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FORENSIC TESTING PROGRAM

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Latent Print Processing - Varied Surfaces
Test No. 25-5191 Summary Report

Each participant received a sample pack containing three items of simulated crime scene evidence, which they were asked to process for latent prints and report their findings. Data were returned from 251 participants and are compiled into the following tables:

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

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

Manufacturer's Information

Each sample pack consisted of three items of simulated crime scene evidence. Each item was divided into four labeled sections, one of which contained a single latent print. Participants were asked to process each item utilizing the method(s) deemed most appropriate for the substrate being examined and report the section in which the latent ridge detail was recovered.

SAMPLE PREPARATION: The nonporous items were cleaned and dried before the latent print was applied. Each item was divided into sections and 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: Predistribution results were consistent with each other and the manufacturer's preparation information. In addition, a random selection of prepared test items were processed in-house for latent prints to verify their durability and proper latent print location.

SAMPLE PACK 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 pack box with bubble wrap and sealed.

Item No.	Test Material	Enhancer	Print Location	Pattern
1	One underwater phone case	Oil	B	Arch
2	One lined sticky note	Acid	A	Loop
3	One receipt (thermal) paper	Acid & Oil	D	Whorl

Inked Impressions of Deposited Prints

Item 1

Item 2

Item 3

Inked versions of the fingerprints deposited by the individuals were obtained in both pressed and rolled formats. The pressed impressions should more closely resemble the appearance of the deposited prints on the substrate.

Summary Comments

This test was designed to allow participants to assess their proficiency in the processing and/or development of latent prints on pieces of evidence. Each sample pack contained three items of evidence, which were divided into four sections (A-D), to be processed for latent prints: An underwater phone case (Item 1), a sticky note (Item 2), and a thermal paper receipt (Item 3). During the creation of this test, latent prints were purposefully deposited in section "B" for Item 1, section "A" for Item 2, and section "D" for Item 3. Due to the tenuous nature of latent fingerprints, it was expected that some participants may not be successful with the recovery of the deposited print on each item. Participants who did not develop a print on an item were therefore not flagged/marked as inconsistent or outliers to the consensus. Refer to the Manufacturer's Information for preparation details.

Of the 232 responding participants who tested all three items, 184 (79%) successfully recovered a latent print in the designated location consistent with the manufacturer's preparation information and the consensus results. Forty-eight participants did not recover latent ridge detail on one or more of the items and three participants reported ridge detail in sections that differed from the consensus. An additional eighteen participants reported "Not Tested" for one or more items.

For Item 1, 241 of 249 participants (97%) recovered a latent print in section "B" of the underwater phone case. Of the remaining eight participants, five did not recover any ridge detail and three reported recovering a print in a different section. Visual Examination (reported 211 times) was most often reported by participants as the first step during the development stage. Cyanoacrylate Fuming (199) was the prevailing method of development reported by participants, followed by Powder Dusting (143), Dye Stain (140), and Alternate Light Source (125) methods. During preservation, Photography (reported 219 times) was the prevailing method reported, followed by the Lifting (79) method.

For Item 2, 191 of 233 participants (82%) recovered a latent print in section "A" of the sticky note. Of the remaining 42 participants, 41 did not recover any ridge detail and one reported recovering a print in a different section. Visual Examination (reported 213 times) was most often reported by participants as the first step during the development stage. Ninhydrin (190) was the prevailing method of development reported by participants, followed by Alternate Light Source (112), 1,2-Indanedione (99), and DFO (59) methods. During preservation, Photography (reported 173 times) was the prevailing method reported, followed by the Scanning (27) method.

For Item 3, 222 of 233 participants (95%) recovered a latent print in section "D" of the thermal paper receipt. The remaining 11 participants did not recover any ridge detail. Visual Examination (reported 207 times) was most often reported by participants as the first step during the development stage. Ninhydrin (134) was the prevailing method of development reported by participants, followed by Alternate Light Source (96), 1,2-Indanedione (94), and Powder Dusting (37) methods. During preservation, Photography (reported 200 times) was the prevailing method reported, followed by the Scanning (30) method.

The Table 4 First-Level Detail Findings section allows participants to report the pattern type(s) of each recovered latent print. Many participants do not perform print pattern analysis in their routine casework and report “N/A” for the pattern type question; therefore, no consensus was 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 - Loop; Item 3 - Whorl.

Print Location

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
2BVC73	B	4WQUD7	B	8U3J73	B
2CJFJA	B	4Z262U	B	8X7LRR	B
2J8RD3	B	4Z6PVN	B	8YYJZX	B
2NK7M3	B	66Y7KM	B	92MCCT	B
2TVLPY	B	67AN4T	B	93FYAQ	Not Tested
34BT7Y	B	67Q7HY	B	93HVEU	B
34VC9L	B	6BJ9LX	B	93XANP	B
38UU7D	B	6K82VA	B	94AQ23	B
3BT73D	B	6N4NPX	B	96LLMU	B
3ETGXD	B	6P3RKU	B	9CNVUM	B
3FJFCB	B	6R4YKX	B	9G2FYM	B
3GWAUW	B	6XUAVV	B	9KRGK2	B
3JJPJ8	B	6ZHNJ7	B	9PR4R6	B
3M79NB	B	76A98L	B	9R27JV	B
3RFGV8	B	777MDR	B	9U6WNP	B
3T9F4D	B	7ANQKW	B	9W9UYH	B
3ZBLK3	B	7CAMRM	B	A2HA6Z	B
44QAZT	B	7HXC77	B	A89KEX	B
4CG24C	B	7K3YNG	B	AJ324Y	B
4EMMRC		7XTU2V	B	AJYFA6	B
4HAYYU	B	829J3K	B	AQX7TU	B
4HPFUN	B	84YK7M	B	AQZQMN	B
4KBZZR	B	8AN3MJ	B	AT8TTT	B
4RU9JH	B	8DJY4X	B	AW6A6M	B
4UH3XX	B	8GJAYX	B	AWKVD4	B
4W6EYN	B	8GLUTR	B	AZMR3Y	B

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
B6CQUY	B	DEVPVN	B	H6CY3K	None
BEKXWU	B	DHUZRN	B	H9BCL4	B
BHM48T	B	DKHEFX	B	H9T2AP	B
BHZTCQ	B	DUP8RD	B	HMR94K	B
BMWE7E	B	DYLTHG	B	HMWP2J	B
BUHA8J	B	EKVH9G	B	HURPEQ	B
BVTWY6	B	ELNGGM	B	HVKMLX	B
C7J8L3	B	EXHUEY	B	HVM9FR	B
C82ERK	B	F63BNN	B	HWZKEW	B
C9TDZR	B	F7ER4M	B	HYH2AM	B
CAPQQQ	B	FC2UQJ	B	HZG3FE	B
CGH4KX	B	FR9VKK	A	J4WWUQ	B
CN4YL3	B	FRYKAB	B	J6PU2W	B
CPHFMM	B	FVWBAU	B	JEUYRT	B
CQVQ2E	B	G2EVZD	B	JFQHTU	B
CTZKGB	B	G34Y8T	B	JLC488	B
CUAM8G	None	GANKCQ	B	JMM9HB	B
D2AARN	B	GDACJM	B	JRKPTJ	B
D2NZGY	B	GEGRRE	B	JV3RZP	B
D336EX	B	GJXUYJ	B	JWA9TT	B
D3JCKE	B	GLL9NU	B	K7JVME	B
D4CATL	B	GLZPMT	B	KC4XNP	B
D7JKPP	B	GNAZEQ	B	KEBDWG	B
DA2MWV	B	GNRTDE	B	KKZND8	B
DBDLNH	B	GPY7VG	B	KQZAYF	B
DBX33Z	B	GR9BBQ	B	KRC6HL	B
DEFHED	B	GTNBUF	B	KUNPMP	B

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
KWRFXB	B	PNYZUE	B	V96EWZ	B
L49D2N	B	PWCPU8	B	VAHQWQ	B
L9KFP6	B	PWXHBC	B	VC6QTZ	B
LAUBQC	B	PZ89FK	B	VHVZ3Y	B
LB7ZVA	B	PZFKHG	B	VMN8G2	None
LCYX4F	B	Q4DJ9Z	B	VU98WD	B
LDUG6G	B	Q9MJMC	B	VVKYT2	B
LJJYJT	B	QC6YVJ	B	WDGPMA	B
LMLRL6	B	QGW7FD	B	WFN6W2	B
LYUXAC	B	QLD9MH	B	WLTNEZ	B
M2DCDC	B	QLTR8F	B	WQKT94	B
MBYH7A	B	QX48AE	B	WUPGRZ	B
ME2B4E	B	R42E48	B	WYEX26	B
MEK3BD	B	R6J4UE	B	WYYUAY	C
MGRKAA	B	R8QNFU	B	X22YHD	B
MPKTWL	B	R9VF6L	B	X4L7GZ	B
MQCQ6R	B	T3C9MG	B	X7VV6H	B
MW6TAD	B	T4LHB9	B	X92CK2	B
N2RZAW	B	T79WZH	B	X9HPN6	B
NAMZQB	B	TB7BTY	B	XB6AT9	B
NHEB27	A	TFD4FH	B	XTLHNH	B
NR6YW9	B	TG66JK	B	Y6EE8V	None
NTXX4E	B	TN7C3U	B	YA7NCM	B
P3GLHE	B	U36KJ9	B	YCJV3B	B
P99T39	B	U8FNCV	B	YJUGMX	B
PKZJGK	B	UQTF7K	B	YJX2GT	B
PNMWP3	B	V4MUQE	B	YKPZNZ	B

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
YLJLLW	B				
YNQ4FL	B				
YT7EVB	B				
ZAJE2X	B				
ZD9JZW	B				
ZGAPF3	B				
ZJCMNA	B				
ZK3U4Z	B				
ZRQECL	B				
ZYN268	B				
ZYZ3LE	None				

Item 1 - Location Response Summary

Location	Total	Total Participants: 251
A	2	*NOTE: Tallies may not add up to the total number of participants, if a participant did not report a response.*
B	241	
C	1	
D	0	
None	5	
Not Tested	1	

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
2BVC73	A	4Z262U	A	8YYJZX	A
2CJFJA	None	4Z6PVN	Not Tested	92MCCT	None
2J8RD3	A	66Y7KM	A	93FYAQ	A
2NK7M3	A	67AN4T	A	93HVEU	A
2TVLPY	A	67Q7HY	A	93XANP	A
34BT7Y	None	6BJ9LX	A	94AQ23	A
34VC9L	Not Tested	6K82VA	A	96LLMU	A
38UU7D	A	6N4NPX	A	9CNVUM	None
3BT73D	A	6P3RKU	A	9G2FYM	A
3ETGXD	A	6R4YKX	A	9KRGK2	Not Tested
3FJFCB	None	6XUAVV	A	9PR4R6	A
3GWAUW	A	6ZHNJ7	None	9R27JV	A
3JJPJ8	A	76A98L	None	9U6WNP	A
3M79NB	A	777MDR	A	9W9UYH	Not Tested
3RFGV8	A	7ANQKW	A	A2HA6Z	A
3T9F4D	A	7CAMRM	None	A89KEX	A
3ZBLK3	A	7HXC77	None	AJ324Y	A
44QAZT	A	7K3YNG	Not Tested	AJYFA6	None
4CG24C	A	7XTU2V	A	AQX7TU	None
4EMMRC		829J3K	Not Tested	AQZQMN	A
4HAYYU	A	84YK7M	A	AT8TTT	A
4HPFUN	Not Tested	8AN3MJ	A	AW6A6M	A
4KBZZR	A	8DJY4X	A	AWKVD4	None
4RU9JH	A	8GJAYX	A	AZMR3Y	A
4UH3XX	A	8GLUTR	A	B6CQUY	A
4W6EYN	A	8U3J73	A	BEKXWU	A
4WQUD7	A	8X7LRR	A	BHM48T	A

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
BHZTCQ	A	DUP8RD	Not Tested	HMR94K	A
BMWE7E	A	DYLTHG	A	HMWP2J	A
BUHA8J	A	EKVH9G	A	HURPEQ	A
BVTWY6	A	ELNGGM	A	HVKMLX	A
C7J8L3	A	EXHUEY	None	HVM9FR	A
C82ERK	A	F63BNN	None	HWZKEW	None
C9TDZR	A	F7ER4M	A	HYH2AM	A
CAPQQQ	A	FC2UQJ	A	HZG3FE	A
CGH4KX	A	FR9VKK	B	J4WWUQ	A
CN4YL3	None	FRYKAB	A	J6PU2W	A
CPHFMM	A	FVWBAU	None	JEUYRT	A
CQVQ2E	A	G2EVZD	A	JFQHTU	None
CTZKGB	A	G34Y8T	Not Tested	JLC488	Not Tested
CUAM8G	A	GANKCQ	A	JMM9HB	A
D2AARN	A	GDACJM	A	JRKPTJ	A
D2NZGY	A	GEGRRE	A	JV3RZP	A
D336EX	A	GJXUYJ	A	JWA9TT	None
D3JCKE	A	GLL9NU	A	K7JVME	A
D4CATL	A	GLZPMT	A	KC4XNP	A
D7JKPP	A	GNAZEQ	A	KEBDWG	A
DA2MWV	A	GNRTDE	A	KKZND8	Not Tested
DBDLNH	A	GPY7VG	A	KQZAYF	A
DBX33Z	A	GR9BBQ	A	KRC6HL	A
DEFHED	Not Tested	GTNBUF	A	KUNPMP	A
DEVPVN	A	H6CY3K	A	KWRFXB	A
DHUZRN	A	H9BCL4	A	L49D2N	A
DKHEFX	A	H9T2AP	A	L9KFP6	Not Tested

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
LAUBQC	A	PZ89FK	None	VHVZ3Y	A
LB7ZVA	None	PZFKHG	A	VMN8G2	None
LCYX4F	A	Q4DJ9Z	Not Tested	VU98WD	A
LDUG6G	A	Q9MJMC	A	VVKYT2	A
LJJYJT	None	QC6YVJ	A	WDGPMA	A
LMLRL6	None	QGW7FD	A	WFN6W2	A
LYUXAC	A	QLD9MH	None	WLTNEZ	A
M2DCDC	A	QLTR8F	A	WQKT94	A
MBYH7A	A	QX48AE	Not Tested	WUPGRZ	None
ME2B4E	A	R42E48	None	WYEX26	A
MEK3BD	None	R6J4UE	A	WYYUAY	A
MGRKAA	A	R8QNFU	A	X22YHD	None
MPKTWL	A	R9VF6L	A	X4L7GZ	A
MQCQ6R	A	T3C9MG	A	X7VV6H	A
MW6TAD	A	T4LHB9	A	X92CK2	A
N2RZAW	A	T79WZH	None	X9HPN6	A
NAMZQB	A	TB7BTY	A	XB6AT9	A
NHEB27	None	TFD4FH	None	XTLHNH	A
NR6YW9	A	TG66JK	A	Y6EE8V	A
NTXX4E	None	TN7C3U	Not Tested	YA7NCM	A
P3GLHE	A	U36KJ9	A	YCJV3B	A
P99T39	None	U8FNCV	None	YJUGMX	A
PKZJGK	A	UQTF7K	A	YJX2GT	A
PNMWP3	Not Tested	V4MUQE	None	YKPZNZ	A
PNYZUE	None	V96EWZ	A	YLJLLW	A
PWCPU8	A	VAHQWQ	A	YNQ4FL	A
PWXHBC	A	VC6QTZ	A	YT7EVB	None

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
ZAJE2X	A				
ZD9JZW	None				
ZGAPF3	A				
ZJCMNA	A				
ZK3U4Z	None				
ZRQECL	A				
ZYN268	A				
ZYZ3LE	None				

Item 2 - Location Response Summary

Location	Total	Total Participants: 251
A	191	*NOTE: Tallies may not add up to the total number of participants, if a participant did not report a response.*
B	1	
C	0	
D	0	
None	41	
Not Tested	17	

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
2BVC73	D	4Z262U	D	8YYJZX	D
2CJFJA	D	4Z6PVN	Not Tested	92MCCT	D
2J8RD3	D	66Y7KM	D	93FYAQ	D
2NK7M3	D	67AN4T	D	93HVEU	D
2TVLPY	D	67Q7HY	D	93XANP	D
34BT7Y	D	6BJ9LX	D	94AQ23	D
34VC9L	Not Tested	6K82VA	D	96LLMU	D
38UU7D	D	6N4NPX	D	9CNVUM	D
3BT73D	D	6P3RKU	D	9G2FYM	D
3ETGXD	D	6R4YKX	D	9KRGK2	Not Tested
3FJFCB	D	6XUAVV	D	9PR4R6	D
3GWAUW	D	6ZHNJ7	D	9R27JV	D
3JJPJ8	D	76A98L	None	9U6WNP	D
3M79NB	D	777MDR	D	9W9UYH	Not Tested
3RFGV8	D	7ANQKW	D	A2HA6Z	D
3T9F4D	D	7CAMRM	D	A89KEX	D
3ZBLK3	D	7HXC77	D	AJ324Y	D
44QAZT	D	7K3YNG	Not Tested	AJYFA6	D
4CG24C	D	7XTU2V	D	AQX7TU	None
4EMMRC		829J3K	Not Tested	AQZQMN	D
4HAYYU	D	84YK7M	D	AT8TTT	D
4HPFUN	Not Tested	8AN3MJ	D	AW6A6M	D
4KBZZR	D	8DJY4X	D	AWKVD4	D
4RU9JH	D	8GJAYX	D	AZMR3Y	D
4UH3XX	D	8GLUTR	D	B6CQUY	D
4W6EYN	D	8U3J73	D	BEKXWU	D
4WQUD7	D	8X7LRR	D	BHM48T	D

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
BHZTCQ	D	DUP8RD	Not Tested	HMR94K	D
BMWE7E	D	DYLTHG	D	HMWP2J	D
BUHA8J	None	EKVH9G	D	HURPEQ	D
BVTWY6	D	ELNGGM	D	HVKMLX	D
C7J8L3	D	EXHUEY	D	HVM9FR	D
C82ERK	None	F63BNN	D	HWZKEW	D
C9TDZR	D	F7ER4M	D	HYH2AM	D
CAPQQQ	D	FC2UQJ	D	HZG3FE	D
CGH4KX	D	FR9VKK	None	J4WWUQ	D
CN4YL3	D	FRYKAB	D	J6PU2W	D
CPHFMM	D	FVWBAU	D	JEUYRT	D
CQVQ2E	D	G2EVZD	D	JFQHTU	D
CTZKGB	D	G34Y8T	Not Tested	JLC488	Not Tested
CUAM8G	D	GANKCQ	D	JMM9HB	D
D2AARN	D	GDACJM	D	JRKPTJ	D
D2NZGY	D	GEGRRE	D	JV3RZP	D
D336EX	D	GJXUYJ	D	JWA9TT	D
D3JCKE	D	GLL9NU	D	K7JVME	D
D4CATL	D	GLZPMT	D	KC4XNP	D
D7JKPP	D	GNAZEQ	D	KEBDWG	D
DA2MWV	D	GNRTDE	D	KKZND8	Not Tested
DBDLNH	D	GPY7VG	D	KQZAYF	D
DBX33Z	D	GR9BBQ	D	KRC6HL	D
DEFHED	Not Tested	GTNBUF	D	KUNPMP	D
DEVPVN	D	H6CY3K	D	KWRFXB	D
DHUZRN	D	H9BCL4	D	L49D2N	D
DKHEFX	D	H9T2AP	D	L9KFP6	Not Tested

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
LAUBQC	D	PZ89FK	D	VHVZ3Y	D
LB7ZVA	D	PZFKHG	D	VMN8G2	D
LCYX4F	D	Q4DJ9Z	Not Tested	VU98WD	D
LDUG6G	D	Q9MJMC	D	VVKYT2	D
LJJYJT	D	QC6YVJ	D	WDGPMA	D
LMLRL6	D	QGW7FD	D	WFN6W2	D
LYUXAC	D	QLD9MH	D	WLTNEZ	D
M2DCDC	D	QLTR8F	D	WQKT94	D
MBYH7A	D	QX48AE	Not Tested	WUPGRZ	D
ME2B4E	D	R42E48	D	WYEX26	D
MEK3BD	D	R6J4UE	D	WYYUAY	None
MGRKAA	D	R8QNFU	D	X22YHD	None
MPKTWL	D	R9VF6L	D	X4L7GZ	D
MQCQ6R	D	T3C9MG	D	X7VV6H	D
MW6TAD	D	T4LHB9	D	X92CK2	D
N2RZAW	D	T79WZH	D	X9HPN6	D
NAMZQB	D	TB7BTY	D	XB6AT9	D
NHEB27	None	TFD4FH	D	XTLHNH	D
NR6YW9	D	TG66JK	D	Y6EE8V	D
NTXX4E	D	TN7C3U	Not Tested	YA7NCM	D
P3GLHE	D	U36KJ9	D	YCJV3B	D
P99T39	None	U8FNCV	D	YJUGMX	D
PKZJGK	D	UQTF7K	D	YJX2GT	D
PNMWP3	Not Tested	V4MUQE	D	YKPZNZ	D
PNYZUE	D	V96EWZ	D	YLJLLW	D
PWCPU8	D	VAHQWQ	D	YNQ4FL	D
PWXHBC	D	VC6QTZ	D	YT7EVB	D

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
ZAJE2X	D				
ZD9JZW	None				
ZGAPF3	D				
ZJCMNA	D				
ZK3U4Z	None				
ZRQECL	D				
ZYN268	D				
ZYZ3LE	D				

Item 3 - Location Response Summary

Location	Total	Total Participants: 251
A	0	*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	222	
None	11	
Not Tested	17	

Development Methods

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
2BVC73	Visual Examination	
	Alternate Light Source	Dual 77 and UV (520 nm - 445 nm - 365 nm)
	Cyanoacrylate Fuming	Visual and RUVIS (254 nm)
	Dye Stain	Dual 77 (520 nm - 445 nm)
2CJFJA	Visual Examination	Visual examination with flashlight was performed and yielded negative results located on marker #1.
	Powder Dusting	A quality control check was performed by placing a fingerprint on the rear side of phone case using the black fine powder was performed with positive results.
	Powder Dusting	Black fine powder was used and yielded positive results located on marker #1B. Black fine powder was used and yielded negative results located on markers #1A, #1C, #1D.
2J8RD3	Visual Examination	Examination under white light and latent print was not appeared on any positions, so we are going to another procedures.
	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 on position B. Cyanoacrylate will crystallizes the water that resulting from sweat secretions.
	Powder Dusting	Using white powder and Fingerprint Hinge Lifter to lift latent print from B position
	Dye Stain	After spraying by basic yellow By40 and drying Item, latent print was appeared by using Using Foster + Freeman crime lite (Blue 420-470nm @ Yellow Filter (476nm)) with Foster + Freeman DCS5 imaging system more clear shape.
2NK7M3	Visual Examination	Nothing visibly seen
	Cyanoacrylate Fuming	Nothing developed
	Dye Stain	MRM-10 - print developed in quadrant B
	Dye Stain	R6G - print developed in quadrant B
2TVLPY	Cyanoacrylate Fuming	
	Dye Stain	Basic Yellow 40. One fingerprint visible in "B".
34BT7Y	Powder Dusting	Fluorescent orange powder reagent applied with a fiberglass brush using alternative light sources (ALS). Time: 21 minutes. Photographic and written documentation was made.
	Alternate Light Source	Fluorescent orange powder reagent, applied with a fiberglass brush and using alternative light sources (ALS). Time: 21 minutes. Photographic and written documentation is made.
34VC9L	Powder Dusting	Fiberglass brush was used to apply a small amount of heavy black powder on the surface.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
38UU7D	Visual Examination	Day light/ White light;
	Alternate Light Source	Polilight; ML2 all available wavelengths
	Cyanoacrylate Fuming	120°C Processing time 15 min
	Powder Dusting	Magnetic Jet Black powder
	Dye Stain	Basic Yellow 40
3BT73D	Visual Examination	used side lighting
	Cyanoacrylate Fuming	fumed for 15 minutes, 80% humidity, 74 degrees Fahrenheit
	Dye Stain	Used RAY dyestain; Laser (Bright Beam) exam / 445 and 532nm / used yellow and orange goggles
3ETGXD	Alternate Light Source	
	Cyanoacrylate Fuming	Lumicyano
3FJFCB	Visual Examination	At 4:50 p.m., I began processing the piece of evidence. Using all necessary personal protective equipment, I proceeded to document the evidence with general photographs to record its condition at the start and each of the packages.
	Alternate Light Source	Visual inspection was then carried out, supplemented with alternating light, to identify any visible fingerprints as no fingerprints could be identified
	Cyanoacrylate Fuming	As the first method of developing fingerprints, cyanoacrylate was applied in a gas chamber for 15 minutes, and a white stain was observed in quadrant B.
	Powder Dusting	Then black graphite powder was applied to the piece of evidence using two brushes, identifying a fingerprint located in the middle area of quadrant B
3GWAUW	Visual Examination	Visible white light, RUVIS, LASER
	Lumicyano	Temperature 250F, time 17:00, humidity 75% White light, LASER, RUVIS
3JJPJ8	Visual Examination	
	Alternate Light Source	CS @ 515nm and UV
	Cyanoacrylate Fuming	Microburst method in SafeFume Chamber
	Dye Stain	RAM, viewed with CS @ CSS & 515nm
	Powder Dusting	BMP
3M79NB	Visual Examination	Examination of the item with light of different wavelengths and with different observation filters. A fingerprint was visible in zone B. Not possible to determine the level 2 details, because only the zone above the center is visible.
	Cyanoacrylate Fuming	A fingerprint was visible in zone B. Not possible to determine the level 2 details, because only the zone above the center is visible.
	Vacuum Metal Deposition	Metal deposition of silver and zinc. A fingerprint was visible in zone B. Not possible to determine the level 2 details, because only the zone above the center is visible. But the zone above the center was clearly visible with good ridge detail.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
3RFGV8	Visual Examination	White light and magnification
	Alternate Light Source	450nm with orange filter
	Cyanoacrylate Fuming	20 min in the Cyanosafe, test print positive
	Powder Dusting	Black magnetic powder
	Dye Stain	R.A.Y, batch # 862, visual inspection with 420nm-470nm ALS and orange filter
3T9F4D	Cyanoacrylate Fuming	control was positive
	Dye Stain	rhodamine control was positive using ALS only a couple ridges were seen on item in quadrant B
	Powder Dusting	magnetic powder to try to enhance the couple ridges seen in hopes the powder would enhance more. It did not.
3ZBLK3	Cyanoacrylate Fuming	Place the underwater phone case in a fuming chamber and heat cyanoacrylate at 120°C with 80% relative humidity (RH), which fills the chamber with cyanoacrylate vapor. The fingerprint pattern will then be covered by the polymerized cyanoacrylate and turn white. But, the effect was limited.
	Direct reflective lighting	Furthermore, we use direct reflective lighting to enhance the latent fingerprint. The light is reflected directly off the latent print into the lens, while less light is reflected directly off the background. This method is performed by placing Item 1 perpendicular to the camera lens and film plane, and positioning the light source at approximately a 10-degree angle from the camera. Finally, a latent fingerprint was observed in section B.
44QAZT	Visual Examination	Visual/oblique lighting examination - no prints observed
	Alternate Light Source	Forensic Light Source - no prints observed
	Cyanoacrylate Fuming	CA fuming - 1 print observed in quadrant B Concurrent control conducted - successful
	Dye Stain	Rhodamine 6G dye stain + Forensic Light Source - 1 print observed in quadrant B Control conducted - successful
	Powder Dusting	Black powder dusting - 1 print observed in quadrant B

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
4CG24C	Visual Examination	1) We observe the waterproof mobile phone case in areas A to D. We observe the surface of the object with the naked eye from different angles. We note the presence of papillary ridges in box "B". We cannot determine the pattern group. We see no other marks elsewhere.
	Alternate Light Source	2) We illuminate the substrate with the Crimescope MCS-400 at different frequencies using the appropriate coloured lenses and at different angles. We no longer observe the ridges detected with the naked eye. We do not see any on the entire object.
	Cyanoacrylate Fuming	3) Using a scalpel, we cut the underwater phone casecase so that we can treat all surfaces of the object. Given the non-porous substrate, we place the object in the fumigation tank. Autocycling for 2 g of Lumicyano solution, with 8% fluorochrome, for 1 hour. A control trace is placed in the tank.
	Visual Examination	4) To the naked eye, treatment with Lumicyano revealed smear marks across the entire outer surface of the object. We observe white papillary ridges on the object in box 'B'. The papillary mark is partial and faint. We cannot determine the pattern group of the trace. We observe no other marks elsewhere on the object.
	Alternate Light Source	5) We illuminate the object using the Crimescope MCS-400 at different wavelengths and wearing appropriate coloured glasses. The papillary ridges in box 'B' are less visible than under white light. We cannot determine the pattern group of the trace. We do not observe any other papillary traces elsewhere on the object.
4EMMRC	Visual Examination	white light observation
	Wet Powder Suspension	wet powdering then rinsing with distilled water.
	Visual Examination	UV light examination and photography with a fingerprint seen in B region. The ridge details in the center were not fully recovered with either arch or loop is possible.
4HAYYU	Visual Examination	white light examination
	Alternate Light Source	Polilight PL 500 illuminator, full range of visible light spectrum, yellow, orange, red filter
	Cyanoacrylate Fuming	MVC 3000 chamber, 80%RH, 120°C, 0,5 g cyanoacrylate glue; white light observation
	Dye Stain	Basic Yellow 40 430-470 nm - yellow and orange filter
	Powder Dusting	white antistatic powder
4HPFUN	Powder Dusting	magnetic powder applied
4KBZZR	Visual Examination	with oblique lighting; print observed and photographed
	Alternate Light Source	Coherent TracER
	Cyanoacrylate Fuming	Print developed and photographed.
	Dye Stain	Rhodamine 6G viewed with Coherent TracER; print developed and photographed.
	Powder Dusting	Conventional black powder and magnetic powder; print lifted.
4RU9JH	Visual Examination	with a white flashlight
	Cyanoacrylate Fuming	for 16 min at 80% humidity
	Powder Dusting	black dust powder and fiberglass brush

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
4UH3XX	Visual Examination	Illumination: Ambient
	Cyanoacrylate Fuming	Processing time: 30 min
	Dye Stain	Technique: Rhodamine 6G Illumination: Laser (532 nm)
4W6EYN	Visual Examination	No RD
	Cyanoacrylate Fuming	First fume - 7min @ 76% RH Second fume - 12 min @ 76% RH
	Dye Stain	R6G H20 due to handwriting (apparent sharpie/marker on substrate). Observed with bright beam laser @ 532nm with orange barrier. Targeted application of R6G MeOH to quadrant B to improve contrast of RD. Observed with bright beam laser @ 532nm with orange barrier
4WQUD7	Visual Examination	Performed a visual examination of item 1. Used Crimelite and TracER Laser. Used oblique lighting using a Crimelite to take two digital photographs of latent print area in quadrant B.
	Cyanoacrylate Fuming	Used Foster+Foster MVC 5000 superglue chamber, ~70 min. Used oblique lighting using a Crimelite to take three digital photographs of latent print area in quadrant B.
	Dye Stain	Used Rhodamine 6G on item 1. Used TracER Laser using a curved orange filter to take three digital photographs of latent print area in quadrant B.
	Powder Dusting	Used Black fingerprint powder on item 1. Used Crimelite and Incandescent lighting. No digital photographs were taken.
4Z262U	Visual Examination	Visual exam of the item was completed. No visible prints were located at this time.
	Cyanoacrylate Fuming	Cyanoacrylate Fuming (MVC FFLEX S1) Approximately 20-30 minutes run time Humidity 80%; Glue Temperature 120 degrees Celsius 4 drops of superglue Lot # 031125-01 Test print (positive/negative control)
	Dye Stain	Basic Yellow Lot #021324-03
	Powder Dusting	Magnetic Powder Lot #052423-01
4Z6PVN	Cyanoacrylate Fuming	Processed for latent prints via cyanoacrylate chamber fish tank, processed in there for approximately 10 minutes.
	Powder Dusting	After removing item from the cyanoacrylate chamber, processed further using black powder.
66Y7KM	Visual Examination	Item was examined under white light. No friction ridge detail was observed.
	Alternate Light Source	FSIS (Full Spectrum Imaging System), ultraviolet and ultraviolet filter. Friction ridge detail was observed and a photograph was taken.
	Cyanoacrylate Fuming	CApture BT Fuming Chamber, 2.5g cyanoacrylate, 70% humidity, and 527F heat. Fumed for 2 minutes and produced a positive quality control. No ridge detail was observed under white light.
	Alternate Light Source	FSIS (Full Spectrum Imaging System), ultraviolet and ultraviolet filter. Ridge detail was observed under better quality and a photograph was taken.
	Powder Dusting	Item was processed with black magnetic powder. The quality of the ridge detail was no better than previously observed. No lift was taken.
	Dye Stain	Rhodamine 6G, positive quality control.
	Alternate Light Source	Rofin Polilight 450nm, orange goggles. Ridge detail was observed at a degraded quality and a photograph was not taken.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
67AN4T	Visual Examination	Detail observed.
	Cyanoacrylate Fuming	The item fumed for around 10 minutes.
	Dye Stain	Applied Rhodamine 6G Aqueous.
	Alternate Light Source	No further development. No photos taken.
	Dye Stain	Applied Rhodamine 6G Methanol.
	Alternate Light Source	Detail observed.
	Powder Dusting	Applied Magnetic Powder. No further development.
	Powder Dusting	Applied Black Powder. No further development.
67Q7HY	Visual Examination	White light. 1 fingerprint was found at section B.
	Cyanoacrylate Fuming	15 min. 1 fingerprint was found at section B.
6BJ9LX	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Visual Examination	
	Alternate Light Source	
	Dye Stain	
	Alternate Light Source	
6K82VA	Cyanoacrylate Fuming	The object was exposed to the vapors for approximately 10 minutes in the chamber.
	Dye Stain	Basic Yellow
	Visual Examination	Forensic Light Source (420nm-470nm)
6N4NPX	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Alternate Light Source	
	Dye Stain	
	Alternate Light Source	
6P3RKU	Visual Examination	Examined under ambient lighting and with use of a flashlight including oblique angles.
	Alternate Light Source	Examined under laser with 445nm and 532nm and an orange barrier filter.
	Cyanoacrylate Fuming	Cyanoacrylate (CA) fuming with hot plate at approximately 125 degrees Celsius in Chamber C and relative humidity of 70% for approximately 10 minutes. Control positive. 1-LP1 developed at this stage and preserved through photography - see below. [No photograph submitted by participant.]
	Dye Stain	Rhodamine 6G (R6G) with methanol carrier solvent utilized as dye stain with a positive control and examined under laser at 532nm and an orange barrier filter. 1-LP1 improved at this stage and preserved through photography - see below. [No photograph submitted by participant.]

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
6R4YKX	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
6XUAVV	Visual Examination	fluorescence examination
	Alternate Light Source	
	Cyanoacrylate Fuming	temperature of the heating plate: 100 degres Celsius, humidity: 80%, time: 35 minutes
	Dye Stain	Basic Yellow 40
6ZHNJ7	Visual Examination	some ridge detail, but need further processing for better contrast
	Cyanoacrylate Fuming	14 minutes
	Dye Stain	R6G. 515nm/orange
	Powder Dusting	Magnetic
76A98L	Visual Examination	
	RUVIS/FSIS	
	Cyanoacrylate Fuming	
	RUVIS/FSIS	
	Powder Dusting	
777MDR	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	120°C +/- 5°, relative humidity 75% +/- 15%
	Dye Stain	R.A.M.
7ANQKW	Cyanoacrylate Fuming	Processing time 30 minutes.
7CAMRM	Visual Examination	No friction ridge detail was observed.
	Cyanoacrylate Fuming	Fumed for 10 minutes at 80% RH. No friction ridge detail was observed.
	Powder Dusting	Used black magnetic powder and friction ridge detail was developed in quadrant B. The ridge detail was photographed and lifted.
	Dye Stain	Sprayed the item with Rhodamine 6G dye stain (Petroleum Ether base) and allowed it dry.
	Alternate Light Source	Visualized the item under 495nm of light. The same friction ridge detail in quadrant B was observed and was photographed.
7HXC77	Cyanoacrylate Fuming	Initially viewed using natural and oblique light. The item was processed with cyanoacrylate fumes.
	Powder Dusting	Post, CA fuming, the item was processed with black
7K3YNG	Powder Dusting	Heavy black powder was applied with a fiberglass brush.
7XTU2V	Cyanoacrylate Fuming	fumigation cycle: 6mins 40secs; 120°C; 80%RH BY40 Dye
829J3K	Cyanoacrylate Fuming	-placed item #1 in a cyanoacrylate chamber for latent print processing

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
84YK7M	Visual Examination	0955, test/control N/A, various angles of light, no suitable ridge detail.
	Alternate Light Source	1030, test/control positive, 445 nm & 520 nm, no suitable ridge detail.
	Cyanoacrylate Fuming	1112, test/control positive, 40 min in Vacuum chamber A, reagent ID-AJ27419, suitable ridge detail, photographed.
	Powder Dusting	1206, test/control positive, reagent ID - MP 08-21-24, no additional ridge detail.
8AN3MJ	Visual Examination	Visually inspected the surface of the clear plastic on the underwater phone case and did not visualize any possible friction ridge detail.
	Cyanoacrylate Fuming	Placed the underwater phone case 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 clear plastic sheet with Rhodamine 6G to cover the entire surface area and let it dry.
	Alternate Light Source	Viewed the clear plastic on the underwater phone case under the laser (550nm with orange filter goggles). Friction ridge detail was observed at this step.
8DJY4X	Cyanoacrylate Fuming	
8GJAYX	Cyanoacrylate Fuming	
	Dye Stain	Basic Yellow Treatment
8GLUTR	Visual Examination	12/3/2025 White light
	Lumicyano Fuming	12/3/2025 Deionized water-Lot: 44070248 Exp: 7/23/2029 1.5 scoops of Lumicyano powder-Lot: AE030325 Exp: 4/2027 26 drops of Lumicyano solution-Lot: 45089A507 Exp: 7/2027 Foster and Freeman MVC 1000 fuming chamber Serial number: 1083-53978 auto cycle settings: humidity-10 minutes, glue-15 minutes, purge-10 minutes Ridge detail observed in quadrant B was photographed
	Dye Stain	12/3/2025 Rhodamine 6G Pre-mix Solution Lot: PF300451052501 Exp 4/15/2028 Contrast did not increase; additional ridge detail was not observed
	Methanol	12/3/2025 Methanol Lot: 2NB0233 Exp: 5/20/2028 Used as a rinse after Rhodamine 6G application
	Alternate Light Source	12/3/2025 Brightbeam laser Green 525nm
8U3J73	Cyanoacrylate Fuming	Ingreso la funda a la camara de cyanocrilato esperando el proceso normal para la visualizcacion del fragmento. [Requested translation was not provided by time of publication.]
8X7LRR	Visual Examination	Conducted visual examination the item using oblique lighting and magnifier. No ridge detail was observed.
	Cyanoacrylate Fuming	Processed item using cyanoacrylate ester fuming for approximately 10 minutes. Ridge detail was developed.
	Powder Dusting	Processed item using black powder in an effort to enhance the ridge detail. The ridge detail was not enhanced.
8YYJZX	Cyanoacrylate Fuming	
	Dye Stain	BY40

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
92MCCT	Cyanoacrylate Fuming	Cyanoacrylate Fuming was QC'd on 11/24/25 and was positive. The item was placed in the chamber and fumed for approximately 30mins. A visual examination was completed after with no visible ridge detail noted.
	Powder Dusting	The item was black powdered and one latent lift card was obtained from Quadrant B. No visible ridge detail was noted in A, C or D.
	Dye Stain	M-Star dye-stain was QC'd on 11/24/25 and was positive. The item was sprayed with M-star, dried and examined with an alternate light source. One latent area was observed in quadrant B. No visible ridge detail was note in A,C or D.
93HVEU	Visual Examination	white and ambient lighting
	Alternate Light Source	F&F 82S UV and Blue lights
	Lumicyano	Dye stain is built into the cyanoacrylate - photographed ridge detail after this step
	Powder Dusting	Used both magnetic black and conventional black powder - photographed after conventional; attempted a lift - insufficient detail lifted
93XANP	Visual Examination	White light Poly light 450 nm Laser light RU vis
	Cyanoacrylate Fuming	
	BY40	
	C.V.	
94AQ23	Visual Examination	Visual examination - No latent ridge detail visible.
	Powder Dusting	Black Magnetic Powder developed latent ridge detail in Section B of Item #1.
96LLMU	Visual Examination	Examined the underwater phone case under different light sources (flashlight, studio lights, ring lights, etc.) and found ridge detail in the B quadrant of the item. Photographed the ridge detail that was observed.
	Cyanoacrylate Fuming	Processed the item with CA in a fuming chamber at 78% humidity for 15 minutes. Photographed the results. Performance checked the CA in parallel to the item of evidence.
	Powder Dusting	Applied magnetic powder to the front of the phone case where there was ridge detail and photographed the results. Performance checked the mag powder before using it on the item of evidence.
	Dye Stain	Applied MRM-10 dye stain to the area of ridge detail that was in the B quadrant and photographed the results using ALS. Performance checked the dye stain before using it on the item of evidence.
	Alternate Light Source	Viewed the item with the ALS using wavelengths from 450 nm to 505nm. Photographed the ridge detail at 450nm using an orange barrier filter. Performance checked the ALS before using it on the item of evidence.
9CNVUM	Visual Examination	Used oblique lighting, no visible prints
	Alternate Light Source	Used forensic laser, no visible prints
	Cyanoacrylate Fuming	Placed in CA fuming chamber, no visible prints
	Dye Stain	Rhodamine 6G applied and allowed to fully dry, no visible prints
	Alternate Light Source	Used forensic laser, print observed in Quadrant B
	Powder Dusting	Used black fingerprint powder and attempted to lift print, 1 latent lift card obtained from Quadrant B

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
9G2FYM	Visual Examination	White and blue light source.
	Cyanoacrylate Fuming	10 minutes of fuming.
	Dye Stain	Basic yellow 40.
9KRGK2	Powder Dusting	The packaging of item 1 is carefully opened, placed on the work table, the magnetic latent print powder gray reagent is verified, then it is applied to the quadrants of item 1, revealing a fingerprint in quadrant "B"
9PR4R6	Visual Examination	Polilight PL500
	Cyanoacrylate Fuming	Fumming time - 6 min
	Dye Stain	Basic Yellow 40
	Wet Powder Suspension	White
9R27JV	Visual Examination	Apparent ridge detail located in quadrant "B" within the clear section of the underwater phone case during visual examination.
	Cyanoacrylate Fuming	Placed underwater phone case into the Cyanoacrylate Ester tank (SN: CA000035) on the 5th floor processing room at its standard settings (15min fume, 80% humidity).
	Powder Dusting	Used Black Powder in the powdering hood (SN: DWS000022) on the 5th floor processing room to better visualize the apparent ridge detail.
9U6WNP	Cyanoacrylate Fuming	2.7 grams CA, 75% humidity, CA Heat: 250 degrees F, Fume 17 minutes, Purge 5 minutes (Dye Staining Lumicyano)
	Powder Dusting	Black powder
9W9UYH	Powder Dusting	Dusted with magnetic powder and wand.
A2HA6Z	Visual Examination	with white light and TracER laser
	Cyanoacrylate Fuming	70 minutes
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black powder
A89KEX	Visual Examination	Item was examined using a flashlight (negative results)
	Cyanoacrylate Fuming	Item was fumed for 20 minutes in a CAE chamber with heat and humidity (negative results)
	Powder Dusting	Item was processed with magnetic powder first (negative results) then processed with black powder (BP1)
	Dye Stain	Item was processed with RAM dye stain, lot #25.2 and examined using the LASER. Additional detail was observed (L1=BP1)
AJ324Y	Visual Examination	Visual examination using CrimeLite and TracER Laser
	Cyanoacrylate Fuming	Foster & Freeman FFlex S and CrimeLite
	Dye Stain	Rhodamine 6G and TracER Laser
	Powder Dusting	Black powder and incandescent lighting
AJYFA6	Visual Examination	A visual inspection of the piece of evidence was carried out, but no fingerprint was observed.
	Powder Dusting	Black magnetic powder is used for developing the fingerprint, exposing a fragment of the fingerprint in quadrant B.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
AQX7TU	Cyanoacrylate Fuming	Placed item in the chamber and added 0.3 grams of super glue preset 28 minutes processing; test print positive
AQZQMN	Visual Examination	Viewed with flashlight, polarized filters and coaxial lighting
	Cyanoacrylate Fuming	~70% RH, 8 min fume time, viewed with flashlight
	Dye Stain	Rhodamine 6G, MeOH-based, viewed using laser @ 532 nm with orange barrier filter
AT8TTT	Visual Examination	White light.
	Cyanoacrylate Fuming	Cyanoacrylate fumming chamber "Air Science Safefume 48C" cyanoacrylate B83000, BVDA. Humidity 80,1%. Target temperature 85C. Procesing time 25 min.. Room temperature 19.5C.
	Physical Developer (PD)	Small particle reagent SPR Black, B-86000, BVDA. Items was spread for 5-6 seconds.
AW6A6M	Cyanoacrylate Fuming	Cyanoacrylate fuming was performed under controlled humidity conditions (75%) for 18min. The developed area was photographed using coaxial lighting.
	Alternate Light Source	And it was further examined using the Foster + Freeman VSC 8000 for enhanced visualization under coaxial light sources.
	Powder Dusting	White fingerprint powder(ZnO) was applied to the fumed surface to enhance contrast, and additional photographs were taken under coaxial illumination.
AWKVD4	Powder Dusting	1. Item #1 was photographed. 2. Gloves and tweezers were used to handle item #1. 3. A visual inspection was performed to locate the fingerprint. Using a white flashlight and a magnifying glass, a fingerprint impression was observed.
AZMR3Y	Visual Examination	
	Cyanoacrylate Fuming	9min and 10min
	Dye Stain	Rhodamine 6G, Forensic light source: orange filter/515 nm
	Powder Dusting	Black powder
B6CQUY	Visual Examination	Examined with white light and magnification on 11/7/25.
	Cyanoacrylate Fuming	Placed in Cyanosafe on 12/8/25. Examined with white light and magnification.
	Dye Stain	RAY dye stain applied via spray on 12/9/25, Batch #835, rinsed with water, then lightly patted dry. Examined with CrimeLite at 460nm - 510nm with an orange filter.
	Powder Dusting	Dusted with magnetic black powder on 12/9/25. Examined with white light and magnification.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
BEKXWU	Visual Examination	After opening the item, I visually inspected it using oblique lighting. I rotated the object around at different angles using natural light and under the magnifying light looking for patent impressions.
	Cyanoacrylate Fuming	– I hung the object in the fume chamber and placed a beaker of hot water in the chamber. I placed my charged fingerprint on multiple areas on the glass of the door. I squeezed superglue into an aluminum dish and put it on the hotplate inside the chamber. I turned the hotplate on and closed the door. I monitored the controls by observing the chamber every couple of minutes. When the control prints turned white, I turned on the vent to remove the superglue fumes and then cracked the door. I removed the aluminum dish and beaker of water. I removed item 1 and visually inspected the item under oblique lighting.
	Powder Dusting	I poured magnetic powder into a plastic weigh boat. I applied the powder to the plastic area where the quadrants were located, careful to not touch the magnetic wand to the item. A print developed.
BHM48T	Visual Examination	Negative
	FSISII	Negative
	Cyanoacrylate Fuming	Negative
	Powder Dusting	Positive in Quadrant B
BHZTCQ	Cyanoacrylate Fuming	1122 hrs - initial examination of item under White Light. Possible print seen in Quadrant B. ~1141hrs, item was developed in a Cyanosafe brand Cyanoacrylate Fuming Chamber (model CAS30) using Evident brand MicroBurst CA glue (#3026). Processing run for 14 minutes under standard humidity. Positive control (QC check) was POSITIVE post processing.
	Dye Stain	~1256hrs item was further examined with RAY (Arrowhead #PF30104/A-26561) to enhance areas of possible print.
	Alternate Light Source	After staining, item was visualized and examined with Rolfin Polilight Flare-2 lights (415 & 505mn) using Red, Orange, and Yellow filters. Possible print was best visualized using 415mn light w/ orange filter.
BMWE7E	Visual Examination	White light
	Cyanoacrylate Fuming	Foster Freeman MVC3000 11 minutes fuming time
	Alternate Light Source	FSIS with 254nm UV
	Dye Stain	Rhodamine 6G viewed with 532 nm LASER
BUHA8J	Visual Examination	No ridge detail
	Alternate Light Source	Used 350-380nm and 420-470nm, no ridge detail
	Cyanoacrylate Fuming	Possible ridge detail
	Powder Dusting	No further development, still possible ridge detail from previous step. Black magnetic

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
BVTWY6	Cyanoacrylate Fuming	Item #1 plastic phone case Screened with white light, UV light and yellow filter, 450 nm light and orange filter, Laser (532 nm) with orange laser filter, FSIS II 245 nm light with UV filter. Positive. Marker A- ridge detail in quadrant B under FSIS II 245 nm light with UV filter. Cyanoacrylate. Control- positive/negative. The chemical was working properly. Screened again with same settings as above. Negative.
	Dye Stain	Item #1 plastic phone case R6G dye stain. Control- positive/negative. The chemical was working properly. Screened with laser (532 nm) with orange laser filter. Positive. Marker A- ridge detail in quadrant B.
	Powder Dusting	Item #1 plastic phone case Black powder 1 latent print card collected - quadrant B
C7J8L3	Visual Examination	
	Powder Dusting	Black powder
C82ERK	Visual Examination	
	Powder Dusting	Black magnetic fingerprint powder
C9TDZR	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
CAPQQQ	Visual Examination	11:00-11:10 friction in quadrant B
	Alternate Light Source	11:10 - 11:40 Polilight 505 nm and examined with three different barrier filters: orange, yellow and red. Print not visible Polilight 415 nm and examined with three different barrier filters: orange, yellow and red. Print not visible
	Cyanoacrylate Fuming	11:42 CyanoSafe TM Cyanoacrylate Fuming Chamber with Evident TM Cyano acrylate Glue #3026
	Visual Examination	11:59 - 12:30 Friction Ridge development with Cyanoacrylate
CGH4KX	Visual Examination	Item was visually examined with oblique lighting
	Powder Dusting	Item was photographed prior to processing, then dusted with black powder.
CN4YL3	Visual Examination	Gloves and tongs were used to handle the piece, then it was photographed. A visual inspection was performed on piece of evidence item #1, a transparent waterproof plastic cell phone case, divided into (4) sections A-D. No fingerprint was displayed.
	Alternate Light Source	A visual inspection was performed using alternating blue light and the print could be visualized in section B.
	Powder Dusting	Black graphite powder was used to develop the print; it was developed and visualized in section B.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
CPHFMM	Visual Examination	Visual examination using white light.
	Alternate Light Source	Visual examination using various wavelengths of light.
	Cyanoacrylate Fuming	Fumed with cyanoacrylate in fuing cabinet, visualised using white light.
	Vacuum metal deposition	VMD using gold and zinc, visualised using white light.
	Dye Stain	Rhodamine-6-G applied, visualised using laser (532nm).
	Dye Stain	Gentian Violet applied, visualised using white light and laser (577nm).
	Dye Stain	Basic Yellow 40 applied, visualised using laser (460nm).
	Powder Dusting	Black powder applied, visualised using white light.
CQVQ2E	Visual Examination	Ambient lighting, and dual lasers to detect inherent fluorescence
	Cyanoacrylate Fuming	
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black fingerprint powder. Photographed using UV254.
CTZKGB	Visual Examination	Natural and oblique lighting to search for any ridge detail prior to cyanoacrylate fuming
	Cyanoacrylate Fuming	Cyanoacrylate Fuming - followed chamber specifications to set the run time for 15 minutes at 80 degrees humidity with a 5 minute purge time
	Powder Dusting	After using the FSIS machine to photograph, used magnetic black powder to attempt to lift the ridge detail in quadrant B
	Dye Stain	After lifting ridge detail, the chemical dye stain MSTAR was sprayed over the underwater phone case and allowed to completely dry
CUAM8G	Visual Examination	With use of white light. No friction ridge detail observed.
	Cyanoacrylate Fuming	Fumed at 75% humidity for 15 minutes.
	Alternate Light Source	White light ALS, no friction ridge detail developed.
	RUVIS	Viewed with shortwave UV light (254 nm). No friction ridge detail developed.
	Dye Stain	Rhodamine 6G applied and left to dry.
	Laser	Viewed with green handheld laser (520 nm) and orange goggles. No friction ridge detail developed.
D2AARN	Visual Examination	Visual examination with white light.
	Cyanoacrylate Fuming	Placed in fuming chamber, Humidity was set at 80% and Temperature of 248 degrees. 0.20 grams of Cyanoacrylate (CAE) was used.
	Dye Stain	Rinsed with fluorescent dye (R.A.M.)
D2NZGY	Alternate Light Source	Krimesite microscope
D336EX	Visual Examination	Visual examination was conducted with negative results.
	Cyanoacrylate Fuming	Faint positive results observed in quadrant B
	Dye Stain	Rhodamine 6G dye-stain
	Alternate Light Source	Orange filter; wavelength 445 nanometers with positive results

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
D3JCKE	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	
D4CATL	Visual Examination	Reviewed with white light and UV (FSIS) - no RD present
	Cyanoacrylate Fuming	Processed in CAE chamber and reviewed with white light and UV (FSIS) - no RD present but noted a void area in quadrant B that resembles a potential latent fingerprint shape but no ridges when reviewing with UV lighting
	Dye Stain	Processed with R6G and reviewed with LASER (532nm) and orange filter - no RD present
	Powder Dusting	Black magnetic powder and reviewed with white light - one latent print visualized (Tip area) and marked as 1L1
D7JKPP	Visual Examination	Item 1: During visual examination there was ridge detail found in the "B" quadrant of the clear panel on the phone pouch which was photographed as photo lift #1.
	Cyanoacrylate Fuming	After photo documentation was complete, the item was exposed to cyanoacrylate (CA) fumes. The results for photo lift #1 was photographed. A standard was tested simultaneously with the item and performed as expected.
	Alternate Light Source	ALS was used on a standard prior to being used on evidence and performed as expected. The alternative light source, set at 450nm, was used to illuminate the ridge detail of photo lift #1 which was photographed after this step.
	Dye Stain	MRM-10 was applied to a standard prior to being used on evidence and performed as expected. After photo documentation was complete, the application of MRM-10 and the use of a forensic light source was used to illuminate photo lift #1 which was photographed after this step.
DA2MWV	Visual Examination	
	Cyanoacrylate Fuming	MYSTAIRE CA Fuming Chamber used (70% humidity for 10 minutes, 10-minute purge)
	Dye Stain	Rhodamine 6G Methanol solution
	Alternate Light Source	Coherent laser
	Powder Dusting	Dual contrast fingerprint powder
DBDLNH	Cyanoacrylate Fuming	Cyanoacrylate chamber- time 20 min., RH 80%, photo (white light) with scale, contrasting technique- Basic Yellow 40.
DBX33Z	[No Methods Reported.]	Visual Exam, Krimesite Imager, Cyanoacrylate Fuming, Powder Dusting, and photography. (Processing time-1Hr 30Min)
DEFHED	Physical Developer (PD)	Processed with magnetic poweder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
DEVPVN	Cyanoacrylate Fuming	
	Powder Dusting	Black magnetic powder
	Dye Stain	MBD
	Alternate Light Source	and orange goggles
DHUZRN	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Visual Examination	
	Alternate Light Source	
	BASIC YELLOW	
	Visual Examination	
	Alternate Light Source	
DKHEFX	Visual Examination	Friction ridge impression visible in section "B" upon visual examination with and without oblique lighting.
	Powder Dusting	Black magnetic powder applied further enhancing the friction ridge impression in section "B".
DUP8RD	Powder Dusting	Item Processed: One (1) pink waterproof phone pouch Processing methods utilized: Sterile magnetic finger print powder for latent prints
DYLTHG	Visual Examination	Visual exam. No friction ridge impressions detected.
	Alternate Light Source	Inherent fluorescence exam using laser at 445nm and 520nm. No friction ridge impressions detected.
	Cyanoacrylate Fuming	CA fuming in vacuum chamber. 40 minutes exposure time. 20 minutes atmospheric exposure. Friction ridge impression detected in Quadrant B.
	Dye Stain	Rhodamine 6G dye stain treatment and examination with laser. This yielded enhanced ridge development to the previously developed latent print in Quadrant B, and it was photographed.
	Powder Dusting	Magnetic black powder treatment yielded no additional impressions and no enhancement to the previously developed impression.
EKVH9G	Visual Examination	Visual/oblique lighting examination - no latent prints observed
	Alternate Light Source	Forensic light source - no latent prints observed
	Cyanoacrylate Fuming	CA fuming - no latent prints observed Concurrent control successfully conducted
	Dye Stain	Rhodamine 6G dye stain/forensic light source - 1 latent print observed in section "B" Control successfully conducted
	Powder Dusting	Black powder - 1 latent print observed in section "B"

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
ELNGGM	Visual Examination	Visual examination of item using white light.
	Cyanoacrylate Fuming	Foster Freeman FFLEX chamber. 80% humidity, glue temp. 248 F for ten minutes, 0.2 g of cyanoacrylate.
	Alternate Light Source	Viewed evidence using UV lighting 350-380nm.
	Dye Stain	R.A.M. dye stain.
	Alternate Light Source	ALS at 445-475nm
	Powder Dusting	Black powder
EXHUEY	Visual Examination	Gloves and tweezers were used to handle the piece. The piece was photographed and and I performed a visual inspection to locate the fingerprint and it was visible with the letter B.
	Powder Dusting	Black graphite powder was used to develop the fingerprint and I lifted it with an adhesive patch which was located on the letter B.
F63BNN	Visual Examination	
	Cyanoacrylate Fuming	Positive control
	Powder Dusting	black powder
F7ER4M	Visual Examination	I used natural light to perform a visual examination of the item.
	Cyanoacrylate Fuming	The 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.
	Alternate Light Source	ALS used to photograph developed latent print after cyanoacrylate fuming process.
	Dye Stain	Following the cyanoacrylate fuming process, I used a dye stain (RAM) to further process the super glue developed latent print.
FC2UQJ	Visual Examination	Pink waterproof plastic phone casting
	Visual Examination	White light
	Cyanoacrylate Fuming	
	Visual Examination	White
	Alternate Light Source	UV using DCS-5
	Dye Stain	Panacryl BY40
	Alternate Light Source	415nm light examination
FR9VKK	Cyanoacrylate Fuming	CA fuming for 10 minutes - very faint ridge detail seen Case was cut open and was fumed for another 10 minutes - better ridge detail
	Dye Stain	Rhodamine 6G - no improvement with ridge detail
	Powder Dusting	Dusted with black powder - no improvement with ridge detail

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
FRYKAB	Visual Examination	Item 1 was examined using fluorescent light under magnification at different angles.
	Cyanoacrylate Fuming	Item 1 was placed in a CyanoSafe chamber with distilled water in the cup heater element and 12 drops of liquid cyanoacrylate in a foil cup that was placed onto a heating element. One (1) test print was created and placed in the chamber. The chamber was sealed and set to run for 12 minutes. The chamber went through a purge cycle, and Item 1 sat in the chamber for 60 minutes. Item 1 was examined using fluorescent light under magnification at different angles.
	Dye Stain	Item 1 was immersed in a dish containing RAY dye staining, before being rinsed with water. Item 1 was patted dry and set to rest in a fume hood to dry completely. Item 1 was examined using blue light with an orange filter under magnification at different angles.
	Powder Dusting	Item 1 was dusted with black powder using a fiberglass brush inside a fume hood. Item 1 was examined using fluorescent light under magnification at different angles.
FVWBAU	Powder Dusting	Processed item using single use black magnetic powder.
	Visual Examination	Item visually examined using flashlight with side lighting.
G2EVZD	Visual Examination	Oblique lighting
	Alternate Light Source	420-470nm
	Cyanoacrylate Fuming	
	Powder Dusting	Black magnetic
G34Y8T	Powder Dusting	With the biosafety equipment in place, the packaging of item 1 is opened. Upon verifying the type of surface, the HI-FI latent print powder black reagent is checked for use, applying it to the four quadrants of the item, locating a fingerprint in quadrant B.
GANKCQ	Visual Examination	Viewed Item with CrimeScope at wavelengths 455nm - 515nm.
	Cyanoacrylate Fuming	Fumed Item in CyanoSafe for 20 minutes.
	Powder Dusting	Dusted Item with black powder.
GDACJM	Visual Examination	White light, Blue light
	Cyanoacrylate Fuming	Cyvac
	Alternate Light Source	
GEGRRE	Visual Examination	Prescreened item with ALS/FSIS II (254nm, 365nm, 450nm and 532nm with UV, yellow, orange and laser filters) - negative result
	Cyanoacrylate Fuming	Cyanoacrylate fuming of item and viewed with white light - positive result (photographed area of ridge detail) (within quadrant B)
	Dye Stain	Rhodamine applied to item and viewed with ALS (532 nm and laser filter) - positive result (photographed area of ridge detail) (within quadrant B)
	Powder Dusting	Black Powder applied - positive result - (lifted with tape and adhered to latent card) (within quadrant B)

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
GJXUYJ	Cyanoacrylate Fuming	
	Dye Stain	Basic Yellow 40. One fingerprint visible in "B".
	Dye Stain	Basic Red 14. One fingerprint visible in "B".
GLL9NU	Visual Examination	viewed w/white light
	Cyanoacrylate Fuming	15 minutes @ 65% humidity
	Dye Stain	MBD on 12/18/2025
	Alternate Light Source	MBD viewed using CSS filter
	Powder Dusting	black powder
GLZPMT	Visual Examination	Visual examination under LED lighting and magnification on 11/07/2025.
	Alternate Light Source	Visual examination using the Crime Lite ML (460nm-510nm filter): orange filter was completed on 11/07/2025.
	Cyanoacrylate Fuming	The Cyanosafe Crime Scene Unit #1 recirculation chamber was used on 11/08/2025. The chamber was set to run for 12 minutes with 12-15 drops of cyanoacrylate glue put into a metal cup and set on a heating element. After the fumes were purged for about 10 minutes the item sat in the chamber for an additional hour in order to allow the glue to harden. The test print was positive. Then the item was examined under LED lighting and magnification.
	Powder Dusting	Black powder was used on 11/08/2025 and then the item was examined under magnificiation.
	Dye Stain	RAY dye stain, batch #870 was used on 11/09/2025. The item was immersed in the dye stain for a few minutes, then rinsed off with water, and then the left over water and dye stain was patted dry with a Kimwipe. The item was placed into a fume hood to dry completely, for approximately 45 minutes. When the item was completely dry, I examined the time using orange filtered glasses and a Polilight 2 (450nm).
GNAZEQ	Visual Examination	Using oblique lighting friction ridge detail could be seen in quadrant B prior to processing.
	Cyanoacrylate Fuming	Mystaire fuming chamber 10 minutes at 70% humidity
	Dye Stain	Rhodamine 6G
	Alternate Light Source	Laser
GNRTDE	Alternate Light Source	Rofin UV with yellow filter - negative Rofin 450nm with orange filter - negative TracER Laser 532nm with orange laser filter - negative FSIS II 254nm light and filter - negative
	Cyanoacrylate Fuming	FSIS II 254nm light and filter - positive One (1) area, B, on front of phone pouch
	Dye Stain	Rhodamine: TracER Laser 532nm with orange laser filter - positive One (1) area, B, on front of phone pouch
	Powder Dusting	Black magnetic powder with white light - negative
GPY7VG	Visual Examination	
	Cyanoacrylate Fuming	MVC FFLEX S2 120 degrees Celsius 80% humidity 10 minute glue time 4 drops Cyanoacrylate lot#031125-01
	Dye Stain	Basic Yellow lot# 021324-03

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
GR9BBQ	Visual Examination	using a flashlight to examine the item prior to any processing method.
	Cyanoacrylate Fuming	Item was processed in the cyanoacrylate ester fuming chamber for 20 minutes. After the fuming process, it was examined using a flashlight to detect ridge detail.
	Powder Dusting	Item was processed with magnetic and black powder to develop ridge detail.
	Dye Stain	Item was processed with RAM and examined using a laser light to detect ridge detail.
GTNBUF	Visual Examination	Visual Exam/Oblique lighting - no latent prints observed
	Alternate Light Source	No latent prints observed
	Cyanoacrylate Fuming	No latent prints observed Control successfully conduced
	Dye Stain	Rhodamine 6G/FLS - 1 latent print observed and documented in quadrant B Control successfully conducted
	Powder Dusting	Black powder - 1 latent print observed and documented in quadrant B Control successfully conducted
H6CY3K	Alternate Light Source	White light crime light UV light crime light Blue & Blue/Green crime light with & without orange & yellow goggles
	Cyanoacrylate Fuming	Cyanoacrylate (CA) fuming time - 6 min
	Alternate Light Source	White light crime light UV light crime light Blue & Blue/Green crime light with & without orange goggles
	Rhodamine-6G HFE	Sprayed with R6G and allowed to air dry
	Alternate Light Source	Blue & Blue/Green crime light with & without orange goggles Polilight using: 415nm, 440nm, 450nm and 490nm with orange and yellow goggles
H9BCL4	Cyanoacrylate Fuming	Utilized cyanoacrylate fuming prior to examining with FSIS
	Full Spectrum Imaging System II	Examined with FSIS and photographed one print in Square B
	Powder Dusting	Processed with black powder and lifted one print from Square B
	Dye Stain	Processed with MSTAR dye stain and utilized Tracer Laser to photograph one print on Square B
H9T2AP	Visual Examination	desk lamp regular light
	Alternate Light Source	FSIS II 254 nm
	Cyanoacrylate Fuming	Air science Safe Fume chamber Super glue 30 min run time 30 min purge time
	Alternate Light Source	FSIS II 254 nm
	Dye Stain	MSTAR
	Powder Dusting	Black powder
HMR94K	Visual Examination	Used ambient and oblique lightning with a flashlight to search for visible prints
	Cyanoacrylate Fuming	Used CA fuming chamber and CA. 2 photographs taken.
	Dye Stain	MRM-10 dye stain applied to item. 1 photograph taken.
	Dye Stain	Basic Yellow applied to item. 1 photograph taken.
	Methanol Rinse	Rinsed item with methanol.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
HMWP2J	Visual Examination	
	1,2-Indanedione	Cyanoacrylate (CA) Fuming Fingerprint Development Procedure 1. Scope This procedure applies to the development of latent fingerprints on non-porous evidence surfaces using cyanoacrylate (CA) fuming. 2. Materials and Equipment • Cyanoacrylate adhesive (Super Glue; Chang Chun Chemical; Product Model: CA-155) • Cyanoacrylate fuming chamber • Heating device (built into the fuming chamber) 3. Procedure 3.1 Preparation 1. Ensure the fuming chamber is clean and free of residual cyanoacrylate deposits. 2. Suspend or place the item to be processed in the fuming chamber, ensuring the surface to be developed is fully exposed to the circulating vapor. 3. Make sure the sample is stable and does not touch the walls of the chamber. 3.2 Fuming 1. Place a few drops of liquid cyanoacrylate onto the heating plate at the bottom of the fuming chamber. 2. Activate the heating device and maintain heating for approximately 10 minutes to generate sufficient CA vapor. 3. Monitor the chamber during the process to prevent over-fuming. 3.3 Initial Observation 1. Carefully remove the sample after fuming is complete. 2. Examine the surface under appropriate lighting to determine if fingerprints have developed. 3. Photograph and document all visible fingerprints. 3.4 Repeat Fuming (If Necessary) 1. If fingerprints are unclear or incomplete, return the sample to the chamber and repeat the fuming process. 2. After each fuming cycle, observe and photograph the sample to evaluate ridge clarity or newly developed prints. 3. Avoid prolonged single fuming cycles to prevent excessive polymer deposition and background interference. 4. Safety and Quality Considerations • Prior to each fuming operation, test a control sample of similar material with known fingerprints to confirm reagent effectiveness and chamber performance. • Avoid over-fuming; excessive cyanoacrylate deposits can obscure fingerprint details. • Ensure adequate ventilation and follow laboratory safety protocols to prevent inhalation of CA vapors.
	Powder Dusting	
HURPEQ	Visual Examination	viewed w/ CrimeLite white light & TracER Laser
	Cyanoacrylate Fuming	used F+F MVC FFLEX S
	Dye Stain	used Rhodamine 6G
	Powder Dusting	used black powder
HVKMLX	Cyanoacrylate Fuming	MVC5000 superglue chamber used
	Dye Stain	Rhodamine 6G with TracER Laser

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
HVM9FR	Visual Examination	The item was visually examined using white light and magnification. No prints observed.
	Cyanoacrylate Fuming	12- 15 drops of cyanoacrylate were added to a metal cup and placed on the heating element. A test print was added to the chamber and the distilled water well level was checked. Item was placed in the chamber to allow for the entire surface to be exposed to the CA vapors. The cycle ran for 12 minutes and then a 10-minute purge cycle. Item was allowed to sit undisturbed for 1 hour. The item was visually examined using white light and magnification. No prints were observed.
	Dye Stain	Item was sprayed with a layer of RAY solution and then the excess was rinsed off with tap water. The item was gently patted dry. The item was visually examined using a Crime Lite ML (460nm-510nm) with an orange filter.
	Powder Dusting	Black magnetic powder was applied to the item with a magnetic wand. The wand was dipped into the magnetic powder. The wand with attached magnetic powder is lightly run over the item in a circular motion. The item was visually examined using white light and magnification.
HWZKEW	Visual Examination	The item was photographed, gloves and tweezers were used to handle the piece, a visual inspection was performed and nothing was observed.
	Alternate Light Source	An inspection was performed with alternating light and nothing was observed.
	Powder Dusting	Black magnetic powder and a magnetic brush were used, a fingerprint was developed in box B.
HYH2AM	Powder Dusting	se utilizo polvo magnético silver black. [Requested translation was not provided by time of publication.]
HZG3FE	Visual Examination	Oblique lighting with flashlight
	Alternate Light Source	Inherent fluorescence by Forensic Light Source (FLS)
	Cyanoacrylate Fuming	CA fuming for approximately 10 minutes
	Dye Stain	Rhodamine 6G and Forensic Light Source (FLS)
	Powder Dusting	Black powder
J4WWUQ	Visual Examination	1 photo section B
	Cyanoacrylate Fuming	no photo
	Dye Stain	RAY batch 862, 1 photo of section B
	Powder Dusting	no photo
J6PU2W	Cyanoacrylate Fuming	processing time: 25 min Dye stain: superglue and MBD solution The reaction needs 75-80 percent humidity

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
JEUYRT	Visual Examination	The examination started by using white light from different angles over the item. No fingermarks could be seen at this stage. We could see a white substance on the items surface.
	Cyanoacrylate Fuming	The item was placed in the Cyanoacrylate cabinet. Humidity 80%. The evaporation process lasted 15 min. A very faint fingermark could be seen in section B. The items suface showed indications that it has previously been wet.
	Alternate Light Source	The item was examined with several different wavelanghts from 365 nm to 520 nm. All four sections were examined. One fingermark was still faintly visible in section B. By using a lightsource with 475 nm and 505 filter we were able to get the best contrast. The fingermark was still of poor quality.
	Dye Stain	The item was treated with a fluorecent dye (basic yellow 40) by spraying the dye on the item and rinsing with cold water. The item was then left to dry.
	Alternate Light Source	Examined the item with 450 nm and a yellow filter. The fingerprint in section B was improved, more friction ridge details were visable.
	vacuum metal deposition	The item was placed in the vacuum chamber and put into vaccum. The item was procesed with silver and zink. The fingerprint in section B was even more improved, more friction ridge details were visable on the lower half of the print.
JFQHTU	Visual Examination	First I made a visual examination to locate the latent print and it was visible in the letter B of the clear underwater phone case.
	Alternate Light Source	Then I used an alternate white light source to highlight the latent print.
	Powder Dusting	I used black powder, a squirrel hair brush and a marabou hair brush to develop the finger print.
JLC488	Powder Dusting	Processed item using magnetic wand and black magnetic powder. Latent fingerprint developed in section B of item.
JMM9HB	Visual Examination	White light
	Cyanoacrylate Fuming	Used a Mystaire CA-6000 for 11 minutes at 80% humidity
	Dye Stain	Rhodamine 6G methanol based; visualized with Arrowhead Dual77 laser at 532nm
JRKPTJ	Visual Examination	Photographed item as received. Visual examination using ambient lighting. No ridge details observed.
	Cyanoacrylate Fuming	Air Science Safe Fume (serial number CA000011) was used for 15 minutes at 80% RH. Ridge details observed in quadrant B.
	Powder Dusting	Magnetic powder was used to enhance/give better contrast from the surface of the item.
JV3RZP	Visual Examination	In normal room lighting; oblique lighting
	Alternate Light Source	CrimeScope CS-16-500 (455-515 nm)
	Cyanoacrylate Fuming	20 mins
	Powder Dusting	Black powder
JWA9TT	Powder Dusting	Black powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
K7JVME	Visual Examination	ambient light
	Lumicyano	1.5 scoops of fluorescent Lumicyano powder combined with 26 dropd of cyanoacrylate (lumicyano solution) to make an 8% solution. Foster and Freeman MVC 1000 chamber used with the following settings Humidity RH ~80% 10 mins , Glue RH >/= 80% 120 degrees C 15 minutes, Purge cycle < 80% 10 minutes
	Alternate Light Source	Visualized under Brightbeam green laser 525nm
	Rhodamine 6G	Rhodamine 6G premixed solution
	Alternate Light Source	Visualized under Brightbeam green laser 525nm
	Visual Examination	White copy stand light
KC4XNP	Visual Examination	
	Alternate Light Source	crime scope and UV
	Cyanoacrylate Fuming	fuming chamber
	Dye Stain	RAM and ALS
	Powder Dusting	Black and White powder ridge detail only visible with oblique lighting and photographed
KEBDWG	Visual Examination	I used oblique lighting with a flashlight to examine Item 1 for fingerprints for 1 minute.
	Cyanoacrylate Fuming	I used a chamber to process Item 1 with superglue for approximately 30 minutes.
	Dye Stain	Applied RAM dye stain to Item 1, approximately 15 seconds.
KKZND8	Powder Dusting	black powder
KQZAYF	Visual Examination	VIS with white light
	FSIS	FSIS II with UV light
	Cyanoacrylate Fuming	CAE chamber followed by white light
	FSIS	FSIS II with UV light
	Dye Stain	R6G
KRC6HL	Visual Examination	
	Alternate Light Source	FSIS
	Cyanoacrylate Fuming	
	Alternate Light Source	FSIS
	Dye Stain	MSTAR
	Powder Dusting	
KUNPMP	Cyanoacrylate Fuming	

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
KWRFXB	Visual Examination	Visual and Oblique Lighting examination No friction ridge observed.
	Alternate Light Source	Coherent TracER FLS and Spex CrimeScope ALS No friction ridge observed.
	Cyanoacrylate Fuming	CA fuming chamber. Control successfully conducted concurrently. Friction ridge observed in quadrant "B".
	Dye Stain	Rhodamine 6G dye stain with FLS. Control successfully conducted prior. Friction ridge observed in quadrant "B".
	Powder Dusting	Black Powder. Friction ridge developed in quadrant "B".
L49D2N	Visual Examination	Visual examination under white light and magnification was done on 11/7/2025 using LED lighting.
	Alternate Light Source	Examination with an alternate light source was done on 11/7/2025 using a Crime Lite ML (460nm-510nm filter) and an Orange Filter on it.
	Cyanoacrylate Fuming	The Crime Scene Unit CyanoSafe recirculation chamber CSU1 was used on 11/8/2025. The chamber had 12-15 drops of cyanoacrylate glue put into a metal cup and set to run for 12 minutes. Then after the fumes were purged for 10 minutes the item sat in the chamber for an hour to allow the glue to completely harden. The test print was positive. Then the item was examined under LED lighting and magnification.
	Dye Stain	RAY dye stain, batch#: 870, was used on 11/10/2025. The item was immersed in the RAY for a few minutes, rinsed with water, and then the water droplets were lightly tapped off with a kimwipe. The item was then placed into a fume hood to dry completely, approximately an hour. Then the item was examined using the Crime Lite ML (460nm-510nm filter) with an Orange Filter on it.
	Powder Dusting	Black powder was used on 11/10/2025 and then the item was examined using LED lighting and magnification.
L9KFP6	Cyanoacrylate Fuming	Placed in cyanoacrylate tank for fuming for 10 minutes.
	Powder Dusting	Dusted lightly with black fingerprint powder to developed latent prints further.
LAUBQC	Visual Examination	Natural light, white light/angle light, optical instruments.
	Alternate Light Source	Polilight PL 500 (all ranges of light), protective goggles with range filter, optical instruments.
	Cyanoacrylate Fuming	Processing time: 10 min, humidity: 80%, The Finder Cyanoacrylate Packet (cyanoacrylate foil)
	Visual Examination	White light /angle light, optical instruments.
	Dye Stain	Basic Yellow 40
	Alternate Light Source	Polilight PL 500 (505 nm light), protective goggles with range filter, optical instruments.
	Wet Powder Suspension	Wet Powder White Suspension
	Visual Examination	White light /angle light, optical instruments.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
LB7ZVA	Visual Examination	Using a flashlight, no latent prints were observed on the clear sections of the underwater phone case. No latent print images were obtained at this stage.
	Alternate Light Source	Using a forensic light source, no latent prints were observed on the clear sections of the underwater phone case. No latent print images were able to be obtained at this stage.
	Cyanoacrylate Fuming	Using binder clips and cyanoacrylate ester (Lot number: 202503101), I placed a control and the underwater phone case within the mounted fuming chambers. A positive control was obtained. No latent prints were observed on the clear sections of the underwater phone case. No latent print images were obtained at this stage.
	Dye Stain	Using binder clips and Rhodamine 6G (Lot number: R6G-092025), I covered the control and the underwater phone case in the cyanoacrylate fluorescent dye stain. A positive control was obtained. Using a forensic light source, I observed a latent print located on quadrant B of the clear section of the underwater phone case.
	Alternate Light Source	Using a forensic light source, Digital Photography was used to preserve the print. The latent print was photographed with and without scale.
	Powder Dusting	Using black powder, I processed the phone case for latent prints. I obtained two latent print lift cards from quadrant B within the clear sections of the underwater phone case.
LCYX4F	Visual Examination	Visual observation using oblique lighting with flashlight - 2 minutes.
	Cyanoacrylate Fuming	45-minute processing time inside chamber with heated distilled water, heated glue in tin dish holder and test print. Positive results from test print.
	Visual Examination	3 minute visual examination of Item 1.
	Dye Stain	Applied R.A.M. using squirt bottle method on cell phone case in Fume Hood, 20 seconds. Dry time 1-minute.
	Alternate Light Source	2-minute observation with ALS lighting.
	Powder Dusting	Applied black powder with brush, 2 minutes on Downdraft table.
	Visual Examination	Visual examination using oblique lighting with flashlight, 1 minute.
LDUG6G	Lumicyano	2g lumicyano solution + 0,18ml lumicyano powder. Fumig cabinet: hot plate 120 celsius + humidity 80% and time 25 minutes.
LJJYJT	Visual Examination	Visual Examination on both sides and it does not show the latent print.
	Visual Examination	Visual Examination with Alternate white Light on both sides and it does not show the latent print.
	Powder Dusting	Development with Black Graphite Powder for 5 minutes and show the latent print in the letter B.
LMLRL6	Visual Examination	
	Alternate Light Source	3 different examinations performed including 450nm blue light with an orange filter, 450nm blue light with a yellow filter, and 530nm green light with a red filter.
	Cyanoacrylate Fuming	
	Dye Stain	RAY dye stain used and examined under 450nm blue light with an orange filter.
	Powder Dusting	Black in color regular powder dusting.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
LYUXAC	Visual Examination	White light
	Alternate Light Source	Lezer- 440 nm
	Cyanoacrylate Fuming	6 min fuming, 75%
	Alternate Light Source	uv reflective
	BY40	
	CV	
M2DCDC	Visual Examination	White light, Laser 532nm, Laser 577 nm, FLS
	Cyanoacrylate Fuming	Luminescent cyanoacrylate CST (Fumigation chamber MVC 3000 FOSTER+FREEMAN - Automatic Mode) - Item seems to be dry
	Alternate Light Source	White light and LABINO Superxenon 325 nm + Yellow filter
	Dye Stain	Basic Yellow 40
	Alternate Light Source	Crimelite 8x4 - FOSTER + FREEMAN (445nm) and Yellow Filter
	VMD	Vacuum metal deposition - Gold Zinc and Silver Zinc Because after the luminescent cyanoacrylate we saw water droplets.
	Alternate Light Source	White light
MBYH7A	Wet Powder Suspension	Black powder suspension
	Visual Examination	white light
	Alternate Light Source	range of high intensity light sources, blue, green and UV
ME2B4E	Visual Examination	
	Cyanoacrylate Fuming	
	Dye Stain	R6G viewed with LASER at 532nm
MEK3BD	Visual Examination	Oblique lighting. Friction ridge detail observed in quardrant "B"
	Cyanoacrylate Fuming	10 minute interval.
	Visual Examination	Friction ridge detail enhanced and observed in quardrant "B". Partial print, tip.
	Dye Stain	Sprayed Basic yellow 40, followed by water rinse and drying.
	Alternate Light Source	Crimelite Blue 420-470nm.
	Visual Examination	Friction ridge detail observed in quardrant "B". Partial print, tip.
MGRKAA	Visual Examination	In natural light and light from forencic ilumination (Polilight 550 XL), a latent print was observed in section B.
	Cyanoacrylate Fuming	Time 15 min., RH 80 %, discoverd finger print mark has improved
	Wet Powder Suspension	The surface was subjected to a powder suspension (Wet Powder White) for about 10 sec, then rinsed with cold running water; the finger print has improved.
	Sudan Black	The surface was subjected to a powder suspension (Sudan Black) for about 10 sec, then rinsed with cold running water; finger print has improved.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
MPKTWL	Visual Examination	Crimelite, LASER
	Cyanoacrylate Fuming	MVC FFLEX
	Dye Stain	Rhodamine 6G
	Powder Dusting	
MQCQ6R	Cyanoacrylate Fuming	Used FSIS to look at item, then used Cyanoacrylate Fuming and RAM to dye stain the envelope.
MW6TAD	Visual Examination	No visible ridge detail
	Cyanoacrylate Fuming	No visible ridge detail
	Dye Stain	Basic Yellow
	Alternate Light Source	Laser 445 NM with bandpass and orange filter. Ridge detail in box "B".
N2RZAW	Visual Examination	Utilized oblique lighting with white light and alternate light sources. Friction ridge detail observed in quadrant B.
	Cyanoacrylate Fuming	Utilized the cyanoacrylate (super-glue) fuming chamber for 16 minutes with a 9-minute purge cycle. The item was placed back into its packaging and placed back on my shelf for at least 24 hours. Item was viewed the following week. Friction ridge detail observed in quadrant B.
	Powder Dusting	Following the fuming method, I utilized a dual contrast fingerprint powder. Friction ridge detail observed in quadrant B.
NAMZQB	Visual Examination	Viewed with white light, 350 nm, 455 nm and 515 nm. No ridge detail observed.
	FSIS (Full Spectrum Imaging System)	Viewed at 254 nm. Ridge detail observed in quadrant B, but unable to capture good image due to reflections from UV light.
	Cyanoacrylate Fuming	Fumed for 10 minutes. No ridge detail observed.
	Dye Stain	R6G (petroleum ether based). No ridge detail observed.
	FSIS	Captured ridge detail in quadrant B, with reflections.
	Powder Dusting	Black magna powder used. Ridge detail in quadrant B captured.
NHEB27	Visual Examination	A visual examination was performed on the item in its received condition, prior to application of processing techniques. Under oblique lighting conditions, friction ridge detail was observed in quadrant B. The friction ridge detail observed was not of value for preservation at this point.
	Cyanoacrylate Fuming	Item 1 was fumed for 12 minutes at 80% humidity. Friction ridge detail was observed in quadrant B; the friction ridge detail observed was not of value for preservation at this point.
	Powder Dusting	Black magnetic powder was used and friction ridge detail was developed in quadrant B. One (1) digital photograph was taken of the friction ridge detail developed in quadrant B and one (1) lift was made.
	Dye Stain	Rhodamine 6G dye stain (petroleum ether base) applied to item 1 and allowed to dry.
	Alternate Light Source	Item 1 was examined with an alternative light source set to 495nm with the use of orange goggles. The same area of friction ridge detail in quadrant B was observed. This development was documented via photography.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
NR6YW9	Visual Examination	
	Cyanoacrylate Fuming	LABCONCO CApture BT fuming chamber, settings: Grams CA 0.2 Humidity 80% RH Dwell 2:00 CA Heat 250 Fahrenheit (121 Celsius) Fume time 4:00 Purge time 5:00
	Dye Stain	Basic Yellow 40. Tap water rinse. ALS: 415 nm, yellow filter
NTXX4E	Visual Examination	I used a flashlight for oblique lighting.
	Cyanoacrylate Fuming	Flex - Chamber Superglue Water Processing time ~ 35 minutes
	Powder Dusting	Black powder
P3GLHE	Visual Examination	During my visual examination, a visible print was seen with the use of a flashlight.
	Cyanoacrylate Fuming	The item was placed in the cyanoacrylate chamber for approximately 30 minutes with a control sample.
	Powder Dusting	Magnetic powder was used to enhance the appearance of the latent prints on the item.
P99T39	Visual Examination	Visual examination performed after opening evidence and before processing.
	Cyanoacrylate Fuming	Fluorescent cyanoacrylate fuming used, item was placed in fuming chamber and glue time was 18 minutes.
	Visual Examination	Item was viewed with white light after fuming.
	Alternate Light Source	Screening alternate light source used, 445-510nm, OG 550 AG orange filter used for viewing.
PKZJGK	Visual Examination	
	Alternate Light Source	
	LUM	
	Powder Dusting	Black Mag`
PNMWP3	black magnetic powder	
PNYZUE	Cyanoacrylate Fuming	Cyanowand
PWCPU8	Visual Examination	light white
	Cyanoacrylate Fuming	temp. 21C, humidity 80%, time 15 min.
	Powder Dusting	light 350-415 nm
PWXHBC	Visual Examination	
	Cyanoacrylate Fuming	
	Dye Stain	Rhodamine 6G
	Alternate Light Source	532nm, orange barrier filter
PZ89FK	Powder Dusting	Photos were taken of the item before processing. The item was visually examined with oblique lighting and met with negative results. The item was dusted with black powder and met with positive results in quadrant B Quality control check was completed by placing a fingerprint on plastic and using black powder to dust, met with positive results.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
PZFKHG	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	magnetic powder/brush
Q4DJ9Z	Powder Dusting	Black magnetic powder was used to process the pink underwater phone case. One latent print was developed in section B.
Q9MJMC	Visual Examination	Examined with white light
	Cyanoacrylate Fuming	80% relative humidity, 248 degrees F, 0.2 g cyanoacrylate ~ 10 minutes
	Visual Examination	Observed with alternate light source (UV light @ 350-380 nm)
	Dye Stain	Evidence processed with RAM, processed for ~ 5 minutes
	Visual Examination	Observed wth alternate light source at ~475 nm
QC6YVJ	Visual Examination	A fluorescent light was used while looking at the item at various angles under magnification.
	Cyanoacrylate Fuming	The item was placed into a CyanoSafe where I added distilled water to the cup heater element and put 14 drops of liquid cyanoacrylate into a foil cup. That foil cup was then placed on a heating element. A test print was made and hung in the chamber. The chamber was closed and it was turned on to run for 12 minutes. After the 12 minutes the chamber went through its purge cycle and I let the item sit for 60 minutes. I examined the item under a fluorescent light at various angles under magnification.
	Powder Dusting	Black powder was used and a fiberglass brush was used to apply the powder in a fume hood. I examined the item under a fluorescent light at various angles under magnification.
	Dye Stain	RAY dye staining was used on this item. It was immersed in the dye stain and then rinsed off with water. I pat the item dry to remove water droplets and then hung the item up in the fume hood to completely dry. I examined the item under a blue light with an orange filter.
QGW7FD	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	Black powder
QLD9MH	Visual Examination	Ridge detail was visualized.
	Alternate Light Source	No ridge detail fluoresced.
	Cyanoacrylate Fuming	Ridge detail was visualized.
	Powder Dusting	Ridge detail was visualized.
QLTR8F	Visual Examination	11/19/2025
	Cyanoacrylate Fuming	11/19/2025
	Powder Dusting	11/19/2025: magnetic powder
QX48AE	Powder Dusting	se aplicó reactivo vulcano negro, mediante el uso de brocha de fibra de vidrio y pluma de marabú. [Requested translation was not provided by time of publication.]

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
R42E48	Visual Examination	
	Alternate Light Source	
	Powder Dusting	Black Magnetic Powder
	Alternate Light Source	
R6J4UE	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	magnetic powder dusting method used
R8QNFU	Visual Examination	Utilizing oblique lighting I examined item 1 with negative findings
	Cyanoacrylate Fuming	I fumed item 1 using cyanoacrylate ester (superglue) alongside a positive control, which developed as expected. I then examined the item, with negative findings
	Dye Stain	I processed item 1 with Basic Yellow dye stain. Utilizing alternate light source (ALS), I visually examined the item and observed friction ridge detail
R9VF6L	Visual Examination	A visual inspection was performed on the piece of evidence, resulting in a positive fingerprint on the Transparent cell phone case.
	Metal Powder	The fingerprint was treated with black metal powder until it became completely visible, and then preserved.
T3C9MG	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.
	Cyanoacrylate Fuming	The entire item and a plastic nonporous control were placed inside a Foster & Freeman MVC-5000 superglue chamber, used 3 grams of cyanobloom (superglue) in heating element, and set an autocycle program for 70 minutes. Using a Crimelite flashlight (white light spectrum), oblique lighting was applied to the plastic card sleeve to image any potential latent Prints.
	Dye Stain	Rhodamine 6G was applied on the underwater phone case and on a nonporous control. 30 minutes was allowed for the stain to airdry. 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, black powder was applied on the underwater phone case. Oblique lighting from a Crimelite flashlight and incandescent lighting was used to image any potential latent prints.
T4LHB9	Visual Examination	White, blue and green lightsource with appropriate filters used.
	Cyanoacrylate Fuming	
	Dye Stain	BY40 used.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
T79WZH	Cyanoacrylate Fuming	Placed my prints on a test piece of acetate sheet. Cyanoacrylate fumed the test piece and item #1 using 0.2g of Omega Print glue. Processed in the MVCFFLEX chamber for 10 minutes. There was an issue with the glue so I processed again in the same chamber but used 0.2g of Arrowhead Forensics glue for 10 minutes. No ridge detail.
	Dye Stain	Next day I processed with basic yellow. Basic yellow was sprayed onto my test print, and clear plastic, allowed to dry and it revealed ridge detail in quadrant B. Photo with label and scale was taken.
	Sudan Black	After photos, processed test piece and clear plastic with sudan black. No additional ridge detail or prints were found.
TB7BTY	Visual Examination	Ambient lighting and ring lamp with magnification was used; No FRD is present.
	Alternate Light Source	Crime Lite ML2 used with orange filter green light-no FRD fluorescent; orange filter blue light -some FRD fluorescent ; FRD is present in quadrant B.
	Cyanoacrylate Fuming	Processed with Cyanoacrylate Ester in the Misonix CA-6000 chamber;65% RH; 30 min. exposure; FRD is present in quadrant B.
	Visual Examination	Ambient lighting and ring lamp with magnification was used; FRD is present in quadrant B
	Alternate Light Source	Crime Lite ML2 used with orange filter-green light (480nm-560nm); Significant improvement in quadrant B fluroscent; orange filter-blue light(420nm-470nm) no improvement; FRD to be captured
TFD4FH	Full Spectrum Imaging System-II	254nm Alternate Light Source and Filter
	Cyanoacrylate Fuming	21 minutes at 70% humidity
TG66JK	Visual Examination	A visual examination was performed, on that piece of evidence, resulting in a positive fingerprint.
	Latent Fingerprint Powder	The piece of evidence was treated with black graphite fingerprint powder, until became completely visible; preserved and documented.
TN7C3U	Powder Dusting	Fiberglass brush was used, gathering a small amount of heavy black powder and then was applied on the surface.
U36KJ9	Visual Examination	No fingerprints were visible.
	Alternate Light Source	We used the following lights and filters: IR, UV, green480-560+OG590, blue420-510+GG495,blue/green445-510+OG550. No fingerprints were visible.
	Lumicyano	Lumicyano. 8 % solution. Weigh 215 mg lumicyano powder and 2,7 g cyanoacrylate solution (CST Lumicyaano Solution). Lumicyano parameters: relative humidity 80%, heating plate 120 degrees, gluing time 25 min.
	Alternate Light Source	Used the blue light 420-510 and GG495 filter and the fingerprint appeared to B section.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
U8FNCV	Visual Examination	Visually examined the item and did not find any friction ridge detail
	Cyanoacrylate Fuming	Placed item in superglue chamber with superglue, distilled water, and a control print. Chamber ran for approximately 40 mins. Friction ridge detail was observed in Quadrant B at this step but was too faint to be photographed.
	Dye Stain	Rhodamine 6G was sprayed onto the entire item and was left to dry.
	Alternate Light Source	Viewed the item under the laser with orange goggles. Friction ridge detail was observed in Quadrant B at this step and was photographed.
UQTF7K	Alternate Light Source	ark search was done by following ways: 1. Blue Light (445 nm) using Goggle (495 nm). 2. Green Light (532 nm) using Goggle (550 nm) Weak mark 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, remains same
	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. The mark on Section B remains the same
V4MUQE	Quality Control Check	At 2:24 PM, CSI [Name] performed a quality control check utilizing black fine powder by placing a fingerprint on the back bottom right corner of item 1: underwater phone case containing quadrant A-D and was met with a positive result.
	Visual Examination	CSI [Name] performed a visual exam with oblique lighting and was met with negative results from item 1: underwater phone case containing quadrant A-D.
	Powder Dusting	CSI [Name] utilized black fine powder to dust item 1: underwater phone case in all four quadrant A, B, C, D and was met with the following positive results: • Quadrant B CSI [Name] utilized black fine powder to dust item 1: underwater phone case in all four quadrant A, B, C, D and was met with the following negative results: • Quadrants A, C, and D.
V96EWZ	Visual Examination	Under white light
	Cyanoacrylate Fuming	Fumed for 20 minutes in chamber
	Dye Stain	Used R6G
	Alternate Light Source	CSS, orange filter
VAHQWQ	Cyanoacrylate Fuming	20 minutes in fuming chamber
	FSIS	
	Powder Dusting	
	Dye Stain	Utilized MStar
VC6QTZ	Visual Examination	Oblique lighting and room lighting used with magnification
	Cyanoacrylate Fuming	.2 grams Cyanoacrylate used, fume time: 4 minutes, 80% humidity, 5 minute purge time.
	Dye Stain	Basic Yellow 40 used with tap water rinse. Viewed using ALS at 415 nm, and yellow goggles

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
VHVZ3Y	Visual Examination	
	Cyanoacrylate Fuming	
	Dye Stain	R6G
VMN8G2	Cyanoacrylate Fuming	30 min processing time 10 min purge, basic yellow used post fuming.
VU98WD	Visual Examination	Visualized a print and captured
	Alternate Light Source	Used UV light and Crime Scope at different wavelengths
	Lumicyano	Mixed liquid solution with dye crystals and fumed for 20 minutes.
	Powder Dusting	Utilized black powder
VVKYT2	Visual Examination	I was able to see ridge detail in Section B.
	Cyanoacrylate Fuming	A test print was placed in the Foster Freeman MVC 3000.
	Dye Stain	I sprayed Basic Yellow 40 on the phone pouch and hung it in the vent hood to dry.
	Alternate Light Source	I utilized an Rofin Poly Light @ 450nm to visualize the phone pouch.
WDGPMA	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	
WFN6W2	Visual Examination	The item was examined using white oblique light, and no prints were observed.
	Cyanoacrylate Fuming	The item was fumed in a superglue chamber. A very faint print was developed and photographed.
	Powder Dusting	The item was processed with gray powder and previous print quality declined. The print was photographed.
WLTNEZ	Visual Examination	
	Alternate Light Source	Blue and green light source
	Cyanoacrylate Fuming	
	Dye Stain	Basic Yellow 40
WQKT94	Visual Examination	Received item photographed Under ambient light, a latent mark was clear in section B
	Powder Dusting	Black powder applied to the whole item and the mark is clearly visible
WUPGRZ	Visual Examination	Visual/Oblique lighting examination- no prints observed
	Alternate Light Source	Forensic Light Source- no prints observed
	Cyanoacrylate Fuming	CA fuming- no prints observed Control successfully conducted
	Dye Stain	Rhodamine 6G dye stain/Forensic Light Source-1 print observed in quadrant "B"
	Powder Dusting	Black powder- 1 print observed in quadrant "B"

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
WYEX26	Cyanoacrylate Fuming	12/05/25: Item placed in Cyanoacrylate Atmospheric Chamber 1, run for 20-25 minutes, vented for 10 minutes, and allowed to sit for 1 hour.
	Powder Dusting	12/05/25: Item processed with black powder and brush.
	Visual Examination	12/05/25: Item examined after processing with black powder; ridge detail observed in quadrant B.
	Dye Stain	12/05/25: Item sprayed with MBD dye stain and allowed to dry.
	Alternate Light Source	12/05/25: Item examined with ALS and orange goggles after dye stain; ridge detail observed in quadrant B.
WYYUAY	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	lot CA 202503101
	Visual Examination	
	Dye Stain	Rhodamine 6G, lot R6G 112525
	Alternate Light Source	
	Powder Dusting	black powder
X22YHD	Visual Examination	The item was visually examined using oblique lighting with a flashlight, prior to processing.
	Cyanoacrylate Fuming	Lot #SGF052224DH, test print positive. A Safefume chamber was used. The relative humidity was set at 55%, the temperature started at 21 degrees Celsius and reached 29 degrees Celsius while fuming. The chamber fumed for 26 minutes and purged for 5 minutes.
	Powder Dusting	After examination quality photographs were taken (see preservation methods), the item was further processed with black magnetic powder.
X4L7GZ	Visual Examination	white light, uv, 415-590nm
	Cyanoacrylate Fuming	white light
	Dye Stain	Basic Yellow (uv 450 light)
X7VV6H	Visual Examination	
	Cyanoacrylate Fuming	Humanity 80%,heat temperature 120°C,fuming time 5min.
X92CK2	Visual Examination	ridges observed, further development with sequential processing / flashlight
	Cyanoacrylate Fuming	ridges observed, further development with sequential processing / 15min run time in chamber
	Rhodamine-6-G/methanol rinse	fluorescent dye stain working solution, document ridge detail with photo, then methanol rinse = no further development / print developed in Quad B

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
X9HPN6	Visual Examination	Item was visually examined under a magnifier and light. One photo taken.
	Cyanoacrylate Fuming	Item was placed into a fuming chamber along with a tin containing CA on a hot plate and hot water for humidity. Item was left in the chamber for approximately ten minutes before turning off the hot plate and venting the chamber. Item was removed and examined under a magnifier. One photo taken.
	Dye Stain	MRM-10 dye stain was poured onto the item. Once the item was dry it was examined under a magnifier with a FLS at 455nm with an orange filter. One photo taken.
	Dye Stain	Basic Yellow dye stain was poured onto the item. Once the item was dry it was examined under a magnifier with a FLS at 455nm with an orange filter. One photo taken.
	Methanol rinse	Methanol was poured onto the item as a rinse. Once item was dry it was examined under a magnifier with a FLS at 455nm with an orange filter. No photos taken.
XB6AT9	Visual Examination	12/4/2025
	Visual Examination	12/10/2025
	Cyanoacrylate Fuming	12/10/2025
	Powder Dusting	12/10/2025: Black powder
XTLHNH	Visual Examination	Ambient and oblique lighting no ridge detail observed.
	FSIS 245NM	FSIS 254NM ridge detail observed and photographed in quadrant B.
	Cyanoacrylate Fuming	Batch#: ST-0060 Control:+ no ridge detail observed.
	FSIS 365NM	FSIS 365NM no ridge detail observed.
	Powder Dusting	Black Powder Batch#: N/A Control: N/A ridge detail observed in quadrant B and collected with latent lift tape that was then affixed to a latent card.
Y6EE8V	Visual Examination	Viewed with white light
	Cyanoacrylate Fuming	
	Dye Stain	Rhodamine 6G - Methanol
YA7NCM	FSIS	I first superglued the item with cyanoacrylate fumes and then examined it with the Full Imaging Spectrum System (FSIS). Located a possible latent area in Quadrant B and photographed it.
	Powder Dusting	I then dusted the item with black powder and lifted the same possible latent area in Quadrant B and placed it on a lift card.
	Dye Stain	I then sprayed the item with liquid dyestain: MSTAR and photographed the same possible latent area in Quadrant B with an alternate light source and orange barrier filter.
YCJV3B	Visual Examination	White light and 532nm LASER
	Cyanoacrylate Fuming	45min F+F fuming chamber
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
YJUGMX	Visual Examination	Visual exam, no latents observed prior to addition of chemicals.
	Cyanoacrylate Fuming	The item was processed utilizing cyanoacrylate (lot # 031125-01) in the Foster and Freeman MVC FFLEX S1 cyanoacrylate fuming chamber, with a temperature of 120°C, 80% relative humidity, and 10 mins., 0.1 g of cyanoacrylate was used. A test print was placed on the bottom of a fuming plate and placed into the instrument to be processed.
	Dye Stain	MBD (lot # 061224-01) was applied via spray bottle to the item while in a fume hood. The fuming plate with the positive test print was also sprayed with MBD.
	Alternate Light Source	An alternate light source on the Foster and Freeman DCS5 was used to observe the bag for latents. Additionally, the test print was observed under ALS, in which the reaction was positive.
YJX2GT	Visual Examination	White light (flashlight)
	Cyanoacrylate Fuming	Approximately 70% humidity Viewed with white light (flashlight)
	Dye Stain	R6G methanol-based Viewed with laser at 532nm with orange barrier filter, and with A-FF-1 forensic filter
YKPZNZ	Visual Examination	11/04/25 - Item 001 (underwater phone case), visual exam using white light. No ridge detail detected
	FSIS-UV	11/04/2025 - Item 001 (underwater phone case) - FSIS-UV - No ridge detail detected
	Cyanoacrylate Fuming	11/04/2025 - Item 001 (underwater phone case) processed with CAE, viewed with white light. 1L1 detected in section labeled B.
	Cyanoacrylate Fuming	11/07/2025 - Item 001 (underwater phone case) processed with CAE, viewed with FSIS-UV. 1L1 detected in section labeled B.
YLJLLW	Visual Examination	Visual/ oblique lighting examination- no prints observed
	Alternate Light Source	Forensic Light Source- no prints observed
	Cyanoacrylate Fuming	CA Fuming- no prints observed Concurrent control successfully conducted
	Dye Stain	Rhodamine 6G dye stain/ Forensic Light Source- 1 print observed in Quadrant B Control successfully conducted
	Powder Dusting	Black powder- 1 print observed in Quadrant B
YNQ4FL	Cyanoacrylate Fuming	10 minutes
	Dye Stain	Stained with BY40
YT7EVB	Visual Examination	I looked at Item 1 under fluorescent lighting before any processing had been done to it.
	Cyanoacrylate Fuming	I put Item 1 in the Cyanosafe. It was in the "running" mode for 12 minutes and the "purge" mode for 10 minutes. Then I let it rest for 1 hour before handling it again. After the hour, I looked at the item under fluorescent lighting.
	Dye Stain	I used RAY (Rhodamine, Ardrox, and Basic Yellow) dye staining on Item 1. I left it in the dye-stain for approximately 1 minute before rinsing it, blotted it dry, and hung it to dry. Then I looked at it on the Crime-Lite ML with the blue light and orange filter.
	Powder Dusting	I dusted Item 1 with black powder as a last attempt at enhancing any ridge detail.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
ZAJE2X	Visual Examination	under white light.
	Alternate Light Source	fluorescence examination (350 nm - 650 nm under appropriate color barrier filters).
	Cyanoacrylate Fuming	in the fuming chamber with a humidity 80% for 15 minutes; visual examination under white light and fluorescence examination in alternate light source (350 nm - 650 nm).
	Basic Yellow 40	fluorescence examination in alternate light source (350 nm - 505 nm under yellow or orange color barrier filters).
ZD9JZW	Visual Examination	Visual/oblique lighting examination- no prints observed
	Alternate Light Source	Forensic Light source- no prints observed
	Cyanoacrylate Fuming	CA Fuming- no prints observed Concurrent Control successfully conducted
	Dye Stain	Rhodamine 6G dye stain/ Forensic Light Source- 1 print observed in quadrant "B" Control successfully conducted
	Powder Dusting	Black powder- 1 print observed in quadrant "B"
ZGAPF3	Visual Examination	Ambient lighting
	Cyanoacrylate Fuming	Mystaire fuming chamber, approximately 25 minutes
	Visual Examination	Ambient lighting
	Dye Stain	Rhodamine 6G
	Visual Examination	Laser at 532nm
	RUVIS	FSIS, UV
ZJCMNA	Visual Examination	Performed a Visual Examination utilizing ambient lighting.
	Cyanoacrylate Fuming	Utilized a Cyano Safe Fuming Cabinet. A test print was placed on clear acetate using a Sirchie Standard Pad. This was used as a control and placed in the Fuming Cabinet concurrent with item 001-001. Item 001-001 was placed on plastic shelving. Cyanoacrylate was poured into an aluminum dish and placed on a hot plate. dH2O was poured into the Honeywell humidifier. The processing time was 11 minutes at 72% Humidity.
	Powder Dusting	Black Magnetic Powder was applied to the front window which was divided into four quadrants marked A-D.
ZK3U4Z	Powder Dusting	Sample 1, successful development of the latent fingerprint, using magnetic powder in "B" area.
ZRQECL	Visual Examination	White light, different angles
	Alternate Light Source	Blue light, yellow filter
	Cyanoacrylate Fuming	10 minutes, 120 degrees celcius, 80% RH.
	Dye Stain	Basic yellow 40
ZYN268	Visual Examination	
	Cyanoacrylate Fuming	Air Science Chamber
	Dye Stain	M-STAR
	Powder Dusting	Black powder

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
ZYZ3LE	Cyanoacrylate Fuming	The item was processed with cyanoacrylate fuming, followed by staining with Ardrox. The total processing time was approximately 1 hour

Item 1 - Development Response Summary

Participants: 249

Methods Utilized

Alternate Light Source	125	Physical Developer	2	*Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.*
Cyanoacrylate Fuming	199	Powder Dusting	143	
DFO	0	Visual Examination	211	
Dye Stain	140	Wet Powder Suspension	5	
Ninhydrin	0	1,2-Indanedione	1	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
2BVC73	Visual Examination	
	Alternate Light Source	Dual 77 and UV (520 nm - 445 nm - 365 nm)
	1,2-Indanedione	Visual and Dual 77 (520 nm)
	Physical Developer (PD)	
2CJFJA	Visual Examination	Visual examination with flashlight was performed and yielded negative results located on marker #2.
	Powder Dusting	A quality control check was performed by placing a fingerprint on a paper coin envelope and he use of magnetic powder was performed with positive results.
	Powder Dusting	Magnetic powder was used and yielded negative results located on marker #2A-#2D.
2J8RD3	Visual Examination	Examination under white light and latent print was not appeared on any positions, so we are going to another procedures.
	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 clear shape.
	Ninhydrin	Putting paper on Ninhydrin solution, let paper dry around 15 minutes. The latent appeared clearer on A position.
2NK7M3	Visual Examination	Nothing visible
	DFO	Nothing developed
	Ninhydrin	very faint and partial print developed in quadrant A
	Silver Nitrate	print that barely developed in quadrant A disappeared
2TVLPY	Visual Examination	White light. No fingerprints were observed.
	1,2-Indanedione	100 degrees C, 10 min. One fingerprint visible in "A".
	Ninhydrin	62% RH, 80 degrees C, 2 min. No fingerprints were observed.
34BT7Y	Powder Dusting	Black magnetic powder physical reagent. Use with a magnetic-tipped brush. Time: 17 minutes
38UU7D	Visual Examination	White light/ Day light
	Alternate Light Source	Polilight, ML2 - 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)	
3BT73D	Visual Examination	used side lighting
	1,2-Indanedione	used heat press and Laser (Bright Beam) exam / 532nm / used orange goggles
	Ninhydrin	used steam iron and visible lighting

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
3ETGXD	Alternate Light Source	
	1,2-Indanedione	
3FJFCB	Visual Examination	At 6:20 p.m., I began processing the piece of evidence. Using all necessary personal protective equipment, I proceeded to document the evidence through general photography in order to record its condition at the start and each of the packages.
	Alternate Light Source	A visual inspection was then carried out, supplemented with alternating light, to identify any visible fingerprints as no fingerprints could be identified
	Iodine Crystal Amp.	As the first method for developing fingerprints, at 6:59 p.m., iodine crystals were applied following a controlled procedure. A control sample was prepared on a piece of yellow paper inside a sealed gas chamber to verify the effectiveness of the reagent, and the sample was photographed. The evidence piece was then placed in a gas chamber along with a sealed ampoule of iodine crystals. After the exposure time, no positive results were observed on the piece.
	Ninhydrin	Continuing with the second method, ninhydrin aerosol was applied, spraying evenly over the piece of evidence and letting it dry for approximately 30 minutes. The document acquired a purplish color, without any fingerprint fragments being visible.
	silver nitrate amp.	As a final method, silver nitrate was used in a sealed gas chamber, leaving the piece exposed for 30 minutes and then drying it at a controlled temperature for several hours. No fragments or fingerprints were observed after the application of this reagent.
3GWAUW	Visual Examination	Visible white light, LASER, RUVIS
	1,2-Indanedione	Dry heat press, LASER
	Ninhydrin	Steam heat, white light
3JJPJ8	Visual Examination	
	Alternate Light Source	CS @ 515nm and UV
	DFO	placed in oven to accelerate development. viewed with CS @ 515nm
	Ninhydrin	placed in plastic bag overnight for development. very little development. viewed one last time a few days later and had very faint development of impression.
3M79NB	Visual Examination	Examination of the item with light of different wavelengths and with different observation filters. Nothing was visible.
	1,2-Indanedione	After treatment with 1,2-Indanedione a fingerprint was visible in zone A.
	Vacuum Metal Deposition	Metal Deposition of Silver/Zinc. The fingerprint in zone A became clearly visible.
3RFGV8	Visual Examination	white light and magnification
	Alternate Light Source	450nm with orange filter
	Ninhydrin	batch # 323
	Physical Developer (PD)	batch # 548

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
3T9F4D	1,2-Indanedione	heat applied
	Alternate Light Source	no ridge detail found on item control was positive
	Ninhydrin	applied heat and humidity - no ridge detail found immediately control was positive placed item in plastic bag and placed in dark room until 12/17/25 and periodically viewed in hopes that something would develop over time.
3ZBLK3	1,2-Indanedione	Item 2 is porous paper, which we enhanced using 1,2-indandione (1,2-IND). The paper was soaked in 1,2-IND solution and then allowed to dry naturally. It was subsequently heated in an oven at 120°C for 10 minutes. When illuminated with 515 nm light and viewed through an orange goggle, a fluorescent fingerprint was observed in section A.
	Ninhydrin	Secondly, we applied ninhydrin to the sample. Item 2 was soaked in ninhydrin solution and allowed to dry naturally. A few days later, the fingerprint developed a purple color, enabling observation with the naked eye.
44QAZT	Visual Examination	Visual/oblique lighting examination - no prints observed
	Alternate Light Source	Forensic Light Source - no prints observed
	Iodine Fuming	Iodine fuming with Iodine crystals- no prints observed Control conducted - successful
	DFO	DFO + FLS - 1 print observed in quadrant A Control conducted - successful
	Ninhydrin	Ninhydrin (Petroleum Ether) - 1 print observed in quadrant A Control conducted - successful

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
4CG24C	Visual Examination	1) The lined sticky note is observed with the naked eye. No traces detected.
	Alternate Light Source	2) We illuminate the object with the Crimescope MCS-400 at different frequencies using the appropriate filters and colored glasses, from different angles. At frequencies of 415 Hz and 450 Hz, we observe a trace in box “A,” but the pattern group is not observable.
	1,2-Indanedione	3) Given the porous substrate, we spray the 1,2-indanedione solution onto the Post-it note under a fume hood, then wait 2 minutes for the solution to evaporate. The object is then placed under a heated press at 165°C for 10 seconds. The 1,2-indanedione solution is tested in parallel on a control sample.
	Visual Examination	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.
	Alternate Light Source	5) We observed the lined sticky note 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.
	Ninhydrin	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 cabin 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.
	Visual Examination	7) The fingerprint is barely visible in box "A". Only a few purple papillary ridges can be seen. The ridges observed do not allow a specific pattern group to be determined. No markings are observed elsewhere.
	Alternate Light Source	8) The fingerprint in box "A" is illuminated under different wavelengths of the Crimescope, using appropriately coloured lenses, in order to obtain the best possible contrast. The white light from the Crimescope gives the best result. The mark remains very faintly visible. We observe no other marks elsewhere on the object.
4EMMRC	Visual Examination	white light examination
	Ninhydrin	ninhydrin processing then photography
4HAYYU	Visual Examination	white light examination
	Alternate Light Source	Polilight PL 500 illuminator, full range of visible light spectrum, yellow, orange, red filter
	1,2-Indanedione	530-550 nm, red liter
	Ninhydrin	white light observation
4KBZZR	Visual Examination	with oblique lighting; no print observed.
	Alternate Light Source	Coherent TracER; no print observed.
	Iodine	Iodine; no print observed.
	DFO	DFO applied and viewed with Coherent Tracer; print developed and photographed.
	Ninhydrin	Ninhydrin (Petroleum Ether) applied and placed into Caron 6105 chamber; print was not developed further.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
4RU9JH	Powder Dusting	dual contrast magnetic powder with magnetic wand
	Ninhydrin	and a steam iron
4UH3XX	Visual Examination	Illumination: Ambient
	Ninhydrin	Technique equipment: Humidity chamber (70 deg F, 65% RH) Technique: Ninhydrin applied and item put into humidity chamber for 10 minutes. Very faint latent observed. Reapplied Ninhydrin a second time and put in humidity chamber (70 deg F, 65% RH) again for another 10 minutes. Slightly more contrast for the latent was observed so it was preserved a using the scanner. Illumination: Ambient
4W6EYN	Visual Examination	No RD
	1,2-Indanedione	Heat Press @~160°C for ~10 sec observed with bright beam laser @ 532nm with orange barrier
	Ninhydrin	Iron for heat/humidity applied 10/31 Re-applied iron on 11/3 for improved contrast
4WQUD7	Visual Examination	Performed a visual examination of item 2 using Crimelite and TracER Laser. No digital photographs were taken.
	DFO	Used DFO on item 2 and placed item 2 in oven @100 degrees Celsius for 20 min. Used TracER Laser with a curved orange filter to take two digital photographs of latent print area in quadrant A.
	Ninhydrin	Used Ninhydrin on item 2. Placed item 2 in humidity chamber at 65% relative humidity at 80 degrees Celsius for 3 min. Used incandescent and Crimelite lighting. No digital photographs were taken.
4Z262U	Visual Examination	Visual exam of the item was completed. No visible prints were located at this time.
	Ninhydrin	Ninhydrin (Lot #071525-01) Hung to dry for several minutes in fume hood
	NINcha	NINcha Humidity Chamber 10 minutes run time 50 degrees Celsius; Relative humidity 65% Test print (positive/negative control)
66Y7KM	Visual Examination	Item was examined under white light. No friction ridge detail was observed.
	Alternate Light Source	FSIS (Full Spectrum Imaging System), ultraviolet and ultraviolet filter. No ridge detail was observed.
	Ninhydrin	Ninhydrin, heat and steam treated with a steam iron. Item was examined again 72 hours later to observe any further development. Friction ridge detail was observed and a photograph was taken.
67AN4T	Visual Examination	Negative. Overall photos taken- 2.
	1,2-Indanedione	Applied 1, 2-Indanedione on 11/19/2025.
	Alternate Light Source	Checked the 1,2-Indanedione on 12/2/2025. Detail observed.
	Ninhydrin	Applied Ninhydrin Pet Ether on 12/2/2025.
	Visual Examination	Checked the Ninhydrin Pet Ether on 12/10/2025. No further development.
67Q7HY	Visual Examination	White light, no fingerprints were found.
	1,2-Indanedione	65% moisture , 90C degrees and 15 min. operate time. 1 fingerprint was found at section A.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
6BJ9LX	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Alternate Light Source	
	Physical Developer (PD)	
6K82VA	Ninhydrin	The object was sprayed with a solution of ninhydrin and placed in a NIN-DFO chamber for 3 minutes at a temperature of 80°C and a relative humidity of 65%.
6N4NPX	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Alternate Light Source	
	Physical Developer (PD)	
	Visual Examination	
6P3RKU	Visual Examination	Examined under ambient lighting and with use of a flashlight including oblique angles.
	Alternate Light Source	Examined under laser with 445nm and 532nm and an orange barrier filter.
	1,2-Indanedione	Accelerated the reaction using dry heat applied via heat press then visualized with laser at 532nm and an orange barrier filter. 2-LP1 developed at this stage and photographed - see below. [No photograph submitted by participant.]
	Ninhydrin	Steam iron utilized
6R4YKX	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Physical Developer (PD)	
6XUAVV	Visual Examination	fuorescence examination
	Alternate Light Source	
	DFO	temperature: 100 degrees Celsius, time 10 minutes
	Ninhydrin	temperature: 80 degrees Celsius, humidity: 62%, time: 10 minutes
6ZHNJ7	Visual Examination	
	1,2-Indanedione	515nm/orange - 20 minutes
	Ninhydrin	5 minutes at 60% humidity
76A98L	Visual Examination	
	RUVIS/FSIS	
	Ninhydrin	Heat and steam applied, analyzed 72 hours later
	Ninhydrin	Re-dipped 12/04/2025, analyzed on 12/19/2025

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
777MDR	Visual Examination	
	Alternate Light Source	
	Ninhydrin	(80°C ± 5°, 65% Relative Humidity ± 5%) Filter: Green
7ANQKW	Ninhydrin	Ninhydrin spray reagent. For paper part.
7CAMRM	Visual Examination	No friction ridge detail was observed.
	DFO	Sprayed the item with DFO. Allowed the DFO (Petroleum Ether base) to dry. Then placed into a heat/humidity chamber for 20 minutes at 100 degrees Celsius with ambient humidity.
	Alternate Light Source	Visualized the item at 475nm with orange goggles and no friction ridge detail was observed.
	Ninhydrin	Sprayed the item with Ninhydrin. Allowed the ninhydrin (Petroleum Ether base) to dry. Then placed into a heat/humidity chamber for 5 minutes at 75 degrees Celsius with humidity created in the chamber.
	Visual Examination	No friction ridge detail was observed.
7HXC77	Powder Dusting	The item was first visualized with natural and oblique light. Next, the item was processed with magnetic powder w/negative results.
	Ninhydrin	After magnetic powder processing, the item was treated with ninhydrin via dip method and allowed to air dry. Afterward, the item was sealed in plastic in an attempt to enhance the development of friction ridge detail. The item was allowed to sit for 2 days and on 11/05/25, the item was visually inspected for friction ridge development: however, none was observed.
7XTU2V	1,2-Indanedione	10mins at 99.5°C
84YK7M	Visual Examination	1002, test/control N/A, various angles of light, no suitable ridge detail.
	Alternate Light Source	1030, test/control positive, 445 nm & 520 nm laser, no suitable ridge detail.
	DFO	1101, test/control positive, DFO oven for 20 minutes, reagent ID- DFO 08-14-25, suitable ridge detail, photographed.
	Ninhydrin	1132, test/control positive, NIN oven for 15 minutes, reagent ID- NIN 08-29-25, no suitable ridge detail.
8AN3MJ	Visual Examination	Visually inspected the surface of the blue lined sticky note and did not visualize any possible friction ridge detail.
	1,2-Indanedione	Sprayed the blue lined sticky note with 1, 2-Indanedione to cover the entire surface area and placed it in the humidity chamber (instrument preset for heat and humidity controls) for ~10 minutes.
	Alternate Light Source	Viewed the blue lined sticky note under the laser (550nm with orange filter goggles). Friction ridge detail was not observed at this step.
	Ninhydrin	Sprayed the blue lined sticky note with Ninhydrin to cover the entire surface area and placed it in the humidity chamber (instrument preset for heat and humidity controls) for ~10 minutes. Friction ridge detail was observed at this step.
8DJY4X	1,2-Indanedione	
	Ninhydrin	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
8GJAYX	1,2-Indanedione	
	Ninhydrin	
8GLUTR	Visual Examination	12/3/2025 White light 12/4/2025 White light 12/5/2025 White light 12/8/2025 White light
	Ninhydrin	12/3/2025 Ninhydrin Special Formula Lot: 202405050 Exp: 12/2025 Applied the first application with heat and humidity, observed faint ridge detail in quadrant A, and photographed. Applied an additional application with heat and humidity, will allow it to dry overnight 12/4/2025 Ridge detail slightly increased, result photographed 12/5/2025 Applied another application with heat and humidity, and will allow it to dry overnight
	1,2-Indanedione	12/4/2025 1, 2 Indanedione Lot# PF300961472501 Exp: 5/27/2026 Applied to the ninhydrin quality control, observed fluorescence. Applied to the item with heat and humidity, did not observe fluorescence. Will allow it to dry overnight, then observe. 12/5/2025 No fluorescence observed
	Alternate Light Source	12/4/2025 Brightbeam laser Green 525nm 12/5/2025 Brightbeam laser Green 525nm
8U3J73	Ninhydrin	se aplico nynhydrina en spary sobre el indicio, se dejo es reposo y se espero a qeu monstrara algun resultado siendo en el cuadrante a. [Requested translation was not provided by time of publication.]
8X7LRR	Visual Examination	Conducted visual examination the item using oblique lighting and magnifier. No ridge detail was observed.
	Ninhydrin	Processed item using heptane-based ninhydrin in a chamber at 70 degrees Celsius and 65% humidity for approximately 10 minutes. Ridge detail was developed.
8YYJZX	Visual Examination	
	1,2-Indanedione	
	Ninhydrin	
92MCCT	Ninhydrin	Ninhyrin with Novec-QCd on 11/24/25 with positive results Item dipped in Ninhydrin with Novec on 11/24/25 Item viewed on 11/25/25- No visible ridge detail observed in any of the quadrant's A-D
93FYAQ	Visual Examination	Examined document for possible latent prints.
	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.
93HVEU	Visual Examination	white and ambient lighting
	Alternate Light Source	F&F 82S UV and Blue lights
	DFO	F&F 82S blue/green and green lights (very little ridge detail visible)
	Ninhydrin	no improvement of ridge detail
93XANP	Visual Examination	White light Poly light 450nm Laser light RU vis
	1,2-Indanedione	
	Ninhydrin	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
94AQ23	Visual Examination	Visual examination - No latent ridge detail visible.
	Alternate Light Source	Visual examination using Crimesight and CrimeLite Auto/Discovery ALS- No latent ridge detail visible.
	1,2-Indanedione	1,2 Indanedione applied then placed into the Caron Forensics Fingerprint Chamber at 100C Temp/0% RH for 10 minutes developed latent ridge detail in Section A of Item #2 utilizing ALS at 505nM and Orange Glasses.
96LLMU	Visual Examination	Examined the lined sticky note under different light sources (flashlight, studio lights, ring lights, etc.) and no ridge detail was seen.
	Alternate Light Source	Viewed the item with the ALS (alternate light source) using wavelengths from 450 nm to 590 nm. There was no ridge detail visible when examined with this method.
	Ninhydrin	Applied ninhydrin to the lined sticky note. Allowed the item to cure in a secure storage locker. At approximately 48 hours a purple color shift was observed. Applied steam to the lined sticky note and ridge detail was observed in the A quadrant.
9CNVUM	Visual Examination	Oblique lighting, no visible prints
	Alternate Light Source	Forensic laser used, no visible prints
	Iodine Fuming	Placed in iodine fuming bag, no visible prints
	DFO	Applied DFO and allowed to fully dry, placed in fingerprint development chamber, no visible prints
	Alternate Light Source	Used forensic light source, no visible prints
	Ninhydrin	Applied Ninhydrin Petroleum Ether and allowed to fully dry, placed into fingerprint development chamber, no visible prints
9G2FYM	Visual Examination	White light source.
	1,2-Indanedione	10 minutes of processing.
	Ninhydrin	2 minutes of processing.
9PR4R6	Visual Examination	Polilight PL 500
	DFO	100 C
	Ninhydrin	62% H, 100 C
9R27JV	Visual Examination	No apparent ridge detail located during visual examination.
	Ninhydrin	Rinsed the lined sticky note with Heptane Ninhydrin and let dry for ~2 hour prior to being placed in the Caron Chamber.
	Caron Chamber	Placed the lined sticky note in the Caron Chamber (SN:6105-2-325) for 10min @ 80C and 65%RH.
9U6WNP	Ninhydrin	Nin1: HFE-7100 Preparation, dipped then hung to dry. Ninhydrin chamber for 3 minutes at 80 degrees C and 65% humidity.
A2HA6Z	Visual Examination	with white light and TracER laser
	DFO	20 minutes processing - examined after 24 hours (6 days later, specifically)
	Ninhydrin	3 minutes processing

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
A89KEX	Visual Examination	Item was examined using a flashlight (negative results)
	DFO	Item was processed by dipping twice in DFO, lot #25.1, then placed in a chamber heated to 100C for 20 minutes. Item was examined using the LASER. (D1)
	Ninhydrin	Item was processed by dipping once in Ninhydrin, lot #25.2, then placed in a chamber heated to 50C, 80% RH for 20 minutes. (negative results)
	Physical Developer (PD)	Item was processed by dipping in the following: Maleic Acid, lot #25.1, 5 minutes / PD (v): (redox solution lot #25.1, detergent solution lot #24.1, silver nitrate solution lot #25.1), 10 minutes / Fixer, lot #25.1, 5 minutes / DI water, 5 minutes / (negative results)
AJ324Y	Visual Examination	CrimeLite and TracER Laser
	DFO	Humidity chamber and TracER Laser
	Ninhydrin	Humidity chamber and incandescent light
AJYFA6	Visual Examination	A visual inspection of the piece of evidence was carried out, but no fingerprint was observed.
	Alternate Light Source	Alternate light was used, but no fingerprint was found.
	Powder Dusting	Black magnetic powder was used to develop the fingerprint, but no fingerprint could be located.
AQX7TU	1,2-Indanedione	1. Working in a fume hood, thoroughly coat (spray, pipette, etc., but do NOT submerge) the evidence with IND and allow evidence to dry. • Thoroughly coat the non-thermal paper item(s) a second time with IND and allow to air dry. 2. Place item(s) in an environmental chamber at 65% humidity and 80° Celsius for approximately 10 - 20 minutes.
	Oil Red O	1. Add enough ORO stain to a glass tray or a plastic bag to cover the piece of evidence and control print. 2. Agitate using an orbital shaker for approximately 5 minutes until the control print and any prints on the evidence are adequately visualized. • This process can take up to thirty minutes but often development happens within 5 minutes. Water Post-Wash: 3. All items of evidence processed should undergo water post-wash after submersion in the ORO stain. 4. Add enough water to a glass tray or plastic bag to cover the evidence. 5. Agitate using an orbital shaker for 5 minutes and monitor results. 6. Allow evidence to air dry on butcher paper or a paper towel.
	Silver Nitrate	1. Working under a fume hood, thoroughly soak the item with silver nitrate and allow item to dry. • A blow-dryer may also be used to speed up the drying time. • Set the blow-dryer on cool and apply the air being emitted to surface of the item. 2. Do not handle with metal tongs, use plastic only. 3. Expose the evidence to a light source such as direct sunlight
AQZQMN	1,2-Indanedione	IND-Zinc Chloride working solution; dry heat applied using heat press @ ~ 165C for ~ 10 sec, viewed with laser @ 532 nm and orange barrier filter
	Ninhydrin	steam/heat applied using iron, viewed with ambient light and flashlight
AT8TTT	Visual Examination	White light.
	Ninhydrin	Nynhidrin spray "NIN-PRINT" B-78500, BVDA. Room temperature 20,5C, room humidity 31%, procesing time 18 days. Spraying time 5-6 sec.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
AW6A6M	1,2-Indanedione	1,2-Indanedione (IND) reagent was applied to the lined sticky note evidence. Development was completed under moderate heat (80 °C for 10 minutes) to produce a pink, fluorescent product that can be viewed with a light source at 495 nm, a short-wavelength visible light source. Then an orange barrier filter (a 550 nm bandpass filter) is used to view the fluorescent print.
AWKVD4	Powder Dusting	1. Piece #2 was photographed. 2. A visual inspection was performed to locate the fingerprint, using a white light source and a magnifying glass; none was visible. 3. Graphite powder and black magnetic powder were then used; no fingerprint development was observed.
AZMR3Y	Visual Examination	
	DFO	20min, 100c, Forensic light source: Red filter/535 nm
	Ninhydrin	15min, 80c/70RH
B6CQUY	Visual Examination	Examined with white light and magnification on 11/7/25.
	Ninhydrin	Submerged in Ninhydrin, Batch #316, then air dried on 11/7/25. Placed in humidifying machine: CARON Examined with white light and magnification.
	Physical Developer (PD)	Processed by LPE [Name] on 11/13/25, Batch #548. Examined with white light and magnification on 12/8/25.
BEKXWU	Visual Examination	After opening the item, I visually inspected it using oblique lighting. I rotated the object around at different angles using natural light and under the magnifying light looking for patent impressions
	Ninhydrin	I turned the Caron on and made sure the humidity and temperature were set correctly for ninhydrin. While the humidity and temperature were reaching their conditions in the chamber, I grabbed two pieces of papers for the ninhydrin control. I placed my charged thumbprint on both papers and applied non-running ninhydrin. After they were dry, I placed one of the papers under a cloth and applied a hot iron to catalyze the reaction. A print developed. I then applied the chemical to item 2 and waited for it to dry. Once the humidity and temperature reached the desired temperatures in the Caron, I then placed the second control paper and item 2 in the chamber. I monitored the Caron for about 10 minutes and observed purple ridges on the control and therefore removed the item. I noticed a purple print developed on item 2.
BHM48T	Visual Examination	Negative
	FSISII	Negative
	Ninhydrin	Positive Quad A
	Oil Red O	Negative
	Physical Developer (PD)	Negative Test Print
BHZTCQ	Alternate Light Source	1537 - initial examination of item under White Light and ALS. ALS exam performed with Rolfin Polilight Flare-2 lights (415 & 505mn) using Red, Orange, and Yellow filters. No prints observed at that time.
	Ninhydrin	~1556hrs. Item was treated with Ninhydrin liquid chemical developer (Sirchie brand #N51609) via immersion. Positive control (QC check) was POSITIVE post processing. Items allowed to air dry appx. 18 hours, then examined under WL. Possible print developed in Quadrant A.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
BMWE7E	Visual Examination	White light and Inherent using 532nm LASER
	Alternate Light Source	FSIS - 254 nm UV light
	1,2-Indanedione	viewed with 532nm LASER
	Ninhydrin	HFE formula
BUHA8J	Visual Examination	No ridge detail
	Alternate Light Source	Used 350-380nm and 420-470nm, no ridge detail
	DFO	Possible ridge detail in quadrant A
	Ninhydrin	Possible ridge detail in quadrant A
BVTWY6	1,2-Indanedione	Item #2 Sticky note Screened with white light, UV light and yellow filter, 450 nm light and orange filter, Laser (532 nm) with orange laser filter, FSIS II 245 nm light with UV filter. Negative. 1, 2-Indanedione. Control-positive/negative. The chemical was working properly. Screened with laser (532 nm) with orange laser filter. Marker A- ridge detail in quadrant A
	Ninhydrin	Item #2 Sticky note Ninhydrin. Control- positive/negative. The chemical was working properly. Negative.
C7J8L3	Visual Examination	
	Ninhydrin	
C82ERK	Visual Examination	
	DFO	Laser visualization with orange filter
	DFO	Second treatment, laser visualization with orange filter
C9TDZR	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Physical Developer (PD)	
CAPQQQ	Visual Examination	15:25-14:35 Using oblique lighting a print was visible in quadrant A
	Alternate Light Source	15:30 -15:47 Polilight 505 nm and examined with three different barrier filters: orange, yellow and red. Print not visible Polilight 415 nm and examined with three different barrier filters: orange, yellow and red. Print not visible
	Ninhydrin	15:50-15:51 Sirchie TM Ninhydrin #NS1609 dipped in glass tray then hung to dry to develop over night
CGH4KX	Visual Examination	The item was visually examined with the Crime Site and 254 Nm light source with negative results. The item was photographed with my Dept issued Nikon camera prior to chemical processing.
	Ninhydrin	The item was processed with Ninhydrin. A partial print was developed in Section A.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
CN4YL3	Visual Examination	Gloves and tweezers were used to handle piece of evidence #2, then the piece was photographed.
	Alternate Light Source	A visual inspection was performed on piece of evidence item #2; sticky note divided into (4) sections A-D. No fingerprint was displayed.
	DFO	Item #2 was treated with DFO solution and placed in an oven at 100 degrees for 10 minutes. After 10 minutes, the item was removed and a visual inspection was performed, which revealed no print.
CPHFMM	Visual Examination	Visual examination using white light.
	Alternate Light Source	Visual examination using various wavelengths of light.
	Indanedione	Indandedione applied, heat press used, visualised using laser (532nm).
	Ninhydrin	Ninhydrin applied, NinCha chamber used for humidity, visualised using white light.
	Vacuum metal deposition	VMD using gold and zinc, visualised using white light.
	Physical Developer (PD)	PD applied, visualised using white light.
CQVQ2E	Visual Examination	Ambient lighting
	1,2-Indanedione	Allowed to process for two days with room temp and humidity. Observed with green laser
	Ninhydrin	Processed with humidity chamber. Friction ridge detail was not suitable for capture
CTZKGB	Visual Examination	Used Full Spectrum Imaging System to visually exam the lined paper prior to processing
	1,2-Indanedione	Dipped the paper in 1,2 Indanedione, allowed to completely dry, and then followed chamber specifications to set the run time for 10 minutes at 100 degrees
	Ninhydrin	Dipped the paper in Ninhydrin, allowed to completely dry, and then followed chamber specifications to set the run time for 5 minutes at 80 degrees and 65 percent humidity
CUAM8G	Visual Examination	With white light. No friction ridge detail observed.
	1,2-Indanedione	Applied dry heat and left to develop.
	Laser	Examined with the green handheld laser (520 nm) and orange goggles. One impression was located in quadrant A.
D2AARN	Visual Examination	Visual examination with white light.
	1,2-Indanedione	Rinsed with Indanedione, allowed to dry and then applied direct heat for 2 minutes.
	Ninhydrin	Rinsed with Ninhydrin, allowed to dry then placed in humidifier at 80% humidity for 30 minutes.
D2NZGY	Ninhydrin	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
D336EX	Iodine fuming	Completed iodine fuming on 11/23/2025 with negative results (in bag for approximately 30 seconds)
	Ninhydrin	immediately after iodine fumigation, I completed processing with ninhydrin heptane followed by a steam ion to accelerate development. The steam iron was used for approximately 1 min. No ridge detail was observed at this time, so the item was placed into a plastic bag for further development. A few hours on the same date (11/23/2025), faint ridge detail was observed and documented via photography in Quadrant A. The item was re-examined on 11/27/2025 and the ridge detail in Quadrant A was observed to be darker.
D3JCKE	Visual Examination	
	Full Spectrum Image System	Ultraviolet imaging
	Ninhydrin	Ninhydrin Petroleum Ether
D4CATL	Visual Examination	Reviewed with white light and UV (FSIS) - no RD present
	1,2-Indanedione	Processed in heat/humidity chamber for approx 10 mins with 67% humidity and reviewed with LASER (532nm) with orange filter - one latent print visualized and marked as 2L1
	Ninhydrin	Processed in heat/humidity chamber for approx 10 mins with 67% humidity and reviewed with white light - no RD present (LP previously developed disappeared)
D7JKPP	Visual Examination	Item 2: 10/31/25: No visible ridge detail was found. Item was placed in a secure storage locker. 11/4/25: No visible ridge detail found in second examination.
	Alternate Light Source	An alternative light source (ALS) was used before chemical processing, but no fluorescence or better contrasting ridge detail was observed using various wavelengths and corresponding barrier filters. This process was continued after chemical application during each hourly check and gave no result.
	Ninhydrin	11/4/25: Item was treated with Ninhydrin and was secured in a CA chamber while being monitored every hour for any color shifts. There was no color shifts observed and as a result the item was placed in a secure storage locker. 11/5/25: After a 24 hour curing period the item was examined and no color shift was observed. As a result the item was returned to a secure storage locker. 11/6/25: After a 48 hour curing period the item was examined and no color shift was observed. As a result the item was returned to a secure storage locker. 11/7/25: After a 72 hour curing period the item was examined and no color shift was observed. As a result the item was exposed to steam to accelerate the process. Ridge detail appeared in the "A" quadrant on the item and was photographed as photo lift #3.
DA2MWV	Visual Examination	
	Ninhydrin	Heptane solution Humidity chamber processing time of 20 minutes at 70% humidity and 70 degrees.
	1,2-Indanedione	HFE formula Humidity chamber processing time of 20 minutes at 100 degrees.
	Alternate Light Source	Coherent laser
DBDLNH	DFO	DFO chamber Nincha time 20 min., temp. 100 C, Ninhydrin chamber Nincha S31 time 3 min., temp. 80 C, RH 65%.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
DBX33Z	[No Methods Reported.]	Visual Exam, DFO Ninhydrin, Ninhydrin, Photography, and Ninhydrin Fixative. (Processing time-1Hr 50Min)
DEVPVN	Ninhydrin	Ninhydrin with Acetone
DHUZRN	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Visual Examination	
	Alternate Light Source	
	Ninhydrin	
	Visual Examination	
	Alternate Light Source	
DKHEFX	Visual Examination	No friction ridges present upon visual examination with and without oblique lighting, Crime-Lite AUTO, or RUVIS.
	1,2-Indanedione	1,2 Indanedione applied to item #2 by spraying. Allowed time to dry under fuming hood. Item#2 placed in forensic oven for 10 minutes at 100C and 0RH.
	Alternate Light Source	Item visually examined with ALS at 505 nm with orange goggles. Latent print located in section "A".
DYLTHG	Visual Examination	Visual exam. No friction ridge impressions detected.
	Alternate Light Source	Inherent fluorescence exam using laser at 445nm and 520nm. No friction ridge impressions detected.
	DFO	Examination with laser at 445nm and 520nm. Latent print was developed in Quadrant "A" with the laser, post treatment with DFO. Superior fluorescence was detected at 520nm and the latent print was photographed and retained.
	Ninhydrin	Latent print was also developed in Quadrant "A" with Ninhydrin, however the DFO developed print was of superior quality and clarity.
EKVH9G	Visual Examination	Visual/oblique lighting examination - no latent prints observed
	Alternate Light Source	Forensic light source - no latent prints observed
	Iodine Fuming	Iodine fuming - no latent prints observed Concurrent control successfully conducted
	DFO	DFO/forensic light source - 1 latent print obtained in section "A" Control successfully conducted
	Ninhydrin	Ninhydrin - no latent print observed Control successfully conducted
ELNGGM	Visual Examination	Visual examination of the evidence with white light.
	1,2-Indanedione	Saturated evidence with 1,2-Indanedione. Allowed to dry and applied heat.
	Alternate Light Source	Viewed using ALS at 475nm.
	Ninhydrin	Saturated evidence with Thermal Ninhydrin. Allowed to dry and placed in humidifier at 80% humidity 40° C.
	Visual Examination	Visual examination of the evidence with white light.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
EXHUEY	Visual Examination	Gloves and tweezers were used to handle the piece. The piece was photographedand and I performed a visual inspection to locate the fingerprint and it was not visible.
	Iodine Crystal	Iodine crystals were used to develop the fingerprint, but it was unsuccessful.
	Ninhydrin	Ninhydrin were used to develop the fingerprint, but it was unsuccessful.
F63BNN	Visual Examination	
	Ninhydrin	Positive control
	Caron Chamber	Caron Environmental Chamber at 80 degrees Celsius and 65% Humidity for 10 minutes
F7ER4M	Visual Examination	I used natural light to perform a visual examination of the item.
	1,2-Indanedione	1,2-Indanedione was applied to the item, then heat was applied. One latent print developed in section A.
	Alternate Light Source	ALS used to photograph developed latent print after 1,2-Indanedione process.
	Ninhydrin	Ninhydrin was applied to the item and placed in the humidity chamber for 30 minutes for development. Chamber set to 40 degrees C and 80% humidity.
FC2UQJ	Visual Examination	Blue sticky note paper
	Visual Examination	White light exam
	1,2-Indanedione	Heat treated at 100 Degrees Celsius for 20 minutes.
	Alternate Light Source	505nm light with orange goggles
FR9VKK	Ninhydrin	Processed with ninhydrin three times
FRYKAB	Visual Examination	Item 2 was examined using fluorescent light under magnification at different angles.
	Ninhydrin	Item 2 was immersed in a dish containing ninhydrin before being hung to dry in a fume hood. The Caron chamber was turned on and acclimated to the required settings. Item 2 was placed inside the chamber for 60 minutes. Item 2 was examined using fluorescent light under magnification at different angles.
	Physical Developer (PD)	This process was completed by Latent Prints Examiner [Name] and the batch number was 548. Item 2 was examined using fluorescent light under magnification at different angles.
FVWBAU	Ninhydrin	Treated item with limited ink ninhydrin (Lot 07125KM), dried, and placed in humidity chamber for 30 minutes with no results. I then treated it again with a second batch of limited ink ninhydrin (Lot 111625KB), dried it, and placed it in humidity chamber for 30 minutes; also no results. Test prints were positive both times. The item was then placed into a ziploc bag for several days and observed again on 11/19/25, again with no latents present.
	Iodine Crystals fuming	On 11/19/25, item placed into a ziploc bag with iodine crystals (Lot 202407144). No latents developed, though several areas on the paper turned yellow. Test prints positive.
G2EVZD	Visual Examination	oblique lighting
	Alternate Light Source	420-470nm
	Ninhydrin	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
GANKCQ	Visual Examination	Viewed Item with CrimeScope at wavelengths 455nm - 515nm.
	Ninhydrin	Sprayed Item 2 with Ninhydrin working solution. Item processed for at least one day.
GDACJM	Visual Examination	White light, UV-light, IR-light
	1,2-Indanedione	Climate Cabinet, humidity 55%, 90 C, 20 min.
	1,2-Indanedione	24 h in a dark bag.
	Alternate Light Source	Green 530, red filter
GEGRRE	Visual Examination	Prescreened item with ALS/FSIS II (254nm, 365nm, 450nm and 532nm with UV, yellow, orange and laser filters) - negative result
	1,2-Indanedione	Indanedione applied to item and viewed with ALS (532nm and laser filter) - positive result (photographed area of ridge detail) (within quadrant A)
	Ninhydrin	Ninhydrin applied to item and viewed under normal lighting conditions - negative result
GJXUYJ	Visual Examination	White light. No fingerprints were observed.
	1,2-Indanedione	100 degrees C, 10 min. One fingerprint visible in "A".
	Ninhydrin	62% RH, 80 degrees C, 2 min. Fragment visible in "A".
GLL9NU	Visual Examination	viewed w/white light
	1,2-Indanedione	viewed under ALS @ 530nm
	Ninhydrin	viewed w/white light
GLZPMT	Visual Examination	Visual examination under LED lighting and magnification on 11/07/2025.
	Alternate Light Source	Visual examination using the Crime Lite ML (460nm-510nm filter): orange filter was completed on 11/07/2025.
	Ninhydrin	Ninhydrin batch #324, was used on 11/09/2025. The item was immersed into the Ninhyrdin for a few minutes and then placed in a fume hood to dry completely. While the item was drying the CARON chamber was set to start and allowed to heat up to 60 degrees farenheit for both the humidity and temperature within the chamber. Once both indicators had reached 60 degrees farenheit, a timer was set for 30 minutes in order for the item to process. After the 30 minutes, the item was taken out and examined but I decided to put the item back in and let it process for another 15 minutes. After being in the CARON chamber for 45 minutes, the item was removed and examined under LED lighting and magnificiation.
	Physical Developer (PD)	Physical Developer batch #548 was completed by Forensic Scientist [Name] on 11/13/2025.
GNAZEQ	Visual Examination	No friction ridge detail could be seen prior to processing.
	Ninhydrin	20 minutes at 70 degrees c and 70% humidity
GNRTDE	Alternate Light Source	Rofin UV with yellow filter - negative Rofin 450nm with orange filter - negative TracER Laser 532nm with orange laser filter - negative FSIS II 254nm light and filter - negative
	1,2-Indanedione	TracER Laser 532nm with orange laser filter - positive One (1) area, A, on front of sticky note
	Ninhydrin	White light - negative

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
GPY7VG	Visual Examination	
	Ninhydrin	NINcha 50 degrees Celsius 65% humidity 10 minute run time Ninhydrin lot# 071525-01
GR9BBQ	Visual Examination	using a flashlight to examine the item prior to any processing method
	DFO	Item dipped in DFO reagent for five seconds and allow it dry. Repeat the same steps for the second time. Place the item in humidity chamber for 20 minutes then examining it using the laser light to detect ridge detail.
	Ninhydrin	Item immersed in the Ninhydrin solution then placed in the humidity chamber for 20 minutes. Visual examination to detect ridge detail.
	Physical Developer (PD)	Item placed in the Maleic Acid for 5 minutes, PD for 10 minutes, Fixer solution for 5 minutes, then the rinse solution for 5 minutes. Dry the item in the PD drying cabinet until the item is completely dry then visual examination for ridge detail.
GTNBUF	Visual Examination	Visual Exam/Oblique lighting - no latent prints observed
	Alternate Light Source	FLS - no latent prints observed
	Iodine	Iodine Fuming - no latent prints observed Control successfully conducted
	DFO	DFO - 1 latent print observed and documented in quadrant A Control successfully conducted
	Ninhydrin	NIN PE - no latent prints observed Control successfully conducted
H6CY3K	Alternate Light Source	Polilight: White light UV light 440nm, 450nm, 490nm, 505nm and 530nm with orange and yellow goggles
	1,2-Indanedione	Sprayed with Ind-Zn and allowed to air dry Heat treated with elna press for ~ 10 sec
	Alternate Light Source	Polilight: 440nm, 450nm, 490nm, 505nm and 530nm with orange and yellow goggles
H9BCL4	1,2-Indanedione	Processed with 1,2 Indanedione and photographed one print in Square A
	Ninhydrin	Processed with Ninhydrin with negative results
H9T2AP	Visual Examination	desk lamp normal light
	Ninhydrin	HFE Ninhydrin 72 hr wait time
HMR94K	Visual Examination	Examined item for visible prints using ambient light.
	Iodine Fuming	Used plastic bag and iodine crystals to develop.
	DFO	DFO applied to item, used heat chamber to develop. 1 photograph taken
	Ninhydrin	Ninhydrin applied to item. Used clothing iron and steam setting to develop.
	Silver Nitrate	Applied Silver Nitrate to item and used UV wavelength on ALS to develop.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
HMWP2J	1,2-Indanedione	IND-Zn (1,2-Indanedione-Zinc) Latent Fingerprint Development Procedure 1. Scope This procedure is applicable for developing latent fingerprints on porous or absorbent surfaces using IND-Zn reagent. 2. Reagent Preparation (A) Stock Solutions 1. 1,2-IND Stock Solution o Weigh 0.8 g of 1,2-Indanedione (BVDA) powder o Add 10 mL of acetic acid and 90 mL of ethyl acetate o Stir until completely dissolved 2. Zinc (Zn) Stock Solution o Weigh 2 g of zinc chloride (ZnCl2) powder o Add 50 mL of absolute ethanol o Stir until completely dissolved 3. Storage Conditions o Store both stock solutions in amber glass bottles o Keep at 4°C in the refrigerator, protected from light o Shelf life: 3 months. (B) Working Solution 1. Take 100 mL of 1,2-IND stock solution 2. Add 4 mL of Zn stock solution 3. Add 900 mL of HFE-7100 solvent 4. Mix thoroughly to obtain the IND-Zn working solution. 3. Fingerprint Development Procedure 3.1 Sample Immersion • Completely immerse the sample in the IND-Zn working solution • Remove the sample and allow the solvent to air-dry completely 3.2 Heat Treatment • Once the solvent has fully evaporated (e.g., ~30 s for standard copy paper) • Place the sample in a 100°C oven for 20 minutes 3.3 Fingerprint Observation 1. Developed fingerprints appear pink under visible light 2. Illuminate with blue-green excitation light (490–515 nm) and view through an orange filter (blocking light below 550 nm); fingerprints show yellow-orange fluorescence 3. If fingerprints are not clearly visible under visible light, always inspect under excitation light and filter, as fluorescence offers higher sensitivity. 4. Quality Control 1. Reagent Performance Verification o Prior to each use or when preparing new working solution, test on a control sample of similar material o Only proceed with case samples if fingerprints develop clearly with expected color and fluorescence 2. Reagent Expiry Management o Label all stock and working solutions with preparation date, operator name, and expiration date o Stock solutions: 3-month shelf life o Discard or remake solutions that exceed the expiration date or show reduced performance
HURPEQ	Visual Examination	viewed w/ CrimeLite white light & TracER Laser
	DFO	viewed the next day w/ TracER Laser
	Dye Stain	used Ninhydrin
HVKMLX	1,2-Indanedione	No heat applied
HVM9FR	Visual Examination	The item was visually examined using white light and magnification. No prints observed.
	Ninhydrin	The item was immersed in a small tray of solution until the entire surface of the item was wet. The item was allowed to completely dry in the fume hood. Once the CARON chamber reached 60 degrees Celsius and 60% humidity the item was placed inside for approximately 30 minutes. The item was visually examined using white light and magnification.
	Physical Developer (PD)	Processing was completed by Latent Print Examiner [Name] on 11/13/2025, Batch #548. The item was visually examined using white light and magnification. No further enhancement observed.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
HWZKEW	Visual Examination	The item was photographed, gloves and tweezers were used to handle the piece, a visual inspection was performed and nothing was observed.
	Alternate Light Source	An inspection was performed with alternating light and nothing was observed.
	1,2-Indanedione	An iodine ampoule was used and no impression developed.
	DFO	DFO reagent was used for ten minutes in the oven at one hundred degrees and no impression developed.
	silver nitrate ampoule	A silver nitrate ampoule was used and no impression developed.
HYH2AM	Ninhydrin	por la condiciones climatológicas alcanzar la humedad recomendada. [Requested translation was not provided by time of publication.]
HZG3FE	Visual Examination	Oblique lighting with flashlight
	Alternate Light Source	Inherent fluorescence by Forensic Light Source (FLS)
	1,2-Indanedione	Iodine Fuming wand method inside plastic bag
	DFO	1,8-Diazafluoren-9-one and placed in fingerprint development chamber for about 15 minutes. Seen with Forensic Light Source (FLS)
	Ninhydrin	Ninhydrin- Petroleum Ether Base placed in fingerprint development chamber for about 10 minutes
J4WWUQ	Visual Examination	no photos
	Ninhydrin	ninhydrin batch 323, 1 photo section A
	Physical Developer (PD)	no photos
J6PU2W	Ninhydrin	processing time: 48 hrs. Dye stain: Ninhydrin solution (2,2-dihydroxyindane-1,3-dione) The reaction needs humidity and dark place
JEUYRT	Visual Examination	The examination started by using white light from different angles over the item. No fingermarks could be seen at this stage.
	Alternate Light Source	The item was examined with UV light- 365 nm, no fingermarks detected.
	1,2-Indanedione	The item then was dipped in Indandione Zinc, and left to dry for a few minutes. Then the item was placed in a humidity cabinet. After the cabinet had reached 75 degrees Celsius and 62% humidity, the item was left inside for 10 min.
	Alternate Light Source	Used a lightsource with 505 nm, and orange filter to examine the item after the use of indandione zinc. One clear fingermark detected in section A.
JFQHTU	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.
	DFO	To develop the finger print, I immersed the lined sticky note in a container that I poured DFO in it. Then I took the lined sticky note with a tweezer and applied heat for 5 to 10 minutes. I made a visual examination to locate the latent print but it wasn't visible.
	Alternate Light Source	I used a alternate blue and orange light source obliquely to highlight the latent print but it wasn't visible neither.
	Silver nitrate crystal ampoule	Using the development procedure I used Silver nitrate crystal ampoule. I put the lined sticky note and a Silver nitrate crystal ampoule inside a plastic bag and the latent print wasn't visible neither.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
JMM9HB	Visual Examination	White light, CrimeScope ALS, and Arrowhead Dual77 laser
	1,2-Indanedione	Developed in Shel oven at 100 degrees C for 20 minutes; visualized with Arrowhead Dual77 laser at 532nm
	Ninhydrin	Developed in Caron humidity chamber at 80 degrees C and 80% humidity for 20 minutes
JRKPTJ	Visual Examination	Photographed item as received. Visual examination using ambient lighting. No ridge details observed.
	Ninhydrin	Heptane Ninhydrin was used. Airdried for at least one hour.
	Caron chamber	Placed item 2 in the Caron chamber (serial number 6105-2-325) at 80 degrees Celsius with 65% humidity for 10 minutes. Ridge details observed in quadrant A.
JV3RZP	Visual Examination	In normal room lighting; oblique lighting
	Alternate Light Source	CrimeScope CS-16-500 (455-515 nm)
	Ninhydrin	overnight + heat
JWA9TT	Ninhydrin	Iodine fuming prior to Ninhydrin application
K7JVME	Visual Examination	ambient light, documentary photographs taken
	1,2-Indanedione	1, 2 indanedione pre-mixed solution Item treated with solution, allowed to dry, heat and humidity applied with a steamer.
	Alternate Light Source	Visualized under Brightbeam green laser 525nm
KC4XNP	Visual Examination	
	Alternate Light Source	crime scope and UV
	DFO	chamber for development, ALS and photographed
	Ninhydrin	plastic bag for development
KEBDWG	Visual Examination	Examined Item 2 with the laser for approximately 1 minute.
	1,2-Indanedione	Applied Indanedione to Item 2 for approximately 20 seconds and let dry before applying heat with a dry iron.
	Ninhydrin	Applied Thermal Ninhydrin (as to not cause the lines and the writing on the paper to bleed) for approximately 20 seconds. After about 10 minutes of drying, Item 2 was placed in the humidifier for 30 minutes.
KQZAYF	Visual Examination	VIS with white light
	FSIS	FSIS II with UV light
	1,2-Indanedione	IND visualized with laser
	Ninhydrin	Nin visualized with white light
KRC6HL	Visual Examination	
	Ninhydrin	HFENIN and humidity chamber
KUNPMP	5-MTN	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
KWRFXB	Visual Examination	Visual and oblique lighting examination. No friction ridge observed.
	Alternate Light Source	Coherent TracER FLS and Spex CrimeScope ALS No friction ridge observed.
	Iodine Fuming	Iodine fuming using Iodine crystals in plastic bag. Successful control. No friction ridge observed.
	DFO	DFO/FLS and ALS. Utilized Caron fingerprint chamber. Successful control. Friction ridge observed in quadrant "A" with ALS at 515 nm.
	Ninhydrin	Ninhydrin-Petroleum Ether. Utilized Caron fingerprint chamber. Successful control. Friction ridge observed in quadrant "A".
L49D2N	Visual Examination	Visual examination under white light and magnification was done on 11/7/2025 using LED lighting.
	Alternate Light Source	Examination with an alternate light source was done on 11/7/2025 using a Crime Lite ML (460nm-510nm filter) with a Orange Filter on it.
	Ninhydrin	Ninhydrin, batch#: 324, was used on 11/10/2025. The item was immersed into the Ninhydrin for a few minutes and then placed into a fume hood to dry completely. While the item was drying the CARON chamber was prepped by letting it come to 60 degrees for the temperature and 60% humidity inside of the chamber. Once the item was dry and the chamber was at 60 degrees with 60% humidity, the item was placed into the CARON chamber. The chamber was allowed to come back up to the set 60 degrees with 60% humidity for both indicators before a timer for 30 minutes was turned on. After the 30 minutes the item was taken out and examined but I decided to put it back in and let it develop for another 30 minutes. After being in the CARON chamber for an hour, the item was removed and examined under LED lighting and magnification.
	Physical Developer (PD)	Physical Developer, batch#: 549 , was completed by Latent Print Examiner [Name] on 12/10/2025.
LAUBQC	Visual Examination	Natural light, white light, optical instruments.
	Alternate Light Source	Polilight PL 500 (all ranges of light), protective goggles with range filter, optical instruments.
	1,2-Indanedione	Processing time: 10 minutes, temperature: 90°C.
	Alternate Light Source	Polilight PL 500 (505-530 nm light), protective goggles with range filter, optical instruments.
	Ninhydrin	Ready solution in spray, processing time - 72h, room temperature, dark place.
	Visual Examination	White light, optical instruments.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
LB7ZVA	Visual Examination	Using a flashlight, no latent prints were observed on the lined sticky note. No latent print images were able to be obtained at this stage.
	Alternate Light Source	Using a forensic light source, no latent prints were observed on the lined sticky note. No latent print images were able to be obtained at this stage.
	Iodine Fuming	Using Iodine crystals (Lot number: 202311115) and a Ziploc style bag, I placed the sticky note and the control in the Ziploc style bag. A positive control was obtained. No latent prints were observed on the lined sticky note. No latent print images were obtained at this stage.
	DFO	Using binder clips and 1,8-Diazafluoren-9-one (Lot number: DFO-102925), I placed a control, and the sticky note within the chamber. A positive control was obtained. No latent prints were observed on the line sticky note. No latent print images were able to be obtained at this stage.
	Alternate Light Source	Using a forensic light source, no latent prints were observed on the lined sticky note. No latent print images were obtained.
	Ninhydrin	Using binder clips and Ninhydrin Petroleum Ether (Lot number: NIN-PE-111125), I covered the control, and the sticky note in the dye stain within a fume hood. A positive control was obtained. No latent prints were observed on the lined sticky note. No latent print images were obtained at this stage.
LCYX4F	Visual Examination	Visual observation using natural light - 2 minutes.
	1,2-Indanedione	Applied Indanedione to Item 2 using squirt bottle method, dry time 30 seconds in Fume Hood.
	Dry Iron	Applied dry heat with Iron, Kim wipe sheet covering Item 2 in circular motion, 1 minute.
	Alternate Light Source	Observed florescence on Item 2 using ALS, 1-minute.
	Ninhydrin	Applied Ninhydrin to Item 2 in Fume Hood, 2 minute dry time.
	Humidity Chamber	Placed Item 2 inside Humidity Chamber for 30 minutes, no further development.
LDUG6G	1,2-Indanedione	65 celsius, 65% humidity and 30 minutes.
LJJYJT	Visual Examination	Visual Examination with White Alternate Light and it does not show the latent print.
	Iodette Ampoulse "Yodo"	Worked with Iodette Ampoules 6pk for 10 minutes and it does not show the latent print.
	DFO	Worked with DFO for 10 minutes in the oven at 100°C and it does not show a latent print.
	Silver Nitrate Crystal	Worked with Silver Nitrate Crystal 10 minutes and it does not show the latent print.
LMLRL6	Visual Examination	
	Alternate Light Source	3 different examinations performed including 450nm blue light with an orange filter, 450nm blue light with a yellow filter, and 530nm green light with a red filter.
	Ninhydrin	
	Physical Developer (PD)	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
LYUXAC	Visual Examination	white light
	Alternate Light Source	Lezer 440nm
	Ninhydrin	
	1,2-Indanedione	
M2DCDC	Visual Examination	White light, Laser 532 nm, Laser 577 nm, FLS
	1,2-Indanedione	1,2,Indanedione/ZnCl2 Heating press 165°C – 10 seconds
	Alternate Light Source	Laser 532 nm – Orange filter
	Ninhydrin	Ninhydrin and Climatic chamber 20min : Temperature = 80°C, RH = 62%
	Alternate Light Source	White light
MBYH7A	Visual Examination	white light
	Alternate Light Source	range of high intensity light sources, blue, green and UV
	1,2-Indanedione	100 C, 0% R/H, 10 minute processing time
	Ninhydrin	80 C, 62 R/H, 4 min processing time
ME2B4E	Visual Examination	
	1,2-Indanedione	
	Ninhydrin	
MEK3BD	Visual Examination	white light. No visible friction ridge observed.
	DFO	Dipped, dried approximately 2 hours.
	Alternate Light Source	Crimelite Green (490-560 nm).
	Visual Examination	No visible friction ridge observed.
	Ninhydrin	Sprayed, steam dried approximately 5 minutes.
	Alternate Light Source	Crimelite Green (490-560 nm).
	Visual Examination	No visible friction ridge observed.
MGRKAA	Visual Examination	In natural light and light from forencic ilumination (Polilight 550 XL) - negative result
	DFO	Time 20 min., temp. 100 °C, RH 0%; 505 nm (Polilight 550 XL) with orange goggles - latern print was observed in section A.
	Ninhydrin	Time 20 min., temp. 70 °C, RH 60%; discovered fingerprint has not improved (been observed in withe light and purple (415 and 565 nm) Polilight 550 XL)
MPKTWL	Visual Examination	Crimelite, LASER
	DFO	100 degree Celsius for 20 minutes re-examined after 24 hours
	Ninhydrin	65% relative humidity and 80 degrees Celsius for 3 minutes
MQCQ6R	Ninhydrin	Utilized Ninhydrin to spray sticky note.
MW6TAD	Visual Examination	No visible ridge detail
	1,2-Indanedione	With dry heat
	Alternate Light Source	Laser 520 NM with bandpass and orange filter. Ridge detail in box "A".

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
N2RZAW	Visual Examination	Utilized oblique lighting with white light and alternate light sources. No friction ridge detail observed.
	DFO	Processed the item with a premixed DFO solution and sprayed the item. Once it was dry, it was then placed back into its packaging, then placed on my evidence shelf to process for at least 24 hours. Item was viewed the following week. No friction ridge detail observed.
	DFO	Processed the item a second time with a premixed DFO solution and sprayed the item. I placed the item into a DFO oven for approximately two hours. Friction ridge detail observed in Quadrant A.
NAMZQB	Visual Examination	Viewed with white light, 350 nm, 455 nm and 515 nm. No ridge detail observed.
	FSIS	Viewed at 254 nm. No ridge detail observed.
	1,2-Indanedione	Viewed at 515 nm. Ridge detail observed in quadrant A
NHEB27	Visual Examination	No friction ridge detail was observed.
	DFO	DFO (petroleum ether base) was utilized on item 2 via spray application. Item 2 was allowed to dry completely and was then placed into a chamber at 100 degrees Celsius with ambient humidity for 20 minutes.
	Alternate Light Source	Item 2 was examined with an alternate light source at 475nm and orange goggles. No friction ridge detail was observed to have developed in any of the quadrants despite strong development on the control.
	Ninhydrin	Nihnydrin (petroleum ether base) was utilized on item 2 via spray application. The ninhydrin was allowed to dry completely and was then placed into a chamber at 78 degrees Celsius at approximately 60% humidity for four minutes.
	Visual Examination	No friction ridge detail was observed to have developed in any of the quadrants despite strong development on the control.
NR6YW9	Visual Examination	
	1,2-Indanedione	1,2-Indanedione + zinc chloride Oven: 100 degrees Celsius for 20 minutes. ALS: 505 nm, orange filter
	Ninhydrin	Air Science Fingerprint Development Chamber (Model SD-34S): 65% Relative Humidity 80 degrees Celsius
NTXX4E	Visual Examination	
	Ninhydrin	Caron chamber for 3 minutes at 80 degrees Celsius and 65% relative humidity
P3GLHE	Visual Examination	A visual examination was done with the item of evidence was taken out of the packaging.
	Ninhydrin	Ninhydrin heptane was used to develop any latent prints that would be on this item.
	Caron Chamber	A caron chamber was used to speed up the development of the ninhydrin heptane. Temperature: 80 Degrees Celsius. Humidity: 65 Degrees Celsius. The item was in the caron chamber for 10 minutes at these temperatures.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
P99T39	Visual Examination	Visual examination completed after opening evidence and before further processing.
	DFO	DFO applied, item allowed to dry in fume hood, item placed in oven for 20 minutes.
	Alternate Light Source	Item viewed under screening ALS, 480-560nm, OG 590 red filter used for viewing.
	Ninhydrin	Applied to item, kept in natural, dark conditions for 24 hours.
	Visual Examination	Viewed after the 24 hours were completed.
PKZJGK	Visual Examination	
	Alternate Light Source	
	DFO	
	Ninhydrin	
PNYZUE	Ninhydrin	Four days in a camera Misonix aura.
PWCPU8	Visual Examination	light 350-555 nm
	1,2-Indanedione	temp. 901C, humidity 5%, time 15 min.
	Ninhydrin	temp. 21C, humidity 80%, time 30 min.
PWXHBC	Visual Examination	
	Ninhydrin	
	1,2-Indanedione	
	Alternate Light Source	532nm, orange barrier filter
PZ89FK	Powder Dusting	Photos were taken of the item before processing. The item was visually examined with oblique lighting and met with negative results. The item was dusted with magnetic powder and met with negative results. Quality control check was completed by placing a fingerprint on a paper coin envelope and using magnetic powder to dust, met with positive results.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
PZFKHG	Visual Examination	
	Photocopy	
	Powder Dusting	magnetic powder/brush
	DFO	
	[No Methods Reported.]	photograph
	Ninhydrin	
	steam	
	time	
	Visual Examination	11/20/25
	Ninhydrin	
	time	
	Visual Examination	11/26/25
	1,2-Indanedione	
	Ninhydrin	
	time	
	Visual Examination	12/1/25
Q9MJMC	Visual Examination	Examined with white light
	1,2-Indanedione	Evidence processed with 1,2-Indanedione. Drying time: ~ 5 minutes. Applied indirect heat.
	Visual Examination	Observed with alternate light source at ~490-560 nm.
	Ninhydrin	Evidence processed with Ninhydrin. Drying time ~ 5 minutes. Placed in humidifier at 40 degrees Celsius with 80% humidity for 30 minutes. Set aside to process for 24 hours.
	Visual Examination	Examined using white light
QC6YVJ	Visual Examination	A fluorescent light was used while looking at the item at various angles under magnification.
	Ninhydrin	I poured the ninhydrin into a glass tray in a fume hood. I immersed the item into the tray and hung it to dry in the fume hood. I turned on the Caron chamber before starting the process to get the settings where they need to be. When the chamber was ready, I placed the item in the chamber and left the item in the chamber for 45 minutes. I examined the item under a fluorescent light at various angles under magnification.
	Physical Developer (PD)	This process was completed by Latent Print Examiner [Name]. I examined the item under a fluorescent light at various angles under magnification.
QGW7FD	Visual Examination	
	Ninhydrin	Heptane ninhydrin
	Caron Chamber	10 minutes

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
QLD9MH	Visual Examination	No ridge detail was visualized.
	Alternate Light Source	No ridge detail was visualized.
	DFO	A new solution of DFO was made and tested prior to testing evidence. The evidence was dipped twice and fully dried between dips, then was placed in the oven at 200° F for 20 minutes. The evidence was left for over 24 hours to further process at room temperature. No ridge detail developed and was observed.
	Ninhydrin	A control was tested and confirmed a positive result of the Ninhydrin solution. The evidence was then dipped twice and fully dried between dips. The evidence was left to process for over 24 hours with no ridge development. Then the evidence was steamed with a clothes iron on and off for over 30 minutes. The item was intermittently steamed on and off (10 minutes a day) for over a week with some possible ridge development (in quadrant A), but could not properly distinguish/was not suitable. The possible ridges did not react with DFO nor Ninhydrin at all. The item was checked daily with no further development.
QLTR8F	Visual Examination	11/19/2025
	photocopy	11/19/2025
	DFO	11/19/2025
	Ninhydrin	11/19/2025
	steam	11/19/2025
	photograph	11/19/2025
	time	11/19/2025
	Visual Examination	12/1/2025
R42E48	Visual Examination	
	Alternate Light Source	
	Ninhydrin	Ninhydrin applied. Developed using PUM100A chamber 5 Min humidified Heated to 160 deg Closed ports Heated to 175 deg then waited 5 more minutes Turn off, cool down
R6J4UE	Visual Examination	
	Powder Dusting	magnetic powder dusting method used
	1,2-Indanedione	
R8QNFU	Visual Examination	I visually examined item 2 with negative findings
	Powder Dusting	Utilizing magnetic powder and a magnetic wand, I processed item 2 with negative results
	DFO	I processed item 2 with DFO. After heat application and examination with ALS, I observed friction ridge detail.
	Ninhydrin	Utilizing Ninhydrin aerosol, I processed item 2. After application of humidity to the item, I observed ridge detail development without the usage of ALS.
R9VF6L	Ninhydrin	The piece of evidence was a note paper. Its was left to act for at least 16 hours, revealing a fingerprint.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
T3C9MG	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.
	DFO	3 seconds soaking of 1,8-Diazafluoren-9-one (DF0) was done on the lined sticky note and on a porous control. After the item and the control dried, the soaking process was repeated and placed into a Sanyo Gallankamp oven set at 100 degrees Celsius for 20 minutes. A Coherent TracER LASER and a KV550 lens filter was used to image the latent print area. The item was re-examined with the LASER after a 24 hour sit-time to allow complete development of DFO.
	Ninhydrin	3 seconds soaking of Ninhydrin was applied on the lined sticky note and on a porous control. After the item and the control dried, the soaking process was repeated and placed into an oven for 3 minutes set at 80 degrees Celsius and having 65 percent relative humidity. The item was re-examined after 24 hours of sit-time to allow complete development of Ninhydrin.
T4LHB9	Visual Examination	White light source used.
	1,2-Indanedione	
	Ninhydrin	
T79WZH	1,2-Indanedione	Placed my prints on a test piece of lined paper. My test piece and item #2 were sprayed with indanedione, allowed to dry and then placed into the NINcha chamber for 20 mins. No ridge detail was found. Sprayed paper and test piece again and placed into the NINcha chamber for an additional 20 minutes. No ridge detail.
	Ninhydrin	Sprayed lined paper and test piece with ninhydrin and left in the lab hood over night to process. No ridge detail was found.
TB7BTY	Visual Examination	Ambient lighting and ring lamp with magnification was used. No FRD is present.
	Alternate Light Source	No FRD present;no fluorescent 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; 1 hr. exposure; FRD is present in quadrant A.
	Visual Examination	Ambient light and ring lamp with magnification was used; FRD is present in quadrant A; FRD is faint
	Alternate Light Source	Crime Lite ML2-orange filter-green light (480nm-560nm) some fluorescence of FRD; orange filter with blue light (420nm-470nm) no fluorescence of FRD; FRD to be captured.
TFD4FH	Full Spectrum Imaging System-II	254nm Alternate Light Source and Filter
	Ninhydrin	
TG66JK	Ninhydrin	This method was applied in that piece of evidence and left to act for at least 16 hours, revealing later, a faint fingerprint.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
U36KJ9	Visual Examination	No fingerprints were visible.
	Alternate Light Source	We used the following lights and filters: IR, UV, green480-560+OG590, blue420-510+GG495,blue/green445-510+OG550. No fingerprints were visible.
	1,2-Indanedione	Parameters: Humidity setting of the environmental chamber: 65% Environmental cabinet temperature setting: 65 degrees Processing time: 30 minutes.
	Alternate Light Source	Used the blue light 420-510 and GG495 filter and the fingerprint appeared to A section.
U8FNCV	Visual Examination	Visually examined the item and did not find any friction ridge detail.
	Alternate Light Source	Examined item with Reflected UV and did not find any friction ridge detail.
	1,2-Indanedione	1,2-Indanedione was sprayed onto the item and left to dry. Once dry, the item was placed inside an oven to assist with the development of any friction ridge detail.
	Alternate Light Source	Viewed the item under the laser with orange goggles and did not find any friction ridge detail.
	Ninhydrin	Ninhydrin was sprayed onto the item and left to dry. Once dry, the item was placed inside an oven/humidity chamber to assist with the development of any friction ridge detail. Friction ridge detail was not found.
UQTF7K	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) Traces found on Sec A
	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 A
V4MUQE	Quality Control Check	At 2:34 PM, CSI [Name] performed a quality control check utilizing magnetic powder by placing a fingerprint on a paper coin envelope for item 2: lined sticky note containing quadrant A-D and was met with a positive result.
	Visual Examination	CSI [Name] performed a visual exam with oblique lighting and was met with negative results from item 2: lined sticky note containing quadrant A-D.
	Powder Dusting	CSI [Name] utilized magnetic powder to dust item 2: lined sticky note in all four quadrant A, B, C, D and was met with the following negative results: • Quadrant A, B, C, D.
V96EWZ	Visual Examination	Under white light
	DFO	Placed in NinCha Oven for 20 minutes
	Alternate Light Source	Both 555nm and 535nm with a red filter
	Ninhydrin	Placed in NinCha oven for approximately 20 minutes, until control was well developed
VAHQWQ	1,2-Indanedione	10 minutes in humidity chamber
	Ninhydrin	3 minutes in humidity chamber
VC6QTZ	Visual Examination	Room lighting used
	1,2-Indanedione	Oven at 100 degrees Celsius for 20 minutes
	Ninhydrin	65% humidity, 80 degrees Celsius for 5 minutes

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
VHVZ3Y	Visual Examination	
	1,2-Indanedione	
	Ninhydrin	
VMN8G2	Powder Dusting	Magnetic Powder
VU98WD	Visual Examination	
	Alternate Light Source	Used UV light and Crime Scope at different wavelengths
	DFO	Sprayed DFO then allowed a few minutes to dry evidence, then placed into a heat chamber @ approximately 200 degrees Fahrenheit to accelerate development.
	Ninhydrin	Dipped evidence into NIN solution in glass pan. Used an Iron with steam to accelerate the development of the print on the evidence
VVKYT2	Visual Examination	
	Ninhydrin	A test print was confirmed prior to utilizing the Ninhydrin. I submerged the sticky note in a Pyrex dish containing Ninhydrin. I hung the note in a vent hood overnight. On 10/30/2025, the ridge detail was extremely faint so I utilized a steam iron on the note to darken the detail. On 10/31/2025 I re-examined the note and the detail was much darker.
WDGPMA	Visual Examination	
	photocopy	
	DFO	
	Heat	
	Visual Examination	
	Ninhydrin	
	Steam	
	Time	
	Visual Examination	
	Time	
	Visual Examination	
WFN6W2	Visual Examination	The item was examined using white oblique light, and no prints were observed.
	Alternate Light Source	The item was examined using a BrightBeamLaser 445 nm (blue)/Orange Curved Filter, and no prints were observed. The item was then examined using a BrightBeamLaser 532 nm (green)/Orange Curved Filter, and no prints were observed.
	1,2-Indanedione	The item was processed with 1,2-indanedione and heated in an oven at 100 degrees C for 20 minutes.
	Alternate Light Source	The item was examined using a BrightBeamLaser 532 nm (green)/Orange Curved Filter. Prints were observed and photographed.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
WLTNEZ	Visual Examination	
	1,2-Indanedione	
	Ninhydrin	
WQKT94	Visual Examination	The item was photographed before examination
	Ninhydrin	after applying Ninhydrin to the whole item, a visible mark was found in section C
WUPGRZ	Visual Examination	Visual/Oblique Lighting examination- no prints observed
	Alternate Light Source	Forensic Light Source- no prints observed
	Iodine Fuming	Iodine Fuming- no prints observed
	DFO	DFO (1, 8-Diazafluoren-9-one)/Forensic Light Source- no prints observed
	Ninhydrin	Ninhydrin- no prints observed
WYEX26	Photocopied	12/05/25: Photocopied item prior to processing to document "writing" on item.
	Ninhydrin	12/05/25: Item processed with Novec Ninhydrin by dipping item into solution. Item allowed to dry and stored for minimum of two days.
	Visual Examination	12/09/25: Examined item; no visible ridge detail observed.
	Visual Examination	12/12/25: Examined item; faint ridge detail observed in quadrant A.
	Ninhydrin	12/12/25: Item reprocessed with Novec Ninhydrin (after photographing faint ridge detail). Item allowed to dry and then placed in a humidity chamber for ~2 hours.
	Visual Examination	12/12/25: Examined item; the faint ridge detail did not appear any darker and no additional ridge detail was observed.
WYYUAY	Visual Examination	
	Alternate Light Source	
	Dye Stain	Iodine Fuming, lot 202311115
	Alternate Light Source	
	DFO	lot 102925
	Alternate Light Source	
	Ninhydrin	lot PE 121625
	Alternate Light Source	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
X22YHD	Visual Examination	The item was visually examined using oblique lighting with a flashlight, prior to processing.
	Ninhydrin	The item was processed for latent prints using Limited Ink Ninhydrin (Lot #070125KM, test print positive). The item was dipped in a glass tray with the Limited Ink Ninhydrin. After drying, the item was placed in the humidity chamber for 40 minutes.
	Alternate Light Source	Item #2 was then examined using Arrowhead Reveal Forensic Field Lights at 455 nm (Blue), 525 nm (Green), 625 nm (red), and 365 nm (UV) with associated barrier filters (yellow, orange, red, and clear UV).
	Physical Developer (PD)	On 12/20/25, the item was processed for latent prints using Physical Developer (Physical Developer Solution “A”: Lot #202510173, Physical Developer Solution “B”: Lot #202511020, test prints-positive). The steps in the Sirchie Physical Developer "Technical Information" sheet were followed for processing, including the pre-treatment steps (Maleic Acid Lot #202508025, test print N/A). The following times were used: step #1: 5 minutes, step #2: 10 minutes, step #3: 10 minutes, step #4: 5 minutes.
	Alternate Light Source	After Physical Developer, the item was examined using Arrowhead Reveal Forensic Field Lights at 455 nm (Blue), 525 nm (Green), 625 nm (red), and 365 nm (UV) with associated barrier filters (yellow, orange, red, and clear UV).
X4L7GZ	Visual Examination	white light, uv, 415-590nm
	1,2-Indanedione	heating (100C ; 10 min) 450-590nm
	DFO	(heating 100C; 20 min) 450-590nm
	Ninhydrin	(heating 80C; 65%wet; 3min) white light, 450-590nm
X7VV6H	Visual Examination	
	Ninhydrin	
X92CK2	Visual Examination	No ridge detail observed
	1,2-Indanedione	dip + 20 min in oven @ 100 degrees C / print developed in Quad A
X9HPN6	Visual Examination	Item was visually examined under a magnifier and light. No photos taken.
	Iodine	The item was placed into a zip top plastic bag along with a small weigh boat containing Iodine crystals. The crystals were agitated and left to sit along with the item for a few minutes before venting the bag and removing the item. Item was examined with a magnifier and light. No photos taken.
	DFO	Item was sprayed with DFO, left to dry then sprayed a second time. After item was dry it was placed into a Caron chamber ser at 100c for 20 minutes. Item was then examined under a magnifier and a FLS at 450mn. One photo taken
	Ninhydrin	Item was sprayed with Ninhydrin, left to dry then sprayed a second time. After item was dry it was placed into a Caron chamber set at 80c with 65% humidity, for three minutes. Item was then examined under a magnifier with light. One scan completed.
	Silver Nitrate	Item was sprayed with Silver Nitrate then left to dry. Once dry item was taken outside to expose it to UV light. Item was then examined under a magnifier with light. No photos taken.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
XB6AT9	Visual Examination	12/4/2025
	Photocopy	12/4/2025
	DFO	12/4/2025
	Ninhydrin	12/4/2025
	Visual Examination	12/10/2025
	Visual Examination	12/15/2025
XTLHNH	Visual Examination	Ambient and oblique lighting no ridge detail observed.
	FSIS 254NM	FSIS 254NM no ridge detail observed.
	FSIS 365NM	FSIS 365NM no ridge detail observed.
	FSIS 850NM	FSIS 850NM no ridge detail observed.
	1,2-Indanedione	Prior to applying the chemical it was mixed for 30 minutes. Batch#: 25-0007 Control: + after being applied and dried in a fuming hood the item was secured in a paper bag for two days to develop. Then the item was examined using ALS at 555NM with a red filter. Ridge detail observed and photographed in quadrant A.
	Alternate Light Source	Used to examine 1 ,2-Indanedione examined using 555NM with a red filter. Ridge detail observed and photographed in quadrant A.
	Ninhydrin	Batch#: 25-0008 Control: + after dried in a fuming hood a steam iron was used to control the heat and relative humidity to accelerate the development of latent prints. Ridge detail was observed and photographed in quadrant A
Y6EE8V	Visual Examination	Viewed with white light/ALS
	Indanedione	Catalyzed with heat
	Ninhydrin	Catalyzed with heat/humidity
YA7NCM	1,2-Indanedione	The item was dipped in the chemical and then put in a humidity chamber for ten minutes. A possible latent area was developed in Quadrant A and photographed with an alternate light source and an orange barrier filter.
	Ninhydrin	The item was then dipped in HFE Ninhydrin and put in a humidity chamber for five minutes. The possible latent area in Quadrant A was not visible after this process and therefore was not photographed.
YCJV3B	Visual Examination	White light and 532nm LASER
	DFO	20 minutes in dry oven
	Ninhydrin	3 minutes in humidified oven
YJUGMX	Visual Examination	Visual exam, no latents observed prior to addition of chemicals
	Ninhydrin	The item was processed utilizing ninhydrin (lot # 071525-01), in which it was poured onto the paper and hung to dry in a fume hood. A test print was applied to a piece of paper and ninhydrin was applied the same way. The papers were placed into the Attestor Nincha humidity chamber, at a temperature of 50°C, with a relative humidity of 65%, and a 10 min run time. The papers were observed with no development on the evidence on 10/22/25. The test print was positive. On 10/24/25, development of a latent print was observed on the paper in quadrant "A".

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
YJX2GT	Visual Examination	White light (flashlight)
	1,2-Indanedione	Heated with heat press at ~160 C for ~10 seconds Viewed with laser at 532nm with orange barrier filter, and with A-FF-1 forensic filter
	Ninhydrin	Heat and humidity source = steam iron Viewed with white light (flashlight)
YKPZNZ	Visual Examination	11/06/25 - Item 002 (lined sticky note), visual exam using white light. No ridge detail detected
	FSIS-UV	11/06/2025 - Item 002 (lined sticky note) - FSIS-UV - No ridge detail detected
	1,2-Indanedione	11/06/2025 - Item 002 (lined sticky note) - viewed with Laser (orange filter). 2L1 detected in section labeled A.
YLJLLW	Visual Examination	Visual/ oblique lighting examination- no prints observed
	Alternate Light Source	Forensic Light Source- no prints observed
	Iodine Fuming	Iodine Fuming (crystals with the plastic bag method)- no prints observed Control successfully conducted
	DFO	1, 8-Diazafluoren-9-one/ Forensic Light Source- 1 print observed in Quadrant A Control successfully conducted
	Ninhydrin	Ninhydrin Petroleum Ether- no prints observed Control successfully conducted
YNQ4FL	1,2-Indanedione	10 minutes in 100 celsius.
	Ninhydrin	2 minutes in 80 celsius 62% relative humidity.
YT7EVB	Visual Examination	I looked at Item 2 under fluorescent lighting before any processing had been done to it.
	Ninhydrin	I submerged Item 2 in ninhydrin for approximately 1 minute, let it dry in a fume hood, and then put it in the Caron chamber for approximately 30 minutes.
	Physical Developer (PD)	Item 2 was submerged in a physical developer solution at the end as a last attempt at enhancing any ridge detail.
ZAJE2X	Visual Examination	under white light.
	Alternate Light Source	fluorescence examination (350 nm - 650 nm under appropriate color barrier filters).
	DFO	baked in the chamber DFO at approximately 100°C for 10 minutes; fluorescence examination in alternate light source (505 nm - 530 nm under orange barrier filter).
	Ninhydrin	in the chamber with a humidity 65% and temperature 50°C for 10 minutes; visual examination under white light.
ZD9JZW	Visual Examination	Visual/oblique lighting examination- no prints observed
	Alternate Light Source	Forensic Light source- no prints observed
	Iodine Fuming	Iodine Fuming- no prints observed Control successfully conducted
	DFO	1,8-Diazaflouren-9-one- no prints observed Control successfully conducted
	Alternate Light Source	Forensic Light Source- no prints observed
	Ninhydrin	Ninhydrin Petroleum Ether- no prints observed Control successful conducted

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
ZGAPF3	Visual Examination	Ambient lighting
	Ninhydrin	NINcha environmental chamber for three rounds of 10 minutes
	Visual Examination	After each round in the environmental chamber under ambient lighting
	1,2-Indanedione	with ZnCl; NINcha environmental chamber for 10 minutes
	Visual Examination	Laser at 532nm with orange barrier filter
ZJCMNA	Visual Examination	Performed a Visual Examination utilizing ambient lighting.
	Alternate Light Source	Performed a Visual Examination utilizing the Polilight PL500 looking for inherent luminescence.
	1,2-Indanedione	A test print was placed on white paper using a Sirchie Standard Pad. This was used as a control. Indanedione was sprayed on the white paper under a hood. After the reagent was fully evaporated, the white paper was placed in a Caron Fingerprint Cabinet. The processing time was 10 minutes at 100 degrees Celsius (dry heat). The control was analyzed under a Bright Beam Laser and viewed at 445nm and 532nm. Following a positive control result, item 001-002 was sprayed with Indanedione under a hood. After the reagent was fully evaporated, it was placed in a Caron Fingerprint Cabinet. The processing time was 10 minutes at 100 degrees Celsius (dry heat). Item 001-002 was analyzed under a Bright Beam Laser and viewed at 445nm and 532nm.
	Ninhydrin	The white paper used as a control for Indanedione was subsequently used as a control for Ninhydrin. Ninhydrin was sprayed on the white paper under a hood. After the reagent was fully evaporated, the white paper was placed in a Caron Fingerprint Cabinet. The processing time was 10 minutes at 80 degrees Celsius and 60% humidity. Following a positive control result, item 001-002 was sprayed with Ninhydrin under a hood. After the reagent was fully evaporated, it was placed in a Caron Fingerprint Cabinet. The processing time was 15 minutes at 80 degrees Celsius and 60% humidity. (Processing time was longer than the control, due to the faint development of friction ridge detail).
	Oil Red O	A test print was placed on white paper using a Sirchie Standard Pad. This was used as a control for Oil Red O. Once the white paper was placed in a clean glass tray, the Oil Red O Stain Solution was poured over the item. This was agitated for approx. 60 minutes, in which a positive result was observed. The Stain Solution was drained out of the glass tray and the Oil Red O Buffer Solution was poured over the white paper neutralizing the reaction. Item 001-002 was placed in a clean glass tray, the Oil Red O Stain Solution was poured over the item. This was agitated for approx. 60 to 90 minutes. The Stain Solution was drained out of the glass tray and the Oil Red O Buffer Solution was poured over the white paper neutralizing the reaction.
ZK3U4Z	Powder Dusting	Sample 2 did not reveal any latent fingerprint after processing.
ZRQECL	Visual Examination	White light
	1,2-Indanedione	96 degrees celcius 9% RH 10 minutes
	Ninhydrin	80 degrees celcius 62% RH 2 minutes
	Physical Developer (PD)	15 minutes

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
ZYN268	Visual Examination	
	Ninhydrin	HFENINHYDRIN Humidity Chamber
ZYZ3LE	Ninhydrin	The item was sprayed with Ninhydrin and kept to dry for 24 hours to view the result

Item 2 - Development Response Summary

Participants: 233

Methods Utilized

Alternate Light Source	112	Physical Developer	22	*Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.*
Cyanoacrylate Fuming	0	Powder Dusting	14	
DFO	59	Visual Examination	213	
Dye Stain	2	Wet Powder Suspension	0	
Ninhydrin	190	1,2-Indanedione	99	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
2BVC73	Visual Examination	
	Alternate Light Source	Dual 77 and UV (520 nm - 445 nm - 365 nm)
	1,2-Indanedione	Visual and Dual 77 (520 nm)
	Physical Developer (PD)	
2CJFJA	Visual Examination	Visual examination with flashlight was performed and yielded negative results located on marker #3.
	Powder Dusting	A quality control check was performed by placing a fingerprint on a paper coin envelope and he use of magnetic powder was performed with positive results.
	Powder Dusting	Magnetic powder was used and yielded positive results located on marker #3D. Magnetic powder was used and yielded negative results located on markers #3A, #3B, #3C.
2J8RD3	Visual Examination	Examination under white light and latent print was not appeared on any positions, so we are going to another procedures.
	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 D position.
	Ninhydrin	Putting paper on Ninhydrin solution, let paper dry around 15 minutes. The latent appeared clearer on D position.
2NK7M3	Visual Examination	Nothing visible
	DFO	Print developed in quadrant D
	Ninhydrin	Print developed in quadrant D
	Silver Nitrate	Print developed in quadrant D
2TVLPY	Visual Examination	White light. No fingerprints were observed.
	1,2-Indanedione	100 degrees C, 10 min. One fingerprint visible in "D".
	Ninhydrin	62% RH, 80 degrees C, 2 min. One fingerprint (the same as after IND) visible in "D".
34BT7Y	Powder Dusting	Black magnetic powder physical reagent. Use with a magnetic-tipped brush. Time: 17 minutes
38UU7D	Visual Examination	Day light/White light
	Alternate Light Source	Polilight, ML2 - 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
3BT73D	Visual Examination	used side lighting
	1,2-Indanedione	used heat press and Laser (Bright Beam) exam / 532nm / used orange goggles
	Ninhydrin	used steam iron and visible lighting
3ETGXD	Alternate Light Source	
	1,2-Indanedione	without heating

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
3FJFCB	Visual Examination	At 6:52 p.m., the processing of the piece of evidence began. Using all necessary personal protective equipment, I proceeded to document the evidence through general photography in order to record its condition at the start and each of the packages.
	Alternate Light Source	A visual inspection was then carried out, supplemented with alternating light, to identify any visible fingerprints as no fingerprints could be identified
	Iodine Crystal Amp.	As the first method for developing fingerprints, at 7:47 p.m., iodine crystals were applied using a fuming gun following controlled procedures. A control sample was prepared on a piece of yellow paper inside a sealed gas chamber to verify the reagent's effectiveness, and this sample was photographed. Subsequently, the piece of evidence was placed in a gas chamber along with an ampoule of iodine crystals and sealed. After the exposure time, positive results were observed in the piece, specifically in quadrant D.
3GWAUW	Visual Examination	Visible white light, RUVIS, LASER
	Hydrochloric acid	Visible white light
	1,2-Indanedione	Dry heat press, LASER
3JJPJ8	Visual Examination	
	Alternate Light Source	CS @ 515nm & UV
	Powder Dusting	used BMP in case DFO & NIN turned paper black
	DFO	allowed to sit for development
	Ninhydrin	placed in plastic bag overnight for development
3M79NB	Visual Examination	Examination of the item with light of different wavelengths and with different observation filters. Nothing was visible.
	1,2-Indanedione	After treatment with 1,2-Indanedione a fingerprint was visible in zone D.
3RFGV8	Visual Examination	White light and magnification
	Alternate Light Source	450nm with orange filter
	Ninhydrin	batch # 323
	Physical Developer (PD)	batch # 548
3T9F4D	Thermanin	after application of Thermanin the item was placed in a plastic bag and allowed to process over time. The impression developed in a couple hours - core of impression was obliterated but the tip was clear
3ZBLK3	ThermaNin	ThermaNin powder (approximately 0.5 g) was sequentially dissolved in isopropanol (0.5 mL), ethyl acetate (1.5 mL), and petroleum ether (98 mL). The colorless upper-layer solution was collected and used to dye Item 3. Item 3 was immersed in this solution, allowed to dry in the shade for approximately one day, and subsequently developed a purple-stained fingerprint in section D.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
44QAZT	Visual Examination	Visual/oblique lighting examination - no prints observed
	Alternate Light Source	Forensic Light Source - no prints observed
	Iodine Fuming	Iodine fuming with Iodine crystals- no prints observed Control conducted - successful
	Ninhydrin	Dry Ninhydrin (Petroleum Ether) - 1 print observed in quadrant D (Method: Ninhydrin (petroleum ether) soaked into blotter paper, allowed to dry, then the thermal paper was secured between two sheets of the soaked blotter paper. The sample was secured in a dark room with a heavy object on top. Blotter paper was re-soaked after 24 hours and the process continued) Control conducted - successful
4CG24C	Visual Examination	1) The receipt (thermal) paper is observed to nake eye. No trace detected.
	Alternate Light Source	2) We illuminate the object with the Crimescope MCS-400 at different frequencies with the appropriate filters and colored glasses, under different inclinations. No trace detected.
	1,2-Indanedione	3) In view of porous support, we vaporise the solution 1,2-Indanedione, under a hood, on the receipt (thermal) paper, 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.
	Visual Examination	4) The receipt remained blank on the front and blackened on the back. On the front, in box "D", we can see a pink fingerprint with the naked eye. We can determine the type of pattern left by the fingerprint. We do not see any other marks anywhere else on the object.
	Alternate Light Source	5) We observed the receipt (thermal) paper with crimescope MCS-400 at CSS filter and orange filter glasses for observation. The fingerprint in box "D" is luminescent. We can clearly determine the pattern type of the trace. We don't observe other traces elsewhere on the object.
	Ninhydrin	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.
	Visual Examination	7) The papillary trace is very partial in box "D". Only a few crest can be observed, but they do not allow us to determine a family group. No trace is observed elsewhere.
	Alternate Light Source	7) The papillary trace is visible, purple in colour, in box "D'" However, the basal area of the trace is too faint or not visible. The shape group cannot be determined precisely. No traces are observed elsewhere on the object.
4EMMRC	Visual Examination	White light examination
	[No Methods Reported.]	Iodine fuming without results
	[No Methods Reported.]	Silver nitrate processing showing a fingerprint in D region. The ridge detail in the center was not sufficiently recovered, but the pattern of the fingerprint is probably a whorl in our opinion.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
4HAYYU	Visual Examination	white light observation
	Alternate Light Source	Polilight PL500 illuminator, full range of visible light spectrum, yellow, orange, red filter
	DMAC	505 nm, orange filter
	1,2-Indanedione	530-550 nm, orange filter
	Ninhydrin	white light and green light observation
4KBZZR	Visual Examination	with oblique lighting; no print observed
	Alternate Light Source	viewed with Coherent Tracer; latent print observed and photographed.
	Iodine	Iodine; no print developed.
	Ninhydrin	Ninhydrin (acetone with dry application - blotter paper); print developed and photographed. Applied on a Friday afternoon and examined/photographed Monday morning; approximate 70 hour development time.
4RU9JH	Powder Dusting	dual contast magnetic powder with magnetic wand
	Iodine fuming	iodine fuming wand
4UH3XX	1,2-Indanedione	Reagent: 1,2-Indanedione-Zinc Chloride Petroleum Ether Technique equipment: humidity chamber (70 deg F, 65% RH) for 10 minutes Illumination: Laser (532 nm)
4W6EYN	Visual Examination	No RD
	Ninhydrin	Bypassed IND due to substrate composition (thermal paper) Iron for heat/humidity application - applied at a distance due to heat sensitivity of substrate
4WQUD7	Visual Examination	Performed a visual examination of item 3 using Crimelite and TracER Laser. One digital photograph was taken using TracER Laser and a curved orange filter of latent print area in quadrant D.
	1,2-Indanedione	Used 1,2-Indanedione on item 3. The item was soaked and allowed to air-dry completely, then left in a dark room at room temperature to develop. Used TracER Laser with a curved orange filter to take one digital photograph of latent print area in quadrant D.
4Z262U	Visual Examination	Visual exam of the item was completed. No visible prints were located at this time.
	NinhydrinHT	NinhydrinHT (Lot #202505027-01) Hung to dry for 1 hour in fume hood; no ridge detail after 1 hour. **The item was is normally sprayed on both sides with the chemical, but the sprayer of the bottle was not working. Instead, the item was dipped into the NinhydrinHT using the same method as regular Ninhydrin. Checked at 24 hours; slight ridge detail appeared in Section D. Check at 48 hours; ridge detail appeared in Section D.
66Y7KM	Visual Examination	Item was examined under white light. No friction ridge detail was observed.
	Alternate Light Source	FSIS (Full Spectrum Imaging System), ultraviolet and ultraviolet filter. No ridge detail was observed.
	Ninhydrin	Ninhydrin. Item was examined again 72 hours later to observe any further development. Ridge detail was observed and a photograph was taken.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
67AN4T	Visual Examination	Negative. Overall photos taken- 2.
	Vacuum Metal Deposition	Processed with Silver/Zinc. Negative. Overall photo taken- 1. Processed with Gold/Zinc. Negative. Overall photo taken- 1.
	1,2-Indanedione	Applied 1,2-Indanedione in the sandwich method on 11/19/2025.
	Alternate Light Source	Checked and viewed the 1,2-Indanedione on 11/21/2025. Detail observed.
	Ninhydrin	Applied Ninhydrin Pet Ether in the sandwich method on 12/2/2025.
	Visual Examination	Checked on 12/4/2025. No further development.
	Ninhydrin	Applied Ninhydrin Pet Ether in the sandwich method on 12/10/2025.
	Visual Examination	Checked on 12/11/2025. No further development.
67Q7HY	Visual Examination	Visual examination with different lights and filters. 1 fingerprint was foun at section D with blue light (range 420- 470 nm) and yellow filter.
	1,2-Indanedione	65% moisture , 90C degrees and 15 min. operate time. 1 fingerprint was found at section D with green light (range 480- 560 nm) and red filter.
6BJ9LX	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Alternate Light Source	
	Physical Developer (PD)	
6K82VA	1,2-Indanedione	The object was sprayed with a solution of indandione and placed in a NIN-DFO chamber for 10 minutes at a temperature of 100°C and no relative humidity.
	Ninhydrin	The object was sprayed with a solution of ninhydrin and placed in a NIN-DFO chamber for 3 minutes at a temperature of 80°C and a relative humidity of 65%.
6N4NPX	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Alternate Light Source	
	Physical Developer (PD)	
	Visual Examination	
6P3RKU	Visual Examination	Examined under ambient lighting and with use of a flashlight including oblique angles.
	Alternate Light Source	Examined under laser with 445nm and 532nm and an orange barrier filter. 3-LP1 visualized at this stage and preserved through photography - see below. [No photograph submitted by participant.]
	1,2-Indanedione	No heat applied due to the substrate's sensitivity to heat. Examined under laser at 532nm and an orange barrier filter. 3-LP1 developed/improved at this stage; preserved through photography - see below. [No photograph submitted by participant.]
	Ninhydrin	No heat applied due to the substrate's sensitivity to heat.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
6R4YKX	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Magnetic powder	
	1,2-Indanedione	
	Dye Stain	
	Physical Developer (PD)	
6XUAVV	Visual Examination	fluorescence examination
	Alternate Light Source	
	DMAC	temperature: 20 -24 degrees Celsius, time: 12 hour
	DFO	temperature: 20 -24 degrees Celsius, time: 7 days
	Ninhydrin	temperature: 20 -24 degrees Celsius, humidity: 30-50%, time: 7 days
6ZHNJ7	Visual Examination	
	1,2-Indanedione	Placed in an envelope and stored in LPU evidence for prints to develop overnight
	Visual Examination	One impression marked B on quadrant D. Viewed under 515nm/orange. Sent to photo lab for digital image
	Physical Developer (PD)	
76A98L	Visual Examination	
	RUVIS/FSIS	
	Ninhydrin	No heat and steam applied. Analyzed after 72 hours.
	Ninhydrin	Re-dipped, no heat and steam applied. Analyzed 12/19/2025
777MDR	Visual Examination	
	Alternate Light Source	Wavelength 455nm, Filter: Orange
	1,2-Indanedione	Forensic Laser, Filter: Red
7ANQKW	Ninhydrin	Ninhydrin spray reagent. For paper part.
7CAMRM	Visual Examination	No friction ridge detail was observed.
	Iodine fuming	The receipt was placed in a heat-sealed plastic bag along with a control. An iodine ampoule was broken to allow the iodine crystals out and heat from the palms of my hands was added to allow the iodine to sublimate. Faint friction ridge detail was observed in quadrant D which was scanned for preservation.
7HXC77	Powder Dusting	The item was initially inspected using natural and oblique light for friction ridge detail. Afterward, it was processed with black fingerprint powder with negative results.
	Ninhydrin	After powder processing, the item was treated with Ninhydrin solution for heat sensitive items and was placed in a sealed plastic bag in an attempt to enhance possible friction ridge development. On 11/05/25, the item was visually inspected, and friction ridge detail was observed.
7XTU2V	1,2-Indanedione	10 mins at 99.5°C

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
84YK7M	Visual Examination	1004, test/control N/A, various angles of light, no suitable ridge detail.
	Alternate Light Source	1020, test/control positive, 445 nm & 520 nm laser, suitable ridge detail, photographed. Due to budget constraints and the fact that the print was successfully developed, processing with Ninhydrin HT is not required.
8AN3MJ	Visual Examination	Visually inspected the surface of the white receipt paper and did not visualize any possible friction ridge detail.
	Ninhydrin	Sprayed the white receipt paper with Ninhydrin to cover the entire surface area and placed it in the humidity chamber (instrument preset for heat and humidity controls) for ~10 minutes. Friction ridge detail was observed at this step. *Note: The Ninhydrin used is Petroleum Ether based*
8DJY4X	1,2-Indanedione	
	Ninhydrin	
8GJAYX	1,2-Indanedione	
	Ninhydrin	
8GLUTR	Visual Examination	12/3/2025 White light 12/4/2025 White light 12/5/2025 White light 12/8/2025 White light
	Ninhydrin	12/3/2025 Ninhydrin HT Lot: 202202023, Exp. 3/16/2027 Applied the first application of Ninhydrin HT without heat and humidity, no ridge detail observed. Applied an additional application without heat and humidity, will allow it to dry overnight 12/4/2025 No ridge detail/purple color change reaction observed. Will apply another application without heat and humidity, and will allow it to dry overnight. 12/5/2025 Ninhydrin Special Formula Lot: 202405050 Exp: 12/2025 Applied Ninhydrin Special Formula with light heat and humidity, purple color reaction and ridge detail observed and captured
	1,2-Indanedione	12/4/2025 1, 2 Indanedione Lot# PF300961472501 Exp: 5/27/2026 Applied 1, 2 Indanedione to quality control without heat and humidity, will allow to dry, then observe if fluorescence and ridge detail are present. Fluorescence or ridge detail was not observed. Will allow it to dry overnight, then observe 12/5/2025 No fluorescence or ridge detail observed, will not apply to the evidence item.
	Alternate Light Source	12/4/2025 Brightbeam Laser Green 525 nm wavelength 12/5/2025 Brightbeam Laser Green 525nm wavelength
8U3J73	Powder Dusting	se le aplico reactivo fisico magnetico y posteriormente se le aplico spray de ninhydrna revelando el fragmetno. [Requested translation was not provided by time of publication.]
8X7LRR	Visual Examination	Conducted visual examination the item using oblique lighting and magnifier. No ridge detail was observed.
	ThermaNin	Processed item using ThermaNin in a chamber at 80 degrees Celsius and 40% humidity for approximately 20 minutes. Ridge detail was developed.
8YYJZX	Visual Examination	
	1,2-Indanedione	
	Ninhydrin	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
92MCCT	Ninhydrin	Ninhydrin HT was Qc'd on 11/24/25 with positive results. The item was sprayed on 11/24/25 The item was viewed on 11/25/25- one latent area was observed on quadrant D. No visible ridge detail was observed in quadrants A,B,C.
93FYAQ	Visual Examination	Examined document for possible latent prints.
	VSC 6000 H/S	Utilized Video Spectral Comparator to determine if any possible prints would fluoresce under alternate light sources. No possible prints or fluorescence noted.
	Cyanoacrylate Fuming	Fuming chamber used; 10 minute processing time. Positive control with positive results. Sirchie Cyanoacrylate CNA-102 (Lot #202501075, Best By: 02/2026)
	Powder Dusting	Positive control with negative results. Sirchie Silk Black 101L fingerprint powder (Lot #202411097, Exp Date: 12/2034)
	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. Ninhydrin in Acetone made in Chemistry Unit (Lot #25-A0433579-03, Exp Date: 02/09/26)
93HVEU	Visual Examination	White and ambient lighting
	Alternate Light Source	F&F 82S UV and Blue lights
	1,2-Indanedione	F&F 82S blue/green and green lights
93XANP	Visual Examination	White light Poly light 450nm Laser light RU vis
	1,2-Indanedione	
	Ninhydrin	
94AQ23	Visual Examination	Visual examination - No latent ridge detail visible.
	Alternate Light Source	CrimeLite Auto/Discovery ALS- latent ridge detail visible in Section D of Item #3 utilizing the following settings: Lighting 100% at 445nM, Filter 495 nM LP, then Greyscale and Invert.
96LLMU	Visual Examination	Examined the receipt paper under different light sources (flashlight, studio lights, ring lights, etc.) and no ridge detail was seen.
	Alternate Light Source	Viewed the item with the ALS (alternate light source) using wavelengths from 450 nm to 590 nm. Ridge detail was observed in the D quadrant. Photographed the ridge detail at 450nm using an orange barrier filter. Performance checked the ALS before using it on the item of evidence.
	Iodine Fuming	Applied iodine fuming to the item using the electronic fuming gun. There was no benefit to the process. Performance checked the iodine fuming gun before using it on the item of evidence.
	ThermaNin	Applied ThermaNin to the receipt paper. Allowed the item to cure in a plastic bag in a secure storage locker. Photographed the results of the process at approximately 48 hours and after 72 hours.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
9CNVUM	Visual Examination	Used oblique lighting, no visible prints
	Alternate Light Source	Used forensic laser, no visible prints
	Iodine Fuming	Placed in iodine fuming bag, no visible prints
	Ninhydrin	Applied ninhydrin-petroleum ether to two pieces of blotter paper and allowed to fully dry, item placed between pieces of blotter paper and secured inside plastic bag, visible print in quadrant D
9G2FYM	Visual Examination	White light source.
	1,2-Indanedione	10 minutes of processing.
	Ninhydrin	2 minutes of processing.
9PR4R6	Visual Examination	Polilight PL 500
	DMAC	impregnatach papier sheets/ 24 h
9R27JV	Visual Examination	No apparent ridge detail located during visual examination.
	Ninhydrin	Rinsed the receipt (thermal) paper with Acetone Ninhydrin and let air dry for ~2 hours prior to being placed in the Caron Chamber.
	Caron Chamber	Placed the receipt (thermal) paper in the Caron Chamber (SN:6105-2-325) for 10min @ 80C and 65%RH.
9U6WNP	Ninhydrin	Nin1: HFE-7100 Preparation, dipped then hung to dry. Ninhydrin chamber for 3 minutes at 80 degrees C and 65% humidity.
A2HA6Z	Visual Examination	with white light and TracER laser
	1,2-Indanedione	examined 24 hours after processing
A89KEX	Visual Examination	Item was examined using a flashlight. (negative results)
	Heat Application	Thermal side of item was heated using a hair dryer on low power for approximately 10 minutes. (negative results)
	DFO	Item was processed by dipping twice in DFO, lot #25.1, then placed in a chamber heated to 100C for 20 minutes. Item was examined using the LASER. (D2)
	Ninhydrin	Item was processed by dipping once in Ninhydrin, lot #25.2, then placed in a chamber heated to 50C, 80% RH for 20 minutes. (negative results)
	Physical Developer (PD)	Item was processed by dipping in the following: Maleic Acid, lot #25.1, 5 minutes / PD (v): (redox solution lot #25.1, detergent solution lot #24.1, silver nitrate solution lot #25.1), 10 minutes / Fixer, lot #25.1, 5 minutes / DI water, 5 minutes / (negative results)
AJ324Y	Visual Examination	CrimeLite and TracER Laser
	1,2-Indanedione	1,2 Indanedione and 24 hour room temp development, TracER Laser
AJYFA6	Visual Examination	A visual inspection of the piece of evidence is carried out, but no fingerprint was observed.
	iodine ampoule	An iodine ampoule is used for fingerprint development, revealing a fragment of a fingerprint in quadrant D.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
AQX7TU	Ninhydrin	1. Working in a fume hood, thoroughly soak (spray, pipette, etc., but do NOT submerge) at least two sheets of filter paper (or enough to cover items of evidence in IND, allow to air dry. 2. Thoroughly soak filter papers with IND a second time and allow to air dry. 3. Place the thermal paper evidence between the treated sheets of filter paper and place in a plastic baggie. 4. A control print will be tested at the time of use to ensure the IND is working properly. 5. Place the plastic baggie with the filter paper and evidence in the Cyanoacrylate Fuming Tank and run the 28 minute pre-programmed electric relay cycle until cycle completes.
	Oil Red O	1. Add enough ORO stain to a glass tray or a plastic bag to cover the piece of evidence and control print. 2. Agitate using an orbital shaker for approximately 5 minutes until the control print and any prints on the evidence are adequately visualized. • This process can take up to thirty minutes but often development happens within 5 minutes. Water Post-Wash: 3. All items of evidence processed should undergo water post-wash after submersion in the ORO stain. 4. Add enough water to a glass tray or plastic bag to cover the evidence. 5. Agitate using an orbital shaker for 5 minutes and monitor results. 6. Allow evidence to air dry on butcher paper or a paper towel.
AQZQMN	1,2-Indanedione	IND-Zinc Chloride working solution; dry heat applied using heat press @ ~ 165C for ~ 10 sec, viewed with laser @ 532 nm and orange barrier filter
AT8TTT	Visual Examination	White light.
	Ninhydrin	Nynhidrin spray "NIN-PRINT" B-78500, BVDA. Room temperature 20,5C, room humidity 31%, procesing time 4 days. Spraying time 5-6 sec.
AW6A6M	ThermaNin method	ThermaNin reagent was applied according to manufacturer's directions and air-dried. Purple ridge detail was observed without background darkening. The processing time is about 2hr at Room temperature.
AWKVD4	Iodine pipette	1. Piece #3 was photographed. 2. A visual inspection was performed to locate the fingerprint, using a white light source and a magnifying glass; the fingerprint was not visible. 3. An iodine pipette was then used to locate the fingerprint, which was found on the letter D.
AZMR3Y	Visual Examination	
	DFO	20min, 100c, Forensic light source: Red filter/535nm & Orange filter/455nm
	Ninhydrin	15min, 80c/70RH
	Acetone rinse	removing blackening from thermal layer.
B6CQUY	Visual Examination	Examined with white light and magnification on 11/7/25.
	Ninhydrin	Submerged in Ninhydrin, Batch #324, then air dried on 11/7/25. Allowed to air dry only. Examined with white light and magnification.
	Physical Developer (PD)	Processed by LPE [Name] on 11/13/25, Batch #548. Examined with white light and magnification on 12/8/25.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
BEKXWU	Visual Examination	After opening the item, I visually inspected it using oblique lighting. I rotated the object around at different angles using natural light and under the magnifying light looking for patent impressions.
	hydrochloric acid (muriatic acid)	– I grabbed a receipt for the control. I placed my charged thumbprint on the receipt and placed the receipt and HCl under a glass beaker inside a fume chamber. I monitored the reaction over the course of ~1.5 hours. Several prints, including prints I did not intentionally leave developed on the receipt. I grabbed another receipt and placed a charged print on it. I placed the new control and item 3 in the same manner as described above and monitored the reaction. The control developed a print, but item 3 had no prints on it after ~1.5 hours.
	1,2-Indanedione	– I ran two controls on the chemical, one using a new piece of paper and one with part of the receipt with developed prints on it from the control with HCl. The controls were treated with indanedione, dried, and put in the Caron for ~1 hour under the proper heating conditions. Prints were best visualized using the DCS5 with 475-550 nm light and an orange filter. I placed a charged print on a receipt and applied indanedione and applied indanedione to item 3. They were allowed to dry and then I placed them in the Caron, where I monitored the reaction for ~1 hour, before removing them and visualizing prints using the DCS5 with 475-550 nm light and an orange filter.
BHM48T	Visual Examination	Negative
	FSISII	Negative
	1,2-Indanedione	Positive Quad D
	Oil Red O	Positive Quad D
BHZTCQ	Alternate Light Source	1430 - initial examination of item under White Light and ALS. ALS exam performed with Rolfin Polilight Flare-2 lights (415 & 505mn) using Red, Orange, and Yellow filters. ~1444 possible print observed in Quadrant D.
	Ninhydrin	~1510hrs. Item was treated with Ninhydrin liquid chemical developer (Sirchie brand #N51609) via immersion. Positive control (QC check) was POSITIVE post processing. Items allowed to air dry appx. 18 hours, then examined under WL.
BMWE7E	Visual Examination	White light and Inherent using 532nm LASER
	Alternate Light Source	FSIS using 254nm UV light
	1,2-Indanedione	No heat applied - Developed overnight - Viewed with 532 nm LASER
	Ninhydrin	No heat applied - Developed over a weekend - HFE formula
BUHA8J	Visual Examination	No ridge detail
	Alternate Light Source	No ridge detail, used 350-380nm and 420-470nm
	HCL	No ridge detail, HCL control test was positive; however the item itself was negative
BVTWY6	1,2-Indanedione	Item #3 Receipt Paper Screened with white light, UV light and yellow filter, 450 nm light and orange filter, Laser (532 nm) with orange laser filter, FSIS II 245 nm light with UV filter. Positive. Marker A- ridge detail in quadrant D under 450nm with orange filter 1, 2-Indanedione. Control- positive/negative. The chemical was working properly. Screened with laser (532 nm) with orange laser filter. Marker A- ridge detail in quadrant D

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
C7J8L3	Visual Examination	
	PDMAC Paper	
C82ERK	Visual Examination	
	Iodine Fuming	
	Powder Dusting	Black magnetic fingerprint powder
C9TDZR	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	
	1,2-Indanedione	
	Dye Stain	
	Physical Developer (PD)	
CAPQQQ	Visual Examination	14:26-14:31 Using oblique lighting a print was visible in quadrant D
	Alternate Light Source	15:30 -15:47 Polilight 505 nm and examined with barrier filters: orange - print is visible with ridge detail Polilight 415 nm and examined with barrier filters: orange - print is visible
	Ninhydrin	15:15-15:34 Sirchie TM Ninhydrin #NS1609 dipped in glass tray then hung to dry to develop over night
CGH4KX	Visual Examination	The item was visually examined with the Crime Site and 254 Nm light source with negative results. The item was photographed with my Dept issued Nikon camera prior to chemical processing.
	Ninhydrin	The item was processed with Ninhydrin and a latent was developed.
CN4YL3	Visual Examination	Gloves and tweezers were used to handle the piece, and then item #3 was photographed exactly as it was found. A visual inspection was performed on piece of evidence item #3, a thermal paper receipt divided into (4) sections A-D. No fingerprint was displayed.
	Alternate Light Source	A visual inspection was performed using a side mirror and the fingerprint was not visible.
	magnetic powder	Magnetic powder was used to develop the print; it was developed and visualized in quadrant D.
	Powder Dusting	To define the fingerprint, black graphite powder was used and it was successfully defined in section D.
CPHFMM	Visual Examination	Visual examination using white light.
	Alternate Light Source	Visual examination using various wavelengths of light.
	DFO	DFO applied, visualised using laser (532nm).
	Ninhydrin	Ninhydrin applied, NinCha chamber using for humidity, visualised using white light.
	Vacuum metal deposition	VMD using gold and zinc, visualised using white light.
	Physical Developer (PD)	PD applied, visualised using white light.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
CQVQ2E	Visual Examination	Ambient lighting
	1,2-Indanedione	Allowed to process for two days with room temp and humidity. Observed with green laser.
	Ninhydrin	Processed with room temp and humidity.
CTZKGB	Visual Examination	Used Full Spectrum Imaging System to visually exam the thermal paper prior to processing
	1,2-Indanedione	Dipped the thermal paper in 1,2 Indanedione, allowed to completely dry, and then followed chamber specifications to set the run time for 10 minutes at 100 degrees
	Ninhydrin	Dipped the thermal paper in Ninhydrin, allowed to completely dry, and then followed chamber specifications to set the run time for 5 minutes at 80 degrees and 65 percent humidity
CUAM8G	Visual Examination	With white light. No friction ridge detail observed.
	PDMAC	Left in PDMAC sleeve for 24 hours.
	Laser	Examined with the green handheld laser (520 nm) and orange goggles. One impression was located in quadrant D.
D2AARN	Visual Examination	Visual examination with white light.
	Ninhydrin	Thermal Ninhydrin used. Allowed to dry then placed in humidifier at 80% humidity for 30 minutes.
D2NZGY	Ninhydrin	
D336EX	Visual Examination	
	Iodine Fuming	
	Powder Dusting	Black Magnetic
	1,2-Indanedione	
	Alternate Light Source	
	Ninhydrin	Ninhydrin Heptane
D3JCKE	Visual Examination	
	Full Spectrum Image System	Ultraviolet imaging
	Powder Dusting	
	Ninhydrin	Ninhydrin Petroleum Ether
D4CATL	Visual Examination	Reviewed with white light and UV (FSIS) - no RD present Processed with thermal layer removal before proceeding to the next step in the processing sequence
	1,2-Indanedione	Processed in heat/humidity chamber for approx 10 mins with 67% humidity and reviewed with LASER (532nm) with orange filter - one latent print visualized and marked as 3L1
	Ninhydrin	Processed in heat/humidity chamber for approx 10 mins with 67% humidity and reviewed with white light - no RD present (LP previously developed disappeared)

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
D7JKPP	Visual Examination	Item 3: No visible ridge detail was found.
	Alternate Light Source	An alternative light source (ALS) was used before chemical processing, but no fluorescence or better contrasting ridge detail was observed using various wavelengths and corresponding barrier filters.
	ThermaNin	Item was treated with ThermaNin and as a result ridge detail appeared in the "D" quadrant on the item and was photographed as photo lift #2.
DA2MWV	Visual Examination	
	1,2-Indanedione	HFE formula Humidity chamber processing time of 20 minutes at 100 degrees.
	Alternate Light Source	Coherent laser
DBDLNH	DMAC	DMAC - contact transfer process placed between filter paper 24. Illuminates - light 505 nm, orange filter.
DBX33Z	[No Methods Reported.]	Visual Exam, Iodine Fuming, Ninhydrin, Photography, and Ninhydrin Fixative. (Processing time-2Hr 5Min)
DEVPVN	Ninhydrin	ThermaNin
DHUZRN	Visual Examination	
	Alternate Light Source	
	ACETONE	
	1,2-Indanedione	
	Visual Examination	
	Alternate Light Source	
	Ninhydrin	
	Visual Examination	
	Alternate Light Source	
DKHEFX	Visual Examination	No friction ridges present upon visual examination with and without oblique lighting, Crime-Lite AUTO, or RUVIS.
	1,2-Indanedione	1,2 Indanedione applied to item #3 by spraying. Allowed time to dry under fuming hood. Forensic oven not utilized due to the item being thermal paper.
	Alternate Light Source	Item visually examined with ALS at 505 nm with orange goggles. Latent print located in section "D".
DYLTHG	Visual Examination	Visual examination. No friction ridge impressions detected.
	Alternate Light Source	Inherent fluorescence exam using laser at 445nm and 520nm. Friction ridge impression detected in quadrant D. No further processing was performed due to the lack of reagents needed to treat thermal paper due to budget constraints.
EKVH9G	Visual Examination	Visual/oblique lighting examination - no latent prints observed
	Alternate Light Source	Forensic light source - no latent prints observed
	Ninhydrin	Dry Ninhydrin - one latent print observed in section "D" Control successfully conducted

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
ELNGGM	Visual Examination	Visual examination of the evidence with white light.
	Ninhydrin	Saturated evidence with Thermal Ninhydrin. Allowed to dry and stored over night.
	Visual Examination	Visual examination of the evidence with white light.
EXHUEY	Visual Examination	Gloves and tweezers were used to handle the piece. The piece was photographedand and I performed a visual inspection to locate the fingerprint, which was visible under the letter D.
	Powder Dusting	Black graphite powder was used to develop the fingerprint which was located on the letter D.
F63BNN	Visual Examination	
	Ninhydrin	Positive Control
	Caron Chamber	Caron Environmental Chamber at 80 degrees Celsius and 65% Humidity for 10 minutes
F7ER4M	Visual Examination	I used natural light to perform a visual examination of the item.
	1,2-Indanedione	1,2-Indanedione was applied to the item. One latent print developed in section D.
	Alternate Light Source	ALS used to photograph developed latent print after 1,2-Indanedione process.
	Ninhydrin	Thermal ninhydrin was applied to the item and placed in the humidity chamber for 30 minutes for development. Chamber set to 40 degrees C and 80% humidity.
FC2UQJ	Visual Examination	White Paper Strip
	Visual Examination	Visual examination with white light
	1,2-Indanedione	Heat treated at 100 Degrees Celsius for 20 minutes.
	Alternate Light Source	505nm light with orange goggles.
FR9VKK	Thermanin	Processed with Thermanin. The thermanin did not go into solution very well. No ridge detail was developed.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
FRYKAB	Visual Examination	Item 3 was examined using fluorescent light under magnification at different angles.
	Alternate Light Source	Item 3 was examined using blue light with an orange filter under magnification at different angles.
	Cyanoacrylate Fuming	Item 3 was placed in a CyanoSafe chamber with distilled water in the cup heater element and 12 drops of liquid cyanoacrylate in a foil cup that was placed onto a heating element. One (1) test print was created and placed in the chamber. The chamber was sealed and set to run for 12 minutes. The chamber went through a purge cycle, and Item 3 sat in the chamber for 60 minutes. Item 3 was examined using fluorescent light under magnification at different angles.
	Powder Dusting	Item 3 was dusted with magnetic powder using a magnetic brush inside a fume hood. Item 3 was examined using fluorescent light under magnification at different angles.
	Ninhydrin	Item 3 was immersed in a dish containing ninhydrin before being hung to dry in a fume hood. Item 3 was placed inside a locker to allow the ninhydrin to develop over time. After 24 hours, Item 3 was examined using fluorescent light under magnification at different angles.
	Physical Developer (PD)	This process was completed by Latent Prints Examiner [Name] and the batch number was 548. Item 3 was examined using fluorescent light under magnification at different angles.
FVWBAU	Ninhydrin	Due to a miscommunication, I did not realize the item was thermal paper until after it was treated with limited ink ninhydrin (Lot 07125KM), dried, and placed in humidity chamber for 30 minutes with no results. I then placed the paper into a ziploc bag for several days and put it into storage. On 11/19/25, the item was removed from storage and a latent was observed in quadrant D. If I had realized the paper was thermal paper, I would have treated it with Thermanin or simple black magnetic powder first.
	Powder Dusting	After initial ninhydrin processing, I thought I saw faint ridge detail on quadrant A and attempted to enhance the area with black magnetic powder, with negative results.
G2EVZD	Visual Examination	Oblique lighting
	Alternate Light Source	420-470nm
	Hydrochloric Acid	Hydrochloric acid did not develop
GANKCQ	Visual Examination	Viewed Item with CrimeScope at wavelengths 455nm - 515nm.
	Ninhydrin	Sprayed Item 3 with Ninhydrin working solution. Item processed for at least one day.
GDACJM	Visual Examination	White light, UV, IR
	1,2-Indanedione	24 h in a dark bag
	Alternate Light Source	Green light 530, Red filter

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
GEGRRE	Visual Examination	Prescreened item with ALS/FSIS II (254nm, 365nm, 450nm and 532nm with UV, yellow, orange and laser filters) - positive result with 450nm and yellow filter (photographed area of ridge detail) (within quadrant D)
	1,2-Indanedione	Indanedione applied to item and viewed with ALS (532nm and laser filter) - positive result (photographed area of ridge detail) (within quadrant D)
	Ninhydrin	Ninhydrin applied to item and viewed under normal lighting conditions - positive result (scanned area of ridge detail) (within quadrant D)
GJXUYJ	Visual Examination	White light. No fingerprints were observed.
	1,2-Indanedione	100 degrees C, 10 min. One fingerprint visible in "D". Before IND, item was treated with acetone.
	Ninhydrin	62% RH, 80 degrees C, 2 min. One fingerprint (the same as after IND) visible in "D".
GLL9NU	Visual Examination	viewed w/white light
	1,2-Indanedione	not heat treated, fumed for 3 days and viewed under ALS @ 530nm
	Ninhydrin	not heat treated, fumed for 3 days
GLZPMT	Visual Examination	Visual examination under LED lighting and magnification was completed on 11/07/2025.
	Alternate Light Source	Visual examination using the Crime Lite ML (460nm-510nm filter): yellow filter was completed on 11/07/2025.
	Cyanoacrylate Fuming	The Cyanosafe Crime Scene Unit #1 recirculation chamber was used on 11/08/2025. The chamber was set to run for 12 minutes with 12-15 drops of cyanoacrylate glue put into a metal cup and set on a heating element. After the fumes were purged for about 10 minutes the item sat in the chamber for an additional hour in order to allow the glue to harden. The test print was positive. Then the item was examined under LED lighting and magnification.
	Powder Dusting	Black magnetic powder was used on 11/08/2025 and then the item was examined under magnificiation.
	Ninhydrin	Ninhydrin batch #324, was used on 11/09/2025. The item was immersed into the Ninhyrdin for a few minutes and then placed in a fume hood to dry completely. While the item was drying the CARON chamber was set to start and allowed to heat up to 60 degrees farenheit for both the humidity and temperature within the chamber. Once both indicators had reached 60 degrees farenheit, a timer was set for 30 minutes in order for the item to process. After the 30 minutes, the item was taken out and examined but I decided to put the item back in and let it process for another 15 minutes. After being in the CARON chamber for 45 minutes, the item was removed and examined under LED lighting and magnificiation.
	Physical Developer (PD)	Physical Developer batch #548 was completed by Forensic Scientist [Name] on 11/13/2025.
GNAZEQ	Visual Examination	No friction ridge detail could be seen prior to processing.
	Ninhydrin	20 minutes at 70 degrees c and 70% humidity

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
GNRTDE	Alternate Light Source	Rofin UV with yellow filter - negative Rofin 450nm with orange filter - negative TracER Laser 532nm with orange laser filter - positive One (1) area, D, on end of receipt paper FSIS II 254nm light and filter - negative
	1,2-Indanedione	TracER Laser 532nm with orange laser filter - positive One (1) area, D, on end of receipt paper
	Ninhydrin	White light - positive One (1) area, D, on end of receipt paper
GPY7VG	Visual Examination	
	Ninhydrin	NinhydrinHT applied on 10/27/25 and checked at 1, 24, and 48 hours for development of prints NinhydrinHT lot# 202505027-01
GR9BBQ	Visual Examination	using a flashlight to examine the item prior to any processing method.
	Heat Application	Hair dryer is used to apply low heat to the heat transfer side of the receipt (thermal) paper. Visual examination for ridge detail.
	DFO	Item dipped in DFO reagent for five seconds and allow it dry. Repeat the same steps for the second time. Place the item in humidity chamber for 20 minutes then examining it using the laser light to detect ridge detail.
	Ninhydrin	Item immersed in the Ninhydrin solution then placed in the humidity chamber for 20 minutes. Visual examination for ridge detail.
	Physical Developer (PD)	Item placed in the Maleic Acid for 5 minutes, PD for 10 minutes, Fixer solution for 5 minutes, then the rinse solution for 5 minutes. Dry the item in the PD drying cabinet until the item is completely dry then visual examination for ridge detail.
GTNBUF	Visual Examination	Visual Exam/Oblique lighting - no latent prints observed
	Alternate Light Source	FLS - no latent prints observed
	Iodine	Iodine Fuming - no latent prints observed Control successfully conducted
	Ninhydrin	NIN PE (Dry) - 1 latent print observed and documented in quadrant D Control successfully conducted
H6CY3K	Alternate Light Source	Polilight: White light UV light 415nm, 440nm, 450nm, 490nm, 505nm and 530nm with orange and yellow goggles
	1,2-Indanedione	Sprayed with Ind-Zn (thermal) and allowed to air dry
	Alternate Light Source	Polilight: 415nm, 440nm, 450nm, 490nm, 505nm and 530nm with orange and yellow goggles
H9BCL4	1,2-Indanedione	Processed with 1,2 Indanedione and photographed one print in Square D
	Ninhydrin	Processed with Ninhydrin and photographed one print in Square D
H9T2AP	Visual Examination	desk lamp normal light
	Ninhydrin	HFE Ninhydrin 72 hr wait time

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
HMR94K	Visual Examination	Examined item for visible ridge detail using ambient light.
	Iodine Fuming	Used plastic bag and iodine crystals to develop. 1 photograph taken.
	DFO	DFO applied to item and used heat chamber to develop. 1 photograph taken.
	Ninhydrin	Ninhydrin applied item and used a clothing iron and steam setting to develop. 1 photograph taken.
	Silver Nitrate	Silver Nitrate applied to item. Used UV wavelength on ALS to develop. 1 photograph taken.
HMWP2J	ThermaNin	ThermaNin Fingerprint Development Procedure 1. Scope This procedure applies to the development of latent fingerprints on thermal paper or similar materials using ThermaNin reagent. 2. Reagent Preparation 1. Weigh 0.5 g of ThermaNin powder (BVDA). 2. Add 0.5 mL of isopropanol and 1.5 mL of ethyl acetate, and stir thoroughly until completely dissolved. 3. Add HFE7100 solvent to bring the final volume to 100 mL, and mix thoroughly to obtain a homogeneous working solution. 3. Fingerprint Development Procedure 1. Completely immerse the sample in the ThermaNin solution. After removal, place it in a fume hood to allow the solvent to evaporate naturally. Do not heat. 2. Place the sample in a dark environment (ambient temperature ~28°C, relative humidity ~60%) and leave it for 24 hours. Observe the fingerprints, which should appear purple. 3. If the development is insufficient, repeat steps 1 and 2 to enhance the results. 4. Quality Control 1. Before preparing or using a new working solution, perform a test on a control sample with similar material to the test sample. Only use the solution on case samples if the control sample yields clear results. 2. If the control sample does not develop properly, check the reagent preparation and procedure, and if necessary, prepare a new working solution.
HURPEQ	Visual Examination	viewed w/ CrimeLite white light & TracER Laser
	1,2-Indanedione	viewed the next day w/ TracER Laser
HVKMLX	1,2-Indanedione	No heat applied

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
HVM9FR	Visual Examination	The item was visually examined using white light and magnification. No prints observed.
	Alternate Light Source	The item was visually examined using a Polilight 2 (450nm) with an orange filter and a yellow filter.
	Cyanoacrylate Fuming	12- 15 drops of cyanoacrylate were added to a metal cup and placed on the heating element. A test print was added to the chamber and the distilled water well level was checked. Item was placed in the chamber to allow for the entire surface to be exposed to the CA vapors. The cycle ran for 12 minutes and then a 10-minute purge cycle. Item was allowed to sit undisturbed for 1 hour. The item was visually examined using white light and magnification. No further enhancement.
	Powder Dusting	Black magnetic powder was applied to the item with a magnetic wand. The wand was dipped into the magnetic powder. The wand with attached magnetic powder is lightly run over the item in a circular motion. The item was visually examined using white light and magnification.
	Ninhydrin	The item was immersed in a small tray of solution until the entire surface of the item was wet. The item was allowed to completely dry in the fume hood. The item was placed in a dark place to allow for development without acceleration. The item was visually examined after 24 hours but was stored for possible development for 7 days. The item was visually examined using white light and magnification.
	Physical Developer (PD)	Processing was completed by Latent Print Examiner [Name] on 11/13/2025, Batch #548. The item was visually examined using white light and magnification. No further enhancement observed.
HWZKEW	Visual Examination	The item was photographed, gloves and tweezers were used to handle the piece, a visual inspection was performed and nothing was observed.
	Alternate Light Source	An inspection was performed with alternating light and nothing was observed.
	1,2-Indanedione	An iodine bulb was used, and a fingerprint developed in box D.
HYH2AM	yodo	se aplico vapores de yodo. [Requested translation was not provided by time of publication.]
HZG3FE	Ninhydrin	Ninhydrin- Acetone Base (Dry) placed in plastic bag for approximately 1 week
J4WWUQ	Visual Examination	no photos
	Ninhydrin	ninhydrin batch 323, 1 photo, section D
	Physical Developer (PD)	no photos
J6PU2W	DFO	processing time: 30 min Dye stain: DFO solution (1,8-Diazaflouren-9-one) The reaction needs heat

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
JEUYRT	Visual Examination	The examination started by using white light from different angles over the item. No fingermarks could be seen at this stage.
	Alternate Light Source	The item was examined with UV light- 365 nm, no fingermarks detected.
	1,2-Indanedione	The item then was dipped in Indandione Zinc, and left to dry for a few minutes. Then the item was placed in a humidity cabinet. After the cabinet had reached 75 degrees Celsius and 62% humidity, the item was left inside for 10 min.
	Alternate Light Source	One fingermark could be seen in section D with white light. Visual enhancement using the fluoresence present in indandione zinc. Lightsource used was 505 nm, in combination with orange filter. One clear fingermark detected in section D.
JFQHTU	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.
	Powder Dusting	I used black powder, a squirrel hair brush and a marabou hair brush to develop the finger print and it was visible in the letter D.
JMM9HB	Visual Examination	White light, CrimeScope ALS, and Arrowhead Dual77 laser
	1,2-Indanedione	Developed in a dark environment at room temperature for 3 days; visualized with Arrowhead Dual77 laser at 532nm
	ThermaNin	Developed in a dark environment at room temperature for 3 days
JRKPTJ	Visual Examination	Photographed item as received. Visual examination using ambient lighting. No ridge details observed.
	Ninhydrin	Acetone Ninhydrin was used. Airdried for at least one hour.
	Caron chamber	Placed item 3 in the Caron chamber (serial number 6105-2-325) at 80 degrees Celsius with 65% humidity for 10 minutes. Ridge details observed in quadrant D.
JV3RZP	Visual Examination	In normal room lighting; oblique lighting
	Alternate Light Source	CrimeScope CS-16-500 (455-515 nm)
	Ninhydrin	overnight
JWA9TT	[No Methods Reported.]	Iodine fuming only
K7JVME	Visual Examination	ambient light
	Ninhydrin	Ninhydrin HT Item treated with solution, allowed to dry, heat and allowed to air dry overnight
	1,2-Indanedione	1, 2 indanedione pre-mixed solution Item treated with solution, allowed to air dry overnight
	Alternate Light Source	Visualized under Brightbeam green laser 525nm
	Ninhydrin	Ninhydrin Special formula Item treated with solution, allowed to dry, heat and allowed to air dry overnight

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WebCode	Development Methods	Method Details
KC4XNP	Visual Examination	
	Alternate Light Source	crime scope then photographed
	Powder Dusting	black magnetic powder
	DFO	plastic bag for development, ALS and photographed
	Ninhydrin	plastic bag for development
KEBDWG	Visual Examination	Examined Item 3 with the laser for approximately 1 minute.
	Ninhydrin	Applied Thermal Ninhydrin to Item 3 for approximately 20 seconds. After about 10 minutes of drying, Item 3 was placed in the humidifier for 30 minutes.
KQZAYF	Visual Examination	VIS with white light
	FSIS	FSIS II with UV light
	1,2-Indanedione	IND visualized with laser
	Ninhydrin	Nin visualized with white light
KRC6HL	Visual Examination	
	Ninhydrin	HFENIN
KUNPMP	Thermanin	
KWRFXB	Visual Examination	Visual and oblique lighting examination. No friction ridge observed.
	Alternate Light Source	Coherent TracER FLS and Spex CrimeScope ALS Friction ridge observed in quadrant "D". ALS-415 nm and 445 nm
	Ninhydrin	Dry Ninhydrin- Petroleum Ether. Successful control. Friction ridge observed in quadrant "D".
L49D2N	Visual Examination	Visual examination under white light and magnification was done on 11/7/2025 using LED lighting.
	Alternate Light Source	Examination with an alternate light source was done on 11/7/2025 using a Crime Lite ML (460nm-510nm filter) with a Yellow Filter on it.
	Cyanoacrylate Fuming	The Crime Scene Unit CyanoSafe recirculation chamber CSU1 was used on 11/8/2025. The chamber had 12-15 drops of cyanoacrylate glue put into a metal cup and set to run for 12 minutes. Then after the fumes were purged for 10 minutes the item sat in the chamber for an hour to allow the glue to completely harden. The test print was positive. Then the item was examined under LED lighting and magnification.
	Powder Dusting	Black magnetic powder was used on 11/9/2025 and then the item was examined using LED lighting and magnification.
	Ninhydrin	Ninhydrin, batch#: 324, was used on 11/9/2025. The item was immersed into the Ninhydrin for a few minutes and then placed into a fume hood to dry completely. The item was then placed onto a shelf in a secured locker within the Crime Scene Unit, where it was allowed to develop at room temperature and humidity in the dark slowly. The item was left in the locker to develop for 13 days and then was removed and examined under LED lighting and magnification.
	Physical Developer (PD)	Physical Developer, batch#: 549, was completed by Latent Print Examiner [Name] on 12/10/2025.

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WebCode	Development Methods	Method Details
LAUBQC	Visual Examination	Natural light, white light, optical instruments.
	Thermanin	Thermanin 0,4g + Naphthyl Ether 100ml, processing time - 72h, room temperature, dark place.
	Visual Examination	Natural light, white light, optical instruments.
LB7ZVA	Visual Examination	Using a flashlight, no latent prints were observed on the receipt (thermal) paper. No latent print images were able to be obtained at this stage.
	Alternate Light Source	Using a forensic light source, no latent prints were observed. No latent print images were able to be obtained at this stage.
	Iodine fuming	Using Iodine crystals (Lot number: 202311115) and a Ziploc style bag, I placed the receipt paper in the Ziploc style bag. A positive control was obtained. No latent prints were observed. No latent print images were obtained able to be obtained at this stage.
	Ninhydrin	Using binder clips and Ninhydrin Petroleum Ether (Lot number: NIN-PE-111125), a blotter paper sheet was folded in half, and saturated with the ninhydrin dye stain solution and allowed to dry completely under a fume hood. The receipt paper was placed in between the dried, folded blotter paper ensuring that the receipt paper was completely covered on both sides. The blotter paper containing the receipt paper was placed within a Ziploc type baggie, with as much of the air forced out of the bag as possible prior to sealing. The receipt paper was placed in a temporary storage locker to process for ~120 hours.
LCYX4F	Visual Examination	Visual observation with natural light-1 minute.
	Ninhydrin	Applied Thermal Ninhydrin to Item 3 using squirt bottle method in Fume Hood, 20 seconds dry time.
LDUG6G	1,2-Indanedione	Thermal coating removal with acetone treatmet. 65 celsius, 65% humidity and 30 minutes.
LJJYJT	Visual Examination	Visual Examination with White Alternate Light and it does not show the latent print.
	Iodette Ampoulse "Yodo"	Worked with Iodette Ampoules 6pk for 5 minutes and show the latent print in the letter D.
LMLRL6	Visual Examination	
	Alternate Light Source	3 different examinations performed including 450nm blue light with an orange filter, 450nm blue light with a yellow filter, and 530nm green light with a red filter.
	Cyanoacrylate Fuming	
	Powder Dusting	Black in color magnetic powder.
	Ninhydrin	
	Physical Developer (PD)	
LYUXAC	Visual Examination	white light
	Alternate Light Source	lezer 440nm
	Ninhydrin	
	1,2-Indanedione	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
M2DCDC	Visual Examination	White light, Laser 532 nm, Laser 577 nm, FLS
	heat treatment development	Heating press 54°C (during 45seconds) and then 85°C (3minutes)
	Alternate Light Source	White light
	Cyanoacrylate Fuming	Luminescent cyanoacrylate CST (Fumigation chamber MVC 3000 FOSTER+FREEMAN - Automatic Mode)
	Alternate Light Source	LABINO Superxenon 325 nm + Yellow filter
	bleaching of thermal paper	Ethyl acetate bathes
	1,2-Indanedione	1,2,Indanedione/ZnCl2, Heating press 165°C – 10 seconds
	Alternate Light Source	Laser 532 nm – Orange filter
	Ninhydrin	Ninhydrin and Climatic chamber 20min : Temperature = 80°C, RH = 62%
	Alternate Light Source	White light
MBYH7A	Visual Examination	white light
	Alternate Light Source	range of high intensity light sources, blue, green and UV
	1,2-Indanedione	100 C, 0% R/H, 10 minute processing time
	Ninhydrin	80 C, 62 R/H, 4 min processing time
ME2B4E	Visual Examination	
	1,2-Indanedione	Dry processing method
	Ninhydrin	Dry processing method
MEK3BD	Visual Examination	White light. No visible friction ridge observed.
	iodine fuming	Approximately 5 minutes before reaction of iodine fuming.
	Visual Examination	Friction ridge detail observed in quardrant "D". No Deltas, smudged in core.
MGRKAA	Visual Examination	In natural light and light from forencic ilumination (Polilight 550 XL), a latent print was observed in section A (470-505 nm with orange goggles).
	DMAC	"Sandwich" between two DMAC impregnated sheets, completely sandwich was wrapped in aluminium foil and pressed for 12 hours - discovered fingerprint has improved (it was observed in 505 nm Polilight 550 XL with orange goggles)
	DFO	Receipt paper has been washed to remove the blackening (sake in the working solution DFO); then: time 20 min., temp. 100 °C, RH 0%; 505 nm (Polilight 550 XL) with orange goggles - latern print was observed in 505 nm Polilight 550 XL with orange goggles - discivered fingerprint has not improved.
	Ninhydrin	Time 20 min., temp. 70 °C, RH 60%; discovered fingerprint has not improved (been observed in withe light and purple (415 and 565 nm) Polilight 550 XL)
MPKTWL	Visual Examination	Crimelite, LASER
	1,2-Indanedione	examined after 24 hours
MQCQ6R	Iodine	Used Iodine packets in plastic Ziplock bag.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
MW6TAD	Visual Examination	No visible ridge detail
	Powder Dusting	Magnetic fingerprint powder. Ridge detail in box "D".
N2RZAW	Visual Examination	Utilized oblique lighting with white light and alternate light sources. No friction ridge detail observed.
	Powder Dusting	Utilized dual contrast magnetic fingerprint powder. No friction ridge detail observed.
	DFO	Processed the item with a premixed DFO solution and sprayed the item. Once it was dry, it was then placed back into its packaging, then placed on my evidence shelf to process for at least 24 hours. Item was viewed the following week. Friction ridge detail observed in quadrant D.
NAMZQB	Visual Examination	Viewed with white light, 350 nm, 455 nm and 515 nm. Ridge detail observed at 455 nm.
	FSIS	Viewed at 254 nm. Ridge detail observed in quadrant D.
	1,2-Indanedione	Ridge detail observed in quadrant D using 515 nm prior to adding heat, and again at same settings after applying heat.
NHEB27	Visual Examination	No friction ridge detail was observed in any of the sections.
	Iodine fuming	Item 3 was sealed into a plastic bag with an iodine ampule and two controls. One control was created using an untreated finger and one was created using a control standards pad. The iodine ampule was broken and heat from my hands was used to catalyze the fuming process. The control created with the standards pad showed almost instant development while the control created using the untreated finger took longer to develop. The fuming process was allowed to carry out for approximately 15 minutes (until both controls showed approximately the same development).
	Visual Examination	Despite strong development on both controls, no true friction ridge detail was found to have developed in any of the sections on item 3. I did observe what appeared to be an orange/brown stain in the approximate shape of a finger in quadrant D, however there were no discernable ridges present and it faded very quickly once removed from the plastic bag.
	Iodine fuming	Due to the results of the first application of iodine fuming, the decision was made to apply additional iodine in an attempt to enhance the potential development observed in quadrant D. Item 3 was once again sealed into a plastic bag with an iodine ampule and one control used, created using an untreated finger. The iodine ampule was broken and heat from my hands was used to catalyze the fuming process. The fuming process was allowed to carry out until the development on the control was dark brown (approximately 15 minutes).
	Visual Examination	The potential development in quadrant D was more distinct this time but there were still no clearly discernable ridges present. The decision was made to document this possible development via an overall scan of item 3 as well as the control.
NR6YW9	Visual Examination	
	1,2-Indanedione	1,2-Indanedione + zinc chloride Oven: 100 degrees Celsius for 20 minutes. ALS: 505 nm, orange filter
	Ninhydrin	Air Science Fingerprint Development Chamber (Model SD-34S): 65% Relative Humidity 80 degrees Celsius

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
NTXX4E	Visual Examination	
	Ninhydrin	Caron chamber for 3 minutes at 80 degrees Celsius and 65% relative humidity
P3GLHE	Visual Examination	A visual examination was done with the item of evidence was taken out of the packaging.
	Ninhydrin	Ninhydrin heptane was used to develop any latent prints that would be on this item.
	Caron Chamber	A caron chamber was used to speed up the development of the ninhydrin heptane. Temperature: 80 Degrees Celsius. Humidity: 65 Degrees Celsius. The item was in the caron chamber for 10 minutes at these temperatures.
P99T39	Visual Examination	Item examined after opening evidence and before processing.
	Iodine Crystals	Iodine crystals were placed in a plastic bag along with the evidence item and a control. Bag was continuously shaken until ridge detail developed.
	Visual Examination	Item was examined after iodine crystals were used.
	Powder Dusting	Item was dusted with black magnetic powder to try to increase contrast and preserve any ridge detail.
	Visual Examination	Item was examined after powder was applied.
PKZJGK	Visual Examination	
	Alternate Light Source	
	Ninhydrin	
	DFO	
PNYZUE	Powder Dusting	Black magnetic powder.
PWCPU8	Visual Examination	light 350-555 nm
	[No Methods Reported.]	DMAC 4-(dimetyloamino)cinnamon aldehyde time 12h, light 450-530 nm
	1,2-Indanedione	temp. 901C, humidity 5%, time 15 min.
	Ninhydrin	temp. 21C, humidity 80%, time 30 min.
PWXHBC	Visual Examination	
	1,2-Indanedione	
	Alternate Light Source	532nm, orange barrier filter
PZ89FK	Powder Dusting	Photos were taken of the item before processing. The item was visually examined with oblique lighting and met with negative results. The item was dusted with magnetic powder and met with positive results in quadrant 3D Quality control check was completed by placing a fingerprint on a paper coin envelope and using magnetic powder to dust, met with positive results.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
PZFKHG	Visual Examination	
	photocopy	
	1,2-Indanedione	
	time	
	Visual Examination	11/20/25
	Photograph	
Q9MJMC	Visual Examination	Examined using white light
	Ninhydrin	Processed with Thermal Ninhydrin. Placed in humidifier at 40 degrees Celsius with 80% humidity for 30 minutes. Set aside to process for 24 hours.
	Visual Examination	Observed with alternate light source at ~490-560 nm.
QC6YVJ	Visual Examination	A fluorescent light was used while looking at the item at various angles under magnification.
	Alternate Light Source	A blue light was used while looking at the item at various angles under magnification. Different filters were used such as orange and yellow.
	Cyanoacrylate Fuming	The item was placed into a CyanoSafe where I added distilled water to the cup heater element and put 14 drops of liquid cyanoacrylate into a foil cup. That foil cup was then placed on a heating element. A test print was made and hung in the chamber. The chamber was closed and it was turned on to run for 12 minutes. After the 12 minutes the chamber went through its purge cycle and I let the item sit for 60 minutes. I examined the item under a fluorescent light at various angles under magnification.
	Powder Dusting	Black magnetic powder was used and a magnetic wand was used to apply the powder in a fume hood. I examined the item under a fluorescent light at various angles under magnification.
	Ninhydrin	I poured the ninhydrin into a glass tray in a fume hood. I immersed the item into the tray and hung it to dry in the fume hood. It was then placed in an evidence locker and left to slowly develop for 24 hours. I examined the item under a fluorescent light at various angles under magnification.
	Physical Developer (PD)	This process was completed by Latent Print Examiner [Name]. I examined the item under a fluorescent light at various angles under magnification.
QGW7FD	Visual Examination	
	Ninhydrin	Heptane ninhydrin
	Caron Chamber	10 minutes
QLD9MH	Visual Examination	No ridge detail was visualized.
	Alternate Light Source	No ridge detail was visualized.
	Ninhydrin	A control was tested and confirmed a positive result of the Ninhydrin solution. The evidence was then dipped twice and fully dried between dips. The evidence was left to process for over 24 hours and ridge detail developed.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
QLTR8F	Visual Examination	11/19/2025
	photocopy	11/19/2025
	1,2-Indanedione	11/19/2025
	time	11/19/2025
	Visual Examination	11/20/2025
	photograph	11/20/2025
R42E48	Visual Examination	
	Alternate Light Source	
	Ninhydrin	Ninhydrin applied. Developed using PUM100A chamber 5 Min humidified Heated to 160 deg Closed ports Heated to 175 deg then waited 5 more minutes Turn off, cool down
R6J4UE	Visual Examination	
	Powder Dusting	Magnetic powder dusting method used
	1,2-Indanedione	
R8QNFU	Visual Examination	I visually examined item 3 with negative findings
	Powder Dusting	Utilizing magnetic powder and a fiberglass brush, I processed item 2 with negative results
	DFO	I processed item 2 with DFO. After allowing the item to dry, I examined the item with ALS and observed friction ridge detail
R9VF6L	Visual Examination	A visual inspection was preformed on the piece of evidence, and the fingerprint was visible in a thermal receipt paper.
	Powder Dusting	The piece was treated with black graphite powder to highlight the fingerprint.
T3C9MG	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. An ALS PL500 set at 450nm using a yellow filter was used. Also, incandescent lighting was used to avoid glare when imaging the area.
	1,2-Indanedione	3 seconds soaking of 1,2 Indanedione/Zinc Chloride (IND-ZN) was done on the thermal paper receipt and on a receipt paper control. After the item and the control dried, the soaking process was repeated and developed in a dark room at room temperature for 24 hours. A Coherent TracER LASER and a KV550 lens filter were used to image the latent print area.
T4LHB9	Visual Examination	White, blue and green light source with appropriate filters used.
	1,2-Indanedione	
	Ninhydrin	
T79WZH	NinhydrinHT	Placed my prints on a test piece of thermal paper sprayed the test piece and the item #3 with ninhydrinHT, allowed to dry and placed into the NINcha Chamber. The chamber was set at 65 degrees Celsius and 65% RH. The pieces were in the chamber for 7 mins. Ridge detail developed in quadrant D.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
TB7BTY	Visual Examination	Ambient lighting and ring lamp with magnification was used. No FRD present.
	Alternate Light Source	No FRD present ; Crime Lite ML2 orange filter-green light (480nm-560nm); no FRD fluorescent; orange filter -blue light (420nm--470nm) some FRD is fluorescent in quadrant D.
	1,2-Indanedione	Processed 1,2 Indanedione: tray immersion application for 5 seconds; allowed to dry in fume hood for 10 min.; processed using the NiNcha M31 Chamber;60 % RH; 100 C; 10 min exposure.
	Visual Examination	Ambient lighting and ring lamp with magnification was used; FRD is present in quadrant D
	Alternate Light Source	Crime Lite ML2 orange filter-green light (480nm-560nm) no improvement FRD; orange filter-blue light (415nm-475 nm) some fluorecence in quadrant D; good improvement; FRD to be captured.
TFD4FH	Full Spectrum Imaging System-II	254nm Alternate Light Source and Filter
	Powder Dusting	Magnetic Powder
TG66JK	Ninhydrin	This method was applied in that piece of evidence and left to act for at least 16 hours, revealing later, a fingerprint.
	Visual Examination	A visual examination was performed, on that piece of evidence, after treated with this method, confirming the fingerprint.
U36KJ9	Visual Examination	No fingerprints were visible.
	Alternate Light Source	We used the following lights and filters: IR, UV, green480-560+OG590. No fingerprints were visible. Next we used the following lights and filters blue420-510+GG495, blue/green445-510+OG550, violet 395-425+GG455 and the fingerprint appeared to D section with these lights and filters.
	1,2-Indanedione	we did not put the item 3 thermal paper to the environmental capinet after 1,2 indanedione. Item 3 was in room temperature about 20 min.
	Alternate Light Source	We used the following lights and filters: blue 420-510 + GG495 and the fingerprint appeared to D section.
	Ninhydrin	After 1,2 Indanedione we used ninhydrid. Device parameters: Humidity setting of the environmental champer: 65% Temperature setting: 65 degrees processing time: 30 min.
	Alternate Light Source	After ninhydrin we used bright light and photographed with it.
U8FNCV	Visual Examination	Visually examined the item and did not find any friction ridge detail.
	Alternate Light Source	Examined item with Reflected UV and did not find any friction ridge detail.
	1,2-Indanedione	1,2-Indanedione was sprayed onto the item and left to dry. Once dry, the item was placed inside an oven to assist with the development of any friction ridge detail.
	Alternate Light Source	Viewed the item under the laser with orange and red goggles. Friction ridge detail was observed in Quadrant D at this step and was photographed.
	Ninhydrin	Ninhydrin was sprayed onto the item and left to dry. Once dry, the item was placed inside an oven/humidity chamber to assist with the development of any friction ridge detail. Friction ridge detail was observed in Quadrant D at this step and was photographed.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
UQTF7K	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) Traces found on Sec D
	1,2-Indanedione	Sprayed with 1,2 Indanedione, kept in Oven for 20 mins to dry at 100C temperature, with 0% humidity. After 20 mins, Mark search was done by using 532nm light (green) with goggle (550nm), Mark found on Section D
V4MUQE	Quality Control Check	At 2:34 PM, CSI [Name] performed a quality control check utilizing magnetic powder by placing a fingerprint on a paper coin envelope for item 3: thermal receipt paper containing quadrant A-D and was met with a positive result.
	Visual Examination	CSI [Name] performed a visual exam with oblique lighting and was met with negative results from item 3: thermal receipt paper containing quadrant A-D.
	Powder Dusting	CSI [Name] utilized magnetic powder to dust item 3: thermal receipt paper in all four quadrant A, B, C, D and was met with the following positive results: • Quadrant D. CSI [Name] utilized magnetic powder to dust item 3: thermal receipt paper in all four quadrant A, B, C, D and was met with the following negative results: • Quadrant A, B, and C.
V96EWZ	Visual Examination	Under white light
	Iodine crystals	
	Powder Dusting	Black magnetic powder
VAHQWQ	1,2-Indanedione	10 minutes in humidity chamber
	Ninhydrin	3 minutes in humidity chamber
VC6QTZ	Visual Examination	Room lighting used
	1,2-Indanedione	Oven at 100 degrees Celsius for 20 minutes
	Ninhydrin	65% humidity, 80 degrees Celsius for 5 minutes
VHVZ3Y	Visual Examination	
	1,2-Indanedione	Applied 11/18 checked 11/24
	Thermanin	Applied 11/24 checked 12/2
VMN8G2	Ninhydrin	Sprayed with Thermal Ninhydrin
VU98WD	Visual Examination	
	Alternate Light Source	Captured using Crime Scope at 495nm
	DFO	Sprayed evidence then placed in bag for a few hours to accelerated development
	Ninhydrin	Evidence placed in solution in glass pan then placed into a sealed bag for further development. Examined 2 days later and development was visualized
VVKYT2	Visual Examination	
	Ninhydrin	A test print was confirmed prior to utilizing the Ninhydrin. I submerged the thermal paper receipt in a Pyrex dish containing Ninhydrin. I hung the receipt in a vent hood for one hour. I then placed the receipt back in between the pieces of cardboard it came from. On 10/31/2025 I re-examined the note and ridge detail had appeared.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
WDGPMA	Visual Examination	
	1,2-Indanedione	
	Time	
	Visual Examination	
WFN6W2	Visual Examination	The item was examined using white oblique light, and no prints were observed.
	Alternate Light Source	The item was examined using a BrightBeamLaser 445 nm (blue)/Orange Curved Filter, and no prints were observed. The item was then examined using a BrightBeamLaser 532 nm (green)/Orange Curved Filter, and no prints were observed.
	1,2-Indanedione	The item was processed with 1,2-indanedione and heated in an oven at 100 degrees C for 20 minutes.
	Alternate Light Source	The item was examined using a BrightBeamLaser 532 nm (green)/Orange Curved Filter. Prints were observed and photographed.
WLTNEZ	Visual Examination	
	1,2-Indanedione	
	Ninhydrin	
WQKT94	Visual Examination	The item was photographed before examination
	Ninhydrin	after applying Ninhydrin to the whole item, a visible mark was found in section C
WUPGRZ	Visual Examination	Visual/Oblique Lighting Examination- no prints observed
	Ninhydrin	Ninhydrin (dry)- 1 print observed in quadrant "D"
WYEX26	Photocopied	12/05/25: Photocopied item prior to processing to document "writing" on item.
	Ninhydrin	12/05/25: Item processed with Ninhydrin HT by spraying onto and saturating surface. Item allowed to dry and stored for minimum of two days.
	Visual Examination	12/09/25: Examined item; ridge detail observed in quadrant D.
WYYUAY	Visual Examination	
	Alternate Light Source	
	Ninhydrin	dry process, lot PE 121625
X22YHD	Visual Examination	The item was visually examined using oblique lighting with a flashlight, prior to processing.
	Powder Dusting	The item was processed for latent prints using black magnetic powder.
	Alternate Light Source	The item was then examined using Arrowhead Reveal Forensic Field Lights at 455 nm (Blue), 525 nm (Green), 625 nm (red), and 365 nm (UV) with associated barrier filters (yellow, orange, red, and clear UV).
X4L7GZ	Visual Examination	white light; uv, 415-590nm
	DMAC	4-(dimetyloamino) cinanamaldehyde 450-590 nm light
X7VV6H	Visual Examination	
	Thermal Ninhydrin	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
X92CK2	Visual Examination	No ridge detail observed
	1,2-Indanedione	dip + 20 min in oven @ 100 degrees C / print developed in Quad D
X9HPN6	Visual Examination	Item was visually examined under a magnifier and light. No photos taken.
	Iodine	The item was placed into a zip top plastic bag along with a small weigh boat containing Iodine crystals. The crystals were agitated and left to sit along with the item for a few minutes before venting the bag and removing the item. Item was examined with a magnifier and light. No photos taken.
	Ninhydrin	Item was sprayed with Ninhydrin, left to dry then sprayed a second time. After item was dry it was placed into a Caron chamber set at 80c with 65% humidity, for three minutes. Item was then examined under a magnifier with light. One scan completed.
	Silver Nitrate	Item was sprayed with Silver Nitrate then left to dry. Once dry item was taken outside to expose it to UV light. Item was then examined under a magnifier with light. No photos taken.
XB6AT9	Visual Examination	12/4/2025
	Photocopy	12/4/2025
	Visual Examination	12/10/2025
	1,2-Indanedione	12/10/2025
XTLHNH	Visual Examination	Ambient and oblique lighting no ridge detail observed.
	FSIS 254NM	FSIS 254NM no ridge detail observed.
	FSIS 365NM	FSIS 365NM no ridge detail observed.
	FSIS 850NM	FSIS 850NM no ridge detail observed.
	1,2-Indanedione	Prior to applying the chemical it was mixed for 30 minutes. Batch#: 25-0007 Control: + after being applied and dried in a fuming hood the item was secured in a paper bag for two days to develop. Then the item was examined using ALS at 555NM with a red filter. Ridge detail observed and photographed in quadrant D.
	Alternate Light Source	Used to examine 1 ,2-Indanedione examined using 555NM with a red filter. Ridge detail observed and photographed in quadrant D.
	NinhydrinHT	NinhydrinHT was developed for use on carbonless and heat-transfer (thermal) papers. Batch#: ST-0044 Control: + after being applied and dried in a fuming hood the item was secured in a paper bag for two days to develop. Ridge detail observed and photographed in quadrant D.
Y6EE8V	Visual Examination	Viewed with white light/ALS
	Indanedione	Applied on 11/06/2025; Catalyzed without heat; Results viewed on 11/10/2025
	Thermanin	Applied on 11/10/2025; Catalyzed without heat; Results viewed on 11/13/2025
YA7NCM	1,2-Indanedione	The item was dipped in the chemical and then put in a humidity chamber for ten minutes. A possible latent area was developed in Quadrant D and photographed with an alternate light source and an orange barrier filter.
	Ninhydrin	The item was then dipped in Thermal Ninhydrin and put in a humidity chamber for five minutes. The possible latent area in Quadrant D was visible and photographed with room lighting.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
YCJV3B	Visual Examination	White light and 532nm LASER
	1,2-Indanedione	examined after 24 hours with 532 nm laser
YJUGMX	Visual Examination	Visual exam, no latents observed prior to addition of chemicals.
	NinhydrinHT	The item was processed utilizing NinhydrinHT (lot# 202402064-01), which was applied via spray bottle and hung to dry in a fume hood. A test print was applied to both sides of a piece of receipt paper and NinhydrinHT was applied the same way. The receipt papers were observed with no development on the evidence on 10/22/25. The test print was positive. On 10/24/25, development of a latent print was observed on the receipt paper in section "D".
YJX2GT	Visual Examination	White light (flashlight)
	Ninhydrin	No heat source - developed for ~24 hours in a plastic bag with a slightly damp square of paper towel in one corner to provide a mildly humid environment
YKPZNZ	Visual Examination	11/06/25 - Item 003 (receipt), visual exam using white light. No ridge detail detected
	FSIS-UV	11/06/2025 - Item 003 (receipt) - FSIS-UV - No ridge detail detected
	1,2-Indanedione	11/06/2025 - Item 003 (receipt) - viewed with Laser (orange filter). 3L1 detected in section labeled D.
YLJLLW	Visual Examination	Visual/ oblique lighting examination- no prints observed
	Alternate Light Source	Forensic Light Source- no prints observed
	Iodine Fuming	Iodine Fuming (crystals with the plastic bag method)- no prints observed Control successfully conducted
	Ninhydrin	Ninhydrin Petroleum Ether (Dry)- 1 print observed in Quadrant D Control successfully conducted
YNQ4FL	1,2-Indanedione	The fingerprint was not affected by the darkening of the receiptpaper. No metod of removal of thermal print was used. 10 minutes in 100 celsius.
	Ninhydrin	2 minutes in 80 celsius 62% relative humidity.
YT7EVB	Visual Examination	I looked at Item 3 under fluorescent lighting before any processing had been done to it.
	Alternate Light Source	I looked at Item 3 on the Crime-Lite ML with the blue light and yellow filter.
	Cyanoacrylate Fuming	I put Item 3 in the Cyanosafe. It was in the "running" mode for 12 minutes and the "purge" mode for 10 minutes. Then I let it rest for 1 hour before handling it again. After the hour, I looked at the item under fluorescent lighting.
	Powder Dusting	I dusted Item 3 with black magnetic powder and then I examined it under fluorescent lighting.
	Ninhydrin	I submerged Item 3 in ninhydrin for approximately 1 minute, let it dry in a fume hood, and then put it in the Caron chamber for approximately 20 minutes.
	Physical Developer (PD)	Item 3 was submerged in a physical developer solution at the end as a last attempt at enhancing any ridge detail.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
ZAJE2X	Visual Examination	under white light.
	Alternate Light Source	fluorescence examination (350 nm - 650 nm under appropriate color barrier filters).
	DMAC	4-Dimethylaminocinnamaldehyde - DMAC contact transfer - placed between two sheets of paper that have been soaked with DMAC solution and subsequently dried; fluorescence examination after 3 days in alternate light source (450 nm - 530 nm under orange and red barrier filters).
	DFO	baked in the chamber DFO at approximately 100°C for 10 minutes; fluorescence examination in alternate light source (505 nm - 530 nm under orange barrier filter).
	Ninhydrin	in the chamber with a humidity 65% and temperature 50°C for 10 minutes; visual examination under white light.
ZD9JZW	Visual Examination	Visual/oblique lighting examination- no prints observed
	Alternate Light Source	Forensic Light Source- no prints observed
	Ninhydrin	Ninhydrin Petroleum Ether (Dry)- no prints observed Control successfully conducted
ZGAPF3	Visual Examination	Ambient lighting
	1,2-Indanedione	with ZnCl; NINcha environmental chamber for 10 minutes
	Visual Examination	Laser at 532nm with orange barrier filter
ZJCMNA	Visual Examination	Performed a Visual Examination utilizing ambient lighting.
	Alternate Light Source	Performed a Visual Examination utilizing the Polilight PL500 looking for inherent luminescence.
	Ninhydrin	A test print was placed on a white receipt using a Sirchie Standard Pad. This was used as a control. Thermal Ninhydrin was sprayed on the white receipt under a hood. (The instructions indicate that item 001-003 was a receipt (thermal) paper). After the reagent was fully evaporated, the white receipt was placed in a clear zip lock bag, which also included a hot/steaming paper towel to create humidity. The zip lock bag was covered with brown butcher paper and stored in a cabinet. Although, the normal development time ranges from 24-72 hours, the development of the control was exceedingly fast and a positive reaction was observed in 3 hours. Thermal Ninhydrin was sprayed on item 001-003 under a hood. After the reagent was fully evaporated, the item was placed in a clear zip lock bag, which also included a hot/steaming paper towel to create humidity. The zip lock bag was covered with brown butcher paper and stored in a cabinet. Following 24 hours, item 001-003 was examined for the development of friction ridge detail.
ZK3U4Z	Powder Dusting	Sample 3 did not reveal latent fingerprint after processing.
ZRQECL	Visual Examination	White light
	1,2-Indanedione	96 degrees celcius 9% RH 10 minutes
	Ninhydrin	80 degrees celcius 62% RH 2 minutes
	Physical Developer (PD)	15 minutes
ZYN268	Visual Examination	
	Ninhydrin	HFENINHYDRIN Humidity Chamber

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
ZYZ3LE	Ninhydrin	The item was sprayed with Ninhydrin and kept to dry for 24 hours to view the result

Item 3 - Development Response Summary

Participants: 233

Methods Utilized

Alternate Light Source	96	Physical Developer	20	*Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.*
Cyanoacrylate Fuming	11	Powder Dusting	37	
DFO	17	Visual Examination	207	
Dye Stain	2	Wet Powder Suspension	0	
Ninhydrin	134	1,2-Indanedione	94	

Preservation Methods

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
2BVC73	[No Preservation Methods Reported.]	
2CJFJA	Lifting	The latent print was lifted from the surface and placed on a J-Lift (lift #1) backing card.
2J8RD3	Photography	Capture and Enhancement processing completed with Foster + Freeman DCS5 imaging system. When treat evidence by cyanoacrylate fuming, 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.
	Photography	When treat evidence by Basic yellow By40 solution, fix Foster + Freeman crime lite (8x4 mk2) with yellow filter (476nm) under camera Nikon D5 (add Visible filter with UV& IR cut filter on camera Nikon D5).
2NK7M3	Photography	RAW format - sticky scale added with all pertinent information - orange filter with forensic light source
2TVLPY	Photography	
34BT7Y	Photography	Apart from the photographic fixation, with different photographic planes to leave records of the characteristics of the revealed element.
	fingerprint lifting tape	Transplanting tape was used to protect the sample.
34VC9L	Lifting	A small piece of tape was cut and sticked on top of the finger print, the tape was rubbed on the surface and then lifted. After that the tape was sticked on a white card.
38UU7D	Photography	White light/ Day light/ Reflective UV/ Infrared for CNA and CNA+Powder; Blue light and yellow filter for BY40
3BT73D	Photography	Photographed ridge detail using oblique lighting after Cyanocrylate fuming and again using Laser (Bright Beam) / 445 and 532nm / used yellow, orange and FF1 filters after processing with RAY dyestain
3ETGXD	Photography	
3FJFCB	Photography	The print was photographed with a metric scale.
	Lifting	It was then lifted using a transparent plastic patch. The entire procedure was documented, recording the process and ensuring the integrity of the piece. Reagent application time: 1 hour
3GWAUW	Photography	Visual exam: white light (0 photos), RUVIS (2 photos), LASER (0 photos) Lumicyano exam: white light (0 photos), LASER (4 photos), RUVIS (4 photos)
3JJPJ8	Photography	Photographed after cyanoacrylate fuming & dye stain
3M79NB	Photography	Photography in white light.
3RFGV8	Photography	1 image taken of powder developed print with transmitted light, 1 image taken of R.A.Y developed print with direct ALS light (450nm, orange filter)

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
3T9F4D	Lifting	preserved on one lift card - very minimal ridges collected
3ZBLK3	Photography	After locating the latent fingerprint, a scale was placed beside it. The DSLR camera was then used to document the fingerprint's location(section B).
44QAZT	Photography	Photographed developed print during CA fuming and Rhodamine + FLS -CA fuming - 4 images - Rhodamine + FLS - 1 image 5 total images (all with scale) captured
	Lifting	Tape used to lift developed print during black powder processing - 1 latent lift card obtained
4CG24C	Photography	During step 4), the trace in the box "B" is illuminated in white light by searching the best contrast. Photographies are realised of the fingerprint with a centimetric test.
	Photography	During step 5), 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, in particular in white light.
4EMMRC	[No Preservation Methods Reported.]	
4HAYYU	Photography	Nikon D800E, f/18, 2 sec., ISO 200, 105 mm
4HPFUN	Lifting	lifting tape utilized and placed on latent lift card
4KBZZR	Photography	Photographs from visual examination, CA fuming (without dye), and Rhodamine 6G sequences.
	Lifting	One lift obtained after black powder & magnetic powder application.
4RU9JH	Photography	macro lens with scale in RAW and JPEG file formats
	Lifting	lift tape onto white lift card
4UH3XX	Photography	Filter on camera Illumination: Laser (532 nm)
4W6EYN	Photography	CA photos captured R6G H20 and MeOH photos captured with bright beam laser @ 532nm with orange barrier and AFF1 barrier
4WQUD7	Photography	Used a NIKON D810 to take 8 digital photographs of latent print area quadrant B.
4Z262U	Photography	DCS5 w/ Crime-lite 8X4 Yellow filter; 445nm Enhancement of the light ridge detail located in Section B was attempted. Photograph printed and submitted to the Latent Print Section.
4Z6PVN	Lifting	Print was lifted using fingerprint lifting tape and placed on an MSP 74 latent lift card.
66Y7KM	Photography	Digital photography. FSIS (Full Spectrum Imaging System) with ultraviolet and ultraviolet filter, with added scale, TIFF format. Photographs were taken before and after cyanoacrylate fuming.
67AN4T	Photography	Overall photos taken- 2. Detail- 1 photo taken at visual examination.
	Photography	Detail- 1 photo taken after Cyanoacrylate fuming.
	Photography	Detail- 2 photos taken after Rhodamine 6G Methanol using the Alternate Light Source.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
67Q7HY	Photography	Canon EOS 77D, 90mm macro-lens 1:1. White light.
6BJ9LX	[No Preservation Methods Reported.]	
6K82VA	Photography	
6N4NPX	[No Preservation Methods Reported.]	
6P3RKU	Photography	For Photography utilized a Nikon D850 & 60mm focal length lens on a copy stand: For CA photo, aperture priority mode, f11 For R6G photo, laser used at 532nm and an orange barrier filter on the camera lens, aperture priority mode, f11
6R4YKX	[No Preservation Methods Reported.]	
6XUAVV	Photography	
6ZHNJ7	Photography	One impression marked A on quadrant B. Sent to photo lab for digital image after Cyanoacrylate.
	Lifting	2 lifts recovered (same print marked A previously captured)
76A98L	Photography	FSIS photo after CA
777MDR	Photography	
7ANQKW	Photography	Camera "Sony A7II" with macro lens and light source.
7CAMRM	Photography	Photographed the developed friction ridge detail post-mag powder application under white light with a Nikon D810, 60mm fixed focal length lens.
	Lifting	Lifted the developed friction ridge detail with lifting tape after it was photographed post-mag powder application.
	Photography	Photographed the developed friction ridge detail post Rhodamine 6G application and ALS examination at 495nm of light with a Nikon D810, 60mm fixed focal length lens.
7HXC77	Photography	Digital photographs were taken both with and without scale.
	Lifting	After photographing, the print was lifted with lifting tape and placed on a latent print card.
7K3YNG	[No Preservation Methods Reported.]	
7XTU2V	[No Preservation Methods Reported.]	
829J3K	Lifting	-used a non-sterile brush and black powder -observed (1) latent print on the quadrant labeled "B" -lifted the print with finger print tape and placed it onto a MSP form 74 (latent print card) -labeled and packaged the item for submission
84YK7M	Photography	oblique lighting
8AN3MJ	Photography	Captured a total of one (1) photograph of friction ridge detail on the clear plastic on the underwater phone case with the DCS5; one photograph was taken after the ALS process using blue/green light with an orange filter.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
8DJY4X	Photography	
8GJAYX	Photography	coaxial mirror (after cyanoacrylate fuming)
	Photography	fluorescence after Basic Yellow treatment
8GLUTR	Photography	12/3/2025 Documentary photographs captured prior to processing Overall, midrange, 1:1 close-up with Nikon 7500 taken after Lumicyano fuming 1:1 close-up with Nikon 7500 taken after Rhodamine 6G application
8U3J73	Photography	se tomo fotografias antes de ingresar y despues de ingresar a la camara de cyanocrilato. [Requested translation was not provided by time of publication.]
8X7LRR	Photography	After cyanoacrylate fuming, I used UV lighting and RUVIS camera to obtain images of ridge detail developed on the item.
8YYJZX	Photography	after BY40
92MCCT	Lifting	One white latent lift card with clear latent tape was used to recover the black powder latent area in quadrant B. The latent lift card will be submitted to the [Laboratory] Latent Squad for further analysis.
	Photography	The item was submitted to the [Laboratory] Image Lab for latent photography of the dye-stain latent area observed in quadrant B.
93HVEU	Photography	Photographed after the Lumicyano and the black conventional powder Tip of finger developed - could be either a loop or whorl
93XANP	[No Preservation Methods Reported.]	
94AQ23	Photography	Latent ridge detail in Section B of Item #1 was preserved by scaled photograph and clear lift tape was used to cover the ridge detail on Item #1.
96LLMU	Photography	The ridge detail that was observed was photographed as photo lift #3. Photographed the results with a Canon R6 Mark II camera mounted to a copy stand. This was done at each step of examination where ridge detail was visualized.
9CNVUM	Photography	Print documented after dye stain under alternate light source, 1 photo obtained
	Lifting	1 latent lift card obtained from Quadrant B
9G2FYM	Photography	Photographed by our forensic photographers.
9KRGK2	Lifting	Once the fingerprint is revealed, photographic documentation is made with a metric witness in the shape of an "L", the fingerprint is removed with conventional tape, placed on acetate, which contains a transplant card that is packed in a plastic bag, labeled, with a chain of custody record.
9PR4R6	Photography	
9R27JV	Photography	Used the DCS5 camera in the 5th floor processing room to take 2 images of the apparent ridge details. One photo was taken prior to supergluing the evidence (Image 1), and the second photo was taken after supergluing the evidence (Image 2).
	Mikrosil	Used Mikrosil to lift the print off of the evidence and placed the lift onto a latent print card.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
9U6WNP	Photography	
9W9UYH	Lifting	Lifted with latent lift tape and placed on latent lift card.
A2HA6Z	Photography	
A89KEX	Lifting	BP1 was tape lifted
	Photography	L1 was captured using the DCS5, ALS, and orange filter
AJ324Y	Photography	Nikon camera and Authenticated Digital Asset Management System (ADAMS)
AJYFA6	Photography	It is photographed for preservation and subsequent analysis.
	Lifting	The fingerprint lifter is identified with the information corresponding to the case, and the fingerprint fragment is collected for future analysis.
AQX7TU	Photography	Photo area B with a scale for comparison
AQZQMN	Photography	Photos captured at visual examination, prior to processing and after dye stain.
AT8TTT	Photography	Nikon D3400, lens AF-S Nikkor 18-105 mm, 3,5-5,6G
	Scanning	Scanner "Epson Perfection V700 Photo"
AW6A6M	Photography	Developed prints were photographed and preserved in situ. No additional lifting was performed to avoid surface distortion.
AWKVD4	Photography	4. Black magnetic powder was then used to develop the fingerprint impression. It was documented and preserved photographically, and the fingerprint was lifted and preserved on a transparent plastic patch with a white background. 5. The fingerprint was located on the letter B.
AZMR3Y	Photography	Captured digital images with and without filter.
	Lifting	Tape lift
B6CQUY	Photography	Photographed with a scale containing case number, date, item number, process used, and initials.
BEKXWU	Photography	I put a small ruler on top of the item near the print that developed and photographed the print at close range. Then I moved the camera further away and photographed the print again to get an overall image of the location of the print on the item in its quadrant.
BHM48T	Lifting	
BHZTCQ	Photography	Images taken with DSLR camera, tripod, and flash. ALS images taken with orange filters. Detail images saved in JPEG and NEF formats. n=18 images total taken throughout, both before and after development and processing. Some ridge detail observed, but possibly not enough area of pattern developed for further identification of print type
BMWE7E	Photography	FSIS - built in capture system Nikon D800 using orange LASER filter

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
BUHA8J	Photography	Photos saved to the DCS5 under FSD25-005544
BVTWY6	Photography	Photo placard taken FSIS II Used built in camera Storage format- TIF Laser (532nm) with orange laser filter: Camera leveled Camera settings - Manual mode, manual focus, F/18, ISO 100, shutter speed variable Storage format - RAW/JPG fine Overall of item with marker under white light followed by close up of marked ridge detail under alternate light source.
	Lifting	Black powder The item was dusted and viewed with oblique lighting. The observed ridge detail was lifted with clear tape and placed on fingerprint card. The details on the fingerprint card were filled out to include a drawn picture of the item and where the lift came from.
C7J8L3	Lifting	Tape lift and put on lift card.
C82ERK	Photography	
C9TDZR	[No Preservation Methods Reported.]	
CAPQQQ	Photography	12/18/2025 12:49 Print was photographed
CGH4KX	Photography	A latent print was observed in Section B. The print was photographed using my Dept issued Nikon camera with a certified scale prior to lifting.
	Lifting	The print was lifted with tape and secured to a latent backing card for documentation and preservation.
CN4YL3	Photography	A photograph was taken with a metric scale to preserve the fingerprint.
	Lifting	After the fingerprint was developed, a metric scale was placed to preserve the print, and then a plastic patch was placed over it, which was lifted to preserve the print.
CPHFMM	Photography	Foster and Freeman DCS5 and Canon MK5.
CQVQ2E	Photography	Images of latent print captured in Quadrant B
CTZKGB	Photography	After cyanoacrylate fuming, used the Full Spectrum Imaging System to photograph ridge detail found in quadrant B
	Lifting	Lifted ridge detail from quadrant B
	Photography	After spraying the chemical dye stain MSTAR, used the Tracer Laser (ALS), with a 532nm green light and orange barrier filter on the camera lens, photographed ridge detail found in quadrant B
CUAM8G	[No Preservation Methods Reported.]	
D2AARN	Photography	One photograph was taken after dye stain rinse (R.A.M.), using ALS and orange filter(OG 550).
D2NZGY	Photography	
D336EX	Photography	Ridge detail development on item 001 after fuming with cyanoacrylate was photographed with scale 001-A. The ridge detail was further enhanced after an application of Rhodamine 6G dye-stain and was again photographed with Scale 001-A(1).

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
D3JCKE	Photography	Photo A from quadrant B of the underwater phone case with the first use of the Full Spectrum Image System
D4CATL	Photography	Photographed 1L1 with a paddle light
D7JKPP	Photography	All photographic documentation performed within resolution guidelines and in RAW format. The Canon EOS R6 Mark II was used. Overalls of the packaging and item were taken with the camera mounted to a copy stand prior to chemical processing. Photo lift #1 was visually captured using a flashlight and a ring light positioned at different angles to enhance the ridge detail. This same process was used after CA exposure. After the application of MRM-10 and the ALS being set to 450nm, an orange barrier filter was secured on the camera lens to photograph the ridge detail again.
DA2MWV	Photography	Macro photography
DBDLNH	Photography	Photo with scale sector B.
DBX33Z	[No Methods Reported.]	Photography and lifting
DEFHED	Lifting	Lifted with clear fingerprint tape
DEVPVN	Photography	
DHUZRN	Photography	
DKHEFX	Photography	Scaled photographs taken of the item and friction ridge impression prior to and after processing. Latent print preserved in place using lift tape.
DUP8RD	Lifting	Results of each method: Prints developed - (1) Latent lift card collected
DYLTHG	Photography	Digital camera on copy stand.
EKVH9G	Photography	Photographed developed print during Rhodamine/forensic light source. One friction ridge image with scale captured.
	Lifting	Tape used to lift developed print during black powder processing. One latent lift card obtained.
ELNGGM	Photography	UV lighting at 365nm with U-filter.
EXHUEY	Photography	The development of the fingerprint was photographed.
	Lifting	The piece was lifted onto a plastic patch.
F63BNN	Mikrosil	
F7ER4M	Photography	One developed latent print photographed under ALS after cyanoacrylate fuming process. One further developed latent print was photographed under ALS, after the dye stain process (same latent). Two photographs total.
FC2UQJ	Photography	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
FR9VKK	Photography	Photographed after CA fuming
	Lifting	Attempted a lift after powder processing - no ridge detail transferred to lift
FRYKAB	Photography	Item 1 was photographed using a Nikon Z7 camera. The dye stain photographs were taken using direct polilight lighting and an orange filter.
FVWBAU	Lifting	Latent was lifted using clear lifting tape and a latent card.
G2EVZD	Photography	
G34Y8T	Lifting	once the fingerprint is reveleaded, photographic documentation is made with a metric witness in the shape of an "L", the fingerprint is removed with conventional tape, placed on acetate, which contains a transplant card thar is packed in a plastic bag, labeded, with chain of custody record.
GANKCQ	Lifting	Prepared one latent lift card of print that developed in area "B".
GDACJM	Photography	Canon EOS 760D + iPad Air 2
GEGRRE	Photography	Captured area of ridge detail with a Nikon D850 (within quadrant B)
	Lifting	Lifted area of ridge detail and adhered tape lift to white back latent print card (within quadrant B)
GJXUYJ	Photography	
GLL9NU	Photography	overall and comparative
	Lifting	black powder and lift tape
GLZPMT	Photography	A Nikon Z7camera was used on 11/08/2025 to photograph the item after visualizing a print using fluorescent lighting, and again after visualizing a print after the item had been processed in the Cyanosafe Crime Scene Unit #1 recirculation chamber with cyanoacrylate glue. In both instances, a fluorescent light was used with the direct lighting techniquye to visualize and photograph the print. A Nikon Z7camera with two (2) orange filters on the lens was used on 11/09/2025 to photograph the item after RAY dye staining produced a print. A Polilight 2 with 450nm blue light was used with the direct lighting technique to visualize and photograph the print.
GNAZEQ	Photography	Photographs taken prior to processing and after processing with and without scale
GNRTDE	Photography	Cyanoacrylate Fuming FSIS II 254nm light and filter Three (3) photos
	Photography	Rhodamine Nikon D850 TracER Laser 532nm with orange laser filter Four (4) photos
	Lifting	Black Magnetic Powder One (1) lift: 001B from front of phone pouch
GPY7VG	Photography	Print observed in quadrant B. Photographed and enhanced with DCS5. Photo printed out
GR9BBQ	Lifting	The tape lifting method was used to preserve the latent print.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
GTNBUF	Photography	Photographs collected during Dye Stain/FLS and Black powder processing. Three images collected during Dye Stain/FLS and one image collected during Black powder processing
	Lifting	One latent print lift card collected during black powder processing
H6CY3K	Photography	iPhone 14 back dual wide camera 5.7mm f/1.5
H9BCL4	Photography	Examined with FSIS and photographed one print in Square B
	Lifting	Processed with black powder and lifted one print from Square B
	Photography	Processed with MSTAR dye stain and utilized Tracer Laser to photograph one print on Square B
H9T2AP	Photography	Nikon D5200 Photoshop 26.6
HMR94K	Photography	Ridge detail developed with CA and Dye Stains were captured and preserved using comparative quality photography.
HMWP2J	Photography	
HURPEQ	Photography	
HVKMLX	Photography	
HVM9FR	Photography	Two photographs were taken on Camera11/Lens3. One photograph was taken after dye stain using direct lighting with the Polilight 2 and an orange filter. One photograph was taken after the item was dusted with powder using direct LED lighting.
HWZKEW	Photography	The item was photographed.
	Lifting	Preserved using a transparent patch.
HYH2AM	Lifting	cinta adhesiva transparente. [Requested translation was not provided by time of publication.]
HZG3FE	Photography	Photograph taken after Rhodamine 6G with the Forensic Light Source (FLS)
J4WWUQ	Photography	visual - 1 photo, transmitted LED light RAY - 1 photo, direct Polilight 2 450nM, with orange filter
J6PU2W	Photography	The latent prints recovered are photographed by using DCS4 imaging device (blue light and yellow filter 530nm). a paper copy is sent to the information branch for comparison on the data base and the soft copy are kept on the hard disk.
JEUYRT	Photography	The fingerprint in section B was photographed between every development method. Three times in total. Firstly photographed after the use of cyanoacrylat using white light and blue light (475 nm/505 filter). Secondly photographed after the use of basic yellow with blue light (445nm + 495 LP filter). Lastly photographed after VMD, by using UV-light (365 nm), white light and blue light (445nm+ 495 LP filter)
JFQHTU	Photography	First I preserved the latent print by using photo documentation.
	Lifting	Then I used a plastic adhesive patch to lift the latent print.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
JLC488	Lifting	Developed print lifted using lift tape and placed on latent lift card.
JMM9HB	Photography	CA photo taken with oblique lighting using a Nikon Z8 camera R6G photo taken with orange barrier filter using a Nikon Z8 camera
JRKPTJ	Photography	Used the DCS5 for digital preservation. Oblique light was used.
	Lifting	Clear tape was used to tape lift.
JV3RZP	Lifting	1 LP lift card created
JWA9TT	Photography	Digital Photography
K7JVME	Photography	1:1 photography
KC4XNP	Photography	photographed with oblique lighting
KEBDWG	Photography	Used Foster Freeman DCS 5 with 8 x 4 Crime Lite box and an orange filter to capture a photograph of the latent print on Item 1.
KKZND8	Lifting	latent lifted with latent lift tape and placed on an MSP Form 74
KQZAYF	Photography	1L1 photographed with FSIS pre and post CAE
KRC6HL	Photography	Conventional digital camera and FSIS
KUNPMP	Photography	
KWRFXB	Photography	Photographed developed print during CA Fuming and Rhodamine/FLS. $ friction ridge images with scale captured.
	Lifting	Tape used to lift developed print during black powder processing. One latent lift card obtained.
L49D2N	Photography	A Nikon Z7 camera was used with direct LED lighting to photograph the print after the visual examination on 11/7/2025 and after Cyanoacrylate fuming on 11/8/2025. Two orange filters were put onto the lens on 11/10/2025 to photograph the print after RAY dye staining. Polilight 2 with 450nm blue light was used with direct lighting to bring forth the print.
L9KFP6	Lifting	Lifted using latent lift tape and placed on a latent lift card.
LAUBQC	Photography	Digital photos - Canon EOS 60D, 100 mm lens, scale ruler.
	CD-R	Recording digital photos of fingerprint to CD-R.
LB7ZVA	Photography	4 latent print images were obtained at the cyanoacrylate dye stain/forensic light source stage. (Quadrant B)
	Lifting	2 latent print lift cards were obtained from the glass of the phone case (Quadrant B)
LCYX4F	Photography	One photograph was taken after (R.A.M.) using ALS and one photograph was taken after black powder using white light.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
LDUG6G	Photography	Glue did not work, no fluorence. Photography Best result with UV 350-380 light and baader 360 filter. Also Green 480-560 light without any filter worked.
LJJYJT	Photography	Documentation by Photography.
	Lifting	Lifting with White Plastic Patch.
LMLRL6	Photography	
LYUXAC	Photography	
M2DCDC	Photography	NIKON D5 + Lens 105mm
MBYH7A	Photography	RAW and TIFF images produced, JPEG position
ME2B4E	Photography	
MEK3BD	Photography	Crimelite Blue 420-470nm. Captured with scale.
MGRKAA	Photography	Fingerprint was photographed at white light Polilight 550 XL with a macro camera lens and linear scale
MPKTWL	Photography	
MQCQ6R	Photography	Used FSIS to photograph
MW6TAD	Photography	Ridge detail appeared to be a tip impression. Pattern type was not suitable for determination.
N2RZAW	Photography	Using a Canon EOS 80D digital camera and a macro lens, I photographed the latent images using JPEG and RAW formats.
	Lifting	Utilizing lift tape, the impression was lifted onto a latent lift card.
NAMZQB	Photography	Photographed with FSIS and digital camera (magna powder) with white light. Appears to be a loop, however core area is unclear (print is top of core and above).
NHEB27	Photography	Post powder development, a Nikon D810 camera was used to photograph the friction ridge detail in quadrant B under white lighting conditions.
	Lifting	Lifting tape was used to lift the friction ridge detail developed in quadrant B. This was done after the development had been documented via photography.
	Lifting	Post Rhodamine 6G development, a Nikon D810 camera was used to photograph the friction ridge detail in quadrant B with the use of an ALS set to 495nm and an orange barrier filter.
NR6YW9	Photography	
NTXX4E	Photography	Four (4) images after Cyanoacrylate Fuming
	Lifting	Two (2) lift cards after Black powder
P3GLHE	Photography	During my visual examination, I took photos of the visible print with the DCS5 camera. The visible print photos were captured over a thousand PPI.
	Lifting	Tape was used to lift the print.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
P99T39	Photography	Five examination photos were taken. One orientation photo was taken.
PKZJGK	Photography	
PNMWP3	Lifting	
PNYZUE	Lifting	Sirchsil white
PWCPU8	Photography	
PWXHBC	Photography	
PZ89FK	Lifting	The print was taped and lifted from the item and placed on a white backing card.
PZFKHG	Lifting	
Q4DJ9Z	Lifting	The latent print was lifted using latent lift print tape and placed in a card with the case information and location of the developed print.
Q9MJMC	Photography	Photographed using U-Filter on camera and UV light at 350-380 nm
QC6YVJ	Photography	It was photographed with a Nikon Z7 camera. The powder photograph was taken using direct LED lighting. The dye stain photograph was taken using direct polilight lighting and an orange filter.
QGW7FD	Photography Lifting	After CAE, visible prints
QLD9MH	Photography Lifting	Prior to dusting and lifting attempts the ridge detail was photographed. After dusting the ridge detail was successfully lifted.
QLTR8F	Lifting	11/19/2025: one latent card
QX48AE	Lifting	se recolectó con cinta tranparente para transplante de huellas. [Requested translation was not provided by time of publication.]
R42E48	Photography	Examination quality photography
R6J4UE	Photography	
R8QNFU	Photography	Utilizing a macro lens and ALS, I photographed the impression in RAW and JPEG format
R9VF6L	Photography	The finger was preserved by photography, with a tripod, at 90 degrees and a metric witness.
T3C9MG	Photography	All images were uploaded into the laboratory's Authenticated Digital Asset Management System (ADAMS) and the laboratory's Information Management System (LIMS).
T4LHB9	Photography	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
T79WZH	Photography	Photographed with label and scale using the Discover Crime-Lite auto camera system.
TB7BTY	Photography	Nikon D810 with orange filter and Crimescope; orange filter-green light (515 nm-575 nm); orange filter blue light (495 nm); back light; invert image with Adobe Photoshop CC; FRD is present in quadrant B; one primary image captured; image saved as tiff; FRD is no value; no calibration performed; original condition photo taken with Canon PowerShot G6; saved as jpeg to T:Drive.
TFD4FH	Photography	
TG66JK	Photography	This fingerprint was preserved by photographs, with a tripod at 90 degrees and a metric witness.
TN7C3U	[No Preservation Methods Reported.]	
U36KJ9	Photography	Used the blue light 420-510 and GG495 filter and the fingerprint appeared to B section.
U8FNCV	Photography	Captured one (1) photograph of friction ridge detail in Quadrant B on this item with the DCS5 after the ALS process using blue/green light with an orange filter.
UQTF7K	Photography	Mark captured with white light
V4MUQE	Photography	CSI [Name] photographed (1) latent print located in quadrant B of item 1: underwater phone case. CSI [Name] utilized an L-scale during photography.
	Lifting	At 2:29 PM, CSI [Name] collected one (1) latent print from quadrant B of item 1: underwater phone case
V96EWZ	Photography	Photographed at cyanoacrylate and ALS steps
VAHQWQ	Photography	Photographed with FSIS
	Lifting	Black powder and lifting tape
	Photography	Photographed with Tracer Laser , alternate light source
VC6QTZ	Photography	Used yellow filter on SLR camera, 415nm setting on alternate light source
VHVZ3Y	Photography	
VMN8G2	[No Preservation Methods Reported.]	
VU98WD	Photography	Captured digital images after visual, Lumicyano and Black powder
VVKYT2	Photography	I placed an orange filter on the camera due to the 450nm setting on the poly light prior to taking a photo. I also placed a scale in the photo. The image was opened in Adobe Photoshop and saved to a photographic reproduction sheet as an original and processed image.
WDGPMA	Lifting	
WFN6W2	Photography	Prints were photographed with a Nikon D3400 camera.
WLTNEZ	Photography	CNA, Basic Yellow 40

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
WQKT94	Lifting	Lift Card
WUPGRZ	Photography	Photographed developed print during Rhodamine 6G dye stain/Forensic Light Source-one friction ridge image with scale captured.
	Lifting	Tape used to lift developed print during black powder processing. One latent lift obtained.
WYEX26	Lifting	12/05/25: Used clear tape to lift area of ridge detail in quadrant B after processing with black powder and placed tape onto latent lift card.
	Photography	12/05/25: Used deep yellow filter and 445nm ALS on the DCS5 to photograph area of ridge detail in quadrant B after processing with MBD dye stain; photograph included scale with case number, identifier A, date photographed, and my initials.
WYYUAY	Lifting	2 latent lift cards
X22YHD	Photography	Examination quality photographs (1:1) were taken using a macro lens, without and with a scale.
	Lifting	After processing with powder, fingerprint lifting tape was used to lift the print and the tape was then placed on a lifting card labeled with the case and collection information.
X4L7GZ	Photography	macro
X7VV6H	Photography	Canon,Photoshop
X92CK2	Photography	Dual 77+ Laser Green light (wavelength = 520nm) + OC Filter/FF-1.0 + Orange goggles
X9HPN6	Photography	Photos were taken in RAW format after the visual examination, and the application of Cyanoacrylate Ester, MRM-10, and Basic Yellow. A FLS at 455nm and a camera with an orange filter were used. A total of four photos were taken. Photos were saved on a photo card then transferred to Digital EMS.
XB6AT9	Photography	
XTLHNH	Photography	FSIS 254NM ridge detail was observed and photographed in quadrant B. The image was saved as a .tif file type with the name: 25-5191_AMC2467A_ITEM1_FSIS254_LAT_1
	Lifting	Black powder was applied and ridge detail was observed in quadrant B. The latent was collected with latent lift tape that was then affixed to a latent card with all pertinent information filled out on the back of the card.
Y6EE8V	[No Preservation Methods Reported.]	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
YA7NCM	Photography	I first superglued the item with cyanoacrylate fumes and then examined it with the Full Imaging Spectrum System (FSIS). Located a possible latent area in Quadrant B and photographed it.
	Lifting	I then dusted the item with black powder and lifted the same possible latent area in Quadrant B and placed it on a lift card.
	Photography	I then sprayed the item with liquid dyestain: MSTAR and photographed the same possible latent area in Quadrant B with an alternate light source and orange barrier filter.
YCJV3B	Photography	digital photography
	Lifting	tape-lift
YJUGMX	Photography	An alternate light source on the Foster and Freeman DCS5 was used to photograph the latent in quadrant "B" of the bag.
YJX2GT	Photography	Photographed LP1-1 with white light after cyanoacrylate fuming Photographed LP1-1 after dye stain with laser at 532nm - with only orange barrier filter and also with orange barrier filter combined with A-FF-1 forensic filter.
YKPZNZ	Photography	1L1 = CAE Photography date - 11/05/2025 Capture Method - Photographed Lighting - White light
	Photography	1L1 = FSIS-UV Photography date - 11/07/2025 Capture Method - Photographed Lighting - UV
YLJLLW	Photography	1 Photograph of the developed latent print was obtained during the Rhodamine 6G dye stain/ Forensic Light Source.
	Lifting	Using tape, 1 latent print lift card was obtained during black powder processing.
YNQ4FL	Photography	
YT7EVB	Photography	I took pictures of section B after CA fuming.
	Photography	I took pictures of section B after RAY.
	Photography	I took pictures of section B after powder.
ZAJE2X	Photography	after Cyanoacrylate Fuming - in alternate light source at 450 nm using a yellow colored bandpass filter.
	Photography	after Basic Yellow 40 - in alternate light source at 450 nm using a orange colored bandpass filter.
ZD9JZW	Photography	Photographed developed print during Rhodamine 6G dye stain/FLS. 3 Friction ridge images with scale captured.
	Lifting	Tape used to lift developed print during black powder processing. One latent lift card obtained.
ZGAPF3	Photography	Photographed under ambient lighting at an oblique angle. A black lifting card was placed behind the phone case for increased contrast.
	Photography	Photographed using the FSIS under UV lighting. A black lifting card was placed behind the phone case for increased contrast.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
ZJCMNA	Photography	The superglue control and developed impression, noted in quadrant B, were photographed using a Nikon Z50II camera. The developed impression was photographed following superglue fuming and black magnetic powder.
ZK3U4Z	Lifting	lifting of the fingerprint using lifting card.
	Photography	documented through photography for record.
ZRQECL	Photography	One latent print was photographed after visual examination. The same print was photagraphed after cyanoacrylate fuming and BY40.
ZYN268	Photography	Nikon D5200 Adobe Photoshop Version 26.2.0
ZYZ3LE	[No Preservation Methods Reported.]	

Item 1 - Preservation Response Summary

Participants: 249

Methods Utilized

Lifting	79
Photography	219
Scanning	1

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

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
2BVC73	[No Preservation Methods Reported.]	
2CJFJA	[No Preservation Methods Reported.]	
2J8RD3	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.
2NK7M3	Photography	RAW format - standard lighting - scale added with all pertinent information
2TVLPY	Photography	
34BT7Y	[No Preservation Methods Reported.]	
38UU7D	Photography	blue/green light for DFO
3BT73D	Photography	photographed with Laser (Bright Beam) / 532nm / used orange and FF1 filters
3ETGXD	Photography	
3FJFCB	Photography	The entire procedure was documented, recording the process and ensuring the integrity of the piece. Reagent application time 17 hours
3GWAUW	Photography	Visual exam: white light (0 photos), LASER (0 photos), RUVIS (0 photos), documentation (2 photos) 1,2-Indanedione exam: LASER (3 photos) Ninhydrin exam: white light (0 photos)
3JJPJ8	Photography	photographed after ninhydrin
3M79NB	Photography	Photography of the fingerprint with infrared light.
3RFGV8	Scanning	1 image of Ninhydrin developed print
3T9F4D	Photography	could not see any ridge detail without photographing and using photoshop to enhance to see a very faint impression
3ZBLK3	Photography	After locating the latent fingerprint, a scale was placed beside it. The DSLR camera was then used to document the fingerprint's location(section A).
44QAZT	Photography	Photographed developed print during DFO + FLS and Ninhydrin - DFO+ FLS - 2 images - Ninhydrin - 2 images 4 total images (all with scale) captured
4CG24C	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 centimetric test near the fingerprint and photographies are taken. The fingerprint is complete and well marked.
	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 centimetric test.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
4EMMRC	[No Preservation Methods Reported.]	
4HAYYU	Photography	Nikon D800E, f/18, 2 sec., ISO 200, 105 mm
4KBZZR	Photography	One image from DFO sequence viewed with Coherent TracER forensic laser.
4RU9JH	Photography	macro lens with scale in RAW and JPEG file formats
4UH3XX	Scanning	Illumination: Direct
4W6EYN	Photography	IND photos captured with bright beam laser @ 532nm with orange barrier and AFF1 barrier NIN photos captured after initial iron application
	Scanning	NIN scans captured after initial iron application and after re-application
4WQUD7	Photography	Used a NIKON D810 to take 2 digital photographs of latent print area quadrant B.
4Z262U	Photography	DCS5 w/ green filter Enhancement of the light ridge detail located in Section A was attempted. Photograph printed and submitted to the Latent Print Section.
66Y7KM	Photography	Digital photography. Nikon D7100, NEF format, scale in picture, white light. After ninhydrin development.
67AN4T	Photography	Detail- 2 photos taken after 1,2-Indanedione using the Alternate Light Source.
67Q7HY	Photography	Canon EOS 77D, 90mm macro-lens 1:1. Green light, range 480- 560 nm. Red filter.
6BJ9LX	[No Preservation Methods Reported.]	
6K82VA	Photography	
6N4NPX	[No Preservation Methods Reported.]	
6P3RKU	Photography	For Photography utilized a Nikon D850 & 60mm focal length lens on a copy stand: laser used at 532nm and an orange barrier filter on the camera lens, aperture priority mode, f11
6R4YKX	[No Preservation Methods Reported.]	
6XUAVV	Photography	
6ZHNJ7	[No Preservation Methods Reported.]	
76A98L	[No Preservation Methods Reported.]	
777MDR	Photography	
7ANQKW	Photography	Camera "Sony A7II" with macro lens and light source.
7CAMRM	[No Preservation Methods Reported.]	
7HXC77	[No Preservation Methods Reported.]	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
7XTU2V	[No Preservation Methods Reported.]	
84YK7M	Photography	orange filter and 520 nm laser.
8AN3MJ	Photography	Captured a total of two (2) photographs of friction ridge detail on the blue lined sticky note with the DCS5. One photograph was taken after Ninhydrin with green light, and the last photograph was taken after Ninhydrin with white light.
8DJY4X	Photography	
8GJAYX	Photography	after 1,2-Indanedione-Treatment
	Photography	after Ninhydrin -Treatment
8GLUTR	Photography	12/3/2025 Documentary photographs captured prior to processing Overall, midrange, 1:1 close-up with Nikon 7500 after Ninhydrin application 12/4/2025 1:1 closeup, midrange and overall with Nikon 7500 after Ninhydrin application 12/5/2025 1:1 closeup with Nikon 7500 after 1,2 Indanedione application
8U3J73	Photography	se realizo toma de fotografias antes durante y despues de procesamiento del indicio. [Requested translation was not provided by time of publication.]
8X7LRR	Scanning	Scanned the item to preserve the ridge detail that was developed.
8YYJZX	Photography	After IND
92MCCT	[No Preservation Methods Reported.]	
93FYAQ	Scanning	Scanned a copy of front and back of document into case file.
93HVEU	Photography	Photographed after DFO application with Green F&F 82S light (insufficient ridge detail for comparison)
93XANP	[No Preservation Methods Reported.]	
94AQ23	Photography	Latent ridge detail in Section A of Item #2 was preserved by scaled photograph utilizing ALS at 505nM and Orange camera filter.
96LLMU	Photography	The ridge detail that was observed was photographed as photo lift #2. Photographed the results with a Canon R6 Mark II camera mounted to a copy stand. This was done at each step of examination where ridge detail was visualized.
9CNVUM	Photography	
9G2FYM	Photography	Photographed by our forensic photographers.
9PR4R6	Photography	
9R27JV	Scanning	Two scans (Scans 1 & 2) of the evidence were captured using the scanner located in CSU.
9U6WNP	Scanning	
A2HA6Z	Photography	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
A89KEX	Photography	D1 was captured using the DCS5, ALS, and orange filter
AJ324Y	Photography	Nikon camera and Authenticated Digital Asset Management System (ADAMS)
AJYFA6	[No Preservation Methods Reported.]	
AQX7TU	[No Preservation Methods Reported.]	
AQZQMN	Photography	Captured after NIN, using green filter and LED lights
AT8TTT	Photography Scanning	Nikon D3400, lens AF-S Nikkor 18-105 mm, 3,5-5,6G, Scanner "Epson Perfection V700 Photo"
AW6A6M	Photography	Developed areas were photographed and allowed to dry completely before being stored in a zipper storage bag.
AWKVD4	Photography	For documentation i use photography.
AZMR3Y	[No Preservation Methods Reported.]	
B6CQUY	Scanning	Scanned with a scale containing case number, date, item number, process used, and initials.
BEKXWU	Photography	I put a small ruler on top of the item near the print that developed and photographed the print at close range. Then I moved the camera further away and photographed the print again to get an overall image of the location of the print on the item in its quadrant.
BHM48T	Photography	
BHZTCQ	Photography	12/18/2025 @ ~1159hrs. After drying, item was examined and possible print was captured via photography. Images taken with DSLR camera, tripod, and flash. Detail images saved in JPEG and NEF formats. n=27 images total taken throughout, both before and after development and processing. Likely loop pattern observed
BMWE7E	Photography	Nikon D800/ orange LASER filter used with 1,2 Indanedione
BUHA8J	Photography	Photos saved to the DCS5 under FSD25-005544
BVTWY6	Photography	Laser (532nm) with orange laser filter: Camera leveled Camera settings - Manual mode, manual focus, F/11, ISO 100, shutter speed variable Storage format - RAW/JPG fine Overall of item with marker under white light followed by close up of marked ridge detail under alternate light source.
C7J8L3	Photography	
C82ERK	Photography	
C9TDZR	[No Preservation Methods Reported.]	
CAPQQQ	Photography	12/18/2025 11:45-12:25 photographed friction in quadrant A
CGH4KX	Photography	The item was photographed for preservation and further analysis.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
CN4YL3	[No Preservation Methods Reported.]	
CPHFMM	Photography	Foster and Freeman DCS5.
CQVQ2E	Photography	Images of latent print captured in Quadrant A.
CTZKGB	Photography	After using 1,2 Indanedione, used the Tracer Laser (ALS), with a 532nm green light and orange barrier filter on the camera lens, photographed ridge detail found in quadrant A
CUAM8G	Photography	One impression was photographed with green handheld laser (520 nm) and Orange barrier filter.
	Adobe	One impression was determined to be of value for comparison purposes and was labeled L1.
D2AARN	Photography	One photograph was taken after Indanedione process. Used ALS and orange filter (OG 550).
D2NZGY	Photography	
D336EX	Photography	Ridge detail was documented via photography when observed.
D3JCKE	Photography	Photo B from quadrant A of the lined sticky note with Ninhydrin
D4CATL	Photography	Photographed 2L1 with LASER (532nm) and orange filter
D7JKPP	Photography	All photographic documentation performed within resolution guidelines and in RAW format. The Canon EOS R6 Mark II was used. Overalls of the packaging and item were taken with the camera mounted to a copy stand prior to chemical processing. The lift on the item was photographed as lift #3 since it was the last item show sufficient ridge detail. Photo lift #3 was photographed on a copy stand using a ambient lighting, a flashlight, and a ring light that was adjusted to various color settings to best capture ridge detail.
DA2MWV	Photography	Macro photography
DBDLNH	Photography	Photo with scale sector A.
DBX33Z	Photography	Ninhydrin Fixative
DEVPVN	Photography	
DHUZRN	Photography	
DKHEFX	Photography	Scaled photographs taken of the item prior to processing. Scaled photograph taken of friction ridge impression with ALS at 505 nm with orange lens filter.
DYLTHG	Photography	Digital camera on copy stand.
EKVH9G	Photography	Photographed developed print during DFO/forensic light source. One friction ridge image with scale captured.
ELNGGM	Photography	Photographed using ALS at 475nm and 529nm camera filter.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
EXHUEY	Photography	After working on the item 2 and finding that it did not yield results, it was then photographed.
F63BNN	[No Preservation Methods Reported.]	
F7ER4M	Photography	One developed latent print photographed under ALS (520nm) after 1,2-Indanedione process.
FC2UQJ	Photography	
FR9VKK	Photography	Photographed after third processing round and being allowed to sit over the weekend
FRYKAB	Scanning	Item 2 was scanned using an Epson scanner.
FVWBAU	[No Preservation Methods Reported.]	
G2EVZD	Photography	
GANKCQ	Photography	Prepared one 1:1 black & white photo of print that developed in area "A".
GDACJM	Photography	Canon EOS 760D + iPad Air 2, Green light 530, Red filter
GEGRRE	Photography	Captured area of ridge detail with a Nikon D850 (within quadrant A)
GJXUYJ	Photography	
GLL9NU	Photography	overall and comparative
GLZPMT	Scanning	A EPSON scanner was used to scan the item on 11/10/2025 after the item had been processed with Ninhyrdin and had produced a print.
GNAZEQ	Photography	Photographs taken prior to processing and after processing with and without scale
GNRTDE	Photography	Indanedione Nikon D850 TracER Laser 532nm with orange laser filter Three (3) photos
GPY7VG	Photography	Minimal ridge detail observed in quadrant A. Photographed and enhanced with DCS5. Photo printed out
GR9BBQ	Photography	Ridge detail preserved using a capture station.
GTNBUF	Photography	1 latent print was photographed during DFO processing
H6CY3K	Photography	iPhone 14 back dual wide camera 5.7mm f/1.5
H9BCL4	Photography	Processed with 1,2 Indanedione and photographed one print in Square A
H9T2AP	Scanning	EPSON V600 photo Photoshop 26.6
HMR94K	Photography	After application of DFO, ridge detail developed was captured and preserved using comparative quality photography.
HMWP2J	Photography	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
HURPEQ	Photography	
HVKMLX	Photography	Photo taken after 24 hours
HVM9FR	Scanning	One image was taken with Scanner 13 after the completion of Ninhydrin. No enhancement was observed after the completion of Physical Developer.
HWZKEW	Photography	It was photographed after it had been treated.
HYH2AM	Photography	se utilizo fotografía macro para su documentación. [Requested translation was not provided by time of publication.]
HZG3FE	Photography	Photograph taken after DFO with the Forensic Light Source (FLS)
J4WWUQ	Photography	Ninhydrin - 1 photo direct, incandescent (flood)
J6PU2W	Photography	The latent prints recovered are photographed by using DCS4 imaging device (white light and 495nm filter). a paper copy is sent to the information branch for comparison on the data base and the soft copy are kept on the hard disk.
JEUYRT	Photography	The fingerprint was photographed after the Indandione treatment, under the same conditions the print was detected. By using 505 nm light source and orange filter.
JFQHTU	[No Preservation Methods Reported.]	
JMM9HB	Photography	NIN photo taken with white light using a Nikon Z8 camera
JRKPTJ	Scanning	Scanned item 2 with Epson scanner.
JV3RZP	Photography	1 BW 1:1 photo
JWA9TT	Photography	Digital Photography
K7JVME	Photography	1:1 photography
KC4XNP	Photography	DFO-ALS and photographed
KEBDWG	Photography	Used Foster Freeman DCS 5 with 8 x 4 Crime Lite box and an orange filter to capture a photograph of the latent print after IND-Zn application on Item 2. No further development after Thermal Ninhydrin to photograph.
KQZAYF	Photography	2L1 captured at IND step
KRC6HL	Scanning	epson scanner
KUNPMP	Photography	
KWRFXB	Photography	Photographed developed print during DFO and Ninhydrin-PE. Three friction ridge images with scale captured.
L49D2N	Scanning	An EPSON scanner (13) was used to scan the item on 11/10/2025 after Ninhydrin produced a print.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
LAUBQC	Photography	Digital photos - Canon EOS 60D, 100 mm lens, scale ruler.
	CD-R	Recording digital photos of fingerprint to CD-R.
LB7ZVA	[No Preservation Methods Reported.]	
LCYX4F	Photography	One photograph was taken after Indanedione application using ALS.
LDUG6G	Photography	Green 480-560 light with Red23A filter.
LJJYJT	None	The fingerprint could not be developed using any of the methods employed. For this reason, there was no preservation for this Item.
LMLRL6	[No Preservation Methods Reported.]	
LYUXAC	Photography	
M2DCDC	Photography	NIKON D7500 + lens 105mm
MBYH7A	Photography	RAW and TIFF images produced, JPEG position
ME2B4E	Photography	
MEK3BD	[No Preservation Methods Reported.]	
MGRKAA	Photography	Fingerprint was photographed at 505nm Polilight 550 XL with a macro camera lens, orange filter (OG 550 AG) and linear scale
MPKTWL	Photography	
MQCQ6R	Photography	Used photo stand and scale to photograph print.
MW6TAD	Photography	
N2RZAW	Photography	Using a Canon EOS 80D digital camera and a macro lens, I photographed the latent images using JPEG and RAW formats.
NAMZQB	Photography	Photographed with curved orange barrier filter at 515 nm.
NHEB27	[No Preservation Methods Reported.]	
NR6YW9	Photography	
NTXX4E	[No Preservation Methods Reported.]	
P3GLHE	Scanning	An Epson scanner was used to capture a scan of the developed prints. The prints were over a thousand PPI.
P99T39	[No Preservation Methods Reported.]	
PKZJGK	Photography	
PNYZUE	[No Preservation Methods Reported.]	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
PWCPU8	Photography	
PWXHBC	Photography	
PZ89FK	[No Preservation Methods Reported.]	
PZFKHG	Photography	one latent photograph
Q9MJMC	Photography	Photographed with alternate light source at ~490-560 nm with a 549 nm lens filter
QC6YVJ	Scanning	It was scanned using an EPSON scanner.
QGW7FD	Scanning	
QLD9MH	[No Preservation Methods Reported.]	
QLTR8F	Photography	11/19/2025: one latent photograph
R42E48	Photography	Examine Quality photography
R6J4UE	Photography	
R8QNFU	Photography	After DFO processing, utilizing a macro lens and ALS I photographed the impression in RAW and JPEG format. After processing with Ninhydrin, I photographed the impression in the same formats.
R9VF6L	Photography	The fingerprint was photographed, with a tripod, at 90 degrees and metric witness, for its preservation.
T3C9MG	Photography	All images were uploaded into the laboratory's Authenticated Digital Asset Management System (ADAMS) and the laboratory's Information Management System (LIMS).
T4LHB9	Photography	
T79WZH	[No Preservation Methods Reported.]	
TB7BTY	Scanning	Epson Perfection V800 Photo Scanner;reflection; 1200 dpi; 24 bit color; saved as a tiff; original condition photo taken with Canon PowerShot G6;saved as a jpeg to T:Drive; Adobe Photoshop CC; saved as tiff; one primary image captured.
TFD4FH	[No Preservation Methods Reported.]	
TG66JK	Photography	This fingerprint was preserved by photographs, with a tripod at 90 degrees and a metric witness.
U36KJ9	Photography	Used the blue light 420-510 and GG495 filter and the fingerprint appeared to A section.
U8FNCV	[No Preservation Methods Reported.]	
UQTF7K	Photography	Mark found on section A after 1,2-Indanedione. Photographed using 532nm light (green light) and camera filter 590nm.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
V4MUQE	[No Preservation Methods Reported.]	
V96EWZ	Photography	Photographed at ALS step and Ninhydrin step
VAHQWQ	Photography	Photographed with alternate light source for 1 2 results Photographed with room lighting for Ninhydrin results
VC6QTZ	Photography	Photographed prints post indanedione using red-orange filter and alternate light source at 505 nm.
	Scanning	Scanned pre-processing and post indanedione at 1000ppi.
VHVZ3Y	Photography	
VMN8G2	[No Preservation Methods Reported.]	
VU98WD	Photography	Digitally photographed after Ninhydrin
VVKYT2	Scanning	An Epson V800 scanner was utilized at 1200dpi to capture the latent fingerprint of value, L-01. The image was opened in Adobe Photoshop and saved to a photographic reproduction sheet as an original and processed image.
WDGPMA	Photography	
WFN6W2	Photography	Prints were photographed with a Nikon D3400 camera.
WLTNEZ	Photography	1,2-Indandione, Ninhydrin
WQKT94	Scanning	
WUPGRZ	[No Preservation Methods Reported.]	
WYEX26	Photography	12/12/25: Used DCS5 to photograph area of ridge detail in quadrant A after processing with Novec Ninhydrin; photograph included scale with case number, identifier C, date photographed, and my initials.
WYYUAY	Photography	1 latent image captured w scale
X22YHD	[No Preservation Methods Reported.]	
X4L7GZ	Photography	macro
X7VV6H	Photography	Canon,Photoshop
X92CK2	Photography	Dual 77+ Laser Green light (wavelength = 520nm) + OC Filter/FF-1.0 + Orange goggles
X9HPN6	Photography	Photos were taken in RAW format after DFO application. A FLS at 455nm and a camera with an orange filter were used. A total of one photo was taken. Photo was saved on a photo card then transferred to Digital EMS.
	Scanning	One scan completed using a flat bed scanner set at TIF and 1200 dpi. Scan was transferred to Digital EMS.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
XB6AT9	Photography	12/4/2025
XTLHNH	Photography	Ridge detail was observed and photographed after 1 ,2-Indanedione with ALS 55NM with a red filter and after Ninhydrin in quadrant A.
Y6EE8V	Photography	
YA7NCM	Photography	The item was dipped in the chemical and then put in a humidity chamber for ten minutes. A possible latent area was developed in Quadrant A and photographed with an alternate light source and an orange barrier filter.
YCJV3B	Photography	digital photography
YJUGMX	Photography	The Foster and Freeman DCS5 was utilized to photograph a latent print in quadrant "A" of the paper.
YJX2GT	Photography	Photographed LP2-1 after 1,2-Indanedione with laser at 532nm with orange barrier filter combined with A-FF-1 forensic filter
YKPZNZ	Photography	2L1 = 1,2-Indanedione Photography date - 11/06/2025 Capture Method - Photographed Lighting - Orange filter
YLJLLW	Scanning	Both sides of the item were photocopied/scanned prior to processing.
	Photography	1 Photograph of the developed latent print was obtained during the DFO/ Forensic Light Source.
YNQ4FL	Photography	
YT7EVB	[No Preservation Methods Reported.]	
ZAJE2X	Photography	after DFO - in alternate light source at 505 nm using a orange colored bandpass filter.
	Photography	after Ninhydrin - under white light.
ZD9JZW	[No Preservation Methods Reported.]	
ZGAPF3	Scanning	Epson scanner was used at 1200 dpi.
	Photography	Photographed under 532nm using two orange barrier filters. In addition to the lens filter, a second orange filter had to be used to block the fluorescence of the sticky note in order for the ridges to be visible.
ZJCMNA	Photography	The Indanedione control, Ninhydrin control, Oil Red O control and the developed impression, noted in quadrant A, were photographed using a Nikon Z50II camera. The developed impression was photographed following the applications of Indanedione and Ninhydrin.
ZK3U4Z	[No Preservation Methods Reported.]	
ZRQECL	Photography	One latent print was photagraphed after 1,2-Indanedione. The same print was photographed after Ninhydrin.
ZYN268	Scanning	Epson Perfection V600 Photo Scanner Adobe Photoshop Version 26.2.0

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
ZYZ3LE	[No Preservation Methods Reported.]	

Item 2 - Preservation Response Summary

Participants: 233

Methods Utilized

Lifting	0
Photography	173
Scanning	27

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

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
2BVC73	[No Preservation Methods Reported.]	
2CJFJA	Submitting Evidence & Fingerprint Tape	The latent print could not be lifted and therefore the entire sheet of paper was collected with print tape (lift #2) and was submitted to Central Evidence and Property.
2J8RD3	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.
2NK7M3	Photography	RAW format, forensic light source with orange filter for DFO.....standard light and no orange filter for Ninhydrin and Silver Nitrate - scale with all pertinent information added
2TVLPY	Photography	
34BT7Y	Photography	Apart from the photographic fixation, with different photographic planes to leave records of the characteristics of the revealed element.
	cinta levantadora de huellas	Transplanting tape was used to protect the sample
38UU7D	Photography	Blue-green light with yellow filter for VIS White light/ Blue-green light for DFO White light for NH
3BT73D	Photography	Photographed with Laser (Bright Beam) / 532nm / used orange and FF1 filters after 1,2-Indanedione processing; rephotographed using visible light after Ninhydrin processing
3ETGXD	Photography	
3FJFCB	Photography	The photographic documentation was performed using a metric scale. Application time of the reagent: 2.5 hours
3GWAUW	Photography	Visible exam: white light (0 photos), RUVIS (0 photos), LASER (3 photos), documentation (2 photos) HCl exam: white light (0 photos) 1,2-Indanedione exam: LASER (2 photos)
3JJPJ8	Photography	captured after DFO
3M79NB	Photography	Examination light: 490nm Observation filter: orange
3RFGV8	Scanning	1 image of the Ninhydrin developed print
3T9F4D	[No Preservation Methods Reported.]	
3ZBLK3	Photography	After locating the latent fingerprint, a scale was placed beside it. The DSLR camera was then used to document the fingerprint's location(section D).

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
44QAZT	Photography	Photographed developed print during Ninhydrin - Ninhydrin - 2 images 2 total images (all with scale) captured
4CG24C	Photography	During step 5), orange filter is fixed on the camera when the trace in "D" box is illuminated with the Crimescope in CSS. We place a centimetric test near the fingerprint and photographies are taken. The fingerprint is complete and well marked.
	Photography	During step 8), no filter is attached to the camera when the trace in box "D" is illuminated by the Crimescope with white light. Photographs are taken of the fingerprint using the centimetre test. Only the top centre of the figure and the upper peripheral area of the trace are visible.
4EMMRC	[No Preservation Methods Reported.]	
4HAYYU	Photography	Nikon D800E, f/18, 2 sec., ISO 200, 105 mm
4KBZZR	Photography	One image
4RU9JH	Photography	macro lens with scale in RAW and JPEG file formats
4UH3XX	Photography	Filter for camera
4W6EYN	Photography	NIN photo captured after initial heat/humidity application (10/31)
	Scanning	NIN scan captured on 11/3
4WQUD7	Photography	Used a NIKON D810 to take 2 digital photographs of latent print area quadrant D.
4Z262U	Photography	DCS5 w/ green filter Enhancement of the ridge detail located in Section D was attempted. Photograph printed and submitted to the Latent Print Section.
66Y7KM	Photography	Digital photography. Nikon D7100, NEF format, scale in picture, white light. After ninhydrin development.
67AN4T	Photography	Detail- 2 photos taken after 1,2-Indanedione using the Alternate Light Source.
67Q7HY	Photography	Canon EOS 77D, 90mm macro-lens 1:1. Blue light, range 420- 470 nm. Yellow filter. Green light, range 480- 560 nm. Red filter.
6BJ9LX	[No Preservation Methods Reported.]	
6K82VA	Photography	
6N4NPX	[No Preservation Methods Reported.]	
6P3RKU	Photography	For Photography utilized a Nikon D850 & 60mm focal length lens on a copy stand: For ALS photo, laser used at 445nm and an orange barrier filter on the camera lens, manual mode, ISO 1250, f11, exposure time of .62 second For IND photo, laser used at 532nm and an orange barrier filter on the camera lens, aperture priority mode, f11
6R4YKX	[No Preservation Methods Reported.]	
6XUAVV	Photography	

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
6ZHNJ7	Photography	One impression marked B on quadrant D. Sent to photo lab for digital image after viewing 1,2 IND
76A98L	[No Preservation Methods Reported.]	
777MDR	Photography	
7ANQKW	Photography	Camera "Sony A7II" with macro lens and light source.
7CAMRM	Scanning	Scanned in at 1200 PPI with an Epson model V700 PHOTO scanner.
7HXC77	Scanning	The item was scanned using a flatbed scanner with and without a scale. The item could have also been photographed as an alternative.
7XTU2V	[No Preservation Methods Reported.]	
84YK7M	Photography	yellow filter and 445 nm laser.
8AN3MJ	Photography	Captured a total of two (2) photographs of friction ridge detail on the white receipt paper with the DCS5. One photograph was taken after Ninhydrin with green light, and the other photograph was taken after Ninhydrin with white light.
8DJY4X	Photography	
8GJAYX	Photography Photography	after 1,2-Indanedione-Treatment after Ninhydrin -Treatment
8GLUTR	Photography	12/3/2025 Documentary photographs captured prior to processing 12/5/2025 1:1 closeup, midrange, and overall with Nikon 7500 after Ninhydrin application
8U3J73	Photography	se realizo toma de fotografis antes y despues del revelado del fragmento. [Requested translation was not provided by time of publication.]
8X7LRR	Scanning	Scanned the item to preserve the ridge detail that was developed.
8YYJZX	Photography	after IND
92MCCT	Photography	The item was submitted to the [Laboratory] Image Lab for latent scanning of the latent area observed in quadrant D.
93FYAQ	Scanning	Scanned a copy of front and back of document into case file.
93HVEU	Photography	Photographed after initial ALS step with F&F blue light; then after IND step with F&F blue/green light
93XANP	[No Preservation Methods Reported.]	
94AQ23	Photography	Latent ridge detail visible in Section D of Item #3 was photographed to scale with CrimeLite Auto/Discovery ALS utilizing the following settings: Lighting 100% at 445nM, Filter 495 nM LP, Greyscale and Invert.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
96LLMU	Photography	The ridge detail that was observed was photographed as photo lift #1. Photographed the results with a Canon R6 Mark II camera mounted to a copy stand. This was done at each step of examination where ridge detail was visualized.
9CNVUM	Photography	Print documented after dry ninhydrin step, 1 photo obtained
9G2FYM	Photography	Photographed by our forensic photographers.
9PR4R6	Photography	
9R27JV	Scanning	Two scans (Scans 3 & 4) of the evidence were captured using the scanner located in CSU.
9U6WNP	Scanning	
A2HA6Z	Photography	
A89KEX	Photography	D2 was captured using the DCS5, ALS, and orange filter
AJ324Y	Photography	Nikon camera and Authenticated Digital Asset Management System (ADAMS)
AJYFA6	Photography	It is photo documented with a metric witness for its preservation and later analysis.
AQX7TU	[No Preservation Methods Reported.]	
AQZQMN	Photography	Photo captured after IND-Zinc Chloride with laser @ 532nm and orange barrier filter
AT8TTT	Photography Scanning	Nikon D3400, lens AF-S Nikkor 18-105 mm, 3,5-5,6G, Scanner "Epson Perfection V700 Photo"
AW6A6M	Photography	Developed prints were photographed for record. The item was stored flat in a paper evidence envelope to prevent further heat exposure.
AWKVD4	Photography	4. The fingerprint was photographed and preserved.
AZMR3Y	Photography	Captured digital images.
B6CQUY	Scanning	Scanned with a scale containing case number, date, item number, process used, and initials.
BEKXWU	Photography	– I put a small ruler on top of the item near the print that developed and photographed the print at close range. Then I moved the camera further away and photographed the print again to get an overall image of the location of the print on the item in its quadrant. The light range of 475-550nm with an orange filter was used in the photography.
BHM48T	Photography	
BHZTCQ	Photography	12/18/2025 @~1145. After drying, item was examined and possible print was captured via photography. Images taken with DSLR camera, tripod, and flash. Detail images saved in JPEG and NEF formats. n=30 images total taken throughout, both before and after development and processing. Likely loop pattern observed

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
BMWE7E	Photography	Nikon D800 - Orange LASER filter used with 1, 2 Indanedione
BUHA8J	[No Preservation Methods Reported.]	
BVTWY6	Photography	450 nm with orange filter and laser (532nm) with orange laser filter: Camera leveled Camera settings - Manual mode, manual focus, F/11, ISO 100, shutter speed variable Storage format - RAW/JPG fine Overall of item with marker under white light followed by close up of marked ridge detail under alternate light source.
C7J8L3	Photography	Blue and green light (470nm- 500nm) with an orange filter (529nm)
C82ERK	[No Preservation Methods Reported.]	
C9TDZR	[No Preservation Methods Reported.]	
CAPQQQ	Photography	12/18/2025 11:45 - 11:55
CGH4KX	Photography	The item was photographed for preservation.
CN4YL3	Photography	A photograph was taken with a metric scale to preserve the fingerprint.
	plastic patch	After developing the fingerprint, a plastic patch is placed to preserve the print.
CPHFMM	Photography	Foster and Freeman DCS5.
CQVQ2E	Photography	Images of latent print captured in Quadrant D.
CTZKGB	Photography	Used the Full Spectrum Imaging System to photograph the thermal paper processing in quadrant D
	Photography	After using 1,2 Indanedione, used the Tracer Laser (ALS), with a 532nm green light and orange barrier filter on the camera lens, photographed ridge detail found in quadrant D
	Photography	After using Ninhydrin, photographed ridge detail found in quadrant D with natural lighting
CUAM8G	Photography	One impression was photographed with green handheld laser (520 nm) and Orange barrier filter.
	Adobe	One impression was determined to be of value for comparison purposes and was labeled L2.
D2AARN	Photography	One photograph was taken after Thermal Ninhydrin process with white light.
D2NZGY	Photography	
D336EX	Photography	
D3JCKE	Photography	Photo C from quadrant D of the thermal receipt paper with Ninhydrin
D4CATL	Photography	Photographed 3L1 with LASER (532nm) and orange filter

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
D7JKPP	Photography	All photographic documentation performed within resolution guidelines and in RAW format. The Canon EOS R6 Mark II was used. Overalls of the packaging and item were taken with the camera mounted to a copy stand prior to chemical processing. The lift on the item was photographed as lift #2 since it was the second item show sufficient ridge detail. Photo lift #2 was photographed on a copy stand using a ambient lighting, a flashlight, and a ring light that was adjusted to various color settings to best capture ridge detail.
DA2MWV	Photography	Macro photography
DBDLNH	[No Preservation Methods Reported.]	
DBX33Z	Photography	Ninhydrin Fixative
DEVPVN	Photography	
DHUZRN	Photography	
DKHEFX	Photography	Scaled photographs taken of the item prior to processing. Scaled photograph taken of friction ridge impression with ALS at 505 nm with orange lens filter.
DYLTHG	Photography	Digital camera on copy stand.
EKVH9G	Photography	Photographed developed print after Dry Ninhydrin. One friction ridge image with scale captured.
ELNGGM	Photography	Photographed with white light.
EXHUEY	Photography	The development of the fingerprint was photographed.
F63BNN	Scanning	
F7ER4M	Photography	One developed latent print photographed under ALS (520nm) after the 1,2-Indanedione process.
FC2UQJ	Photography	
FR9VKK	[No Preservation Methods Reported.]	
FRYKAB	Scanning	Item 3 was scanned using an Epson scanner.
FVWBAU	Photography	The latent was photographed with and without a scale, with the camera on a copy stand.
G2EVZD	Photography	
GANKCQ	Photography	Prepared one 1:1 black & white photo of print that developed in area "D".
GDACJM	Photography	Canon EOS 760D + iPad Air 2, Green light 530, Red filter
GEGRRE	Photography Scanning	Captured area of ridge detail with a Nikon D850 (within quadrant D) Scanned area of ridge detail with Epson Scanner (within quadrant D)

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
GJXUYJ	Photography	
GLL9NU	Photography	overall and comparative
GLZPMT	Photography	A Nikon Z7camera with two (2) yellow filters on the lens was used on 11/08/2025 to photograph the item after a print had been seen after visuallizing the print using Crime Lite ML (460nm-510nm) with blue light. A Polilight 2 with 450nm blue light was used with the direct lighting technique to visualize and photograph the print.
GNAZEQ	Photography	Photographs taken prior to processing and after processing with and without scale
GNRTDE	Photography	Nikon D850 TracER Laser 532nm with orange laser filter Three (3) photos
	Photography	Indanedione Nikon D850 TracER Laser 532nm with orange laser filter Three (3) photos
	Photography	Ninydrin Nikon D850 White light Three (3) photos
GPY7VG	Photography	Print observed in quadrant D. Photographed and enhanced with DCS5. Photo printed out
GR9BBQ	Photography	Ridge detail preserved using a capture station.
GTNBUF	Photography	1 latent print was photographed during NIN PE (Dry) processing
H6CY3K	Photography	iPhone 14 back dual wide camera 5.7mm f/1.5
H9BCL4	Photography	Processed with 1,2 Indanedione and photographed one print in Square D
	Photography	Processed with Ninhydrin and photographed one print in Square D
H9T2AP	Scanning	Epson V600 photo
HMR94K	Photography	After application of Iodine, DFO, Ninhydrin, and Silver Nitrate, ridge detail developed was captured and preserved using comparative quality photography.
HMWP2J	Photography	
HURPEQ	Photography	
HVKMLX	Photography	Taken on the same day 1,2-Indanedione was used
HVM9FR	Photography	One photograph was taken on Camera11/Lens3 using direct lighting with the Polilight 2 and a yellow filter.
	Scanning	Two images were taken with Scanner 13. One photograph was after the completion of magnetic powder and one after Ninhydrin. No further enhancement was observed after the completion Physical Developer.
HWZKEW	Photography	It was photographed using a ruler for preservation.
HYH2AM	Photography	se documento con fotografía macro para su documentación. [Requested translation was not provided by time of publication.]
HZG3FE	Photography	Photograph taken after Ninhydrin- Acetone Base

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
J4WWUQ	Photography	ninhydrin - 1 photo, direct lighting, incandescent (flood)
J6PU2W	Photography	The latent prints recovered are photographed by using DCS4 imaging device (green light and bright red filter 590 nm). a paper copy is sent to the information branch for comparison on the data base and the soft copy are kept on the hard disk.
JEUYRT	Photography	The fingerprint was photographed after the Indandione treatment, under the same conditions the print was detected. By using 505 nm light source and orange filter.
JFQHTU	Photography	I preserved the latent print by using photo documentation.
JMM9HB	Photography	Visual Exam photo taken with orange barrier filter and Arrowhead Dual77 laser at 445nm using a Nikon Z8 camera IND photo taken with orange barrier filter using a Nikon Z8 camera ThermaNin photo taken with white light using a Nikon Z8 camera
JRKPTJ	Scanning	Scanned item 3 with Epson scanner.
JV3RZP	Photography	1 BW 1:1 photo
JWA9TT	Photography	Digital Photography
K7JVME	Photography	1:1 photography
KC4XNP	Photography	photographed after ALS, DFO, and NIN
KEBDWG	Photography	Used Foster Freeman DCS 5 to photograph latent print on Item 3.
KQZAYF	Photography	3L1 captured at IND step
KRC6HL	Scanning	epson scanner
KUNPMP	Photography	
KWRFXB	Photography	Photographed print with ALS and dry ninhydrin-petroleum ether. Four friction ridge images with scale captured.
L49D2N	Photography	A Nikon Z7 camera was used with two yellow filters put onto the lens on 11/7/2025 to photograph the print after the alternate light source examination. Polilight 2 with 450nm blue light was used with direct lighting to bring forth the print.
	Scanning	An EPSON scanner (13) was used to scan the item on 11/22/2025 after Ninhydrin produced a print.
LAUBQC	Photography	Digital photos - Canon EOS 60D, 100 mm lens, scale ruler.
	CD-R	Recording digital photos of fingerprint to CD-R.
LB7ZVA	Photography	2 latent print images were obtained at the NIN-PE (Dry) dye stain stage.
LCYX4F	Photography	One photograph taken after Thermal Ninhydrin application using ALS.
LDUG6G	Photography	Green 480-560 light with Red23A filter.
LJJYJT	Photography	Documentation by Photography.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
LMLRL6	[No Preservation Methods Reported.]	
LYUXAC	Photography	
M2DCDC	Photography	NIKON D7500 + Lens 105mm
MBYH7A	Photography	RAW and TIFF images produced, JPEG position
ME2B4E	Photography	
MEK3BD	Photography	Captured with scale.
MGRKAA	Photography	Fingerprint was photographed at 505nm Polilight 550 XL with a macro camera lens, orange filter (OG 550 AG) and linear scale
MPKTWL	Photography	
MQCQ6R	Photography	Used photo stand and scale to photograph print.
MW6TAD	Photography	Bottom and right edge portions of fingerprint visible. Void in core. Appears to be left loop or whorl pattern type.
N2RZAW	Photography	Using a Canon EOS 80D digital camera and a macro lens, I photographed the latent images using JPEG and RAW formats.
NAMZQB	Photography	Captured prior to chemical processing at 455 nm using curved orange barrier filter. Captured prior to chemical processing using FSIS at 254 nm. Captured after Indanedione, prior to adding heat and again after applying heat, using 515 nm and curved orange barrier filter.
NHEB27	Scanning	A overall scan of item 3 and the control used was made using an Epson Perfection V800 scanner at 1200ppi.
NR6YW9	Photography	
NTXX4E	Photography	Three (3) images after Ninhydrin
P3GLHE	Scanning	An Epson scanner was used to capture a scan of the developed prints. The prints were over a thousand PPI.
P99T39	[No Preservation Methods Reported.]	
PKZJGK	Photography	
PNYZUE	Lifting	Sirchisil white
PWCPU8	Photography	
PWXHBC	Photography	
PZ89FK	Taping	The paper item did not allow me to lift the taped print from the surface. The print was taped, and the entire item was submitted

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
PZFKHG	Photography	one latent photograph
Q9MJMC	Photography	Photographed with alternate light source at ~490-560 nm
QC6YVJ	Photography	It was photographed with a Nikon Z7 camera. The ALS photograph was taken using direct polilight lighting with a yellow filter.
	Scanning	The ninhydrin scan was scanned using an EPSON scanner.
QGW7FD	Scanning	
QLD9MH	Photography	Photographs of ridge detail were taken.
QLTR8F	Photography	11/20/2025: one latent photograph
R42E48	Photography	
R6J4UE	Photography	
R8QNFU	Photography	Utilizing a macro lens and ALS, I photographed the impression in RAW and JPEG format
R9VF6L	Photography	Fingerprint was photographed for preservation, using a tripod, at 90 degrees a metric witness.
T3C9MG	Photography	All images were uploaded into the laboratory's Authenticated Digital Asset Management System (ADAMS) and the laboratory's Information Management System (LIMS).
T4LHB9	Photography	
T79WZH	Photography	Photographed with label and scale using the Discover Crime-Lite auto camera system.
TB7BTY	Photography	FRD captured with Nikon D810 with attached orange filter and the CrimeScope -blue light (495nm) some fluorescent FRD in quadrant D; improvement of FRD; backlight; orange filter green light (515nm) no improvement FRD; FRD invert processed with Adobe Photoshop CC; saved as tiff; image calibrated >1000 ppi; one primary image captured; original condition photo taken with PowerShot G6; saved as jpeg to T:Drive.
TFD4FH	Photography	
TG66JK	Photography	This fingerprint was preserved by photographs, with a tripod at 90 degrees and a metric witness.
U36KJ9	Photography	We used the following lights and filters: blue 420-510 + GG495 and the fingerprint appeared to D section.
U8FNCV	Photography	Captured two (2) photographs of friction ridge detail in Quadrant D on this item with the DCS5. One photograph was after 1,2-Indanedione using green light with a red filter. The second photograph was after Ninhydrin using white light.
UQTF7K	Photography	Mark found on section A after 1,2-Indanedione. Photographed using 532nm light (green light) and camera filter 590nm.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
V4MUQE	Photography	CSI [Name] photographed (1) latent print located in quadrant D of item 3: thermal receipt paper. CSI [Name] utilized an L-scale during photography.
	Collection	At 2:45 PM, CSI [Name] collected one (1) thermal receipt paper containing one (1) latent print in quadrant 3D.
V96EWZ	Photography	
VAHQWQ	Photography	Photographed with alternate light source for 1 2 results Photographed with room lighting for Ninhydrin results
VC6QTZ	Photography	Photographed prints post indanedione using red-orange filter and alternate light source at 505 nm.
	Scanning	Scanned pre-processing and post indanedione at 1000ppi.
VHVZ3Y	Photography	
VMN8G2	Photography	Z6-II mirrorless Nikon with Macro lens
VU98WD	Photography	Digitally photographed after ALS and Ninhydrin
VVKYT2	Scanning	An Epson V800 scanner was utilized at 1200dpi to capture the latent fingerprint of value, L-02. The image was opened in Adobe Photoshop and saved to a photographic reproduction sheet as an original and processed image.
WDGPMA	Photography	
WFN6W2	Photography	Prints were photographed with a Nikon D3400 camera.
WLTNEZ	Photography	1,2-Indanedione, Ninhydrin
WQKT94	Scanning	
WUPGRZ	Photography	Photographed developed print after Ninhydrin was applied- one friction ridge image with scale captured.
WYEX26	Photography	12/09/25: Used DCS5 to photograph area of ridge detail in quadrant D after processing with Ninhydrin HT; photograph included scale with case number, identifier B, date photographed, and my initials.
WYYUAY	[No Preservation Methods Reported.]	
X22YHD	[No Preservation Methods Reported.]	
X4L7GZ	Photography	macro
X7VV6H	Photography	Canon,Photoshop
X92CK2	Photography	Dual 77+ Laser Green light (wavelength = 520nm) + OC Filter/FF-1.0 + Orange goggles
X9HPN6	Scanning	One scan completed using a flat bed scanner set at TIF and 1200 dpi. Scan was transferred to Digital EMS.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
XB6AT9	Photography	
XTLHNH	Photography	Ridge detail was observed and photographed after 1 ,2-Indanedione with ALS 55NM with a red filter and after NinhydrinHT in quadrant D.
Y6EE8V	Photography	
YA7NCM	Photography	The item was dipped in the chemical and then put in a humidity chamber for ten minutes. A possible latent area was developed in Quadrant D and photographed with an alternate light source and an orange barrier filter.
	Photography	The item was then dipped in Thermal Ninhydrin and put in a humidity chamber for five minutes. The possible latent area in Quadrant D was visible and photographed with room lighting.
YCJV3B	Photography	digital photography
YJUGMX	Photography	The Foster and Freeman DCS5 was utilized to photograph a latent print in section "D" of the paper.
YJX2GT	Photography	Photographed LP3-1 with white light after ninhydrin development
YKPZNZ	Photography	3L1 = 1,2-Indanedione Photography date - 11/06/2025 Capture Method - Photographed Lighting - Orange filter
YLJLLW	Scanning	Both sides of the item were photocopied/scanned prior to processing.
	Photography	1 Photograph of the developed latent print was obtained during the Ninhydrin Petroleum Ether (Dry).
YNQ4FL	Photography	
YT7EVB	Photography	I photographed section D after ALS.
	Scanning	I scanned section D after Ninhydrin.
ZAJE2X	Photography	after fluorescence examination in alternate light source at 450 nm using a yellow colored bandpass filter.
	Photography	after DMAC - in alternate light source at 505 nm using a orange colored bandpass filter.
	Photography	after DFO - in alternate light source at 505 nm using a orange colored bandpass filter.
	Photography	after Ninhydrin - under white light.
ZD9JZW	[No Preservation Methods Reported.]	
ZGAPF3	Photography	Photographed under 532nm using an orange barrier filter
ZJCMNA	Photography	The Thermal Ninhydrin control, and the developed impression, noted in quadrant D, were photographed using a Nikon Z50II camera.
ZK3U4Z	[No Preservation Methods Reported.]	

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
ZRQECL	Photography	One latent print was photagraphed after 1,2-Indanedione. The same print was photographed after Ninhydrin.
ZYN268	Scanning	Epson Perfection V600 Photo Scanner Adobe Photoshop Version 26.2.0
ZYZ3LE	Scanning	the developed fingerprint were preserved using scanner.

Item 3 - Preservation Response Summary

Participants: 233

Methods Utilized

Lifting	1
Photography	200
Scanning	30

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

First-Level Detail Findings

TABLE 4 - Item 1

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
		Arch	Loop	Whorl		Arch	Loop	Whorl
2BVC73	Not Suitable				4Z262U	N/A		
2CJFJA					4Z6PVN	N/A		
2J8RD3				✓	66Y7KM		✓	
2NK7M3	N/A				67AN4T	Not Suitable		
2TVLPY	N/A				67Q7HY	N/A		
34BT7Y	Not Suitable				6BJ9LX	Not Suitable		
34VC9L			✓		6K82VA		✓	✓
38UU7D	Not Suitable				6N4NPX	Not Suitable		
3BT73D		✓			6P3RKU	N/A		
3ETGXD	Not Suitable				6R4YKX	Not Suitable		
3FJFCB	N/A				6XUAVV	Not Suitable		
3GWAUW	N/A				6ZHNJ7	Not Suitable		
3JJPJ8			✓	✓	76A98L		✓	✓
3M79NB	Not Suitable				777MDR	Not Suitable		
3RFGV8			✓	✓	7ANQKW	Not Suitable		
3T9F4D	Not Suitable				7CAMRM	Not Suitable		
3ZBLK3	Not Suitable				7HXC77	N/A		
44QAZT	N/A				7K3YNG	Not Suitable		
4CG24C	Not Suitable				7XTU2V	Not Suitable		
4EMMRC		✓			829J3K	N/A		
4HAYYU	Not Suitable				84YK7M	N/A		
4HPFUN	N/A				8AN3MJ	N/A		
4KBZZR	N/A				8DJY4X	Not Suitable		
4RU9JH	Not Suitable				8GJAYX		✓	
4UH3XX			✓	✓	8GLUTR	N/A		
4W6EYN	N/A				8U3J73		✓	
4WQUD7	N/A				8X7LRR	N/A		

TABLE 4 - Item 1

WebCode		First Level Pattern(s)? Arch	Loop	Whorl
8YYJZX	N/A			
92MCCT	N/A			
93HVEU			✓	✓
93XANP	N/A			
94AQ23	N/A			
96LLMU	N/A			
9CNVUM	N/A			
9G2FYM	N/A			
9KRGK2	N/A			
9PR4R6	Not Suitable			
9R27JV	N/A			
9U6WNP	Not Suitable			
9W9UYH	N/A			
A2HA6Z	N/A			
A89KEX	N/A			
AJ324Y	N/A			
AJYFA6	N/A			
AQX7TU	Not Suitable			
AQZQMN	N/A			
AT8TTT	Not Suitable			
AW6A6M	Not Suitable			
AWKVD4	N/A			
AZMR3Y	N/A			
B6CQUY	N/A			
BEKXWU	Not Suitable			
BHM48T	N/A			
BHZTCQ	Not Suitable			
BMWE7E	Not Suitable			
BUHA8J	N/A			
BVTWY6	N/A			
C7J8L3	Not Suitable			
C82ERK	Not Suitable			
C9TDZR	Not Suitable			
CAPQQQ	Not Suitable			
CGH4KX			✓	
CN4YL3	N/A			
CPHFMM	N/A			
CQVQ2E	N/A			
CTZKGB	Not Suitable			
CUAM8G	N/A			
D2AARN	Not Suitable			
D2NZGY	N/A			
D336EX	N/A			
D3JCKE	N/A			
D4CATL	Not Suitable			
D7JKPP	N/A			
DA2MWV	N/A			
DBDLNH	Not Suitable			
DBX33Z		✓	✓	
DEFHED	N/A			
DEVPVN	N/A			
DHUZRN		✓		
DKHEFX	Not Suitable			
DUP8RD	N/A			
DYLTHG	N/A			
EKVH9G	N/A			
ELNGGM	Not Suitable			

TABLE 4 - Item 1

WebCode		First Level Pattern(s)? Arch	Loop	Whorl
EXHUEY	N/A			
F63BNN	N/A			
F7ER4M	Not Suitable			
FC2UQJ			✓	✓
FR9VKK	Not Suitable			
FRYKAB	N/A			
FVWBAU		✓		
G2EVZD	N/A			
G34Y8T	N/A			
GANKCQ	N/A			
GDACJM	N/A			
GEGRRE	N/A			
GJXUYJ	N/A			
GLL9NU	Not Suitable			
GLZPMT			✓	
GNAZEQ	N/A			
GNRTDE	N/A			
GPY7VG	N/A			
GR9BBQ	Not Suitable			
GTNBUF	N/A			
H6CY3K	N/A			
H9BCL4	N/A			
H9T2AP	Not Suitable			
HMR94K	N/A			
HMWP2J	Not Suitable			
HURPEQ	N/A			
HVKMLX	Not Suitable			
HVM9FR				
HWZKEW	N/A			
HYH2AM	Not Suitable			
HZG3FE	N/A			
J4WWUQ	Not Suitable			
J6PU2W			✓	
JEUYRT		✓	✓	
JFQHTU	N/A			
JLC488	N/A			
JMM9HB	Not Suitable			
JRKPTJ	N/A			
JV3RZP	N/A			
JWA9TT			✓	
K7JVME	N/A			
KC4XNP	Not Suitable			
KEBDWG	Not Suitable			
KKZND8	N/A			
KQZAYF		✓		
KRC6HL	Not Suitable			
KUNPMP	N/A			
KWRFXB	N/A			
L49D2N	N/A			
L9KFP6	N/A			
LAUBQC	Not Suitable			
LB7ZVA	N/A			
LCYX4F	N/A			
LDUG6G	N/A			
LJJYJT	N/A			
LMLRL6	N/A			
LYUXAC				
M2DCDC	Not Suitable			

TABLE 4 - Item 1

WebCode		First Level Pattern(s)? Arch	Loop	Whorl
MBYH7A	Not Suitable			
ME2B4E	Not Suitable			
MEK3BD	Not Suitable			
MGRKAA		✓		
MPKTWL	N/A			
MQCQ6R			✓	
MW6TAD	Not Suitable			
N2RZAW			✓	✓
NAMZQB	Not Suitable			
NHEB27	Not Suitable			
NR6YW9	Not Suitable			
NTXX4E	N/A			
P3GLHE	N/A			
P99T39			✓	✓
PKZJGK	Not Suitable			
PNMWP3	N/A			
PNYZUE	N/A			
PWCPU8			✓	
PWXHBC		✓	✓	
PZ89FK	Not Suitable			
PZFKHG	N/A			
Q4DJ9Z	N/A			
Q9MJMC	Not Suitable			
QC6YVJ	N/A			
QGW7FD	N/A			
QLD9MH	N/A			
QLTR8F	N/A			
QX48AE	Not Suitable			
R42E48	N/A			
R6J4UE	N/A			
R8QNFU	Not Suitable			
R9VF6L	Not Suitable			
T3C9MG	N/A			
T4LHB9	N/A			
T79WZH	N/A			
TB7BTY	Not Suitable			
TFD4FH			✓	✓
TG66JK	Not Suitable			
TN7C3U	Not Suitable			
U36KJ9		✓		
U8FNCV	N/A			
UQTF7K			✓	✓
V4MUQE	N/A			
V96EWZ	Not Suitable			
VAHQWQ	N/A			
VC6QTZ	Not Suitable			
VHVZ3Y	Not Suitable			
VMN8G2	N/A			
VU98WD			✓	✓
VVKYT2	Not Suitable			
WDGPMA	N/A			
WFN6W2	N/A			
WLTNEZ	N/A			
WQKT94		✓		
WUPGRZ	N/A			
WYEX26	N/A			
WYYUAY	N/A			

TABLE 4 - Item 1

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
X22YHD	N/A						
X4L7GZ	Not Suitable						
X7VV6H	Not Suitable						
X92CK2	Not Suitable						
X9HPN6	N/A						
XB6AT9	N/A						
XTLHNH							
Y6EE8V	Not Suitable						
YA7NCM	N/A						
YCJV3B	N/A						
YJUGMX	N/A						
YJX2GT	N/A						
YKPZNZ		✓	✓				
YLJLLW	N/A						
YNQ4FL	Not Suitable						
YT7EVB	N/A						
ZAJE2X		✓	✓				
ZD9JZW	N/A						
ZGAPF3	Not Suitable						
ZJCMNA	Not Suitable						
ZK3U4Z							
ZRQECL	Not Suitable						
ZYN268	N/A						
ZYZ3LE							

Item 1 - Pattern Response Summary Total Participants: 249

1st Level	Arch	Loop	Whorl	Not Suitable	N/A
Total	14	26	13	83	126

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

TABLE 4 - Item 2

WebCode	First Level Pattern(s)? Arch	Loop	Whorl	WebCode	First Level Pattern(s)? Arch	Loop	Whorl
2BVC73		✓		6BJ9LX		✓	
2CJFJA				6K82VA		✓	
2J8RD3		✓		6N4NPX		✓	
2NK7M3	N/A			6P3RKU	N/A		
2TVLPY	N/A			6R4YKX		✓	
34BT7Y	Not Suitable			6XUAVV		✓	
38UU7D		✓		6ZHNJ7	N/A		
3BT73D		✓	✓	76A98L			
3ETGXD		✓		777MDR	Not Suitable		
3FJFCB	N/A			7ANQKW	Not Suitable		
3GWAUW	N/A			7CAMRM	N/A		
3JJPJ8		✓		7HXC77	N/A		
3M79NB		✓		7XTU2V		✓	
3RFGV8			✓	84YK7M	N/A		
3T9F4D			✓	8AN3MJ	N/A		
3ZBLK3		✓		8DJY4X		✓	
44QAZT	N/A			8GJAYX		✓	
4CG24C		✓		8GLUTR	N/A		
4EMMRC		✓		8U3J73		✓	
4HAYYU		✓		8X7LRR	N/A		
4KBZZR	N/A			8YYJZX	N/A		
4RU9JH		✓		92MCCT	N/A		
4UH3XX		✓		93FYAQ	N/A		
4W6EYN	N/A			93HVEU	Not Suitable		
4WQUD7	N/A			93XANP	N/A		
4Z262U	N/A			94AQ23	N/A		
66Y7KM		✓		96LLMU	N/A		
67AN4T		✓		9CNVUM	N/A		
67Q7HY	N/A			9G2FYM	N/A		

TABLE 4 - Item 2

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
9PR4R6		✓		CUAM8G		✓	
9R27JV	N/A			D2AARN		✓	
9U6WNP	Not Suitable			D2NZGY	N/A		
A2HA6Z	N/A			D336EX		✓	
A89KEX	N/A			D3JCKE	N/A		
AJ324Y	N/A			D4CATL		✓	
AJYFA6	N/A			D7JKPP	N/A		
AQX7TU	N/A			DA2MWV	N/A		
AQZQMN	N/A			DBDLNH		✓	
AT8TTT	Not Suitable			DBX33Z		✓	
AW6A6M		✓		DEVPVN	N/A		
AWKVD4	N/A			DHUZRN		✓	
AZMR3Y	N/A			DKHEFX		✓	
B6CQUY	N/A			DYLTHG	N/A		
BEKXWU		✓		EKVH9G	N/A		
BHM48T	N/A			ELNGGM		✓	✓
BHZTCQ		✓		EXHUEY	N/A		
BMWE7E		✓		F63BNN	N/A		
BUHA8J	N/A			F7ER4M		✓	
BVTWY6	N/A			FC2UQJ		✓	
C7J8L3	Not Suitable			FR9VKK	Not Suitable		
C82ERK		✓		FRYKAB	N/A		
C9TDZR		✓		FVWBAU	Not Suitable		
CAPQQQ		✓		G2EVZD	N/A		
CGH4KX		✓	✓	GANKCQ	N/A		
CN4YL3	N/A			GDACJM	N/A		
CPHFMM	N/A			GEGRRE	N/A		
CQVQ2E	N/A			GJXUYJ	N/A		
CTZKGB		✓					

TABLE 4 - Item 2

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
GLL9NU		✓		KQZAYF		✓	
GLZPMT		✓		KRC6HL		✓	
GNAZEQ	N/A			KUNPMP	N/A		
GNRTDE	N/A			KWRFXB	N/A		
GPY7VG	N/A			L49D2N	N/A		
GR9BBQ		✓		LAUBQC		✓	
GTNBUF	N/A			LB7ZVA	N/A		
H6CY3K	N/A			LCYX4F	N/A		
H9BCL4	N/A			LDUG6G	N/A		
H9T2AP		✓		LJJYJT	N/A		
HMR94K	N/A			LMLRL6	N/A		
HMWP2J		✓		LYUXAC			
HURPEQ	N/A			M2DCDC		✓	
HVKMLX		✓		MBYH7A		✓	
HVM9FR				ME2B4E		✓	
HWZKEW	N/A			MEK3BD	N/A		
HYH2AM		✓		MGRKAA		✓	
HZG3FE	N/A			MPKTWL	N/A		
J4WWUQ		✓	✓	MQCQ6R		✓	
J6PU2W		✓		MW6TAD		✓	
JEUYRT		✓		N2RZAW		✓	
JFQHTU	N/A			NAMZQB		✓	
JMM9HB		✓		NHEB27	N/A		
JRKPTJ	N/A			NR6YW9		✓	
JV3RZP	N/A			NTXX4E	N/A		
JWA9TT	N/A			P3GLHE	N/A		
K7JVME	N/A			P99T39	N/A		
KC4XNP		✓	✓	PKZJGK	Not Suitable		
KEBDWG		✓		PNYZUE	N/A		

TABLE 4 - Item 2

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
PWCPU8		✓		VVKYT2		✓	
PWXHBC		✓		WDGPMA	N/A		
PZ89FK	N/A			WFN6W2	N/A		
PZFKHG	N/A			WLTNEZ	N/A		
Q9MJMC		✓	✓	WQKT94		✓	
QC6YVJ	N/A			WUPGRZ	N/A		
QGW7FD	N/A			WYEX26	N/A		
QLD9MH	N/A			WYYUAY	N/A		
QLTR8F	N/A			X22YHD	N/A		
R42E48	N/A			X4L7GZ		✓	
R6J4UE	N/A			X7VV6H	Not Suitable		
R8QNFU		✓		X92CK2		✓	
R9VF6L	Not Suitable			X9HPN6	N/A		
T3C9MG	N/A			XB6AT9	N/A		
T4LHB9	N/A			XTLHNH			
T79WZH	N/A			Y6EE8V		✓	
TB7BTY		✓	✓	YA7NCM	N/A		
TFD4FH				YCJV3B	N/A		
TG66JK	Not Suitable			YJUGMX	N/A		
U36KJ9	✓			YJX2GT	N/A		
U8FNCV	N/A			YKPZNZ		✓	
UQTF7K		✓	✓	YLJLLW	N/A		
V4MUQE	N/A			YNQ4FL		✓	
V96EWZ		✓		YT7EVB	N/A		
VAHQWQ	N/A			ZAJE2X		✓	
VC6QTZ		✓		ZD9JZW	N/A		
VHVZ3Y		✓		ZGAPF3		✓	
VMN8G2	Not Suitable			ZJCMNA		✓	✓
VU98WD		✓		ZK3U4Z	Not Suitable		

TABLE 4 - Item 2

WebCode	First Level Pattern(s)? Arch	Loop	Whorl	WebCode	First Level Pattern(s)? Arch	Loop	Whorl
ZRQECL		✓					
ZYN268	N/A						
ZYZ3LE							

Item 2 - Pattern Response Summary Total Participants: 233

1st Level	Arch	Loop	Whorl	Not Suitable	N/A
Total	1	91	11	16	120

NOTE: Numbers may not add up to the total number 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
2BVC73	Not Suitable			6BJ9LX			✓
2CJFJA				6K82VA			✓
2J8RD3		✓	✓	6N4NPX		✓	✓
2NK7M3	N/A			6P3RKU	N/A		
2TVLPY	N/A			6R4YKX		✓	✓
34BT7Y	Not Suitable			6XUAVV	Not Suitable		
38UU7D			✓	6ZHNJ7			✓
3BT73D			✓	76A98L			
3ETGXD		✓	✓	777MDR		✓	
3FJFCB	N/A			7ANQKW	Not Suitable		
3GWAUW	N/A			7CAMRM			✓
3JJPJ8		✓	✓	7HXC77	N/A		
3M79NB			✓	7XTU2V			✓
3RFGV8		✓		84YK7M	N/A		
3T9F4D	Not Suitable			8AN3MJ	N/A		
3ZBLK3			✓	8DJY4X		✓	
44QAZT	N/A			8GJAYX			✓
4CG24C		✓		8GLUTR	N/A		
4EMMRC			✓	8U3J73		✓	
4HAYYU		✓		8X7LRR	N/A		
4KBZZR	N/A			8YYJZX	N/A		
4RU9JH			✓	92MCCT	N/A		
4UH3XX			✓	93FYAQ	N/A		
4W6EYN	N/A			93HVEU			✓
4WQUD7	N/A			93XANP	N/A		
4Z262U	N/A			94AQ23	N/A		
66Y7KM			✓	96LLMU	N/A		
67AN4T			✓	9CNVUM	N/A		
67Q7HY	N/A			9G2FYM	N/A		

TABLE 4 - Item 3

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
9PR4R6			✓	CUAM8G			✓
9R27JV	N/A			D2AARN		✓	✓
9U6WNP			✓	D2NZGY	N/A		
A2HA6Z	N/A			D336EX	N/A		
A89KEX	N/A			D3JCKE	N/A		
AJ324Y	N/A			D4CATL		✓	
AJYFA6	N/A			D7JKPP	N/A		
AQX7TU	N/A			DA2MWV	N/A		
AQZQMN	N/A			DBDLNH			
AT8TTT	Not Suitable			DBX33Z		✓	✓
AW6A6M			✓	DEVPVN	N/A		
AWKVD4	N/A			DHUZRN			✓
AZMR3Y	N/A			DKHEFX	Not Suitable		
B6CQUY	N/A			DYLTHG	N/A		
BEKXWU	Not Suitable			EKVH9G	N/A		
BHM48T	N/A			ELNGGM			✓
BHZTCQ		✓		EXHUEY	N/A		
BMWE7E		✓	✓	F63BNN	N/A		
BUHA8J	N/A			F7ER4M			✓
BVTWY6	N/A			FC2UQJ			✓
C7J8L3	Not Suitable			FR9VKK	N/A		
C82ERK	Not Suitable			FRYKAB	N/A		
C9TDZR		✓	✓	FVWBAU	✓	✓	
CAPQQQ		✓		G2EVZD	N/A		
CGH4KX		✓		GANKCQ	N/A		
CN4YL3	N/A			GDACJM	N/A		
CPHFMM	N/A			GEGRRE	N/A		
CQVQ2E	N/A			GJXUYJ	N/A		
CTZKGB		✓	✓				

TABLE 4 - Item 3

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
GLL9NU		✓	✓	KQZAYF		✓	✓
GLZPMT	Not Suitable			KRC6HL		✓	✓
GNAZEQ	N/A			KUNPMP			✓
GNRTDE	N/A			KWRFXB	N/A		
GPY7VG	N/A			L49D2N	N/A		
GR9BBQ			✓	LAUBQC		✓	
GTNBUF	N/A			LB7ZVA	N/A		
H6CY3K	N/A			LCYX4F	N/A		
H9BCL4	N/A			LDUG6G	N/A		
H9T2AP	Not Suitable			LJJYJT	N/A		
HMR94K	N/A			LMLRL6	N/A		
HMWP2J			✓	LYUXAC			
HURPEQ	N/A			M2DCDC	Not Suitable		
HVKMLX		✓	✓	MBYH7A	Not Suitable		
HVM9FR				ME2B4E			✓
HWZKEW	N/A			MEK3BD	Not Suitable		
HYH2AM	Not Suitable			MGRKAA		✓	
HZG3FE	N/A			MPKTWL	N/A		
J4WWUQ	Not Suitable			MQCQ6R	Not Suitable		
J6PU2W			✓	MW6TAD		✓	✓
JEUYRT			✓	N2RZAW			✓
JFQHTU	N/A			NAMZQB		✓	✓
JMM9HB			✓	NHEB27	N/A		
JRKPTJ	N/A			NR6YW9			✓
JV3RZP	N/A			NTXX4E	N/A		
JWA9TT			✓	P3GLHE	N/A		
K7JVME	N/A			P99T39	Not Suitable		
KC4XNP	Not Suitable			PKZJGK		✓	✓
KEBDWG			✓	PNYZUE	N/A		

TABLE 4 - Item 3

WebCode		First Level Pattern(s)? Arch	Loop	Whorl
PWCPU8			✓	
PWXHBC				✓
PZ89FK	Not Suitable			
PZFKHG	N/A			
Q9MJMC	Not Suitable			
QC6YVJ	N/A			
QGW7FD	N/A			
QLD9MH	N/A			
QLTR8F	N/A			
R42E48	N/A			
R6J4UE	N/A			
R8QNFU	Not Suitable			
R9VF6L	Not Suitable			
T3C9MG	N/A			
T4LHB9	N/A			
T79WZH	N/A			
TB7BTY			✓	✓
TFD4FH	Not Suitable			
TG66JK	Not Suitable			
U36KJ9		✓	✓	✓
U8FNCV	N/A			
UQTF7K			✓	✓
V4MUQE	N/A			
V96EWZ	Not Suitable			
VAHQWQ	N/A			
VC6QTZ				✓
VHVZ3Y	Not Suitable			
VMN8G2	N/A			
VU98WD			✓	✓
VVKYT2				✓
WDGPMA	N/A			
WFN6W2	N/A			
WLTNEZ	N/A			
WQKT94				✓
WUPGRZ	N/A			
WYEX26	N/A			
WYYUAY	N/A			
X22YHD	N/A			
X4L7GZ	Not Suitable			
X7VV6H				✓
X92CK2			✓	
X9HPN6	N/A			
XB6AT9	N/A			
XTLHNH				
Y6EE8V			✓	✓
YA7NCM	N/A			
YCJV3B	N/A			
YJUGMX	N/A			
YJX2GT	N/A			
YKPZNZ			✓	✓
YLJLLW	N/A			
YNQ4FL			✓	
YT7EVB	N/A			
ZAJE2X				✓
ZD9JZW	N/A			
ZGAPF3				✓
ZJCMNA	Not Suitable			

TABLE 4 - Item 3

WebCode	First Level Pattern(s)? Arch	Loop	Whorl	WebCode	First Level Pattern(s)? Arch	Loop	Whorl
ZK3U4Z	Not Suitable						
ZRQECL			✓				
ZYN268	N/A						
ZYZ3LE							

Item 3 - Pattern Response Summary Total Participants: 233

1st Level	Arch	Loop	Whorl	Not Suitable	N/A
Total	2	39	66	32	116

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

Additional Comments

TABLE 5

WebCode	Additional Comments
34BT7Y	The identified elements do not have the necessary characteristics to carry out a first-level determination analysis (fundamental group).
34VC9L	Paper or cardborad is processed in laboratory.
3ETGXD	The ridge details on item 1 are of good quality but the mark is incomplete (only the upper part) and for the item 3, the mark is not clear in the center part (it seems to be a whorl but it can also be a loop)
3FJFCB	Through inspection, evaluation, and analysis of the surfaces of the evidence pieces, the following results were obtained: After working with the previously described evidence pieces to identify the development of fingerprints, different methods and products were applied, selected according to the characteristics of each piece of evidence to be analyzed. As a result of the process, positive results were obtained in the following sections: Evidence piece No. 1 showed a positive result in quadrant B, using the cyanoacrylate and black graphite powder method. Evidence piece No. 3 showed a positive result in quadrant D, using an iodine crystal ampoule. Evidence piece No. 2 did not show positive results in any of the sections analyzed, even after the application of various methods and reagents at the time of completing the analysis.
3GWAUW	No thermal printing on thermal paper, unclear which side was thermal pre-processing.
3JJPJ8	Item 1 was more consistent with being wiped down with something wet and air dried (similar to development I have seen after items have been swabbed for DNA) verses an item that has been wet and a print placed on the item. The wiping effect on the item did make it more difficult to visualize the print placed on the item after SGF and visually--extreme oblique lighting needed to be used. Fluorescent dye stain did not have the same issue.
3M79NB	The fingerprint on item1 was clearly visible, but the pattern could not be determined, because only the part above the center of the fingerprint was visible.
3T9F4D	had a very difficult time developing impressions on items 1 and 2. The impressions were very faint and minimal. The methods used to process items work well in our regular case work and with controls so not sure what happened with my test during impression placement.
66Y7KM	All items were physically and chemically processed for latent prints with positive results. Any observed or developed prints seemed to have been weak or faint. This was the case especially for Item 2 where the lighting had to be just right in order to capture a photograph of any observable friction ridge detail. Item 3's core was smudged/not visible but could potentially be observed as a whorl but it is possible to be a loop. A similar situation occurred with Item 1 where most ridge detail observed was above the core. The tip of the core was observed to be similar to that of a loop. All observed latent prints had been photographed and retained. These positives were documented in a subsequent lab report.
6P3RKU	1) N/A was selected for the pattern determination as it does not occur at our lab during the processing stages; instead, pattern type is determined during the analysis phase of a case. 2) The thermal paper (Item 3) was assessed for potential of utilizing both porous and non-porous (such as powder or a light fume of CA) processing techniques, but during assessment, it was determined the coating was thin enough/very lightly coated and only on one side that priority was given to porous techniques.
7CAMRM	I was disappointed in the development of the friction ridge detail on the thermal paper receipt. I utilized a standards pad as one control in addition to rubbing my fingers on my face as a second control and the standards pad control print instantaneously began to develop as soon as the iodine ampoule was broken. The other control from my face secretions also developed, taking a little bit longer of a time. The development of the friction ridge detail in section D took a very long time to occur and was notably extremely faint when compared to the development of both of the other controls. I also used a standards pad and facial secretions to create two controls for the lined sticky-note processes. Both of the controls worked as designed for DFO and NIN.

TABLE 5

WebCode	Additional Comments
7K3YNG	Items 2 and 3 were not tested because the paper is processed in the laboratory.
8GLUTR	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 12/3/2025 and was completed on the date of this report. EXAMINATION COMPLETED BY: [Name] Authorization Date: Forensic Scientist II 12/9/2025
8YYJZX	Item 1 was was covered in water stains (visualised clearly by the cyanoacrylate) as though it had been rinsed under a tap and left to air-dry. The print was very hard to make out.
92MCCT	Items 1 and 3 were transferred to the [Laboratory] Image Lab for latent photography. The latent lift card was submitted to the [Laboratory] Latent Squad for further analysis. Ite items were submitted to the Evidence Unit.
93HVEU	Ridge detail was present on all three items processed. Item #2's ridge detail was very faint and while photographed after the DFO step, was not sufficient for comparison. Item #1 detail that developed was tip area, so pattern type was not certain.
9U6WNP	Item 1: Ridge detail observed, however tip of finger, unable to say pattern. Item 2: Minimal development observed. Unable to determine pattern/ no value for comparison.
AJYFA6	After using iodine ampoule and black magnetic powder, fingerprints were developed on evidence items 1 and 3: 1. On evidence item number 1, a fingerprint fragment was developed in section B. 2. On evidence item number 2, no fingerprint was developed. 3. On evidence item number 3, a fingerprint fragment was developed in section D. 4. Photographic documentation is carried out with a metric witness.
AQX7TU	Items 2 and 3 were processed completely using the chemicals available with negative results. Tests prints for all of the chemicals were processed with positive results.
AQZQMN	N/A selected for pattern determination as our agency does not make pattern determinations as part of a latent processing request. Item 1 comments - the LP was extremely faint at VIS, very difficult to see/photo and was very borderline suitable for documentation - swipe marks across all four quadrants negatively impacted clarity of LP, especially after CA. Item 2 comment - the LP was very faint and barely developed using NIN, even after letting it sit for 48 hours; the LP did not develop using IND.
AWKVD4	After processing the evidence items for development, collection, and preservation, the following was observed: 1. On item number one, using black magnetic powder, a fingerprint developed in quadrant B. 2. On item number two, using black magnetic powder, no fingerprint developed. 3. On item number three, using an iodine pipette, a fingerprint developed in quadrant D.
BHZTCQ	See appropriate text areas in Item test tabs for processing details and methodological information. Additionally, see "Departure From Normal Protocol" notice from Quality Manager, [Name] for information on technical review of test report
BMWE7E	The latent print developed on item 1 was suitable for source identification, however not enough of the core developed to classify it.
BVTWY6	Items #1-3 were processed for friction ridge detail. All items were screened prior to processing for visible ridge detail and inherent fluorescence yielding the following results: Item #1, Marker A, ridge detail in quadrant B using FSIS II 245 nm light with a UV filter. Item #3, Marker A, ridge detail in quadrant D using 450nm with an orange filter. Item #1 was processed using cyanoacrylate, R6G dye stain, and black powder yielding the following results: Marker 1A, ridge detail in quadrant B. 1 latent print card collected from quadrant B. Item #2 was processed using indanedione and ninhydrin yielding the following results: Marker 2A, ridge detail in quadrant A. Item #3 was processed using indanedione yielding the following results: Marker 3A, ridge detail in quadrant D. No other forensic services were

TABLE 5

WebCode	Additional Comments
	provided.
C9TDZR	Additional areas of ridge detail were detected on Item 1 during CA fuming. These were checked by the proctor and documented in the processing case notes.
CAPQQQ	Item 1 underwater phone case showed friction detail ridge the tip area of the friction ridge, but the pattern area was not visible therefor a pattern was not determined.
CN4YL3	After treating samples 1, 2, and 3 for fingerprint development using: 1. Black graphite powder #1, a transparent, waterproof plastic cell phone case, divided into four (4) sections A-D. A fingerprint was identified in section B. 2. DFO solution #2, an adhesive note paper, divided into four (4) sections A-D. No fingerprint was developed. 3. Black magnetic powder and black graphite powder #3, a thermal paper receipt, divided into four (4) sections identified A-D. A fingerprint was identified in section D.
CUAM8G	Item 1 (Lab #1A) had no friction ridge detail develop; however it was observed to have apparent swipes (like a surface being cleaned) that were observed during the RUVIS examination.
D3JCKE	Completed on 11/18/2025 and Tech/Admin reviewed on 11/20/2025 by [Name].
DEVPVN	Information was provided from the predistribution items received on 07/27/2025. The new test was received on 10/26/2025.
EXHUEY	Through inspection, evaluation, and analysis of the surface(s) of the piece(s), the following results were obtained: 1. Powder Dusting on piece number 1 underwater phone case: a fingerprint was identified in section B. 2. Iodine Crystal and Ninhydrin on piece number 2 sticky note: no fingerprint was identified. 3. Powder Dusting on piece number 3 receipt (thermal) paper: a fingerprint was identified in section D.
FVWBAU	The only comment I have is that it would have been helpful to have a description of the item in the envelope on the exterior of the physical item, in addition to "Item 1, 2, 3" etc.
GLL9NU	ridge detail recovered on item 1, impression was the tip area of the finger therefore no pattern could be determined
GNRTDE	When trying to lift the area in section B of Item 001, a layer of the tape did not peel off, resulting in a portion of the area of ridge detail not lifting. I attempted to peel the layer off but attempts interfered with the ridge detail.
GTNBUF	The dry NIN PE process took over 96 hours before any latent prints were able to be observed on the thermal paper. On the blue sticky note, item was left in the NIN PE processing chamber for 30 minutes with no results.
H6CY3K	Item 1 - Nil ridge detail recovered, however a finger shaped handing mark observed in section D.
HMR94K	Used CrimeScope CS-16-500 Alternate Light Source(ALS) during processing.
HWZKEW	After treating the evidence pieces for fingerprint development and lifting: 1. Using black magnetic powder on piece #1, a fingerprint developed, in quadrant B. 2. Using iodine ampoule, DFO, and silver nitrate ampoule on piece #2, no fingerprint developed. 3. Using iodine ampoule on piece #3, a fingerprint developed, in quadrant D.
HYH2AM	por ausencia de calidad de las huellas no se pudo clasificar las huellas reveladas en los items 1 y 3. [Requested translation was not provided by time of publication.]
JEUYRT	When excamining item 1 we could detect friction ridge details in section A. The ridges were right on the outer corner and of a very poor quality.
JFQHTU	Through visual examination and the use of reagents 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 B. 2. That in the piece identified number two; no fingerprint was identified. 3. That in the piece identified number three; a fingerprint was identified in section D.

TABLE 5

WebCode	Additional Comments
JWA9TT	Photographs were taken of Item 2 to preserve the results of both processing techniques performed.
K7JVME	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 concluded. Evidence received but not analyzed is documented in the case record. 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 December 3, 2025 and concluded on the date this report was issued. This laboratory report shall not be altered, amended, or modified by any individual outside of the [Laboratory] Forensic Science and Evidence Services Division. [Name] FSII
KC4XNP	Item 1 was wiped down to be "cleaned" with apparently a wet object which left testing area with water droplets, streakiness, and water trails that were never cleaned before drying. SGF revealed that item 1 in the visible area was streaky and spotty droplets with water marks throughout quadrants area. This continued through the rest of the processing (RAM, White powder, and black powder) which made it very difficult to identify any ridge detail.
KWRFXB	The print on Item 2 (blue sticky note) was very faint during all processing methods.
LDUG6G	The marks were clear and well-defined, developing far better that what we typically obtain from items collected from actual crime scene.
LJJYJT	Through visual examination and the use of reagents 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 B. 2. That in the piece identified number two; a fingerprint was no show. 3. That in the piece identified number three; a fingerprint was identified in section D.
LMLRL6	Item 1, underwater cell phone case, was observed to have a print on quadrant B, which was photographed and submitted. Item 2, sticky note, did not have any prints observed throughout processing. Item 3, receipt paper, was observed to have a mark consistent with a print on quadrant D, however, was absent of ridge details.
N2RZAW	For Item 1, the latent exhibits recurving ridge flow consistent with a loop, however, due to distortion and incomplete ridge clarity, a partial whorl configuration cannot be excluded. Therefore, loop and whorl were selected per instructions allowing up to two pattern types.
NHEB27	Based on the observed processing results from item 3 (thermal paper), I believe that there may have been a print deposited in Quadrant D for this item that did not clearly develop. If so, I would be curious to know what deposition matrix was used on this item. If there was not a sebaceous component to this matrix, it would explain the poor results. Iodine fuming is the only process available to me for this type of surface, so no alternative testing could be performed. Because I could not discern any true ridges in the faint finger-shaped orange/brown mark that developed the results are being reported out as no friction ridge detail developed.
NR6YW9	Pattern type determination was not possible for the print in Item 1, as it appeared to be the tip of the finger/thumb.
PZFKHG	There was a significant lack of detail in the latent fingerprints left on the items processed. The sticky note was nearly impossible to collect or document. It makes processing an item rather difficult when the goal is to identify a latent print and there isn't one that has been deposited in a way that is visible.
QX48AE	Al ser criminalística, unicamente se utilizán reactivos físicos, por lo que los artículos 2 y 3 se envian al laboratorio de lofoscópía al requerir la aplicación de reactivos químicos especializados, para el revelado de huellas latentes. [Requested translation was not provided by time of publication.]
V96EWZ	Impressions from item 1 and item 3 were suitable for comparison but were from the tip area, so pattern type could not be determined.
VC6QTZ	The print on item one was from above the pattern area, so the pattern could not be determined.

TABLE 5

WebCode	Additional Comments
VMN8G2	Item #1 seemed to be wiped, wipe marks were visible post fuming.
VU98WD	Item 1 appeared to have been wet. Had streaks and water stains, which made it difficult to visualize the print that was placed on the evidence. I did try to capture the print through digital photography after visual examination and no ridge detail that was relatively of value was present. Also, Item 3 appeared to be recycled paper that was similar to thermal paper. It was hard to capture digitally with alternate light source with all the fibers in the paper.
WYEX26	A QC was completed for Cyanoacrylate in conjunction with processing Item 1 in the cyanoacrylate chamber. A QC was completed for Novec Ninhydrin, Ninhydrin HT, and MBD dye stain prior to use on evidence.
X22YHD	We did not have some of the chemicals necessary for sequential processing of the thermal paper, and of the sticky note after Ninhydrin. Physical Developer, Maleic Acid, and ThermaNin were requested. The Physical Developer and Maleic Acid arrived, but the ThermaNin was backordered and did not arrive before the due date so it could not be used on the thermal receipt paper. The receipt paper was not processed with regular Ninhydrin due to being thermal paper, and Ninhydrin needing heat and humidity to catalyze the reaction.
YCJV3B	Lots of background interference on item 1 (waterproof case). Looks like the plastic was cleaned, possibly with water, before placing print. the residue made it very difficult to observe the placed latent print.
YJX2GT	Processed Item 3 with ninhydrin only to avoid use of heat. Our procedures require the use of heat when using 1,2-indanedione, however a heat source is optional when using ninhydrin. Test QC prints on samples of different thermal paper that were left to develop in a closed drawer but failed to develop sufficiently. Ambient air tends to be more dry in this area during winter months. Test prints were processed again and allowed to develop in a plastic bag with a small slightly damp square of paper towel tucked in to one corner to provide some moisture in the environment and the tests produced good results so this process was replicated with Item 3 and achieved development of LP3-1.
YLJLLW	The "Date(s) Samples Analyzed: 11/05/2025-11/16/2025" for Item 3 timeframe consists of the following: The time the control was conducted, as being a several day process The time when the item was processed, as being a several day process
YNQ4FL	Item 1 had signs of having been wet, and could have been sent to vacuum metal deposition analysis, if it filled the requrements. However this analysis is not preformed i [State].
ZD9JZW	For Item 3, the control was left in a Temporary Storage Locker for 3+ days to determine if the Dry Ninhydrin Method was successful. Item 3 was also left in a temporary storage Locker for processing for 3+ days.
ZGAPF3	To further answer question 1-5, the recovered portion of the fingerprint was from the area above the core, therefore no pattern was able to be determined. Item 2 was processed with 1,2-Indanedione/Zinc Chloride after Ninhydrin in an attempt to have increased contrast by fluorescence. The Ninhydrin developed incredibly faint, to the point it was almost indetectable.
ZJCMNA	Although the friction ridge detail developed on item 001-003 (Item 3) had insufficient quality and quantity of information, the reagent controls utilized showed positive results.
ZK3U4Z	All three samples were processed using the powder technique in accordance with standard latent print examination procedures, one latent fingerprint was successfully developed on sample 1 and was subsequently marked, lifted and photograph for documentation purpose. No latent fingerprint were detect on sample 2 and sample 3.

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 25-5191: Latent Print Processing - Varied Surfaces

DATA MUST BE SUBMITTED BY **Dec. 22, 2025, 11:59 p.m. EST** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A WebCode: JJNR7G

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 weeks of 4 September 2025 and 2 October 2025, several items of evidence were recovered from a crime scene. Police have requested that you process the four quadrants within 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 a label displaying a CTS item number. Each item inside the packaging is marked with a grid, with sections labeled A, B, C, and D. A single latent print has been placed within a single labeled quadrant on each item.

- Do not process any packaging and protective material. Only process and report what is found within the marked grid.

- Predistribution labs receive more items than are intended to be included in the final test. The final test will only include three items.

Items Submitted (Sample Pack LAP2):
Item 1: Quadrants A-D within the clear section of the underwater phone case.
Item 2: Quadrants A-D within the lined sticky note.
Item 3: Quadrants A-D within the receipt (thermal) paper.

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

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

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

Item 1
Item 2
Item 3

Results for Item 1:

Quadrants A-D within the clear section of the underwater phone case.

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 or your laboratory does not use pattern determinations, please select "N/A".

☐ Arch ☐ Loop ☐ Whorl ○ Not suitable for determination ○ N/A

Results for Item 2:

Quadrants A-D within the lined sticky note.

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 or your laboratory does not use pattern determinations, please select "N/A".

☐ Arch ☐ Loop ☐ Whorl ○ Not suitable for determination ○ N/A

Results for Item 3:

Quadrants A-D within the receipt (thermal) paper.

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 or your laboratory does not use pattern determinations, please select "N/A".

☐ Arch ☐ Loop ☐ Whorl ○ Not suitable for determination ○ N/A

4.) Additional Comments

Note: *Please use appropriate punctuation to indicate the end of sentences, sections, and statements in the free-form space below. Extra spacing and returns used for separation within your text will not transfer and may cause your information to be illegible in the Summary Report. The use of lists and tabular formats to deliver information is also cautioned against, as these do not transfer.*

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

A2LA Certificate No.

Step 2: Complete the Laboratory Identifying Information in its entirety

Authorized Contact Person and Title

Laboratory Name

Location (City/State)