developed.

Item 2 - Development Response Summary				Participants: 246
Methods Utilized				
Alternate Light Source	86	Physical Developer	0	Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.
Cyanoacrylate Fuming	172	Powder Dusting	109	
DFO	0	Visual Examination	184	
Dye Stain	103	Wet Powder Suspension	0	
Ninhydrin	0	1,2-Indanedione	0	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
23UZ76	Visual Examination	Item was examined using a strong white light source.
	Alternate Light Source	Item was examined using a Crime Scope CS-16-500
	DFO	DFO was applied, item was placed in a Caron chamber for approx. 20 minutes at 100 degrees Centigrade.
	Ninhydrin	Ninhydrin was applied and item was placed in a locker until it was reexamined on 11/22/2023. Steam iron was used to attempt to further develop faint ninhydrin print.
	[No Methods Reported.]	Silver nitrate (alcohol based formulation) was applied. Latent print was visible after application of silver nitrate, did not develop any additiona/better detail than what was preserved after DFO
24JDNM	Iodine crystals	Item was exposed to iodine crystals fumes in a plastic sealed bag.
26J63H	Visual Examination	10/26/2023: Ambient light
	1,2-Indanedione	10/26/2023: 1,2-Indanedione powder + ethyl acetate + HFE 7100 Fluid; steam
	Alternate Light Source	10/26/2023: Laser (green/532nm)
2AAEDG	Visual Examination	
	Powder Dusting	Black magnetic
	DFO	NinCha used, 20 minute processing time
	Alternate Light Source	Laser used for viewing
2MWXH7	Ninhydrin	I sprayed a premixed solution on the envelope (item 3). Once it was dry, I placed a paper towel on top of the envelope and placed an iron on top to add heat and speed up the process.
2NAK37	Visual Examination	A visual examination was conducted of the item prior to processing for prints. No impressions were visible.
	Dye Stain	I then poured Acetone Ninhydrin over the entire envelope (in a fuming hood for safety). I allowed the item to dry for approximately 10 minutes. While the item was drying, I started up the "Caron" chamber in preparation to further develop any impressions on the envelope. The acetone ninhydrin is made in batches with the control tested on the batch at the time it is prepared.
	Visual Examination	A visual examination was conducted of this item after using ninhydrin, and prior to using the Caron chamber. No evidence was visible. After using the Caron chamber, a visual examination revealed an impression in Quadrant A of the envelope.
	Caron fingerprint chamber	After the envelope was processed with ninhydrin and dry, the Caron fingerprint chamber was used to assist with the development of possible ninhydrin prints on the envelope. The chamber was set to 80 degrees and 65% humidity. After 10 minutes, a very light impression appeared in Quadrant A so the item remained in this chamber for another 10 minutes. After a total of 20 minutes, a purple-pink impression appeared in Quadrant A.
2TPNDH	1,2-Indanedione	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
2VMHLJ	Visual Examination Ninhydrin	No prints found
336737	Ninhydrin	with heat press
338RXL	Visual Examination Ninhydrin	Prior to processing, the envelope was visually examined, both with and without an alternate light source (white light). No patent prints were noticed in any section at that time. After being photographed, the envelope was treated with limited ink ninhydrin for processing. The treated envelope was allowed to develop in our humidity chamber for about 45 minutes. A test print as also processed to ensure accuracy of the chemical, which had a positive result. Latent ridge detail was developed in section A.
38H3NV	Ninhydrin	Sprayed ninhydrin over piece of evidence and hung to dry before steaming with the iron
3AMGAF	Visual Examination Alternate Light Source DFO Ninhydrin	temperature - 100 degrees Celsius, time - 10 minute temperature - 80 degrees Celsius, time - 10 minute
3CXACU	Visual Examination Full Spectrum Image System Ninhydrin	Ultraviolet imaging Ninhydrin Petroleum Ether
3TFH6H	Visual Examination Alternate Light Source Iodine Crystals	Work on the piece of evidence began at 5:00 pm, with a visual examination, giving negative results for papillary ridges. Alternating ultraviolet light is used to verify with the examination whether there are papillary ridges in the evidence piece, giving a negative result. After the visual examination and the use of alternating ultraviolet light, I proceed to use iodine crystals. The vial is placed in a transparent plastic bag along with the piece of evidence. With this, the fingerprint in section A could be highlighted.
3VMU7T	Visual Examination Ninhydrin Physical Developer (PD)	No prints were visually observed under fluorescent lighting. Batch: 313. Dipped in Nin and allowed to air dry. Put into CARON chamber for 30 minutes. Observed under fluorescent lighting. Batch #523. Performed by LPT [Name]

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
3Y6V77	Visual Examination	Natural light, white light, optical instruments.
	Alternate Light Source	Polilight PL 500, barrier filters, optical instruments.
	1,2-Indanedione	Processing time: 10 minutes, temperature: 90°C.
	Alternate Light Source	Polilight PL 500 (505-530 nm light), orange barrier filter, optical instruments.
	Ninhydrin	Processing time - 72h, room temperature, dark place.
	Visual Examination	White light, optical instruments.
42RREW	Visual Examination	
	UV Light/FSIS	
	Ninhydrin	Nin - Petroleum Ether Based
43HZEZ	Iodine fuming	crystals
	DFO	Sprayed chemical then used NINcha S31
	Alternate Light Source	Red barrier filter, 475 nm wavelength
	Ninhydrin	sprayed chemical then used NINcha S31 for 20 minutes
44T33K	Ninhydrin	the envelope was sprayed with ninhydrin and kept inside the oven , the fingerprint was developed after 3 minutes on section A of the envelope
46AAAM	Alternate Light Source	Viewed at 455nm, 475nm, CSS, 495nm, and 515nm. No indented writing or fluorescing prints.
	Ninhydrin	Sprayed with Ninhydrin working solution.
48TB69	Visual Examination	VIS with white light.
	1,2-Indanedione	VIS with LASER and orange filter. Photographed latent 3L1.
	Ninhydrin	VIS with white light.
4CPQ3W	Powder Dusting	
	DFO	100 degrees for 20 min until dry
	Ninhydrin	
4F9WDD	Visual Examination	Visual Exam with white light.
	1,2-Indanedione	Rinsed with Indanedione, allowed to dry, then applied heat for 2 minutes.
	Ninhydrin	Rinsed with Ninhydrin, allowed to dry, then placed in Humidifier at 80% humidity for 30 minutes.
4FKTHH	Ninhydrin	POR TIPO DE SUPERFICIE SE PROCESO EL ITEM CON NINHYDRINA EN SPRAY.
4FN9VH	Ninhydrin	A visual inspection was made with alternative light for the piece of evidence. The piece of evidence was worked with ninhydrin.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
4FRQ3U	Ninhydrin	I tested my chemicals prior to use for positive and negative controls. I opened the packaging and made my initial observations. I scanned the item while encased in a clear acetate folder. I applied the ninhydrin to the item using a squeeze bottle and then applied steam until print was developed.
4KEMFJ	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin Physical Developer (PD)	
4PVV4H	Ninhydrin	por el tipo de superficie el item c, fue procesado mediante ninhydrina en spray que revelo de manera uniforme el fragmento
4PYBGJ	Visual Examination Iodine Crystal Amp	Observe the small white envelope, divided into section A-D and could not find the finger print with naked eye. Place the small white envelope, divided into sections A through D in a plastic container and use a vial of iodine and latent print was developed in a few minutes.
4WTMCC	Alternate Light Source DFO Alternate Light Source Ninhydrin Alternate Light Source	white light, 340nm-587nm, UV, coaxially reflected 100°C during 20 min in oven Fluorescence examination with polylight (491nm-548nm) Development in the dark for 24 to 48 hours in an ambient temperature with humidity white light source
4YKJ27	Visual Examination 1,2-Indanedione Ninhydrin	lumière blanche 160°C - 5 sec. Presse à chaud. light B/G - orange filter 160°C - 8 sec. Presse à chaud
4ZEFCL	1,2-Indanedione	
6262HH	Visual Examination 1,2-Indanedione Alternate Light Source Ninhydrin Visual Examination	10/31/2023-Ambient lighting 10/31/2023-applied first application with heat and humidity, observed faint ridge detail. Let sit overnight. 11/2/2023-ridge detail slightly increased, result photographed. 10/31/2023-Laser green wavelength. 11/2/2023-Laser green wavelength 11/2/2023-Applied with heat and humidity in attempt to increase contrast of ridge detail. Let sit overnight. 11/3/2023-Ambient lighting. Quality control showed purple color change expected with Ninhydrin, however, the same reaction didn't occur on the item and contrast of ridge detail did not increase. Result was photographed

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
69LJRJ	Visual Examination	It begins with a visual inspection of the piece of evidence to locate papillary ridges, which could not be located.
	Alternate Light Source	Subsequently, the search was performed with alternating white, ultraviolet and blue light, but no papillary ridges were located.
	Iodine Crystals	Iodine crystals are used, about five (5) minutes, developing a fingerprint in section A.
69MA7E	Visual Examination	
	Alternate Light Source	DCS-5 General Screen
	Iodine Fuming	
	1,2-Indanedione	
	Alternate Light Source	Polilight = Print Found Capture DCS-5
	Ninhydrin	
6B7B2Z	Visual Examination	White light, blue light with yellow filter and green light with red filter.
	1,2-Indanedione	10 minutes, 100 degrees C.
	Ninhydrin	2 minutes, 80 degrees C, 62% humidity.
6G4PW3	Alternate Light Source	An ALS was used prior to chemical processing but no ridge detail was visible.
	Ninhydrin	Ninhydrin was applied to the envelope and allowed to cure in a secure cabinet. The item was allowed to stay in the cabinet for the minimum 24 hours before the process was accelerated with steam since a purple color shift was observed. Ridge detail developed in the A section of the envelope. Ridge detail of a recordable level was scanned before the application of steam. The envelope was then steamed and scanned again. NIN was applied to a standard before applying it to case evidence and performed as expected.
6JKAJH	Visual Examination	
	Alternate Light Source	UV 475nm
	Ninhydrin	
6MM9UB	1,2-Indanedione	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
6RFAVP	Visual Examination	Used oblique lighting from a Crimelite flashlight (white light), then used a Coherent TracER LASER with a curved orange KV550 lens filter to image any potential latent print. Also, incandescent lighting was used .
	DFO	On the envelope and on a porous control, A 3 second soaking of 1,8-Diazafluoren-9-one (DFO) was applied. After the item dried, the soaking step was repeated and placed into the Sanyo Gallankamp oven and set at 100 degrees Celsius for 20 minutes. A Coherent TracER LASER and a curved orange KV550 lens filter was used to image the latent print. The item was re-examined with the LASER after a 24 hour sit-time to allow complete development of DFO.
	Ninhydrin	On the envelope and on a porous control, A 3 second soaking of Ninhydrin was applied. After the item dried, the soaking step was repeated and placed into an oven for 3 minutes set at 80 degrees Celsius and having 65 percent relative humidity. Incandescent lighting, Oblique lighting from a Crimelite flashlight, and fluorescent lighting was used to image any potential latent prints. The item was re-examined after 24 hours of sit-time to allow complete development of Ninhydrin.
7HTEUN	Ninhydrin	item 3 dipped in liquid ninhydrin until the paper was damp; hung in a fuming hood to air dry; steam hand iron used for humidity held approx. 3 inches away from evidence
7M2U4D	Visual Examination	No visible print observed
	Ninhydrin	Ninhydrin. Lot# 050123-01. Tested and working. NINcha Chamber - 75 Degrees Celsius / 65% RH at 5 minutes
7VWW7N	Visual Examination	white light and LASER
	DFO	20 minute run time in dry oven, observed with LASER
	Ninhydrin	3 minute run time in wet oven, observed with incandescent light
7W7VEC	Visual Examination	
	1,2-Indanedione	10 minutes, 100 degrees celsius
	Ninhydrin	2 minutes, 62 %Rh, 80 degrees celsius
7YD6UN	Visual Examination	Visually inspected the surface of the white paper (piece of envelope) and did not visualize any possible friction ridge detail.
	Ninhydrin	Sprayed the white paper with Ninhydrin and placed it in the humidity chamber (instrument preset for heat and humidity controls) for ~10 minutes. Friction ridge detail was observed.
84HHQD	Visual Examination	ambient light
	Ninhydrin	placed in sealed plastic bag overnight; observed faint print, applied heat with heat press 143 degrees Celsius for 3 rounds of 10 seconds for further development
88MVNE	Iodine crystals	Item was exposed to the iodine crystals vapors for a period of time.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
8A8XEJ	Visual Examination	Oblique lighting and no indented writing.
	Alternate Light Source	455-515nm
	Ninhydrin	Working solution made 11/1/2023 SH.
8ABEPC	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Ninhydrin	
	Physical Developer (PD)	
8BM7KD	Visual Examination	A visual inspection of the piece of evidence is carried out to locate fingerprints, which could not be located.
	Alternate Light Source	The search is carried out with alternating white, ultraviolet and blue light, but no fingerprints are located
	Iodine Crystal	A fingerprint is developed in section A using the iodine crystals, about five (5) minutes.
8E6J62	Visual Examination	
	DFO	
	Ninhydrin	steam applied
	Ninhydrin	second application
8E77X9	Ninhydrin	A control test and the item 3 were processed with ninhydrin. Distance: From eight inches away, them it was left to air dry for 24 hours at temperature and humidity room condition.
8JEL8W	Ninhydrin	24 hours into heated camara then 14 days into ambient conditions camara.
8R8WJD	Iodine crystals	Item was exposed to iodine crystals fumes for about an hour.
8XEEZE	DFO	Processed by 1,8-Diazafluoren-9-one (DFO) and placed in an oven at 100 degree C for 20 minutes and viewed using a 530nm/green forensic laser.
973JJD	Visual Examination	Rofin Polylight white, 450, 505, 530, 545,uv, ir, with clear, yellow, orange and red goggles.
	1,2-Indanedione	FF-Green light source, photo with red filter.
978XWE	Visual Examination	When working on the piece, I began using all the necessary equipment, documenting the piece of evidence with a general photograph, to capture how it was received and each of its packaging.
	Alternate Light Source	then perform visual inspection using alternating white light on the piece of evidence for greater visibility, obtaining no results.
	Iodine Crystal Amp	Then I began to work the piece with "Iodine Crystal Ampoules" placed inside a sealed gas chamber, during the process I carried out an inspection where positive results were obtained.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
9APBG2	Visual Examination Ninhydrin	I performed a visual examination by looking at the item using natural Lighting and oblique lighting at different angles to see if any ridge detail is present. Once I performed a quality control to ensure my chemical is working property, I applied non-running Ninhydrin to the entire item using a squirt bottle and let the item completely dry. I turned on the Caron oven chamber and set the temperature to 80 degrees Celsius and the humidity to 65% and waited until the proper Ninhydrin temperature and humidity was met. I placed the item into the oven along with a control and waited approximately five minutes until purple ridge(s) developed and waited a few more minutes after that to ensure the developing process was completed. I turned the oven off and removed the item.
9GB4UM	Visual Examination DFO Ninhydrin	white light & LASER & Polilight
9KN4QE	Visual Examination Ninhydrin	white light Ninhydrin Acetone formula. heat and humidity applied
9MAQJ2	Visual Examination Photocopy Ninhydrin time Visual Examination steam time Visual Examination steam Photograph	On 11/09/23 On 11/09/23 On 11/22/23, dipped in Ninhydrin, hung to dry 7 days On 11/16/23 On 11/16/23 6 days On 11/22/23 On 11/22/23 On 11/22/23, using alternate light source to enhance
9NRPVD	Iodine Ampoules	Item 3 was removed from its packaging and photographed. A visual inspection was carried out. Artificial light was used and item 3 was introduced into a plastic bag with a snap closure, the iodine vial was inserted, sealed and the vial was broken, after 3 minutes it was possible to observe the impression developed.
9PZRRB	Visual Examination 1,2-Indanedione Alternate Light Source Ninhydrin	applied 11/3/23 viewed IND 11/3/23, 11/13/23 used Pet Ether version, applied 11/13/23, viewed 11/20/23

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
9UY7CE	Visual Examination	10/24/23-ambient lighting. no ridge detail observed
	Ninhydrin	10/24/23. NinhydrinHT formula was utilized since the Ninhydrin Special Formula expired. Ninhydrin with Acetone was not utilized for fear of negatively affecting the inked labels. Light purple fingermark developed; documentary photos captured. Allowed to sit overnight to promote additional development. Ninhydrin HT lot 202202023 exp 3/16/27
	Visual Examination	10/25/23-ambient lighting. Stronger purple color development was observed in section A after letting the Ninhydrin develop overnight. No sufficient ridge detail was observed. Documentary photos captured.
	1,2-Indanedione	10/25/23 1,2-Indanedione was applied to develop actual ridge detail. Initial visual examination after applying 1,2-Indanedione yielded no ridge detail, no fluorescence, and no pink color development. Allowed to sit overnight to promote additional development. 1,2 Indanedione power lot 202108083 exp 9/2024. Ethyl acetate lot 200213 exp 2/2025. HFE 7100 Fluid lot 25742 exp 3/24/27. 1,2 Indanedione Working solution lot 102523DK exp EOD. Brightbeam Laser serial number SN1127 wavelength 532nm (green)
	Visual Examination	10/26/23 Brightbeam Laser serial number SN1127 wavelength 532nm (green). Visual examination after allowing the envelope to sit overnight yielded no pink color change as well as no fluorescence. Positive control for 1,2-Indanedione showed stronger fluorescence on 10/26/23 than initially observed on 10/25/23.
Vacuum Metal Deposition	10/26/23. VMD processing using gold followed by zinc yielded no development of ridge detail. The same positive control used for 1,2-Indanedione processing was used for VMD processing; ridge detail developed on positive control. VMD serial number 674	
9YMYE	Visual Examination	
	Alternate Light Source	520nm, 445nm, 365nm
	1,2-Indanedione	
	Ninhydrin	
Physical Developer (PD)		
A96WJC	Visual Examination	First I made a visual examination to locate the latent print but it wasn't visible.
	Alternate Light Source	Then I used an alternate white light source obliquely to highlight the latent print but it wasn't visible neither.
	Iodine	To develop the latent print I used an transparent sealed plastic bag and Iodine. I put the envelope and the iodine ampoule inside the plastic bag. It took approximately 10 to 15 minutes to develop the finger print and it was visible in the letter A.
A9MZZP	Visual Examination	flashlight
	1,2-Indanedione	10 minutes in humidity chamber
	Alternate Light Source	Coherent TracER laser

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
AA7MY8	Visual Examination	White light - no results
	Alternate Light Source	Poly light - no results
	1,2-Indanedione	strong Finger Print
ACPNTT	Visual Examination	White light
	1,2-Indanedione	10 min, 100 C
	Ninhydrin	2 min, 62 % RH, 80 C
AHW6DF	Visual Examination	No friction ridges present upon visual examination with and without oblique lighting.
	Ninhydrin	Ninhydrin applied to item #3 by spraying. Faint friction ridge impression visible in section "A". Item #3 placed in forensic oven for 3 minutes at 80C and 65RH. Visibility of friction ridge impression greatly enhanced as a result of this process.
AJP8T4	Visual Examination	Vis exam with white light and LASER. No lats detected.
	1,2-Indanedione	Vis with LASER. Latent 3L1 detected in Box A. Photographed with LASER.
	Ninhydrin	Vis with White Light. Did not improve 3L1. No additional lats detected.
B3ZBFF	FSIS	VISUAL EXAM W/ UV LIGHT.
	1,2-Indanedione	Placed into humidity chamber for approximately 15 mins. Visual exam with green laser and orange filter.
	Ninhydrin	Place into humidity chamber for approximately 15 mins. Visual exam under white light.
BDZZWG	Visual Examination	Tungsten/Incandescent, fluorescent, and TracER laser used to view item
	DFO	Oven @ 100 degrees C for 20min
	Ninhydrin	Oven @ 80 degrees C and 65% wet bulb for 3 min
BGYEK7	Visual Examination	
	1,2-Indanedione	10 sec. under press
BJJFET	Alternate Light Source	RUVis exam
	Iodine crystal fuming	
	Powder Dusting	black magnetic powder
	Ninhydrin	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
BKZMLV	Iodine	The item was placed into a zip top bag along with a weigh boat with Iodine crystals. The zip top bag was closed and the iodine crystals were agitated. After several minutes the item was removed from the zip top bag and inspected using a magnifier and light.
	Ninhydrin	Item was sprayed with Ninhydrin and left to dry, then placed into a temperature and humidity chamber set at 80 degrees Fahrenheit and 60 percent humidity for three minutes. Item was inspected using a magnifier and light.
	Silver Nitrate	Item was sprayed with Silver Nitrate and left to dry in a dark area. Once dried the item was taken outside to be placed into the sunlight (UV light) for approximately two minutes.
BLRJBP	Visual Examination	White Light & ALS
	1,2-Indanedione	15 min @ 100* C
	Ninhydrin	15 min @ 80* C & 80% RH
BPBK7B	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	Oven
	Ninhydrin	
	Physical Developer (PD)	
C7VTL7	Iodine crystals	Item was exposed to iodine crystals fumes from a vial for about an hour.
C9KR9G	Visual Examination	
	Ninhydrin	Item was sprayed. Item was then placed inside the Caron FP Development Chamber set at 70 degrees Celsius and 70% humidity for 20 minutes.
	1,2-Indanedione	Item was sprayed. Item was then placed inside the Caron FP Development Chamber set at 100 degrees Celsius for 20 minutes.
	Alternate Light Source	Item was examined using a Coherent Laser light source and orange filter.
CBMZ6E	Alternate Light Source	Mark search was done by following ways: 1. Blue Light (445 nm) using Goggle (495 nm). 2. Green Light (532 nm) using Goggle (550 nm). No Print 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 B
	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
CCMQJA	Ninhydrin	Amino Acid Reagent - Ninhydrin with humidity

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
CL3RQ3	Ninhydrin	Porous surface treated with Ninhydrin aerosol spray
	Developing chamber	Item was developed in Air Science Safe Developing Chamber at 80C, 65% humidity for 25 minutes
CNDKUH	Ninhydrin	used steam from iron to activate chemical reaction. Very faint
CNEEDN	Visual Examination	*Please note that gloves were worn at all times throughout this processing. Item 3 was first removed from its packaging and visually examined. No possible ridge detail was observed at this time.
	Ninhydrin	*Please note that gloves were worn at all times throughout processing. Because item 3 was observed to be a paper item, ninhydrin was selected for processing. A positive control was created utilizing a clean piece of white butcher paper. Ninhydrin (Lot #06292023JRL, EXP: 06/29/2024) was sprayed onto the control paper and allowed to dry for approximately 60 seconds. A Black and Decker brand hand steamer was turned on and allowed to heat up until it began producing a steady flow of steam. The control was then held in the steam approximately 10 inches away from the steamer for approximately 30 seconds. Positive results were observed on the control. Identical steps were taken to process item 3. At this time, a purple discoloration and ridge detail were observed in quadrant "A" of item 3. The item along with the control were then placed into an unsealed plastic bag and placed into a temporary evidence locker pending further analysis at a later date.
CQXLN6	Visual Examination	Visual examination with natural light.
	1,2-Indanedione	Sprayed and allowed to dry. Applied heat for 5 minutes. viewed with laser at 525nm.
	Ninhydrin	Sprayed and allowed to dry. Let item sit for 24 hours. Placed in humidifier for 30 minutes at 40 degrees C and 80% humidity.
CX2K2F	Visual Examination	The item was first examined utilizing Ambient / Oblique lighting, and no ridge detail was observed.
	Full Spectrum Imaging System	The item was then examined utilizing the Full Spectrum Imaging System (FSIS) at 254NM, and no ridge detail was observed.
	Ninhydrin	The item was then dipped in Ninhydrin and allowed to fully dry inside of a hooded vent. After drying, a steam iron was used to heat the items surface, and ridge detail was observed in section A.
D2G6UM	Visual Examination	Item viewed under white light and with flashlight.
	1,2-Indanedione	1,2-Indanedione was applied to the item and developed in a Caron oven at 80 degrees C for 20 minutes and viewed with a TracER laser.
	Ninhydrin	Ninhydrin was applied to the item and developed in a Caron humidity oven at 80 degrees C and 80% humidity for 20 minutes.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
DGQ4Q7	Visual Examination 1,2-Indanedione Ninhydrin	I used natural light to perform a visual examination of the item. 1,2-Indanedione applied to item, applied heat. One latent print developed in section A. Ninhydrin applied to item and placed in humidity chamber for 30 minutes for development. Chamber set to 40 degrees C and 80% humidity.
DL8GJ8	1,2-Indanedione	Item dipped in 1,2-indanedione, heated at 100 degrees C for 20 minutes, and then examined using a BrightBeam Laser 532nm (green) / Orange Curved Filter / FF 1.0 Narrow Band Pass Filter - Prints were observed.
DMGDZ6	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin	White light Blue and green light 10 min at 100°C 2 min at 80°C and 62% RH
DNT4CU	Visual Examination Ninhydrin	A visual examination of the envelope was done using oblique lighting. No ridge detail visualized. Before ninhydrin was applied to the envelope, a control was created by placing a print on a piece of paper. Ninhydrin was then placed onto the piece of paper and air dried. Heat was applied to the paper and purple colored ridges developed and were visualized. Ninhydrin was placed on the evidence item and air dried. The evidence was then placed into a humidity-controlled chamber with the temperature set at 80 degrees Celcius and the humidity at 65% for approximately 10 minutes. Purple colored ridge detail developed on section A.
DR749L	Visual Examination Indanedione Ninhydrin	Viewed with white light, ALS, and laser Catalyzed in Oven Catalyzed in Humidity Chamber
DR8ZJG	Visual Examination DFO Ninhydrin	Crime-lite, LASER
DVQ2E4	Visual Examination 1,2-Indanedione Ninhydrin	Forensic light sources (white, green, blue) 100 degrees celcius, 10 min 80 degrees celcius, 62 RH%, 2 min
ENLKHN	1,2-Indanedione	Hot press treatment for 10 seconds, Temperature=165°C
ER4HD7	1,2-Indanedione	heated in the oven for 20 min.
F2NDM6	1,2-Indanedione Alternate Light Source	Two applications of Indanedione, followed by application of heat Laser

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
FCADJ3	Visual Examination, Ninhydrin, Steamer	Visual Examination with white oblique lighting, Ninhydrin, and Steamer to accelerate enhancement.
FECF6X	Visual Examination 1,2-Indanedione Ninhydrin	Conducted VIS with Ambient and White Lighting. Conducted IND processing by performing the spray method and allowing the item to air dry. Placed the item into the Caron Forensics Humidity Chamber (Model: 6105-2) with heat and humidity for 10 minutes to expedite the development of LPs. Utilized TracER LASER to visualize. Conducted NIN processing by performing the spray method and allowing the item to air dry. Placed the item into the Caron Forensics Humidity Chamber (Model: 6105-2) with heat and humidity for 10 minutes to expedite the development of LPs. Utilized White Light to visualize.
FG4CUR	Ninhydrin	Ninhydrin was utilized, along with a positive control, to develop any present latent impressions. A iron with steam was utilized to increase processing time.
FK2VXB	Visual Examination 1,2-Indanedione Ninhydrin	Initial examination with white light and light source (blue and green light). No visible fingerprint. 100 degrees, 10min processing time. Teststrip positive. Visible fingerprint in section A with green light and orange/red filter. 80 degrees, humidity 62%, 2min processing time. Teststrip positive. Visible fingerprint in section A with white light.
FMNK4A	Visual Examination Alternate Light Source DFO Ninhydrin	visual with white light (-) FSIS (-) dye stained w DFO / viewed with forensic blue laser (+) stained with NIN / viewed with white light (+)
FQ9CFC	Visual Examination DFO Ninhydrin	
FQRFNC	Sequential Processing	DFO (heating chamber for 20 minutes) followed by LASER (print was developed and photographed with the DCS5, printed and placed on a lift card), followed by Ninhydrin (heat & humidity chamber with no further enhancement), followed by Physical Developer (no further enhancement).
FXRP7X	Visual Examination Ninhydrin	
FZG4KZ	1,2-Indanedione	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
G8C7MC	Visual Examination	Regular fluorescent lighting - 11/17/2023- No Ridge Detail noted.
	Visual Examination	FSIS - 11/17/2023 - No Ridge Detail noted.
	Iodine	Shake and bake method, Iodette Ampoules - 11/17/2023 - Ridge detail developed and photographed (lot# IO231117A)
	Ninhydrin	HFENinhydrin - spray method - 11/17/2023 - Ridge detail developed and photographed (lot# HFENIN230309).
GAW8GX	Dye Stain	Dye stained/treated with Ninhydrin and developed in caron chamber 80C @ 70% humidity for 15min.
	Visual Examination	Viewed with white light. Test print positive.
GCKY7A	1,2-Indanedione	sample placed in NINcha S31 chamber at 100 degrees C for 5 minutes - viewed results with Laser (Bright Beam) / 532nm / used orange goggles; little to no RD visible - re-dipped item in 1,2 Indanedione and placed in heat press 213 F for 15 seconds - viewed results with Laser (Bright Beam) / 532 nm / used orange goggles
	Ninhydrin	sample placed in NINcha S31 chamber at 60 degrees C and 80% humidity for 20 minutes
GDEPCN	Visual Examination	Visualised with a white crime-lite no FRD found
	Alternate Light Source	Laser, UV & Blue crime-lite. no FRD visualised
	Physical Developer (PD)	Treated with PD, examined using ring light and crime-lite. no FRD visualised
GGMH2M	Ninhydrin	- Wear the personal protective equipment (PPE) to check if the package was well sealed; - Apply digital photography with camera canon 1100D for recording the package; - Open the package containing 3 items; - Apply digital photography with camera canon 1100D for each item; - Open item 3; - Proceed with visual examination; - Apply digital photography with camera canon 1100D for recording the small white envelop; - Apply ninhydrin spray under safety cabinet; - Apply heat under NINCHA M31 for about 50 minutes; - Apply digital photography with camera canon 1100D for recording developed latent print with camera, reproduction table with a ruler closer to the developed latent print ; - Enhancement using DCS-5 machine with forensic light source (FLS: e.g: Ring light); - Apply digital photography by using DCS-5 camera Nikon D6 to save image of enhanced latent print; - Processing time was about one and a half hour; - Ninhydrin spray was used.
GGZ7U9	1,2-Indanedione	
	Ninhydrin	
	Physical Developer (PD)	
GJ3662	Iodette Ampoules and Black Magnetic Powder.	The piece was observed, white artificial light was used, use before Iodette Ampoules about 10 minutes and before Black Magnetic Powder was used to develop the fingerprint a little bit. The fingerprint was observed in the left upper corner, identified in the sections with the letter A.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
GLPN7Y	Visual Examination	No ridge detail observed
	Alternate Light Source	Insufficient ridge detail (orange goggles and 505nm) observed in quadrant B
	Ninhydrin	Latent (L1) was developed in quadrant A. The latent was photographed.
GRY6FM	Visual Examination	Examination under white light and latent print was not observed any position. However need to make it appear and clearer shape.
	1,2-Indanedione	The paper was placed in 1,2 indanedione solution, let paper around 20 minutes to dry. Using Foster + Freeman crime lite (Blue/Green 450 – 510nm @ Orange Filter (529nm)). A latent print was appeared on A position. However, it was not clearer.
	Ninhydrin	Putting paper on Ninhydrin solution, let paper dry around 15 minutes. The latent appeared clearer on A position.
GUMC4Q	Visual Examination	
	Ninhydrin	40°C +/- 5°, relative humidity 65% +/- 5%
GV2WW2	Visual Examination	Oblique lighting used to search for latent prints. No ridge detail detected.
	1,2-Indanedione	Item 3 processed with 1, 2-Indanedione by applying reagent, letting sample dry completely and then placing in oven set at 100 degrees Celsius for 20 minutes. CG3 detected in quadrant A.
	Ninhydrin	Item 3 processed with Ninhydrin by applying reagent, letting sample dry completely and then placing in humidity chamber set at 80 degrees Celsius and 65% humidity. CG 3 still detected in quadrant A.
GYGD76	Crystals iodine	Performed a visual inspection, to try and locate the latent print, this was not visible in plain view. Then proceeded to use the crystals iodine. Once applied, we waited for it to dry until the latent print was visible and then preserved it in photo. The footprint is located in the letter A.
H62XK6	Visual Examination	
	Alternate Light Source	520nm, 445nm, 365nm, 254nm
	1,2-Indanedione	Oven for 20 min
	Alternate Light Source	520nm
	Ninhydrin	Humidity cabinet for 20 min
	Physical Developer (PD)	
HRCWAP	Visual Examination	under white light
	Alternate Light Source	fluorescence examination (350nm-650nm under appropriate colour barrier filters)
	DFO	baked in the chamber DFO at approximately 100 C (212 F) for 10 minutes fluorescence examination in alternate light source (505nm-530nm under orange barrier filter)
	Ninhydrin	in the chamber with a humidity 65% and temperature 50 C for 10 minutes; visual examination under white light

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
HTQDBA	Visual Examination	Visually examined the evidence, using natural light source
	Iodine Fuming	used iodine crystals on the porous surface causing fumes to develop the latent print reacting to the fatty and oily components in the print, forming a yellowish-brown fingerprint (IO231117)
	Ninhydrin	sprayed evidence with ninhydrin reacting to the amino acids in the fingerprint forming a purple print (HFENIN230309)
HUJFRX	Visual Examination	Performed visual examination with white light, alternate light source and laser.
	1,2-Indanedione	Sprayed Indanedione on the paper. Waited about 20-30 minutes. Applied heat by ironing the paper.
	Alternate Light Source	Performed visual examination of the developed latent print using Foster Freeman DCS 5 with alternate light source.
	Ninhydrin	Sprayed Thermal Ninhydrin. Waited about 60 minutes and placed it in the humidifier chamber for 30 minutes.
	Visual Examination	Performed visual examination of the developed latent print using Foster Freeman DCS 5 with alternate light source.
HVAE7W	Cyanoacrylate Fuming	CA fumed for 45 minutes , 20 minute curing
	Ninhydrin	sprayed with Ninhydrin, placed in humidity chamber at 80 degree celsius. Test print positive.
J348RV	Visual Examination	The item 3 was visually inspected and examined following our LPPM.
	Ninhydrin	The item was sprayed with ninhydrin solution from eight inches away. Then, left to dry for 24 hours at room temperature and controlled humidity condition. One print was observed in quadrant A.
J6D3JE	Visual Examination	Item was visually examined prior to processing.
	Ninhydrin	Ninhydrin Lot # 06292023JRL, EXP: 6/29/2024. Positive and negative controls reacted appropriately. Item was sprayed with ninhydrin and allowed to air dry. Once dry the item was treated with steam for approximately thirty (30) seconds. Item was placed in a plastic bag and transferred to a secure locker to process overnight.
JB4CVY	Visual Examination	No ridge detail observed.
	DFO	Processed in the Nincha climate chamber with heat for approximately 20 minutes.
	Alternate Light Source	Orange barrier filter at 495nm. Ridge detail observed in quadrant A which was photographed.
	Ninhydrin	Processed in the Nincha climate chamber with heat and humidity for approximately 20 minutes. Additional photograph taken of impression in quadrant A.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
JCWECL	1,2-Indanedione	HEAT 160°C during 5". Composition of Indanedione formulation: - 1,2-Indanedione. - Zinc Chloride. - Ethanol. - Methanol. - Acetic Acid. - Ethyl acetate. - HFE 7100 (méthoxy-nonafluorobutane)
	Ninhydrin	HEAT 160°C during 8" Composition of Ninhydrin formulation: - Ninhydrine. - Methanol. - Acetic Acid. - Ethyl acetate. - HFE 7100 (méthoxy-nonafluorobutane)
JN8RR2	Visual Examination	negative
	Alternate Light Source	negative
	1,2-Indanedione	negative results after 2 applications
	Ninhydrin	positive results after 2 applications
	Physical Developer (PD)	1. Distilled Water Pre-Wash. 2. Maleic Aid Rinse. 3. Physical Developer Working Solution. 4. Distilled Water Post-Rinse. The envelope began to dissolve during step 3 and was removed from the solution prior to recommended time by manufacturer to prevent further destruction.
JVCHJ8	Visual Examination	Visually examined item. No friction ridge detail could be seen.
	Ninhydrin	Item 3 and a control were sprayed with Ninhydrin Heptane solution and allowed to dry before being placed into the Caron fingerprint development chamber for 20 minutes at a temperature of 70 degrees Celsius and the humidity level set at 70%. Friction ridge detail of possible value was developed.
JZME3N	Ninhydrin	
K2QUMY	Visual Examination	1 minute visual inspection; natural light
	1,2-Indanedione	1 minute application using squirt bottle method
	Fume Hood	16 hours dry time
	Visual Examination	1 minute visual inspection; natural light
	Iron	3 minute application dry heat with Iron
	Alternate Light Source	10 minutes using Foster Freeman DCS-5 Orange filter 550nm
	Ninhydrin	1 min application using squirt bottle method
	Fume Hood	1 hour dry time
	Humidity Chamber	1 hour in ESPEC humidity chamber
	Fume Hood	67 hours dry time in fume hood
K42PG4	Visual Examination	Viewed in visible light.
	FULL SPECTRUM IMAGIN SYSTEM (FSIS)	Examined with a FSIS using UV light and a filter.
	1,2-Indanedione	Saturated with IND (heat and humidity added) and examined with laser light at 532 nm and an orange filter.
	Ninhydrin	Stained with NIN (heat and humidity added) and viewed with visible light.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
K9EBNP	Visual Examination	
	DFO	after drying heated for approximately 20 minutes using a dry iron
KANCAN	Alternate Light Source	Examined using Crimelites white, blue and green and Coherent TracER laser, No latents fingerprints observed
	1,2-Indanedione	Sprayed with Indanedione Zinc, then heat treated in elna press
	Alternate Light Source	Examined using Crimelite green and orange goggles. Latent fingerprint observed in Section A
	Ninhydrin	Sprayed with Ninhydrin
	Alternate Light Source	Examined using Crimelite white, green. Nil additional latent fingerprints observed
KB3N78	Visual Examination	Item # 3, a white paper envelope. visual exam in ambient room lighting did not divulge any latent prints.
	Alternate Light Source	I used an alternate light source with orange and yellow barrier filter along with every available setting on the alternate light source to view the envelope in a darkened room. No prints were visible.
	1,2-Indanedione	I used indanedione, batch # 071823BG. I placed the envelope in a glass container and poured the Indanedione over the envelope, saturating the paper sufficiently. I hung the envelope in a fume hood, allowing it to dry. I placed the envelope in a Caron oven where it was exposed to a controlled environment of 100 degrees Celsius for ten minutes. I used a darkened room and alternate light source at 515 nm and an orange barrier filter to view the fluorescent latent print. I used a digital format, single lense reflex camera with an orange barrier filter to preserve the image designated as L-3.
KBXCHB	Visual Examination	white light, uv 415-590 nm
	1,2-Indanedione	white light, 450-590 nm
	DFO	white light, 450-590 nm
	Ninhydrin	white light, 450-590 nm
KJ74NZ	Nihydrin/ Acetone Fuming	Nihydrin/Acetone Fumming Chamber. Fixation technique through the scanner, model V700 PHOTO with image caption to 800 PPP resolution.
KNMBCY	Visual Examination	Visually looked at the item for any prints
	Alternate Light Source	Used 520nm Laser, 445nm Blue light, and 365nm UV
	1,2-Indanedione	Used Indanedione and placed the item in the oven for 20 minutes, afterwards used the 520nm Laser
	Ninhydrin	Used Ninhydrin and then placed the item in the humidity cabinet for 15 minutes and then performed a visual examination
	Physical Developer (PD)	Used physical developer on the item and then performed a visual examination

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
KNQQNZ	Visual Examination	visual examination using oblique lighting and Alternate Light Source under multiple wavelengths
	1,2-Indanedione	Item placed in Caron Chamber at 100 degrees C, with 60% humidity for 20 minutes.
KPH6VP	Visual Examination	
	Photocopy	Front and back
	Ninhydrin	Applied on 10/25/23, time
	Visual Examination	11/01/23, time
	Visual Examination	11/06/23
	Photograph	11/06/23, time
	Visual Examination	11/08/23
KR27PB	Dye Stain	Ninhydrin dye stain processed in humidity chamber for 5 min at 80C/65% humidity
KUR8XK	1,2-Indanedione	
	Ninhydrin	
KV6YP2	Visual Examination	Observe the small white envelope, divided into section A-D, and could not find the fingerprint with naked eye.
	Iodine crystal amp	Place the small white envelope, divided into sections A-D in a plastic container and a vial of iodine and latent print was developed in a few minutes
KV8GWD	Ninhydrin	Dipped in ninhydrin solution
KVZJDZ	Ninhydrin	6 minutes in the Labrum Klimat chamber.
KXRHQY	Visual Examination	Used laser
	1,2-Indanedione	20 seconds with dry iron
	Ninhydrin	Used Thermal ninhydrin. 30 minutes in humidifier and left overnight.
L4DV6R	Visual Examination	The item was photographed before examination
	Ninhydrin	after applying Ninhydrin to the whole item, a visible mark was found in section A
LAJFG4	DFO	Sprayed with DFO solution (pre-mixed), allowed to dry. Heated in oven at 100C for 20 minutes.
LD2LRK	Visual Examination	White light, different angles
	1,2-Indanedione	Process time: 10 minutes. Temperature: 100°C. Relative humidity: 0%
	Ninhydrin	Process time: 2 minutes. Temperature: 80°C. Relative humidity: 62%
	Physical Developer (PD)	Maleic acid: 10 minutes. Working solution: 5 minutes

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
LEWZMP	Visual Examination	After opening the evidence envelope, I visually examined the item using oblique lighting.
	Ninhydrin	After making sure the quality control worked, I applied non-running ninhydrin onto the evidence item. After it was dry, I placed the evidence into the oven for approximately 4 minutes.
LQL2VJ	Visual Examination	examined with white light
	1,2-Indanedione	pipetted chemical onto item with IND then placed into NINcha M31 oven for 20 mins at 100°C 0% humidity; ridge detail located in quadrant A
	Ninhydrin	pipetted chemical onto item with NIN then placed onto a t-shirt press set at 310°F for 1 min. negative results
LX9UA4	Visual Examination	Conducted visual examination on the item using UV, 450, 505 (ROFIN ALS) and laser (LaseR ALS) with yellow, orange and laser filters, prior to processing.
	1,2-Indanedione	Used 505 light source (ROFIN ALS) with an orange filter, to visualize areas of ridge detail.
	Ninhydrin	
M4BB4B	Ninhydrin	saturated with liquid Ninhydrin, allowed to dry 10 min. Introduced heat and steam from hand held iron. Very faint development. Re-saturated with liquid Ninhydrin, allowed to dry 10 min. Introduced heat and steam from a steam kettle. Developed more visible.
M6KBCX	Powder Dusting	Latent print revealed with gray magnetic powder dusting applied with a magnetic brush. Latent print was not revealed. The folder was open with the small White envelope divided into quadrant A, B, C, and D.
MGGG7W	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Ninhydrin	
	Physical Developer (PD)	
MYWMGT	Ninhydrin	Sprayed item with ninhydrin; Developed in safe develop chamber at 80°, 65% Humidity for 5 mins. Test print was positive.
N3DKB2	DFO	heated at 100 degrees Celsius for 20 minutes
	Ninhydrin	heated with steam iron
N87CVQ	DFO	Item was treated with DFO and developed in caron chamber for 20 min
	Alternate Light Source	Viewed with forensic laser. Test print was positive.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
N87EKV	Visual Examination	
	Alternate Light Source	532nm laser, 450nm Blu light, and 365nm UV
	1,2-Indanedione	Developed in oven, examined under 532nm laser
	Physical Developer (PD)	
NELDUZ	Iodine crystals	Item was treated with iodine crystals for about an hour revealing a latent print on the A quadrant.
NJLCD7	Ninhydrin	Soaked in Ninhydrin for about 12 seconds. Air Dried for about 5 minutes. Humidified with an iron for approximately 20 minutes.
NKDBR4	Visual Examination	I did a visual exam of the item prior to processing using a flashlight and oblique lighting with negative results.
	DFO	The item was dipped into DFO (Lot #22.2) dried, then dipped a second time and dried. Then it was placed in the DFO chamber which was pre-heated to 100° C. A DFO print was observed on section A.
	Ninhydrin	The item was dipped into Ninhydrin (Lot #23.3) and dried. Then it was placed in the Ninhydrin chamber which was pre-heated to 50° C and 80% humidity. The item was heated in the chamber for 20 minutes with negative results.
	Physical Developer (PD)	The item was processed with physical developer with negative results. The steps taken were the following: 1- Maleic Acid Rinse, Lot #23.3, 5 minutes. 2- PD, valid with test strip, 10 minutes (Redox lot #23.3, Detergent, Lot #23.1, Silver Nitrate Lot #23.1). 3- Fixer, Lot #23.2, 5 minutes. 4- DI Water Rinse, 10 minutes. The item was then dried in the drying cabinet.
NWWPTL	Visual Examination	
	DFO	heat applied for twenty minutes after
	Alternate Light Source	
	Ninhydrin	steamed after and allowed processing time of ten days minimum (nineteen days), then reapplied ninhydrin and steamed and allowed to process for one day
NW7U9V	Visual Examination	White light, Laser 532 nm, Laser 577 nm, FLS
	1,2-Indanedione	1,2,Indanedione/ZnCl ₂ (Ramotowski, 2009), Heating press 165°C – 10 seconds
	Alternate Light Source	Laser 532 nm – Orange filter
	Ninhydrin	- 4 g ninhydrin. - 20 ml ethanol. - 10 ml acetic acid. - 70 ml ethyl acetate. - 900 ml petroleum ether. 30 min : Temperature = 80°C, RH = 62%
	Alternate Light Source	White light and green light
NXL3B4	Ninhydrin	processing time : 48 hrs. Dye stain :Ninhydrine solution (2,2 dihydroxy indane-1,3-dione). The reaction needs humidity and dark place
NYFTGH	Ninhydrin	climate chamber 30°C; 65 RH

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
P3NVFJ	Visual Examination	First visualisation with white light and then after with blue-green light (445-510 nm) + yellow filter and blue light (420-470 nm) + yellow filter
	1,2-Indanedione	Indanedione/zinc chloride solution : Preparation of working solution ZnCl ₂ : - 0,16 ZnCl ₂ . - 4 ml ethanol. - 0,4 ml ethyl acetate. - 76 ml HFE-7100. Preparation of working solution 1,2-indanedione and ZnCl ₂ : - 90 ml ethyl acetat. - 10 ml acetic acid. - 0,8 g 1,2-indanedione. - add the working solution ZnCl ₂ . - 820 ml HFE-100. Heating under press : 160°C and 5 sec.
	Ninhydrin	Ninhydrin solution : - 5 g ninhydrine. - 45 ml ethanol. - 2 ml ethyl acetate. - 5 ml acetic acid. - 950 ml HFE-7100. Heating under press : 160°C and 8 sec.
P3PGEK	Visual Examination DFO	
P6AH97	DFO Alternate Light Source	DFO sprayed onto envelope and placed in Caron chamber for 20min Viewed with forensic laser
P9AT67	Ninhydrin	15 days
P9ZJGF	1,2-Indanedione Ninhydrin	
PDBNDA	Visual Examination Ninhydrin	Visual exam produced negative results Positive and negative controls; sprayed envelope with Ninhydrin and used steamer for approximately 15 seconds to accelerate drying; visualized latent in section marked "A;" placed in Locker 9 overnight to dry and allow for additional latent development. Lot# 06292023JRL, Exp: 6/29/24
PH3WEV	Iodine crystals	Evidence was treated with iodine crystals in a closed plastic bag for about half an hour.
PJ2VX4	Visual Examination DFO Ninhydrin Physical Developer (PD)	Visual exam using available light and a flashlight. Processing time: 5 minutes. Item was dipped in DFO solution, air-dried, dipped in DFO solution again, and air dried. Item was placed in a heat drying chamber. Processing time: 20 minutes. Item was dipped in Ninhydrin solution and placed in a humidifying heat chamber. Processing time: 20 minutes. Item was placed in Maleic Acid (processing time: 5 minutes), removed and placed in Physical Developer (processing time: 10 minutes), removed and placed in Fixer (processing time: 5 minutes), removed and placed in D/I water (5 minutes). Item was placed on a drying rack to dry. (processing time: 1 hour).

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
PRBMZ7	Visual Examination	white light used for exam. no RD observed. no photos taken
	1,2-Indanedione	dry heat press used. 160 degrees Celsius for 10 seconds. LASER exam at 532 nm with orange barrier filter. photos taken of LP in Quadrant A
	Ninhydrin	heat/humidity chamber used to accelerate process. Temp: 80 degrees Celsius. Humidity: 70%. Time: 15 minutes. visual exam. no photos taken
PT3HPZ	Ninhydrin	
PTQLKV	Visual Examination	When observed in white light, the trace not visible at all. When observed in the wavelength range 430-550 nm through orange filter, likewise.
	DFO	Working solution based on FHE7100, 15 min. heating in temperature 90°C. Afterwards, the trace visible both in the light of Forensic Light Source and in the daylight.
	Ninhydrin	Working solution based on FHE7100, 15 min. heating in temperature 90°C. Afterwards the trace visible both in the light of Forensic Light Source and in the daylight.
PW6GX8	Visual Examination	11/14/23: Magnifier lamp and magnifier loop: Exhibit 3: No FRD is visible in any of the sections of the small white envelope.
	Alternate Light Source	11/15/23: CRIMESCOPE CS-16-500: 350-535 nm with clear, yellow, orange, and red goggles: Exhibit 3: No FRD is visible in any of the sections of the small white envelope.
	Ninhydrin	11/15/23: Exhibit 3: Ninhydrin Working Solution (Petroleum Ether) was applied to the small white envelope by squeeze bottle method. Allowed to dry in the fume hood. Placed in the NINcha M31 for 10 minutes at approximately 75°C and 65% relative humidity. Removed to prevent overprocessing.
	Visual Examination	11/15/23: Exhibit 3: Post Ninhydrin: Magnifier lamp and magnifier loop: FRD is visible in only Section A of the small white envelope. Will be scanned.
QA32PV	Visual Examination	Used oblique lighting and a bright white light.
	Alternate Light Source	Used 365nm (UV light) and the Dual 77 (445nm and 520nm).
	1,2-Indanedione	Item was processed with 1,2-Indanedione using a squirt bottle and then allowed to dry. Item was placed in the 100-degree Celsius oven for approximately 20 minutes. The item was then examined with bright white light and the Dual 77 (520nm). A check occurred during IND.
	Ninhydrin	Item was processed with Ninhydrin using a squirt bottle and then allowed to dry. Item was placed in the 76% relative humidity chamber for 15 minutes. The item was then examined with bright white light.
	Physical Developer (PD)	Item was processed with physical developer. Item was placed in a maleic acid bath for 15 minutes. The item was then removed and placed in a Redox Working solution for 15 minutes. The item was then placed in a distilled water rinse for a few minutes and moved to a second water rinse. Once the item was dry (used a drum-dryer), it was examined using bright white light.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
QEHADV	Visual Examination	A visual examination was conducted on the envelope and no visible ridge detail was located. This process took approximately 5 minutes.
	Ninhydrin	Following the visual examination, ninhydrin was pipetted on the exterior of the envelope and allowed to dry (this step was conducted twice). The envelope was then placed inside of our environmental chamber (at 80 degrees Celsius and 65% humidity) for development. This process took approximately 15-20 minutes, and a small amount of purple color was located in the section labeled "A", but no ridge detail was developed. Due to the small amount of purple color developing, the above-mentioned process was repeated and again yielded no ridge detail.
	Dye Stain	Following the Ninhydrin processing, the envelope was further chemically processed using Oil Red O. The envelope was placed inside of a plastic bag containing enough Oil Red O to completely cover it and then placed on an orbital shaker and agitated for approximately 15 minutes. The envelope was then placed inside of a plastic bag containing enough distilled water to completely cover it and placed on an orbital shaker and agitated for approximately 5 minutes. No ridge detail was developed.
	Physical Developer (PD)	Following the Oil Red O processing, the envelope was further chemically processed using Physical Developer. The envelope was placed inside of a plastic bag containing enough distilled water to completely cover it and the bag was agitated on an orbital shaker for approximately 5-10 minutes. Following the distilled water pre-wash, the envelope was then placed inside of a plastic bag containing enough Maleic Acid to completely cover it and then agitated on an orbital shaker for approximately 5-10 minutes. Following the Maleic Acid rinse, the envelope was then placed inside of a plastic bag containing the mixture of part A and part B of the Physical Developer solution. The bag was then agitated on an orbital shaker for approximately 10 minutes. Following the Physical Developer solution, the envelope was placed inside of a plastic bag containing distilled water and was agitated on an orbital shaker for approximately 3 minutes. Following the distilled water post-rinse, the envelope was allowed to air dry. No ridge detail was developed.
QTFGCW	Iodine	Evidence was photographed and subjected to Iodine fuming for @ 15hrs. Latent evidence was developed
R76QH3	Visual Examination	
	1,2-Indanedione	
	Alternate Light Source	LASER
RK6EQV	Visual Examination	no areas of ridge detail on visual
	Ninhydrin	applied ninhydrin

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
RTE2KG	Visual Examination	Visual examination of the item, 5 minutes processing time
	Magnetic Dusting	Dusted for prints using magnetic fingerprint powder, 7-minute processing time.
	DFO	Dipped the item in DFO for approximately 5 seconds and heated the item. Visualized using ALS and yellow goggles.
RUN7X7	Visual Examination	Visual examination completed of item 3 and observations were documented in the field notes
	Ninhydrin	PLAP standard used to test that the chemicals are working properly. Ninhydrin was applied to item 3 until item was coated. Item 3 was allowed to dry. Item 3 is then exposed to relative humidity.
T7GPEW	Visual Examination	The item was photographed and documented as per lab procedure. The item was first analyzed with the crime site scope with negative results.
	Ninhydrin	The item was processed with ninhydrin and a latent was located in section A.
TEPGGY	Visual Examination	No friction ridge detail
	1,2-Indanedione	CARON FP Development Chamber used. - 100°C. - Cycle time 20:00 minutes. Friction ridge detail of possible value
TJK9PW	DFO	Heat 20 minutes at 100 degrees C. View with laser (ALS)
	Ninhydrin	Visual examination
TK26HW	Ninhydrin	The item was processed using limited ink ninhydrin (lot # 110723JS) and after drying was placed in the humidity chamber for 30 minutes. The test print was positive.
TNJP3Q	Visual Examination	The item was visually examined using ambient and oblique lighting. No latent prints were observed.
	Ninhydrin	The item was dipped in Ninhydrin and dried by hanging. The item was then placed in the humidity chamber for 5 minutes at a humidity of 65%. A latent print was observed in section A. A test print was ran prior to and at the same time and both yielded a positive result.
TNXTWH	Visual Examination	Examined under white light and magnifier
	Ninhydrin	After conducting control, applied non-running ninhydrin to item. Placed into Caron over that had reached appropriate conditions, and waited approximately 10 minutes before removing the item.
U2JNPM	Visual Examination	Examined document for presence of latent print.
	Ninhydrin	Ninhydrin in Acetone - dipped into solution, then left to dry on brown paper on counter. Steam heated with iron, then dried in appropriate location overnight. Packaged in plastic sleeve and sealed with evidence tape.
UH6F7E	Visual Examination	
	1,2-Indanedione	temp. 90 C, humidity 5%, time 15 min
	Ninhydrin	temp. 21 C, humidity 80%, time 30 min

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
UKDDVN	Visual Examination DFO Ninhydrin	
UKTK6D	1,2-Indanedione	Development at 165°C for 10 seconds.
UMHYMV	Iodine Crystals	I use an Iodette Ampoule and wait around 30 minutes to take effect the gas.
UMWKWW	Visual Examination Alternate Light Source 1,2-Indanedione Visual Examination Alternate Light Source Ninhydrin Visual Examination Alternate Light Source	<p>1) The small white envelope is observed to naked eye. No trace detected.</p> <p>2) We illuminate the small white envelope with the Crimescope MCS-400 at different frequencies with the appropriate filters and colored glasses, under different inclinations. No trace detected.</p> <p>3) In view of porous support, we vaporise the solution 1,2-Indanedione, under a hood, on the small white envelope, then we wait 2 minutes for evaporation of the solution. Then the object is placed under a heating press at 165°C during 10 seconds. The solution 1,2-Indanedione is tested in parallel on a control.</p> <p>4) We observe a slight pink color, with the naked eye, in the box "A". We can determine the type of trace pattern. We don't observe other traces elsewhere on the object.</p> <p>5) We observed the small white envelope with crimescope MCS-400 at CSS filter and orange filter glasses for observation. The fingerprint in box "A" is luminescent. We can clearly determine the pattern type of the trace. We don't observe other traces elsewhere on the object.</p> <p>6) We spray the ninhydrin under a hood on the object, then we wait 2 minutes for the solution to evaporate. Then the object is placed in a cuvette in the dark at room temperature with a beaker of water for 24-48 hours for a slow reaction. The object is checked regularly with the naked eye to verify the revelation of the purple fingerprint. The ninhydrin solution is tested in parallel on a control.</p> <p>7) The fingerprint is visible in the box "A" and colored in purple with naked eye. The coloring of the fingerprint is weak. We don't observe other traces elsewhere on the object.</p> <p>8) The fingerprint in case "A" is illuminated under different wavelengths of the Crimescope, with glasses of appropriate colors, to get the best contrast. The white light of Crimescope is the best result, but the coloration is weak. We don't observe other traces elsewhere on the object.</p>
UNQB3C	1,2-Indanedione	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
UP6HNT	Visual Examination	Visually examined for ridge detail
	Alternate Light Source	Examined item with 365nm, 445nm and 520nm wavelengths.
	1,2-Indanedione	Applied Indanedione, allowed to dry, placed in oven for 20min, then examined item visually and with 520nm wavelength.
	Ninhydrin	Applied Ninhydrin, allowed to dry, placed in humidity chamber for 15min, then examined item visually.
	Physical Developer (PD)	Submerged item in Maleic Acid wash, transferred to Physical Developer working solution, rinsed item with water then allowed to dry before visually examining the item.
URDTKW	Visual Examination	white light source
	Alternate Light Source	Blue (420-470nm), Green (480-560nm), UV(350-380nm)
	DFO	DRy bulb @ 100 C
	Ninhydrin	Dry bulb @ 80 C R/H @ 62%
UZ9L24	1,2-Indanedione	Heat applied using heat press at approximately 160 degrees C for approximately 10 seconds. Light source exam: Laser at 532nm with orange barrier filter
	Ninhydrin	Heat/humidity applied using steam iron. Item was then kept in a closed drawer and examined again after 24 hours and 48 hours. White light exam
VELE6Z	Visual Examination	Visual Examination of Item 3 was conducted through the use of ambient room light.
	1,2-Indanedione	Indanedione was applied to a test print deposited on white paper to ensure that the process achieved positive results. This involved spraying Indanedione over the white paper, allowing the chemical to evaporate and placing in the Caron Fingerprint Chamber for 10 minutes at 100 degrees. After observing pink colored development, the white paper was viewed in a dark room while wearing appropriate PPE, which included a lab coat, approved protection and viewing goggles and latex gloves. The test print achieved a positive result while being illuminated under 532nm emitted from a Bright Beam Laser. Indanedione was applied to Item 3 allowed to evaporate and placed in the Caron Fingerprint Chamber for 10 minutes at 100 degrees C. After observing pink colored development, Item 3 was viewed in a dark room under 532nm emitted from a Bright Beam Laser. An area of developed friction ridge detail was noted.
	Ninhydrin	Ninhydrin was applied to a test print deposited on white paper to ensure that the process achieved positive results. (This was the same test print used for the Indandione process being that this is a sequential method). Ninhydrin was sprayed over the white paper, allowed to evaporate and placed in the Caron Fingerprint Chamber for at 80 degrees and 60% humidity. The test print was viewed for optimal development which resulted in 3 minutes and achieved a positive result. Ninhydrin was applied to Item 3 allowed to evaporate and placed in the Caron Fingerprint Chamber at 80 degrees C and 60% humidity. Item 3 was viewed for optimal development and achieved a positive result in 5 minutes. An area of developed friction ridge detail was noted.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
VKB3EC	Visual Examination	
	Alternate Light Source	Oblique lighting
	Powder Dusting	Magnetic fingerprint powder
	Ninhydrin	Aerosol Ninhydrin spray: Processing/Air dry time - 30 minutes; Dry time in oven - 15 minutes
VKNRHN	Iodine crystals	Item was exposed to iodine crystals vapors for about an hour.
VV79BV	Visual Examination	White light
	Alternate Light Source	Polilight - all available wavelengths
	ESDA	Foster+Freeman ESDA 2/B
	DFO	100° C, 0% RH. Processing time 10 min
	Ninhydrin	80° C, 65% RH. Processing time 5 min
	Physical Developer (PD)	
VY9ADD	Visual Examination	Processing time: 2 minutes. No friction ridge detail was visible
	Ninhydrin	Processing time: approximately 1 hour. One area of friction ridge detail was visible
WG7K33	Visual Examination	Ambient lighting and ring lamp with magnification was used. No FRD present.
	Alternate Light Source	No FRD present; no fluorescence of FRD; Crime Lite ML2 used with orange filter with green and blue light .
	Ninhydrin	Processed with Ninhydrin Petroleum Ether mix; tray immersion application for 5 seconds; allowed to dry in fume hood for 10 min.; processed using the NiNcha M31 Chamber; 65% RH; 80 C; 30 min. in chamber; appreciable FRD is present in Square A.
	Visual Examination	Ambient lighting and ring lamp with magnification was used; FRD is present in Square A; Crime Lite ML2 used with orange filter and green light (480nm-560nm OG590)- slight improvement; orange filter with blue light (420nm-470nm GG 495) ;no improvement; some fluorescence with orange filter and green light; FRD to captured.
WJBMFK	Visual Examination	white light
	DFO	20 minute processing time
	Alternate Light Source	Blue-Green (445-510 wavelength)
	Ninhydrin	15 minute processing time
	Alternate Light Source	Green (480-560 wavelength)
	Visual Examination	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
WUB4D2	Visual Examination	No friction ridge detail was visible.
	DFO	DFO was applied.
	Alternate Light Source	ALS was used at 475nm - friction ridge detail was developed in quadrant "A".
	Ninhydrin	Ninhydrin was applied - no improvement or additional development was noted.
X3NE7T	Visual Examination	No visible prints.
	Alternate Light Source	No visible prints.
	Ninhydrin	Purple latent print developed and was photographed, LP3.
X4FBVM	1,2-Indanedione	Bright beam laser 532 nm (green)/ orange curved filter. FF 1.0 Narrow band pass filter used for Indanedione.
	Ninhydrin	1-day Ninhydrin used following Indanedione (no additional ridge detail developed w/ Ninhydrin).
XBCEEQ	Visual Examination	Visual Examination on both sides.
	Alternate Light Source	Visual Examination with Alternate white Light on both sides.
	Alternate Light Source	Another Visual Examination with Alternate violet Light on both sides.
	Iodine Crystal "Yodo"	"Developed with Iodine Crystal "Yodo" for 10 minutes.
XC76J6	1,2-Indanedione	Because item 3 is the porous paper, we use the 1,2-IND to enhance the latent fingerprint. Leave the Item 3 soaked in 1,2-IND solution, and air the paper. Heat it up with 120°C oven for 10 minutes. When using the 515nm light, we can observe the fluorescent of developed fingerprint with orange goggle.
	Ninhydrin	Besides, we apply ninhydrin to the sample. Soak the item 3 in ninhydrin solution, and air it overnight. The fingerprint pattern would turn pink.
XCNWTP	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Ninhydrin	
	Physical Developer (PD)	
XFRM3P	1,2-Indanedione	Visual first and in between each process.
	Laser	
XLY4JQ	1,2-Indanedione	1. Development using a 1,2-Indanedione-zinc. 2. Heat to 165 degrees for 10 seconds using a heat press
XR2DQJ	Visual Examination	white light- no results
	1,2-Indanedione	with hot press

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
XULEK6	Iodine crystals	
	Alternate Light Source	RUVIS
	Ninhydrin	Ninhydrin Heptane
XWVEPC	Visual Examination	The item was viewed and rotated under white light.
	Ninhydrin	The non-running ninhydrin formulation was used. The Caron was used for processing. One control was done prior to applying chemical to the evidence and resulted in the ridges turning purple. A second control was done concurrently in the Caron and ridges turned purple.
XX8W3Q	Visual Examination	flashlight at oblique angle used
	1,2-Indanedione	visualized with laser light, allowed to process for 24 hours prior to photo being taken
XXLMFP	Visual Examination	Visual white light, LASER, RUVIS
	1,2-Indanedione	Dry heat press, 2 minutes. LASER
	Ninhydrin	Steam heat. White light
Y24VY2	1,2-Indanedione	
	Ninhydrin	
YFKZXG	Ninhydrin	Ninhydrin with methanol
YHCVMB	1,2-Indanedione	1,2-Indandione with zinc chloride: the envelope was put in a closed recipient for 5 minutes with a relative humidity over 70%. The fingerprint on the envelope was developed by using a heat press during 5 seconds at 160°C.
	Ninhydrin	The fingerprint on the envelope was developed by using a heat press during 8 seconds at 160°C. There was no improvement so the best result was obtained after 1,2-Indanedione with zinc chloride.
YKLU7J	Visual Examination	
	DFO	DFO filter and DFO setting on NINcha
	Laser	Laser and orange filter used to view DFO developed imp
	Ninhydrin	NIN filter and NIN setting NINcha
YM6V3R	1,2-Indanedione	
	Ninhydrin	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
YQMFML	Visual Examination	Piece or item #3 is removed from the packaging and a visual inspection is carried out.
	Alternate Light Source	Another visual inspection is carried out using alternating light source and photographing the piece or item #3 before working on it.
	Iodine Crystal Ampoules	The piece or item #3 is placed inside a medium-sized transparent plastic bag with a snap closure along with the Iodine Vial, making movements of 3 to 5 minutes for its development. The latent print was developed in Section A at 10:45AM.
YTAYNJ	Powder Dusting	BVDA fingerprint powder Swedish soot mix black. This carbon based powder gave weak result, from which however you were able to see where the print was.
	1,2-Indanedione	65% humidity, 65 deg C temperature and 30 min processing time
YUH8VH	Visual Examination	Item was first photographed and looked at.
	Ninhydrin	Item was dipped into Ninhydrin.
YWQCGJ	Visual Examination	Lightsearch carried out using white light.
	Alternate Light Source	Lightsearch carried out using different wavelengths of light.
	1,2-Indanedione	Indanedione developed using heat press, viewed using 532nm laser.
	Ninhydrin	Ninhydrin developed using Nincha cabinet, viewed using white light.
	VMD	VMD applied to improve contrast, viewed using white light.
	Physical Developer (PD)	PD applied using shaker, viewed using white light.
Z4MEBH	Visual Examination	Observe the small white envelope, divided into section A-D and could not find the finger print whit naked eye.
	Iodine Crystal amp	Place the small white envelope, divided into sections A through D in a plastic container and use a vial of Iodine an latent print was developed in a few minutes.
Z7AXCF	Visual Examination	Visual examination with oblique lighting, with negative results.
	DFO	Sprayed DFO and allowed item to dry. Accelerated reaction with hot iron for 20 seconds. Visualized positive reaction in section A with use of ALS and orange goggles.
	Ninhydrin	Dripped item in Ninhydrin with methanol and allowed item to dry. Accelerated reaction by placing item in a humidity chamber for 20 mins at 174 degrees. Visualized positive reaction in section A.
ZB6RAG	Visual Examination	The item was examined under Forray Adam's imaging system to check the background Fluorescence.
	1,2-Indanedione	1,2- Indanedion zinc was sprayed on evidence item. The item was air dried for few minutes pressed with iron for less than 30 seconds..
	Visual Examination	The item was examined under Forray Adma's imaging system at 505 nm with orange filter 21.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
ZQ3Y8J	Visual Examination	~1 minute viewing item.
	Ninhydrin	~20 seconds spraying solution onto item. ~1 hour curing.
	Heat	Applied heat to item using steam iron for ~5 minutes to accelerate curing.
ZQXJVH	Visual Examination	The lights that were used in visual examination for locating the possible fingerprint are bright light, green light and UV-light. The fingerprint was still not found.
	1,2-Indanedione	processing time 30 minutes, temperature 65 degrees celsius, humidity 65 percent
	Visual Examination	Visual examination with green light and red goggles. A fingerprint was found.
ZUYMNQ	Visual Examination	in natural light and light from forensic illuminators - no print
	DFO	time 20 min., temp. 100°C, RH 0%, - a latent print was observed in section A (viewed with orange goggle at 505 nm)
	Ninhydrin	time 20 min., temp 70°C, RH 60% - the observed fingerprint mark did not improve
ZWPL3N	Iodine crystals	Item was exposed to iodine crystals vapor resulting in the developing of a latent print.

Item 3 - Development Response Summary				Participants: 238
Methods Utilized				
Alternate Light Source	77	Physical Developer	21	Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.
Cyanoacrylate Fuming	1	Powder Dusting	6	
DFO	38	Visual Examination	172	
Dye Stain	4	Wet Powder Suspension	0	
Ninhydrin	175	1,2-Indanedione	92	

Preservation Methods

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
23UZ76	Photography	Photographed visible latent print and photographed latent print after application of fluorescent dye stain (MRM-10).
	Lifting	After applying black magnetic powder, I collected 1 lift card using standard lift tape and a department latent card.
24JDNM	Lifting	Item was photographed and then preserved using a white plastic print lifter.
26J63H	Photography	10/26/2023: overall, mid-range, 1:1 close-up; Nikon D7500
2AAEDG	Photography	
2NAK37	Photography	Prior to processing for prints, I took digital image #1 of the visible impression in Quadrant D. Using a DCS5 camera, this impression was taken in TIFF/1000+ppi. After processing with cyanoacrylate ester fuming, image #2 was taken, also in TIFF/1000+ppi. These images were made 1:1 and a Master disc and a Working Copy disc were burned with the images.
	Lifting	After processing the item with black powder, the impression in Quadrant D was lifted with fingerprint tape and placed on a latent print card. The required information was filled out on the card, including a drawing of the item with an "X" placed in the area of the lifted impression and orientation arrows by the drawing and the tape lift.
2VMHLJ	Photography	digital camera
336737	Lifting	
338RXL	Photography	Digital images were captured of the item before processing, as well as of the item and latent print, both with and without a scale, after processing.
	Lifting	After photography, the latent print was lifted using fingerprint tape and placed on a latent lift card for submission to the Latent Unit for examination.
38H3NV	Lifting	With lift tape
3AMGAF	Photography	
3CXACU	Photography	Photo A from section D of the wrapping paper with the Alternate Light Source
3TFH6H	Photography	Process of preserving the fingerprint through photography with and without a ruler.
	Lifting	After photo documenting the fingerprint, I process it by lifting it with a hinge lifter and thus preserving it.
3VMU7T	Photography	Visual: 2 Photos taken with CSU camera 11/lens 3 with direct LED lighting. CA: no enhancement. Nin: no enhancement. PD: no enhancement
	Scanning	Powder: 1 scan with the CSU scanner 13

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
3Y6V77	Photography CD-R	Digital photos - Canon EOS 60D, 100 mm lens, scale ruler. CD-R (burning the captured photos onto a CD-R).
42RREW	Photography	Photographed after CA using the UV light with the FSIS camera
43HZEZ	Lifting	magnetic powder lift
46AAAM	Lifting	Tape lifted print and placed on latent print card.
48TB69	Photography	Photographed Latent 1L1 at VIS and CAE using white light and IND using the LASER and orange filter.
4CPQ3W	Lifting Photography	
4F9WDD	Photography	(1) Photograph after CAE fuming with white light. (1) Photograph after fluorescent dye (R.A.M.) using ALS and orange filter
4FKTHH	Photography	SE TOMO FOTAGRAFIA, ANTESY DESPUES DLE PROCESAMIENTO COMO METODO DE FIJACION
4FN9VH	Lifting	The fingerprint was photo documented and lift with adhesive tape.
4FRQ3U	Lifting	I used lifting tape to collect the print and placed it onto a form 74. The form 74 was packaged and sealed for further latent print examination.
4PV4H	Photography	debido a la superficie solamente se presevo el fragmento con cinta y se le tomo fotografias al mismo como metodo de fijacion
4PYBGJ	Photography Lifting	Was photographed to 90 grades use a Nikon D7500 camera and rule. Lift the latent print whit a white plastic patch and fill the information in the patch.
4WTMCC	Photography	Digital Capturing System DCS-5. Cyanoacrylate: White light source. Dye stain (Rhodamine 6G): Blue/Green (460-510nm) with filter OG-550
4YKJ27	Photography	Trasoscan + photographie digitale. min 1000 ppi - min 8 bits
6262HH	Photography	10/31/2023-Overall, midrange, 1:1 closeup with Nikon 7500 taken after visual examination. 10/31/2023-Overall, midrange, 1:1 closeup with Nikon 7500 taken after Lumicyano fuming
69LJRJ	Photography Lifting	It is photo documented for preservation and subsequent analysis. The fingerprint hinge lifter is identified with the information corresponding to the case and the fingerprint fragment is lifted for future analysis.
69MA7E	Photography	DSLR - Digital capture after visual and each treatment.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
6B7B2Z	Photography	Photographed after visual examination with white and blue light, and photographed after cyanoacrylate fuming.
6G4PW3	Photography	Overalls of the item and it's packaging were taken with a camera mounted to a copy stand. This was done before any chemical processing took place. The lift on the item was photographed as lift #2 as it was the second item processed that had sufficient ridge detail. Photo lift #2 was initially photographed on a copy stand using a flashlight. The flashlight was used at different angles and distances from the item. This was done for both the visual and CA process. Each process was documented separately. After the application of MRM-10 an ALS set to a 450 nm wavelength was used and an orange barrier filter was on the camera lens to photograph item ridge detail again (photo lift #2).
6JKAJH	Photography	Digital photography
6RFAVP	Photography	All images were uploaded into the Authenticated Digital Asset Management System (ADAMS) and the laboratory's Information Management System (LIMS).
7HTEUN	Lifting	Lifted with latent print tape and placed on latent lift card
7M2U4D	Photography	DCS5 System. Copy stand white lights. Polarizing filter. L01 - Section D, wrapping paper
	Lifting	Clear tape on white card. L02 - duplicate of L01
7VWW7N	Photography	
7W7VEC	Photography	
7YD6UN	Photography	Captured a total of two (2) photographs of friction ridge detail on the wrapping paper with the DCS5. One photograph was after the cyanoacrylate fuming process using white light and the other photograph was taken after the ALS process using blue/green light with an orange filter.
84HHQD	Photography	Photographed using white light for visual, CA, and black powder prints.
88MVNE	Lifting	Latent print was documented in photos and then preserved and lifted with a plastic patch medium sized with white background.
8A8XEJ	Lifting	One latent lift card prepared.
8BM7KD	Photography	It is photo documented for preservation and subsequent analysis.
	Lifting	The fingerprint hinge lifter is identified with the information corresponding to the case and the fingerprint fragment is lifted for future analysis.
8E6J62	Lifting	
8E77X9	Photography	The method used to preserve the evidence: FSIS. Quality of Image: Tiff

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
8JEL8W	Accutrans	The resin is placed on the fingerprint for 20 minutes and lifted, the latent print is covered with a transparent tape.
	Photography	Camara
8R8WJD	Lifting	A latent print was developed, photographed and then preserved using a hinged print lifter.
8XEEZE	Photography	Using Cannon camera.
973JJD	Lifting	Lifting with a silicone casting.
978XWE	Photography	Then it was documented with photograph and documented with a ruler.
	Lifting	After documenting the fingerprint, it was lifted with a hinged lifter, identified with the information of the case.
9APBG2	Lifting	I placed accutrans casting material on to the ridge detail and smoothed out across the ridge detail. I waited for the accutrans to dry and stappled it to a lift card and filled out all the proper information.
9GB4UM	Photography	
9KN4QE	Photography	1:1 photography
9NRPVD	Photography	Se procedió a trabajar para el desarrollo de la impresión dactilar, utilizando polvo magnético negro, desarrollandose la impresión en la sección D. Work proceeded to develop the fingerprint, using black magnetic powder, developing the impression in section D.
	Lifting	Una vez desarrollada, se fotografió y se preservó utilizando un parche plástico. Once developed, it was photographed and preserved using a plastic patch.
9PZRRB	Photography	with white light at visual, after CA and after powder
	Lifting	
9UY7CE	Photography	Evidentiary photographs were taken before and after Lumicyano fuming
A96WJC	Photography	First I preserved the latent print by using photodocumentation.
	Lifting	Then I used a plastic adhesive patch to lift the latent print.
A9MZZP	Photography	No photo taken since this is a processing test. Would take photo for real case work.
AA7MY8	Photography	
ACPNTT	Photography	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
AHW6DF	Photography	Scaled photographs taken of the item and friction ridge impression prior to and after processing.
AJP8T4	Photography	FSIS/UV photography
B3ZBFF	Photography	
BDZZWG	Photography	Nikon D810 using appropriate filters
BJJFET	Photography Lifting	of results from each RUVis examination after black powder dusting
BKZMLV	Photography Photography	The visible ridge detail was photographed using natural lighting. This method was used for both visible ridge detail and ridge detail developed after cyanoacrylate fuming. After the application of MRM-10 and Basic Yellow dye stain it was determined that the ridge detail appeared to be of better quality than with just CA. Therefore additional photos were taken using a FLS and an orange filter.
BLRJPB	Photography	Oblique lighting and photographing at an angle
C7VTL7	Lifting	The latent print was photographed and then preserved using a hinged print lifter.
C9KR9G	Photography	
CBMZ6E	Photography	The Mark on section D was photographed by using white light.
CCMQJA	Photography	Digital Photography
CL3RQ3	Photography	Photographed prints.
CNDKUH	Lifting	transferred to latent print card
CNEEDN	Lifting	*Please note that gloves were worn at all times throughout this processing. Clear tape was placed across the area of observed ridge detail and lifted from the item. The tape lift was then placed onto a white backing card for contrast and preservation. A directionality arrow was drawn onto the front of the card for orientation. All case information was added to the back of the card. The latent lift card was then placed into an evidence envelope and sealed with evidence tape.
CQXLN6	Photography Lifting	UV lighting with UV filter for cyanoacrylate impression. same impression as above enhanced with black powder. Traditional lift tape and lift card.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
CX2K2F	Photography	All ridge detail observed was photographed utilizing the Full Spectrum Imaging System (FSIS) at 254NM.
	Lifting	All ridge detail observed was lifting utilizing fingerprint lift tape and placed onto a white latent print card.
D2G6UM	Photography	The latent print was photographed following visual exam with white light, cyanoacrylate fuming with white light, 1,2-Indanedione with the TracER laser and an orange barrier filter, and Water-Rhodamine 6G with the TracER laser and an orange barrier filter. Photos were taken with a Nikon Z8.
DFCW6P	Lifting	lifting and cards.
DGQ4Q7	Photography	One developed latent print photographed under white light after cyanoacrylate fuming process. One further developed latent print photographed under white light after powder dusting (same latent). Two photographs total.
DL8GJ8	Photography	All prints were documented with photography as they were observed during each processing step.
DMGDZ6	Photography	
DNT4CU	Lifting	The ridge detail recovered from section D was collected with lifting tape. The tape was placed onto a white latent print lift card and documented.
DR749L	Photography	Preserved with white light and laser
DR8ZJG	Photography	
ENLKHN	Photography	White light
ER4HD7	Photography	digital
F2NDM6	Photography	The print was preserved through photography prior to powder dusting and then again after.
	Lifting	After photography, the print was lifted with latent print tape on white cardstock.
FCADJ3	Lifting	Clear lifting tape onto a latent print card.
FCREBB	Lifting	Tape lift
FECF6X	Photography	Photographed with FSIS - UV Light at CAE processing step.
FG4CUR	Photography	Photography, with and without scale, utilizing a macro lens and oblique lighting, in both RAW and JPEG format.
	Lifting	Partial fingerprint lifted with fingerprint lift tape and placed onto a white lift card.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
FK2VXB	Photography	The fingerprint in section D was first photographed after visual examination with white light and cross polarization and UV reflection. After cyanoacrylate fuming the fingerprint in section D was photographed with white light and cross polarization and UV reflection.
FMNK4A	FSIS Photography	captured unprocessed image w Full Spectrum Imaging System (short wave UV) digitally photographed with diffused white light and blue laser (Coherent)
FQ9CFC	Photography	
FQRFNC	Lifting	Magnetic powder lift onto a white lift card. Back of card listed case number/date lifted/description and sketch of where the lift was collected from/my initials/methodology used for the lift/card number.
FXRP7X	Photography	
G8C7MC	Photography	Nikon D5200 digital camera. FSIS Camera. Adobe Photoshop CC
GAW8GX	Photography	Photo taken using Nikon D850 with blue laser.
GCKY7A	Photography	Photographed ridge detail using side lighting for visual examination, cyanoacrylate fuming and black magnetic powder processing
GDEPCN	Photography Photography Photography	Visual photography on the DCS 5 using oblique lighting with a white crime-lite Photographed on the DCS 5 using Blue crime-lite and yellow filter Photographed on the DCS 5 using white light on 8x4 using the polarising filter
GGMH2M	Photography Printing	- Apply a digital photography using DCS-5 camera Nikon D6 to save enhanced latent print ; - Printing enhanced latent print with a DCS-5 machine printer; - Processing time for all steps of preservation was 10 minutes; - Fluorescent green powder was used; - Printing enhanced latent print with a DCS-5 machine printer;
GGZ7U9	Photography	
GJ3662	Photograph and Hinge Lifter	The developed impression was photographed with and without rule and a Hinge Lifter was used to preserve the developed print.
GLPN7Y	Photography Lifting	Two photographs one that was visible at the beginning and one that was photographed after magnetic powder was applied. One latent lift card lifted at the end after magnetic powder.
GRY6FM	Photography	Capture and Enhancement processing completed with Foster + Freeman DCS5 imaging system. Add Baader U – filter 2" on camera Nikon D5 lens and use UV crime lite (350 – 380 nm). Put camera in live mode, try to set the lite appropriately to depict the latent as desired.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
GUMC4Q	Photography	
GV2WW2	Photography	CG1 photographed after each method of processing.
GYGD76	Photography	Used Nikon D7500 photography camera.
HRCWAP	Photography	after visual examination - under white light
	Photography	after Cyanoacrylate Fuming - under white light
	Photography	after Bi-Chromatic - under white light
HTQDBA	Photography	used a digital camera to capture the image of the latent print and adobe photoshop to visually see details in the latent print
HUJFRX	Photography	Photographed the developed latent print using Foster Freeman DCS 5 with alternate light source.
HVAE7W	Photography	Visual of developed print was captured in visible light using single lens reflex camera preserved in .NEF format.
J348RV	Photography	The method used to lift and preserve the evidence: FSIS with lamp and filter at 254 nm wavelength.
J6D3JE	Lifting	Developed fingerprint was lifted using clear fingerprint tape. Tape was applied to a white backing card. All information on the back of the card was filled out. The card with the developed print and information was then packaged and entered into the TraQ Evidence system, barcoded, and transferred to the appropriate destination.
JB4CVY	Photography	
JCWECL	Photography	CANON EOS 5D DIRECT PHOTOGRAPHY WITH WHITE LIGHT OR AFTER CY + BY40, YELLOW FILTER, CRIME-LITE 82S (420-470 nm)
JN8RR2	Photography	Comparison photography used to document ridge detail developed after cyanoacrylate fuming and again after Rhodamine-6-G with laser
JVCHJ8	Photography	Photographed friction ridge detail in quadrant D before and after dusting with bichromatic powder.
JZME3N	Photography	
K2QUMY	Photography	20 minutes - Foster Freeman DCS-5
K42PG4	Photography	- with FSIS using UV light and a filter. - with laser at 532 nm and an orange filter (no ridge detail was seen)
K9EBNP	Lifting	Lifted with frosted tape onto a white latent card

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
KANCAN	Photography	Macro photographs taken using various Crimelites and polilight wavelengths prior to dye stain. Macro photographs taken with Crimelite XL green and Interference filter IF565
KB3N78	Photography	I used a digital format single lense reflex camera to preserve the developed latent print designated as L-1.
KBXCHB	Photography	macro
KJ74NZ	Clear plastic packaging Digital images by camera and scanner.	Physical evidence is packaged in transparent plastic. Evidence and latent print revealed, are stored in the digital registry of the lab.
KNMBCY	None	
KNQQNZ	Lifting	One latent print lift recovered from item 1 using lifting tape.
KPH6VP	Lifting	Clear tape and white latent card
KR27PB	Photography	
KUR8XK	Photography	
KV6YP2	Photography Lifting	Took a photo of the fingerprint to 90 grades to preserve. Lift the latent print, using a white patch, and fill the case information
KV8GWD	Lifting	
KVZJDZ	Photography	Canon EOS 77D + Tamron 90mm f2.8 macro lens.
KXRHQY	Photography Lifting	Used Foster Freeman DCS5 camera and ambient light One lift obtained
L4DV6R	Lifting	
LAJFG4	Photography	Photography was done before CAE Fuming, after CAE fuming, and again after Basic Yellow staining.
LD2LRK	Photography	One latent fingerprint was photographed after visual examination (visible in white and blue light). The same print was seen after cyanoacrylate fuming and photographed. It was also seen after powder dusting but not photographed.
LEWZMP	Photography Lifting	I took two photographs of this evidence item. I collected one latent print card.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
LQL2VJ	Photography Lifting	photograph image with white light and with ALS at 515nm after R6G tape lift after black powder
LX9UA4	Photography	Used Nikon D850 digital camera using JPEG and RAW format. Photographs taken after visual examination, after cyanoacrylate fuming and after application of magnetic powder.
M4BB4B	Lifting	One latent print developed and was collected two separate times with lift tape and placed on two different lift cards
M6KBCX	Photography	The latent print (fingerprint) revealed was photographed.
MGGG7W	None	
MYWMGT	Photography	Photos taken with camera using green forensic laser as a light source and an orange filter on the camera.
MZ7RVG	Photography	Once the friction ridges were located in section D, photographic fixation was carried out with the support of a metric witness on the friction ridge and recovering the imprint with conventional tape which was placed and protected with translucent acetate film, packing , sealing and labeling friction ridges
N3DKB2	Photography	laser, yellow filter
N87CVQ	Photography	Digital photo with Nikon 850
N87EKV	Photography	Full spectrum imaging system (FSIS)
NELDUZ	Lifting	Latent print was photographed and preserved with a white plastic lifter.
NKDBR4	Photography Lifting	C1 was captured on section D using the DCS5, 60mm quartz lens, Crime Lite 82S (365nm), and the UV pass filter. MP1 was tape lifted from section D. MP1 is a re-lift of C1.
NVWPTL	Lifting	
NW7U9V	Photography	NIKON D800 + Lens 105 mm
NXL3B4	Photography	The latent prints recovered are photographed by using DCS4 Imaging device : blue light and yellow filter (OG530). A paper copy is sent to the information system branch for comparison on the data base and the soft copy is kept on the hard disk.
NYFTGH	Photography	
P3PGEK	Photography	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
P6AH97	Photography	Photographed with scale.
P9AT67	Photography Lifting	Transparent adhesive tape
P9ZJGF	Photography	
PDBNDA	Photography Lifting	Photographed with alternate light source (no filter) prior to processing with powder; uploaded photos to Digital TraQ system Used lift tape to preserve latent processed with magnetic powder
PH3WEV	Lifting	The latent print was observed, photographed and then preserved using a hinged print lifter.
PJ2VX4	Lifting	After item was processed with magnetic powder, fingerprint/s was lifted using clear fingerprint tape and placed on white lift card. Information documented on to lift card.
PRBMZ7	Photography	Photography Settings for CA exam: Aperture Priority; white light; no filters. Photography Settings for BP exam: Aperture Priority; white light; no filters. Images were saved to a secure image drive as an item of evidence. Could have also preserved by lifting but it wasn't necessary
PT3HPZ	Photography	
PTQLKV	Photography	
PW6GX8	Photography	11/15/23: Exhibit 1 as received: Nikon D810 with LED spot lighting used to capture one (1) image of FRD in section D of Exhibit 1 (1D).
QEHADV	Photography	Scaled comparative photographs were taken of the located ridge detail after each processing step was completed (visual examination, cyanoacrylate ester fuming, and Rhodamine 6G + Tracer laser).
QTFGCW	Photography Lifting	Latent evidence was photographed. Latent was dusted with black powder and lifted. Latent card was completed appropriately.
R76QH3	Photography	
RK6EQV	Photography Lifting	Photo taken of ride detail once developed ride detail lifted and documented
RTE2KG	Photography	Used the DCS 5 fingerprint enhancement software and took a photograph of the print using a macro lense, 10-minute processing time.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
RUN7X7	Lifting	When latent print developed, latent print tape was use to lift the print from item 1.
T7GPEW	Photography	The latent was photographed with a scale.
	Lifting	The latent was not lifted from the paper, lift tape was used to preserve it in place.
TEPGGY	Photography	Photocopy stand used
TJK9PW	Scanning	Scanner
TK26HW	Lifting	The latent prints were lifted using latent print tape and placed on a latent backing card.
TNJP3Q	Photography	After visual examination, an attempt was made to photograph the possible ridge detail with negative results. After cyanoacrylate fuming, the possible ridge detail was observed in section D of the item. The possible ridge detail was photographed and saved on the DSC-5 system using a DSLR camera, an oblique white light source and a calibrated scale. The image was enhanced in the DSC-5 system and the lift was printed. The lift print included the lift number, central complaint number, my name and ID, the date and time, and where the lift was recovered from. The lift print was submitted to the Latent Print Unit.
	Photography	After powder processing the item with standard black powder, a latent print was observed in section D of the item. The latent print was photographed and saved on the DSC-5 system using a DSLR camera, an white light source (ring light) and a calibrated scale. The image was enhanced in the DSC-5 system and the lift was printed. The lift print included the lift number, central complaint number, my name and ID, the date and time, and where the lift was recovered from. The lift print was submitted to the Latent Print Unit.
	Lifting	After processing the item with standard black powder and photographing, the latent print was lifted using clear lifting tape and a glossy white lift card. The orientation of the print and a diagram were included. The lift card included the lift number, central complaint number, my name and ID, the date and time, and where the lift was recovered from. The lift card was submitted to the Latent Print Unit.
TNXTWH	Photography	Photographed with scale after visual examination only.
	Lifting	Used clear lifting tape and placed lift on card after black powder application.
U2JNPM	Lifting	Lifted print from Quadrant D and placed onto latent print card.
	Scanning	Scanned latent print card for case file documentation.
UH6F7E	Photography	
UKDDVN	Photography	FOUR (4) DIGITAL IMAGES
	Lifting	ONE (1) LIFT

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
UMHYMV	Lifting	Photography and lifted with a plastic finger print hinge lifter.
UMWKWW	Photography	During step 1), the trace in the box "D" is illuminated in white light by searching the best contrast. We place a centimeter test being near the fingerprint and photographs are taken.
	Photography	During step 2), the digital trace in the "D" box is illuminated using the Crimescope in CSS under different wavelengths looking for the best contrast. Photographs of the fingerprint with the centimeter test are taken, in particular in white light with an orange filter and in 515 with an orange filter.
	Photography	During step 4), the trace in the box "D" is illuminated in white light by searching the best contrast. Photographies are realised of the fingerprint with the centimeter test.
	Photography	During step 5), orange filter is fixed on the camera when the trace in the box "D" is illuminated with the Crimescope in white light without filter and in CSS with an orange filter, by searching the best contrast. Photographies are realised of the fingerprint with the centimeter test.
UNQB3C	Photography	
UP6HNT	None	
URDTKW	Photography	Blue (420-470nm), Green (480-560nm), UV(350-380nm)
UZ9L24	Photography	Photographed using white light (source: flashlight) both after visual exam and cyanoacrylate fuming. No photos captured after powder dusting.
VELE6Z	Photography	Following the cyanoacrylate and powder dusting applications, developed friction ridge detail was documented using a Nikon D7500 camera and LED lights attached to a camera stand.
VKB3EC	Photography	Canon EOS 80D digital camera with macro lens - JPEG and RAW
VKNRHN	Lifting	Item was photographed and preserved using a plastic white lifter.
VW79BV	Photography	White light
VY9ADD	Photography	One area of friction ridge detail was photographed with a macro-lens with no alternate light source
WG7K33	Scanning	Epson Perfection V800 Photo Scanner; reflection ;1200 ppi; 24 bit color; saved as a tiff; one primary image captured: original condition photo taken with Canon PowerShot G6; saved as a jpeg
WJBMFK	Photography	Developed friction ridge without scale. Developed friction ridge with scale
	Lifting	Developed friction ridge preserved using fingerprint lifting tape

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
WUB4D2	Lifting	One (1) lift was made of the friction ridge detail developed in quadrant "D".
	Photography	One (1) digital photograph was taken of the friction ridge detail developed in quadrant "D" with the magnetic powder prior to lifting. One (1) digital photograph was taken of the same friction ridge detail after dye staining.
X3NE7T	Lifting	After dusting the print was lifted and a latent print card was made, LP1.
X4FBVM	Photography	4 digital photographs: (All Ex. 1A). 1 photograph of patent prints. 1 photograph of SGF prints. 2 photographs of R6G prints.
XBCEEQ	Photography	Documentation by Photography
	Lifting	Lifting with White Plastic Patch.
XC76J6	Photography	Use DSLR(digital single-lens reflex camera) with macro lens and employ coaxial lighting techniques to photograph and preserve fingerprint.
	Lifting	After photograph the latent fingerprint, use fingerprint lifting tape, adhere it to the fingerprint, gently remove it to make the powder stuck to the film, and then place it on a black backing paper to preserve fingerprint.
XFRM3P	Photography	
XLY4JQ	Photoluminescence mode	1. Excitation light wavelength is 450 nm. 2. Barrier filter : 515 nm long pass filter.
XULEK6	Photography	
	Lifting	
XWVEPC	Lifting	One print was lifted with tape and placed on a lift card.
XX8W3Q	Photography	Digital photographs were taken at visual and after black powder processing
XXLMPF	Photography	Visual LASER, 1 photo. Lumicyano LASER, 1 photo.
Y24VY2	Photography	
Y8PXV6	Photography	Once the friction ridges are revealed with the silk black reagent, photographs are taken with a metric witness, it is then lifted with tape and protected with acetate to be packaged, sealed and labeled.
YFKZXG	Lifting	1 Latent Lift Card
YHCVMB	Photography	After each method, the visible fingerprint was photographed with a DSLR-camera. The best result was obtained after Cyanoacrylate Fuming.
YKLU7J	Photography	Images taken after visual exam (3-4 exam; 5 orientation). Image taken after powder (6 exam)

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
YM6V3R	Photography Lifting	
YQMFML	Lifting Photography	Once the latent print was revealed using black magnetic powder, A plastic patch lifting was used to preserve it. it was photographed without and with a metric witness.
YTAYNJ	Photography	White light, no filters.
YUH8VH	Photography	DCS5 was used for the photography.
YWQCGJ	Photography	Canon mark III and associated software
Z4MEBH	Photography Lifting	Was photographed to 90 grades use a Nikon D7500 camera and rule. Lift the latent print whit a white plastic patch and fill the information in the patch.
Z7AXCF	Lifting	One latent lift card collected from section D.
ZB6RAG	Photography	The developed latent print was prserved by photography using Forray Adma's D810 camera using 505 nm to 515 nm light with orange filter 21.
ZQ3Y8J	Lifting	Applied lift tape to area with ridge detail, lifted tape, applied tape to latent print card.
ZQXJVH	Photography	The fingerprint was photographed with a measurement.
ZUYMNQ	Photography	fingerprint was photographed at white light with a macro camera lens (without the filter) and linear scale
ZWPL3N	Lifting	Item was photographed and preserved using a white plastic lifter.

Item 1 - Preservation Response Summary		Participants: 222
Methods Utilized		
Lifting	84	Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.
Photography	179	
Scanning	4	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
23UZ76	Photography	Photographs were taken at the visible/visual examination stage and after the application of fluorescent dye stain (MRM-10).
24JDNM	Lifting	Item was photographed and then preserved using a black plastic print lifter.
26J63H	Photography	10/26/2023: Ambient and oblique lighting; overall, 1:1 mid-range, 1:1 close-up; Nikon D7500. 11/30/2023: Ambient and oblique lighting; mid-range, 1:1 close-up; Nikon D7500
2AAEDG	Photography	
2NAK37	Photography	Prior to processing for prints, I took digital image #3 of the visible impression in Quadrant B. Using a DCS5 camera, this impression was taken in TIFF/1000+ppi. After processing with cyanoacrylate ester fuming, image #4 was taken, also in TIFF/1000+ppi. These images were made 1:1 and a Master disc and a Working Copy disc were burned with the images.
	Lifting	After processing the item with black powder, the impression in Quadrant B was lifted with fingerprint tape and placed on a latent print card. The required information was filled out on the card, including a drawing of the item with an "X" placed in the area of the lifted impression and orientation arrows by the drawing and the tape lift.
2VMHLJ	Photography	digital camera
336737	Lifting	
338RXL	Photography	Digital images were captured of the item before processing, as well as of the item and latent print, both with and without a scale, after processing.
	Lifting	Once photographed and processed with powder, the latent was lifted using fingerprint tape and placed on a latent lift card for submission to the Latent Unit.
38H3NV	Lifting	With lift tape
3AMGAF	Photography	
3CXACU	Photography	Photo B from section B of the sunglasses with second development method of the Full Spectrum Image System
3TFH6H	Photography	Continuing with the preservation of the fingerprint, use the photograph with a ruler and without a ruler for corresponding analysis.
	Lifting	Using a hinge lifter, I lifted the fingerprint from the surface of the sunglasses and thus preserved it.
3VMU7T	Photography	VIS: 1 image taken with CSU camera 11/lens 3 with direct LED lighting. CA: no enhancement. RAY: 1 image taken with CSU camera 11/lens 3 with direct Polilight 2 (435nm) and an orange filter.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
3Y6V77	Photography CD-R	Digital photos - Canon EOS 60D, 100 mm lens, scale ruler. CD-R (burning the captured photos onto a CD-R).
42RREW	Lifting	Obtained one lift after applying fingerprint powder
43HZEZ	Photography	Using ALS with orange barrier filter, crime scene scope wave length
46AAAM	Lifting	Tape lifted print and placed on latent print card.
48TB69	Photography	Photographed Latent 2L1 at VIS using white light.
4CPQ3W	Lifting Photography	
4F9WDD	Photography	(1) Visible Photograph with white light before any processing. (1) Photograph after CAE fuming with white light.
4FKTHH	Photography	SE REALIZO FIJACION MEDIANTE CAMARA FOTOGRAFICA
4FN9VH	Lifting	The fingerprint was photo documented and lift with adhesive tape.
4FRQ3U	Lifting	I used lifting tape to collect the print and placed it onto a form 74. The form 74 was packaged and sealed for further latent print examination.
4PVV4H	Photography	se protegio el fragmento con cinta y se fijo de manera fotografica.
4PYBGJ	Photography Lifting	Was photographed to 90 grades use a Nikon D7500 camera and rule. Lift the latent print whit a white plastic patch and fill the information in the patch.
4WTMCC	Photography	Digital Capturing System DCS-5. Cyanoacrylate: White light source. Dye stain (Rhodamine 6G): Blue/Green (460-510nm) with filter OG-550
4YKJ27	Photography	Trasoscan + photographie digitale. min 1000 ppi - min 8 bits
6262HH	Photography	10/31/2023-Overall, midrange, 1:1 closeup with Nikon 7500 taken after visual examination. 10/31/2023-Overall, midrange, 1:1 closeup with Nikon 7500 taken after Lumicyano fuming
69LJRJ	Photography Lifting	It is photo documented for preservation. The fingerprint hinge lifter is identified with the information corresponding to the case and the fingerprint fragment is lifted for future analysis.
69MA7E	Photography	DCS-5 - Digital capture and enhancement
6B7B2Z	Photography	Photographed after visual examination with white light, after cyanoacrylate fuming in white light, and after Basic Yellow 40 in ethanol with blue light.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
6G4PW3	Photography	Overalls of the item and it's packaging were taken with a camera mounted to a copy stand. This was done before any chemical processing took place. The ridge detail on the item was photographed as photo lift #1 as it was the first item processed that had sufficient ridge detail. Photo lift #1 was initially photographed on a copy stand using a flashlight. The flashlight was used at different angles and distances from the item. This was done for both the visual examination and FLP steps. Each process was documented separately. After the application of FLP and MRM-10 an ALS set to a 450 nm wavelength was used and an orange barrier filter was on the camera lens to photograph item ridge detail (photo lift #1). The photographic documentation was done for each step, separately (FLP and MRM).
6JKAJH	Photography	Digital Photography
6RFAVP	Photography	All images were uploaded into the Authenticated Digital Asset Management System (ADAMS) and the laboratory's Information Management System (LIMS).
7HTEUN	Lifting	Lifted with latent print tape and placed on latent lift card
7M2U4D	Photography	DCS5 System. Copy stand white lights. Polarizing filter. L03 - Section B, sunglasses
	Lifting	Clear tape on white card. L04 - duplicate of L03
7VWW7N	Photography	
7W7VEC	Photography	
7YD6UN	Photography	Captured a total of one (1) photograph of friction ridge detail on the sunglasses with the DCS5. The photograph was taken after the ALS process using blue/green light with an orange filter.
84HHQD	Photography	Photographed using white light for visual and CA prints.
88MVNE	Lifting	Latent print was documented in photos and then preserved and lifted with a plastic patch medium sized with white background.
8A8XEJ	Lifting	One latent lift card prepared.
8BM7KD	Photography	Then we proceed to photo document the piece of evidence
	Lifting	The fingerprint hinge lifter is identified with the information corresponding to the case and the fingerprint fragment is lifted for future analysis.
8E6J62	Lifting	
8E77X9	Photography	The method used to preserve the evidence: FSIS. Quality of Image: Tiff

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
8JEL8W	Accutrans Photography	The resin is placed on the fingerprint for 20 minutes and lifted, the latent print is covered with a transparent tape. Camara
8R8WJD	Lifting	A latent print was developed, photographed and then preserved using a hinged print lifter.
8XEEZE	Photography	Using Cannon Camera
973JJD	Lifting	Lifting with a silicone casting.
978XWE	Photography Lifting	then it was documented with a photo It was raised with a white plastic patch, documented with a ruler.
9APBG2	Lifting	I placed accutrans casting material on to the ridge detail and smoothed out across the ridge detail. I waited for the accutrans to dry and stappled it to a lift card and filled out all the proper information.
9GB4UM	Photography Lifting	
9KN4QE	Photography	1:1 photography
9MAQJ2	Lifting	On 11/22/23, lifted with latent tape
9NRPVD	Photography Lifting	Se sacó el artículo 2 de su embalaje, se realizó una inspección visual, se fotografió, se utilizó luz alterna y se observó una impresión en la sección B. Item 2 was removed from its packaging, a visual inspection was carried out, it was photographed, alternating light was used and an impression was observed in section B. Para preservarla se utilizó un parche plástico. To preserve it, a plastic patch lifting was used.
9PZRRB	Photography Lifting	photographed at visual, after CA, after dye stain, after powdering
9UY7CE	Photography	Evidentiary photographs were taken before and after Lumicyano fuming
A96WJC	Photography Lifting	First I preserved the latent print by using photodocumentation. Then I used a black plastic adhesive patch to lift the latent print.
A9MZZP	Photography	No photo taken since this is a processing test. Would take photo for real case work.
ACPNTT	Photography	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
AHW6DF	Photography	Scaled photographs taken of the item and friction ridge impression prior to and after processing.
AJP8T4	Photography	FSIS/UV photography
B3ZBFF	Photography	
BDZZWG	Photography	Nikon D810 using appropriate filters
BJJFET	Photography	after both RUVis exams
	Lifting	of black powder results
	Photography	of positive results after final ALS exam
BKZMLV	Photography	The visible ridge detail was photographed using natural lighting. This method was used for both visible ridge detail and ridge detail developed after cyanoacrylate fuming.
	Photography	After the application of MRM-10 dye stain it was determined that the ridge detail appeared to be of better quality than with just CA. Therefore additional photos were taken using a FLS and an orange filter.
BLRJBP	Photography	
C7VTL7	Lifting	The latent print was photographed and then preserved using a hinged print lifter.
C9KR9G	Photography	With and without orange filter.
CBMZ6E	Photography	After Dye Stain, Mark photographed after Dying using 445nm light with 495nm Filter
CCMQJA	Photography	Digital photography
CL3RQ3	Photography	photographed prints
CNDKUH	Lifting	transferred to latent print card
CNEEDN	Lifting	*Please note that gloves were worn at all times throughout this processing. Clear tape was placed across the area of observed ridge detail and lifted from the item. The tape lift was then placed onto a white backing card for contrast and preservation. A directionality arrow was drawn onto the front of the card for orientation. All case information was added to the back of the card. The latent lift card was then placed into an evidence envelope and sealed with evidence tape.
CQXLN6	Photography	Photographed using natural light.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
CX2K2F	Photography	All ridge detail observed on the item was photographed utilizing the Full Spectrum Imaging System (FSIS) at 254NM.
	Lifting	All ridge detail observed was lifting utilizing fingerprint lift tape and placed onto a white latent print card.
D2G6UM	Photography	The latent print was photographed following visual exam with white light, cyanoacrylate fuming with white light, and Methanol-Rhodamine 6G with the TracER laser and an orange barrier filter. Photos were taken with a Nikon Z8.
DFCW6P	Lifting	lifting and cards
DGQ4Q7	Photography	One developed latent print photographed under white light after cyanoacrylate fuming process. One further developed latent print photographed under ALS after the dye stain process (same latent). Two photographs total.
DL8GJ8	Photography	All prints were documented with photography as they were observed during each processing step.
DMGDZ6	Photography	
DNT4CU	Lifting	The ridge detail recovered from section B was collected with lifting tape. The tape was placed onto a white latent print lift card and documented.
DR749L	Photography	Preserved with white light, ALS, and laser
DR8ZJG	Photography	
ENLKHN	Photography	White light
ER4HD7	Photography	digital
F2NDM6	Photography	all three stages/results photographed (visual and cyanoacrylate with oblique lighting and R6G with Laser light source)
FCADJ3	Lifting	Clear lifting tape onto a latent print card.
FCREBB	Lifting	Tape lift
FECF6X	Photography	Photographed with FSIS - UV Light at CAE processing step.
FG4CUR	Photography	Photography with a macro lens, with and without scale, with oblique lighting, in both JPEG and RAW format.
	Lifting	White magnetic fingerprint powder is known to lift better than regular white powder. The impression was lifted with white fingerprint powder and placed onto a black lift card.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
FK2VXB	Photography	The fingerprint in section B was first photographed after visual examination with white light and cross polarization and UV reflection. After cyanoacrylate fuming the fingerprint in section B was photographed with white light and cross polarization and UV reflection. After dye stain the fingerprint in section B was photographed with blue light and yellow filter.
FMNK4A	FSIS Photography	captured unprocessed image w Full Spectrum Imaging System (short wave UV) digitally photographed with diffused white light and blue laser (Coherent)
FQ9CFC	Photography Lifting	
FQRFNC	Lifting	Black powder lift onto a white lift card. Back of card listed case number/date lifted/description and sketch of where the lift was collected from/my initials/methodology used for the lift/card number.
FXRP7X	Photography	
G8C7MC	Photography	Nikon D5200 digital camera. FSIS Camera. Adobe Photoshop CC
GAW8GX	Photography	photo captured using RUVIS
GCKY7A	Photography	Photographed ridge detail after each processing step - used side lighting for visual examination and cyanoacrylate fuming; used Laser (Bright Beam) / 532nm / orange and FF1 filters for R6G processing step
GDEPCN	Photography Photography	Visual photography using oblique lighting with a white crime-lite Photographed on the DCS 5 with a white crime-lite
GGMH2M	Lifting Photography Printing	- Apply digital photography using DCS-5 camera Nikon D6 to save enhanced developed latent print ; - Applying a tape lifter to record the developed latent print; - Printing enhanced latent print with a printer for DCS-5 machine; - Processing time for all steps of preservation was 20 minutes; - Fluorescent green powder was used. - Apply digital photography using DCS-5 camera Nikon D6 to save enhanced developed latent print. - Printing enhanced latent print with a printer for DCS-5 machine;
GGZ7U9	Photography	
GJ3662	Photography and Hinge Lifter	The developed impression was photographed with and without rule and a Hinge Lifter was used to preserve the developed print.
GLPN7Y	Photography	L1 was photographed at both the Visual examination stage and after rhodamine application.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
GRY6FM	Photography	Capture and Enhancement processing completed with Foster + Freeman DCS5 imaging system. Using UV light (Foster + Freeman Crime lite (350-380nm), add Baader U-filter on Camera Nikon D5. Put System on (Live Mode) to make image good brightness and clear size.
GUMC4Q	Photography	
GV2WW2	Photography	Photographs were taken after visual examination and CA fuming. Photographs were taken after dye staining using yellow filter on camera and 415nm ALS setting.
GYGD76	Photography	Used Nikon D7500 photography camera.
HRCWAP	Photography	after visual examination - under white light
	Photography	after Cyanoacrylate Fuming - under white light
	Photography	after Basic Yellow 40- in alternate light source at 450nm using a orange colored bandpass filter
HTQDBA	Photography	used a digital camera to capture the image of the latent print and adobe photoshop to visually see details in the latent print
HUJFRX	Photography	Photographed the developed latent print using Foster Freeman DCS 5 with alternate light source.
HVAE7W	Photography	Visual of developed print was captured under green laser light using single lens reflex camera preserved in .NEF format.
J348RV	Photography	The method used to lift and preserve the evidence: FSIS with lamp and filter at 254 nm wavelength.
J6D3JE	Lifting	Developed fingerprint was lifted using clear fingerprint tape. Tape was applied to a white backing card. All information on the back of the card was filled out. The card with the developed print and information was then packaged and entered into the TraQ Evidence system, barcoded, and transferred to the appropriate destination.
JB4CVY	Photography	
JCWECL	Photography	CANON EOS 5D (DIRECT PHOTOGRAPHY WITH WHITE LIGHT OR AFTER CYANO). NO BETTER FINGERPRINT REVEALED AFTER BY40
JN8RR2	Photography	comparative photography used to document the print after all listed examinations.
JVCHJ8	Photography	Photographed friction ridge detail in quadrant B after each method used.
JZME3N	Photography	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
K2QUMY	Photography	20 minutes - Foster Freeman DCS - 5, no filter
K42PG4	Photography	- with FSIS using UV light and a filter. - with laser at 532 nm and an orange filter
K9EBNP	Lifting	Lifted with frosted tape onto a white latent card
KANCAN	Photography	Macro photographs taken using various Crimelites and polilight wavelengths prior to dye stain. Macro photographs taken with Crimelite XL green and Interference filter IF565
KB3N78	Photography	I used a digital format single lense reflex camera to preserve the developed fingerprint throughout the four stages of the fingerprint development designated as L-2.
	Lifting	I used black fingerprint powder, clear tape and a white 3" x 5" fingerprint card to preserve the powdered print.
KBXCHB	Photography	macro
KJ74NZ	Clear plastic packaging	Physical evidence is packaged in transparent plastic. Evidence and latent print revealed, are stored in the digital registry of the lab.
	Digital images by camera and scanner.	
KNMBCY	None	
KNQQNZ	Photography	Photographs of visible latent print on item 2 taken prior to processing
	Lifting	One latent print lift recovered using lifting tape
KPH6VP	Lifting	Clear tape and white latent card
	Photography	After Ardrex applied photographed
KR27PB	Photography	
KUR8XK	Photography	
KV6YP2	Photography	Took a photo of fingerprint to 90 grades to preserve
	Lifting	Lift the latent print with a white plastic patch and fill the information .
KV8GWD	Lifting	
KVZJDZ	Photography	Canon EOS 77D + Tamron 90mm f2.8 macro lens.
KXRHQY	Photography	Used Foster Freeman DCS5 camera and 8 x 4 crime light with orange filter.
L4DV6R	Lifting	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
LAJFG4	Photography	Before CAE fuming, after CAE fuming and after Basic Yellow staining, photography was done.
LD2LRK	Photography	One latent fingerprint was photographed after visual examination (visible in white light). The same print was seen after cyanoacrylate fuming and basic yellow 40 but not photographed.
LEWZMP	Lifting	I collected one latent print card
LQL2VJ	Photography	photograph image before processing with white light, photograph after SG processing, and with ALS at 515nm after R6G processing
	Lifting	negative results
LX9UA4	Photography	Used Nikon D850 digital camera using JPEG and RAW format. Photographs taken after cyanoacrylate fuming (white light (ROFIN ALS)) and dye staining (Rhodamine) (505 (ROFIN ALS) with an orange filter).
	Lifting	Area of ridge detail lifted with tape after the application of black fingerprint powder and placed on a fingerprint latent lift card.
M4BB4B	Lifting	lift was developed and lifted with tape and placed on latent lift card
M6KBCX	Photography	The latent print (fingerprint) revealed was photographed.
MGGG7W	None	
MYWMGT	Photography	Photos taken with camera using green laser as a light source and an orange filter on the camera.
MZ7RVG	Photography	Once the friction ridges have been located in section B, photographic documentation with a metric witness is carried out on the friction ridge and then it is lifted with conventional tape, placing the friction ridge on acetate film, packaging, sealing and labeling.
N3DKB2	Photography	laser, yellow filter
N87CVQ	Photography	Digital photo with Nikon 850
N87EKV	Photography	Full spectrum imaging system (FSIS)
NELDUZ	Lifting	Latent print was photographed and preserved with a white plastic lifter.
NJLCD7	Lifting	Lifted with Latent Lift Tape and transferred to an [Laboratory] Form 74
NKDBR4	Photography	PP1 was captured using the DCS5 and visible light (flashlight).
	Photography	After CAE processing the item was photographed using the DCS5, 60mm quartz lens, Crime Lite 82S (365nm), and the UV pass filter.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
NVWPTL	Lifting	
NW7U9V	Photography	NIKON D800 + Lens 105mm
NXL3B4	Photography	The latent prints recovered are photographed by using DCS4 Imaging device : blue light and yellow filter (OG530). A paper copy is sent to the information system branch for comparison on the data base and the soft copy is kept on the hard disk.
NYFTGH	Photography	
P3PGEK	Lifting	
P6AH97	Photography	Macro lens on a copy stand with scale and oblique lighting for best contrast.
P9AT67	Photography	
P9ZJGF	Photography	
PDBNDA	Lifting	Used lift tape to preserve latent processed with bichromatic powder
PH3WEV	Lifting	The latent print was observed, photographed and then preserved using a hinged print lifter.
PJ2VX4	Lifting	After item was inside CAE chamber and processed with black powder, fingerprint was lifted using clear fingerprint tape and placed on white lift card. Information documented on to lift card.
	Photography	After RAM dye stain, fingerprint was captured using a capture station, DCS5. After fingerprint was captured, a hardcopy was printed and stapled onto a white lift card. Information documented on to lift card.
PRBMZ7	Photography	Photography Settings for visual exam: Aperture Priority; white light; no filters. Photography Settings for CA exam: Aperture Priority; white light; no filters. Photography Settings for dye stain/LASER exam: Aperture Priority; 532 nm; orange barrier filter. Images were saved to a secure image drive as an item of evidence. Could have followed up with dusting and lifting, but it wasn't necessary
PT3HPZ	Photography	
PTQLKV	Photography	
PW6GX8	Photography	11/15/23: Exhibit 2 as received: Nikon D810 with LED spot lighting used to capture one (1) image of FRD in section B of Exhibit 2 (2B).
QEHADV	Photography	Scaled comparative photographs were taken of the located ridge detail after each processing step was completed (visual examination, cyanoacrylate ester fuming, and Rhodamine 6G + Tracer laser).

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
QTFGCW	Photography	Latent evidence was photographed.
	Lifting	Latent was dusted with black powder and lifted. Latent card was completed appropriately.
R76QH3	Photography	
RK6EQV	Photography	photo of ride detail once developed.
	Lifting	lifted ridge detail and documented
RTE2KG	Lifting	Lifted the same fingerprint twice (labeled first lift and second lift) using fingerprint tape and placing it on a fingerprint card.
RUN7X7	Lifting	When latent print developed, latent print tape was use to lift the print from item 2.
T7GPEW	Photography	The latent was photographed with a scale.
	Lifting	The latent was lifted with lift tape and preserved on a latent lift card for storage.
TEPGGY	Photography	Photocopy stand used
TJK9PW	Photography	Use of laser (ALS). Digital photography
TK26HW	Lifting	The latent was preserved using latent print tape and a latent backing card.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
TNJP3Q	Photography	After visual examination, the latent print was observed in section B of the item. The latent print was photographed and saved on the DSC-5 system using a DSLR camera, an oblique white light source and a calibrated scale. The image was enhanced in the DSC-5 system and the lift was printed. The lift print included the lift number, central complaint number, my name and ID, the date and time, and where the lift was recovered from. The lift print was submitted to the Latent Print Unit.
	Photography	After cyanoacrylate fuming, the latent print was observed in section B of the item. The latent print was photographed and saved on the DSC-5 system using a DSLR camera, an oblique white light source and a calibrated scale. The image was enhanced in the DSC-5 system and the lift was printed. The lift print included the lift number, central complaint number, my name and ID, the date and time, and where the lift was recovered from. The lift print was submitted to the Latent Print Unit.
	Photography	After dye staining, the latent print was observed in section B of the item. The latent print was photographed and saved on the DSC-5 system using a DSLR camera, an alternate light source (Blue) light and a yellow/orange filter, and a calibrated scale. The image was enhanced in the DSC-5 system and the lift was printed. The lift print included the lift number, central complaint number, my name and ID, the date and time, and where the lift was recovered from. The lift print was submitted to the Latent Print Unit.
	Lifting	After processing the item with black magnetic powder, the latent print was lifted using clear lifting tape and a glossy white lift card. The orientation of the print and a diagram were included. The lift card included the lift number, central complaint number, my name and ID, the date and time, and where the lift was recovered from. The lift card was submitted to the Latent Print Unit.
TNXTWH	Photography	Photographed with scale after visual examination only.
	Lifting	Used clear lifting tape and placed lift on card after black powder application.
U2JNPM	Retained in case file	Would be forwarded to appropriate processing unit.
UH6F7E	Photography	
UKDDVN	Photography	TWO (2) DIGITAL IMAGES
	Lifting	ONE (1) LIFT CARD
UMHYMV	Photography	Photography and lifted with a plastic finger print hinge lifter.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
UMWKWW	Photography	During step 1), the trace in the box "B" is illuminated in white light by searching the best contrast. We place a centimeter test being near the fingerprint and photographs are taken.
	Photography	During step 2), the digital trace in the "B" box is illuminated using the Crimescope in CSS under different wavelengths looking for the best contrast. Photographs of the fingerprint with the centimeter test are taken. The fingerprint is visible with white light, less visible with the other frequencies.
	Photography	During step 4), the trace in the box "B" is illuminated in white light by searching the best contrast. Photographs are realized of the fingerprint with the centimeter test.
	Photography	During step 5), orange filter is fixed on the camera when the trace in the box "B" is illuminated with the Crimescope in white light without filter and in CSS with an orange filter, by searching the best contrast. Photographs are realized of the fingerprint with the centimeter test.
	Photography	During step 7), the trace in the box "B" is illuminated in white light by searching the best contrast. Photographs are realized of the fingerprint with the centimeter test.
UNQB3C	Photography	
UP6HNT	None	
URDTKW	Photography	Blue (420-470nm), Green (480-560nm), UV(350-380nm)
UZ9L24	Photography	Photographed using white light (source: flashlight) after visual exam. Photographed using laser at 532nm with orange barrier filter after dye stain. No photos captured after cyanoacrylate fuming.
VELE6Z	Photography	Visible friction ridge detail observed under ambient light was documented using a Nikon D7500 camera and LED lights attached to a camera stand. Following the Cyanoacrylate application, developed friction ridge detail was documented using a Nikon D7500 camera and LED lights attached to a camera stand. Following the Dye Stain applications, developed friction ridge detail was documented using a Nikon D7500 camera with a curved orange barrier filter attached to the lens while utilizing a Bright Beam Laser emitted at 532nm.
VKB3EC	Photography	Canon EOS 80D digital camera with macro lens - JPEG and RAW
VKNRHN	Lifting	Item was photographed and preserved with a black plastic lifter.
W79BV	Photography	White light for CA, blue light and yellow filter for BY40
VY9ADD	Lifting	One latent print card was collected
WG7K33	Photography	Original condition photo taken with Canon PowerShot G6 : saved as a jpeg; Nikon D810 camera used to capture image; image saved as a tiff; image calibrated greater than 1000ppi using Adobe Photoshop CC.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
WJBMFK	Photography	Developed friction ridge without scale. Developed friction ridge with scale
	Lifting	Developed friction ridge preserved using fingerprint lifting tape
WUB4D2	Photography	One (1) digital photograph was taken of friction ridge detail developed in quadrant "B".
X3NE7T	Lifting	After dusting the print was lifted and a latent print card was made, LP2.
X4FBVM	Photography	3 digital photographs: (All Ex. 2A). 1 photograph of patent prints. 2 photographs of SGF & R6G prints.
XBCEEQ	Photography	Documentation by Photography.
	Lifting	Lifting with White Plastic Patch.
XC76J6	Photography	The latent print would be found in section B on sunglasses lens. And the latent print was photographed with DSLR.
	Lifting	Furthermore, with fingerprint lifting tape, adhere it to the section B. Then, put it on a black backing paper to preserve fingerprint.
XFRM3P	Photography	
XLY4JQ	Photoluminescence mode	1. Excitation light wavelength is 450 nm. 2. Barrier filter : 515 nm long pass filter.
XULEK6	Photography	
	Lifting	
XWVEPC	Lifting	One print was lifted with tape and placed on a lift card.
XX8W3Q	Photography	Digital photographs were taken after visual examination and dye stain.
XXLMPF	Photography	Visual white light, 2 photos. Lumicyano LASER, 3 photos (1 with FF1.0 narrow band pass filter)
Y24VY2	Photography	415nm, yellow filter
Y8PXV6	Photography	Once the development of friction ridges has been carried out, it is photographed with a metric witness, then it is lifted with rubberized tape, protecting it with acetate film, and it is packaged, sealed and labeled.
YFKZYG	Photography	3 Latent Photographs
YHCVMB	Photography	After each method, the visible fingerprint was photographed with a DSLR-camera.
YKLU7J	Photography	Images taken after visual exam (7, 9 exam; 8 orientation)

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
YM6V3R	Photography Lifting	
YQMFML	Lifting Photography	At the same time, the plastic patch is placed on it to photograph and preserve it. Once the latent print is developed using graphite powder on the left lens, photography is carried out without and with a metric witness.
YTAYNJ	Photography	Blue light source (420-470nm) with polarization filter. Photographed with polarization filter. Polarization direction in the camera filter was set about 90 degrees angle to polarization of light source filter.
YUH8VH	Lifting	Fingerprint tape was used to lift the print
YWQCGJ	Photography	Canon Mark III and associated software
Z4MEBH	Photography Lifting	Was photographed to 90 grades use a Nikon D7500 camera and rule. Lift the latent print whit a white plastic patch and fill the information in the patch.
Z7AXCF	Lifting	One latent lift card recovered from section B.
ZB6RAG	Photography	The developed latent print was preserved by photography using Forray Adma's D810 camera using 505 nm to 515 nm light with orange filter 21.
ZQ3Y8J	Lifting	Applied lift tape to area with ridge detail, lifted tape, and applied tape to latent print card.
ZQXJVH	Photography	The fingerprint was photographed with a measurement.
ZUYMNQ	Photography	fingerprint was photographed at white light (forensic iluminator) with a macro camera lens (without filter) and linear scale
ZWPL3N	Lifting	Latent print was treated with blue magnetic powder and preserved in a white plastic lifter.

Item 2 - Preservation Response Summary			Participants: 223
Methods Utilized			
Lifting	84	Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.	
Photography	183		
Scanning	0		

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
23UZ76	Photography	Photographed after application of DFO with the use of a Crime Scope CS-16-500. Latent print was visible after application of silver nitrate, did not develop any additional/better detail than what was preserved after DFO
24JDNM	Photography	The latent print was photographed using a tripod at 90 degrees and a scale.
26J63H	Photography	10/26/2023: Overall, mid-range, 1:1 close-up; Nikon D7500
2AAEDG	Photography	Laser assisted photograph, orange filter used
2NAK37	Scanning	The front of the envelope (the side with the Quadrants and developed print) was scanned using the Epson V700 scanner at 1000dpi with a scale/ruler included. This impression (a Master and a Working Copy) was burned to the same discs with the digital images from items 1 and 2.
2VMHLJ	Photography	digital camera
336737	Scanning	
338RXL	Photography	The envelope was digitally photographed prior to processing. Once processed, the envelope and developed latent print were documented as well via digital photography, both with and without a scale.
	Item Itself Kept	The envelope itself was kept as evidence for submission, sealed in a plastic bag, possibly allowing the print to develop further.
38H3NV	Scanning	Item was photocopied before processing with Ninhydrin
3AMGAF	Photography	
3CXACU	Photography	Photo C from section A of the envelope with Ninhydrin
3TFH6H	Photography	Through photo documentation, the fingerprint developed on the piece of evidence is preserved.
3VMU7T	Photography	Vis: No prints observed. Nin: 1 image taken with CSU camera 11/lens 3 with direct fluorescent lighting. PD: No enhancement
3Y6V77	Photography	Digital photos - Canon EOS 60D, 100 mm lens, scale ruler.
	CD-R	CD-R (burning the captured photos onto a CD-R).
42RREW	Photography	Photographed after the application of Ninhydrin
43HZEZ	Scanning	
46AAAM	Photography	Took photo of developed print.
48TB69	Photography	Photographed Latent 3L1 at IND using the LASER and orange filter.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
4F9WDD	Photography	(1) Photograph after Indanedione using Laser and orange filter.
4FKTHH	Photography	SE REALIZO FIJACION FOTOGRAFICA DEL FRAGMENTO
4FN9VH	Photography	The fingerprint was photo documented.
4FRQ3U	Scanning	
4PVV4H	Photography	el fragmento de fijo de manera fotografica
4PYBGJ	Photography	Was photographed to 90 grades use a Nikon D7500 camera and rule.
4WTMCC	Photography	Digital Capturing System DCS-5. DFO: Green (500-550nm) with filter OG-570. Ninhydrine: White light source
4YKJ27	Photography	photographie digitale. min 1000 ppi - min 8 bits - light B/G - orange filter
6262HH	Photography	10/31/2023-Overall with Nikon 7500 after visual examination. 11/2/2023-1:1 closeup with Nikon 7500 after 1,2 Indanedione application. 11/3/2023-midrange with Nikon 7500 after Ninhydrin application
69LJRJ	Photography	It is photo documented for preservation and future analysis.
69MA7E	Photography	DCS-5 Digital capture
6B7B2Z	Photography	Photographed after 1,2-Indanedione with green light with red filter, and after Ninhydrin with white light.
6G4PW3	Photography	Overalls of the item and it's packaging were taken with a camera mounted to a copy stand. This was done before any chemical processing took place.
	Scanning	The envelope was scanned to document the ridge detail that had developed. The ridge detail on the item was scanned as photo lift #3 as it was the third item processed that had sufficient ridge detail.
6JKAJH	Photography	Digital Photography
6RFAVP	Photography	All images were uploaded into the Authenticated Digital Asset Management System (ADAMS) and the laboratory's Information Management System (LIMS).
7HTEUN	repackaged in original packaging	evidence repackaged back into original packagaing.
7M2U4D	Photography	DCS5 System. White light with green filter. FLS. L05 - Section A, white envelope
7VWW7N	Photography	
7W7VEC	Photography	

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
7YD6UN	Photography	Captured a total of two (2) photographs of friction ridge detail on the white paper with the DCS5. One photograph was captured using white light and the other photograph was captured using green light and no filter.
84HHQD	Scanning	scanned at 1000 ppi
88MVNE	Photography	Documented using a scale and a tripod at 90 degrees to preserve it.
8A8XEJ	Photography	One latent print photograph was prepared.
8BM7KD	Photography	It is photo documented for preservation and future analysis.
8E6J62	Photography	
8E77X9	Photography	The method used to preserve the evidence: Photography: Nikon D 850 Camera. Image Quality: Tiff.
8JEL8W	Photography	Camara
8R8WJD	Photography	The latent print was photographed using a tripod at 90 degrees and a scale.
8XEEZE	Photography	Using Cannon Camera
973JJD	Photography	FF-Green light source. Camera with red filter.
978XWE	Photography	The piece was removed to be documented with photography with a ruler.
9APBG2	Photography	Using the digital capturing system 5, I took a closeup photograph with a ruler (TIFF image). Photography using a scale and an overall photograph of the ridge detail that developed.
9GB4UM	Photography	
9KN4QE	Photography	1:1 photography
9MAQJ2	Photography	On 11/22/23, photographed using alternate light source to enhance
9NRPVD	Photography	Once the impression was developed with the iodine vials, in section A, the impression was photo-documented to preserve it.
9PZRRB	Photography	after IND and after NIN
9UY7CE	Photography	Only documentary photos taken
A96WJC	Photography	I preserved the latent print by using photodocumentation.
A9MZZP	Photography	No photo taken since this is a processing test. Would take photo for real case work.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
ACPNTT	Photography	
AHW6DF	Photography	Scaled photographs taken of the item and friction ridge impression prior to and after processing.
AJP8T4	Photography	LASER photography
B3ZBFF	Photography	
BDZZWG	Photography	Nikon D810 using appropriate filters
BJJFET	Photography	after processing with black magnetic powder
	Scanning	after processing with ninhydrin
BKZMLV	Scanning	The ridge detail that was developed was scanned on a flatbed scanner at 1200 dpi using tiff. format.
BLRJBP	Photography	
	Scanning	
C7VTL7	Photography	The latent print was photographed using a tripod at 90 degrees and a scale.
C9KR9G	Photography	With and without orange filter.
CBMZ6E	Photography	Mark found on section B after 1,2-Indanedione and Ninhydrin. Photographed using 532nm light (green light) and camera filter 550nm.
CCMQJA	Photography	Digital Photography
CL3RQ3	Photography	photographed print
CNDKUH	[No Methods Reported.]	returned to original container and submit as is for latent print comparison.
CNEEDN	Photography	*Please note that gloves were worn at all times throughout this processing. Approximately 48 hours after the application of ninhydrin, item 3 was retrieved and placed onto a clean sheet of butcher paper. Overall and close-up digital photographs were captured with a digital camera positioned at a 90-degree angle utilizing a copy stand. A macro lens was used and the images were taken with RAW formatting. Photographs were taken with and without a scale. All photographs were uploaded into the Digital TraQ system. Through TraQ, the scaled close-up photograph was opened in Adobe Photoshop. The image was enhanced and calibrated to a 1:1 ratio. All image history is documented in Digital TraQ and the original image remains preserved and unaltered.
CQXLN6	Photography	Photographed using laser at 525nm.
CX2K2F	Photography	All ridge detail observed was photographed utilizing the Full Spectrum Imaging System (FSIS) without a filter.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
D2G6UM	Photography	The latent print was photographed following 1,2-Indanedione with the TracER laser and an orange barrier filter and Ninhydrin with white light and with an ALS at 535nm. Photos were taken with a Nikon Z8.
DGQ4Q7	Photography	One developed latent print photographed under ALS (520nm) after the 1,2-Indanedione process. One developed latent print photographed under white light after the Ninhydrin process (same latent). Two photographs total.
DL8GJ8	Photography	Developed prints were documented with photography.
DMGDZ6	Photography	
DNT4CU	Photography	The purple colored ridge detail that developed on section A of the envelope was photographed and documented.
DR749L	Photography	Preserved with white light and laser
DR8ZJG	Photography	
ENLKHN	Photography	Polylight wave length = 505 nm & emission filter Red 23A (Tiffen)
ER4HD7	Photography	digital
F2NDM6	Photography	the print was photographed utilizing a laser light source.
FCADJ3	Photography	Photograph
FECF6X	Photography	Photographed with TracER LASER at IND processing step.
FG4CUR	Photography	Ninhydrin impressions can be photographed, with and without scale, with a macro lens in both JPEG and RAW formats.
FK2VXB	Photography	After using 1,2-Indandione the fingerprint in section A was photographed with green light and orange/red filter. After using ninhydrin the fingerprint in section A was photographed with white light.
FMNK4A	Photography	digitally photographed with diffused white light and blue laser (Coherent)
FQ9CFC	Photography	
FQRFNC	Photography	Foster & Freeman DCS5 capture station (Crime Lite 8x4MK2 475nm blue/green with orange filter & 60mm lens), printed photo of ridge detail and placed on latent card. Back of card listed case number/date lifted/description and sketch of where the lift was collected from/my initials/methodology used for the lift/card number.
FXR7X	Photography	

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
G8C7MC	Scanning	Epson Perfection V370 #10 Photo Scanner. Epson Perfection V330#2 Photo Scanner. Adobe Photoshop CC
	Photography	FSIS Camera. Adobe Photoshop CC
GAW8GX	Photography	Photo taken using white light.
GCKY7A	Photography	Photographed ridge detail using Laser (Bright Beam) / 532nm / used orange and FF1 filters - RD looked best under orange + FF1 filter combination; re-photographed after ninhydrin with visible light - no enhancement of ridge detail
GGMH2M	Photography	- Apply digital photography with DCS-5 camera Nikon D6 to save enhanced image of the latent print; - Apply DCS-5 printer for printing enhanced latent print image; - Processing time was about 10 minutes.
GGZ7U9	Photography	
GJ3662	Photography	The developed impression was photographed to preserve the developed print only due to the material surface.
GLPN7Y	Photography	L1 was photographed in quadrant A after ninhydrin application.
GRY6FM	Photography	Capture and Enhancement processing completed with Foster + Freeman DCS5 imaging system. - When treat evidence by 1,2- Indanedione solution, fix Foster + Freeman crime lite (8x4 mk2) with Orange/ Red filter (549nm) under camera Nikon D5 (add Visible filter with UV& IR cut filter on camera Nikon D5). - When treat evidence by Ninhydrin solution, Fix ring light under camera Nikon D5 (add Visible filter with UV& IR cut filter on camera Nikon D5). Add green filter to halogen light source to become latent print clearer.
GUMC4Q	Photography	
GV2WW2	Photography	Photographed latent print CG3 after indandione procsseing.
	Scanning	Scanned item 3 with latent print CG3 after ninhydrin processing.
GYGD76	Photography	Used Nikon D7500 photography camera.
HRCWAP	Photography	after DFO - in alternate light source at 505nm using a orange colored bandpass filter
	Photography	after Ninhydrin - under white light
HTQDBA	Photography	used a digital camera to capture the image of the latent print and adobe photoshop to visually see details in the latent print
	Scanning	scanned Ninhydrin print to capture the image of the latent print and adobe photoshop to visually see details in the latent print

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
HUJFRX	Photography	Photographed the developed latent print using Foster Freeman DCS 5 with alternate light source.
HVAE7W	Photography	Visual of developed print was captured in visible light using single lens reflex camera preserved in .NEF format.
J348RV	Photography	After processing, the print was lifted using a Nikon 850 camera with 24-85 mm lens and live view mode.
J6D3JE	Photography	Overall photographs of the front, back, and front with area marked A were captured. A close up comparison quality photograph (1:1) of the developed print in quadrant A was captured with a scale. Photographs were then uploaded into the Digital TraQ system. The comparison quality image was then enhanced through Photoshop.
JB4CVY	Photography	
JCWECL	Photography	CANON EOS 5D - ORANGE FILTER - Polylight 505 nm
JN8RR2	Photography	Comparison photography used to document LP2 in quadrant A
JVCHJ8	Photography	Photographed friction ridge detail in quadrant A after Ninhydrin processing.
JZME3N	Photography	
K2QUMY	Photography	10 min - Foster Freeman DCS -5
K42PG4	Photography	- with laser at 532 nm and an orange filter
K9EBNP	Photography	Photographed using the DCS5 system with ALS at 533nm and using a red filter
KANCAN	Photography	Macro photographs taken with Crimelite XL green/ and Interference filter IF565, polilight various wavelengths
KB3N78	Photography	I used a digital format single lense reflex camera with an orange barrier filter to preserve the fluorescent print at 515 nm emitted from an alternate light source designated as L-3, in quadrant A.
KBXCHB	Photography	macro
KJ74NZ	Clear plastic packaging Digital images by camera and scanner.	Physical evidence is packaged in transparent plastic. Evidence and latent print revealed, are stored in the digital registry of the lab.
KNMBCY	None	
KPH6VP	Photography	11/06/23
KR27PB	Photography	

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
KUR8XK	Photography	
KV6YP2	Photography	Took a photo of fingerprint to 90 grades to preserved
KVZJDZ	Photography	Canon EOS 77D + Tamron 90mm f2.8 macro lens.
KXRHQY	Photography	Used Foster Freeman DCS5 camera and laser for 1, 2-Indanedione: DCS5 and ambient light for ninhydrin.
L4DV6R	Scanning	
LAJFG4	Photography	After DFO, used an ALS (Blue Laser) and photographed evidence.
LD2LRK	Photography	One latent fingerprint was photographed after 1,2-indanedione.
LEWZMP	Photography	I took three photos of this evidence item.
LQL2VJ	Photography	photograph with ALS at 515nm after processing with IND
LX9UA4	Photography	Used Nikon D850 digital camera using JPEG and RAW format. Photographs taken after the application of Indanedione and Ninhydrin.
M4BB4B	Forwarded to LPU	item packaged properly and forwarded to Latent Print unit for further processing.
MGGG7W	None	
MYWMGT	Photography	Photos taken with no filters; white light
MZ7RVG	Photography	The packaging of item three is a brown envelope, with the label data Test 23-5191 item 3, it is opened and extracted with tweezers, it is observed that it is a white paper envelope divided into sections A, B, C and D, so since it is paper it is documented photographically and is not tested by returning to its packaging.
N3DKB2	Photography	
N87CVQ	Photography	Digital photo with Nikon 850
N87EKV	Photography	Full spectrum imaging system (FSIS)
NELDUZ	Photography	Latent print was photographed with a tripod at 90 degrees and a scale.
NJLCD7	Latent Tape	Latent tape to cover the print to preserve it.
NKDBR4	Photography	D1 was observed using the LASER at 532nm. It was captured using the DCS5, Crime Lite 8x4MK2 (475nm) with the orange filter.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
NVWPTL	Photography	
NW7U9V	Photography	NIKON D800 + Lens 105 mm
NXL3B4	Photography	The latent prints recovered are photographed by using DCS4 Imaging device : White light / filter (GG495) or no filter. A paper copy is sent to the information system branch for comparison on the data base and the soft copy is kept on the hard disk.
NYFTGH	Photography	
P3PGEK	Photography	
P6AH97	Photography	Photographed with scale. Macro lens with orange filter using timed exposure.
P9AT67	Photography	
P9ZJGF	Photography	
PDBNDA	Photography	The next day, photographed latent with scale; uploaded photos to Digital TraQ system; enhanced one photo in Photoshop and calibrated in TraQ
PH3WEV	Photography	The latent print was photographed using a tripod at 90 degrees and a scale.
PJ2VX4	Photography	After item was processed with DFO, fingerprint was captured using a capture station, DCS5. After fingerprint was captured, a hardcopy was printed and stapled onto a white lift card. Information was documented on to lift card.
PRBMZ7	Photography	Photography Settings for IND/LASER exam: Aperture Priority; 532 nm; orange barrier filter. Images were saved to a secure image drive as an item of evidence. Could have followed up with physical developer, but it wasn't necessary
PT3HPZ	Photography	
PTQLKV	Photography	
PW6GX8	Scanning	11/15/23: Exhibit 3: Post Ninhydrin: Epson Expression 11000XL used to take one (1) scan of FRD in section A of Exhibit 3 (3A). Scanned at 1000 dpi.
QTFGCW	Photography	Latent evidence was photographed for preservation.
R76QH3	Photography	
RK6EQV	[No Methods Reported.]	no ride detail developed using ninhydrin
RTE2KG	Photography	Used the DCS 5 fingerprint enhancement software and took a photograph of the print using a macro lense, 10-minute processing time.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
T7GPEW	Photography	The latent was photographed with a scale.
TEPGGY	Photography	Photocopy stand used
TJK9PW	Scanning	Scanner
TK26HW	Photography	The latent print would be photographed using a macro lens with and without a scale and RAW and JPG images would be created.
TNJP3Q	Photography	The latent print was observed in section A of the item. The latent print was photographed and saved on the DSC-5 system using a DSLR camera, a white light source with a green filter and a calibrated scale. The image was enhanced in the DSC-5 system and the lift was printed. The lift print included the lift number, central complaint number, my name and ID, the date and time, and where the lift was recovered from. The lift print was submitted to the Latent Print Unit.
TNXTWH	Photography	Photographed with scale after development with ninhydrin.
U2JNPM	Scanning	Scanned a copy of front and back of document into case file.
UH6F7E	Photography	
UKDDVN	Photography	THREE (3) DIGITAL IMAGES
UMHYMV	Photography	Photography with a tripod at 90 degrees and a scale.
UMWKWW	Photography	During step 5), orange filter is fixed on the camera when the trace in "A" box is illuminated with the Crimescope in CSS. We place a centimeter test being near the fingerprint and photographs are taken.
	Photography	During step 8), no filter is fixed on the camera when the trace in "A" box is illuminated with the Crimescope in white light. Photographies are realised of the fingerprint with the centimeter test.
UNQB3C	Photography	
UP6HNT	None	
URDTKW	Photography	Blue (420-470nm), Green (480-560nm), UV(350-380nm)
UZ9L24	Photography	Photographed using laser at 532nm with orange barrier filter after 1,2-Indanedione.
	Scanning	Scanned at 1000 dpi after Ninhydrin (after 48 hours)

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
VELE6Z	Photography	Following the Indandione applications, developed friction ridge detail was documented using a Nikon D7500 camera with a curved orange barrier filter attached to the lens while utilizing a Bright Beam Laser emitted at 532nm. Following the Ninhydrin application, developed friction ridge detail was documented using a Nikon D7500 camera and LED lights attached to a camera stand.
VKB3EC	Photography	Canon EOS 80D digital camera with macro lens - JPEG and RAW
VKNRHN	Photography	Latent print was photographed using a tripod at 90 degrees and a scale.
W79BV	Photography	blue/green light for DFO
	Scanning	ESDA and NH
VY9ADD	Photography	One area of friction ridge detail was photographed with a macro-lens with no alternate light source
WG7K33	Scanning	Epson Perfection V800 Photo Scanner ; reflection; 1200ppi; 24 bit color; recorded original condition photo with Canon PowerShot G6; saved as a jpeg to TDrive; Adobe Photoshop CC; saved as tiff; one primary image captured.
WJBMFK	Photography	Developed friction ridge without scale. Developed friction ridge with scale
WUB4D2	Photography	One (1) digital photograph was taken of the friction ridge detail developed in quadrant "A" after DFO treatment.
X3NE7T	Photography	Photograph of LP3.
X4FBVM	Photography	1 digital photograph: (Ex. 3A). 1 photograph of Indanedione prints.
XBCEEQ	Photography	Documentation by Photography.
XC76J6	Photography	After knowing where is the latent fingerprint, we put the scale beside the fingerprint. Employ the DSLR camera to record the location of fingerprint. Using the macro lens with orange filter, we could record the fluorescent of fingerprint pattern. Without orange filter, we can also record the pink pattern of developed fingerprint by macro lens.
XFRM3P	Photography	
XLY4JQ	Photoluminescence mode	1. Excitation light wavelength is 505 nm. 2. Barrier filter : 550 nm long pass filter.
XULEK6	Photography	
XWVEPC	Photography	Two photographs were taken on the DCS-5.
XX8W3Q	Photography	Digital photograph was taken after processing with 1,2-indanedione.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
XXLMPF	Photography	Visual LASER, 1 photo (FF1.0 narrow band pass filter). 1,2 Indanedione LASER, 1 photo. Ninhydrin white light, 1 photo.
Y24VY2	Photography	505nm, orange filter
Y8PXV6	Photography	Item number three is not tested because it is paper, photographs are taken.
YFKZYG	Photography	Photographed the same day - 1 Latent Photograph
YHCVMB	Photography	The fingerprint developed with 1,2-Indanedione was visualized using the Polylight (wavelength: 505nm) and photographed with a DSLR camera with orange filter.
YKLU7J	Photography	Images taken after DFO processing. Used Laser and orange filter for visualization. (images 1 exam; 2 orientation)
YM6V3R	Photography Scanning	
YQMFML	Photography	It was photographed to preserve it since it cannot be lifted with lifting due to the material where it was developed.
YTAYNJ	Photography	Green light source (480-560nm) and red filter.
YWQCGJ	Photography	Canon mark III and associated software
Z4MEBH	Photography	Was photographed to 90 degrees use a Nikon D7500 camera and rule.
Z7AXCF	Photography	Latent photo taken with NIST traceable scale. ALS and filter used for DFO reaction and ambient light used for Ninhydrin reaction.
ZB6RAG	Photography	The developed latent print was preserved by photography using Forray Adma's D810 camera under 505 nm with orange filter 21.
ZQ3Y8J	Photography	Photographed ridge detail with and without a scale on photo copy stand.
ZQXJVH	Photography	Photographing with green light, red filter and a measurement
ZUYMNQ	Photography	fingerprint was photographed at 505 nm (forensic illuminator) with a macro camera lens (with orange filter OG550AG) and linear scale
ZWPL3N	Photography	Item was photographed using a tripod at 90 degrees and a scale.

TABLE 3 - Item 3

Preservation		
WebCode	Methods	Method Details
Item 3 - Preservation Response Summary		Participants: 213
Methods Utilized		
	Lifting	0
	Photography	193
	Scanning	21
<p>Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.</p>		

First-Level Detail Findings

TABLE 4 - Item 1

		First Level Pattern(s)?					First Level Pattern(s)?		
WebCode		Arch	Loop	Whorl	WebCode		Arch	Loop	Whorl
23UZ76	N/A				4PVV4H			✓	
24JDNM	N/A				4PYBGJ	N/A			
26J63H	N/A				4WTMCC			✓	
2AAEDG			✓	✓	4YKJ27			✓	
2MWXH7			✓	✓	6262HH	N/A			
2NAK37			✓	✓	69LJRJ	N/A			
2VMHLJ	N/A				69MA7E			✓	✓
336737			✓		6B7B2Z			✓	
338RXL	N/A				6G4PW3	N/A			
38H3NV	N/A				6JKAJH	N/A			
3AMGAF			✓		6RFAVP	N/A			
3CXACU	N/A				7HTEUN	N/A			
3TFH6H		✓	✓		7M2U4D	N/A			
3VMU7T	N/A				7VWW7N	N/A			
3Y6V77			✓		7W7VEC			✓	
42RREW			✓	✓	7YD6UN	N/A			
43HZEZ	Not Suitable				84HHQD			✓	
46AAAM	N/A				88MVNE	N/A			
48TB69			✓	✓	8A8XEJ	N/A			
4CPQ3W			✓		8ABEPC			✓	✓
4F9WDD			✓	✓	8BM7KD	N/A			
4FKTHH			✓		8E6J62	N/A			
4FN9VH	Not Suitable				8E77X9	N/A			
4FRQ3U	N/A				8JEL8W	N/A			
4GZT38			✓		8R8WJD	N/A			
4KEMFJ			✓		8XEEZE	N/A			

TABLE 4 - Item 1

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
978XWE	N/A				D2G6UM		✓	✓	
9APBG2	N/A				DFCW6P	N/A			
9GB4UM	N/A				DGQ4Q7		✓		
9KN4QE	N/A				DL8GJ8	N/A			
9NRPVD	N/A				DMGDZ6	N/A			
9PZRRB			✓		DNT4CU		✓	✓	
9UY7CE	N/A				DR749L		✓	✓	
9YMYYE			✓		DR8ZJG	N/A			
A9MZZP			✓	✓	DVQ2E4		✓		
ACPNTT	N/A				ENLKHN	N/A			
AHW6DF			✓		ER4HD7		✓		
AJP8T4			✓		F2NDM6	N/A			
B3ZBFF	Not Suitable				FCADJ3		✓	✓	
BDZZWG	N/A				FCREBB	N/A			
BJJFET			✓		FECF6X		✓		
BKZMLV	N/A				FG4CUR		✓		
BLRJBP			✓	✓	FK2VXB		✓		
BPBK7B			✓	✓	FMNK4A		✓	✓	
C7VTL7	N/A				FQ9CFC	N/A			
C9KR9G			✓		FQRFNC	N/A			
CBMZ6E			✓		FXRP7X		✓	✓	
CCMQJA			✓		G8C7MC		✓	✓	
CL3RQ3	N/A				GAW8GX	N/A			
CNDKUH	N/A				GCKY7A		✓	✓	
CNEEDN	N/A				GGMH2M		✓		
CQXLN6			✓	✓	GGZ7U9	N/A			
CX2K2F	N/A				GJ3662	N/A			

TABLE 4 - Item 1

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
GLPN7Y	Not Suitable				KR27PB			✓	
GRY6FM			✓		KUR8XK			✓	
GUMC4Q			✓		KV6YP2	N/A			
GV2WW2	N/A				KV8GWD	N/A			
GYGD76	Not Suitable				KVZJDZ	N/A			
H62XK6			✓	✓	KXRHQY	Not Suitable			
HRCWAP			✓	✓	L4DV6R			✓	
HTQDBA	N/A				L8VTXN			✓	
HUJFRX			✓		LAJFG4	N/A			
HVAE7W	N/A				LD2LRK			✓	
J348RV	N/A				LEWZMP			✓	
J6D3JE	N/A				LQL2VJ			✓	
JB4CVY			✓		LX9UA4	N/A			
JCWECL	N/A				M4BB4B	N/A			
JN8RR2	N/A				M6KBCX	N/A			
JVCHJ8		✓	✓		MGGG7W		✓	✓	
JZME3N			✓		MYWMGT	N/A			
K2QUMY	N/A				MZ7RVG	N/A			
K42PG4	N/A				N3DKB2		✓		
K9EBNP	N/A				N87CVQ	N/A			
KANCAN			✓		N87EKV		✓	✓	
KB3N78			✓		NELDUZ	N/A			
KBXCHB		✓		✓	NKDBR4	N/A			
KJ74NZ			✓		NVWPTL	N/A			
KNMBCY			✓	✓	NW7U9V		✓	✓	
KNQQNZ			✓	✓	NXL3B4		✓		
KPH6VP	N/A				NYFTGH		✓		

TABLE 4 - Item 1

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
P3NVFJ			✓		UH6F7E			✓	
P3PGEK	N/A				UJZZTD			✓	
P6AH97			✓	✓	UKDDVN			✓ ✓	
P9AT67	Not Suitable				UKTK6D			✓	
P9ZJGF	Not Suitable				UMHYMV	N/A			
PDBNDA	N/A				UMWKWW			✓	
PH3WEV	N/A				UNQB3C			✓	
PJ2VX4	N/A				UP6HNT			✓	
PRBMZ7			✓	✓	URDTKW	Not Suitable			
PT3HPZ	N/A				UZ9L24			✓ ✓	
PTQLKV			✓		VELE6Z			✓ ✓	
PW6GX8			✓	✓	VKB3EC			✓	
QA32PV			✓		VKNRHN	N/A			
QEHADV			✓		VW79BV			✓	
QTFGCW			✓		VY9ADD	✓		✓	
R76QH3	N/A				WG7K33			✓ ✓	
RAGN2H			✓		WJBMFK			✓	
RK6EQV			✓		WUB4D2			✓ ✓	
RTE2KG	N/A				X3NE7T	N/A			
RUN7X7			✓		X4FBVM			✓	
T7GPEW			✓		XBCEEQ	N/A			
TEPGGY	N/A				XC76J6			✓	
TJK9PW	N/A				XCNWTP			✓	
TK26HW	N/A				XFRM3P	N/A			
TNJP3Q	N/A				XLDKQD			✓	
TNXTWH	N/A				XLY4JQ			✓	
U2JNPM	N/A				XULEK6			✓	

TABLE 4 - Item 1

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
XWVEPC			✓	✓					
XX8W3Q			✓	✓					
XXLMPF	N/A								
Y24VY2			✓						
Y8PXV6	Not Suitable								
YFKZXG	N/A								
YHCVMB			✓						
YKLU7J			✓						
YM6V3R	N/A								
YQMFML	N/A								
YTAYNJ			✓						
YUH8VH			✓						
YWQCGJ	N/A								
Z4MEBH	N/A								
Z7AXCF	N/A								
ZB6RAG			✓	✓					
ZQ3Y8J			✓	✓					
ZQXJVH	Not Suitable								
ZUYMNQ			✓						
ZWPL3N	N/A								

Item 1 - Pattern Response Summary						Total Participants: 247
1st Level	Arch	Loop	Whorl	Not Suitable	N/A	
Total	5	117	40	11	104	

NOTE: Numbers may not add up to the total # of participants, as more than one pattern option may be selected.

TABLE 4 - Item 2

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
23UZ76	N/A				4PYBGJ	N/A			
24JDNM	N/A				4WTMCC				✓
26J63H	N/A				4YKJ27				✓
2AAEDG				✓	6262HH	N/A			
2MWXH7				✓	69LJRJ	N/A			
2NAK37				✓	69MA7E				✓
2VMHLJ	N/A				6B7B2Z				✓
336737			✓	✓	6G4PW3	N/A			
338RXL	N/A				6JKAJH				✓
38H3NV	N/A				6RFAVP	N/A			
3AMGAF				✓	7HTEUN	N/A			
3CXACU	N/A				7M2U4D	N/A			
3TFH6H		✓	✓		7VWW7N	N/A			
3VMU7T	N/A				7W7VEC				✓
3Y6V77				✓	7YD6UN	N/A			
42RREW				✓	84HHQD				✓
43HZEZ				✓	88MVNE	N/A			
46AAAM	N/A				8A8XEJ	N/A			
48TB69				✓	8ABEPC				✓
4CPQ3W				✓	8BM7KD	N/A			
4F9WDD				✓	8E6J62	N/A			
4FKTHH				✓	8E77X9	N/A			
4FN9VH	Not Suitable				8JEL8W	N/A			
4FRQ3U	N/A				8R8WJD	N/A			
4GZT38				✓	8XEEZE	N/A			
4KEMFJ				✓	978XWE	N/A			
4PVV4H				✓	9APBG2	N/A			

TABLE 4 - Item 2

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
9GB4UM	N/A				DFCW6P	N/A			
9KN4QE	N/A				DGQ4Q7				✓
9MAQJ2	N/A				DL8GJ8	N/A			
9NRPVD	N/A				DMGDZ6	N/A			
9PZRRB				✓	DNT4CU				✓
9UY7CE	N/A				DR749L				✓
9YMYYE				✓	DR8ZJG	N/A			
A9MZZP				✓	DVQ2E4				✓
ACPNTT	N/A				ENLKHN	N/A			
AHW6DF				✓	ER4HD7				✓
AJP8T4				✓	F2NDM6	N/A			
B3ZBFF				✓	FCADJ3				✓
BDZZWG	N/A				FCREBB	N/A			
BJJFET				✓	FECF6X				✓
BKZMLV	N/A				FG4CUR				✓
BLRJBP				✓	FK2VXB				✓
BPBK7B				✓	FMNK4A				✓
C7VTL7	N/A				FQ9CFC	N/A			
C9KR9G				✓	FQRFNC	N/A			
CBMZ6E				✓	FXRP7X				✓
CCMQJA				✓	G8C7MC				✓
CL3RQ3	N/A				GAW8GX				✓
CNDKUH	N/A				GCKY7A				✓
CNEEDN	N/A				GGMH2M				✓
CQXLN6				✓	GGZ7U9	N/A			
CX2K2F	N/A				GJ3662	N/A			
D2G6UM				✓	GLPN7Y				✓

TABLE 4 - Item 2

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
GRY6FM				✓	KUR8XK				✓
GUMC4Q				✓	KV6YP2	N/A			
GV2WW2	N/A				KV8GWD	N/A			
GYGD76	Not Suitable				KXRHQY				✓
H62XK6				✓	L4DV6R				✓
HRCWAP				✓	L8VTXN				✓
HTQDBA	N/A				LAJFG4	N/A			
HUJFRX				✓	LD2LRK				✓
HVAE7W				✓	LEWZMP				✓
J348RV	N/A				LQL2VJ				✓
J6D3JE	N/A				LX9UA4	N/A			
JB4CVY				✓	M4BB4B	N/A			
JCWECL	N/A				M6KBCX	N/A			
JN8RR2	N/A				MGGG7W				✓
JVCHJ8				✓	MYWMGT	N/A			
JZME3N				✓	MZ7RVG				✓
K2QUMY	N/A				N3DKB2				✓
K42PG4	N/A				N87CVQ	N/A			
K9EBNP	N/A				N87EKV				✓
KANCAN				✓	NELDUZ	N/A			
KB3N78				✓	NJLCD7	N/A			
KBXCHB				✓	NKDBR4	N/A			
KJ74NZ				✓	NVWPTL	N/A			
KNMBCY				✓	NW7U9V				✓
KNQQNZ				✓	NXL3B4				✓
KPH6VP	N/A				NYFTGH				✓
KR27PB				✓	P3NVFJ				✓

TABLE 4 - Item 2

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
P3PGEK	N/A				UKDDVN			✓	
P6AH97				✓	UKTK6D			✓	
P9AT67				✓	UMHYMV	N/A			
P9ZJGF				✓	UMWKWW			✓	
PDBNDA	N/A				UNQB3C			✓	
PH3WEV	N/A				UP6HNT			✓	
PJ2VX4	N/A				URDTKW	N/A			
PRBMZ7				✓	UZ9L24			✓	
PT3HPZ	N/A				VELE6Z			✓	
PTQLKV				✓	VKB3EC			✓	
PW6GX8				✓	VKNRHN	N/A			
QA32PV				✓	VW79BV			✓	
QEHADV				✓	VY9ADD			✓	
QTFGCW				✓	WG7K33			✓	
R76QH3	N/A				WJBMFK			✓	
RAGN2H				✓	WUB4D2			✓	
RK6EQV				✓	X3NE7T	N/A			
RTE2KG	N/A				X4FBVM			✓	
RUN7X7				✓	XBCEEQ	N/A			
T7GPEW				✓	XC76J6			✓	
TEPGGY	N/A				XCNWTP			✓	
TJK9PW	N/A				XFRM3P	N/A			
TK26HW				✓	XLDKQD			✓	
TNJP3Q	N/A				XLY4JQ			✓	
TNXTWH	N/A				XULEK6			✓	
UH6F7E				✓	XWVEPC		✓	✓	
UJZZTD				✓	XX8W3Q			✓	

TABLE 4 - Item 2

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
XXLMPF	N/A								
Y24VY2				✓					
Y8PXV6				✓					
YFKZXG	N/A								
YHCVMB				✓					
YKLU7J				✓					
YM6V3R	N/A								
YQMFML	N/A								
YTAYNJ				✓					
YUH8VH		✓							
YWQCGJ	N/A								
Z4MEBH	N/A								
Z7AXCF	N/A								
ZB6RAG				✓					
ZQ3Y8J				✓					
ZQXJVH				✓					
ZUYMNQ				✓					
ZWPL3N	N/A								

Item 2 - Pattern Response Summary						Total Participants: 247
1st Level	Arch	Loop	Whorl	Not Suitable	N/A	
Total	2	3	130	2	100	

NOTE: Numbers may not add up to the total # of participants, as more than one pattern option may be selected.

TABLE 4 - Item 3

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
23UZ76	N/A				6262HH	N/A			
24JDNM	N/A				69LJRJ	N/A			
26J63H	N/A				69MA7E				✓
2AAEDG				✓	6B7B2Z				✓
2MWXH7				✓	6G4PW3	N/A			
2NAK37			✓	✓	6JKAJH				✓
2VMHLJ	N/A				6RFAVP	N/A			
336737			✓	✓	7HTEUN	N/A			
338RXL	N/A				7M2U4D	N/A			
38H3NV	N/A				7VWW7N	N/A			
3AMGAF				✓	7W7VEC				✓
3CXACU	N/A				7YD6UN	N/A			
3TFH6H	Not Suitable				84HHQD				✓
3VMU7T	N/A				88MVNE	N/A			
3Y6V77				✓	8A8XEJ	N/A			
42RREW				✓	8ABEPC				✓
43HZEZ				✓	8BM7KD	N/A			
46AAAM	N/A				8E6J62	N/A			
48TB69				✓	8E77X9	N/A			
4F9WDD				✓	8JEL8W	N/A			
4FKTHH				✓	8R8WJD	N/A			
4FN9VH	Not Suitable				8XEEZE	N/A			
4KEMFJ				✓	978XWE	N/A			
4PV4H				✓	9APBG2	N/A			
4PYBGJ	N/A				9GB4UM	N/A			
4WTMCC				✓	9KN4QE	N/A			
4YKJ27				✓	9MAQJ2	N/A			

TABLE 4 - Item 3

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
9NRPVD	N/A				DNT4CU			✓	
9PZRRB				✓	DR749L		✓	✓	
9UY7CE	N/A				DR8ZJG	N/A			
9YMYYE				✓	DVQ2E4			✓	
A9MZZP				✓	ENLKHN	N/A			
ACPNTT	N/A				ER4HD7			✓	
AHW6DF				✓	F2NDM6	N/A			
AJP8T4				✓	FCADJ3	Not Suitable			
B3ZBFF				✓	FECF6X			✓	
BDZZWG	N/A				FG4CUR			✓	
BJJFET				✓	FK2VXB			✓	
BKZMLV	N/A				FMNK4A			✓	
BLRJPB				✓	FQ9CFC	N/A			
BPBK7B				✓	FQRFNC	N/A			
C7VTL7	N/A				FXRP7X			✓	
C9KR9G	Not Suitable				G8C7MC			✓	
CBMZ6E				✓	GAW8GX			✓	
CCMQJA	Not Suitable				GCKY7A			✓	
CL3RQ3	N/A				GGMH2M			✓	
CNDKUH	N/A				GGZ7U9	N/A			
CNEEDN	N/A				GJ3662	N/A			
CQXLN6			✓	✓	GLPN7Y			✓	
CX2K2F	N/A				GRY6FM			✓	
D2G6UM				✓	GUMC4Q			✓	
DGQ4Q7				✓	GV2WW2	N/A			
DL8GJ8	N/A				GYGD76	Not Suitable			
DMGDZ6	N/A				H62XK6			✓	

TABLE 4 - Item 3

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
HRCWAP				✓	LD2LRK				✓
HTQDBA	N/A				LEWZMP				✓
HUJFRX				✓	LQL2VJ				✓
HVAE7W		✓			LX9UA4	N/A			
J348RV	N/A				M4BB4B	N/A			
J6D3JE	N/A				MGGG7W				✓
JB4CVY				✓	MYWMGT	N/A			
JCWECL	N/A				MZ7RVG	N/A			
JN8RR2	N/A				N3DKB2	Not Suitable			
JVCHJ8				✓	N87CVQ	N/A			
JZME3N				✓	N87EKV				✓
K2QUMY	N/A				NELDUZ	N/A			
K42PG4	N/A				NJLCD7	N/A			
K9EBNP	N/A				NKDBR4	N/A			
KANCAN				✓	NVWPTL	N/A			
KB3N78				✓	NW7U9V				✓
KBXCHB				✓	NXL3B4				✓
KJ74NZ				✓	NYFTGH			✓	
KNMBCY				✓	P3NVFJ				✓
KPH6VP	N/A				P3PGEK	N/A			
KR27PB				✓	P6AH97				✓
KUR8XK				✓	P9AT67	Not Suitable			
KV6YP2	N/A				P9ZJGF				✓
KVZJDZ	N/A				PDBNDA	N/A			
KXRHQY				✓	PH3WEV	N/A			
L4DV6R				✓	PJ2VX4	N/A			
LAJFG4	N/A				PRBMZ7				✓

TABLE 4 - Item 3

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
PT3HPZ	N/A				VKB3EC			✓	
PTQLKV				✓	VKNRHN	N/A			
PW6GX8				✓	VW79BV		✓	✓	
QA32PV				✓	VY9ADD			✓	
QEHADV	Not Suitable				WG7K33			✓	
QTFGCW				✓	WJBMFK			✓	
R76QH3	N/A				WUB4D2			✓	
RK6EQV	Not Suitable				X3NE7T	N/A			
RTE2KG	N/A				X4FBVM			✓	
RUN7X7	N/A				XBCEEQ	N/A			
T7GPEW				✓	XC76J6			✓	
TEPGGY	N/A				XCNWTP			✓	
TJK9PW	N/A				XFRM3P	N/A			
TK26HW				✓	XLY4JQ			✓	
TNJP3Q	N/A				XULEK6			✓	
TNXTWH	N/A				XWVEPC		✓	✓	
U2JNPM	N/A				XX8W3Q			✓	
UH6F7E				✓	XXLMPF	N/A			
UKDDVN				✓	Y24VY2			✓	
UKTK6D				✓	Y8PXV6	N/A			
UMHYMV	N/A				YFKZXG	N/A			
UMWKWW				✓	YHCVMB			✓	
UNQB3C				✓	YKLU7J			✓	
UP6HNT				✓	YM6V3R	N/A			
URDTKW				✓	YQMFML	N/A			
UZ9L24				✓	YTAYNJ			✓	
VELE6Z				✓	YWQCGJ	N/A			

TABLE 4 - Item 3

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
Z4MEBH	N/A								
Z7AXCF	N/A								
ZB6RAG				✓					
ZQ3Y8J				✓					
ZQXJVH				✓					
ZUYMNQ				✓					
ZWPL3N	N/A								

Item 3 - Pattern Response Summary						Total Participants: 247
1st Level	Arch	Loop	Whorl	Not Suitable	N/A	
Total	1	7	112	10	99	

NOTE: Numbers may not add up to the total # of participants, as more than one pattern option may be selected.

Additional Comments

TABLE 5

WebCode	Additional Comments
23UZ76	Determining pattern type is not a normal part of my job duties. I could not determine the pattern on the wrapping paper (item 1). Item 3 (envelope) is a whorl. Item 2 (sunglasses) is also a whorl.
26J63H	DISPOSITION: All evidence has been retained by the [Laboratory] to the extent required, as defined in the policies and procedures of the Forensic Laboratory Section and Evidence Management Unit. The chain of custody record may be referenced for the disposition of the evidence at the time this analysis is conducted. This report contains examination results that relate only to the items tested and conclusions based on the interpretations/opinions of the below signed author. Work performed began on 10/26/2023 and was completed on the date of this report.
2NAK37	Items #1 The pattern appears to be a loop but there is a chance it could be a whorl. Item #3 The pattern appears to be a loop but could be a whorl.
3CXACU	Completed on 11/14/2023 and Tech/Admin reviewed on 12/6/2023 by [Name].
3TFH6H	Through inspection, evaluation and analysis of the surface(s) of the part(s) the following result(s) was obtained. 1. Piece #1 tested positive for fingerprints in section D, through the use of black graphite powder. 2. Piece #2 tested positive for a fingerprint in section B, through visual inspection and the use of orange neon graphite powder to preserve it. 3. Piece #3 tested positive for a fingerprint in section A, through the use of the chemical iodine crystal.
3Y6V77	A pleasant test, thank you for letting us take part!
42RREW	Latent print developed with Ninhydrin was VERY light.
4FKTHH	LOS ITEM SOMETIDOS A ESTUDIO SE RESGUARDAN EN EL LABORATORIO ASI COMO SU CADENA DE CUSTODIA
4FRQ3U	I observed latent print on the following areas: Item #1 : section D of the item. Item #2 : section B of the item. Item #3 : section A of the item. Collected: (2) [Laboratory] latent lift cards from items #1 and #2. (1) small white envelope, divided into section A-D with (1) latent print developed on section A
4GZT38	On item number 3, was not tested because we have no methodology to process this type of material.
4PV4H	los items son resguardados con su embalaje y cadena de custodia en el laboratorio de lofoscopia
4WTMCC	Tests on similar surfaces were done to make sure that the methods were correctly realized
6262HH	All evidence has been retained by the [Laboratory] to the extent required, as defined in the policies and procedures of the Forensic Laboratory Section and Evidence Management Unit. The chain of custody record may be referenced for the disposition of the evidence at the time this analysis is conducted. This report contains examination results that relate only to the items tested and conclusions based on the interpretations/opinions of the below signed author. Work performed began on 10/31/2023 and was completed on the date of this report. EXAMINATION COMPLETED BY: [Name]
69LJRJ	1. After using iodine crystals and graphite powder, fingerprints developed on pieces of evidence 1, 2 and 3. 2. In piece of evidence number 1, a fingerprint is developed in section D. 3. In piece of evidence number 2, a fingerprint develops in quadrant B. 4. In piece of evidence number 3, a fingerprint develops in quadrant A. 5. It is photodocumented with a metric witness.
69MA7E	Observed faint palm print development on item 1 underneath the fingerprint in quadrant D but of poor quality.
84HHQD	Item 1 latent was noted as a loop but would also reference as a whorl.
8BM7KD	After using iodine crystals and graphite powder, fingerprints developed on pieces of evidence 1, 2 and 3. 1. In piece of evidence number 1, a fingerprint is developed in section D. 2. In piece of evidence number 2, a fingerprint develops in quadrant B. 3. In piece of evidence number 3, a fingerprint develops in quadrant A.

TABLE 5

WebCode	Additional Comments
978XWE	Through inspection, evaluation and analysis of the surface(s) of the part(s) the following result(s) was obtained. After having worked on the pieces of evidence described above with the purpose of identifying the development of fingerprinting. This process was carried out through the use of different methods and products previously selected based on the piece of evidence to be worked on. As a result, the Items tested positive in the following sections. Piece 1 gave results in section D, using black graphite powder. Piece 2 gave results in section B, using neon orange graphite powder. Piece 3 gave results in section A using a vial of iodine crystals.
9GB4UM	Our lab does not do comparisons so first-level pattern type not recorded. Print on envelope was very faint and difficult to see.
9KN4QE	All evidence has been retained by the [Laboratory] to the extent required, as defined in the policies and procedures of the Forensic Laboratory Section and Evidence Management Unit. The chain of custody record may be referenced for the disposition of the evidence at the time this analysis is conducted. This report contains examination results that relate only to the items tested and conclusions based on the interpretations/opinions of the below signed author. Work performed began on 10/27/2023 and was completed. Examination Completed by: [Name]
9UY7CE	All evidence has been retained by the [Laboratory] to the extent required, as defined in the policies and procedures of the Forensic Laboratory Section and Evidence Management Unit. The chain of custody record may be referenced for the disposition of the evidence at the time this analysis is conducted. This report contains examination results that relate only to the items tested and conclusions based on the interpretations/opinions of the below-signed author. Work performed began on 10/24/2023 and was completed on the authorization date below.
A96WJC	Throught visual examination and the use of reagent in the different pieces of evidence(s) analyzed, the following conclusions were reached: 1. That in the piece identified number one; a fingerprint was identified in section D. 2. That in the piece identified number two; a fingerprint was identified in section B. 3. That in the piece identified number three; a fingerprint was identified in section A.
ACPNNT	There were at least 3 additional prints on item no 2, sunglasses.
BLRJBP	Additional impressions intersecting both A&B and C&D on Item 003 (L002 & L003). L002 and L003 are also classified as whorls. L002 and L003 latent impressions which would be marked for analysis in casework but as L001 occupied only one quadrant and both L002 and L003 intersected two quadrants, L001 was submitted as the answer for Item 003.
C9KR9G	Item #3 (Envelope): A faint color change on the area marked "A" was noted after processing with Ninhydrin. No friction ridge detail was visible in the area with the color change. Controls processed with reagents used on item #3 produced visible friction ridge detail.
CL3RQ3	For item 3: the best choice of processing method was determined based on the porous material and techniques available at FOL. Ninhydrin aerosol spray was used to treat the item and manufacturer directions were followed for airsafe developer and Ninhydrin aerosol spray. Item was reevaluated 24 hours after initial development to confirm no changes occurred in ridge detail with additional setting time in a dark, closed environment.
CNDKUH	Item 3, was barely visible and hard to determine where the paper pattern was and the latent print was placed. Reaction with chemical was sufficient to develop a faint border with some ridge detail. Just hard to view.
CX2K2F	After processing each item of evidence they were initialed, and then placed into their original packaging which was later sealed. All three items were then placed into the original packaging provided and was re-sealed.
DFCW6P	The items 3 was not treated because the laboratory has not the reagent for do the process.
DMGDZ6	For Item 2: After dye stain with basic yellow two new fingerprints were detected. One in boxes A + B and another one in box C. These two new fingerprints were more faint than the fingerprint in box B.
FCADJ3	1-5. Loop reference Whorl. 3-5. Not suitable for determination. (Extremely faint purple stain developed with no clear ridge detail in Section A.)

TABLE 5

WebCode	Additional Comments
GDEPCN	Requested by supervisors to use powder and PD only as per in lab testing schedule
GJ3662	This CTS skills are excellent continuing education exercises for those of us in the forensic research and scientific community.
GRY6FM	The items are very easy to latent print process, but the latents that were placed are difficult to identify in item 1. The shape tends towards Loop and Arch
JB4CVY	The impression developed for item 1 appears to be a left loop, however, the lower part of the impression is missing so I would cross reference as a double loop whorl.
L8VTXN	on item number 03 was not tested because we don't have methodology to process this type of material. This kind of paper is sended to fingerprint lab.
NWWPTL	Unable to develop full ridge detail on Item 3
PDBNDA	Packaging of items should be sealed with evidence seals and signed and dated across the seal. Fill out packaging with case information, evidence information, collection date/time, etc.
PJ2VX4	Item 1: wrapping paper. I debated using the semi-porous/non-porous method versus the porous method. I initially chose the porous method. After the first dip of the wrapping paper into the DFO solution, I immediately realized I chose the wrong process. I waited for the item to dry and proceeded to the semi-porous/non-porous method.
PRBMZ7	only the surfaces divided into quadrants were examined. items not processed to completion as it was not necessary
QEHADV	Test/control prints were tested with each chemical that was used (Cyanoacrylate ester, Rhodamine 6G, Ninhydrin, Oil Red O, and Physical Developer) prior to testing the evidence items to ensure the chemicals were working properly.
RAGN2H	Item number 3 wasn't tested because we don't have the methodology nor the equipment to process this type of material, whenever we encounter this type of material, we have to send it to the labs
UJZZTD	The item 03 was not tested because we don't have methodology to process this material. The paper is processed by the fingerprint lab.
X4FBVM	Prints were developed on the wrapping paper (Exhibit 1, quadrant D), the sunglasses (Exhibit 2, quadrant B), and the envelope (Exhibit 3, quadrant A). Documentation of these prints consists of eight digital photographs (Exhibits 1A, 2A, and 3A). These prints were forwarded for latent print comparison. The evidence was physically and chemically processed for prints.
XLDKQD	On item number 3, was not tested because we have no methodology to process this type of material. This items are sent to the Fingerprint lab.
YM6V3R	Each item was examined with alternate light sources upon opening, then again after cyanoacrylate fuming. I did not list these methods as no ridge detail was observed.
YTAYNJ	Thank you.

-End of Report-
(Appendix may follow)

Test No. 23-5191: Latent Print Processing - Varied Surfaces

DATA MUST BE SUBMITTED BY **Dec. 11, 2023, 11:59 p.m. EST** TO BE INCLUDED IN THE REPORT

Participant Code: U1234H

WebCode: RHDB4F

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 September 18, 2023, 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 are not intended to be processed.

Items Submitted (Sample Pack LAP2):

Item 1: Wrapping paper, divided into sections A-D.

Item 2: Sunglasses, divided into sections A-D.

Item 3: Small white envelope, 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.*

1

2

3

Results for Item 1:

Wrapping paper, divided into sections A-D.

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.

No preservation methods performed.

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:

Sunglasses, 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.

No preservation methods performed.

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:

Small white envelope, 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.

No preservation methods performed.

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)