



Latent Print Processing - Varied Surfaces

Test No. 26-5190 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 259 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 which were either printed directly onto the object or by 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	Luggage Tag	Oil	C	Loop
2	Glossy Postcard	Acid & Oil	B	Loop
3	White Invitation Envelope	Acid	D	Whorl
Inked Impressions of Deposited Prints				
<u>Item 1</u> 		<u>Item 2</u> 		<u>Item 3</u> 

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. These images are intended to provide a representation of the print patterns only and are not 1:1.

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. Participants were supplied with three items of evidence divided into four sections (A-D), 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. 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.

Among the 259 participants who returned data, 247 tested all three items. Of those participants, 243 (99%) reported recovering a latent print in the designated location, consistent with the manufacturer's preparation information and the consensus results. One participant reported their results in Table 2: Development Methods and not within Table 1: Print Location. Their results are included in the counts found within the Summary Comments, but were not transferred to Table 1.

For Item 1, all 259 participants tested and recovered a latent print in section "C" of the luggage tag. Visual Examination (reported 220 times) was most often reported by participants as the first step during the development stage. Cyanoacrylate Fuming (206) was the prevailing method of development reported by participants, followed by Powder Dusting (164), Dye Stain (150), and Alternate Light Source (116) methods. During preservation, Photography (reported 204 times) was the prevailing method reported, followed by the Lifting (84) method.

For Item 2, all 259 participants tested and recovered a latent print in section "B" of the glossy postcard. Visual Examination (reported 220 times) was most often reported by participants as the first step during the development stage. Powder Dusting (213) was the prevailing method of development reported by participants, followed by Cyanoacrylate Fuming (195), Alternate Light Source (103), Dye Stain (71), and Ninhydrin (57) methods. During preservation, Photography (reported 200 times) was the prevailing method reported, followed by the Lifting (87) method.

For Item 3, 244 of 247 participants (99%) tested and recovered a latent print in section "D" of the white invitation envelope. The remaining 3 participants did not recover any ridge detail and twelve additional participants reported Item 3 as "Not Tested". Visual Examination (reported 210 times) was most often reported by participants as the first step during the development stage. Ninhydrin (210) was the prevailing method of development reported by participants, followed by Alternate Light Source (91), 1,2-Indanedione (77), DFO (60) and Physical Developer (40) methods. During preservation, Photography (reported 195 times) was the prevailing method reported, followed by the Scanning (35) method.

Table 4: First-Level Detail Findings 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 (Luggage Tag)

WebCode	Location	WebCode	Location	WebCode	Location
2CMZ87	C	4XVR3G	C	86LCW8	C
2DBJ2C	C	62RVAU	C	884Q3T	C
2F2VM4	C	64XJ67	C	92DBX2	C
2F43W4	C	697GGC	C	9MYBGV	C
2GWT2H	C	6998MV	C	9RRZV2	C
2JYQDB	C	6A3XTA	C	9TMF8Y	C
2KG7Z8	C	6FPEV7	C	9UBY36	C
2YQNE7	C	6GLV94	C	9VQBQ2	C
32VG7J	C	6PD428	C	9WLCX7	C
377UNH	C	6TBRA2	C	9WMQ4X	C
382CQJ	C	6TF2AE	C	9WZX9T	C
382VM2	C	6TGYKA	C	9XBAX4	C
3DT37A	C	6U7AB3	C	A4HN9T	C
3E3PN2	C	6U88LY	C	A82HAZ	C
3EJB8X	C	6XRKDU	C	A8XYLW	C
3JBHP8	C	76GRA6	C	AEWKBB	C
3V8UDY	C	76N6B3	C	AEYBHU	C
46T378	C	77JMC4	C	AG7PNZ	C
473PNY	C	79LLMW	C	AN6E8P	C
4APDH8	C	7KEBX3	C	ATHZEB	C
4EF4N3	C	7LBRAY	C	AYJAL4	C
4EJMC7	C	7PBTHA	C	B347KZ	C
4NQ3HE	C	7Q22KX	C	B8D9LW	C
4PGBJ3	C	7U66KD	C	BDMVNT	C
4QV937	C	7VD3P2	C	BHD6XQ	C
4UTEEB	C	7X6GGD	C	BQNTA4	C

Print Location

TABLE 1 - Item 1 (Luggage Tag)

WebCode	Location	WebCode	Location	WebCode	Location
BU8LK8	C	EJFULQ	C	JHADGW	C
BV2WD9	C	EJTXZV	C	JJ4NAX	C
BWR6EW	C	EKBR27	C	JNAG4T	C
C28Q84	C	EP74VP	C	JP6XGQ	C
C2KUNU	C	ETJJ7U	C	JQZP7G	C
C3XY9R	C	FBF9Z3	C	JYT79K	C
C8DJ2Y	C	FD4CGV	C	K4JZHR	C
CAHPLR	C	FLJW2U	C	K6FFVN	C
CDEVXW	C	FMEE3V	C	KAPTDM	C
CKWJY7	C	FN49TQ	C	KQVXZY	C
CRZB2V	C	FYPCZP	C	KRQG3Z	C
CU3NP2	C	FZXA3T	C	KXD8NV	C
D2FYF8	C	G68W6W	C	L8DG9Q	C
DFHQGY	C	G9N34Q	C	L8V3RN	C
DFMB63	C	GJT3MQ	C	LBMRKG	C
DH8WG3	C	GPTWNQ	C	LVNK7T	C
DL78D3	C	GQMMU6	C	M2QB9H	C
DNFJPT	C	HAXJLM	C	M3K2EW	C
DTPECU	C	HC4GXW	C	M4BAFK	C
DTQW8R	C	HCHHTQ	C	M4TNWN	C
DVAVEV	C	HDZWAT	C	M9KMXJ	C
DXH4PZ	C	HENZRL	C	M9KQMN	C
E7RR4Y	C	HML2HT	C	MPE9MK	C
E8HZ6M	C	J39ZLX	C	MQARNL	C
EAUQER	C	J3EGEK	C	MUTJZN	C
EDRL4Y	C	J7DRBK	C	MZU6GQ	C
EG9JJV	C	JDU34R	C		

Print Location

TABLE 1 - Item 1 (Luggage Tag)

WebCode	Location	WebCode	Location	WebCode	Location
MZUD2N	C	RQBPTH	C	VW7TK	C
N3GWEE	C	RQRD2J	C	W4KGH7	C
N4BMKT	C	RQTBCE	C	W6FZJ8	C
N62VLG	C	RWDYZB		W74HED	C
NKE4MK	C	RZWUZG	C	W8KF8D	C
NYGZWR	C	T8ELPL	C	WH2CVG	C
P9FD8C	C	T9REZB	C	WH4GFD	C
PAA4DQ	C	TDZE48	C	WHL3YA	C
PJ3RHN	C	TEXPWN	C	WJX8LR	C
PU7UTD	C	TFU6AL	C	WL6PJM	C
PVZKYR	C	TN3WEA	C	WLZ7WK	C
PWQTZG	C	TRLRFG	C	WQGVFG	C
Q2DM2R	C	TTH8RD	C	WR84G6	C
Q2ZJMM	C	TWEE4H	C	WRCEGH	C
Q3QRNB	C	TZDATP	C	WTJ4BE	C
QAT8MC	C	UM2J78	C	X36HXG	C
QUY8QP	C	UPA7T8	C	X4VQZ6	C
QVPFTE	C	URVFTD	C	X4YAM9	C
QXZBHC	C	UZXWNC	C	X73DNN	C
QY79UL	C	V7WWC8	C	XD6XZE	C
QYNUDH	C	V8QMHL	C	XJCN67	C
QYT2NQ	C	V9GVJA	C	XXCVAF	C
QZ3N8H	C	VDFZJA	C	Y4CUXB	C
QZJAQF	C	VPRB9K	C	YGJKZH	C
R2TADE	C	VQGJB9	C	YGLA8Z	C
RFA32L	C	VQMTBL	C	YHFH8C	C
RMTZGF	C	VRD2CA	C		

Print Location

TABLE 1 - Item 1 (Luggage Tag)

WebCode	Location	WebCode	Location	WebCode	Location
YKHGH6	C				
YLVTLF	C				
YLZBJE	C				
YM9X27	C				
YMQHK4	C				
YN3BJC	C				
YN4F48	C				
YYJ6PD	C				
Z3VW7B	C				
Z6LNB9	C				
Z7FGZZ	C				
Z8C367	C				
Z9M4NJ	C				
ZAUMPZ	C				
ZC4U8F	C				
ZDDGP8	C				
ZDU394	C				
ZJJ8UY	C				
ZJMZ79	C				
ZNE2QE	C				
ZU4UBA	C				
Response Summary: Item 1 (Luggage Tag) - Location					
				Responding Participants: 258	
A: 0	B: 0	C: 258	D: 0	None: 0	No Response: 1

Print Location

TABLE 1 - Item 2 (Glossy Postcard)

WebCode	Location	WebCode	Location	WebCode	Location
2CMZ87	B	62RVAU	B	92DBX2	B
2DBJ2C	B	64XJ67	B	9MYBGV	B
2F2VM4	B	697GGC	B	9RRZV2	B
2F43W4	B	6998MV	B	9TMF8Y	B
2GWT2H	B	6A3XTA	B	9UBY36	B
2JYQDB	B	6FPEV7	B	9VQBQ2	B
2KG7Z8	B	6GLV94	B	9WLCX7	B
2YQNE7	B	6PD428	B	9WMQ4X	B
32VG7J	B	6TBRA2	B	9WZX9T	B
377UNH	B	6TF2AE	B	9XBAX4	B
382CQJ	B	6TGYKA	B	A4HN9T	B
382VM2	B	6U7AB3	B	A82HAZ	B
3DT37A	B	6U88LY	B	A8XYLW	B
3E3PN2	B	6XRKDU	B	AEWKBB	B
3EJB8X	B	76GRA6	B	AEYBHU	B
3JBHP8	B	76N6B3	B	AG7PNZ	B
3V8UDY	B	77JMC4	B	AN6E8P	B
46T378	B	79LLMW	B	ATHZEB	B
473PNY	B	7KEBX3	B	AYJAL4	B
4APDH8	B	7LBRAY	B	B347KZ	B
4EF4N3	B	7PBTHA	B	B8D9LW	B
4EJMC7	B	7Q22KX	B	BDMVNT	B
4NQ3HE	B	7U66KD	B	BHD6XQ	B
4PGBJ3	B	7VD3P2	B	BQNTA4	B
4QV937	B	7X6GGD	B	BU8LK8	B
4UTEEB	B	86LCW8	B	BV2WD9	B
4XVR3G	B	884Q3T	B		

Print Location

TABLE 1 - Item 2 (Glossy Postcard)

WebCode	Location	WebCode	Location	WebCode	Location
BWR6EW	B	EKBR27	B	JNAG4T	B
C28Q84	B	EP74VP	B	JP6XGQ	B
C2KUNU	B	ETJJ7U	B	JQZP7G	B
C3XY9R	B	FBF9Z3	B	JYT79K	B
C8DJ2Y	B	FD4CGV	B	K4JZHR	B
CAHPLR	B	FLJW2U	B	K6FFVN	B
CDEVXW	B	FMEE3V	B	KAPTDM	B
CKWJY7	B	FN49TQ	B	KQVXZY	B
CRZB2V	B	FYPCZP	B	KRQG3Z	B
CU3NP2	B	FZXA3T	B	KXD8NV	B
D2FYF8	B	G68W6W	B	L8DG9Q	B
DFHQGY	B	G9N34Q	B	L8V3RN	B
DFMB63	B	GJT3MQ	B	LBMRKG	B
DH8WG3	B	GPTWNQ	B	LVNK7T	B
DL78D3	B	GQMMU6	B	M2QB9H	B
DNFJPT	B	HAXJLM	B	M3K2EW	B
DTPECU	B	HC4GXW	B	M4BAFK	B
DTQW8R	B	HCHHTQ	B	M4TNWN	B
DVAVEV	B	HDZWAT	B	M9KMXJ	B
DXH4PZ	B	HENZRL	B	M9KQMN	B
E7RR4Y	B	HML2HT	B	MPE9MK	B
E8HZ6M	B	J39ZLX	B	MQARNL	B
EAUQER	B	J3EGEK	B	MUTJZN	B
EDRL4Y	B	J7DRBK	B	MZU6GQ	B
EG9JJV	B	JDU34R	B	MZUD2N	B
EJFULQ	B	JHADGW	B	N3GWEE	B
EJTXZV	B	JJ4NAX	B		

Print Location

TABLE 1 - Item 2 (Glossy Postcard)

WebCode	Location	WebCode	Location	WebCode	Location
N4BMKT	B	RQTBCE	B	W6FZJ8	B
N62VLG	B	RWDYZB		W74HED	B
NKE4MK	B	RZWUZG	B	W8KF8D	B
NYGZWR	B	T8ELPL	B	WH2CVG	B
P9FD8C	B	T9REZB	B	WH4GFD	B
PAA4DQ	B	TDZE48	B	WHL3YA	B
PJ3RHN	B	TEXPWN	B	WJX8LR	B
PU7UTD	B	TFU6AL	B	WL6PJM	B
PVZKYR	B	TN3WEA	B	WLZ7WK	B
PWQTZG	B	TRLRFG	B	WQGVFG	B
Q2DM2R	B	TTH8RD	B	WR84G6	B
Q2ZJMM	B	TWEE4H	B	WRCEGH	B
Q3QRNB	B	TZDATP	B	WTJ4BE	B
QAT8MC	B	UM2J78	B	X36HXG	B
QUY8QP	B	UPA7T8	B	X4VQZ6	B
QVPFTE	B	URVFTD	B	X4YAM9	B
QXZBHC	B	UZXWNC	B	X73DNN	B
QY79UL	B	V7WWC8	B	XD6XZE	B
QYNUDH	B	V8QMHL	B	XJCN67	B
QYT2NQ	B	V9GVJA	B	XXCVAF	B
QZ3N8H	B	VDFZJA	B	Y4CUXB	B
QZJAQF	B	VPRB9K	B	YGJKZH	B
R2TADE	B	VQGJB9	B	YGLA8Z	B
RFA32L	B	VQMTBL	B	YHFH8C	B
RMTZGF	B	VRD2CA	B	YKHGH6	B
RQBPTH	B	VW7TK	B	YLVTLF	B
RQRD2J	B	W4KGH7	B		

Print Location

TABLE 1 - Item 2 (Glossy Postcard)

WebCode	Location	WebCode	Location	WebCode	Location
YLZBJE	B				
YM9X27	B				
YMQHK4	B				
YN3BJC	B				
YN4F48	B				
YYJ6PD	B				
Z3VW7B	B				
Z6LNB9	B				
Z7FGZZ	B				
Z8C367	B				
Z9M4NJ	B				
ZAUMPZ	B				
ZC4U8F	B				
ZDDGP8	B				
ZDU394	B				
ZJJ8UY	B				
ZJMZ79	B				
ZNE2QE	B				
ZU4UBA	B				
Response Summary: Item 2 (Glossy Postcard) - Location					
				Responding Participants: 258	
A: 0	B: 258	C: 0	D: 0	None: 0	Not Tested: 0
				No Response: 1	

Print Location

TABLE 1 - Item 3 (White Invitation Envelope)

WebCode	Location	WebCode	Location	WebCode	Location
2CMZ87	D	62RVAU	D	92DBX2	D
2DBJ2C	D	64XJ67	D	9MYBGV	Not Tested
2F2VM4	D	697GGC	D	9RRZV2	D
2F43W4	Not Tested	6998MV	D	9TMF8Y	D
2GWT2H	D	6A3XTA	D	9UBY36	D
2JYQDB	D	6FPEV7	D	9VQBQ2	D
2KG7Z8	D	6GLV94	D	9WLCX7	D
2YQNE7	D	6PD428	D	9WMQ4X	D
32VG7J	D	6TBRA2	D	9WZX9T	D
377UNH	D	6TF2AE	D	9XBAX4	D
382CQJ	D	6TGYKA	D	A4HN9T	D
382VM2	D	6U7AB3	D	A82HAZ	D
3DT37A	D	6U88LY	D	A8XYLW	Not Tested
3E3PN2	Not Tested	6XRKDU	D	AEWKBB	D
3EJB8X	D	76GRA6	D	AEYBHU	D
3JBHP8	D	76N6B3	D	AG7PNZ	D
3V8UDY	D	77JMC4	D	AN6E8P	D
46T378	D	79LLMW	None	ATHZEB	D
473PNY	D	7KEBX3	D	AYJAL4	D
4APDH8	D	7LBRA7	D	B347KZ	D
4EF4N3	D	7PBTHA	D	B8D9LW	D
4EJMC7	D	7Q22KX	D	BDMVNT	D
4NQ3HE	D	7U66KD	D	BHD6XQ	D
4PGBJ3	D	7VD3P2	D	BQNTA4	D
4QV937	D	7X6GGD	D	BU8LK8	D
4UTEEB	D	86LCW8	D	BV2WD9	D
4XVR3G	D	884Q3T	D		

Print Location

TABLE 1 - Item 3 (White Invitation Envelope)

WebCode	Location	WebCode	Location	WebCode	Location
BWR6EW	D	EKBR27	D	JNAG4T	D
C28Q84	D	EP74VP	D	JP6XGQ	D
C2KUNU	D	ETJJ7U	D	JQZP7G	D
C3XY9R	D	FBF9Z3	D	JYT79K	Not Tested
C8DJ2Y	D	FD4CGV	D	K4JZHR	D
CAHPLR	Not Tested	FLJW2U	D	K6FFVN	D
CDEVXW	D	FMEE3V	D	KAPTDM	Not Tested
CKWJY7	D	FN49TQ	D	KQVXZY	D
CRZB2V	D	FYPCZP	D	KRQG3Z	D
CU3NP2	D	FZXA3T	D	KXD8NV	D
D2FYF8	D	G68W6W	D	L8DG9Q	D
DFHQGY	D	G9N34Q	D	L8V3RN	D
DFMB63	D	GJT3MQ	D	LBMRKG	D
DH8WG3	D	GPTWNQ	D	LVNK7T	D
DL78D3	D	GQMMU6	D	M2QB9H	D
DNFJPT	D	HAXJLM	D	M3K2EW	D
DTPECU	D	HC4GXW	D	M4BAFK	D
DTQW8R	D	HCHHTQ	D	M4TNWN	D
DVAVEV	D	HDZWAT	D	M9KMXJ	D
DXH4PZ	D	HENZRL	D	M9KQMN	D
E7RR4Y	D	HML2HT	D	MPE9MK	D
E8HZ6M	D	J39ZLX	D	MQARNL	D
EAUQER	D	J3EGEK	D	MUTJZN	D
EDRL4Y	D	J7DRBK	D	MZU6GQ	D
EG9JJV	D	JDU34R	D	MZUD2N	D
EJFULQ	D	JHADGW	D	N3GWEE	D
EJTXZV	D	JJ4NAX	D		

Print Location

TABLE 1 - Item 3 (White Invitation Envelope)

WebCode	Location	WebCode	Location	WebCode	Location
N4BMKT	D	RQTBCE	D	W6FZJ8	D
N62VLG	D	RWDYZB		W74HED	D
NKE4MK	D	RZWUZG	D	W8KF8D	D
NYGZWR	D	T8ELPL	D	WH2CVG	D
P9FD8C	D	T9REZB	D	WH4GFD	D
PAA4DQ	D	TDZE48	None	WHL3YA	D
PJ3RHN	D	TEXPWN	D	WJX8LR	D
PU7UTD	D	TFU6AL	D	WL6PJM	D
PVZKYR	D	TN3WEA	None	WLZ7WK	D
PWQTZG	D	TRLRFG	D	WQGVFG	D
Q2DM2R	D	TTH8RD	Not Tested	WR84G6	D
Q2ZJMM	D	TWEE4H	D	WRCEGH	D
Q3QRNB	D	TZDATP	D	WTJ4BE	D
QAT8MC	D	UM2J78	D	X36HXG	D
QUY8QP	D	UPA7T8	Not Tested	X4VQZ6	D
QVPFTE	D	URVFTD	Not Tested	X4YAM9	D
QXZBHC	D	UZXWNC	D	X73DNN	D
QY79UL	D	V7WWC8	D	XD6XZE	D
QYNUDH	D	V8QMHL	D	XJCN67	D
QYT2NQ	D	V9GVJA	D	XXCVAF	D
QZ3N8H	D	VDFZJA	D	Y4CUXB	D
QZJAQF	D	VPRB9K	D	YGJKZH	D
R2TADE	Not Tested	VQGJB9	D	YGLA8Z	D
RFA32L	D	VQMTBL	D	YHFH8C	D
RMTZGF	D	VRD2CA	D	YKHGH6	D
RQBPTH	D	VW7TK	D	YLVTLF	D
RQRD2J	D	W4KGH7	D		

Print Location

TABLE 1 - Item 3 (White Invitation Envelope)

WebCode	Location	WebCode	Location	WebCode	Location
YLZBJE	D				
YM9X27	Not Tested				
YMQHK4	D				
YN3BJC	D				
YN4F48	D				
YYJ6PD	D				
Z3VW7B	D				
Z6LNB9	D				
Z7FGZZ	D				
Z8C367	D				
Z9M4NJ	D				
ZAUMPZ	D				
ZC4U8F	D				
ZDDGP8	D				
ZDU394	D				
ZJJ8UY	D				
ZJMZ79	D				
ZNE2QE	D				
ZU4UBA	D				
Response Summary: Item 3 (White Invitation Envelope) - Location					
Responding Participants: 258					
A: 0	B: 0	C: 0	D: 243	None: 3	Not Tested: 12
No Response: 1					

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
2CMZ87	Visual Examination	Visual examination to determine what the best method of development to use
	Cyanoacrylate Fuming	A positive control was conducted, 7 min fuming, visually examined after development to see if any possible area was developed
	Powder Dusting	Magnetic powder was used to develop the latent print
2DBJ2C	Visual Examination	Diffrent lights sources and filters, entire range of optical radiation.
	Cyanoacrylate Fuming	80%-Humidity heater-130° C, Time 10 minutes, temperature inside of the chamber 25°C. (chamber Safefume CA30s)
	Basia Yellow 40	Spray, 350 nm - 530 nm, yellow and orange filters.
2F2VM4	Visual Examination	Item 1 was photographed. A visual inspection was then conducted, during which an impression was observed in quadrant C and photographed.
	Alternate Light Source	White alternating light was used to observe the impression in quadrant C, and it was photographed.
	Black magnetic powder	Black magnetic powder was applied, and a distinct fingerprint was developed and observed in quadrant C, between 5-10 seconds.
2F43W4	Visual Examination	Oblique lighting, detail visible in quadrant "C".
	Cyanoacrylate Fuming	Fumed for approximately 30 minutes, detail further visible in quadrant "C".
	Powder Dusting	Standard black powder, ridge detail further developed in quadrant "C".
2GWT2H	Visual Examination	Observed a print in quadrant C during the visual examination phase. Took images on DCS camera before proceeding.
	Cyanoacrylate Fuming	Item was in the enclosed chamber with the superglue and hot water for 12 minutes. I used a Quality Control print on the glass of the chamber concurrently with the Cyanoacrylate Fuming. After Cyanoacrylate Fuming I took more images on DCS camera because the ridge detail was enhanced in quadrant C before proceeding.
	Powder Dusting	Powdered both sides of item with black powder using a sterile fingerprint brush and sterile powder. Collected 2 latent print lift cards from quadrant C using lift tape. Item placed back in original packaging and "CAUTION: EVIDENCE CHEMICALLY TREATED" sticker was placed on the packaging.
2JYQDB	Visual Examination	Utilized white light, green laser, UV
	Lumicyano	Lumicyano (fluorescent CA) - processed for 15 minutes
	Dye Stain	BY
2KG7Z8	Visual Examination	
	Cyanoacrylate Fuming	Superglue fuming.
	Dye Stain	Basic Yellow 40-dye stain.
	Alternate Light Source	450nm.

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
2YQNE7	Visual Examination	On 04/15/2026, a visual examination was performed on the item under fluorescent lighting, and no latent prints were observed.
	Alternate Light Source	On 04/15/2026, a visual examination was performed on the item under Alternative Light Source and a latent print was observed.
	Cyanoacrylate Fuming	On 04/15/2026, the item was processed through Cyanoacrylate fuming in the CyanoSafe chamber for 20 minutes with distilled water in the cup heater element, 18 drops of Cyanoacrylate in an aluminum weigh boat placed on the flat heating pad, and a test strip was hung. After the 20 minutes of fuming the Cyanosafe chamber was opened, and the evidence was left to rest for 60 minutes. A visual examination was performed after, and a latent print was observed.
	Dye Stain	On 04/15/2026, after the Cyanoacrylate fuming process was completed and left to rest 60 minutes, the item was soaked in the fluorescent dye stain and then rinsed with tap water then patted dry and left to continue drying in the fume hood. After the items were completely dry a visual exam was performed under blue light with an orange filter (450). A latent print was observed
	Powder Dusting	On 04/15/2026, after the dye stain process the item was placed under a fume hood to dust with black powder. After powder dusting a visual examination was done and a latent print was observed.
32VG7J	Visual examination, Forensic Light Source, Cyanoacrylate Fuming, Dye Stain	4/2/26: Photo lift #1: Prior to chemical processing visible ridge detail was observed on the item in Quadrant C and photographed as photo lift #1. With initial photographic documentation complete, Item 1 was exposed to Cyanoacrylate fumes. Further development of ridge detail was noted after the completion of the Cyanoacrylate process and additional photographic documentation was performed. In an attempt to further develop ridge detail, MRM10 dye stain was applied to the case evidence and additional photographic documentation of photo lift #1 was performed. The Cyanoacrylate, Forensic Light Source, and MRM10 dye stain were all tested prior to being applied to case evidence and they performed as expected.
377UNH	Visual Examination	During initial documentation processes, under ambient room lighting conditions, a mark with latent fingerprint ridge detail (FRD) was observed in quadrant C and determined suitable for photography. This was assigned the unique identifier number "FEN102403408". Substrate appeared to possess non-porous properties.
	Alternate Light Source	Examined using a variety of Foster and Freeman (F+F) Crime-lites of white (W, 400-700nm), blue (B, 420-470nm), green (G, 480-560nm) and with a combination of viewing filters (orange, OG550 and yellow, GG495). FRD recorded photographically.
	Cyanoacrylate Fuming	Item treated in a F+F MVC1000 with Cyanobloom for 5 minutes fuming time (control used).
	Alternate Light Source	Examined using a variety of F+F Crime-lites (white, ultraviolet and blue). FRD recorded photographically.
	Dye Stain	Spray application of surface conducted with rhodamine-6G (R6G) HFE.
	Alternate Light Source	Examined using Crime-lite G+522nm trimming filter and OG550 viewing filter, to examine if background interactions with R6G might be altered by solvent/dye combination. However background fluorescence of plastic was too strong and no improvement to ridge detail contrast was obtained.
	Powder Dusting	Black magnetic powder was applied to the item surface. FRD recorded photographically.

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
382CQJ	Visual Examination Cyanoacrylate Fuming Dye Stain Dye Stain Methanol Rinse	Used magnifying glass and white light No photos taken MRM-10: two photos taken Basic Yellow: two photos taken Methanol Rinse: two photos taken
382VM2	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source	Air Science Safefume cabinet, 15 minutes, 80% humidity, 73°F RAY dye stain (Rhodamine 6G, Ardrex, Basic Yellow 40), Isopropanol base BrightBeam laser, 445 and 532nm, yellow and orange goggles
3DT37A	Visual Examination Cyanoacrylate Fuming Dye Stain	Used white light to view evidence for possible patent prints; patent print observed in Quadrant C; photographed print using Nikon digital camera and white oblique light. Placed evidence in fuming chamber with cyanoacrylate and then observed for developed latent prints; latent print observed in Quadrant C; photographed print using Nikon digital camera and white oblique light. Rinsed evidence with Rhodamine 6G dye stain and methanol; observed for developed latent prints using alternate light source (Dual 77+ laser (green)) and orange goggles; latent print observed in Quadrant C; photographed print using Nikon digital camera, alternate light source, and orange filter.
3E3PN2	Powder Dusting	Dusted for fingerprints with magnetic powder
3EJB8X	Visual Examination Cyanoacrylate Fuming Magnetic powder	The item of evidence was photographed in the original packaging. Once the luggage tag was removed from the packaging, the item was photographed and visually examined. The luggage tagged was then placed into the benchtop superglue chamber to be processed for 30 mins. There was also a positive control placed in the chamber, along with the tin with 10-15 drops of superglue. There was friction ridge development, and the luggage tag was photographed again. There was friction ridge development on the luggage tag in quadrant C. I used magnetic powder to enhance the print.
3JBHP8	Visual Examination Cyanoacrylate Fuming Powder Dusting	Cyanoacrylate Lot # 031125-03; MVC FFLEX S1 fuming chamber. Parameters: 4 drops of cyanoacrylate (~0.1g), 80% relative humidity, 120 degrees Celsius, 10-minute purge time. Magnetic Powder Lot # 052423-01; magnetic brush.
3V8UDY	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting	suitable latent observed 455 nm and 520 nm no additional ridge detail observed Vacuum chamber 40 minutes suitable latent observed magnetic powder suitable latent observed

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
46T378	Visual Examination	Visual examination under various light sources: daylight, direct/oblique lighting (flashlight), UV, LASER (532nm and 485nm), ALS (495nm) and short UV with an FSIS camera.
	Cyanoacrylate Fuming	Processed in superglue chamber for ~10 minutes (gauged time by test print), analyzed with short UV light and an FSIS camera.
	Dye Stain	Used Ardrex (Isopropanol) dye stain (applied via a squirt bottle) to cover the entire surface of the item, let dry, examined under UV light.
	Dye Stain	Used Rhodamine dye stain (applied via a squirt bottle) to cover the entire surface of the item, let dry, examined under LASER at 532nm (green).
	Powder Dusting	Used carbon black powder and a powder brush, applied to entire item with a light dusting motion to make sure not to disrupt the print.
473PNY	Visual Examination	RD (pattern type unknown) noted in quad. C No RD noted in quad. A, B or D
	Alternate Light Source	No additional RD noted
	Cyanoacrylate Fuming	No additional RD noted
	Powder Dusting	Magnetic black powder - RD (right loop/arch) RD noted in quad. C No RD noted in quad. A, B, or D
	Dye Stain	Rhodamine 6G, illuminated with 520 nm light source - No additional RD noted.
4APDH8	Visual Examination	Disclosing of a fingerprint but without details. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white.
	Cyanoacrylate Fuming	Improvement in fingerprint quality after use cyanoacrylate fuming. The best visible in the light source 505 nm and white.
	Dye Stain	No improvement in fingerprint quality after use Basic Yellow 40. The fingerprint is visible the best in the light source 415 nm with yellow goggles.
4EF4N3	Visual Examination	negative
	Cyanoacrylate Fuming	negative
	Dye Stain	MBD positive (c)
	Powder Dusting	black powder
4EJMC7	Visual Examination	Used flashlight, UV, short UV, and laser to visualize
	Cyanoacrylate Fuming	Superglued for 15 minutes then visualized with short UV
	Dye Stain	Used ardrex then visualized with UV
	Dye Stain	Used rhodamine then visualized with laser
	Powder Dusting	Used black powder
4NQ3HE	Visual Examination	One area of visible ridge structure on the luggage tag in quadrant C.
	Alternate Light Source	Full Spectrum Imaging System (FSIS) - One area of ridge structure observed in quadrant C. A photograph was taken.
	Cyanoacrylate Fuming	Foster and Freeman MVC 1000, 15 minutes at 120 degrees Celsius and 80% humidity. A positive control was used and passed. No additional areas of ridge structure were developed.
	Alternate Light Source	Full Spectrum Imaging System (FSIS) - The area of ridge structure in quadrant C was of equal or higher quality, so an additional photograph was taken.
	Dye Stain	RAY (Rhodamine 6G, Ardrex, Basic Yellow) mixture dye stain was used.
	Alternate Light Source	Crimescope, viewed with yellow goggles at 415 nm and 455 nm. The area of ridge structure in quadrant C was of higher quality, so additional photographs were taken.

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
4PGBJ3	Visual Examination	Visual examination of the item for ridge detail was completed using a flashlight, with the source of light at various angles, yielding negative results.
	Cyanoacrylate Fuming	Using the Air Science Safe Fume Atmospheric Fuming Chamber: The evidence was placed within the chamber with a test print. Cold tap water was added to the humidifier to facilitate the CA polymerization to humidify the evidence prior to exposure to CA fumes. An aluminum dish was on the heating element with liquid CA, and then the system was turned on and put into operation. After the cycle was complete, visualization yielded a faint but present latent print in section C. Positive results noted to the control print.
	Dye Stain	Rhodamine 6G (R6G) is a fluorescent dye stain used to enhance CA developed latent prints. R6G fluoresces in a narrow range, 450 – 480nm, and is best suited for use with the Coherent TracER Laser. After the item was CA fumed, R6G was applied (under a fume hood) by spraying the item in the R6G. The item was then allowed to dry. The item was then examined using the TracER Laser utilizing appropriate goggles. The item was then rinsed in attempt to improve clarity, but there was no visualization of any latent print detail. Positive results noted to the control print.
	Powder Dusting	Powder processing was completed with magnetic powder, yielding a latent print in section C, and detail was recovered with latent print tape.
4QV937	Visual Examination LUMICYANO	Visible light and LASER at 532nm light for visual exam. Fumed in CAPture-BT chamber for 17min at 75% relative humidity. Viewed with 490nm light and orange goggles/filter.
4UTEEB	Visual Examination	Viewed at white light and CrimeScope set to 350nm, 455nm, and 515nm with appropriate barrier filters
	Cyanoacrylate Fuming	10 mins
	Dye Stain	R6G, viewed at 515nm with orange and green barrier filters stacked
4XVR3G	Visual Examination	White light
	Cyanoacrylate Fuming	Cyanoacrylate cabinet 1000 with cyanobloom - Auto cycle
	Alternate Light Source	Polilight - multiple wave lengths
	Dye Stain	Rhodamine
	Alternate Light Source	Polilight - 505nm with orange filter
	Dye Stain	Ardrox
	Alternate Light Source	Polilight - UV 350nm
	Powder Dusting	Black powder
62RVAU	Alternate Light Source	Polilight - multiple wave lengths
	Cyanoacrylate Fuming	Automated chamber that fumes for approximately 15 minutes. Simultaneous reliability test performed.
	MBD	Applied to surface using plastic squirt bottle after successful reliability test.
64XJ67	Alternate Light Source	Visual exam at 450nm after successful reliability test
	Visual Examination	Ambient and white light examination
	Alternate Light Source	Multiple wavelengths - from long wave uv through to IR
	Cyanoacrylate Fuming	Visualised with white light
	Vacuum Metal Deposition	Visualised with white light
	Dye Stain	R6G, Sudan Black, GV and BY40 - Visualised with white light and laser
64XJ67	Powder Dusting	Visualised with white light

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
697GGC	Visual Examination Cyanoacrylate Fuming Powder Dusting	Visual examination of the luggage tag. No ridge detail observed. Fumed the item in the chamber for approximately 10 minutes with hot water for humidity. No ridge detail observed after fuming. Applied black powder to the luggage tag with a disposable brush and developed ridge detail in quadrant C. No other ridge detail observed.
6998MV	Visual Examination Cyanoacrylate Fuming Visual Examination Dye Stain Alternate Light Source Wet Powder Suspension Visual Examination	Examined item using ambient lighting and a flashlight. Used a vacuum chamber set to 25 PSI and fumed for twenty minutes, let cure for 15 minutes. Examined item using ambient lighting and a flashlight. Used a combination dye stain (Rhodamine 6G, Ardrex P-133D, MBD) to spray item and then allowed item to dry in fume hood. Used Foster+Freeman Crime-Lite Blue-Green (445-510nm) with orange goggles. Used in-lab made Powder Suspension Solution, applied solution via a brush, allowed to sit on substrate for approximately 10-15 seconds before rinsing off with tap water. Examined item using ambient lighting.
6A3XTA	Visual Examination Cyanoacrylate Fuming Powder Dusting	various wavelengths of light approx. 9 min black magnetic powder
6FPEV7	Powder Dusting	Black magnetic fingerprint powder
6GLV94	Visual Examination	
6PD428	Cyanoacrylate Fuming Ardrox	Ardrox + 350nm + yellow filter
6TBRA2	Cyanoacrylate Fuming Dye Stain Powder Dusting	appro. 10 min fuming RAM Magnetic powder
6TF2AE	Visual Examination Cyanoacrylate Fuming Dye Stain	white light examination fuming chamber then white light examination R6G-methanol (one squirt of solution applied, then stopped due to ink running on substrate) then switched to R6G-water application then laser examination (with orange filter goggles)
6TGYKA	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain	White Light - a smudge was observed in Quadrant C. Dual 77 Laser 520nm (green) and 445nm (blue) lights - no prints observed. Processed in AirScience Cyanoacrylate Fuming Tank for 15 minutes under 80% humidity - a smudge was observed in Quadrant C. Used Rhodamine 6G (viewed with Dual 77 Laser 520nm (green light)) - a print was observed and photographed in Quadrant C. Followed up with a Methanol rinse (viewed with Dual 77 Laser 520nm (green light)) - a print was observed and photographed in Quadrant C.

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
6U7AB3	Visual Examination Alternate Light Source Polycyano Alternate Light Source Basic Yellow 40	Fingerprint visible in area C, photographed different light sources & different filters (UV, IR, Blue, Green, Violet) Fuming with polycyano (two scoops), photographed different light sources & different filters (UV, IR, Blue, Green, Violet), no better results Basic Yellow 40
6U88LY	Powder Dusting	- Wear personal protective equipment (PPE) and check if the package was well sealed; - Apply a digital photography with camera canon 1100D to record the received package; - Open the package which contains 3 items; - Apply a digital photography with camera canon 1100D for the item 1; - Open the item 1 which contains Quadrants A-D within the luggage tag; - Apply a digital photography with camera canon 1100D on the luggage tag, - Proceed with visual examination on the luggage tag; - Apply Fluorescent powder by using camel hair brush after wearing appropriate ppe; - Apply a digital photography with camera, reproduction table with ruler closer to the latent print for recording the developed latent print; - Enhancement by using DCS-5 machine with 8×4(2) light source of 445 nm GG495 and filter of OG 590 AG; - Apply a digital photography using DCS-5 camera Nikon D6 to save enhanced latent print developed; Processing time for all steps was about 40 minutes.
6XRKDU	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source	examined under lighted magnification / visible ridge detail in quadrant C 15 minutes in fuming chamber / 15 minutes purging chamber / examined under lighted magnification / visible ridge detail in quadrant C sprayed with 7-P-methoxybenzylamino-4-nitrobenz-2-oxa-1-3-diazole (MBD) examined with alternate light source (ALS) at 450 nm under magnification / visible ridge detail in quadrant C
76GRA6	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain Powder Dusting	Rhodamine 6G
76N6B3	Visual Examination Cyanoacrylate Fuming Powder Dusting	Item 1 was visually examined using oblique lighting in our processing room and no visible prints were observed. Item 1 was then chemically processed using Superglue Fuming (lot# SGF052224DH, positive test print) The chamber was set at 55% humidity for 26 minutes and purged for 5 minutes. After superglue fuming was complete, item 1 was examined and ridge detail was observed in quadrant C. Item 1 was further processed using magnetic black powder, which enhanced the ridge detail observed in quadrant C.
77JMC4	Alternate Light Source Cyanoacrylate Fuming Powder Dusting	FSIS, Preprocessing and after cyanoacrylate, used UV light and camera with UV filter Portable fuming chamber 1 for 15 minutes Black magnetic powder, brush method for a few seconds
79LLMW	Cyanoacrylate Fuming Powder Dusting	after passing a quality control (lot# 202409041) Magnetic powder

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TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
7KEBX3	Visual Examination Cyanoacrylate Fuming Dye Stain	Polilight PL500 Hot plate 120 °C, hum. 85%, time 20 min. Basic Yellow 40
7LBRAY	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain	
7PBTHA	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source Powder Dusting Powder Dusting	Preserved via photography. Fumed for approximately 10 minutes. Rhodamine 6G Aqueous Multiple wavelengths used to preserve via photography. Magnetic powder- preserved via photography and a lift. Black powder
7Q22KX	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain	FLS exams RMO dye stain
7U66KD	Visual Examination Cyanoacrylate Fuming Powder Dusting	I processed one purple plastic tag with handwritten letters (A-D) inside quadrants on one side of the tag. Using a new pair of disposable gloves, I removed the item from the packaging and placed it onto the white piece of butcher paper. I observed ridge detail on the item, located in quadrant C. Prior to taking photos, I disinfected the station and camera equipment, placed butcher paper on top of station, and changed to a new pair of disposable gloves to transfer evidence into DCS-5 room. After I finished taking photographs of the ridge detail during the visual examination stage, I began the superglue fuming process. I disinfected inside the superglue fuming chamber using 10 percent bleach solution and placed a piece of white butcher paper inside. I also disinfected the metal clasp used to hold onto the purple tag with an ethanol solution. I checked the expiration date for the superglue, and after confirming that the reagent was not expired, placed it into an aluminum dish tin which was placed on top of the heating panel. I also heated up distilled water into a cylinder beaker and placed it inside the chamber. Lastly, I placed a known print onto the glass inside the chamber as a quality control (QC). I fumed for 6 minutes. I confirmed that the QC worked and documented the results in my notes. I did not observe additional ridge detail on the item. No additional photographs taken at this stage. I disinfected the downdraft using an ethanol solution, placed a piece of white butcher paper, one disposable fingerprinting brush, and black powder onto the downdraft. I applied black powder onto the item. To preserve the ridge detail located in Quadrant C, I used lift tape and placed the lift tape with ridge detail onto a lift card.
7VD3P2	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	Visualized using white, green and blue light. One latent print observed. Results best with white light. Photograph taken using white light. Visualized using white light. Applied RAM Dye Stain visualized using a blue light (445nm) and yellow filter. Applied black magnetic powder visualized using a white light.

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
7X6GGD	Visual Examination	Prior to opening the packaging containing item 1, I decontaminated my workstation using bleach and placed two butcher paper on top of the workstation. I opened the packaging containing item 1. With clean gloved hands, I pulled item 1 out and visually examined the item. I saw ridge detail in quadrant C. I went over to the DCS-5 and took images of the ridge detail.
	Cyanoacrylate Fuming	Prior to placing the item into the Cyanoacrylate fuming chamber, I placed a butcher paper inside the chamber and decontaminated a hanging hook with ethanol. I placed a quality control print on the glass of the Cyanoacrylate fuming chamber door. With clean gloved hands, I then placed item 1 onto a hanging hook, which hung inside the chamber. I ran the Cyanoacrylate fuming chamber at approximately 80% relative humidity and 120 degrees Celsius for the vaporization of superglue for approximately 25 minutes.
	Powder Dusting	With clean gloved hands, I placed item 1 onto a butcher paper. I placed a sterile fingerprint powder brush and black powder onto the butcher paper as well. I then powdered the entire surface of item 1 and lifted 2 latent print lift cards with tape lifts from quadrant C.
	[No Methods Reported.]	I swabbed the entire surface of item 1 for possible DNA evidence using one swab. I placed the swab into a coin envelope, which was then placed into a bigger envelope.
86LCW8	Visual Examination	Visual examination with oblique light showed possible latent print in quadrant C. No trace evidence was noted.
	Alternate Light Source	Crimelite using wavelengths 455nm - 515nm. No visible fluorescing prints.
	Cyanoacrylate Fuming	CyanoSafe Atmospheric chamber for 20 minutes.
	Powder Dusting	Used black powder. Latent print developed in quadrant C.
884Q3T	Visual Examination	11:20, no suitable ridge detail
	Alternate Light Source	1133, Laser 445 nm & 520 nm, no suitable ridge detail
	Cyanoacrylate Fuming	1215, Vacuum chamber, 40 minute fume time, no suitable ridge detail
	Powder Dusting	1317, Magnetic Powder, Suitable ridge detail
92DBX2	Visual Examination	Exam with white light and 350-650nm
	Cyanoacrylate Fuming	Fuming chamber processing time 12 minutes, with 75% humidity
	Basic Yellow 40	Item sprayed BY 40 solution and exam blue light
9MYBGV	Powder Dusting	Black magnetic powder. Standard application
9RRZV2	Visual Examination	Using oblique lighting, laser, long and short wave UV with FSIS
	Cyanoacrylate Fuming	Fumed for approximately 10 minutes then visualized using the FSIS with short wave UV
	Dye Stain	Ardrox dye stain with UV light
	Dye Stain	Rhodamine dye stain with laser light
	Powder Dusting	Black fingerprint powder
9TMF8Y	Visual Examination	negative
	Cyanoacrylate Fuming	negative
	Dye Stain	MBD - positive item 1 (C)
	Ninhydrin	positive (D)
	Physical Developer (PD)	negative
	Powder Dusting	black magnetic powder - positive

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
9UBY36	Visual Examination	In daylight fingerprint has been disclosed - section C. In whole spectrum of Polilight PL500 no fingerprint fluorescence.
	Cyanoacrylate Fuming Dye Stain	Improved fingerprint quality has been achieved - section C. Type of dye stain - Basic Yellow 40. Improved fingerprint quality has been achieved - section C.
9VQBQ2	Visual Examination	Examine the item as is, using ambient lighting, flashlight, UV light, FSIS, ALS, and LASER.
	Cyanoacrylate Fuming	Superglued the item in the superglue cabinet along with a test print for about 10 minutes.
	Dye Stain	Dye stained the item with Ardrex. Let it dry for a few minutes and examined it under the UV light.
	Dye Stain	Dye stained the item with Rhodamine. Let it dry for a few minutes and examined it under the LASER light.
	Powder Dusting	Dusted the item with carbon black powder.
9WLCX7	Visual Examination	-White light, UV light, TracER (532nm green laser light)
	Lumicyano	-Processed using 0.14g powder and 2.71g solution -Fumed in CAPture-BT fuming chamber for 17 minutes -Positive control sample
9WMQ4X	Visual Examination	positive photo'd with scale
	Cyanoacrylate Fuming	positive photo'd with scale
	MBD	MBD - positive (photo'd with a scale, FLS & Orange barrier filter)
	Powder Dusting	BMP - POS (lifted with tape and lift card)
9WZX9T	Visual Examination	Examined under ambient lighting.
	Alternate Light Source	Examined under all wavelengths available on the Mini-Crimescope.
	Cyanoacrylate Fuming	SafeFume Superglue Chamber used with following settings: Fume Time- 25 minutes under 80% RH; Purge Time- 7 minutes.
	Powder Dusting	Powdered with Magnetic Bi-Chromatic Fingerprint Powder.
	Rhodamine 6G	Reagent applied via spray method.
	Alternate Light Source	Fluorescence of Rhodamine 6G visualized and examined with Dual 77 under 532 nm.
9XBAX4	Visual Examination	Print recovered
	Cyanoacrylate Fuming	Print recovered
	Dye Stain	Ardrex, Print recovered
A4HN9T	Visual Examination	Visual examination under ambient lighting. Ridge detail (right loop) noted in Quadrant C. No RD noted in Quadrants A, B or D. One (1) documentation photo captured of RD noted in Quadrant C.
	Alternate Light Source	Inherent Lumination utilizing the Mini-Crimescope at all available wavelengths. No additional RD noted in Quadrant C. No RD noted in Quadrants A, B or D.
	Cyanoacrylate Fuming	Cyanoacrylate fuming in SafeFume Superglue Chamber for 25 minutes. Allowed to rest for 24hrs. No additional RD noted in Quadrant C. No RD noted in Quadrants A, B or D.
	Powder Dusting	Powder dusting with Magnetic Black powder. No additional RD noted in Quadrant C. No RD noted in Quadrants A, B or D. One (1) documentation photo captured of RD noted in Quadrant C.
	Dye Stain	Rhodamine 6G dye stain applied. Visualization with TracER laser at 532nm. No additional RD noted in Quadrant C. No RD noted in Quadrants A, B or D. One (1) documentation photo captured of RD noted in Quadrant C.

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TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
A82HAZ	Visual Examination FSIS2 Cyanoacrylate Fuming FSIS2 Dye Stain	NLPSC in quadrant "C." NLP in quadrants "A," "B," and "D." NLPSC in quadrant "C." NLP in quadrants "A," "B," and "D." NLPSC in quadrant "C." NLP in quadrants "A," "B," and "D." Latent print suitable for comparison (1a) in quadrant "C." NLP in quadrants "A," "B," and "D." RAM dye stain used. Latent print suitable for comparison (1a) in quadrant "C." NLP in quadrants "A," "B," and "D."
A8XYLW	Powder Dusting	Item processed with magnetic powder with positive results
AEWKBB	Visual Examination Cyanoacrylate Fuming Powder Dusting	Humidity-70%, 15 minutes glue time, QC used-positive black powder and brush used
AEYBHU	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting Dye Stain	Ambient Lighting with naked eye Mini-Crimescope all available wavelengths SafeFume Chamber run time 25 minutes, allowed to dry overnight Silver/black powder utilized Rhodamine 6G- utilized with DUAL 77 Laser (532nm)
AG7PNZ	Visual Examination Lumicyano	-White light, UV light, TracER (532nm green laser light) -Processed using 0.14g powder and 2.71g solution -Fumed in CAPture-BT fuming chamber for 17 minutes -Positive control sample
AN6E8P	Powder Dusting	Dusted with black powder.
ATHZEB	Visual Examination Cyanoacrylate Fuming Powder Dusting	Examine the item and compare to submission form before labeling with case identifiers. Proceed to describe the item in notes and examine the item for any visible ridge detail. Place the item in the Fuming chamber and allow the process to cycle and then visually inspect the item for any further development. Contrast the print against the background.
AYJAL4	Visual Examination Cyanoacrylate Fuming DFO Ninhydrin	Positive Fumed for 12 minutes with improvement Processed at 100 degrees C for 20 minutes with improvement Processed at 60 degrees C and 65% RH for 2 minutes (after preset temperature and relative humidity were reached) with no improvement
B347KZ	Visual Examination Cyanoacrylate Fuming Dye Stain Dye Stain Powder Dusting	Used different light sources: flashlight, LASER, SUV(FSIS), ALS, UV Placed item in superglue chamber for ~10-15 minutes, gauged timing with a test print inside chamber at the same time. Used a flashlight and FSIS/SUV to examine and take photo Ardrox: Sprayed item and let dry, used UV light to examine and take photo Rhodamine: Sprayed item and let dry, used the LASER and an orange filter to examine and take photo Dust item with black powder until print developed
B8D9LW	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	15 min in CA chamber Rhodamine 6G / laser examination black powder

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
BDMVNT	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting Dye Stain	Visual with white light. Visual with Mini-Crimescope all wavelengths SafeFume Superglue Fuming Chamber Bi-Chromatic Powder Rhodamine 6G Dye Stain visualized with Dual 77 ALS at 520nm
BHD6XQ	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting Dye Stain	Ambient lighting with naked eye Mini-crimescope (all wavelengths) SafeFume Superglue Chamber (run time 25 minutes), allowed to dry overnight Magnetic bi-chromatic powder utilized Rhodamine 6G utilized with Dual 77 (520 nm)
BQNTA4	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	Lumicyanoacrylate Rhodamine 6G
BU8LK8	Visual Examination Cyanoacrylate Fuming Powder Dusting	Visual print CA-3000 Cyanoacrylate Fuming Chamber Magnetic powder
BV2WD9	Visual Examination Cyanoacrylate Fuming Dye Stain	Flashlight & ALS @ 475nm Rhodamine 6G - Methanol based, viewed with LASER
BWR6EW	Visual Examination Powder Dusting	The sample was observed to determine the type of surface and its characteristics. It was determined to be a non-porous and smooth surface. Based on this result, a physical reagent (black powder) was applied.
C28Q84	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain	1 mark was visualised with natural light and labelled Item 1_PLC1_Tag. Mark Item 1_PLC1_Tag was captured using the DCS-5 with a co-axial light box attached. Examination was carried out using Attestor LIGHTcube sources. The following light sources were used: UV narrow angle (365 nm), Violet narrow angle (410 nm), Royal blue narrow angle (447 nm), Blue-green narrow angle (470 nm), Pure green narrow angle (530 nm), Orange narrow angle (590 nm), Pure red narrow angle (630 nm). Examination was carried out using the corresponding filter goggles and after a brief period of darkness adaptation. Foster & Freeman Crime-lite 8x4 Mk2 White (400-700nm), Violet (410nm), Green (520nm), Blue (445nm), Blue-Green (475nm), Orange (590nm) and Red (640nm) UV (365 nm) was attached to the DCS-5. Forenteq Megafume XL61 cabinet was used with standard cyanoacrylate pre-set process (15 min fuming at 80% Relative Humidity). Full spectrum Light-cube examination as per Alternative Light Source comments. Further enhancement required. Item 1_PLC1_Tag was enhanced with Basic Yellow 40 solution, prepared according to the method in the CAST Fingermark Visualisation Manual 2nd edition 2022, chapter 5.SFDS.8 (page 708). The dye solution was applied using a spraying method and dried in a Voigtländer VTR forensic drying cabinet. Item 1_PLC1_Tag was recaptured using the DCS-5 and a Blue Crime-lite 8x4 Mk2.

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
C2KUNU	Powder Dusting	Black Powder
C3XY9R	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain	RMO
C8DJ2Y	Visual Examination Cyanoacrylate Fuming Powder Dusting	ridge detail observed in "C" ridge detail observed in "C". chamber ran for ~31 minutes, test print positive Lot#SGF052224DH black powder, ridge detail observed in "C"
CAHPLR	Powder Dusting	Used Black Powder On Quadrants A-D on Luggage Tag.
CDEVXW	Visual Examination Powder Dusting	Latent print in Area C on purple tag Black Magnetic Powder. Latent print enhanced in Area C on purple tag
CKWJY7	Visual Examination Cyanoacrylate Fuming Powder Dusting	Visually examined for possible ridge detail. Item processed with a 15-minute fume at 80% RH. Performed in superglue chamber SN: CA000035. Black powder applied to the surface of the luggage tag in powdering hood SN: DWS000022.
CRZB2V	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source Powder Dusting	viewed w/white light 15 minutes @ 65% humidity sprayed with MBD MBD viewed using CSS filter black powder
CU3NP2	Visual Examination Cyanoacrylate Fuming Powder Dusting	Tracer laser, UV, Ambient lighting Misonix chamber, 80% RH, 8-minute processing time Magnetic black powder
D2FYF8	Visual Examination Photography Cyanoacrylate Fuming Powder Dusting	Saw ridge detail. Photographed ridge detail.
DFHQGY	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting Dye Stain	Visual exam with white light. 1 photo taken. FLS exam UV-thru near infrared. No photos taken. CA fuming in chamber. No photos taken. Black powder (BP) processing. 1 photo taken. MRM-10. 1 photo taken.
DFMB63	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source Powder Dusting Powder Dusting	One photo taken Took approximately 10 minutes Rhodamine 6G Methanol; took approximately 5 minutes Viewed with orange goggles using a green laser light source; one photo taken Magnetic powder; took approximately 5 minutes; one lift taken Black powder; took approximately 5 minutes; one lift taken

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
DH8WG3	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	light sources: Crimelite, Incandescent, and TracER Laser (532 nm) using FFLEX chamber methanol-based Rhodamine 6G dye stain viewed with TracER Laser (532 nm) black powder
DL78D3	Visual Examination Lumicyano Fuming DFO Powder Dusting	Flashlight, incandescent, laser flashlight, laser, fflex fuming chamber Rhodamine, laser Black powder
DNFJPT	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	negative Cyanoacrylate fuming (15 mins @80% RH) MBD black powder
DTPECU	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	Ambient light, LASER @ 532nm with orange filter, and UV @ 254 nm w/ Full Spectrum Imaging System (FSIS). 75% relative humidity, 14 min fuming time. No additional detail developed. Rhodamine 6G/Methanol, visualized w/ LASER @ 532nm with orange filter = no friction ridge detail visible due to background fluorescence. Magnetic black powder.
DTQW8R	Powder Dusting	SHORT PROCESSING TIME, WITH LIGHT DUSTING OVER THE CARD

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
DVAVEV	Visual Examination	White light examination of exhibit as received using ambient laboratory lighting and 'Tiablo' High Power LED Flashlight at varying angles. A mark was observed in quadrant C but did contain suitable detail to be captured.
	Alternate Light Source	Sequential High Intensity Light Sources (HILS) examination carried out, following dark adaptation, using a UV Crime Lite 350nm-380nm with 408nm filter followed by a Blue Crime Lite 420nm-470nm with a 476nm viewing filter followed by a Green Crime Lite 480nm-560nm with 571nm viewing filter. A mark was observed in quadrant C but did contain suitable detail to be captured.
	Powder Dusting	The item was treated with SupraTheta Black Magnetic Powder using a magnetic applicator wand. Following treatment the item was examined with a 'Tiablo' High Power LED Flashlight at varying angles. The QA was adhered to and the control test piece passed. A mark was observed in quadrant C but did contain suitable detail to be captured.
	Cyanoacrylate Fuming	The item was treated with Cyanoacrylate Fuming using a Foster and Freeman MVC 5000D cabinet. The relative humidity was set to 80% with a glue time of 13 minutes and 3g of superglue. The QA was adhered to and the control test piece passed. Following treatment the item was examined with a 'Tiablo' High Power LED Flashlight at varying angles. A mark was observed in quadrant C but did contain suitable detail to be captured.
	Dye Stain	The item was treated with ethanol-based Basic Yellow 40 dye, this was applied for ~20 seconds and rinsed with water and left to dry. When dry this was examined with an Blue ML2 420nm-470nm with a 476nm viewing filter. QA was adhered to and the control test piece passed. An area of ridge detail was developed in quadrant C. This was marked up as "TJD/2" and photographed.
	Wet Powder Suspension	The item was treated with carbon-based powder suspension after being pre-rinsed with water. The powder suspension was applied with a soft squirrel hair brush and left for ~20 seconds before being rinsed with water and allowed to dry. When dry, the item was examined with a bench ring light at varying angles. The QA was adhered to and the control test piece passed. No useful marks were developed and no previously exhibited marks were further enhanced.
DXH4PZ	Visual Examination	Prior to any processing, the item was examined for any visible ridge detail. A finger shaped smudge was seen in Quadrant 'C' but no ridges were observed at this time.
	Alternate Light Source	The Arrowhead Dual 77+ laser was used at 520nm to view any ridge detail that may naturally fluoresce. No ridge detail was observed.
	Cyanoacrylate Fuming	Item 1 was placed inside one of our Air Science Safefume chambers with a processing time of 12 minutes and was then left to rest overnight. The chamber was set to 21°C and 80% humidity.
	Powder Dusting	Sirchie black magnetic powder was applied to all four quadrants. An impression was developed in Quadrant 'C.' No other ridge detail was observed.

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
E7RR4Y	Visual Examination	Visual examination - Photographed print labeled 1A1
	Full Spectrum Imaging System	Full Spectrum Imaging System (following visual) - Photographed print labeled 1A1
	Cyanoacrylate Fuming	Cyanoacrylate Fuming - Photographed print labeled 1A1
	Full Spectrum Imaging System	Full Spectrum Imaging System (following Cyanoacrylate fuming) - Photographed print labeled 1A1
	Dye Stain	Basic Yellow 40
	Alternate Light Source	Alternate Light Source - Crimescope (yellow filter 445nm) - Photographed print labeled 1A1
	Powder Dusting	Black Magnetic Powder - Photographed print labeled 1A1
E8HZ6M	Powder Dusting	
EAUQER	Visual Examination	magnification & light
	Cyanoacrylate Fuming	20 minute in chamber
	Dye Stain	MBD
	Powder Dusting	black powder
EDRL4Y	Visual Examination	
	Cyanoacrylate Fuming	8.5 minute fume time in the Misonix
	Powder Dusting	dusted using magnetic powder
EG9JJV	Visual Examination	Plastic material card, and the most suitable technique is cyanoacrylate vapour and dye with the application of the chemical dye ARDROX. Visual examination using the Polilight PL 500 forensic light: white light and all wavelengths between 330 nm and 1000 nm (UV-IR). A fingerprint can be detected on the "C" dial using white light: L1 in quadrant "C"
	Cyanoacrylate Fuming	Application of cyanoacrylate vapours using a SIRCHIE cabinet with an automated process controlling humidity, curing time and ventilation.
	Dye Stain	Staining with ARDROX (a fluorescent chemical reagent): applied by spraying and viewed under ultraviolet light: the same fingerprint detected during the visual examination under UV light and observed L1.
EJFULQ	KRIMESITE IMAGER	Visual Exam, Krimesite Imager, Magnetic Powder Dusting, and photography. (Processing time-1 Hr 30Min)
EJTXZV	Visual Examination	The item was examined with white LED light and magnification as is.
	Cyanoacrylate Fuming	The item was placed in the CSU1 recirculation chamber, a test print was placed in the upper clip of the cabinet, 12 drops of cyanoacrylate was placed in a cup on the heating element, and the item was fumed for 12 minutes. The item was then examined with white LED light and magnification after it sat untouched for one hour. The test print was positive upon taking it out of the chamber.
	Powder Dusting	The item was dusted with black fingerprint powder and examined under white LED and magnification.
	Dye Stain	The item was rinsed with RAY fluorescent dye stain (consisting of Rhodamine 6G, Ardrox, and Basic Yellow 40) then was rinsed under water. The item was placed under a fume hood until it was dry. The item was then viewed under a CrimeLite ML, using an orange filter and blue LEDs.

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
EKBR27	Visual Examination	Examination done using natural light and a flashlight.
	Cyanoacrylate Fuming	Used Misonix fuming chamber set to 70% humidity, 12 minute fume time and 10 minute purge time.
	Dye Stain	Basic Yellow 40 sprayed onto item followed by a rinse with distilled water. Viewed and photographed developed latent print using a 450 nm forensic light source with a yellow filter.
EP74VP	Visual Examination	09/04/2026 @ 01:00 pm, pre-treatment examination for the exhibit was done using White light
	Cyanoacrylate Fuming	09/04/2026 @ 01:27 pm, placed in Superglue cabinet (MV1000) for 25 minutes @ RH=84.5, Plate T=120C, after that the item was subjected to white light examination
	Dye Stain	09/04/2026 @ 2:15 pm, item was immersed in BY40 solution, after that it was washed using deionized water and left to dry in the drying cabinet.
	Dye Stain	Finally, the item was subjected to Blue light examination using yellow goggles 10/04/2026 @ 09:05 am, item was dye-stained by CV solution and kept for about two minutes, after that it was washed using deionized water and left to dry in the drying cabinet. Finally, the item was subjected to white light examination
	Dye Stain	10/04/2026 @ 11:00 am, item was dye-stained by SB solution and kept for about two minutes, after that it was washed using deionized water and left to dry in the drying cabinet. Finally, the item was subjected to white light examination
	Powder Dusting	13/04/2026 @ 09:10 am, Black powder was applied on the item, after that the item was subjected to white light examination
ETJJ7U	Visual Examination	RAY
	Cyanoacrylate Fuming	
	Dye Stain	
FBF9Z3	Visual Examination	Print observed in quadrant C
	Cyanoacrylate Fuming	Magnetic Powder
	Powder Dusting	
FD4CGV	Visual Examination	Item photographed prior to processing. Natural light: weak print fragment observed in section C, it was photographed.
	Alternate Light Source	Examination with white light (Polilight flare 2"ROFIN"). Print fragment Visible, it was rephotographed with white light and macro camera lens (Nikon D 3300)
	Cyanoacrylate Fuming	-The cabinet (Scenesafe) settings was : 85 % humidity and the hot plate was set on 120 degrees. Processing time 8-10 minutes. A visible print was seen in section C of item. -Prints were deposited on a purple plastic objet, by human fingerprint (control Test), developed a relatively good quality print.
	Photography	Fingerprint was photographed with white light and macro camera lens (Nikon D 3300).
	Powder Dusting	Powder Dusting (to improve the quality of latent print): Black magnetic powder, Enhanced ridges of latent print .
	Photography	Fingerprint was photographed with white light and macro camera lens (Nikon D 3300).
FLJW2U	Visual Examination	20 minutes, RH 80% Basic Yellow 40
	Cyanoacrylate Fuming	
	Dye Stain	

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
FMEE3V	Visual Examination	The item was observed under white light / Visual Examination under Foray Adam's Imaging System for presence of any latent print.
	Cyanoacrylate Fuming	Item was placed in fish tank for application of superglue fuming for 2 hours for development of latent prints. The evidence item was observed time to time to avoid over development.
	Visual Examination Rhodamine 6-G	After fuming the item was examined under white light Rhodamine 6-G was sprayed on superglued evidence item and rinsed with water.
	Alternate Light Source	Observation of developed latent prints at 505 nm to 515 nm wavelength using orange goggles.
FN49TQ	Powder Dusting	Black carbon powder
FYPCZP	Visual Examination	5/12/26: Exhibit 1: FRD is observed in only Section C of the luggage tag. Not sufficient for image capture.
	Alternate Light Source	CRIMESCOPE CS-16-500: 350-535 nm with clear, yellow, orange, and red goggles: 5/12/26: Exhibit 1: FRD is observed in only Section C of the luggage tag. No improvement to previously viewed FRD; no additional FRD. No image capture.
	Cyanoacrylate Fuming	5/15/26: Exhibit 1: Cyanoacrylate fuming performed in the CA-6000 at approximately 65% relative humidity for 16 minutes. Removed to prevent overprocessing.
	Visual Examination	5/15/26: Exhibit 1: Post CAE: Magnifier lamp and magnifier loop: Some improvement to previously viewed FRD is observed; no additional FRD. Image capture performed.
	Dye Stain	5/15/26: Exhibit 1: RAM is applied using a squeeze bottle. Allowed to dry several minutes in the fume hood.
	Alternate Light Source	5/15/26: Exhibit 1: Post RAM: CRIMESCOPE CS-16-500 CSS wavelength with orange goggles: No improvement to previously viewed FRD is observed; no additional FRD. No image capture.
FZX3T	Visual Examination	white light, UV- 555 nm - Polilight PL 500, suitable goggles
	Cyanoacrylate Fuming	processing time - 15 minutes, humidity - 80%
	Visual Examination	white light
	Dye Stain	Basic Yellow 40
	Visual Examination	UV - 495 nm, yellow coloured google
G68W6W	Alternate Light Source	White light (-), Rofin UV 365 nm with yellow filter (-), Rofin 450 nm light with orange filter (-), Laser 532 nm with orange laser filter (-), FSIS II 254nm with 254 nm filter (+)
	Cyanoacrylate Fuming	FSIS II 254nm with 254 nm filter (+)
	Dye Stain	Rhodamine. Laser 532 nm with orange laser filter (-), Natural light (+)
	Powder Dusting	Black powder (+)
G9N34Q	Visual Examination	A physical examination of the evidence was performed to determine the reagent, applicator, and transfer tool to be used.
	Powder Dusting	For this purpose, a fiberglass brush and conventional black physical reagent were used, applying it to the entire evidence. A marabou feather brush was used for cleaning. The evidence identified as 1.1 was located in quadrant "C".
GJT3MQ	Cyanoacrylate Fuming	Placed in sealed chamber (Portable Fuming Chamber 1), 15 minutes of glue time.
	Black Magnetic Powder	Brush method for a couple seconds.

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TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
GPTWNQ	Visual Examination	Visual exam under white light and magnification.
	Alternate Light Source	Examination using the FSIS II camera and UV light
	Cyanoacrylate Fuming	Cyanosafe was set up with 18 drops of cyanoacrylate in the aluminum weigh boat on top of the heating element. The well was filled with distilled water and a test strip was placed in the chamber. The chamber ran for 20 minutes and allowed to purge. The items then dried for 1 hour. Test print was positive.
	Dye Stain	Item was completely covered in RAY dye stain for approximately 1 minute. The item was then rinsed with water and patted dry. The item was then allowed to air dry. Batch #868
	Powder Dusting	Black magnetic powder was applied to the surface using a magnetic wand.
GQMMU6	Visual Examination	During visual examination there was ridge detail found in the C quadrant of the luggage tag which was photographed as photo lift #1.
	Cyanoacrylate Fuming	After photo documentation was complete, the item was exposed to cyanoacrylate (CA) fumes for 17 minutes at 75% humidity. No additional development was observed to photo lift #1. A standard was tested simultaneously with the item and performed as expected.
	Alternate Light Source	ALS was used on a dye stain standard prior to being used on evidence and performed as expected. The alternate light source, set at 450nm, was used to illuminate the ridge detail of photo lift #1 after the dye stain was applied. (See below)[A photograph was not provided by this participant]
	Dye Stain	MRM-10 was applied to a standard prior to being used on evidence and performed as expected. The application of MRM-10 and the use of a forensic light source was used to illuminate dye stained ridge detail in photo lift #1. This was photographed using the alternate light source and an orange barrier filter. (See below)[A photograph was not provided by this participant]
HAXJLM	Visual Examination	Visually examined Item 1. Observed possible latent print on Section C.
	Powder Dusting	Processed the item with magnetic powder. Observed latent print on Section C.
HC4GXW	Visual Examination	oblique light
	Alternate Light Source	455-515nm
	Cyanoacrylate Fuming	vacuum ~60 min.
	Powder Dusting	black powder
HCHHTQ	Cyanoacrylate Fuming	F&F MVC-3000: 15min 120'C 80%, BVDA cyanoacrylate Dusting with black carbonpowder
HDZWAT	Visual Examination	
	Alternate Light Source	UV, 390 nm (clear), 415 nm (yellow), 455 nm, 495 nm, 535 nm (orange), 535 nm, 555 nm, 600 nm (red)
	Cyanoacrylate Fuming	80% relative humidity (RH); 0-minute humidity saturation time; 12-minute cycle; and 120°C hot plate temperature.
	Dye Stain	Rhodamine 6G-observed at 495 nm with orange goggles
	Powder Dusting	standard black powder used

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TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
HENZRL	Visual Examination	Fingerprint visible at section C.
	Alternate Light Source	Foster& Freeman Blue lighsource (420-470nm) with yellow goggles (GG 495), Green (480-560nm) with red goggles (OG 590) and UV-light (350-380nm). White led light source.
	Cyanoacrylate Fuming	MVC 3000. Moisture RH80%, temperature 120 °C, amount of glue 12 drops, time set up for 15 minutes but stopped when 3mins 19 seconds left, so total time was shortened for 11 minutes 41 seconds.
	Visual Examination Powder Dusting	with white ledlight and normal light. BVDA Concentrated Black, B-28000
HML2HT	Visual Examination	On 4/7/26, I examined the item under a white light magnification using a fluorescent light. No prints were observed.
	Cyanoacrylate Fuming	On 4/7/26, I conducted cyanoacrylate fuming using a Cyanosafe. I placed the item into the chamber, with the chamber prepared by placing 10-15 drops of cyanoacrylate into a metal cup and filling up the water supply. A test print was also placed within the chamber to ensure the item was developing properly. Once the chamber completed its 12 minute cycle followed by a 10 minute purge, the item was allowed to sit for 60 minutes to allow for the cyanoacrylate to harden. The item was then examined under white light magnification using a fluorescent light. No prints were observed.
	Dye Stain	On 4/7/26, I conducted fluorescent dye staining on the item using the RAY combination. I used a pre-made solution labelled with the batch number CS1, allowing the item to immerse in the solution for approximately 1 minute before rinsing it with tap water. The item was then patted dry, before being allowed to further dry in a fume hood. I then examined the item under a Crime Lite ML with a 460nm-510nm blue light using an orange filter.
	Powder Dusting	On 4/7/26, I conducted black powder dusting of the item using a feather brush. I then examined the item under a white light magnification using a fluorescent light.
J39ZLX	Visual Examination	Apparent ridge detail located in quadrant "C" during visual examination.
	Cyanoacrylate Fuming	Placed into the superglue tank (SN: CA000035) on 5th floor processing room at standard settings (15min fume, 70%RH, 15 min purge).
	Powder Dusting	Used black powder in the powdering hood (SN: DWS000022) on 5th floor processing room.
J3EGEK	Cyanoacrylate Fuming	Fuming chamber for 1 hour
J7DRBK	Cyanoacrylate Fuming	Fuming chamber for 1 hour and 3 minutes.
JDU34R	Visual Examination	White lighting, Alternative light sources inc. UV & Tracer
	Lumicyano	CApture-BT; 17 minutes
	Powder Dusting	Black Magnetic Powder
JHADGW	Visual Examination	Observed item after removing it from evidence envelope with gloves. There appeared to be some possible fingerprint residue, but image was not clear.
	Cyanoacrylate Fuming	Placed item 1 in the fuming chamber at approximately 1831hrs 04/13/2026. The process takes about 20 minutes to complete. The area of focus, from the visual exam, did appear to have friction ridge detail.
	Powder Dusting	I magnetic powdered that area, on item 1, to try to enhance the ridge detail from fuming.

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TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
JJ4NAX	Visual Examination	Using oblique lighting the surface of the luggage tag was examined. Ridge was visualized in quadrant C of the tag with no other quadrant having ridge structure observed. This area was photographed using a camera on the camera stand.
	Alternate Light Source	Using the FSIS II, the surface of the luggage tag was examined. Ridge was visualized in quadrant C of the tag with no other quadrant having ridge structure observed. This area was photographed using the FSIS camera.
	Cyanoacrylate Fuming	The luggage tag was placed into the Cyanoacrylate Fuming Chamber (CA Chamber) along with a clear piece of Acetate with a fingerprint on it to be used as a control. Distilled water was added to the water container in the chamber to the fill line, and a dime size amount of glue was added to the container for the glue. The chamber was allowed to run, and at the end of the cycle the control test showed a positive result. Using oblique lighting the surface of the luggage tag was examined. Ridge was visualized in quadrant C of the tag with no other quadrant having ridge structure observed. This area was photographed using a camera on the camera stand.
	Alternate Light Source	Using the FSIS II, the surface of the luggage tag was examined after CA fuming. Ridge was visualized in quadrant C of the tag with no other quadrant having ridge structure observed. This area was photographed using the FSIS camera.
	Dye Stain	The dye stain RAY was control tested to ensure that the stain was working as expected using yellow and orange goggles with the alternate light source range of 350nm to 515nm. The stain tested positive and was applied to the luggage tag and allowed to dry.
	Alternate Light Source	Using the CrimeScope at the range of 350nm to 515nm and using goggles (yellow or orange) the surface of the luggage tag was examined. Ridge was visualized in quadrant C of the tag with no other quadrant having ridge structure observed. The ridge structure that was visible was best seen at 415nm with yellow goggles. This area was photographed using a camera on the camera stand with a yellow lens filter.
	Powder Dusting	Silver (Gray) traditional powder was applied to the surface of the luggage tag. Ridge structure was developed but was not of better quality and quantity then seen at previous stages no photos were taken.
JNAG4T	Visual Examination	white natural light
	Alternate Light Source	350-530nm/relevant filters for detecting fluorescence
	Sudan Black	ready solution applied by immersion, then rinsed with water, followed by visual examination in white light
JP6XGQ	Cyanoacrylate Fuming	PFC 1 for 15 minutes
	Powder Dusting	Black magnetic powder - brushing method
JQZP7G	Visual Examination	White light Blue light 420 - 470 nm, yellow filter
	Cyanoacrylate Fuming	Glue plate 120 °C Humidity 80% Processing time 10 min
	Visual Examination	White light
	Dye Stain	Basic Yellow 40
	Visual Examination	Blue light 420 - 470 nm, yellow filter
	Dye Stain	Natural Yellow 3
JYT79K	Visual Examination	Blue light 420 - 470 nm, yellow filter
	Powder Dusting	Magnetic Powder

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TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
K4JZHR	Visual Examination Cyanoacrylate Fuming Powder Dusting	white light & alternate light sources Misonix chamber, 15 min fume time black magnetic powder
K6FFVN	Visual Examination Cyanoacrylate Fuming Powder Dusting Dye Stain	Possible impression observed in quadrant C Possible impression in quadrant C, some ridge detail Magnetic powder. Latent L1A, possible right slope loop (pattern area partially smudged), in Quadrant C. RAM, laser 532nm and 460nm. No enhancement of recovered latent print, no additional ridge detail.
KAPTDM	Powder Dusting	
KQVXZY	Visual Examination Powder Dusting	Room lighting and ring light were used to visualize latent on item, ridges were present and sufficient for photography Added humidity to item. Applied magnetic powder to both sides of the item with magnetic brush. Excess powder was tapped off/blown off. Latent was then preserved. Then repeated powdering/blowing off powder step to lifted area, and ridges were visually better, so preservation was repeated. This process was repeated 1 more time until the powdered latent was the same.
KRQG3Z	Visual Examination Cyanoacrylate Fuming Powder Dusting	Visual examination showed visible print in quadrant C Positive control Black magnetic powder
KXD8NV	Visual Examination Lumicyanoacrylate Fuming Dye Stain Powder Dusting	CrimeLite and TracER Laser FFlex fuming chamber, observed with CrimeLite and TracER Laser Rhodamine 6G, observed with TracER Laser Regular black powder
L8DG9Q	Powder Dusting	Black magnetic powder was used.
L8V3RN	Visual Examination Cyanoacrylate Fuming Powder Dusting	Latent print was observed in quadrant C prior to processing. Lot #: 031125-02 Parameter: 80% humidity, 120°C, 4 drops of glue Black Powder Lot #: 102623-01
LBMKRG	Visual Examination Cyanoacrylate Fuming Dye Stain	Mark search was done by following ways: 1. Blue Light (445 nm) using Goggle (495 nm). 2. Green Light (532 nm) using Goggle (550 nm) No print found Processing Time: 45 mins, which includes Humidifying, Fuming and Purging. After 45 mins print found on section C 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). Print Found on C
LVNK7T	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting	Oblique light 455, 475, CSS, 495, 515 nm 20 minutes Black powder
M2QB9H	Powder Dusting	Conventional black powder applied with powder brush

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TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
M3K2EW	Visual Examination Cyanoacrylate Fuming Dye Stain	R6G-Methanol
M4BAFK	Visual Examination Powder Dusting	A physical examination of the evidence was performed to determine the appropriate reagent, applicator, and transfer tool. A fiberglass brush and a conventional black physical reagent were used, applying it to the entire evidence. A marabou feather brush was used for cleaning. The evidence identified as 1.1 was located in quadrant "C"
M4TNWN	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain Powder Dusting	On 04/06/2026, I examined the item under a white LED light and magnification and observed visible ridge detail/print(s) in the area marked as "C". On 04/06/2026, I examined the item under a wavelength 450nm light with an orange filter and magnification and observed visible ridge detail/print(s) in the area marked as "C". On 04/06/2026, I placed the item in a Cyanosafe and ran cyanoacrylate fuming. I then examined the item under a white LED light and magnification and observed visible ridge detail/print(s) observed in the area marked as "C". On 04/13/2026, I used a RAY dye stain solution on the item and examined the item under a wavelength 450nm light with an orange filter and magnification and observed visible ridge detail/print(s) in the area marked as "C". On 04/13/2026, I powdered the item with black latent print powder and examined the item under a white LED light and magnification observed visible ridge detail/print(s) in the area marked as "C".
M9KMXJ	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source Alternate Light Source Vacuum metal deposition	Latent print impression observed and photographed (some ridge detail, no pattern type). CAE fuming in chamber for approximately 15 minutes. Enhancement observed and photographed (some ridge detail, no pattern type). Rhodamine 6G dye stain utilized, followed by methanol rinse. No improvement of latent print observed. Arrowhead Dual 77 laser utilized, 532nm and 445nm. No improvement of latent print observed. Purple plastic fluoresced under laser. Long pass and band pass filters utilized with no improvement. Foster & Freeman Crime-Lite Auto utilized. Slight enhancement of latent print observed and photographed. Some ridge detail and faint pattern type observed. West Technology VMD1260 utilized, silver followed by zinc. Enhancement of latent print observed and photographed. Pattern type visible.
M9KQMN	Alternate Light Source Cyanoacrylate Fuming Dye Stain Powder Dusting	FSIS II 254 nm UV with UV filter (+), Rofin 365 nm UV with yellow filter (-), Rofin 450 nm with orange filter (-), Laser 532 nm with laser filter (-) White light (-), Rofin 365 nm UV with yellow filter (-) Rhodamine. Laser 532 nm with laser filter (+) Bichromatic powder (+)
MPE9MK	Visual Examination Cyanoacrylate Fuming Dye Stain	2.5 g glue, 60% humidity, 18 min duration Rhodamine

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
MQARNL	Visual Examination	On visual examination, I found a possible latent print in Area C on the Purple Tag.
	Powder Dusting	I then used Magnetic Powder on the whole tag and found a latent print in Area C.
MUTJZN	Visual Examination	flashlight, UV, SUV, Laser, ALS
	Cyanoacrylate Fuming	flashlight, SUV/FSIS
	Dye Stain	Ardrox/UV and Rhodamine/Laser
	Powder Dusting	Black powder
MZU6GQ	Visual Examination	White light (negative), FSIS II with 254nm ALS (positive 1A in quadrant C), Dual 77+ laser 532nm with orange laser filter (negative)
	Cyanoacrylate Fuming	FSIS II with 254nm ALS (positive 1A in quadrant C)
	Dye Stain	Dual 77+ laser 532nm with orange laser filter (negative)
	Powder Dusting	Dual Use powder (positive 1A in quadrant C)
MZUD2N	Visual Examination	Visual examination was completed by examining the item with a fluorescent light under magnification at different angles.
	Cyanoacrylate Fuming	Cyanoacrylate fuming was completed by placing the item into the CyanoSafe. Distilled water was added to the cup heater element, and 12 drops of liquid cyanoacrylate were added to a foil cup, which was placed on a heating element. A test print was created and placed in the chamber. After the chamber was closed and turned on, it ran for 12 minutes and then a purge cycle started. The item sat for one hour and then taken out to be examined with a fluorescent light under magnification at different angles.
	Dye Stain	Dye stain was completed with RAY on this item. After immersing it in dye stain, it was rinsed off with water. It was pat dry to remove water droplets and hung in a fume hood to dry off completely. The item was examined under a blue light with an orange filter.
	Powder Dusting	Powder dusting was completed with black magnetic powder on this item. Powder was applied with a magnetic wand in a fume hood and then examined with a fluorescent light under magnification at different angles.
N3GWEE	Visual Examination	ridge detail photographed
	Cyanoacrylate Fuming	MVC5000 ridge detail photographed
	Dye Stain	R6G with Forensic Light Source ridge detail photographed

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
N4BMKT	Visual Examination	I performed a visual examination of Item 1 and observed ridge structure in Quadrant C which I digitally photographed.
	Alternate Light Source	I performed an examination of Item 1 Using FSIS II (Full Spectrum Imaging System) (Ultraviolet light camera) and observed ridge structure in Quadrant C which I digitally photographed.
	Cyanoacrylate Fuming	I processed Item 1 with cyanoacrylate and performed a visual examination of Item 1 and observed ridge structure in Quadrant C which I digitally photographed. Control test was positive.
	Alternate Light Source	I performed an examination of Item 1 Using FSIS II (Full Spectrum Imaging System) (Ultraviolet light camera) and observed ridge structure in Quadrant C which I digitally photographed.
	Dye Stain	I control tested Rhodamine 6G with a positive result and applied it to Item 1.
	Alternate Light Source	I used the SH PoliLight to examine Item 1 and LS PoliLight to digitally photograph ridge structure observed in quadrant C of Item 1. (SH and LS are unit identifiers for separate PoliLight units.) Due to the material/color of Item 1 there was minimal contrast using the normal orange camera filter, and a green camera filter was used as it created more contrast on Item 1.
	Powder Dusting	I processed Item 1 by dusting with black powder. I observed and digitally photographed ridge structure in Quadrant C.
N62VLG	Visual Examination	Temperature on the heating plate 100°C, Humidification 80%, Time 25 minutes.
	Cyanoacrylate Fuming	
	Dye Stain	
NKE4MK	Visual Examination	White and ambient light
	Alternate Light Source	Foster + Freeman 82S Blue and UV wavelengths.
	Cyanoacrylate Fuming	Lumicyano
	Alternate Light Source	Foster + Freeman 82S blue-green wavelength and white light
	Powder Dusting	Magnetic black powder with magnetic wand and transparent latent print lifting tape.
NYGZWR	Visual Examination	Examined visually with direct and oblique lighting. Friction ridge detail of possible value was observed in quadrant C.
	Cyanoacrylate Fuming	Processed in MYSTAIRE Cyanoacrylate Fuming Chamber: - 70% humidity - Cycle time 10:00 minutes - Purge time 10:00 minutes Friction ridge detail of possible value was developed in quadrant C.
	Powder Dusting	Processed with bichromatic powder. Friction ridge detail of possible value was developed in quadrant C.
P9FD8C	Visual Examination	Visual exam with room light
	Alternate Light Source	Mini-crime scope all wave lengths
	Cyanoacrylate Fuming	test print, while ridge detail visible., let it dry for 24 hrs.
	Powder Dusting	bi-chromatic powder
	photography	photo of latent print developed in Quad. C
	Dye Stain	Rhodamine 6G- using Dual 77 tracer laser 520nm
PAA4DQ	Visual Examination	CrimeLite, LASER
	Lumicyanoacrylate Fuming	MVC FFLEX
	Dye Stain	Rhodamine 6G
	Powder Dusting	black powder

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
PJ3RHN	Visual Examination	Friction ridge detail in quadrant C (white light & ALS - blue light with yellow filter). Not enough detail for photography.
	Cyanoacrylate Fuming	CA fume hood 350 degrees F, 80% humidity for 15 mins.
	Powder Dusting	Black powder. Would not lift. Not enough detail for photography.
	Dye Stain	Basic yellow (lot #040726KEM01)
	Alternate Light Source	Blue light/yellow filter. Friction ridge detail in quadrant C.
PU7UTD	multispectral lights and forensic ligths	The evidence is checked using "forenscope 8k" (UVA-PW lights) and "Lumatec 400" forensic light with all spectrum. 23°C room temperature.
	Cyanoacrylate Fuming	Vaporization of cyanoacrylate in fuming chamber for about 4,38 minutes. 127,2°C temperatura, 80% humidity.
	forensic ligths	The evidence is checked again using forensic light with all spectrum.
	Dye Stain	The ITEM 1, is pulverised by Ardrex. Natural drying.
	forensic ligths	The evidence is checked again using "Lumatec 400" forensic light 490nm and after with all the rest spectrum.
PVZKYR	Visual Examination	Ridge structure was observed in quadrant C. The ridge structure was photographed.
	FSIS II	Ridge structure observed in quadrant C. The ridge structure was photographed.
	Cyanoacrylate Fuming	Ridge structure observed in quadrant C. The ridge structure was photographed. Positive Control.
	FSIS II	Ridge structure observed in quadrant C. The ridge structure was photographed.
	Dye Stain	Item 1 was processed using the dye stain Rhodamine 6G. Positive Control.
	Alternate Light Source	Item 1 was processed using a Polilight to visualize after Rhodamine 6G with ridge structure observed in quadrant C. The ridge structure was photographed.
	Powder Dusting	Magnetic black powder used. Ridge structure observed in quadrant C. The ridge structure was photographed.
PWQTZG	Visual Examination	We found a print in sector C by visual examination (normal room lighting and naked eye). The print became almost completely visible and could be photographed using white light with polarizing film and circular polarizing filter and also reflective UV, UV-modified camera with UV-filter
	Cyanoacrylate Fuming	Foster&Freeman MVC-3000-D3 + Lumicyano 215mg + cyanoacrylate 2,7g. Humidity 80%, temperature 120 celsius, processing time 25 min. After fuming the print in sector C became fully visible and could be photographed by white light with polarizing film and circular polarizing filter. Print was also examined by various lights and filters but the best result became by using white light and polarization.
Q2DM2R	Visual Examination	Inspected under white light and magnifier
	Cyanoacrylate Fuming	Fumed in chamber using superglue on hot plate and boiling water for humidity for approximately 12 minutes. Ran QC concurrently on plastic sheet with positive results.
	Powder Dusting	Used black powder on down draft station
Q2ZJMM	Cyanoacrylate Fuming	80% rel. humidity, 10 min
	Dye Stain	Basic Yellow

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
Q3QRNB	Visual Examination	Examination under white light and latent print was appeared on C positions, However it was not clear shape 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 clear shape under white light. Cyanoacrylate will crystallizes the water that resulting from sweat secretions.
	Powder Dusting	Using white powder and Fingerprint Hinge Lifter to lift latent print from C position
	Dye Stain	Spray Evidence with BY40 and wash it with water. After spraying and drying Item, latent print was appeared by using Using Foster + Freeman crime lite (Blue 420 - 470nm @ Yellow Filter (476)nm) with Foster + Freeman DCS5 imaging system more clear shape.
QAT8MC	Visual Examination	
	Alternate Light Source	mini-crimescope (all wavelengths)
	Cyanoacrylate Fuming	SafeFume Superglue Chamber
	Powder Dusting	Bi-Chromatic
	Dye Stain	Rhodamine 6G/mini-crimescope 515nm
QUY8QP	Visual Examination	A visual exam was performed on Item 1 with a light source prior to processing. A print was noted in quadrant C.
	Cyanoacrylate Fuming	Item 1 was placed into a fuming chamber for eight minutes for cyanoacrylate processing. A visual exam was performed with a light source on Item 1 after cyanoacrylate processing to see if any prints were developed. A print was observed in quadrant C.
	Dye Stain	Rhodamine 6G fluorescent dye stain was applied with a squirt bottle to Item 1.
	Alternate Light Source	A visual exam was performed on the fluorescent dye-stained item using the Cohert TracER. No prints were observed or developed.
	Powder Dusting	Item 1 was taken to the Downflow workstation where black powder was applied with a feather brush. A print developed in quadrant C.
QVPFTE	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Alternate Light Source	
	Dye Stain	
QXZBHC	Alternate Light Source	
QXZBHC	Powder Dusting	magnetic powder
QY79UL	Visual Examination	
	Cyanoacrylate Fuming	Cyanoacrylate Fuming utilizing Misonix Chamber, Fuming Cycle: 13 minutes
	Dye Stain	Basic Yellow 40
QYNUDH	Visual Examination	Visually examined item with room and oblique lighting.
	Cyanoacrylate Fuming	Suspended item in cyanoacrylate chamber.
	Basic Yellow	Sprayed item from cyanoacrylate chamber with Basic Yellow and rinsed.
	Alternate Light Source	Once dry, viewed the item with blue laser with yellow filter.

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
QYT2NQ	Visual Examination	
	Alternate Light Source	FSIS (Full Spectrum Imaging System)
	Cyanoacrylate Fuming	
	Alternate Light Source	FSIS (Full Spectrum Imaging System)
	Dye Stain	Rhodamine 6G
	Alternate Light Source	Crimescope at 515 nano meters in conjunction with dye stain
	Powder Dusting	Black magnetic powder
QZ3N8H	Powder Dusting	
QZJAQF	Visual Examination	
	Cyanoacrylate Fuming	
	Rhodamine 6 G	Fluorescent Dye Stain
	Alternate Light Source	TracER Laser, fixed wavelength of 532nm
	Powder Dusting	Conventional powder
R2TADE	Visual Examination	Suspected ridge details observed in quadrant C.
	Powder Dusting	Magnetic powder utilized on all four quadrants. Suspected print developed in quadrant C.
RFA32L	Visual Examination	This item was visually examined utilizing an LED flashlight and a magnifying glass.
	Cyanoacrylate Fuming	This item was cyanoacrylate (superglue) fumed in a controlled fuming chamber for eleven (11) minutes at approximately 72% humidity. A latent impression was observed on this item in quadrant C.
	Dye Stain	This item was processed using a fluorescent chemical dye stain (RAY mixture), rinsed with deionized water, and left to air dry.
	Alternate Light Source	This item was examined under a blue 445nm forensic laser light with an orange barrier filter. The same latent impression was observed in quadrant C.
RMTZGF	Visual Examination	Some ridge detail observed. Photographed
	Cyanoacrylate Fuming	Fuming chamber. Approx. 15 minutes. Some enhancement observed. Photographed
	Dye Stain	Rhodamine 6g stain w/methanol rinse. No improvement.
	Alternate Light Source	Arrowhead Dual 77 LASER. 445nm. No improvement. Lots of background noise
	VMD	West Technology VMD1260. Silver followed by zinc. Enhancement observed and photographed
RQBPTH	Visual Examination	diffused specular reflection technique
	Lumicyano Fuming	17 minute fuming cycle at 75% relative humidity; 10 minute purge cycle. Visualization with UV (325 nm) with yellow barrier filter, and/or Green (535 nm) with orange barrier filter for fluorescence examination; oblique lighting with green (535 nm) for visual examination
RQRD2J	Visual Examination	No print observed
	Alternate Light Source	No print observed
	Cyanoacrylate Fuming	No print observed
	Powder Dusting	Black non-magnetic powder

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
RQTBCE	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain Powder Dusting	505nm wavelength Rhodamine 6G and 505nm wavelength. Latent easier to visualize with no ALS. Powder did not enhance ridge detail.
RWDYZB	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain	Full examination of all surfaces of item under ambient lighting conditions. Frag RD (NI) noted in Quadrant C. Item examined with Mini-Crimescope with all available wavelengths of light and orange barrier filter. No additional RD noted. Item processed in SafeFume fuming chamber for 15 minutes, 5 minute purge time. No additional RD noted. Rhodamine 6G applied to item and viewed with Dual77 at 520nm and orange barrier filter. RD ID noted (Quadrant C).
RZWUZG	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain Powder Dusting	ALS used MCS0389 @ <400nm (Clear); 400-450nm (Yellow); 450-535nm (Orange); >535nm (Red). Instrument used: CAE-MF1601000035, Cyan I program, Control +/-. Rhodamine 6G used; Control +/- ALS used: MCS0389 @ 475nm (Orange). Standard powder used due to metal ring on tag.
T8ELPL	Visual Examination Powder Dusting Powder Dusting	Magnetic powder Black powder
T9REZB	Visual Examination Cyanoacrylate Fuming Dye Stain Dye Stain Dye Stain Powder Dusting	per-treatment examination placed in Superglue cabinet (MV3000) for 20 minutes @RH=75, Plate T=120C, after that the item was subjected to white light examination Item was immersed in BY40 solution, after that it was wash using deionized water and left to dry in the drying cabinet. Finally, the item was subjected to blue light examination using yellow goggles Item was dye-stained by CV solution and kept for about two minutes, after that washed using deionized water and left to dry in the drying cabinet. Finally, the item was subject to white light examination Item was dye-stained by SB solution and kept for about two minutes, after that washed using deionized water and left to dry in the drying cabinet. Finally, the item was subject to white light examination Black powder was applied on the item, after that the item was subjected to white light examination
TDZE48	Powder Dusting	Item was processed with black powder
TEXPWN	Cyanoacrylate Fuming	Processed item of evidence using cyanoacrylate fuming in MVC 500 chamber.
TFU6AL	Visual Examination Cyanoacrylate Fuming Dye Stain	Various colors of light was used. Misonix fuming chamber was used. Item was fumed for 9 minutes and 30 seconds. Basic Yellow was used. Blue light and yellow filter was used.

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TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
TN3WEA	Powder Dusting	I processed the tag using black powder with positive results in C.
TRLRFG	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain Powder Dusting	04/07/2026 04/07/2026 MCS0388: 300nm-400nm/clear; 415nm/yellow; 515nm/orange; 555nm/red 04/07/2026 Ridge detail present: latent 1.1.1 observed and photographed in quadrant C. 04/07/2026 Rhodamine G 6 - Methanol based MCS0388 - 475nm, 495nm, and 515nm/orange Ridge detail present: latent 1.1.1 observed and photographed in quadrant C. 04/07/2026 Standard powder used due to metal ring in tag Ridge detail present: latent 1.1.1 observed and lifted in quadrant C. One latent lift card
TTH8RD	Visual Examination Powder Dusting	Using oblique lighting Using black fingerprint powder
TWEE4H	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	Visual Examination with LASER, UV, SUV, ALS, and Oblique Lighting. Fumed for Approximately 10 minutes. Visualized with FSIS and Shortwave UV and regular flashlight. Dye stained with Ardrex and visualized with UV lamp then Dye stained with Rhodamine 6G and visualized with a LASER. Powdered with black powder.
TZDATP	Visual Examination Cyanoacrylate Fuming Powder Dusting	Black powder.
UM2J78	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain VMD	Natural lighting Crimescope 15min processing time, 10min purging time. Rhodamine 6G methanol based was utilized to process Item 001. It was observed that the substrate was highly fluorescent and potentially drowned out any fluorescent impressions on the item. Item was suspended in VMD chamber and the two-metal process was utilized to process Item 001. Gold/Zinc was used.
UPA7T8	Visual Examination Cyanoacrylate Fuming	We found a print in sector C by visual examination by naked eye and in normal room lighting. The print was almost completely visible. Foster & Freeman MVC-3000-D3 + Lumicyano 0,22 g + cyanoacrylate 2,7 g. Temperature set 120 celcius, humidity was 80% and processing time 25 minutes. After fuming the print in sector C became fully visible and could be photographed by white light.
URVFTD	Powder Dusting	Processed item using magnetic wand and magnetic black powder.
UZXWNC	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	VIS using white light and magnifier CA Chamber 5 drops w/ 15 minute processing time MBD w/ 460nm FLS Black powder and fiberglass brush
V7WWC8	Cyanoacrylate Fuming Powder Dusting	after passing a quality control (lot# 202409041) Black powder

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
V8QMHL	Visual Examination	I used a bright light to visually examine the luggage tag. Noting that ridge structure was visible, photographs were not taken at this step.
	Alternate Light Source	I used FSIS as an alternate light source. There was ridge structure that was visible at this step. It was photographed using the camera on FSIS.
	Cyanoacrylate Fuming	The CA tank was used (MVC1000B) to glue the luggage tag. There was a positive control and ridge structure was visible once removed from the tank. Photographs were not taken at this step.
	Alternate Light Source	FSIS was used again after the CA fuming. There was ridge structure and this was photographed using the FSIS camera.
	Dye Stain	Rhodamine 6G was used to dye stain the luggage tag.
	Alternate Light Source	Crimescope was used at 515nm to visualize the dye stain. Ridge structure was visible and more photographs were taken.
	Powder Dusting	Black powder was used after the alternate light source. Ridge structure was visible, but no further development had occurred, no more photos were taken.
V9GVJA	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
VDFZJA	Powder Dusting	Item was processed in about five minutes using black fingerprint powder and cleaned with a feather duster.
VPRB9K	Visual Examination	I was able to see ridge detail in Section C.
	Cyanoacrylate Fuming	A test print was placed in the Foster+Freeman MVC3000.
	Dye Stain	I sprayed Basic Yellow 40 on the luggage tag and hung it in the vent hood to dry.
	Alternate Light Source	I utilized the Rofin Polilight at 450nm to visualize the luggage tag.
VQGJB9	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
VQMTBL	Visual Examination	4/20/26: Visually examined item with oblique light. Ridge structure (RS) was observed. A full spectrum imaging system (FSIS) was utilized to see if the RS would be further developed with the system at Visual (Vis).
	Alternate Light Source	4/20/26: FSIS used for Vis/FSIS examination. RS was further developed at Vis/FSIS. RS was marked and photographed.
	Cyanoacrylate Fuming	4/20/26: Item placed in cyanoacrylate (CA) fuming chamber. Visualized at CA and RS was observed. FSIS was used in conjunction with CA.
	Alternate Light Source	4/20/26: FSIS used for CA/FSIS examination. RS was further developed at CA/FSIS and was photographed.
	Dye Stain	4/20/26: Item processed with Basic Yellow 40(BY40).
	Alternate Light Source	4/20/26: Item processed with BY40 and visualized with Alternate Light Source (ALS) at 445nm with yellow goggles. RS was observed and photographed with yellow barrier filter.
	Powder Dusting	4/20/26: Item processed with black magnetic powder (BM). RS was observed and photographed.

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
VRD2CA	Visual Examination	We found a print in sector C by visual examination (normal room lighting and naked eye). The print became almost completely visible, but ridge details was not recovered.
	Cyanoacrylate Fuming	Foster&Freeman MVC-3000-D3 + Cyanoacrylate. Humidity 80%, temperature 120 celsius, processing time 15 min. After fuming the print in sector C became fully visible and could be photographed by white light.
	Basic Yellow 40	After Cyanoacrylate Fuming we used Basic Yellow 40 - method. Print was examined by F&F Crime-Lite 82S Blue 420-470nm, Schott GG495AG filter. Both methods, Cyanoacrylate + white light and Basic Yellow 40 + F&F Crime-Lite 82S Blue 420-470nm, Schott GG495AG filter, gave same results.
VW7TK	Visual Examination	
	Cyanoacrylate Fuming	
	Dye Stain	Basic Yellow
W4KGH7	Powder Dusting	The item was brushed using black powder and a fingerprint was developed
W6FZJ8	Visual Examination	
	Cyanoacrylate Fuming	CAE (lot# AN03419) – chamber #1, 15 min, 74 degrees F, 80% humidity
	Dye Stain	RAY (Isopropanol) working solution (lot# LP07032426)
W74HED	Alternate Light Source	White light, 340nm-587nm, UV.
	Cyanoacrylate Fuming	(80%) Humidity Cycle 15 min, Glue Cycle 15 min, Purge Cycle 40 min.
	Alternate Light Source	White light source
	Dye Stain	Staining with Rhodamine 6G
	Alternate Light Source	Fluorescence examination with polylight [475nm-510nm]
W8KF8D	Visual Examination	Item # 1, purple tag, was photographed and visually examined with no latent prints found.
	Cyanoacrylate Fuming	Item # 1, was then placed in the Cyanoacrylate - CApture BT fuming chamber - 5 minute processing time, 6 minute dwell time - no visible latent prints found after this step.
	Dye Stain	Item # 1 was then chemically processed with dye stain - basic yellow, rinsed with water and air dried. Visible ridge detail was found in box C after this step, and same was photographed.
	Arrowhead Forensics Laser	Item # 1 was then viewed with a blue Arrowhead Forensics laser and yellow filter. Visible ridge detail was found in box C and same was photographed.
	Powder Dusting	Item # 1 was then dusted with black/silver mag powder. Visible ridge detail was found box C and same was photographed.
WH2CVG	Visual Examination	White light with different angles
	Alternate Light Source	Foster&Freeman Crime Lite ML2 (UV-VIS)
	Cyanoacrylate Fuming	Foster&Freeman MVC3000D - about 4 minutes of fuming (120C, 80% RH)
	Dye Stain	Basic Yellow 40 (ethanol based CAST recepture)
WH4GFD	Visual Examination	the examiner performed the initial visual examination using the Rofin Polilight light source. the results were positive.
	Cyanoacrylate Fuming	the examiner performed the visual examination following processing. the results were improved. the chamber used was the CApture-BT and the fuming cycle was approximately 7 minutes long.

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TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
WHL3YA	Visual Examination	Impression observed in quadrant C but could not detect any friction ridges/friction ridge detail.
	Cyanoacrylate Fuming	Impression was enhanced and photographed.
	Dye Stain	Rhodamine 6G
	Laser examination	Possible enhancement of the impression. Photographed again.
	Powder Dusting	Processed with black fingerprint powder and photographed again.
WJX8LR	Visual Examination	Illumination: Ambient
	Cyanoacrylate Fuming	Processing time: 30 minutes Illumination: Ambient
	Dye Stain	Dye stain: Rhodamine Illumination: Laser (532 nm)
	Alternate Light Source	RUVIS Illumination: UV light
WL6PJM	Visual Examination	Oblique and direct overhead lighting.
	Cyanoacrylate Fuming	CA chamber for 15 minutes.
	Dye Stain	BY-40 dye stain, 350nm lighting with orange and yellow filters.
WLZ7WK	Visual Examination	
	Cyanoacrylate Fuming	Lumicyanoacrylate Fuming
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black Powder
WQGVFG	Powder Dusting	
WR84G6	Visual Examination	Item 1 was examined from the general to the specific
	Physical Developer (PD)	By applying the "Physical Magnetic Latent Print Powder Regular Black" reagent using a magnetic applicator and the uniform sweeping technique
WRCEGH	Visual Examination	Visual examination using oblique lighting
	Cyanoacrylate Fuming	Processed in fuming chamber for approximately 8 minutes using hotplate set at approximately 200 degrees C and a glass of hot water
	Powder Dusting	Used black latent powder
WTJ4BE	Visual Examination	Examination with an alternate forensic light source with appropriate filters (light source – POLILIGHT PL 500)
	Cyanoacrylate Fuming	20 min exposure, 120° C, 80% humidity, examination in white light and with POLILIGHT PL 500 in 505-530 nm range + appropriate filters
	Dye Stain	Spraying item with BY40 working solution, after 1 min the excess of reagent was rinsed under running tap water, examination with POLILIGHT PL 500 in 415-495 nm range + appropriate filters
	Dye Stain	Spraying item with Sudan black, exposing for 2-3 minutes, rinsing with running water and after drying examination with a white light
X36HXG	Visual Examination	I used a flashlight to examine for patent prints.
	Cyanoacrylate Fuming	I fumed the tag in a chamber for 15 minutes.
	Visual Examination	I used a flashlight to examine for latent prints.
	Dye Stain	I applied Rhodamine 6G to the tag.
	Alternate Light Source	I used the Arrowhead Forensics Dual77+ Laser at 532nm with orange laser goggles to visualize the processed tag.
	DI H2O rinse	I applied H2O to the tag
	Alternate Light Source	I used the Arrowhead Forensics Dual77+ Laser at 532nm with orange laser goggles to visualize the processed tag.

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TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
X4VQZ6	Powder Dusting	
X4YAM9	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain Alternate Light Source Powder Dusting	Initial visual examination. Initial ALS examination. RAM dye stain. ALS examination after RAM. Black magnetic powder dusting.
X73DNN	Visual Examination Cyanoacrylate Fuming Dye Stain Dye Stain	oblique lighting - nothing visible (aka. CA) Sealed chamber, heat, small amount of superglue in small tin, moister MRM-10 Basic Yellow
XD6XZE	White Light (WL) Superglue (CNA) Basic Yellow (BY40) Crystal Violet (CV) Sudan Black (SB) Black Powder (PR)	29/04/2026 @ 8:30 am, pre-treatment examination 29/04/2026 @ 8:45 am, placed in Superglue cabinet (MV3000) for 45 minutes @ RH=58, , after that the item was subjected to white light examination 29/04/2026 @ 10:20 am, item was immersed in BY40 solution ,after that it was washed using deionized water and left to dry in the drying cabinet. Finally, the item was subjected to Blue light examination using yellow goggles 29/04/2026 @ 11:30 am, item was dye-stained by CV solution and kept for about two minutes , after that it was washed using deionized water and left to dry in the drying cabinet. Finally, the item was subjected to white light examination 29/04/2026 @ 12:05 pm, item was dye-stained by SB solution and kept for about two minutes , after that it was washed using deionized water and left to dry in the drying cabinet. Finally, the item was subjected to white light examination 29/04/2026 @ 1:00 pm, Black powder was applied on the item, after that the item was subjected to white light examination
XJCN67	Visual Examination Alternate Light Source Cyanoacrylate Fuming Dye Stain	RMO
XXCVAF	Visual Examination Cyanoacrylate Fuming Dye Stain	Tracer Laser; Rofin at various wavelengths Misonix CA-6000 fuming chamber utilized with a 10 minute 28 seconds fuming time; visualized with white light Basic Yellow Dye stain used; visualized with blue light and yellow filter
Y4CUXB	Visual Examination Cyanoacrylate Fuming	Utilized Rofin, Coaxial light, Paddle light and Crime-lite 8x4: white light 75% Humidity and 17-minute fume time
YGJKZH	Visual Examination Cyanoacrylate Fuming Powder Dusting	Approx. 30 minute cycle magnetic powder
YGLA8Z	Powder Dusting	The item was dusted using black powder.

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
YHFH8C	Cyanoacrylate Fuming Vacum metal deposition	Visual examination (000-670nm); photography; humidity 84%; temperature 130°C
YKHGH6	Visual Examination Cyanoacrylate Fuming Powder Dusting	No visual ridge detail obs. Visual ridge detail obs. BP
YLVTLF	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting	Item 1 was examined visually upon opening it from its original packaging. Item 1 was examined with the use of an alternative light source (ALS) at 520 nm. Item 1 was placed into a secured cyanoacrylate fuming chamber and exposed to fumes in a controlled environment. The item remained in the chamber until the following day. Item 1 was processed with magnetic powder in a controlled environment under a powder ventilation hood.
YLZBJE	Cyanoacrylate Fuming Powder Dusting	The luggage tag and glossy postcard were placed in a CAE fuming chamber for 5 minutes with a pea-sized amount of super-glue and water. After fuming, the luggage tag and the postcard were both processed using silk black powder and were then photographed prior to having lift tape applied.
YM9X27	Powder Dusting	Item was processed with Magnetic Powder / print developed quadrant "C"
YMQHK4	Alternate Light Source	optical examination with white light source
YN3BJC	Cyanoacrylate Fuming Dye Stain Dye Stain Powder Dusting	LASER, UV, ALS, Oblique lighting Ardrox - UV Rhodamine - LASER Black powder
YN4F48	Powder Dusting	Black powder and magnetic powder.

Development Methods
TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
YYJ6PD	Visual Examination	Visual examination was conducted with positive results located on marker C.
	Oblique (white) lighting	Oblique (white) lighting was used with positive results, located on marker C.
	Cyanoacrylate Fuming	A Quality Control Test Print was placed on garment tag and placed inside the Cyanoacrylate Fuming Chamber. The luggage tag was placed inside the Cyanoacrylate Fuming Chamber for 12 minutes. A quality control test print was placed on a piece of film and placed inside the chamber. The quality control test print was conducted with positive results. Once the item finished, visual examination was conducted with positive results located on marker C.
	Visual Examination	Once the item finished, visual examination was conducted on the quality control test print garment tag, with positive results. A visual examination was conducted with positive results located on marker C.
	Oblique (white) lighting	Oblique (white) lighting was used on the quality control test print garment tag, with positive results. Oblique (white) lighting was used on the luggage tag with positive results, located on marker C.
	Dye Stain	The chemical that was used was Rhodamine 6G followed by a Methanol Rinse. A quality control test print was conducted using garment tag was placed on a tray and sprayed evenly using Rhodamine 6G and followed by Methanol Rinse, with positive results. The luggage tag was placed on a tray under a fumehood and sprayed evenly using Rhodamine 6G and then followed by Methanol Rinse. The item was left to dry. Once the item finished, visual examination was conducted with positive results located on marker C.
	Visual Examination	Once the item finished, visual examination was conducted with positive results located on marker C.
Z3VW7B	Oblique (white) lighting	Oblique (white) lighting was used with positive results, located on marker C.
	Alternate Light Source	The item luggage tag was placed under the Alternate Light Source wearing orange filtered goggles, wavelength 415nm with positive results.
	Visual Examination	On 4/15/26 I visually examined item 1 under white light with magnification using an LED light source. prints observed in section "C".
	Cyanoacrylate Fuming	on 4/15/26 I placed item 1 into the cyanosafe and allowed it to run for 12 minutes. The purge cycle ran, and the item sat for one hour to dry. I then placed the item under a white light with magnification using an LED light source. prints observed in section "C".
	Dye Stain	on 4/15/26 I submerged item 1 into RAY dye stain (Batch: CS2). I then rinsed the item under water, patted it dry with a Kim wipe, and then allowed to air dry completely. I then examined the item under the CrimeLite ML (460nm-510nm filter) using an orange filter. Print observed in section "C".
Z6LNB9	Powder Dusting	On 4/15/26 I powdered item 1 using a black powder. I then placed the item under a white light using an LED light source. Print observed in section labeled "C".
	Cyanoacrylate Fuming	portable fuming chamber #3, 12 minutes fuming time
	Alternate Light Source	UV Light Filter 410 nm GG 455 (3000 K)
Z7FGZZ	Cyanoacrylate Fuming	
Z8C367	Powder Dusting	Black powder
Z9M4NJ	Visual Examination	Visual exam using a LED flashlight and room lighting
	Cyanoacrylate Fuming	Cyanoacrylate processing for 12 minutes with 74% humidity in chamber.
	Dye Stain	Dye stained with Basic yellow 40

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
ZAUMPZ	Visual Examination	This item was visually inspected for fingerprint residue.
	Alternate Light Source	This item was viewed under a dual laser at 445nm and 520nm.
	Cyanoacrylate Fuming	This item was fumed using Cyanoacrylate fuming in an atmospheric chamber for 9 minutes and 18 seconds.
	Powder Dusting	This item was further processed using magnetic powder.
ZC4U8F	Visual Examination	
	Cyanoacrylate Fuming	
	Dye Stain	Rhodamine 6G
	Alternate Light Source	TracER 532nm
	FSIS II	254nm and 254 filter
ZDDGP8	Visual Examination	Visual examination under white light and magnification on 4/15/2026 (LED). Number of items confirmed.
	Alternate Light Source	Examination using an alternate light source (450nm filter) on 4/15/2026 (Crime Lite ML2 (420nm-470nm filter): Orange Filter). Number of items confirmed. - Examination using an alternate light source (530nm filter) on 4/15/2026 (Crime Lite ML2 (490nm-560nm filter): Red Filter). Number of items confirmed.
	FSIS II	- FSIS II examination on 4/15/2026 (UV). Number of items confirmed.
	Cyanoacrylate Fuming	- CA - CyanoSafe (LP) recirculation chamber (test print positive) on 4/15/2026 (Fluorescent). Number of items confirmed.
	Powder Dusting	- Magnetic powder on 4/15/2026 (Fluorescent). Number of items confirmed. Black powder.
	Dye Stain	RAY (868) on 4/17/2026 (Crime Lite ML2 (420nm-470nm filter): Orange Filter). Number of items confirmed. Test Print Positive
ZDU394	Visual Examination	Fingerprint visible at section C. Photographed with diagonal white light.
	Cyanoacrylate Fuming	Foster&Freeman MVC-3000. 120C, 80% humidity, 15 minutes. Photographed.
	Wet Powder Suspension	White Wet Powder, print did not get visible better.
	Basic Yello 40	Foster& Freeman bluegreen crime lite 82S (445-510 nm) with orange filter Schott 550 AG. Good, visible print.
ZJJ8UY	Visual Examination	
	Cyanoacrylate Fuming	Approximately 30 minutes.
	Visual Examination	
	Dye Stain	MBD - 7-P-methoxybenzylamino-4-nitrobenz-2-oxa-1-3-diazole
	Alternate Light Source	450nm with orange filter.
ZJMZ79	Visual Examination	
	Cyanoacrylate Fuming	FFLEX Chamber
	Powder Dusting	Black Powder

Development Methods

TABLE 2 - Item 1 (Luggage Tag)

WebCode	Development Methods	Method Details
ZNE2QE	Visual Examination	The item was labeled with squares A through D. Friction ridge detail of no value was observed on square C.
	Cyanoacrylate Fuming	MYSTAIRE Cyanoacrylate Fuming Chamber used - 70% humidity - Cycle time 10:00 minutes - Purge time 10:00 minutes Friction ridge detail of no value was observed on square C.
	Dye Stain	Rhodamine R6G Methanol was used as the staining dye, followed by a methanol rinse. The sample was then examined using a laser. Friction ridge detail of no value was observed on square C.
	Powder Dusting	Magnetic powder was used to dust the latent print. Friction ridge detail of possible value was developed on square C.
ZU4UBA	Visual Examination	Polilight PL550XL
	Cyanoacrylate Fuming	Cyanopowder (1,2g), Air Science Safe Fume CA-30S, time 40 minutes, humidity 75%
	Dye Stain	Basic Yellow 40, light 415-495 nm, yellow and orange viewing filter

Response Summary: Item 1 (Luggage Tag) - Development		
Methods Utilized		Responding Participants: 259
Alternate Light Source: 116	Physical Developer: 2	No Response: 0
Cyanoacrylate Fuming: 206	Powder Dusting: 164	Not Tested: 0
DFO: 2	Visual Examination: 220	Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.
Dye Stain: 150	Wet Powder Suspension: 3	
Ninhydrin: 2	1,2-Indanedione: 0	

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
2CMZ87	Visual Examination	Visual examination to determine what the best method of development to use
	Cyanoacrylate Fuming	A positive control was conducted, 7 min fuming, visually examined after development to see if any possible area was developed
	Powder Dusting	Magnetic powder was used to develop the latent print
2DBJ2C	Visual Examination	Diffrent lights sources and filters, entire range of optical radiation.
	Cyanoacrylate Fuming	80%-Humidity heater-130° C, Time 10 minutes, temperature inside of the chamber 25°C. (chamber Safefume CA30s)
	Powder Dusting	BVDA Magnetic Black, natural and white light
2F2VM4	Visual Examination	Item 2 was photographed. A visual inspection was then conducted, during which a slight impression was observed in quadrant B and photographed.
	Alternate Light Source	White alternating light was used to observing more closely the impression in quadrant B, and it was photographed.
	Black magnetic powder	Black magnetic powder was used, and a clear impression was developed and observed in quadrant B, between 5-10 seconds.
2F43W4	Visual Examination	Oblique lighting. No prints visible.
	Powder Dusting	Magnetic powder. Print visible in quadrant "B".
2GWT2H	Visual Examination	Observed a print in quadrant B during the visual examination phase. Took images on DCS camera before proceeding.
	Cyanoacrylate Fuming	Item was in the enclosed chamber with superglue and hot water for 12 minutes. I used a Quality Control print on the glass of the chamber concurrently with the Cyanoacrylate Fuming. After Cyanoacrylate Fuming, I took more images on DCS camera because the ridge detail was enhanced in quadrant B before proceeding.
	Powder Dusting	Powdered both sides of item with black powder using a sterile fingerprint brush and sterile powder. Collected 1 latent print lift card from quadrant B using lift tape.
	Ninhydrin	I performed a Quality Control check using a print on a white piece of paper prior to using the Ninhydrin on the item. Used Non-Running Ninhydrin on back of postcard. Item was in Caron chamber for 10 minutes at 80 degrees C and 65% humidity. Nothing was seen on the back of the postcard after enhancement. Item placed back in original packaging and "CAUTION: EVIDENCE CHEMICALLY TREATED" sticker was placed on the packaging.
2JYQDB	Visual Examination	Utilized white light, green laser, UV
	Lumicyano	Lumicyano (fluorescent CA) - processed for 15 minutes
2KG7Z8	Visual Examination	
	Cyanoacrylate Fuming	Superglue fuming.
	Powder Dusting	Fluorescent magnetic fingerprint powder.
	Alternate Light Source	450nm.

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
2YQNE7	Visual Examination	On 04/15/2026, a visual examination using fluorescent lighting was done on the item and no latent prints were observed.
	Alternate Light Source	On 04/15/2026, a visual examination was performed on the item under Alternative Light Source and a latent print was observed.
	Cyanoacrylate Fuming	On 04/15/2026, the item was processed through Cyanoacrylate fuming in the CyanoSafe chamber for 20 minutes with distilled water in the cup heater element, 18 drops of Cyanoacrylate in an aluminum weigh boat placed on the flat heating pad, and a test strip was hung. After the 20 minutes of fuming the Cyanosafe chamber was opened, and the evidence was left to rest for 60 minutes. A visual examination was performed after, and no latent print was observed.
	Powder Dusting	On 04/15/2026, the item was placed under a fume hood to dust with black magnetic powder. After dusting with black magnetic powder, a visual examination was done, and a latent print was observed.
	Ninhydrin	On 04/15/2026, the item was placed in Ninhydrin (batch #326) until fully saturated and hung to dry. After the item was completely dry the item was placed in the Caron chamber (humidity 60%/temperature 60c, allowing the chamber to reach the heat and humidity settings for 30-45 minutes). After approximately 30 minutes the item was removed, and visual examination was done and no latent prints were observed.
	Physical Developer (PD)	on 04/21/2026, Physical developer (batch #553) was used on the item and hung to dry. No latent prints were observed.
32VG7J	Visual Examination, Forensic Light Source, Cyanoacrylate Fuming, Dye Stain	4/6/26: Photo lift #2: Prior to chemical processing visible ridge detail was observed on the item in Quadrant B and photographed as photo lift #2. With initial photographic documentation complete, Item 2 was exposed to Cyanoacrylate fumes. Further development of ridge detail was noted after the completion of the Cyanoacrylate process and additional photographic documentation was performed. In an attempt to further develop ridge detail, MRM10 dye stain was applied to the case evidence and additional photographic documentation of photo lift #2 was performed. The Cyanoacrylate, Forensic Light Source, and MRM10 dye stain were all tested prior to being applied to case evidence and they performed as expected.

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
377UNH	Visual Examination	During initial documentation processes, under ambient room lighting conditions, a mark with fingerprint ridge detail (FRD) was observed in quadrant B and determined suitable for photography. This was assigned the unique identifier number "FEN102403417". Substrate appeared to possess non-porous (blank underside) and semi-porous/non-porous properties (glossy, grid-marked side).
	Alternate Light Source	Examined using a Rofin Polilight PL550XL UV-Vis-IR utilising a variety of wavelengths, white torch, and a combination of viewing filters (orange, OG550 and yellow, GG495).
	Cyanoacrylate Fuming	Item treated in a F+F MVC1000 with Cyanobloom for 5 minutes fuming time (control used).
	Alternate Light Source	Examined using a Rofin Polilight PL550XL UV-Vis-IR utilising a variety of wavelengths, white torch, and a combination of viewing filters (orange, OG550 and yellow, GG495). FRD recorded photographically.
	Dye Stain	Liquid (pipette) application of glossy card surface conducted with basic yellow-40 (BY40) and rinsed with water.
	Alternate Light Source	Examined using a Rofin Polilight PL550XL UV-Vis-IR utilising 440nm wavelengths and GG495 filter. FRD recorded photographically.
	Powder Dusting	Black magnetic powder was applied to the item surface. FRD recorded photographically.
382CQJ	Visual Examination	Used magnifying glass with white light
	Cyanoacrylate Fuming	No photos taken
	Dye Stain	MRM-10: one photo taken
	Dye Stain	Basic Yellow: two photos taken
	Methanol Rinse	Methanol Rinse: one photo taken
382VM2	Visual Examination	
	Cyanoacrylate Fuming	Air Science Safefume cabinet, 15 minutes, 80% humidity, 73°F
	Dye Stain	RAY dye stain (Rhodamine 6G, Ardrex, Basic Yellow 40), Isopropanol base
	Alternate Light Source	BrightBeam laser, 445 and 532nm, yellow and orange goggles
3DT37A	Visual Examination	Used white light to view evidence for possible patent prints; patent print observed in Quadrant B; photographed print using Nikon digital camera and white oblique light.
	Cyanoacrylate Fuming	Placed evidence in fuming chamber with cyanoacrylate and then observed for developed latent prints; latent print observed in Quadrant B; photographed print using Nikon digital camera and white oblique light.
	Powder Dusting	Dusted evidence with black fingerprint powder and observed for developed latent prints using white light; latent print observed in Quadrant B; photographed print using Nikon digital camera and white oblique light.
3E3PN2	Powder Dusting	Dusted for fingerprints with magnetic powder
3EJB8X	Visual Examination	The item of evidence was photographed in the original packaging. Once the postcard was removed from the packaging, the item was photographed and visually examined.
	Cyanoacrylate Fuming	The postcard was then placed into the benchtop superglue chamber to be processed for 30 mins. There was also a positive control placed in the chamber, along with the tin with 10-15 drops of superglue. There was friction ridge development, and the postcard was photographed again.
	Magnetic Powder	There was friction ridge development on the postcard in quadrant B. I used magnetic powder to enhance the print.

Development Methods
TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
3JBHP8	Visual Examination Powder Dusting	Magnetic Powder Lot # 052423-01; magnetic brush.
3V8UDY	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting	suitable latent observed 455 nm and 520 nm no additional ridge detail observed Vacuum chamber 40 minutes suitable latent observed suitable latent observed
46T378	Visual Examination Cyanoacrylate Fuming Dye Stain Dye Stain Powder Dusting DFO Ninhydrin Zinc Chloride Physical Developer (PD)	Visual examination under various light sources: daylight, direct/oblique lighting (flashlight), UV, LASER (532nm and 485nm), ALS (495nm) and short UV with an FSIS camera. Processed in superglue chamber for ~12 minutes (gauged time by test print), analyzed with short UV light and an FSIS camera. Used Ardrex (Methyl Ethyl Ketone) dye stain (applied via a squirt bottle) to cover the entire surface of the item, let dry, examined under UV light. Used Aqueous Rhodamine dye stain (applied via a squirt bottle) to cover the entire surface of the item, let dry, examined under LASER at 532nm (green). Used carbon black powder and a powder brush, applied to entire item with a light dusting motion to make sure not to disrupt the print. Immersed item in liquid chemical for ~5 seconds, let dry, and repeated (total of 2, 5 second immersions). Examined under 532nm LASER after at least 24 hours for best results before photographing. Immersed item in liquid chemical for ~5 seconds, let dry, examined under white light, allowing at least 24 hours for best results before photographing. Applied via a spray bottle to the entire item without oversaking; looked for visual process of Ruhemann's purple print (after Ninhydrin) to change to a red/orange color. Examined under 495nm ALS after at least 24 for best results before photographing. Item underwent a 5 minute rinse in maleic acid before processing in physical developer for ~10 minutes. Carefully rinsed under running water until water ran clear before allowing to dry on a clean paper towel and examining under white light.
473PNY	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting 1,2-Indanedione Ninhydrin Dye Stain	RD (Right loop/arch) noted in quad. B No RD noted in quad. A, C or D No additional RD noted No additional RD noted Magnetic black powder - No additional RD noted Illuminated with 520 nm light source - No additional RD noted Illuminated with white light - Additional RD (Right loop/arch) noted in quad. B No RD noted in quad. A, C or D Rhodamine 6G, illuminated with 520 nm light source - No additional RD noted
4APDH8	Visual Examination Cyanoacrylate Fuming Powder Dusting	Disclosing of a fingerprint but without details. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white. Improvement in fingerprint quality after use cyanoacrylate fuming. The best visible in the light source 505 nm and white. Improvement in fingerprint quality after use Magnetic Two Tone dusting powder.

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
4EF4N3	Visual Examination	negative
	Cyanoacrylate Fuming	negative
	Powder Dusting	black magnetic powder
4EJMC7	Visual Examination	Used flashlight, UV, short UV, and laser to visualize
	Cyanoacrylate Fuming	Superglued for 15 minutes then visualized with short UV
	Dye Stain	Used ardrex MEK on glossy side only, then visualized with UV
	Dye Stain	Used aqueous rhodamine on glossy side only, then visualized with laser
	Powder Dusting	Used black powder on glossy side only
	DFO	Dipped in DFO, let dry, dipped again, let dry, placed in oven for 20 minutes, then visualized with laser
	Ninhydrin	Dipped in ninhydrin, let dry, then placed in humidity chamber for 10 minutes
	Zinc chloride	Sprayed with zinc chloride, let dry, placed in humidity chamber for 10 minutes, then visualized with alternate light source
	Physical Developer (PD)	Placed in maleic acid for 10 minutes, placed in PD for 20 minutes, rinsed with tap water, then let dry
4NQ3HE	Visual Examination	One area of visible ridge structure was observed on the postcard in quadrant B.
	Alternate Light Source	Full Spectrum Imaging System (FSIS) - One area of visible ridge structure in quadrant B. A photograph was taken.
	Cyanoacrylate Fuming	Foster and Freeman MVC 1000, 15 minutes at 120 degrees Celsius and 80% humidity. A positive control was used and passed. No additional areas of ridge structure were developed.
	Alternate Light Source	Full Spectrum Imaging System (FSIS) - The area of ridge structure in quadrant B was of equal or higher quality, so an additional photograph was taken.
	Powder Dusting	Black powder - The area of ridge structure in quadrant B was of equal or higher quality, so an additional photograph was taken.

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
4PGBJ3	Visual Examination	Visual examination of the item for ridge detail was completed using the full spectrum imaging system. Positive results to control print too.
	Cyanoacrylate Fuming	To the front of the postcard: Using the Air Science Safe Fume Atmospheric Fuming Chamber: The evidence was placed within the chamber with a test print. Cold tap water was added to the humidifier to facilitate the CA polymerization to humidify the evidence prior to exposure to CA fumes. An aluminum dish was on the heating element with liquid CA, and then the system was turned on and put into operation. After the cycle was complete, nothing was visualized on the item. Positive results to control print.
	Dye Stain	To the front of the postcard: Rhodamine 6G (R6G) is a fluorescent dye stain used to enhance CA developed latent prints. R6G fluoresces in a narrow range, 450 – 480nm, and is best suited for use with the Coherent TracER Laser. After the item was CA fumed, R6G was applied (under a fume hood) by spraying the item in the R6G. The item was then allowed to dry. The item was then examined using the TracER Laser utilizing appropriate goggles. The item was then rinsed in attempt to improve clarity, but there was no visualization of any latent print detail. Positive results to control print.
	1,2-Indanedione	Back of the card: IND is a fluorescent analogue of ninhydrin and is used to develop latent prints on porous and semi-porous surfaces. IND reacts with amino acids and eccrine components in the latent print residue. IND prints tend to appear pink (compared to the color obtained with ninhydrin) and are highly luminescent. The same process was completed as NIN, but with IND. Positive results noted to the control print, negative results to the back of the item.
	Ninhydrin	Back of the card: Ninhydrin (1, 2, 3-Indantrione monohydrate) is a reagent used to develop latent prints on porous and semi-porous surfaces. Ninhydrin reacts with amino acids in the latent print residue, forming a dark purple product called Ruhemann's Purple. Working in a fume hood, I thoroughly coated the item using a spray bottle and allowed the evidence to dry. I then placed the dried evidence item between a folded piece of butcher paper before ironed it using a standard steam iron to heat and hydrate the treated item in its entirety. Positive results noted to the control print, negative results to the back of the item.
	Powder Dusting	Powder processing was completed with magnetic powder, yielding a latent print in section C, and detail was recovered with latent print tape.
4QV937	Visual Examination	Visible light and LASER at 532nm light for visual exam.
	LUMICYANO	Lumicyano applied in fuming chamber for 17 min at 75% relative humidity and viewed with light at 490nm and orange goggles/filter.
	DFO	Applied and put into environmental chamber at 100 deg C and 0% relative humidity for 20min; viewed with 450nm light and orange goggles/filter.
	Ninhydrin	Applied and put into environmental chamber at 60 deg C and 65% relative humidity for 2 min; viewed with white light.
4UTEEB	Visual Examination	Viewed at white light and CrimeScope set to 350nm, 455nm, and 515nm with appropriate barrier filters
	Cyanoacrylate Fuming	10 mins
	Dye Stain	R6G viewed at 515nm with orange and green barrier filters stacked

Development Methods
TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
4XVR3G	Visual Examination Cyanoacrylate Fuming Alternate Light Source Dye Stain Alternate Light Source Dye Stain Alternate Light Source Powder Dusting Alternate Light Source	White light Cyanoacrylate cabinet 1000 with cyanobloom - auto cycle Polilight - multiple wave length Rhodamine Polilight - 505nm with orange filter Ardrox Polilight - UV 350nm Black powder Polilight - multiple wave lengths
62RVAU	Cyanoacrylate Fuming MBD Alternate Light Source	Automated chamber that fumes for approximately 15 minutes. Simultaneous reliability test performed. Applied to surface using plastic squirt bottle after successful reliability test. Visual exam at 450nm after successful reliability test
64XJ67	Visual Examination Alternate Light Source Cyanoacrylate Fuming 1,2-Indanedione VMD Ninhydrin Dye Stain Physical Developer (PD)	Ambient and white light examination Multiple wavelengths - from long wave uv through to IR Visuallised using white light Visuallised with laser Visualised with white light Visuallised with white light R6G, GV - Visuallised with white light and laser Visualised with white light
697GGC	Visual Examination Cyanoacrylate Fuming Powder Dusting	Visual examination of the glossy postcard. No ridge detail observed. Fumed the item in the chamber for approximately 10 minutes with hot water for humidity. No ridge detail observed after fuming. Applied black powder to the glossy postcard with a disposable brush and developed ridge detail in quadrant B. No other ridge detail observed.
6998MV	Visual Examination Cyanoacrylate Fuming Visual Examination Powder Dusting Visual Examination Dye Stain Alternate Light Source	Examined item using ambient lighting and a flashlight. Used a vacuum chamber set to 25 PSI and fumed for twenty minutes, let cure for 15 minutes. Examined item using ambient lighting and a flashlight. Used standard black powder. Examined item using ambient lighting. Used a combination dye stain (Rhodamine 6G, Ardrox P-133D, MBD) to spray item and then allowed item to dry in fume hood. Used a Foster+Freeman Crime-Lite Blue-Green (445-510nm) with orange goggles.
6A3XTA	Visual Examination Cyanoacrylate Fuming Powder Dusting	various wavelengths of light approx. 9 min black magnetic powder
6FPEV7	Powder Dusting	Black magnetic fingerprint powder
6GLV94	Visual Examination	Visual, refUV, magnetpowder
6PD428	Cyanoacrylate Fuming Ardrox	Ardrox + 350nm + yellow filter

Development Methods
TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
6TBRA2	Cyanoacrylate Fuming Dye Stain Powder Dusting	approx. 10 min fuming RAM dye stain to glossy side of card Magnetic Powder
6TF2AE	Visual Examination Cyanoacrylate Fuming 1,2-Indanedione Ninhydrin Dye Stain	white light examination fuming chamber then white light examination drying oven then laser examination (with orange filter goggles) humidity oven then white light examination R6G-water on glossy side only then laser examination (with orange filter goggles)
6TGYKA	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting 1,2-Indanedione	White Light - a smudge was observed in Quadrant B. Dual 77 Laser 520nm (green) and 445nm (blue) lights - no prints observed. Processed in AirScience Cyanoacrylate Fuming Tank for 15 minutes under 80% humidity - a print was observed and photographed in Quadrant B. Used black magnetic powder - a print was observed and photographed in Quadrant B. Processed with 1,2 Indanedione (viewed with Dual 77 Laser 520nm (green light)) - no prints observed
6U7AB3	Visual Examination Alternate Light Source Powder Dusting Alternate Light Source	Fingerprint visible at area B. Photographed with diagonal light green 480 – 560nm, blue 420 – 470nm, ja UV 350 – 380nm. Not better visibility for fingerprint. Supranano Green Fluorescent green 480 – 560nm, blue 420 – 470nm
6U88LY	Powder Dusting	- Wear the personal protective equipment (PPE) to check if the package was well sealed; - Apply digital photography with camera canon 1100D for recording the item 2; - Open item 2 containing Quadrants A-D within the glossy postcard; - Apply digital photography with camera canon 1100D on the glossy postcard; - Proceed with visual examination on the glossy postcard; - Dusting with Fluorescent green powder by using camel hair brush after wearing appropriate PPE; - Apply digital photography with camera, reproduction table with ruler closer to the latent print for recording developed latent print; - Enhancement by using DCS-5 machine with forensic light source (FLS) e.g. Ring light; - Apply a digital photography using DCS-5 camera Nikon D6 to save enhanced latent print; - Processing time for all steps was about 50 minutes.
6XRKDU	Visual Examination Cyanoacrylate Fuming Dye Stain Alternate Light Source	examined under lighted magnification / no fingerprint evidence observed 15 minutes in fuming chamber / 15 minutes purging chamber / examined under lighted magnification / no fingerprint evidence was observed sprayed with 7-P-methoxybenzylamino-4-nitrobenz-2-oxa-1-3-diazole (MBD) examined with alternate light source (ALS) at 450 nm under magnification / visible ridge detail in quadrant B
76GRA6	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting Ninhydrin	

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
76N6B3	Visual Examination	Item 2 was visually examined using oblique lighting in our processing room and no visible prints were observed.
	Cyanoacrylate Fuming	Item 2 was then chemically processed using Superglue Fuming (lot# SGF052224DH, positive test print). The chamber was set at 55% humidity for 26 minutes and purged for 5 minutes. After superglue fuming was complete, item 2 was examined and no ridge detail was observed on this item.
	Powder Dusting	Item 2 was then processed using magnetic black powder, which developed ridge detail in quadrant B.
77JMC4	Cyanoacrylate Fuming	Portable fuming chamber 1 for 15 minutes
	Alternate Light Source	FSIS, used UV light and camera with UV filter
	Powder Dusting	Black magnetic powder, Brush method for a few seconds
79LLMW	Powder Dusting	Magnetic powder
7KEBX3	Visual Examination	Polilight PL500
	Cyanoacrylate Fuming	Hot plate 120 'C, hum. 85%, time 20 min.
	Powder Dusting	Bichromatic
7LBRAY	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	
	1,2-Indanedione	
	Dye Stain	
	Physical Developer (PD)	
7PBTHA	Visual Examination	Preserved via photography.
	Cyanoacrylate Fuming	Fumed for approximately 10 minutes. Preserved via photography.
	Powder Dusting	Magnetic powder- preserved via photography and a lift.
	Powder Dusting	Black powder - preserved via a latent lift.
7Q22KX	Visual Examination	
	Alternate Light Source	FLS exams
	Cyanoacrylate Fuming	
	Powder Dusting	MGP
	1,2-Indanedione	
	Dye Stain	RMO dye stain
	Physical Developer (PD)	

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
7U66KD	Visual Examination	I processed one peach-colored, white, and multi-colored invitation card with a glossy (non-porous) surface on one side and a porous surface on the other side. Prior to conducting a visual examination on the item, I disinfected my workstation using a 10 percent bleach solution, placed a piece of white butcher paper on the table, and wore a new set of disposable gloves to remove the item from the packaging. Using a flashlight and magnifying glass, I search for ridge detail and did not observe any or any other trace evidence on this item at this stage.
	Cyanoacrylate Fuming	I disinfected inside the superglue fuming chamber and metal clasps used to hold item and placed a piece of white butcher paper inside. I checked the expiration date for the superglue and placed it into an aluminum dish tin which was placed on top of the heating panel. I also heated up distilled water into a cylinder beaker and placed it inside the chamber. Lastly, I placed a known print onto the glass inside the chamber as a quality control (QC). I fumed for 6 minutes. I documented the results of the QC. I did not observe ridge detail on the item.
	Powder Dusting	I disinfected the downdraft using an ethanol solution, placed a piece of white butcher paper, one disposable fingerprinting brush, and black powder onto the downdraft. I applied black powder onto the item and observed ridge detail in quadrant B of the invitation card.
	Ninhydrin	I used the non-running Ninhydrin solution and checked the expiration date for the reagent. I tested the reagent using a quality control (QC), where I place a known print onto a blank piece of paper. I applied the ninhydrin onto the piece of paper with the known print and waited for the paper to completely dry before applying heat by using a steam iron. I observed ridge detail colored in purple and documented the results in my notes. I applied the ninhydrin onto the entire surface of the porous side of the invitation card and let it dry completely. I then placed the evidence into the CARON chamber with the settings at 80 degrees Celsius and 65% humidity. I kept the evidence inside the chamber for 5 minutes. I did not observe ridge detail on the porous side of the invitation card.
7VD3P2	Visual Examination	Used white, green and blue lights to scan evidence. One latent print observed. Latent print best visible using white side lighting which was used to photograph the print.
	Cyanoacrylate Fuming	Used white side lighting to visualize the latent print.
	Dye Stain	Used RAM dye stain. Visualized the latent print using a blue light (445nm) and a yellow filter.
	Powder Dusting	Used Black Magnetic Powder after dye stain. Visualized using white light.
	Ninhydrin	Applied Ninhydrin on the back (non-glossy side) of evidence. No latent prints developed.

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
7X6GGD	Visual Examination	Prior to opening the packaging containing item 2, I decontaminated my workstation using bleach and placed two butcher paper on top of the workstation. I opened the packaging containing item 2. With clean gloved hands, I pulled item 2 out and visually examined the item. I saw ridge detail in quadrant B. I went over to the DCS-5 and took images of the ridge detail.
	Cyanoacrylate Fuming	Prior to placing the item into the Cyanoacrylate fuming chamber, I placed a butcher paper inside the chamber. I placed a quality control print on the glass of the Cyanoacrylate fuming chamber door. With clean gloved hands, I then placed item 2 onto the butcher paper (glossy side of the postcard facing up) inside the chamber. I ran the Cyanoacrylate fuming chamber at approximately 80% relative humidity and 120 degrees Celsius for the vaporization of superglue for approximately 25 minutes.
	Powder Dusting	With clean gloved hands, I placed item 2 onto a butcher paper. I placed a sterile fingerprint powder brush and black powder onto the butcher paper as well. I then powdered the glossy area of item 2 and lifted 1 latent print lift card with tape lift from quadrant B.
	[No Methods Reported.]	I swabbed the glossy side of item 2 for possible DNA evidence using one swab. I placed the swab into a coin envelope, which was then placed into a bigger envelope.
	Ninhydrin	Prior to processing the item with Ninhydrin, I performed a quality control check on the Ninhydrin (non-running) chemical. I then processed the non-glossy side of item 2 with Ninhydrin (non-running). I decontaminated the hanging hook inside the Caron chamber and placed a butcher paper inside the Caron chamber as well. I hung item 2 and ran the Caron chamber at 65% relative humidity and at 80 degrees Celsius for approximately 10 minutes.
86LCW8	Visual Examination	Visual examination with oblique light. No trace evidence was noted. No indented writing visible.
	Alternate Light Source	Crimelite using wavelengths 455nm - 515nm. No visible fluorescing prints.
	Cyanoacrylate Fuming	CyanoSafe Atmospheric chamber for 20 minutes.
	Powder Dusting	Used black powder. Latent print developed in quadrant B
884Q3T	Visual Examination	11:20, no suitable ridge detail
	Alternate Light Source	1133, Laser 445 nm & 520 nm, no suitable ridge detail
	Cyanoacrylate Fuming	1215, Vacuum chamber, 40 minute fume time, no suitable ridge detail
	Powder Dusting	1317, Magnetic Powder, Suitable ridge detail
92DBX2	Visual Examination	Exam with white light and 350-650nm
	Cyanoacrylate Fuming	Fuming chamber processing time 12 minutes, with 75% humidity
	Powder Dusting	Black Powder dusting
9MYBGV	Powder Dusting	Black magnetic powder. Standard application

Development Methods
TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
9RRZV2	Visual Examination	Using oblique lighting, laser, long and short wave UV with FSIS
	Cyanoacrylate Fuming	Fumed for approximately 10 minutes then visualized using the FSIS with short wave UV
	Dye Stain	MEK Ardrex dye stain visualized with UV light
	Dye Stain	Aqueous Rhodamine dye stain visualized with laser light
	Powder Dusting	Black fingerprint powder
	DFO	Dipped into dish and placed into oven for 20 minutes, visualized with laser light
	Ninhydrin	Dipped into dish and placed into humidity chamber
	Zinc Chloride	Sprayed and placed into humidity chamber, visualized with ALS
	Physical Developer (PD)	Rinsed paper with Maleic Acid prior
9TMF8Y	Visual Examination	negative
	Cyanoacrylate Fuming	negative
	Powder Dusting	black magnetic powder
9UBY36	Visual Examination	In daylight fingerprint has been disclosed - section B. In whole spectrum of Polilight PL500 no fingerprint fluorescence.
	Cyanoacrylate Fuming	Improved fingerprint quality has been achieved - section B.
	Powder Dusting	Type of powder - Black Emerald. Improved fingerprint quality has been achieved - section B.
9VQBQ2	Visual Examination	Examine the item as is, using ambient lighting, flashlight, UV light, FSIS, ALS, and LASER.
	Cyanoacrylate Fuming	Superglued the item in the superglue cabinet along with a test print for about 10 minute
	Dye Stain	Dye stained the glossy part of the item with MEK Ardrex. Let it dry for a few minutes and examined it under the UV light.
	Dye Stain	Dye stained the glossy part of the item with Aqueous Rhodamine. Let it dry for a few minutes and examined it under the LASER light.
	Powder Dusting	Dusted the glossy part of the item with carbon black powder.
	DFO	Dipped the item twice in DFO, let it dry for a few seconds, then put in the oven at 100°C for about 20 minutes. Examined under the Laser and Shortwave UV/FSIS camera.
	Ninhydrin	Dipped the item in Ninhydrin, let is dry for a few seconds, then put it in the humidity chamber (70°C) for about 1 minute or until the latent impressions turns Ruhemann's Purple.
	Zinc Chloride	Sprayed item with Zinc Chloride. Examined under ALS.
	Physical Developer (PD)	Dipped item in Maleic Acid first for about 5 minutes, and then dipped the item into PD for about 20 minutes. Let it dry under the lights.
9WLCX7	Visual Examination	-White light, UV light, Tracer (532nm green laser light)
	Lumicyano	-Processed using 0.14g powder and 2.71g solution -Fumed in CAPture-BT fuming chamber for 17 minutes -Positive control sample
9WMQ4X	Visual Examination	negative
	Cyanoacrylate Fuming	negative
	Ninhydrin	negative
	Physical Developer (PD)	negative
	Powder Dusting	positive (lifted with tape and lift card).

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
9WZX9T	Visual Examination	Examined under ambient lighting.
	Alternate Light Source	Examined under all wavelengths available on the Mini-Crimescope.
	Cyanoacrylate Fuming	SafeFume Superglue Chamber used with following settings: Fume Time- 25 minutes under 80% Relative Humidity; Purge Time- 7 minutes.
	Powder Dusting	Powdered with Bi-Chromatic Fingerprint Powder.
	1,2-Indanedione	Reagent applied using spray method. Used humidity chamber to aid development at 70 degrees Celsius under 40% Relative Humidity.
	Alternate Light Source	Fluorescence of 1,2-Indanedione visualized and examined using Dual 77 at 532 nm.
	Ninhydrin	Reagent applied using spray method. Used humidity chamber to aid development at 80 degrees Celsius under 60% Relative Humidity.
	Rhodamine 6G	Reagent applied via spray method.
	Alternate Light Source	Fluorescence of Rhodamine 6G visualized and examined with Dual 77 under 532 nm.
9XBAX4	Visual Examination	Print recovered
	Cyanoacrylate Fuming	Print recovered
	Powder Dusting	Print recovered
A4HN9T	Visual Examination	Visual examination under ambient lighting. No RD noted in Quadrants A, B, C or D.
	Alternate Light Source	Inherent Lumination utilizing the Mini-Crimescope at all available wavelengths. No RD noted in Quadrants A, B, C or D.
	Cyanoacrylate Fuming	Cyanoacrylate fuming in SafeFume Superglue Chamber for 25 minutes. Allowed to rest for 24hrs. No RD noted in Quadrants A, B, C or D.
	Powder Dusting	Powder dusting with Magnetic Black powder. RD (right loop) noted in Quadrant B. No RD noted in Quadrants A, C or D. One (1) documentation photo captured of RD noted in Quadrant B.
	1,2-Indanedione	1,2-Indanedione applied. Visualization with TracER laser at 532nm. No additional RD noted in Quadrant B. No RD noted in Quadrants A, C or D. One (1) documentation photo captured of RD noted in Quadrant B.
	Ninhydrin	Ninhydrin applied. No additional RD noted in Quadrant B. No RD noted in Quadrants A, C or D.
	Dye Stain	Rhodamine 6G dye stain applied. Visualization with TracER laser at 532nm. No additional RD noted in Quadrant B. No RD noted in Quadrants A, C or D. One (1) documentation photo captured of RD noted in Quadrant B.
A82HAZ	Visual Examination	NLPSC in quadrant "B." NLP in quadrants "A," "C," and "D."
	FSIS2	NLPSC in quadrant "B." NLP in quadrants "A," "C," and "D."
	Cyanoacrylate Fuming	Latent print suitable for comparison (2a) in quadrant "B." NLP in quadrants "A," "C," and "D."
	Powder Dusting	Green fluorescent powder used. Latent print suitable for comparison (2a) in quadrant "B." NLP in quadrants "A," "C," and "D."
A8XYLW	Powder Dusting	Item processed with magnetic powder with positive results
AEWKBB	Visual Examination	
	Cyanoacrylate Fuming	Humidity-70%, 15 minutes glue time, QC used-positive
	Powder Dusting	black powder and brush used

Development Methods
TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
AEYBHU	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting 1,2-Indanedione Ninhydrin Dye Stain	Ambient Lighting with naked eye Mini-Crimescope all available wavelengths SafeFume Chamber run time 25 minutes, allowed to dry overnight Silver/black powder utilized Humidity chamber utilized (70 degrees, 40% humidity-10 minutes) then Dual 77 Laser utilized at 532nm Humidity chamber utilized (80 degrees, 60% humidity- 10 minutes). Rhodamine 6G utilized with Dual 77 Laser at 532nm
AG7PNZ	Visual Examination Lumicyano	-White light, UV light, Tracer (532nm green laser light) -Processed using 0.14g powder and 2.71g solution -Fumed in CAPture-BT fuming chamber for 17 minutes -Positive control sample
AN6E8P	Powder Dusting	Dusted
ATHZEB	Visual Examination Cyanoacrylate Fuming Powder Dusting	Examine the item and the submission form before labeling with case identifiers, documenting the item in notes and visually examining for any ridge detail. Placing the item in the Fuming chamber to cycle and examine any further developments of ridge detail. Contrast the print against the background.
AYJAL4	Visual Examination Cyanoacrylate Fuming Powder Dusting Dye Stain	Positive Fumed for 12 minutes with improvement Magnetic powder with improvement Basic Yellow with improvement
B347KZ	Visual Examination Cyanoacrylate Fuming Dye Stain Dye Stain Powder Dusting DFO Ninhydrin Zinc Chloride Physical Developer (PD)	Used different light sources: flashlight, LASER, SUV(FSIS), ALS, UV Placed item in superglue chamber for ~10-15 minutes, gauged timing with a test print inside chamber at the same time. Used a flashlight and FSIS/SUV to examine and take photo Ardrox (Methyl Ethyl Ketone): Sprayed item and let dry, used UV light to examine and take photo Aqueous Rhodamine: Sprayed item and let dry, used the LASER and an orange filter to examine and take photo Dust item with black powder until print developed Dip item in DFO, let dry and dip again, after it is dry place in oven at 100C for ~15-20 minutes Used LASER and orange filter Wait 24 hours between porous processing Dip in ninhydrin, let dry and place into a humidity chamber ~15-20 minutes Wait 24 hours between porous processing Lightly sprayed ZC on item, let dry and sit until nin print turns orange Wait 24 hours between porous processing let item sit in Maleic Acid for 5 minutes, transfer to PD for about 20 minutes or until print starts to develop
B8D9LW	Visual Examination Cyanoacrylate Fuming Dye Stain Powder Dusting	15 min in a CA chamber Rhodamine 6G / laser examination black powder

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
BDMVNT	Visual Examination Alternate Light Source Cyanoacrylate Fuming 1,2-Indanedione Ninhydrin Powder Dusting Dye Stain	Visual with White Light Visual with Mini-Crimescope all wavelengths SafeFume Superglue Chamber Heat and Humidity Chamber visualized with the Dual 77 at 520nm Heat and Humidity chamber Bi-Chromatic Powder Rhodamine 6G visualized with Dual 77 at 520nm
BHD6XQ	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting 1,2-Indanedione Ninhydrin Dye Stain	Ambient lighting with naked eye Mini-crimescope (all wavelengths) SafeFume Superglue Chamber (run time 25 minutes), allowed to dry overnight Magnetic bi-chromatic powder utilized Humidity chamber, Dual 77 (520 nm) was utilized after Humidity chamber Rhodamine 6G utilized with Dual 77 (520 nm)
BQNTA4	Visual Examination Cyanoacrylate Fuming Powder Dusting DFO Ninhydrin	Lumicyanoacrylate
BU8LK8	Visual Examination Cyanoacrylate Fuming Powder Dusting	CA-3000 Cyanoacrylate Fuming Chamber Magnetic powder
BV2WD9	Visual Examination Cyanoacrylate Fuming 1,2-Indanedione Ninhydrin Dye Stain	Flashlight & ALS @ 475nm Forced Air Oven used, viewed with LASER Humidity Oven used Rhodamine 6G - Water based
BWR6EW	Visual Examination Powder Dusting	The sample was observed to determine the type of surface and its characteristics. The surface was determined to be plasticized (non-porous) and smooth. Based on this result, a physical reagent (black powder) was applied.

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
C28Q84	Visual Examination	1 mark was visualised with natural light and labelled Item 2_PLC2_Postcard. Mark Item 2_PLC2_Postcard was captured using DCS-5 with a co-axial light box attached.
	Alternate Light Source	Examination was carried out using Attestor LIGHTcube sources. The following light sources were used: UV narrow angle (365 nm), Violet narrow angle (410 nm), Royal blue narrow angle (447 nm), Blue-green narrow angle (470 nm), Pure green narrow angle (530 nm), Orange narrow angle (590 nm), Pure red narrow angle (630 nm). Examination was carried out using the corresponding filter goggles and after a brief period of darkness adaptation. Foster & Freeman Crime-lite 8x4 Mk2 White (400-700nm), Violet (410nm), Green (520nm), Blue (445nm), Blue-Green (475nm), Orange (590nm) and Red (640nm) UV (365 nm) was attached to the DCS-5.
	Cyanoacrylate Fuming	Forenteq Megafume XL61 cabinet was used with a standard cyanoacrylate pre-set process (15 min fuming at 80% Relative Humidity). Full spectrum Light-cube examination as per Alternative Light Source comments. Further enhancement required.
	Powder Dusting	Mark Item 2_PLC2_Postcard was enhanced using Sirchie Black Magnetic latent fingerprint powder and recaptured using DCS-5 and the white Crime-lite 8x4 Mk2.
C2KUNU	Powder Dusting	Black magnetic powder
C3XY9R	Visual Examination	Magnetic
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	RMO
	1,2-Indanedione	
	Dye Stain	
	Physical Developer (PD)	
C8DJ2Y	Visual Examination	no ridge detail observed
	Cyanoacrylate Fuming	possible ridge detail observed in "B". chamber ran ~31 minutes, test print positive Lot#SGF052224DH
	Powder Dusting	magnetic powder, ridge detail observed in "B"
CAHPLR	Powder Dusting	Used Magnetic Powder On Quadrants A-D on Glossy Postcard.
CDEVXW	Visual Examination	Latent print in Area B
	Powder Dusting	Black Magnetic Powder. Latent print enhanced in Area B
CKWJY7	Visual Examination	Visually examined for possible ridge detail.
	Cyanoacrylate Fuming	Item processed with a 15-minute fume at 80% RH. Performed in superglue chamber SN: CA000035.
	Powder Dusting	Black powder applied to the surface of the glossy postcard in powdering hood SN: DWS000022.
CRZB2V	Visual Examination	viewed w/white light
	Cyanoacrylate Fuming	15 minutes @ 65% humidity
	Dye Stain	sprayed with MBD
	Alternate Light Source	MBD viewed using CSS filter
	Powder Dusting	black powder

Development Methods
TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
CU3NP2	Visual Examination Cyanoacrylate Fuming Powder Dusting	Tracer laser, UV, Ambient lighting Misonix chamber, 80% RH, 8-minute processing time Magnetic black powder
D2FYF8	Visual Examination Cyanoacrylate Fuming Powder Dusting	
DFHQGY	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting Dye Stain	Visual exam with white light. 2 photos taken (used yellow filter). FLS exam UV-thru near infrared. No photos taken. CA fuming in chamber. 1 photo taken. Black powder (BP) processing. 1 photo taken. MRM-10. 1 photo taken.
DFMB63	Visual Examination Cyanoacrylate Fuming Powder Dusting Powder Dusting	One photo taken Took approximately 10 minutes; one photo taken Magnetic powder; took approximately 5 minutes; one lift taken Black powder; took approximately 5 minutes; one lift taken
DH8WG3	Visual Examination Cyanoacrylate Fuming Powder Dusting DFO Ninhydrin	light sources: Crimelite, Incandescent, and TracER Laser (532 nm) using Lumicyano powder (fluorescent) viewed with TracER Laser (532 nm), and processed in FFLEX chamber black powder incubated at 100C for 20 mins, viewed with Tracer Laser (532 nm) incubated at 80C and 65% humidity for 3min
DL78D3	Visual Examination Lumicyano Fuming Powder Dusting DFO Ninhydrin	Flashlight, incandescent, laser Flashlight, laser, fflex fuming chamber Flashlight Laser, oven Flashlight, humidity chamber
DNFJPT	Visual Examination Cyanoacrylate Fuming Powder Dusting Ninhydrin	negative Cyanoacrylate fuming (15 mins @80% RH) black magnetic powder Ninhydrin (humidity chamber 5 mins @70 degree F & 75% humidity)
DTPECU	Visual Examination Cyanoacrylate Fuming Powder Dusting	Ambient light, LASER @ 532nm with orange filter, and UV @ 254 nm w/ Full Spectrum Imaging System (FSIS). 75% relative humidity, 14 min fuming time. Magnetic black powder
DTQW8R	Powder Dusting	SHORT PROCESSING TIME, WITH LIGHT DUSTING OVER THE CARD

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
DVAVEV	Visual Examination	White light examination of exhibit as received using ambient laboratory lighting and 'Tiablo' High Power LED Flashlight at varying angles. A mark was developed in quadrant B, exhibited as "TJD/1" and photographed.
	Alternate Light Source	Sequential High Intensity Light Sources (HILS) examination carried out, following dark adaptation, using a UV Crime Lite 350nm-380nm with 408nm filter followed by a Blue Crime Lite 420nm-470nm with a 476nm viewing filter followed by a Green Crime Lite 480nm-560nm with 571nm viewing filter. No useful marks were developed and no previously exhibited marks were further enhanced.
	Powder Dusting	The item was treated with SupraTheta Black Magnetic Powder using a magnetic applicator wand. Following treatment the item was examined with a bench ring light at varying angles. The QA was adhered to and the control test piece passed. Mark "TJD/1" was further enhanced, exhibited as "TJD/1A0" and photographed.
	Cyanoacrylate Fuming	The item was treated with Cyanoacrylate Fuming using a Foster and Freeman MVC 5000D cabinet. The relative humidity was set to 80% with a glue time of 13 minutes and 3g of superglue. The QA was adhered to and the control test piece passed. Following treatment the item was examined with a 'Tiablo' High Power LED Flashlight at varying angles. No useful marks were developed and no previously exhibited marks were further enhanced.
	Powder Dusting	The item was treated with SupraTheta Black Magnetic Powder using a magnetic applicator wand. Following treatment the item was examined with a bench ring light at varying angles. The QA was adhered to and the control test piece passed. Mark "TJD/1A0" was further enhanced, exhibited as "TJD/1B0" and photographed.
	1,2-Indanedione	The item was treated with 1,2-Indanedione and allowed to dry. It was then placed in the Thermo Fisher oven set at 100°C for 11 minutes (10 minutes of treatment time plus the current 1 minute recovery time). Following dark adaptation, the item was examined using the Green ML2 490nm-560nm with a 571nm viewing filter and a Green Crime Lite 480nm-560nm with a 560nm narrow band trimming filter with 560nm viewing filter. The QA was adhered to and the control test piece passed. No useful marks were developed and no previously exhibited marks were further enhanced.
	Ninhydrin	The item was treated with Ninhydrin and allowed to dry. It was then placed in the Crime Event oven set at 80°C and 62% RH for 5 minutes (2 minutes of treatment time plus the current 3 minute recovery time). The item was then examined using the 'Tiablo' High Power LED Flashlight at varying angles. The QA was adhered to and the control test piece passed. No useful marks were developed and no previously exhibited marks were further enhanced.
	Wet Powder Suspension	The item was treated with carbon-based powder suspension after being pre-rinsed with water. The powder suspension was applied with a soft squirrel hair brush and left for ~20 seconds before being rinsed with water and allowed to dry. When dry, the item was examined with a bench ring light at varying angles. The QA was adhered to and the control test piece passed. No useful marks were developed and no previously exhibited marks were further enhanced.
	Physical Developer (PD)	The item was treated with Physical Developer. Initially the item was treated with Maleic Acid Solution for 10 minutes followed by Physical Developer Working Solution for 20 minutes followed by 2 x 5 minute water rinses. All of the aforementioned treatments occurred on rockers so the exhibit was constantly agitated throughout. Lastly the item was rinsed with running water for 10 minutes in a stationary tray. The item was allowed to dry and then examined using the bench ring light at varying angles. The QA was adhered

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
		to and the control test piece passed. No useful marks were developed and no previously exhibited marks were further enhanced.
DXH4PZ	Visual Examination	Prior to any processing, the item was examined for any visible ridge detail. No ridge detail was observed.
	Alternate Light Source	The Arrowhead Dual 77+ laser was used at 520nm to view any ridge detail that may naturally fluoresce. No ridge detail was observed.
	Cyanoacrylate Fuming	Item 2 was placed inside one of our Air Science Safefume chambers with a processing time of 12 minutes and was then left to rest overnight. The chamber was set to 21°C and 80% humidity.
	Powder Dusting	Sirchie black magnetic powder was applied to all four quadrants. A print was developed in Quadrant 'B.' No other ridge detail was observed.
E7RR4Y	Visual Examination	Visual Examination - Photographed print labeled 1B1
	Full Spectrum Imaging System	-Full Spectrum Imaging System (following visual) - Photographed print labeled 1B1
	Cyanoacrylate Fuming	Cyanoacrylate Fuming
	Full Spectrum Imaging System	Full Spectrum Imaging System (following Cyanoacrylate fuming) - Photographed print labeled 1B1
	Powder Dusting	Black Magnetic Powder - Photographed print labeled 1B1
	1,2-Indanedione	Indanedione (placed in heat chamber at 100C for 20 minutes)
	Alternate Light Source	Alternate Light Source (orange filter 505nm) - Photographed print labeled 1B1
	Ninhydrin	Ninhydrin (placed in heat/humidity chamber at 80C and 65%humidity for 15 minutes) - Print 1B1 did not increase in quality or quantity of ridge structure following NIN - print was not re-photographed
E8HZ6M	Powder Dusting	
EAUQER	Visual Examination	magnification & light
	Cyanoacrylate Fuming	20 minute in chamber
	Powder Dusting	Black Magnetic Powder
EDRL4Y	Visual Examination	
	Cyanoacrylate Fuming	8.5 minute fume time in the Misonix
	Powder Dusting	dusted using magnetic powder
EG9JJV	Visual Examination	It is a highly satin-finished paper: for this reason, cyanoacrylate vapours are applied and it is stained with a fluorescent mechanical reagent. Visual examination using the Polilight PL 500 forensic light: white light and all wavelengths between 330 nm and 1000 nm (UV-IR).A fingerprint can be detected on the "C" dial using white light.
	Dye Stain	Staining with SIRCHIE Dazzle RED fluorescent magnetic reagent. Application of ultraviolet (UV) light to enhance fingerprint: a fingerprint develop in quadrant 'B': L2
EJFULQ	Cyanoacrylate Fuming	Visual examination under ambient light. KrimeSite Imager revealed that portion of the print was located on section B. Cyanoacrylate Fuming Chamber for 20 minutes. Item 2 was then viewed under white light with magnification with a latent print impression observed in section B.

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TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
EJTXZV	Visual Examination	The item was examined with white LED light and magnification as is.
	Cyanoacrylate Fuming	The item was placed in the CSU1 recirculation chamber, a test print was placed in the upper clip of the cabinet, 12 drops of cyanoacrylate was placed in a cup on the heating element, and the item was fumed for 12 minutes. The item was then examined with white LED light and magnification after it sat untouched for one hour. The test print was positive upon taking it out of the chamber.
	Powder Dusting	The item was dusted with black magnetic powder, then examined under white LED light and magnification.
	Ninhydrin	The item was submerged in ninhydrin and was hung in a fume hood until fully dry. While the item was drying the Caron chamber was turned on. It was set to 60 degrees with 60% humidity. I verified that the jug that provided water for the humidity levels was full. Once my item was dry, it was placed in the Caron once the humidity and temperature levels were at the correct level. The item was checked at 15 minutes and again at 30 minutes. Once the item was finished processing, I examined it under white LED light and magnification.
	Physical Developer (PD)	The item was submitted to the LP unit. LP tech [Name] processed the item for PD. Once it was returned to me, I examined the item under white LED light and magnification.
EKBR27	Visual Examination	Examination done using natural light and a flashlight.
	Cyanoacrylate Fuming	Used Misonix fuming chamber set to 70% humidity, 12 minute fume time and 10 minute purge time.
	Dye Stain	Basic Yellow 40 sprayed onto item followed by a rinse with distilled water. Viewed and photographed developed latent print using a 450 nm forensic light source with a yellow filter.
EP74VP	Visual Examination	09/04/2026 @ 01:10 pm, pre-treatment examination for the exhibit was done using White light
	Cyanoacrylate Fuming	09/04/2026 @ 01:27 pm, placed in Superglue cabinet (MV1000) for 25 minutes @ RH=84.5, Plate T=120C, after that the item was subjected to white light examination
	Powder Dusting	13/04/2026 @ 09:10 am, Black powder was applied on the item, after that the item was subjected to white light examination
ETJJ7U	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	
FBF9Z3	Visual Examination	Print observed in quadrant B
	Cyanoacrylate Fuming	
	Powder Dusting	Magnetic Powder

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
FD4CGV	Visual Examination	Item photographed prior to processing. Natural light: weak print fragment observed in section B, it was photographed.
	Alternate Light Source	Examination with white light (Polilight flare 2"ROFIN"). Print fragment Visible, it was rephotographed with white light and macro camera lens (Nikon D 3300)
	Cyanoacrylate Fuming	-The cabinet (Scenesafe) settings was : 85 % humidity and the hot plate was set on 120 degrees. Processing time 8-10 minutes. A visible print was seen in section B of item. -Prints were deposited on a invitation card of coated paper, by human fingerprints (control Test), developed good quality prints.
	Photography	Fingerprint was photographed with white light and macro camera lens (Nikon D 3300).
	Powder Dusting	Powder Dusting (to improve the quality of latent print): Black magnetic powder, Enhanced ridges of latent print .
	Photography	Fingerprint was photographed with white light and macro camera lens (Nikon D 3300).
FLJW2U	Visual Examination	
	Cyanoacrylate Fuming	20 minutes, RH 80%
	Powder Dusting	magnetic red
FMEE3V	Visual Examination	The item was observed under white light / Visual Examination under Foray Adam's Imaging System for presence of any latent print.
	Cyanoacrylate Fuming	Item was placed in fish tank for application of superglue fuming for 2 hours for development of latent prints. The evidence item was observed time to time to avoid over development.
	Visual Examination	After fuming the item was examined under white light
	Rhodamine 6-G	Rhodamine 6-G was sprayed on superglued evidence item and rinsed with water.
	Alternate Light Source	The item was examined under Foray Adam's Imaging System at 505 nm to 515 nm light with orange goggles.
	Powder Dusting	Regular black magnetic powder was used for development of latent prints.
FN49TQ	Powder Dusting	Magnetic powder

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
FYPCZP	Visual Examination	5/13/26: Exhibit 2: FRD is observed in only Section B of the postcard. Not sufficient for image capture.
	Alternate Light Source	CRIMESCOPE CS-16-500: 350-535 nm with clear, yellow, orange, and red goggles: 5/13/26: Exhibit 2: FRD is observed in only Section B of the postcard. No improvement to previously viewed FRD; no additional FRD. No image capture.
	Cyanoacrylate Fuming	5/15/26: Exhibit 2: Cyanoacrylate fuming performed in the CA-6000 at approximately 65% relative humidity for 16 minutes. Removed to prevent overprocessing.
	Visual Examination	5/15/26: Exhibit 2: Post CAE: Magnifier lamp and magnifier loop: Some improvement to previously viewed FRD is observed; no additional FRD. Not sufficient for image capture.
	Ninhydrin	5/15/26: Exhibit 2: Ninhydrin Working Solution (Petroleum Ether) is applied to the postcard by squeeze bottle method; Allowed to dry in the fume hood; Placed in the NINcha M31 for 30 minutes at approximately 80°C and 65% relative humidity.
	Visual Examination	5/15/26: Exhibit 2: Post Ninhydrin: Magnifier lamp and magnifier loop: Some improvement to previously viewed FRD is observed; no additional FRD. Not sufficient for image capture.
	Dye Stain	5/15/26: Exhibit 2: RAM is applied using a squeeze bottle. Allowed to dry several minutes in the fume hood.
	Alternate Light Source	5/15/26: Exhibit 2: Post RAM: CRIMESCOPE CS-16-500 CSS wavelength with orange goggles: Improvement to previously viewed FRD is observed; no additional FRD. Image capture performed.
FZXAT	Visual Examination	white light, UV - 555 nm - Polilight PL 500, suitable goggles
	Cyanoacrylate Fuming	processing time - 15 minutes, humidity - 80%
	Visual Examination	white light
	Powder Dusting	Mag Black Ruby
	Visual Examination	white light, UV
G68W6W	Alternate Light Source	White light (-), Rofin UV 365 nm with yellow filter (-), Rofin 450 nm light with orange filter (-), Laser 532 nm with orange laser filter (-), FSIS II 254nm with 254 nm filter (+)
	Cyanoacrylate Fuming	FSIS II 254nm with 254 nm filter (+)
	Dye Stain	Rhodamine. Laser 532 nm with orange laser filter (+)
	Powder Dusting	Black powder (+)
G9N34Q	Visual Examination	A physical examination of the evidence was performed to determine the reagent, applicator, and transfer tool to be used.
	Powder Dusting	A black magnetic physical reagent and a magnetized applicator were used. A search for evidence was conducted on the object, using a marabou feather brush for cleaning. The evidence identified as 2.1 was located in quadrant "B".
GJT3MQ	Cyanoacrylate Fuming	Placed in sealed chamber (Portable Fuming Chamber 1), 15 minutes of glue time.
	Black Magnetic Powder	Brush method for a couple seconds.

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
GPTWNQ	Visual Examination	Visual exam under white light and magnification.
	Alternate Light Source	Examination using the FSIS II camera and UV light
	Cyanoacrylate Fuming	Cyanosafe was set up with 18 drops of cyanoacrylate in the aluminum weigh boat on top of the heating element. The well was filled with distilled water and a test strip was placed in the chamber. The chamber ran for 20 minutes and allowed to purge. The items then dried for 1 hour. Test print was positive.
	Powder Dusting	Black magnetic powder was applied to the surface using a magnetic wand.
	Ninhydrin	Item was soaked in a glass tray filled with Ninhydrin solution until all surfaces were completely wet. Item was then air dried. The item was then placed in the CARON chamber at 60 C and 60% humidity for 30 minutes.
	Physical Developer (PD)	The item was placed in a Maleic Acid solution and agitated for 10 minutes. The item is then placed in the Physical Developer solution and agitated for 10 minutes. The item is then placed in a tray of water to rinse. The item is patted dry and allowed to air dry.
GQMMU6	Visual Examination	During visual examination there was ridge detail found in the B quadrant of the postcard which was photographed as photo lift #2.
	Cyanoacrylate Fuming	After photo documentation was complete, the item was exposed to cyanoacrylate (CA) fumes for 17 minutes at 75% humidity. The results of the CA development of photo lift #2 was photographed. A standard was tested simultaneously with the item and performed as expected.
	Alternate Light Source	ALS was used on a dye stain standard prior to being used on evidence and performed as expected. The alternate light source, set at 450nm, was used to illuminate the ridge detail of photo lift #2 after the dye stain was applied. (See below) [A photograph was not provided by this participant]
	Dye Stain	MRM-10 was applied to a standard prior to being used on evidence and performed as expected. The application of MRM-10 and the use of an alternate light source was used to illuminate dye stained ridge detail in photo lift #2. This was photographed using the light source and an orange barrier filter. (See below) [A photograph was not provided by this participant]
HAXJLM	Visual Examination	I visually examined item and observed a possible latent print on section B.
	Powder Dusting	I processed item 2 with black magnetic powder, and I observed a latent print on section B.
HC4GXW	Visual Examination	oblique light
	Alternate Light Source	455-515nm
	Cyanoacrylate Fuming	vacuum ~60 min.
	Powder Dusting	black powder
HCHHTQ	Cyanoacrylate Fuming	F&F MVC-3000: 15min 120'C 80%, BVDA cyanoacrylate Dusting with ferroxide Red powder
HDZWAT	Visual Examination	
	Alternate Light Source	UV, 390 nm (clear), 415 nm (yellow), 455 nm, 495 nm, 535 nm (orange), 535 nm, 555 nm, 600 nm (red)
	Cyanoacrylate Fuming	80% relative humidity (RH); 10-minute humidity saturation time; 15-minute cycle; and 120°C hot plate temperature
	Powder Dusting	magnetic black powder used
	Ninhydrin	

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
HENZRL	Visual Examination	Fingerprint visible in section B.
	Alternate Light Source	Foster& Freeman Blue lighsource (420-470nm) with yellow goggles (GG 495), Green (480-560nm) with red goggles (OG 590) and UV-light (350-380nm). White led light source.
	Powder Dusting	BVDA Magnetic Jet Black, B-44800
	Visual Examination	Roomlight and white ledlight.
HML2HT	Visual Examination	On 4/7/26, I examined the item under a white light magnification using a fluorescent light. No prints were observed.
	Cyanoacrylate Fuming	On 4/7/26, I conducted cyanoacrylate fuming using a Cyanosafe. I placed the item into the chamber, with the chamber prepared by placing 10-15 drops of cyanoacrylate into a metal cup and filling up the water supply. A test print was also placed within the chamber to ensure the item was developing properly. Once the chamber completed its 12 minute cycle followed by a 10 minute purge, the item was allowed to sit for 60 minutes to allow for the cyanoacrylate to harden. The item was then examined under a white light magnification using a fluorescent light. No prints were observed.
	Powder Dusting	On 4/7/26, I completed powder dusting using black magnetic powder and a magnetic brush. I then examined the item under a white light magnification using a fluorescent light.
	Ninhydrin	On 4/7/26, I conducted latent print processing using ninhydrin. The item with immersed in ninhydrin batch #326 and allowed to dry in a fume hood. Once dry, the item was placed within a Caron chamber for 30 minutes to develop. The item was then examined under white light magnification using a fluorescent light. No further enhancement was observed.
	Physical Developer (PD)	On 4/21/26, the item was transferred to the [Laboratory] Latent Print Unit and processed with physical developer by Latent Print Unit examiner [Name] using batch #553. The item was then returned on 4/23/26 and examined under white light magnification with a fluorescent light. No further enhancement was observed on the latent print.
J39ZLX	Visual Examination	Apparent ridge detail located in quadrant "B" during visual examination.
	Cyanoacrylate Fuming	Placed into the superglue tank (SN: CA000035) on 5th floor processing room at standard settings (15min fume, 70%RH, 15 min purge).
	Powder Dusting	Used black powder in the powdering hood (SN: DWS000022) on 5th floor processing room.
J3EGEK	Cyanoacrylate Fuming	Fuming chamber for 1 hour
J7DRBK	Cyanoacrylate Fuming	Fuming chamber for 1 hour and 3 minutes
JDU34R	Visual Examination	White lighting, Alternative light sources inc. UV & Tracer
	Lumicyano	CApture-BT; 17 minutes
	Powder Dusting	Black Magnetic Powder
JHADGW	Visual Examination	Observed item after removing it from evidence envelope with gloves. There appeared to be some possible fingerprint residue, but image was not clear.
	Powder Dusting	I used magnetic powder to dust the evidence, item 2, to try and enhance the ridges I observed in the previous exam.

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
JJ4NAX	Visual Examination	Using oblique lighting to examine the surface of the glossy postcard no ridge structure was observed in any of the quadrants.
	Alternate Light Source	Using the FSIS II, the surface of the glossy postcard was examined. No ridge structure was observed in any of the quadrants.
	Cyanoacrylate Fuming	The glossy postcard was placed into the Cyanoacrylate Fuming Chamber (CA Chamber) along with a clear piece of Acetate with a fingerprint on it to be used as a control. Distilled water was added to the water container in the chamber to the fill line, and a dime size amount of glue was added to the container for the glue. The chamber was allowed to run, and at the end of the cycle the control test showed a positive result. Using oblique lighting the surface of the glossy postcard was examined. Ridge was visualized in quadrant B of the tag with no other quadrant having ridge structure observed. This area was photographed using a camera on the camera stand.
	Alternate Light Source	Using the FSIS II, the surface of the glossy postcard was examined after CA fuming. Ridge was visualized in quadrant B of the glossy postcard with no other quadrant having ridge structure observed. This area was photographed using the FSIS camera.
	Powder Dusting	Black Magnetic powder was applied to the surface of the glossy postcard. The ridge structure was developed in quadrant B. This area was photographed using the camera on the camera stand.
	1,2-Indanedione	Using an amido-acid standards pad, the 1,2-Indanedione solution was control tested in a Dry Humidity chamber which was set to 100- degrees C for 20 minutes and the CrimeScope at 510nm with orange goggles to visualize the test. The control was positive. The Solution was applied to the glossy postcard and allowed to dry prior to being placed into the chamber for 20 minutes.
	Alternate Light Source	The glossy postcard was examined with the CrimeScope at 510nm with orange goggles. No ridge structure was seen with the indanedione in any of the quadrants.
	Ninhydrin	Using an amido-acid standards pad, the Ninhydrin - Hexane solution was control tested in Humidity chamber which was set to 80- degrees C and 65% relative humidity for 20 minutes. The control was positive. The Solution was applied to the glossy postcard and allowed to dry prior to being placed into the chamber for 20 minutes. After the 20 minutes; no ridge structure was seen developed an any of the quadrants. The postcard was allowed to sit out for roughly 48 hours after being processed to see if any further development was seen. No further development was seen in the 48 hour wait period.
JNAG4T	Visual Examination	natural white light,
	Alternate Light Source	350-530 nm, relevant filters for fluorescence, beam of white light from the side
	Cyanoacrylate Fuming	fuming chamber MVC M FFLEX, 120°C, RH 80%
JP6XGQ	Powder Dusting	magnetic powder black
	Cyanoacrylate Fuming	PFC 1 for 15 minutes
JQZP7G	Powder Dusting	Black magnetic powder - brushing method
	Visual Examination	White light Blue light 420 - 470 nm, yellow filter
	Cyanoacrylate Fuming	Glue plate 120 °C Humidity 80% Processing time 10 min
	Visual Examination	White light
	Powder Dusting	Magnetic black
JQZP7G	Visual Examination	White light

Development Methods
TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
JYT79K	Powder Dusting	Magnetic Powder
K4JZHR	Visual Examination Cyanoacrylate Fuming Powder Dusting	white light & alternate light sources Misonix chamber, 15 min fume time black magnetic powder
K6FFVN	Visual Examination Cyanoacrylate Fuming Powder Dusting	Possible impression in quadrant B Possible impression in quadrant B, some ridge detail Magnetic powder. Latent L2A, possible right slope loop (referenced to tented arch) in Quadrant B. No additional
KAPTDM	Powder Dusting	
KQVXZY	Visual Examination Powder Dusting	Room lighting and ring light were used to visualize latent on item, ridges were present and attempted to photograph for sufficiency. Added humidity to item. Applied magnetic powder to both sides of the item with magnetic brush. Excess powder was tapped off/blown off. Latent was then preserved. Then repeated powdering/blowing off powder step to lifted area, and ridges were visually the same, so preservation was not repeated.
KRQG3Z	Visual Examination Cyanoacrylate Fuming Powder Dusting	visual examination showed visible print in quadrant B Positive control Black magnetic powder
KXD8NV	Visual Examination Lumicyanoacrylate Fuming Powder Dusting DFO Ninhydrin	CrimeLite and TracER Laser FFlex fuming chamber, observed with CrimeLite and TracER Laser Regular black powder Developed in DFO chamber for 20 minutes, photographed, allowed to continue to develop for 24hrs - no further development Developed in Ninhydrin chamber for 3 minutes
L8DG9Q	Powder Dusting	Black magnetic powder was used.
L8V3RN	Visual Examination Powder Dusting	Latent print was observed in quadrant B prior to processing. Magnetic Powder Lot #: 052423-01
LBMKRG	Alternate Light Source Cyanoacrylate Fuming Powder Dusting	Mark search was done by following ways: 1. Blue Light (445 nm) using Goggle (495 nm). 2. Green Light (532 nm) using Goggle (550 nm) No Mark Found. Processing Time: 45 mins, which includes Humidifying, Fuming and Purging. After 45 mins, weak print found on section B item powder with Mgenatic powder. Print Found on B.
LVNK7T	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting	Oblique light 455, 475, CSS, 495, 515 nm 20 minutes Black powder
M2QB9H	Powder Dusting	Conventional black powder applied with powder brush

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
M3K2EW	Visual Examination Cyanoacrylate Fuming 1,2-Indanedione Ninhydrin Dye Stain	R6G-Methanol
M4BAFK	Visual Examination Powder Dusting	A physical examination of the evidence was performed to determine the appropriate reagent, applicator, and transfer tool. A black magnetic physical reagent and a magnetized applicator were used. The object was searched for evidence using a marabou feather brush for cleaning. The evidence identified as 2.1 was located in quadrant "B".
M4TNWN	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting Ninhydrin Physical Developer (PD)	On 04/06/2026, I examined the item under a white LED light and magnification and observed no visible ridge detail/print(s). On 04/06/2026, I examined the item under a wavelength 450nm light with an orange filter and magnification and observed no visible ridge detail/print(s). On 04/06/2026, I placed the item in a Cyanosafe and ran cyanoacrylate fuming. I then examined the item under a white LED light and magnification and observed no visible ridge detail/print(s). On 04/13/2026, I powdered the item with black magnetic latent print powder and examined the item under a white LED light and magnification and observed visible ridge detail/print(s) in the area marked "B". On 04/13/2026, I applied ninhydrin to the item and placed it into a humidity controlled chamber. I then observed the item under a white LED light and magnification and observed no further enhancement of the ridge detail/print(s). On 04/16/2026, I submitted the item to the [Laboratory] Latent Print Unit through the [Laboratory] Evidence Complex. On 04/21/2026, Latent Print Examiner [Name] applied Physical Developer to the item. I then received the item back into my custody through the [Laboratory] Evidence Complex and observed it under a white LED light and magnification and observed further enhancement of the ridge detail/print(s) in the area marked as "B".
M9KMXJ	Visual Examination Cyanoacrylate Fuming Powder Dusting	Latent print impression observed and photographed. Pattern type visible. CAE fuming in chamber for approximately 15 minutes. Enhancement observed and photographed (no improvement of latent print impression). Black magna-powder utilized. Enhancement of latent print impression observed, photographed and lifted. Pattern type visible (tent ed arch, possible right slant loop)
M9KQMN	Alternate Light Source Cyanoacrylate Fuming Dye Stain Powder Dusting	FSIS II 254 nm UV with UV filter (+), Rofin 365 nm UV with yellow filter (-), Rofin 450 nm with orange filter (-), Laser 532 nm with laser filter (-) White light (+), Rofin 365 nm UV with yellow filter (+) Rhodamine. Laser 532 nm with laser filter (+) Bichromatic powder (+)
MPE9MK	Visual Examination Cyanoacrylate Fuming Powder Dusting	2.5 g glue, 60% humidity, 18 min duration black powder

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
MQARNL	Visual Examination	On visual examination, I found a possible latent print in Area B on the Invitation card.
	Powder Dusting	I then used Magnetic Powder on the Invitation card and found a latent print in Area B.
MUTJZN	Visual Examination	flashlight, UV, SUV, Laser, ALS
	Cyanoacrylate Fuming	flashlight, SUV/FSIS
	Dye Stain	MEK Ardrex/UV and Aqueous Rhodamine/Laser
	Powder Dusting	Black Powder
	DFO	Oven at 100 degrees for approximately 15 minutes. Visualize with laser
	Ninhydrin	Humidity chamber at 70 degrees/70 percent humidity for approximately 20 minutes.
	Zinc Chloride	Zinc Chloride, Humidity chamber at 70 degrees/70 percent humidity for approximately 20 minutes, visualize with ALS
MZU6GQ	Physical Developer (PD)	Maleic acid for 5 minutes, PD for 15 minutes, wash
	Visual Examination	White light (negative), FSIS II with 254nm ALS (positive 2A in quadrant B), Dual 77+ laser 532nm with orange laser filter (negative)
	Cyanoacrylate Fuming	FSIS II with 254nm ALS (positive 2A in quadrant B)
	Dye Stain	Dual 77+ laser 532nm with orange laser filter (positive 2A in quadrant B)
MZUD2N	Powder Dusting	Powder Use powder (positive 2A in quadrant B)
	Visual Examination	Visual examination was completed by examining the item with a fluorescent light under magnification at different angles.
	Cyanoacrylate Fuming	Cyanoacrylate fuming was completed by placing the item into the CyanoSafe. Distilled water was added to the cup heater element and 12 drops of liquid cyanoacrylate were added to a foil cup, which was placed on a heating element. A test print was created and placed in the chamber. After the chamber was closed and turned on, it ran for 12 minutes and then a purge cycle started. The item sat for one hour and then taken out to be examined with a fluorescent light under magnification at different angles.
	Powder Dusting	Powder dusting was completed with black magnetic powder on this item. Powder was applied with a magnetic wand in a fume hood and then examined with a fluorescent light under magnification at different angles.
	Ninhydrin	Ninhydrin was completed by immersing the item into a glass tray of ninhydrin in a fume hood. It was hung up to dry completely in a fume hood. The Caron chamber was turned on before processing began to ensure the settings were correct before placing the item in the chamber. After setting the item inside, it was left in the chamber for 45 minutes and checked on during the set time. It was then examined with a fluorescent light under magnification at different angles.
N3GWEE	Physical Developer (PD)	Physical developer was completed by Latent Print Examiner [Name] and the batch number was 553. The item was then examined with a fluorescent light under magnification at different angles.
	Visual Examination	no ridge detail observed
	Cyanoacrylate Fuming	MVC5000 no ridge detail observed
	Powder Dusting	Black powder (disposable) ridge detail developed and photographed

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
N4BMKT	Visual Examination	I performed a visual examination of Item 2 and observed ridge structure in Quadrant B which I digitally photographed.
	Alternate Light Source	I performed an examination of Item 2 Using FSIS II (Full Spectrum Imaging System) (Ultraviolet light camera) and observed ridge structure in Quadrant B which I digitally photographed.
	Cyanoacrylate Fuming	I processed Item 2 with cyanoacrylate and performed a visual examination of Item 2 and observed ridge structure in Quadrant B which I digitally photographed. Control test was positive.
	Alternate Light Source	I performed an examination of Item 2 Using FSIS II (Full Spectrum Imaging System) (Ultraviolet light camera) and observed ridge structure in Quadrant B which I digitally photographed.
	Dye Stain	I control tested Rhodamine 6G with a positive result and applied it to Item 2.
	Alternate Light Source	I used the SH PoliLight to examine Item 2 and LS PoliLight to digitally photograph ridge structure observed in quadrant B of Item 2. (SH and LS are unit identifiers for separate PoliLight units.)
	Powder Dusting	I processed Item 2 by dusting with black powder. I observed and digitally photographed ridge structure in Quadrant B.
N62VLG	Visual Examination	Temperature on the heating plate 100°C, Humidification 80%, Time 25 minutes.
	Cyanoacrylate Fuming	
	Powder Dusting	
NKE4MK	Visual Examination	White and ambient light
	Alternate Light Source	Foster + Freeman 82S Blue and UV wavelengths
	Water Spot Test	Placed a drop of sterile water in the lower left corner, near quadrant C to confirm that the glossy side surface was non-porous.
	Cyanoacrylate Fuming	Lumicyano
	Alternate Light Source	Foster + Freeman 82S Blue-green wavelength and white light
NYGZWR	Visual Examination	Examined visually with direct and oblique lighting. No friction ridge detail was observed.
	Powder Dusting	Processed using magnetic powder. Friction ridge detail of possible value was developed in quadrant B.
P9FD8C	Visual Examination	Visual with room light.
	Alternate Light Source	Mini-crime scope- all wave Lengths
	Cyanoacrylate Fuming	white ridge detail with test print, let dry for 24 hrs.
	Powder Dusting	Bi-chromatic powder- RD noted in Quad B
	Dye Stain	Rhodamine 6G- using Dual 77 tracer laser 520nm
	1,2-Indanedione	Heat/humidity chamber- follow up with Dual 77 tracer laser nm.
	Ninhydrin	Purple ridge detail noted- heat/humidity chamber.
PAA4DQ	Visual Examination	CrimeLite, LASER
	Lumicyanoacrylate Fuming	MVC FFLEX
	Powder Dusting	Black Magnetic
	DFO	100 degree Celsius for 20 minutes, re-examined after 24 hours
	Ninhydrin	65% relative humidity and 80 degrees Celsius for 3 minutes

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
PJ3RHN	Visual Examination Cyanoacrylate Fuming Powder Dusting Visual Examination	Friction ridge detail under white light in quadrant B CA fume hood at 350 degrees F and 80% humidity for 15 mins. Black powder. Friction ridge detail in quadrant B.
PU7UTD	Multispectral lights & Forensic ligths Cyanoacrylate Fuming forensic ligths Powder Dusting forensic ligths Dye Stain forensic ligths	The evidence is checked using "forenscope 8k" (UVA-PW & UVC-PW lights) and "Lumatec 400" forensic light with all spectrum. 23°C room temperature. Vaporization of cyanoacrylate in fuming chamber for about 3,48 minutes. 127,4°C temperatura, 75 % humidity. The evidence is checked again using forensic light with all spectrum. The evidence has been treated using lofoscopic powders (Magnucley) The evidence is checked again using forensic light with all spectrum. The ITEM 1, is pulverised by Ardrex. Natural drying. The evidence is checked again using "Lumatec 400" forensic light 490nm and after with all the rest spectrum.
PVZKYR	Visual Examination FSIS II Cyanoacrylate Fuming FSIS II Powder Dusting	No ridge structure observed. Ridge structure was observed in quadrant B. The ridge structure was photographed. Ridge structure was observed in quadrant B. The ridge structure was photographed. Positive Control. Ridge structure was observed in quadrant B. The ridge structure was photographed. Magnetic black powder used. Ridge structure was observed in quadrant B. The ridge structure was photographed.
PWQTZG	Visual Examination Cyanoacrylate Fuming	We found a print in sector B by visual examination (normal room lighting and naked eye). The print became completely visible and could be photographed using white light with polarizing film and circular polarizing filter. Also pretty good print came visible by using reflective UV, UV-modified camera with UV-filter. Foster&Freeman MVC-3000-D3 + Lumicyano 215mg + cyanoacrylate 2,7g. Humidity 80%, temperature 120 celsius, processing time 25 min. After fuming the print in sector B became fully visible and could be photographed by using reflective UV, UV-modified camera with UV-filter. Print was also examined by various lights and filters white light with polarization. But the best result became by using reflective UV.
Q2DM2R	Visual Examination Cyanoacrylate Fuming Powder Dusting	Inspected under white light and magnifier Fumed in chamber using superglue on hot plate and boiling water for humidity for approximately 12 minutes. Ran QC concurrently on plastic sheet with positive results. Used black powder on down draft station
Q2ZJMM	Cyanoacrylate Fuming 1,2-Indanedione Ninhydrin	80% rel. humidity, 10 min 50°C, 40% rel. humidity, 3h 25°C, 65% rel. humidity, 24h

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
Q3QRNB	Visual Examination	Examination under white light and latent print was appeared on B positions, However it was not clear shape 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 clear shape under white light. 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	Spray the sample with BY40 and wash it with water. After spraying and drying Item, latent print was appeared by using Using Foster + Freeman crime lite (Blue 420 - 470 nm @ Yellow Filter (476nm)) with Foster + Freeman DCS5 imaging system more clear shape.
QAT8MC	Visual Examination	
	Alternate Light Source	mini-crimescope (all wavelengths)
	Cyanoacrylate Fuming	SafeFume Superglue Chamber
	Powder Dusting	Bi-Chromatic
	1,2-Indanedione	Humidity Chamber/mini-crimescope 515nm
	Ninhydrin	Humidity Chamber
QUY8QP	Dye Stain	Rhodamine 6G/mini-crimescope 515nm
	Visual Examination	A visual examination was performed on Item 2 with a light source. No prints were observed.
	Cyanoacrylate Fuming	Item 2 was placed in a fuming chamber and processed with cyanoacrylate for eight minutes. A visual examination was performed with a light source after Item 2 was removed from the fuming chamber and a print was observed in quadrant B.
	Powder Dusting	Item 2 was taken to the Downflow workstation where black powder was applied to the front (glossy) side of Item 2 with a feather brush. A visual examination was performed after black powder was applied to Item 2, front (glossy) side. A print was developed in quadrant B.
QVPFTE	Ninhydrin	Ninhydrin was applied to the back (matte) side of Item 2 with a brush. After the Ninhydrin dried on Item 2, the processed evidence was placed inside the Air Science humidity chamber to accelerate the development process. (5 minutes at 80 °C and 70% relative humidity.) After Ninhydrin processing, a visual examination was performed on Item 2, on the back (matte) side. No prints were observed or developed.
	Visual Examination	
QXZBHC	Alternate Light Source	
	Cyanoacrylate Fuming	
	Alternate Light Source	
QY79UL	Dye Stain	
	Alternate Light Source	
	Visual Examination	
QYNUDH	Powder Dusting	Black powder
	Visual Examination	
QY79UL	Cyanoacrylate Fuming	Cyanoacrylate Fuming utilizing Misonix Chamber, Fuming Cycle: 13 minutes
	Powder Dusting	Black Magnetic Powder
QYNUDH	Visual Examination	Visually examined item using room and oblique lighting.
	Powder Dusting	Utilized magnetic silver / black powder.

Development Methods
TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
QYT2NQ	Visual Examination Alternate Light Source Cyanoacrylate Fuming Alternate Light Source Dye Stain Alternate Light Source Powder Dusting	FSIS (Full Spectrum Imaging System) FSIS (Full Spectrum Imaging System) Rhodamine 6G Crimescope at 515 nano meters in conjunction with dye stain Black magnetic powder
QZ3N8H	Powder Dusting	
QZJAQF	Visual Examination Cyanoacrylate Fuming Powder Dusting	Conventional powder
R2TADE	Visual Examination Powder Dusting	No ridge detail observed. Magnetic powder utilized on all quadrants. Suspected ridge detail observed in quadrant B.
RFA32L	Visual Examination Cyanoacrylate Fuming Powder Dusting	This item was visually examined utilizing an LED flashlight and a magnifying glass. This item was cyanoacrylate (super glue) fumed in a controlled fuming chamber for eleven (11) minutes at approximately 72% humidity. A latent impression was observed on this item in quadrant B. This item was processed with black magnetic fingerprint powder. The same latent impression was observed on this item in quadrant B.
RMTZGF	Visual Examination Cyanoacrylate Fuming Powder Dusting	No friction ridge detail observed Fuming chamber. Approx. 15 minutes. Fragmentary friction ridge detail observed Magna powder. Enhancement observed. Photographed then tape lift
RQBPTH	Visual Examination Alternate Light Source Lumicyano Fuming	diffused specular reflection technique Coherent Tracer Laser - 532 nm with orange barrier filter 17 minute fuming cycle at 75% relative humidity; 10 minute purge cycle. Visualization with UV (325 nm) with yellow barrier filter, and/or Green (535 nm) with orange barrier filter for fluorescence examination; oblique lighting with green (535 nm) for visual examination
RQRD2J	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting	No print observed No print observed No print observed Black non-magnetic powder
RQTBCE	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting Ninhydrin	505nm wavelength Processed the porous back side of the card only.

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
RWDYZB	Visual Examination	Full examination of all surfaces of item under ambient lighting conditions. No RD noted.
	Alternate Light Source	Item examined with Mini-Crimescope with all available wavelengths of light and orange barrier filter. No RD noted.
	Cyanoacrylate Fuming	Item processed in SafeFume fuming chamber for 15 minutes, 5 minute purge time. No RD noted.
	Dye Stain	Rhodamine 6G applied to item and viewed with Dual77 at 520nm and orange barrier filter. RD ID noted in Quadrant B.
	Powder Dusting	Magnetic black powder applied. Additional RD noted.
RZWUZG	Visual Examination	
	Alternate Light Source	ALS used MCS0389 @ <400nm (Clear); 400-450nm (Yellow); 450-535nm (Orange); >535nm (Red).
	Cyanoacrylate Fuming	Instrument used: CAE-MF1601000036; run on CYAN II program; Control +/-.
	Powder Dusting	Magnetic powder used.
	Ninhydrin	Control +/-.
T8ELPL	Visual Examination	
	Powder Dusting	Magnetic Powder
T9REZB	Visual Examination	per-treatment examination
	Cyanoacrylate Fuming	placed in Superglue cabinet (MV3000) for 20 minutes @RH=75, Plate T=120C, after that the item was subjected to white light examination
	Powder Dusting	Black powder was applied on the item, after that the item was subjected to white light examination
TDZE48	Powder Dusting	Magnetic Powder was used
TEXPWN	Cyanoacrylate Fuming	Processed item of evidence using cyanoacrylate fuming in MVC 500 chamber.
TFU6AL	Visual Examination	Various colors of light was used.
	Cyanoacrylate Fuming	Misonix fuming chamber was used. Item was fumed for 9 minutes and 30 seconds.
	Powder Dusting	Black magnetic powder was used.
TN3WEA	Powder Dusting	Item was processed using black powder with positive results in B.
TRLRFG	Visual Examination	04/07/2026
	Alternate Light Source	04/07/2026 MCS0388: 300nm-400nm/clear; 415nm/yellow; 515nm/orange; 555nm/red
	Cyanoacrylate Fuming	04/07/2026 Ridge detail present: latent 1.2.1 observed and photographed in quadrant B.
	Powder Dusting	04/07/2026 Magnetic powder used. Targeted glossy paper side only Ridge detail present: latent 1.2.1 observed and lifted in quadrant B. One latent lift card
	Ninhydrin	04/07/2026
TTH8RD	Visual Examination	Using oblique lighting
	Powder Dusting	Using black fingerprint powder

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
TWEE4H	Visual Examination	Visual Examination with LASER, UV, SUV, ALS, and Oblique Lighting
	Cyanoacrylate Fuming	Fumed for Approximately 10 minutes. Visualized with FSIS and Shortwave UV and regular flashlight.
	Powder Dusting	Powdered with black powder.
	Dye Stain	Dye stained with Ardrox and visualized with UV lamp then Dye stained with Rhodamine 6G and visualized with a LASER.
	DFO	Dipped twice, let sit in 100 degree oven for 10 minutes, visualized with LASER and orange wratten filter.
	Ninhydrin	Dipped twice, placed in humidity chamber at 70 percent humidity and 70 degrees for about 15 minutes
	Zinc Chloride	Dipped twice, placed in humidity chamber at 70 percent humidity and 70 degrees for about 15 minutes. viewed with Alternate light source and orange filter.
	Physical Developer (PD)	Maleic Acid for 10 minutes, PD processed for 15 minutes.
TZDATP	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	Black powder.
UM2J78	Visual Examination	Natural lighting
	Alternate Light Source	Crimescope
	Cyanoacrylate Fuming	15min processing time, 10min purging time.
	Dye Stain	Rhodamine 6G methanol based was utilized to process Item 002.
	VMD	Item was suspended in VMD chamber and the two-metal process was utilized to process Item 001. Gold/Zinc was used.
UPA7T8	Visual Examination	We found a print in sector B by visual examination by naked eye and in normal room lighting. The print was almost completely visible.
	Cyanoacrylate Fuming	Foster & Freeman MVC-3000-D3 + Lumicyano 0,22 g + cyanoacrylate 2,7 g. Temperature set 120 celcius, humidity was 80% and processing time 25 minutes. After fuming the print in sector B became fully visible and could be photographed by white light.
URVFTD	Powder Dusting	Processed item using magnetic wand and magnetic black powder.
UZXWNC	Visual Examination	VIS using white light and magnifier
	Cyanoacrylate Fuming	CA Chamber 5 drops w/ 15 minute processing time
	Powder Dusting	black magnetic powder w. mag wand
V7WWC8	Powder Dusting	Magnetic powder

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
V8QMHL	Visual Examination	A bright light was used to visually examine the postcard. Ridge structure was visible with the light but not collected at this step.
	Alternate Light Source	FSIS, an alternate light source, was used to examine the postcard. There was ridge structure visible and it was photographed using the FSIS camera.
	Cyanoacrylate Fuming	The MVC1000B was used to lightly glue the postcard. There was a positive control test and ridge structure was visible once the item was removed from the tank. There were no photographs taken at this step.
	Alternate Light Source	FSIS was used after CA fuming. Ridge structure was visible and photographed using the FSIS camera.
	Dye Stain	Rhodamine 6G was used to dye stain the postcard.
	Alternate Light Source	Crimescope at 515nm was used to visualize the dye stain. Ridge structure was visible and collected using photography.
	Powder Dusting	Magnetic black powder was used to powder the postcard. There was ridge structure visible, there was no further development of ridge structure, so photographs were not taken.
V9GVJA	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	
	1,2-Indanedione	
	Dye Stain	
	Physical Developer (PD)	
VDFZJA	Powder Dusting	Item was processed in about five minutes using black fingerprint powder and cleaned with a feather duster.
VPRB9K	Visual Examination	I was able to see ridge detail in Section B.
	Cyanoacrylate Fuming	A test print was placed in the Foster+Freeman MVC3000.
	Powder Dusting	I applied magnetic black latent fingerprint powder to the postcard.
VQGJB9	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Powder Dusting	Magnetic powder
	1,2-Indanedione	
	Dye Stain	
	Physical Developer (PD)	

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
VQMTBL	Visual Examination	4/20/26: Visually examined item with oblique light. Ridge structure (RS) was observed. A full spectrum imaging system (FSIS) was utilized to see if the RS would be further developed with the system at Visual (Vis).
	Alternate Light Source	4/20/26: FSIS used for Vis/FSIS examination. RS was further developed at Vis/FSIS. RS was marked and photographed.
	Cyanoacrylate Fuming	4/20/26: Item placed in cyanoacrylate (CA) fuming chamber. Visualized at CA and RS was observed. FSIS was used in conjunction with CA.
	Alternate Light Source	4/20/26: FSIS used for CA/FSIS examination. RS was further developed at CA/FSIS and was photographed.
	Powder Dusting	4/20/26: Item processed with black magnetic powder (BM). RS was observed and photographed.
	1,2-Indanedione	4/20/26: Item processed with 1,2-Indanedione (IND) and placed in Dry/Humidity chamber at 100 degrees Celsius for 20 minutes.
	Alternate Light Source	4/20/26: Item processed with IND and visualized with Alternate Light Source (ALS) at 505nm with orange goggles. No fluorescence was observed. Previously developed RS was not photographed.
	Ninhydrin	4/20/26: Item processed with Ninhydrin (NIN), hexane based and place in Dry/Humidity chamber at 80 degrees Celsius and 65% humidity. No reaction observed with NIN. Previously developed RS was not photographed. 4/22/26: 48hr hold for NIN. Item examined. No observed reaction with NIN after 48hrs.
VRD2CA	Visual Examination	We found a print in sector B by visual examination (normal room lighting and naked eye). The print was visible, but ridge details was not recovered.
	Cyanoacrylate Fuming	Foster&Freeman MVC-3000-D3 + Cyanoacrylate. Humidity 80%, temperature 120 celsius, processing time 15 min. After fuming the print in sector B became fully visible by white light.
	Powder Dusting	After Cyanoacrylate Fuming we used magnetic Latent Print Powder + F&F Crime-Lite 82S Green 480-560nm, Schott OG590AG. The print became more visible by using Magnetic Latent Print Powder.
VW7TK	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	
W4KGH7	Powder Dusting	The item was brushed using black powder and a fingerprint was developed
W6FZJ8	Visual Examination	
	Cyanoacrylate Fuming	CAE (lot# AN03419) – chamber #1, 15 min, 74 degrees F, 80% humidity
	Dye Stain	RAY (H2O) working solution (lot# LP07b061225)
W74HED	Alternate Light Source	White light, 340nm-587nm, UV, Coaxially reflected.
	Cyanoacrylate Fuming	(80%) Humidity Cycle 15 min, Glue Cycle 15 min, Purge Cycle 40 min.
	Alternate Light Source	White light source
	Dye Stain	Staining with Rhodamine 6G
	Alternate Light Source	Fluorescence examination with polylight [475nm-510nm]

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
W8KF8D	Visual Examination	Item #2, was visually examined and photographed. No latent prints were located.
	Cyanoacrylate Fuming	Item # 2, was then placed in the Cyanoacrylate - CApture BT fuming chamber - 5 minute processing time, 6 minute dwell time - no visible latent prints found after this step.
	Powder Dusting	Item # 1 was then dusted with black/silver mag powder. Visible ridge detail was found box B and same was photographed.
WH2CVG	Visual Examination	White light with different angles
	Alternate Light Source	Foster&Freeman Crime Lite ML2 (UV-VIS)
	Cyanoacrylate Fuming	Foster&Freeman MVC3000D - approx. 4 minutes of fuming (120C, 80% RH)
	[No Methods Reported.]	Powder Suspension: Iron Oxide (II/III)
WH4GFD	Visual Examination	the examiner performed the initial visual examination using the Rofin Polilight light source. the results were positive.
	Cyanoacrylate Fuming	the examiner performed the visual examination following processing. the results were improved. the chamber used was the CApture-BT and the fuming cycle was approximately 7 minutes long.
	DFO	the examiner performed the visual examination following processing. the results were not improved. the item was processed for 20 minutes once the NINcha chamber reached 100 degrees C, with no humidity.
	Ninhydrin	the examiner performed the visual examination following processing. the results were improved. the item was processed for 2 minutes once the NINcha chamber reached 60 degrees C and 65% relative humidity.
	Physical Developer (PD)	the examiner performed the visual examination following processing. the results were not improved. once the item was placed in the physical developer solution, it was processed for approximately 12-15 minutes.
WHL3YA	Visual Examination	No impression(s) observed.
	Cyanoacrylate Fuming	Latent impression developed in quadrant B. Impression was photographed.
	Powder Dusting	Black fingerprint powder enhanced the impression which was photographed again.
WJX8LR	Visual Examination	Illumination: Ambient
	Cyanoacrylate Fuming	Processing time: 30 minutes Illumination: Ambient
	Alternate Light Source	RUVIS Illumination: UV Light
	Dye Stain	Dye stain: Rhodamine Illumination: Laser (532 nm)
WL6PJM	Powder Dusting	Black powder and magna powder mix
WLZ7WK	Visual Examination	
	Cyanoacrylate Fuming	Lumicyanoacrylate Fuming
	Powder Dusting	Black Powder
	DFO	
	Ninhydrin	
WQGVFG	Powder Dusting	
WR84G6	Visual Examination	Item 1 was examined from the general to the specific
	Physical Developer (PD)	By applying the "Physical Magnetic Latent Print Powder Dual Purpose Black" reagent using a magnetic applicator and the uniform sweeping technique

Development Methods
TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
WRCEGH	Visual Examination	Visual examination using oblique lighting
	Cyanoacrylate Fuming	Processed in fuming chamber for approximately 8 minutes using hotplate set at approximately 200 degrees C and a glass of hot water
	Powder Dusting	Used black latent powder
WTJ4BE	Visual Examination	Examination with an alternate forensic light source with appropriate filters (light source – POLILIGHT PL 500)
	Cyanoacrylate Fuming	20 min exposure, 120° C, 80% humidity, examination in white light and with POLILIGHT PL 500 in 505-530 nm range + appropriate filters
	Powder Dusting	Dusting surface with latent print powder (magnetic black), examination in a white light
X36HXG	Visual Examination	I used a flashlight to examine for patent prints.
	Cyanoacrylate Fuming	I fumed the postcard in a chamber for 15 minutes.
	Visual Examination	I used a flashlight to examine for latent prints.
	Dye Stain	I applied Rhodamine 6G to the postcard.
	Alternate Light Source	I used the Arrowhead Forensics Dual77+ Laser at 532nm with orange laser goggles to visualize the processed postcard
	DI H2O rinse	I applied H2O to the postcard
	Alternate Light Source	I used the Arrowhead Forensics Dual77+ Laser at 532nm with orange laser goggles to visualize the processed postcard
X4VQZ6	Powder Dusting	
X4YAM9	Visual Examination	Initial visual examination.
	Alternate Light Source	Initial ALS examination.
	Cyanoacrylate Fuming	
	Powder Dusting	Black magnetic powder dusting.
	DFO	Heat applied.
	Alternate Light Source	ALS after DFO.
	Ninhydrin	heat/steam applied.
X73DNN	Visual Examination	oblique lighting - nothing visible
	Cyanoacrylate Fuming	(aka. CA) Sealed chamber, heat, small amount of superglue in small tin, moister
	Dye Stain	MRM-10
	Dye Stain	Basic Yellow
XD6XZE	White Light (WL)	30/04/2026 @ 10:20 am, pre-treatment examination
	Superglue (CNA)	30/04/2026 @ 10:30 am, placed in Superglue cabinet (MV3000) for 45 minutes @ RH=58, , after that the item was subjected to white light examination
	Magnetic Powder (M-PR)	30/04/2026 @ 12:30 am, magnetic powder was applied on the item, after that the item was subjected to white light examination

Development Methods
TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
XJCN67	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting 1,2-Indanedione Dye Stain Physical Developer (PD)	Magnetic Powder RMO
XXCVAF	Visual Examination Cyanoacrylate Fuming Powder Dusting	Tracer Laser; Rofin at various wavelengths Misonix CA-6000 fuming chamber utilized with a 10 minute fuming time; visualized with oblique white light Black magnetic powder utilized; visualized with white light
Y4CUXB	Visual Examination DFO Ninhydrin	Utilized Tracer, Rofin, and Crime-lite 8x4: white light, green light with orange filter, blue light with yellow filter. 100 Degrees Celsius with a 20-minute processing time 65% Humidity and 60 Degrees Celsius with a 2-minute processing time
YGJKZH	Visual Examination Cyanoacrylate Fuming Powder Dusting	Approx. 30 minute fume cycle magnetic powder
YGLA8Z	Powder Dusting	The item was dusted using black powder.
YHFH8C	Cyanoacrylate Fuming Vacum metal deposition	Visual examination (000-1000nm); photography; humidity 84%; temperature 130°C
YKHGH6	Visual Examination Cyanoacrylate Fuming Powder Dusting	NVRD VRD VRD
YLVTLF	Visual Examination Alternate Light Source Cyanoacrylate Fuming Powder Dusting	Item 2 was examined visually upon opening it from its original packaging. Item 2 was examined with the use of an alternative light source (ALS) at 520 nm. Item 2 was placed into a secured cyanoacrylate fuming chamber and exposed to fumes in a controlled environment. The item remained in the chamber until the following day. Item 2 was processed with magnetic powder in a controlled environment under a powder ventilation hood.
YLZBJE	Cyanoacrylate Fuming Powder Dusting	The luggage tag and glossy postcard were placed in a CAE fuming chamber for 5 minutes with a pea-sized amount of super-glue and water. After fuming, the luggage tag and the postcard were both processed using silk black powder and were then photographed prior to having lift tape applied.
YM9X27	Powder Dusting	Item was processed with Magnetic Powder / print developed quadrant "B"
YMQHK4	Alternate Light Source	optical examination with white light source

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
YN3BJC	Visual Examination Cyanoacrylate Fuming Dye Stain Dye Stain Powder Dusting DFO Ninhydrin Zinc Chloride Physical Developer (PD)	LASER, UV, ALS, Oblique lighting MEK Ardrex - UV Aqueous Rhodamine - LASER LASER ALS
YN4F48	Powder Dusting	I used dusting powder and magnetic powder.
YYJ6PD	Visual Examination Oblique (white) lighting Cyanoacrylate Fuming Visual Examination Oblique (white) lighting Dye Stain Visual Examination Oblique (white) lighting Alternate Light Source	Visual examination was conducted with negative results. Oblique (white) lighting was conducted with positive results located on marker B. The glossy invitation card was used as a quality control by placing prints on the card and placing inside the Cyanoacrylate Fuming Chamber. The glossy postcard was placed inside the Cyanoacrylate Fuming Chamber for 12 minutes. A Quality Control Test Print was placed on a piece of film and placed inside the chamber. The quality control test yield positive results. Once the item finished, visual examination was conducted with positive results located on marker B. Visual examination was conducted on the quality control test with positive results. A visual examination was conducted on the glossy postcard with positive results, located on marker B. Oblique (white) lighting was conducted on the quality control test yield positive results. Oblique (white) lighting was conducted on the glossy postcard with positive results located on marker B. The dye stain that was used was Rhodamine 6G and followed by Methanol Rinse. The quality control test was placed on a tray and sprayed evenly using Rhodamine 6G and followed by Methanol Rinse. The glossy postcard was placed on a tray under the Fumehood and sprayed evenly using Rhodamine 6G and followed by Methanol Rinse. The item was left to dry. Once the item finished, visual examination was conducted with positive results, located on marker B. Visual examination was conducted on the quality control yielded positive results. Once the item finished, visual examination was conducted on the glossy postcard with positive results, located on marker B. The oblique (white) lighting was used on the quality control test print with positive results. Oblique (white) lighting was conducted on glossy postcard with positive results located on marker B. The item glossy postcard was placed under the Alternate Light Source wearing orange filtered goggles, wavelength 415nm with positive results.

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
Z3VW7B	Visual Examination	On 4/15/26 I visually examined item 2 under a white light with magnification using an LED light source. No prints observed.
	Cyanoacrylate Fuming	on 4/15/26 I placed item 2 into the cyanosafe and allowed it to run for 12 minutes. The purge cycle ran, and the item sat for one hour to dry. I then placed the item under a white light with magnification using an LED light source. Print observed in section labeled "B".
	Powder Dusting	On 4/15/26 I powdered item 2 using a black magnetic powder. I then placed the item under a white light using an LED light source. Print observed in section labeled "B".
	Ninhydrin	On 4/16/26 I submerged item 2 in Ninydrin (Batch: 326) and allowed to air dry. I then placed the item into the CARON humidifying chamber. I placed the item under a white light with magnification using an LED light source and there was no enhancement.
	Physical Developer (PD)	on 4/21/26, PD (Batch: 553) was completed by LPE [Name]. I placed Item 2 under a white light with magnification using an LED light source. Prints were observed in section labeled "B".
Z6LNB9	Powder Dusting	regular black fingerprint powder applied with brush
Z7FGZZ	Cyanoacrylate Fuming	
	Powder Dusting	Black Magnetic Powder
Z8C367	Powder Dusting	Black magnetic powder
Z9M4NJ	Visual Examination	Visual exam using a LED flashlight and room lighting
	Cyanoacrylate Fuming	Cyanoacrylate processing for 12 minutes with 74% humidity in chamber.
	Dye Stain	Dye stained with Basic yellow 40
ZAUMPZ	Visual Examination	This item was visually inspected for fingerprint residue.
	Alternate Light Source	This item was viewed under a dual laser at 445nm and 520nm.
	Cyanoacrylate Fuming	This item was fumed using Cyanoacrylate fuming in an atmospheric chamber for 9 minutes and 18 seconds.
	Powder Dusting	This item was further processed using magnetic powder.
ZC4U8F	Visual Examination	
	Cyanoacrylate Fuming	
	FSIS II	254nm and 254 filter
	Powder Dusting	magnetic BP

Development Methods

TABLE 2 - Item 2 (Glossy Postcard)

WebCode	Development Methods	Method Details
ZDDGP8	Visual Examination	Visual examination under white light and magnification on 4/15/2026 (LED). Number of items confirmed.
	Alternate Light Source	- Examination using an alternate light source (450nm filter) on 4/15/2026 (Crime Lite ML2 (420nm-470nm filter): Orange Filter). Number of items confirmed. - Examination using an alternate light source (530nm filter) on 4/15/2026 (Crime Lite ML2 (490nm-560nm filter): Red Filter). Number of items confirmed.
	FSIS II	- FSIS II examination on 4/15/2026 (UV). Number of items confirmed.
	Cyanoacrylate Fuming	- CA - CyanoSafe (LP) recirculation chamber (test print positive) on 4/15/2026 (Fluorescent). Number of items confirmed.
	Powder Dusting	- Magnetic powder on 4/15/2026 (Fluorescent). Number of items confirmed. Black powder
	Ninhydrin	- Ninhydrin (326) and processing in the CARON on 4/15/2026 (Fluorescent). Number of items confirmed.
	Physical Developer (PD)	- Physical Developer (553) on 4/21/2026 (Fluorescent). Number of items confirmed.
ZDU394	Visual Examination	Fingerprint visible at section B. Photographed with diagonal white light.
	Cyanoacrylate Fuming	MVC-3000, 120c, 80%,15 minutes. Photographed.
	Powder Dusting	carbon powder.
ZJJ8UY	Visual Examination	
	Cyanoacrylate Fuming	Approximately 30 minutes.
	Powder Dusting	Black magnetic powder.
	Visual Examination	
ZJMZ79	Visual Examination	
	Cyanoacrylate Fuming	Lumicyano. In CAPture chamber for 20 minutes.
	Powder Dusting	Black powder
ZNE2QE	Visual Examination	The item was labeled with squares A through D. No friction ridge detail was observed.
	Cyanoacrylate Fuming	MYSTAIRe Cyanoacrylate Fuming Chamber used - 70% humidity - Cycle time 10:00 minutes - Purge time 10:00 minutes Friction ridge detail of possible value was observed on square B
	Powder Dusting	Fluorescent powder was used to dust the latent print. Friction ridge detail of possible value was developed on square B.
ZU4UBA	Visual Examination	Polilight PL550XL
	Cyanoacrylate Fuming	Cyanopowder (1,2g), Air Science Safe Fume CA-30S, time 40 minutes, humidity 75%
	Powder Dusting	Magnetic Blitz Red

Response Summary: Item 2 (Glossy Postcard) - Development

Methods Utilized		Responding Participants: 259
Alternate Light Source: 103	Physical Developer: 27	No Response: 0
Cyanoacrylate Fuming: 195	Powder Dusting: 213	Not Tested: 0
DFO: 18	Visual Examination: 220	Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.
Dye Stain: 71	Wet Powder Suspension: 1	
Ninhydrin: 57	1,2-Indanedione: 25	

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
2CMZ87	Visual Examination Ninhydrin	Visual examination to determine what the best method of development to use Due to surface texture (porous), ninhydrin was used. A positive control was conducted. Items were placed in a heat press to help accelerate the development
2DBJ2C	Visual Examination DFO Ninhydrin	Diffrent lights sources and filters, entire range of optical radiation. Spray, temp. 90 °C, Time 10 minutes, 490 nm - 530 nm light, orange filter. Chamber Nincha S31 Spray, temp. 80 °C, Humidity 60%, Time 10 minutes, natural and white light, Chamber Nincha S31
2F2VM4	Visual Examination Alternate Light Source Iodine ampoules	Item 3 was photographed. A visual inspection was then conducted; nothing was observed. White alternating light was used, and another visual inspection was conducted; nothing was observed. Item 3 was placed inside a transparent plastic bag with a snap closure, and an iodine ampoule was placed inside the bag. The iodine ampoule was broken, and within approximately 5 minutes, a reaction developed and a mark was observed in quadrant D, which was photographed.
2F43W4	[Not Tested]	
2GWT2H	Visual Examination Ninhydrin	Nothing was observed in the visual examination phase. I performed a Quality Control check using a print on a white piece of paper prior to using the Ninhydrin on the item. Item was in Caron chamber for 10 minutes at 80 degrees C and 65% humidity. Print observed in quadrant D. Photographed on DCS. Item placed back in original packaging and "CAUTION: EVIDENCE CHEMICALLY TREATED" sticker was placed on the packaging.
2JYQDB	Visual Examination DFO Ninhydrin	Utilized white light, green laser, UV 100 Degrees C, 0% humidity, 20 minute processing time 80 Degrees C, 65% humidity, 2 minute processing time
2KG7Z8	Visual Examination Ninhydrin	Aerosol spray.
2YQNE7	Visual Examination Ninhydrin Physical Developer (PD)	On 04/15/2026, a visual examination was performed on the item under fluorescent lighting, and no latent prints were observed. On 04/15/2026, the item was placed in Ninhydrin (batch #326) until fully saturated and hung to dry. After the item was completely dry the item was placed in the Caron chamber (humidity 60%/temperature 60c, allowing the chamber to reach the heat and humidity settings for 30-45 minutes). After approximately 30 minutes the item was removed, a visual examination was done, and a latent print was observed. on 04/21/2026, Physical developer (batch #553) was used on the item and hung to dry. No latent prints were observed.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
32VG7J	Visual Examination, Forensic Light Source, Ninhydrin	4/6/26: No visible ridge detail was detected during the visual examination. Item 3 was treated with Ninhydrin and then secured for the curing process. Ninhydrin was tested prior to being applied to evidence and it performed as expected. 4/7/26: Photo lift #3: The evidence which was treated with Ninhydrin on 4/6/26 presented with an observable color shift and ridge detail in Quadrant D. Photographic documentation was performed prior to steam being applied. Item 3 was then exposed to steam and additional ridge detail developed in Quadrant D. Additional photographic documentation was completed for photo lift #3. As this was the post-application portion of the Ninhydrin process, a performance check is not indicated.
377UNH	Visual Examination Alternate Light Source 1,2-Indanedione Alternate Light Source Ninhydrin Alternate Light Source	Nil fingerprint ridge detail (FRD) or marks visible under ambient room lighting. Substrate appeared to possess non-porous properties. Examined using a Rofin Polilight PL550XL UV-Vis-IR utilising a variety of wavelengths, white torch, and a combination of viewing filters (orange, OG550 and yellow, GG495). Nil FRD observed. Item treated with indanedione-zinc and allowed to air-dry. Item then heat treated using an Elnapress. Item optically examined using a Rofin Polilight PL550XL UV-Vis-IR utilising 505nm wavelength and OG550 and IF565 filters. A mark with fingerprint ridge detail (FRD) was observed in quadrant D and determined suitable for photography. This was assigned the unique identifier number "FEN102403426". Item treated with ninhydrin and allowed to air-dry. Item then placed into a paper envelope and stored in a darkened cupboard to await chemical development. Examination paused (3-May-2026). Examination resumed (8-May-2026). Item examined under ambient room lighting and with Rofin Polilight PL550XL UV-Vis-IR (various wavelengths). FRD recorded photographically.
382CQJ	Visual Examination Iodine DFO Ninhydrin Silver Nitrate	Used magnifying glass and white light Iodine: no photos taken No photos taken One scan taken Silver Nitrate: no photos taken
382VM2	Visual Examination 1,2-Indanedione Alternate Light Source Ninhydrin	Ind/ZnCl, NINcha S31 chamber, 100°C, 0% humidity, 5 minutes BrightBeam laser, 445 and 532nm, yellow and orange goggles NIN, HFE7100 base, NINcha S31 chamber, 60°C, 80% humidity, 20 minutes
3DT37A	Visual Examination 1,2-Indanedione	Used white light to view evidence for possible patent prints; No patent prints observed. Applied Indanedione to evidence then placed inside 100 degree Celsius oven for 20 minutes; observed evidence for developed latent prints using alternate light source (Dual 77 + laser (green)) and orange goggles; latent print observed in Quadrant D; photographed print using Nikon digital camera, alternate light source, and orange filter.
3E3PN2	[Not Tested]	

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
3EJB8X	Visual Examination	The item of evidence was photographed in the original packaging. Once the envelope was removed from the packaging, the item was photographed and visually examined.
	Ninhydrin	Ninhydrin was poured into a tray. The envelope was dipped in the tray and then hung to air-dry. A positive control was created and dipped in Ninhydrin. Both the control and envelope were placed in the Ninhydrin Chamber and processed for 3 minutes. There was friction ridge development in quadrant D.
3JBHP8	Visual Examination	
	Ninhydrin	Ninhydrin Lot #: 021226-01; NINcha humidity chamber. Parameters: 50 degrees Celsius, 65% relative humidity, 10-minute development time.
3V8UDY	Visual Examination	no suitable ridge detail observed
	Alternate Light Source	455 nm and 520 nm no suitable ridge detail observed
	DFO	520 nm suitable latent observed
	Ninhydrin	suitable latent observed
46T378	Visual Examination	Visual examination under various light sources: daylight, direct/oblique lighting (flashlight), UV, LASER (532nm and 485nm), ALS (495nm) and short UV with an FSIS camera.
	DFO	Immersed item in liquid chemical for ~5 seconds, let dry, and repeated (total of 2, 5 second immersions). Examined under 532nm LASER after at least 24 hours for best results before photographing.
	Ninhydrin	Immersed item in liquid chemical for ~5 seconds, let dry, examined under white light, allowing at least 24 hours for best results before photographing.
	Zinc Chloride	Applied via a spray bottle to the entire item without oversoaking; looked for visual process of Ruhemann's purple print (after Ninhydrin) to change to a red/orange color. Examined under 495nm ALS after at least 24 for best results before photographing.
	Physical Developer (PD)	Item underwent a 5 minute rinse in maleic acid before processing in physical developer for ~12 minutes. Carefully rinsed under running water until water ran clear before allowing to dry on a clean paper towel and examining under white light.
473PNY	Visual Examination	No RD noted
	Alternate Light Source	No RD noted
	1,2-Indanedione	Illuminated with 520 nm light source - RD (whorl) noted in quad. D No RD noted in quad. A, B or C
4APDH8	Ninhydrin	Illuminated with white light - RD (whorl) noted in quad. D No RD noted in quad. A, B or C
	Visual Examination	No fingerprint. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white.
	DFO	Disclosing of a fingerprint. The fingerprint is visible in the light source 505 nm with orange goggles.
4EF4N3	Ninhydrin	Not improvement in fingerprint quality after use Ninhydrin. The fingerprint is steel visible the best at the white light.
	Visual Examination	negative
	Ninhydrin	positive
4EF4N3	Physical Developer (PD)	positive

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
4EJMC7	Visual Examination	Used flashlight, UV, short UV, and laser to visualize
	DFO	Dipped in DFO, let dry, dipped again, let dry, placed in oven for 20 minutes, then visualized with laser
	Ninhydrin	Dipped in ninhydrin, let dry, then placed in humidity chamber for 10 minutes
	Zinc chloride	Sprayed with zinc chloride, let dry, placed in humidity chamber for 10 minutes, then visualized with alternate light source
	Physical Developer (PD)	Placed in maleic acid for 10 minutes, placed in PD for 20 minutes, rinsed with tap water, then let dry
4NQ3HE	Visual Examination	No ridge structure was observed.
	Alternate Light Source	Full Spectrum Imaging System (FSIS) - No ridge structure was observed.
	1,2-Indanedione	Sprayed and let dry, heat press for 20 seconds at 320 degrees Fahrenheit. A positive control was used and passed.
	Alternate Light Source	Crimescope, viewed with orange goggles at 495 nm. One area of ridge structure was observed in quadrant D. A photograph was taken.
4PGBJ3	Ninhydrin	Sprayed and let dry, humidity chamber at 80 degrees Celsius and 70% humidity. A 48 hour wait period was observed and the item was checked again for any additional ridge structure. No additional ridge structure was observed. The previously observed ridge structure in quadrant D was not of higher quality than previous steps, so no additional photos were taken. A positive control was used and passed.
	Visual Examination	Visual examination of the item for ridge detail was completed using a flashlight, with the source of light at various angles, yielding negative results.
	Ninhydrin	Ninhydrin (1, 2, 3-Indantrione monohydrate) is a reagent used to develop latent prints on porous and semi-porous surfaces. Ninhydrin reacts with amino acids in the latent print residue, forming a dark purple product called Ruhemann's Purple. Working in a fume hood, I thoroughly coated the item using a spray bottle and allowed the evidence to dry. I then placed the dried evidence item between a folded piece of butcher paper before ironed it using a standard steam iron to heat and hydrate the treated item in its entirety. Positive results noted to the control print, positive results to area D.
4QV937	Dye Stain	Oil Red O (ORO) is a lipid dye stain that reacts with the insoluble lipid components of latent fingerprint residue. ORO produces a strong red color when lipids are present. Its development will result in well-defined red ridges with a pink background. The developed impression can be seen in natural light. Oil Red O was added to a plastic bag to cover the piece of evidence and control print. The bag was placed on an orbital shaker for approximately 5 minutes, with the control print visualized. No visualization was noted to the envelope after ten minutes. The item then underwent a water post-wash after submersion in the ORO stain by adding enough water to a plastic bag to cover the evidence. The item was then placed on an orbital shaker for 5 minutes. The evidence was allowed to air dry on butcher paper. Positive results to control, negative results to item.
	Visual Examination	Visible light and LASER at 532nm light for visual exam.
4QV937	DFO	Applied and put into environmental chamber at 100 deg C and 0% relative humidity for 20min; viewed with 450nm light and orange goggles/filter.
	Ninhydrin	Applied and put into environmental chamber at 60 deg C and 65% relative humidity for 2 min; viewed with white light.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
4UTEEB	Visual Examination	Viewed at white light and CrimeScope set at 350nm, 455nm, and 515nm with appropriate barrier filters
	1,2-Indanedione	Heat press for 10 seconds
	Ninhydrin	Heat press for 10 seconds
	Ninhydrin	Processed a second time with Ninhydrin and heat press for 10 seconds
4XVR3G	Visual Examination	Visual examination using white light
	1,2-Indanedione	Standard process
	Alternate Light Source	Polilight 505 + multiple wave lengths
	Ninhydrin	Standard procedure - after application the item was returned to packaging and examined the following day.
	Alternate Light Source	Polilight - white light and multiple wave lengths
62RVAU	Ninhydrin	Applied to surface using plastic squirt bottle after successful reliability test. Development process was accelerated by initially using an iron, then a humidity chamber.
64XJ67	Visual Examination	Ambient and white light examination
	Alternate Light Source	Multiple wavelengths - from long wave uv through to IR
	1,2-Indanedione	Visuallised with laser
	Ninhydrin	Visuallised with white light
	VMD	Visuallised with white light
	Physical Developer (PD)	Visuallised with white light
697GGC	Visual Examination	Visual examination of the paper envelope. No ridge detail observed.
	Ninhydrin	Applied ninhydrin to the envelope via a lab squeeze bottle. Allowed to dry for approximately 10 minutes. Placed the envelope in the Caron machine on the Ninhydrin settings (80 Celsius and 65% humidity) for approximately 40 minutes. Ridge detail with purple coloring developed in quadrant D. No other ridge detail observed
6998MV	Visual Examination	Examined item using ambient lighting.
	DFO	The item was saturated with DFO by use of a spray bottle, let to dry in a fume hood at room temperature, and then placed into an oven set for 100 degrees Celsius for 20 minutes.
	Alternate Light Source	Used Foster+Freeman Crime-Lite Blue-Green (445-510nm) with orange goggles.
	Ninhydrin	The item was saturated with Ninhydrin by use of a spray bottle, let to dry in a fume hood at room temperature, and then placed into an oven set for 80 degrees Celsius and 65% relative humidity, for 3 minutes. The item was then stored in a dark and secure location for at least 24 hours before an examination was performed.
	Visual Examination	Used ambient lighting.
	Physical Developer (PD)	The item was immersed in the following sequential "baths"/washes for a specific time as described below: -Deionized water for 10 minutes. -Maleic acid for 10 minutes. -Physical Developer working solution for 10 minutes, continuously agitated with a bench rocker. -Deionized water for 10 minutes. -Air dried prior to examination.
	Visual Examination	Used ambient lighting.
	50% bleach treatment	The item was immersed in 50% bleach solution for approximately 2 minutes.
	Visual Examination	Used ambient lighting.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
6A3XTA	Visual Examination DFO Ninhydrin Physical Developer (PD)	various wavelengths of light 100 degrees for 20 minutes 65 RH/60 degrees approx. 10 min
6FPEV7	Ninhydrin	Sprayed with ninhydrin then placed in the drying cabinet until dry. Once dry, it was placed between two sheets of paper. An iron was hovered above the paper on a high steam setting. I ensured not to touch the iron to the paper. The evidence was then allowed to sit for approximately six hours to further develop.
6GLV94	1,2-Indanedione	Attestor NinCha S30: 30min 60'C 60%
6PD428	Ninhydrin	
6TBRA2	DFO Ninhydrin	in DFO chamber approx. 25 min NIN + heat & steam
6TF2AE	Visual Examination 1,2-Indanedione Ninhydrin	white light examination drying oven then laser examination (with orange filter goggles) humidity oven then white light examination
6TGYKA	Visual Examination Alternate Light Source 1,2-Indanedione	White Light - no prints observed. Dual 77 Laser 520nm (green) and 445nm (blue) lights - no prints observed. Processed with 1,2 Indanedione (viewed with Dual 77 Laser 520nm (green light)) - print observed and photographed in Quadrant D.
6U7AB3	Visual Examination 1,2-Indanedione Alternate Light Source	Moist 65%, warm 65 degrees, time 30 minutes, Nincha M31 Crime-Lite 42S 480-560nm; filter OG590AG
6U88LY	Ninhydrin	- Wear personal protective equipment (PPE) and check if the package was well sealed; - Apply a digital photography with camera canon 1100D for recording items 3; - Open the items 3 that containing Quadrants A-D within the white invitation envelope; - Apply a digital photography with camera canon 1100D on white invitation envelope; - Proceed with visual examination on white invitation envelope; - Apply ninhydrin spray under safety cabinet; - Apply heat under NINCHA M31 for about 30 minutes; - Apply digital photography with camera canon 1100D for recording developed latent print, reproduction table and a ruler closer to the developed latent print; - Enhancement using DCS-5 machine with forensic light source (FLS: e.g.: Ring light); - Apply digital photography by using DCS-5 camera Nikon D6 to save image of enhanced latent print; - Processing time was about one hour.
6XRKDU	Visual Examination Ninhydrin Visual Examination	examined under lighted magnification / no fingerprint evidence was observed sprayed with ninhydrin / placed in heat and humidity chamber for approximately 60 minutes examined under lighted magnification / visible ridge detail observed in quadrant D
76GRA6	Visual Examination Alternate Light Source Ninhydrin	

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
76N6B3	Visual Examination Ninhydrin	Item 3 was visually examined using oblique lighting in our processing room and no visible prints were observed. Item 3 was chemically processed using Ninhydrin Limited ink (lot# 111625KB, positive test print). Item 3 and the test print were sprayed with the Ninhydrin Limited ink (lot# 111625KB) and allowed to dry. They were then placed in the ninhydrin chamber for 46 minutes. Both items were then taken out of the chamber, and ridge detail was observed in quadrant D and the test print was positive.
77JMC4	Ninhydrin Powder Dusting	Ninhydrin (Methanol Base), Used dip method, dried evidence, humidity chamber for 20 minutes, 80°C / 60% humidity Black magnetic powder, brush method for a few seconds
79LLMW	Ninhydrin	after passing a quality control (lot# 1087241216)
7KEBX3	Visual Examination DFO Ninhydrin	Polilight PL500 temp. 100 'C, time 10 min temp. 55'C, hum. 60%, time 30 min
7LBRA Y	Visual Examination Alternate Light Source 1,2-Indanedione Physical Developer (PD)	
7PBTHA	Visual Examination 1,2-Indanedione Alternate Light Source Ninhydrin	Applied on 4/1/26. Processed for seven days. Viewed on 4/8/26 using green laser light. Preserved via photography. Applied on 4/8/26. Viewed after eight days on 4/16/26.
7Q22KX	Visual Examination Alternate Light Source 1,2-Indanedione	FLS exams
7U66KD	Visual Examination Ninhydrin	I processed one white envelope with one white wax-like paper on top of seal. Prior to conducting a visual examination on the item, I disinfected my workstation using a 10-percent bleach solution, placed a piece of white butcher paper on the table, wore a new set of disposable gloves to remove the item from the packaging. Using a flashlight and magnifying glass, I did not observe any ridge detail or any other trace evidence on this item. I did not process the white wax-like paper or sticky side of envelope at this time. I used the non-running Ninhydrin solution and checked the expiration date for the reagent. After confirming that the reagent was not expired, I tested the reagent using a quality control (QC), where I place a known print onto a blank piece of paper. I applied the ninhydrin onto the piece of paper with the known print and waited for the paper to completely dry before applying heat by using a steam iron. I observed ridge detail colored in purple and documented the results in my notes. I applied the ninhydrin onto the entire surface of the white envelope and let it dry completely. I then placed the evidence into the CARON chamber with the settings at 80 degrees Celsius and 65% humidity. I kept it in the chamber for 5 minutes. I observed ridge detail in quadrant D.

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TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
7VD3P2	Visual Examination	Visual examination using white, green and blue light. No latent prints observed.
	1,2-Indanedione	Applied 1,2-Indanedione visualized with a green light (520nm) and an orange filter. Observed one latent print.
	Ninhydrin	Applied Ninhydrin visualized latent print with white and green light.
7X6GGD	Visual Examination	Prior to opening the packaging containing item 3, I decontaminated my workstation using bleach and placed two butcher paper on top of the workstation. I opened the packaging containing item 3. With clean gloved hands, I pulled item 3 out and visually examined the item.
	Ninhydrin	Prior to processing the item with Ninhydrin, I performed a quality control check on the Ninhydrin (non-running) chemical. I then processed item 3 with Ninhydrin (non-running). I decontaminated the hanging hook inside the Caron chamber and placed a butcher paper inside the Caron chamber as well. I hung item 3 and ran the Caron chamber at 65% relative humidity and at 80 degrees Celsius for approximately 10 minutes.
86LCW8	Visual Examination	Visual examination with oblique light. No trace evidence was noted. No indented writing visible.
	Alternate Light Source	Crimelite using wavelengths 455nm - 515nm. No visible fluorescing prints.
	Ninhydrin	Sprayed Ninhydrin. Let develop overnight. Latent print developed in quadrant D.
884Q3T	Visual Examination	11:20, no suitable ridge detail
	Alternate Light Source	1133, Laser 445 nm & 520 nm, no suitable ridge detail
	DFO	1215, 20 Minute processing time, suitable ridge detail
	Ninhydrin	1244, 20 Minute processing time, no additional ridge detail
92DBX2	Visual Examination	Exam with white light and 350-650nm
	DFO	Dipped the item in DFO solution. After dry we put item into humidity chambering with 95 degrees Celsius
	Ninhydrin	Dipped the item in Ninhydrin solution. After dry we put item into humidity chambering with 65 degrees Celsius and 75% humidity
9MYBGV	[Not Tested]	
9RRZV2	Visual Examination	Using oblique lighting, laser, long and short wave UV with FSIS
	DFO	Dipped into dish and placed into oven for 20 minutes, visualized with laser light
	Ninhydrin	Dipped into dish and placed into humidity chamber, used green filter for higher contrast
	Zinc Chloride	Sprayed and placed into humidity chamber, visualized with ALS
	Physical Developer (PD)	Rinsed paper with Maleic Acid prior
	Visual Examination	negative
	Ninhydrin	positive
	Physical Developer (PD)	negative
	Visual Examination	In daylight and in whole spectrum of Polilight PL500 none fingerprint.
9UBY36	DFO	A fingerprint has been disclosed - section D.
	Ninhydrin	A fingerprint has been disclosed - section D.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
9VQBQ2	Visual Examination	Examine the item as is, using ambient lighting, flashlight, UV light, FSIS, ALS, and LASER.
	DFO	Dipped the item twice in DFO, let it dry for a few seconds, then put in the oven at 100°C for about 20 minutes. Examined under the Laser and Shortwave UV/FSIS camera
	Ninhydrin	Dipped the item in Ninhydrin, let it dry for a few seconds, then put it in the humidity chamber (70°C) for about 1 minute or until the latent impressions turns Ruhemann's Purple.
	Zinc Chloride	Sprayed item with Zinc Chloride. Examined under ALS.
	Physical Developer (PD)	Dipped item in Maleic Acid first for about 5 minutes, and then dipped the item into PD for about 20 minutes. Let it dry under the lights.
9WLCX7	Visual Examination	-White light, UV light, TracER (532nm green laser light)
	DFO	-Processed for 20 minutes in NINcha environmental chamber at 100 degrees Celsius -Positive control sample
	Ninhydrin	-Processed for 2 minutes in NINcha environmental chamber at 60 degrees Celsius and 65% humidity -Positive control sample
9WMQ4X	Visual Examination	negative
	Ninhydrin	positive (photo'd with a scale)
	Physical Developer (PD)	negative
9WZX9T	Visual Examination	Examined under ambient lighting.
	Alternate Light Source	Examined under all wavelengths available on the Mini-Crimescope.
	1,2-Indanedione	Reagent applied using spray method. Used humidity chamber to aid development at 70 degrees Celsius under 40% Relative Humidity.
	Alternate Light Source	Fluorescence of 1,2-Indanedione visualized and examined using Dual 77 at 532 nm.
	Ninhydrin	Reagent applied using spray method. Used humidity chamber to aid development at 80 degrees Celsius under 60% Relative Humidity.
9XBAX4	Visual Examination	No Print recovered
	Alternate Light Source	350-600nm. No Print recovered
	DFO	Print recovered
	Ninhydrin	Print recovered
A4HN9T	Visual Examination	Visual examination under ambient lighting. No RD noted in Quadrants A, B, C or D.
	Alternate Light Source	Inherent Lumination utilizing the Mini-Crimescope at all available wavelengths. No RD noted in Quadrants A, B, C or D.
	1,2-Indanedione	1,2-Indanedione applied. Visualization with TracER laser at 532nm. RD (whorl) noted in Quadrant D. No RD noted in Quadrants A, B or C. One (1) documentation photo captured of RD noted in Quadrant D.
	Ninhydrin	Ninhydrin applied. No additional RD noted in Quadrant D. No RD noted in Quadrants A, B or C. One (1) documentation photo captured of RD noted in Quadrant D.
A82HAZ	Visual Examination	NLP in quadrants "A," "B," "C," and "D."
	FSIS2	NLP in quadrants "A," "B," "C," and "D."
	1,2-Indanedione	Latent print suitable for comparison (3a) in quadrant "D." NLP in quadrants "A," "B," and "C."
	Ninhydrin	Latent print suitable for comparison (3a) in quadrant "D." NLP in quadrants "A," "B," and "C."

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TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
A8XYLW	[Not Tested]	
AEWKBB	Visual Examination Ninhydrin Caron Development Chamber	Heptane Ninhydrin spray method. QC per batch-positive Temperature- 80 degrees Celsius, Humidity- 65%, 10 minutes
AEYBHU	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin	Ambient Lighting with naked eye Mini-Crimescope all available wavelengths Humidity chamber utilized (70 degrees, 40% humidity-10 minutes) then Dual 77 Laser utilized at 532nm Humidity chamber utilized- (80 degrees, 60% humidity- 10 minutes).
AG7PNZ	Visual Examination DFO Ninhydrin Physical Developer (PD)	-White light, UV light, TracER (532nm green laser light) -Processed for 20 minutes in NINcha environmental chamber at 100 degrees Celsius -Positive control sample -Processed for 2 minutes in NINcha environmental chamber at 60 degrees Celsius and 65% humidity -Positive control sample -Processed for 15 minutes in PD solution -Positive control sample
AN6E8P	Powder Dusting DFO Ninhydrin	Magentic Powder DFO 20 min at 100° Ninhydrin 3 min at 80°, 60 Humidity
ATHZEB	Visual Examination Ninhydrin	Checking the item and submission form before adding case identifiers and documenting the item in notes before visually examining the item for any ridge detail. Spray the item in the fume hood and allow to dry for about 10 minutes before heating to speed up development. then document any ridge detail developed.
AYJAL4	Visual Examination DFO Ninhydrin	Negative Processed at 100 degrees C for 20 minutes with positive results Processed at 60 degrees C and 65% RH for 2 minutes (after preset temperature and relative humidity were reached) with improvement
B347KZ	Visual Examination DFO Ninhydrin Zinc Chloride Physical Developer (PD)	Used different light sources: flashlight, LASER, SUV(FSIS), ALS, UV Dip item in DFO, let dry and dip again, after it is dry place in oven at 100C for ~15-20 minutes Used LASER and orange filter Wait 24 hours between porous processing Dip in ninhydrin, let dry and place into a humidity chamber ~15-20 minutes Wait 24 hours between porous processing Lightly sprayed ZC on item, let dry and sit until nin print turns orange Wait 24 hours between porous processing let item sit in Maleic Acid for 5 minutes, transfer to PD for about 20 minutes or until print starts to develop. Item was in PD for ~5 minutes before item started to over develop
B8D9LW	Ninhydrin	Ninhydrin pet ether with steam heat
BDMVNT	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin	Visual with White Light Visual with Mini-Crimescope- all wavelengths Heat and Humidity Chamber visualized with Dual 77 at 520nm. Heat and Humidity Chamber

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TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
BHD6XQ	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin	Ambient lighting with naked eye Mini-crimescope (all wavelengths) Humidity chamber, Dual 77 (520 nm) was utilized after Humidity chamber
BQNTA4	Visual Examination DFO Ninhydrin	
BU8LK8	Visual Examination Ninhydrin Caron Chamber	Heptane Ninhydrin - 1 hour left to dry 10 min processing time
BV2WD9	Visual Examination 1,2-Indanedione Ninhydrin	Flashlight & ALS @ 475nm Forced Air Oven used, viewed with LASER Humidity oven used
BWR6EW	Visual Examination iodine crystals	The evidence was observed to determine the type of surface and its characteristics. It was determined to be a porous and smooth surface (paper). Based on this result, iodine vapors (a chemical reagent) were applied.
C28Q84	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin	No marks visualised with natural light or High Intensity Light Sources (HILS) - (see alternative light source for further information). Examination was carried out using Attestor LIGHTcube sources. The following light sources were used: UV narrow angle (365 nm), Violet narrow angle (410 nm), Royal blue narrow angle (447 nm), Blue-green narrow angle (470 nm), Pure green narrow angle (530 nm), Orange narrow angle (590 nm), Pure red narrow angle (630 nm). Examination was carried out using the corresponding filter goggles and after a brief period of darkness adaptation. Foster & Freeman Crime-lite 8x4 Mk2 White (400-700nm), Violet (410nm), Green (520nm), Blue (445nm), Blue-Green (475nm), Orange (590nm) and Red (640nm) UV (365 nm) was attached to the DCS-5. 1 mark was developed using Indanedione and labelled Item3_PLC3_Envelope. Indanedione solution was prepared in-house using commercially available reagents without further purification, according to the method in the CAST Fingermark Visualisation Manual 2nd edition 2022, chapter 5.Ind.7 (page 516). The exhibit was briefly submerged in the Indanedione solution, allowed to dry and then developed in a Weiss Technik laboratory oven at 100°C for 10 minutes. Mark Item3_PLC3_Envelope was captured using the DCS-5 with the green Crime-lite 8x4 Mk2 - see Alternative Light Sources and Photography comments. Mark Item3_PLC3_Envelope was developed further after Ninhydrin treatment. Ninhydrin solution was prepared in-house using commercially available reagents without further purification, according to the method in the CAST Fingermark Visualisation Manual 2nd edition 2022, chapter 5.NIN.8 (page 605). The exhibit was briefly submerged in the ninhydrin solution, allowed to dry and developed in a Attestor NINcha N31 (temperature 80°C and humidity 62% RH) for 4 minutes. Mark Item3_PLC3_Envelope was recaptured on the DCS-5 under white light - see Alternative Light Sources and Photography comments.
C2KUNU	Ninhydrin	With Steam

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TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
C3XY9R	Visual Examination Alternate Light Source 1,2-Indanedione Physical Developer (PD)	
C8DJ2Y	Visual Examination iodine fuming Ninhydrin	visual examination with a flashlight, no ridge detail observed no ridge detail observed. in bag ~15 minutes, test print positive Lot#202407144 ridge detail observed in "D". in humidity chamber wit 60% relative humidity for ~ 50 minutes, test print positive Lot#111625KB
CAHPLR	[Not Tested]	
CDEVXW	Visual Examination Ninhydrin	(-) results Completed a test paper with (+) results. Then sprayed Ninhydrin, allowed to dry, and placed test in chamber for 3 minutes at 80 degrees at 65% humidity. (+) results. Sprayed Ninhydrin on Item 3, allowed to dry, and placed Item 3 in chamber for 3 minutes at 80 degrees at 65% humidity. (+) results in Area D.
CKWJY7	Visual Examination Ninhydrin Caron Chamber	Visually examined for possible ridge detail. Envelope rinsed with Ninhydrin inside fume hood CSU 636C. Hung to dry for approximately an hour and fifteen minutes. Envelope processed for 10 minutes at 80C and 65% RH. Performed in Caron Chamber SN: 6105-2-325.
CRZB2V	Visual Examination Iodine 1,2-Indanedione Ninhydrin	viewed w/white light used ampoules & fumed submerged in solution, 3 minute develop time, viewed under ALS @ 530nm submerged in solution, 30 minute develop time, heated, viewed w/white light
CU3NP2	Visual Examination DFO Ninhydrin Physical Developer (PD)	Tracer laser, UV, Ambient lighting NINcha chamber, 100 degrees Celsius, 20-minute processing time NINcha chamber, 60 degrees Celsius, 65% RH, 2-minute processing time 5-minute processing time
D2FYF8	Visual Examination Ninhydrin Caron Chamber	Used heptane ninhydrin. used heat and humidity to help develop the ninhydrin for ten minutes.
DFHQGY	Visual Examination Alternate Light Source DFO Ninhydrin Physical Developer (PD)	Visual exam with white light. No photos taken. Exam done on 05/07/26 FLS exam UV-thru near infrared. No photos taken. Exam done on 05/07/26 DFO applied and item examined on 05/08/26. 1 photo taken. NIN applied and item examined on 05/08/26. 1 photo taken. PD applied and item examined on 05/08/26. No photos taken.
DFMB63	Visual Examination 1,2-Indanedione Alternate Light Source Ninhydrin	Applied on 4/1/26 Viewed with orange goggles using a green laser light source on 4/9/26; one photo taken Applied Ninhydrin Pet Ether on 4/9/26 and viewed on 4/21/26; one photo taken

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
DH8WG3	Visual Examination DFO Ninhydrin	light sources: Crimelite, Incandescent, and TracER Laser (532 nm) incubated at 100C for 20 minutes, viewed with TracER Laser (532 nm) incubated at 80C and 65% humidity for 3 minutes
DL78D3	Visual Examination DFO Ninhydrin	Flashlight, incandescent, laser Laser, oven Flashlight, humidity chamber
DNFJPT	Visual Examination Ninhydrin Physical Developer (PD)	negative Ninhydrin (humidity chamber 5 mins @70 degree F & 75% humidity)
DTPECU	Visual Examination 1,2-Indanedione	Ambient light, LASER @ 532nm with orange filter, and UV @ 254 nm w/ Full Spectrum Imaging System (FSIS). Heated to 100°C x 30 minutes. Visualized w/ LASER @ 532nm with orange filter
DTQW8R	IODINE FUMING GUN DF2016	LIGHT BLOW IODINE ACROSS SURFACE, SHORT PROCESSING TIME
DVAVEV	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin Physical Developer (PD)	White light examination of exhibit as received using ambient laboratory lighting and 'Tiablo' High Power LED Flashlight at varying angles. A useful marks were developed. Sequential High Intensity Light Sources (HILS) examination carried out, following dark adaptation, using a UV Crime Lite 350nm-380nm with 408nm filter followed by a Blue Crime Lite 420nm-470nm with a 476nm viewing filter followed by a Green Crime Lite 480nm-560nm with 571nm viewing filter. No useful marks were developed. The item was treated with 1,2-Indanedione and allowed to dry. It was then placed in the Thermo Fisher oven set at 100°C for 11 minutes (10 minutes of treatment time plus the current 1 minute recovery time). Following dark adaptation, the item was examined using the Green ML2 490nm-560nm with a 571nm viewing filter and a a Green Crime Lite 480nm-560nm with a 560nm narrow band trimming filter with 560nm viewing filter. The QA was adhered to and the control test piece passed. A mark was developed in quadrant D, exhibited as "TJD/3" and photographed. The item was treated with Ninhydrin and allowed to dry. It was then placed in the Crime Event oven set at 80°C and 62% RH for 5 minutes (2 minutes of treatment time plus the current 3 minute recovery time). The item was then examined using the 'Tiablo' High Power LED Flashlight at varying angles. The QA was adhered to and the control test piece passed. No useful marks were developed and no previously exhibited marks were further enhanced. The item was treated with Physical Developer. Initially the item was treated with Maleic Acid Solution for 10 minutes followed by Physical Developer Working Solution for 20 minutes followed by 2 x 5 minute water rinses. All of the aforementioned treatments occurred on rockers so the exhibit was constantly agitated throughout. Lastly the item was rinsed with running water for 10 minutes in a stationary tray. The item was allowed to dry and then examined using the bench ring light at varying angles. The QA was adhered to and the control test piece passed. No useful marks were developed and no previously exhibited marks were further enhanced.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
DXH4PZ	Visual Examination	Prior to any processing, the item was examined for any visible ridge detail. No ridge detail was observed.
	Alternate Light Source	The Arrowhead Dual 77+ laser was used at 520nm to view any ridge detail that may naturally fluoresce. No ridge detail was observed.
	Ninhydrin	Ninhydrin was applied using a squirt bottle and Item 3 was then allowed to air dry before placing it into an Air Science Safedvelop fingerprint development chamber for three minutes. The chamber was set to 80°C and 65% humidity. A print as developed in Quadrant 'D.' No other ridge detail was observed.
E7RR4Y	Visual Examination	Visual Examination - No ridge structure - no photographs taken
	1,2-Indanedione	Indanedione (placed in heat chamber at 100C for 20 minutes)
	Alternate Light Source	Alternate Light Source (orange filter 505nm) - Photographed print labeled 1C1
	Ninhydrin	Ninhydrin (placed in heat/humidity chamber at 80C and 65%humidity for 15 minutes) - Photographed print labeled 1C1
E8HZ6M	1,2-Indanedione	After preservation, green light source and red filter.
EAUQER	Visual Examination	magnification & light
	Ninhydrin	5 minute in chamber
	Physical Developer (PD)	PD w/drying cabinet
EDRL4Y	Visual Examination	
	DFO	20 minute processing time in the NINcha M31
	Ninhydrin	2 minute processing time in the NINcha S31
EG9JJV	Visual Examination	It's a white paper Visual examination using the Polilight PL 500 forensic light: white light and all wavelengths between 330 nm and 1000 nm (UV-IR).
	1,2-Indanedione	Application of the combined method: 1,2-Indanedione – zinc chloride, ninhydrin ether and physical developer: 1,2-Indanedione – Zinc chloride: procedure involving immersion of the item (10 seconds) followed by oven drying at 100°C in a moisture-free environment: 20 minutes A fingerprint is visible in quadrant 'D' with 1,2-indanedione, viewed under a 505 nm forensic light and an orange filter: L3
	Ninhydrin	Ninhydrin ether: immersion of the item (10 seconds) followed by oven drying at 80°C and 65% humidity (20 minutes)
	Physical Developer (PD)	SIRCHIE physical developer: first step, fixed with maleic acid solution: immersion for 5–10 minutes; second step, place the item in the SIRCHIE physical developer solution (mix solutions A and B to obtain the working solution). Final step: rinse with distilled water and leave to dry at room temperature.
EJFULQ	Ninhydrin	Item 3 was processed with Ninhydrin and allowed to dry for 30 minutes, then placed in a heat and humidity chamber for 1 hour. A fingerprint impression was developed on section D.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
EJTXZV	Visual Examination	The item was examined with white LED light and magnification as is.
	Ninhydrin	The item was submerged in ninhydrin and was hung in a fume hood until fully dry. While the item was drying the Caron chamber was turned on. It was set to 60 degrees with 60% humidity. I verified that the jug that provided water for the humidity levels was full. Once my item was dry, it was placed in the Caron once the humidity and temperature levels were at the correct level. The item was checked at 15 minutes and again at 30 minutes. Once the item was finished processing, I examined it under white LED light and magnification.
	Physical Developer (PD)	The item was submitted to the LP unit. LP tech [Name] processed the item for PD. Once it was returned to me, I examined the item under white LED light and magnification.
EKBR27	Visual Examination	Examination done using natural light and a flashlight.
	DFO	Item sprayed with the DFO, dried, and placed in a chemical processing oven at 100° C for 20 minutes. Viewed and photographed developed latent print using a 450 nm forensic light source with an orange filter.
	Ninhydrin	Item sprayed with NIN, then allowed to completely dry. Applied heat and humidity to the processed item with several passes of a steam iron above the surface of the item. Viewed on 05/06/26 then again on 05/08/26 (for potential development of additional latent print detail)
EP74VP	Visual Examination	09/04/2026 @ 01:14 pm, pre-treatment examination for the exhibit was done using White light
	DFO	09/04/2026 @ 01:38 pm, item was immersed in DFO solution, after that it was left to dry completely, then item was placed in the Humidity chamber (Oven) @ T=100C for 20 minutes. Finally, the item was subjected to Green light examination using orange goggles
	Ninhydrin	10/04/2026 @ 01:45 pm, item was immersed in NH solution, after that it was left to dry completely, then item was placed in the Humidity chamber (Oven) @ T=75C, RH=65 for sufficient time to develop marks (observed). Finally, the item was subjected to White light examination
ETJJ7U	Visual Examination	
	Ninhydrin	
FBF9Z3	Visual Examination	
	Ninhydrin	Heptane Ninhydrin used
	Caron Chamber	Caron Chamber used for 10 mins, Print observed in quadrant D.
FD4CGV	Visual Examination	The Item was photographed before examination. No prints observed
	Alternate Light Source	Examined with white light (Polilight flare 2"ROFIN") and no print observed. Examined with at 430nm - 550nm (Polilight flare 2"ROFIN") and goggles and no prints observed.
	Ninhydrin	-Submerged evidence in Ninhydrin, dried and placed in chamb "NINcha S31"(temp. range 65°C, relative humidity 65 %) for aprox. 15min, examine visually, stored in dark location for 72 hours. A visible print was seen in Quadrant D. -Prints deposited on similar envelope the day before, by human fingerprints (control Test). Development of paper gave prints of good quality
	Photography	Fingerprint was photographed with green light (orange goggles) and macro camera lens (Nikon D 3300).

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
FLJW2U	Visual Examination DFO Ninhydrin	20 minutes, 100 °C 30 minutes, 80 °C, RH 65%
FME3V	Visual Examination 1,2-Indanedione Alternate Light Source	The item was observed under white light / Visual Examination under Foray Adam's Imaging System for presence of any latent print. 1,2-Indanedione Zinc was sprayed on the evidence item. The item was air dried for few minutes then pressed with iron for less than 30 seconds. The item was examined under Foray Adam's Imaging System at 505 nm light with orange goggles.
FN49TQ	Ninhydrin	Ninhydrin with steam
FYPCZP	Visual Examination Alternate Light Source Ninhydrin Visual Examination	5/15/26: Exhibit 3: No FRD is observed in any of the sections of the envelope. CRIMESCOPE CS-16-500: 350-535 nm with clear, yellow, orange, and red goggles: 5/15/26: Exhibit 3: No FRD is observed in any of the sections of the envelope. 5/15/26: Exhibit 3: Ninhydrin Working Solution (Petroleum Ether) is applied to the envelope by squeeze bottle method; Allowed to dry in the fume hood; Placed in the NINcha M31 for 10 minutes at approximately 80°C and 65% relative humidity; Removed to prevent overprocessing. 5/15/26: Exhibit 3: Post Ninhydrin: Magnifier lamp and magnifier loop: FRD is observed in only Section D of the envelope. Image capture performed.
FZXA3T	Visual Examination DFO Visual Examination Ninhydrin Visual Examination	white light, UV - 555 nm - Polilight PL 500, suitable goggles processing time - 20 minutes, temperature - 100 degree Celsius 495 - 555 nm, orange and red coloured goggles processing time - 3 minutes, humidity - 65%, temperature - 80 degree Celsius white light
G68W6W	Alternate Light Source 1,2-Indanedione Ninhydrin	White light (-), Rofin UV 365 nm with yellow filter (-), Rofin 450 nm light with orange filter (-), Laser 532 nm with orange laser filter (-), FSIS II 254nm with 254 nm filter (-) Laser 532 nm with orange laser filter (+) White light (-)
G9N34Q	Visual Examination iodine crystals	A physical examination of the evidence was performed to determine the reagent, applicator, and transfer tool to be used. Iodine crystals were used. Using a pipette containing the crystals, the vapors were released when the capsule was broken, and blowing into the nozzle until the iodine vapors were obtained. These vapors adhered to the processed evidence, identified as evidence 3.1 in quadrant "D".
GJT3MQ	Ninhydrin	Used dip method, dried evidence, placed in humidity chamber for 20 minutes at 80 degrees celcius/60% humidity

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
GPTWNQ	Visual Examination	Visual exam under white light and magnification.
	Ninhydrin	Item was soaked in a glass tray filled with Ninhydrin solution until all surfaces were completely wet. Item was then air dried. The item was then placed in the CARON chamber at 60 C and 60% humidity for 30 minutes.
	Physical Developer (PD)	The item was placed in a Maleic Acid solution and agitated for 10 minutes. The item is then placed in the Physical Developer solution and agitated for 10 minutes. The item is then placed in a tray of water to rinse. The item is patted dry and allowed to air dry.
GQMMU6	Visual Examination	4/20/2026 No visible ridge detail was found. See Below for ALS use during visual exam on this date. 4/21/2026 I examined the item for a purple color shift. No color shift was observed. 4/22/2026 I examined the item for a purple color shift. No color shift was observed. 4/23/2026 I examined the item for a purple color shift. No color shift was observed. The item was placed in a secure storage locker for the curing process between examinations.
	Alternate Light Source	4/20/2026 An alternative light source was used before chemical processing, but no ridge detail was observed using various wavelengths and corresponding barrier filters.
	Ninhydrin	4/20/2026 Ninhydrin (NIN), applied to a standard prior to being used on evidence performed as expected. NIN was applied to the item using a sterile pipette and secured for the curing process. 4/23/2026 After a 72 hour curing period and no observation of a purple color shift, the invitation envelope was exposed to steam to accelerate the process. Ridge detail developed in quadrant D and was photographed as photo lift #3.
HAXJLM	Visual Examination	I visually examined item 3. No visible prints were observed.
	Ninhydrin	A Ninhydrin test sheet with fingerprints on it was sprayed with Ninhydrin and allowed to air dry. The sheet was placed in the Fingerprint Chamber for three minutes at 80 degrees Celsius and 65% relative humidity. Latent prints were observed. I sprayed Ninhydrin on item 3 and allowed to air dry. Item 3 was placed into the Fingerprint Chamber under the same settings. The item was removed from the chamber after three minutes and examined. A latent print was observed on section D.
HC4GXW	Visual Examination	oblique light
	Alternate Light Source	455-515nm
	Ninhydrin	sprayed ~60 min. for development
HCHHTQ	1,2-Indanedione	Self-made working solution Attestor NinCha S30: 30min 60°C 60%
HDZWAT	Visual Examination	
	Alternate Light Source	UV, 390 nm (clear), 415 nm (yellow), 455 nm, 495 nm, 535 nm (orange), 535 nm, 555 nm, 600 nm (red)
	Ninhydrin	
HENZRL	Visual Examination	NO visible fingerprint
	Alternate Light Source	Foster& Freeman Blue lighsource (420-470nm) with yellow goggles (GG 495), Green (480-560nm) with red goggles (OG 590) and UV-light (350-380nm). White led light source.
	1,2-Indanedione	Attestor NINcha M31. Temperature 65°C , moist RH65%, treatment time 30min.
	Alternate Light Source	Foster&freeman green lightsource (480-560nm) with red goggles (OG590). Fingerprint in area D.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
HML2HT	Visual Examination	On 4/7/26, I examined the item under a white light magnification using a fluorescent light. No prints were observed.
	Ninhydrin	On 4/7/26, I conducted latent print processing using ninhydrin. The item with immersed in ninhydrin batch #326 and allowed to dry in a fume hood. Once dry, the item was placed within a Caron chamber for 40 minutes to develop. The item was then examined under white light magnification using a fluorescent light.
	Physical Developer (PD)	On 4/21/26, the item was transferred to the [Laboratory] Latent Print Unit and processed with physical developer by Latent Print Unit examiner [Name] using batch #553. The item was then returned on 4/23/26 and examined under white light magnification with a fluorescent light. No further enhancement was observed on the latent print.
J39ZLX	Visual Examination	No visible prints.
	Ninhydrin	Rinsed the item with acetone ninhydrin and let air dry ~1 hour.
	Caron Chamber	The item was developed in the Caron Chamber (SN: 6105-2-325) at standard settings (10min, @80C, 65%RH).
J3EGEK	Ninhydrin	Item placed in a dark place for 7 days.
J7DRBK	Ninhydrin	Placed in a dark place for 7 days.
JDU34R	Visual Examination	White lighting, Alternative light sources inc. UV & Tracer
	DFO	NINcha- 20min @ 100 degrees C, 0% Humidity
	Ninhydrin	NINCha- 2 min @ 60 degrees C, 65% Humidity
	Physical Developer (PD)	Approximately 15 minutes
JHADGW	Visual Examination	Observed item after removing it from evidence envelope with gloves. The visual examination resulted in a negative search of friction ridge.
	Ninhydrin	I processed item 3 with ninhydrin, spraying the evidence with the chemical solution . I placed item 2 on a drying rack located in a fume hood. I let the item dry, placing a note nearby the evidence to alert my co-workers of the item (04/13/2026 1846hr). Due to the processing procedure, I returned back the next day (04/14/2026 1934 hrs), to see the results.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
JJ4NAX	Visual Examination	Using oblique lighting to examine the surface of the white invitation envelope no ridge structure was observed in any of the quadrants.
	1,2-Indanedione	Using an amido-acid standards pad, the 1,2-Indanedione solution was control tested in a Dry Humidity chamber which was set to 100- degrees C for 20 minutes and the CrimeScope at 510nm with orange goggles to visualize the test. The control was positive. The Solution was applied to the white invitation envelope and allowed to dry prior to being placed into the chamber for 20 minutes.
	Alternate Light Source	The white invitation envelope was examined with the CrimeScope at 510nm with orange goggles. Ridge structure was seen in quadrant D and no ridge structure was seen in any other quadrant. A photograph of the ridge structure in quadrant D was taken using a camera stand and a lens filter was used.
	Ninhydrin	Using an amido-acid standards pad, the Ninhydrin - Hexane solution was control tested in Humidity chamber which was set to 80- degrees C and 65% relative humidity for 20 minutes. The control was positive. The Solution was applied to the white invitation envelope and allowed to dry prior to being placed into the chamber for 20 minutes. After the 20 minutes; ridge structure was seen developed in quadrant D. A photograph was taken of the ridge structure in this quadrant. The white invitation envelope was allowed to sit out for roughly 48 hours after being processed to see if any further development was seen. No further development was seen in the 48 hour wait period.
JNAG4T	Visual Examination	white natural light
	Alternate Light Source	350-530nm, relevant filters
	1,2-Indanedione	Nincha L31 chamber, 100°C, 0% RH, followed by examination in ALS, 505nm, orange filter
	Ninhydrin	Nincha L31 chamber, 80°C, 65% RH, followed by visual examination in white light
JP6XGQ	Ninhydrin	Ninhydrin (Methanol) - dip method Fingerprint development chamber 20 minutes at 80 degrees Celsius and 60% humidity
JQZP7G	Visual Examination	White light Blue light 420 - 470 nm, yellow filter
	1,2-Indanedione	Temp 100 °C Processing time: 10 min
	Visual Examination	Green light 480 - 560 nm, orange filter
	Ninhydrin	Temp 80 °C Humidity 62 % Processing time: 2 min
	Visual Examination	White light
JYT79K	[Not Tested]	
K4JZHR	Visual Examination	white light & alternate light sources
	DFO	NINcha chamber - 20 min cycle, 100 degrees Celsius, 0% humidity
	Ninhydrin	NINcha chamber - 2 min cycle, 60 degrees Celsius, 65% humidity
	Physical Developer (PD)	water bath -> maleic acid (~10 min) -> water bath -> PD (~15 min) -> water bath
K6FFVN	Visual Examination	No apparent ridge detail
	Ninhydrin	Latent L3A (whorl), quadrant D
KAPTDM	[Not Tested]	

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
KQVXZY	Visual Examination 1,2-Indanedione	Room lighting was used to visualize latent on item, and no latents were visualized. After a test print was done. I applied 1,2-Indanedione to the item using a plastic pipette, and allowed it to completely dry. I then heated the item evenly using a dry clothing iron. Then the latent print was visualized using an alternate light source and a filter and preserved using photography.
KRQG3Z	Visual Examination Ninhydrin Caron Chamber	Heptane ninhydrin; positive control 80 degrees Celsius and 65% humidity for 10 minutes
KXD8NV	Visual Examination DFO Ninhydrin	CrimeLite and TracER Laser Developed in DFO chamber for 20 minutes, photographed, allowed to continue to develop for 24hrs - no further development Developed in Ninhydrin chamber for 3 minutes
L8DG9Q	Ninhydrin	Saturated with ninhydrin spray. Left to dry and then secured in my evidence locker to allow time for development. Checked development approximately 25 hours later.
L8V3RN	Visual Examination Ninhydrin	No visible prints prior to processing. Lot #: 021226-01 Parameters: 50°C, 65% humidity, 10 minutes
LBMKRG	Alternate Light Source 1,2-Indanedione	Mark search was done by following ways: 1. Blue Light (445 nm) using Goggle (495 nm). 2. Green Light (532 nm) using Goggle (550 nm) No Mark Found. 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
LVNK7T	Visual Examination Alternate Light Source Ninhydrin	Oblique light 455, 475, CSS, 495, 515 nm Dipped
M2QB9H	Ninhydrin	Lot # 0905110725, coated LAP1-3 white envelope, dried for 15 minutes, applied heat and humidity for 30 minutes. Repeated process once.
M3K2EW	Visual Examination 1,2-Indanedione Ninhydrin	
M4BAFK	Visual Examination iodine crystals	A physical examination of the evidence was performed to determine the appropriate reagent, applicator, and transfer tool. Iodine crystals were used. Using a pipette containing the crystals, the vapors were released when the capsule was broken. Blowing into the mouthpiece resulted in the iodine vapors adhering to the processed evidence, identified as evidence 3.1 in quadrant "D".

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TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
M4TNWN	Visual Examination	On 04/06/2026, I examined the item under a white LED light and magnification and observed no visible ridge detail/print(s).
	Alternate Light Source	On 04/06/2026, I examined the item under a wavelength 450nm light with an orange filter and magnification and observed no visible ridge detail/print(s).
	Ninhydrin	On 04/13/2026, I applied ninhydrin to the item and placed it into a humidity controlled chamber. I then observed the item under a white LED light and magnification and observed visible ridge detail/print(s) in the area marked "D".
	Physical Developer (PD)	On 04/16/2026, I submitted the item to the [Laboratory] Latent Print Unit through the [Laboratory] Evidence Complex. On 04/21/2026, Latent Print Examiner [Name] applied Physical Developer to the item. I then received the item back into my custody through the [Laboratory] Evidence Complex and observed it under a white LED light and magnification and observed no further visible ridge detail/print(s).
M9KMXJ	Visual Examination	No latent print impression observed
	1,2-Indanedione	No latent print impression observed
	Heat	Caron 6105 heat chamber utilized. 80 degree Celsius heat applied for 20 minutes. No latent print impression observed.
	Alternate Light Source	Arrowhead Dual 77 laser utilized, 532nm and 445nm. Latent print impression observed and photographed. Pattern type visible.
M9KQMN	Alternate Light Source	FSIS II 254 nm UV with UV filter (-), Rofin 365 nm UV with yellow filter (-), Rofin 450 nm with orange filter (-), Laser 532 nm with laser filter (-)
	1,2-Indanedione	Laser 532 nm with laser filter (+)
	Ninhydrin	White light (+)
MPE9MK	Visual Examination	
	Ninhydrin	60 degrees heat, 60% humidity, 1 hour duration
MQARNL	Visual Examination	On visual examination, no latent prints were observed.
	Ninhydrin	I filled out a Ninhydrin test sheet and put my prints on it. I then sprayed Ninhydrin on it, let it dry for a few minutes while the Fingerprint Chamber warmed up. I then put the test sheet in for 3 minutes at 80 degrees Celsius and 65% relative humidity. Latent prints were observed on the test sheet. I then sprayed Ninhydrin on the White Envelope, let it dry for a few minutes and then put it in the Fingerprint Chamber, for the same conditions above and a latent print was developed in Area D.
MUTJZN	Visual Examination	flashlight, UV, SUV, Laser, ALS
	DFO	Oven at 100 degrees for approximately 15 minutes. Visualize with laser
	Ninhydrin	Humidity chamber at 70 degrees/70 percent humidity for approximately 20 minutes.
	Zinc Chloride	Humidity chamber at 70 degrees/70 percent humidity for approximately 20 minutes.
	Physical Developer (PD)	Maleic acid for 5 minutes, PD for 15 minutes, wash
MZU6GQ	Visual Examination	White light (negative), FSIS II with 254nm ALS (negative), Dual 77+ laser 532nm with orange laser filter (negative)
	1,2-Indanedione	Positive 3A in quadrant D
	Ninhydrin	Negative

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
MZUD2N	Visual Examination	Visual examination was completed by examining the item with a fluorescent light under magnification at different angles.
	Ninhydrin	Ninhydrin was completed by immersing the item into a glass tray of ninhydrin in a fume hood. It was hung up to dry completely in a fume hood. The Caron chamber was turned on before processing began to ensure the settings were correct before placing the item in the chamber. After setting the item inside, it was left in the chamber for 45 minutes and checked on during the set time. It was then examined with a fluorescent light under magnification at different angles.
	Physical Developer (PD)	Physical developer was completed by Latent Print Examiner [Name] and the batch number was 553. The item was then examined with a fluorescent light under magnification at different angles.
N3GWEE	Visual Examination	no ridge detail observed
	1,2-Indanedione	with Forensic Light Source ridge detail developed and photographed
N4BMKT	Visual Examination	I performed a visual examination of Item 3 and observed no ridge structure.
	Alternate Light Source	I performed an examination of Item 3 Using FSIS II (Full Spectrum Imaging System) (Ultraviolet light camera) and observed no ridge structure.
	1,2-Indanedione	I processed Item 3 with Indanedione using a heat press. The control test was positive. When using the heat press some of the ink marking the quadrants on Item 3 transferred to a blank sheet of paper used as a cover sheet. When removing the cover sheet, a small portion of the surface of quadrant B tore upward but remains attached to item3. The cover sheet was packaged with Item 3 after all processing was complete.
	Alternate Light Source	I used the SH PoliLight to examine Item 3 and LS PoliLight to digitally photograph ridge structure observed in quadrant D of Item 3. (SH and LS are unit identifiers for separate PoliLight units.) There was no ridge structure observe in the area torn during the heat press process. Ridge structure was observed and photographed in quadrant D.
	Ninhydrin	I processed Item 3 with Ninhydrin and developed it in a humidity chamber. The control test was positive. Ridge structure was observed and photographed in quadrant D. A green filter was used to increase contrast. I re-viewed the item after a 48-hour waiting period for possible additional development. Ridge structure was observed and rephotographed in quadrant D.
N62VLG	Visual Examination	
	DFO	Temperature 90°C, Humidification 10%, Time 10 minutes.
	Ninhydrin	Temperature 60°C, Humidification 65%, Time 30 minutes.
NKE4MK	Visual Examination	White and ambient light
	Alternate Light Source	Foster + Freeman 82S Blue and UV wavelengths
	1,2-Indanedione	
	Alternate Light Source	Foster + Freeman 82S Blue-green wavelength and white light
	Ninhydrin	
NYGZWR	Alternate Light Source	Foster + Freeman 82S Blue-green wavelength
	Visual Examination	Examined visually with direct and oblique lighting. No friction ridge detail was observed.
	Ninhydrin	Sprayed with Ninhydrin and processed in CARON FP Development Chamber: - 70% humidity - 70°C heat - Cycle time 20:00 minutes Friction ridge detail of possible value was developed in quadrant D.

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TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
P9FD8C	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin	visual with room light mini-crimescope all wave lengths. Fluorescent ridge detail- with dual 77 tracer laser 520nm (Quad D whorl) purple ridge detail
PAA4DQ	Visual Examination DFO Ninhydrin	CrimeLite, LASER 100 degree Celsius for 20 minutes re-examined after 24 hours 65% relative humidity and 80 degrees Celsius for 3 minutes
PJ3RHN	Visual Examination 1,2-Indanedione Alternate Light Source Ninhydrin Visual Examination	Negative Lot # 040225AM01. Heat 100 degrees C for 10 mins. Green light with orange filter. Friction Ridge detail in quadrant D. Lot #022625CSF01. Heat 80 degrees C and 65% humidity for 3 minutes. No additional.
PU7UTD	Multispectral lights & Forensic ligths 1,2-Indanedione forensic ligths Ninhydrin forensic ligths	The evidence is checked using "forenscope 8k" (UVA-PW lights) and "Lumatec 400" forensic light with all spectrum. 23°C room temperature. All ITEM 3, is immersed in a INDANEDIONE solution. Natural drying. The oven is used to visualice the developed latent print. 100°C Temeperature. 0% humidity (20 minutes) The evidence is checked again using forensic light with all spectrum. The ITEM 3, is immersed in a Ninhydrin solution. Natural drying. The oven is used to visualice the developed latent print. 81°C Temperature. 65% Humidity. (6 minutes) The evidence is checked again using forensic light with all spectrum.
PVZKYR	Visual Examination FSIS II 1,2-Indanedione Alternate Light Source Ninhydrin Ninhydrin 48 hour wait	No ridge structure observed. No ridge structure observed. Ridge structure was observed in quadrant D. The heat press was used to activate the reagent at 320 F for 10 seconds. Positive Control. The ridge structure on item 3 in quadrant D was viewed using a polilight and then photographed. A humidity chamber at 70% humidity and 70 degrees was used to activate the reagent. Ridge structure was observed in quadrant D and photographed. Positive Control. Ridge structure observed in quadrant D and photographed.
PWQTZG	Visual Examination 1,2-Indanedione	We couldn't find any prints using visual examination. Labrum Kllimat: humidity 65%, temperature 90 celsius, processing time 15 minutes. After processing we could see a print in sector D. A good, comaparable print could be seen using green light and red goggles.
Q2DM2R	Visual Examination Ninhydrin	Inspected under white light and magnifier After QC, used non-running ninhydrin on item. Allowed item to dry. Placed in Caron chamber when settings reached 80 degrees Celsius and 65% humidity. Allowed to process in chamber for approximately 10 minutes.
Q2ZJMM	1,2-Indanedione Ninhydrin	50°C, 40% rel. humidity, 3h 25°C, 65% rel. humidity, 24h

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
Q3QRNB	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 envelope was placed in 1,2 indanedione solution, let envelope 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. However, it was not clearer.
	Ninhydrin	Putting envelope on Ninhydrin solution, let envelope dry around 15 minutes. The latent appeared clearer on D position.
QAT8MC	Visual Examination	
	Alternate Light Source	mini-crimescope (all wavelengths)
	1,2-Indanedione	Humidity Chamber/mini-crimescope 515nm
	Ninhydrin	Humidity Chamber
QUY8QP	Visual Examination	A visual examination was performed on Item 3 with a light source prior to processing. No prints were observed.
	Ninhydrin	Ninhydrin was applied to Item 3 with a brush. After the Ninhydrin dried, Item 3 was placed into the Air Science humidity chamber to accelerate the development process. (5 minutes at 80 °C and 70% relative humidity.) After Ninhydrin processing, a visual examination was performed on Item 3. A print was observed in quadrant D.
QVPFTE	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Alternate Light Source Physical Developer (PD)	
QXZBHC	Ninhydrin	After passing a quality control test
QY79UL	Visual Examination	
	DFO	DFO utilizing NINcha for 20 minutes at 100°C
	Ninhydrin	Ninhydrin utilizing NINcha for 2 minutes at 60°C and 65% relative humidity
	Physical Developer (PD)	
QYNUDH	Visual Examination	Viewed item with room and oblique lighting.
	1,2-Indanedione	Sprayed item with Indanedione and allowed to dry.
	Alternate Light Source	Viewed item with green laser with orange filter.
QYT2NQ	Visual Examination	
	1,2-Indanedione	With heat press set to 325 degrees Fahrenheit for 10 seconds
	Alternate Light Source	Crimescope at 515 nano meters in conjunction with Indanedione
	Ninhydrin	With humidity chamber set to 70 degrees Celsius and 60% humidity for 10 minutes Item allowed to sit at room temperature for 48 hours after processing with Ninhydrin. After the 48 hour wait the item was checked for any additional ridge structure development. No additional ridge structure development observed after 48 hours.
QZ3N8H	Ninhydrin	Sprayed item and let it sit overnight
QZJAQF	Visual Examination	
	Ninhydrin	Ninhydrin reacts with amino acids
	Oil Red O	Lipid Dye Stain

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TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
R2TADE	[Not Tested]	
RFA32L	Visual Examination 1,2-Indanedione Alternate Light Source Ninhydrin	This item was visually examined utilizing an LED flashlight and a magnifying glass. This item was processed with a 1,2-Indanedione reagent and placed in a controlled fingerprint development chamber oven at 100°C, dry heat for ten (10) minutes. This item was examined under a green 532nm forensic laser light with an orange barrier filter. A latent impression was observed in quadrant D. This item was processed with a Ninhydrin Heptane reagent and placed in a controlled fingerprint development chamber oven at 80°C and approximately 60% relative humidity for ten (10) minutes. The same latent impression was observed in quadrant D.
RMTZGF	Visual Examination Ninhydrin Heat/Humidity	No friction ridge detail observed Petroleum ether solution. No friction ridge detail observed Caron 6105 heat and humidity chamber for 5 minutes at 80 degrees celsius and 65% humidity. Enhancement observed and photographed.
RQBPTH	Visual Examination Alternate Light Source DFO	bench top desk lamp Coherent Tracer Laser - 532 nm with orange barrier filter 20 minute cycle at 100* C
RQRD2J	Visual Examination Alternate Light Source Ninhydrin	No print observed No print observed Print located
RQTBCE	Visual Examination Alternate Light Source Ninhydrin	505nm wavelength
RWDYZB	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin	Full examination of all surfaces of item under ambient lighting conditions. No RD noted. Item examined with Mini-Crimescope with all available wavelengths of light and orange barrier filter. No RD noted. 1,2-Indanedione applied to item, allowed to dry at room temp, and viewed with Dual77 at 520nm and orange barrier filter. RD ID noted in Quadrant D. Ninhydrin applied to item and allowed to dry at room temp. No additional RD noted.
RZWUZG	Visual Examination Alternate Light Source Ninhydrin	ALS used MCS0389 @ <400nm (Clear); 400-450nm (Yellow); 450-535nm (Orange); >535nm (Red). Control +/-.
T8ELPL	Visual Examination Ninhydrin	Lot # 25.3, 20 minutes, 50 C, and 80 RH

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TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
T9REZB	Visual Examination	per-treatment examination
	DFO	Item was immersed in DFO solution, after that it was left to dry completely, then item was placed in the humidity chamber (Oven)@ T=100c. Finally, the item was subjected to Green light examination using orange goggles
	Ninhydrin	Item was immersed in NH solution, after that it was left to dry completely, then item was placed in the humidity chamber (Oven)@ T=75c, RH=65. Finally, the item was subjected to Green light examination using orange goggles
TDZE48	Powder Dusting	Magnetic Powder
TEXPWN	Ninhydrin	Heptane ninhydrin used. 10 mins in the Caron fingerprint chamber at 65 degrees and 80% humidity.
TFU6AL	Visual Examination	Various colors of light was used.
	DFO	NINcha Chamber was used. 100 degrees Celsius for 20 minutes Green light and orange filter was used.
	Ninhydrin	NINcha Chamber was used. 60 degrees Celsius 65% RH for 2 minutes
	Physical Developer (PD)	Was processed in PD for 15 minutes
TN3WEA	Powder Dusting	Items were processed using the methods listed. No results achieved for powder, chemicals and DFO method ("Iron Method").
	Ninhydrin	Negative results
	DFO	Negative results
TRLRFG	Visual Examination	04/07/2026
	Alternate Light Source	04/07/2026 MCS0388: 300nm-400nm/clear; 415nm/yellow; 515nm/orange; 555nm/red
	Ninhydrin	04/07/2026 Ridge detail present: latent 1.3.1 observed and photographed in quadrant D
TTH8RD	[Not Tested]	
TWEE4H	Visual Examination	Visual Examination with LASER, UV, SUV, ALS, and Oblique Lighting
	DFO	Dipped twice, let sit in 100 degree oven for 10 minutes, visualized with LASER and orange wratten filter
	Ninhydrin	Dipped twice, placed in humidity chamber at 70 percent humidity and 70 degrees for about 15 minutes.
	Zinc Chloride	Dipped twice, placed in humidity chamber at 70 percent humidity and 70 degrees for about 15 minutes. viewed with Alternate light source and orange filter.
	Physical Developer (PD)	Maleic Acid for 10 minutes, PD processed for 15 minutes.
TZDATP	Visual Examination	
	Ninhydrin	Heptane
	Caron Chamber	Caron chamber for 10 minutes, humidity at 65%, and temperature at 80°C
UM2J78	Visual Examination	Natural lighting
	Alternate Light Source	Crimescope
	1,2-Indanedione	Processed in the NINcha for approximately 20mins. Noted faint insufficient ridge detail in the "D" quadrant.
	Ninhydrin	Processed in the NINcha for approximately 15mins.
UPA7T8	[Not Tested]	

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
URVFTD	[Not Tested]	
UZXWNC	Visual Examination Ninhydrin Physical Developer (PD)	VIS using white light and magnifier pre-mixed heptane based ninhydrin using humidity chamber set to 70 degrees C and 75% humidity for 5 minutes pre-mixed 2 solution physical developer
V7WWC8	Ninhydrin	after passing a quality control (lot# 202409041)
V8QMHL	Visual Examination Alternate Light Source 1,2-Indanedione Alternate Light Source Ninhydrin Ninhydrin	The envelope was visually examined with a bright light; no ridge structure was visible. FSIS was used to examine the envelope; no ridge structure was visible. The envelope was soaked in 1,2-Indanedione and left to dry. Once it was dried a heat press was used at 325 degrees Fahrenheit for 10 seconds. There was a positive control. Crimescope was used at 515nm to visualize the 1,2-Indanedione. Ridge structure was visible and photographed at this step. The envelope was soaked in Ninhydrin and left to dry. Once it was dried it was placed in the CARON humidity chamber. There was a positive control. After it came out of the humidity chamber, there was Ridge structure development. It was photographed. The envelope was left to sit out for 48 hours to see if more development had occurred. No further development was noted, so photographs were not taken.
V9GVJA	Visual Examination Alternate Light Source 1,2-Indanedione	
VDFZJA	Iodine crystals	Item was exposed to iodine crystals fumes from a vial, for about an hour.
VPRB9K	Visual Examination Ninhydrin	A test print was confirmed prior to utilizing the Ninhydrin. I submerged the envelope in a Pyrex dish containing Ninhydrin. I hung the envelope in the vent hood overnight. The next day faint ridge detail was present. I used a steam iron to darken the detail.
VQGJB9	Visual Examination Alternate Light Source 1,2-Indanedione	
VQMTBL	Visual Examination 1,2-Indanedione Alternate Light Source Ninhydrin	Visually examined item with oblique light. No ridge structure (RS) was observed. 4/20/26: Item processed with 1,2-Indanedione (IND) and placed in Dry/Humidity chamber at 100 degrees Celsius for 20 minutes. 4/20/26: Item processed with IND and visualized with Alternate Light Source (ALS) at 505nm with orange goggles. RS was observed, marked, and photographed with an orange barrier filter. 4/20/26: Item processed with Ninhydrin (NIN), hexane based and place in Dry/Humidity chamber at 80 degrees Celsius and 65% humidity. RS was observed and photographed. 4/22/26: 48hr hold for NIN. Item examined. RS not further developed at NIN48. No photos.

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TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
VRD2CA	Visual Examination 1,2-Indanedione	We didn't find any fingerprints by using visual examination. Labrum Klimat: humidity 65%, temperature 90 celsius, processing time 15 minutes. After processing we found a print in sector D. There was a good, comparable print using F&F Crime-Lite 82S Green 480-560nm + Schott OG590AG.
VW7TK	Visual Examination 1,2-Indanedione Ninhydrin	
W4KGH7	Ninhydrin	The item was sprayed with Ninhydrin and left for the next day - a fingerprint was developed
W6FZJ8	Visual Examination 1,2-Indanedione Ninhydrin	IND/ZnCl working solution (lot # LP10062525)—heat press—control passed; viewed under Laser (Bright Beam) exam / 532nm / used orange goggles NIN (HFE7100) working solution (lot # LP11062525)—NinCham s31 chamber, 20 min, 60°C, 80% humidity—control passed
W74HED	Alternate Light Source DFO Alternate Light Source Ninhydrin Alternate Light Source	White light, 340nm-587nm, UV. 100° C during 20 min in oven. Fluorescence examination with polylight (491nm-548nm) Development in the dark for 24 to 48 hours in an ambient temperature with humidity. White light source
W8KF8D	Visual Examination 1,2-Indanedione Arrowhead Forensic Laser	Item #3, was visually examined and photographed. No latent prints were located. Item # 3 was then chemically processed with 1, 2-Indanedione, air dried and a heated iron (no steam) was applied. Visible ridge detail was found in box D after this step, and same was photographed. Item # 3 was then viewed with a green Arrowhead Forensics laser and orange filter. Visible ridge detail was found in box D and same was photographed.
WH2CVG	Visual Examination Alternate Light Source 1,2-Indanedione Ninhydrin	White light with different angles Foster&Freeman Crime Lite ML2 (UV-VIS) CAST recepture, 100C, 0% RH - 10 min. CAST recepture, 80C, 62% RH - 20 min.
WH4GFD	Visual Examination DFO Ninhydrin Physical Developer (PD)	the examiner performed the initial visual examination using the Rofin Polilight light source. the results were negative. the examiner performed the visual examination following processing. the results were positive. the item was processed for 20 minutes once the NINcha chamber reached 100 degrees C, with no humidity. the examiner performed the visual examination following processing. the results were improved. the item was processed for 2 minutes once the NINcha chamber reached 60 degrees C and 65% relative humidity. the examiner performed the visual examination following processing. the results were not improved. once the item was placed in the physical developer solution, it was processed for approximately 12-15 minutes.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
WHL3YA	Visual Examination Ninhydrin	Used humidity (iron) to aid in accelerating the reaction. Latent impression developed in quadrant D.
WJX8LR	Visual Examination Ninhydrin	Illumination: Ambient Technique equipment: Humidity chamber (70 deg F, 65% RH) Processing time: 10 minutes Illumination: Ambient
WL6PJM	Ninhydrin	Ninhydrin developed with heat and humidity.
WLZ7WK	Visual Examination DFO Ninhydrin	
WQGVFG	Ninhydrin	HFE based ninhydrin then into 80 degree C chamber at 65% RH for 3 minutes.
WR84G6	Visual Examination Ninhydrin	Item 1 was examined from the general to the specific by applying the chemical reagent ninhydrin to both sides of item 3
WRCEGH	Visual Examination Ninhydrin	Visual examination using oblique lighting Dipped sample into a premade ninhydrin solution. Let dry. Processed in fingerprint chamber for 10 minutes at 70 Celsius with 65% humidity. Visual observation.
WTJ4BE	Visual Examination DFO Ninhydrin	Examination with an alternate forensic light source with appropriate filters (light source – POLILIGHT PL 500) Spraying item with DFO working solution, after drying – heating the item for 10 min in 95° C, examination with POLILIGHT PL 500 alternate forensic light source in ~515 nm range + appropriate filters Spraying item with ninhydrin aerosol spray, after drying – heating the item for 90 min in 40 °C, 80% humidity, viewing in a daylight and with POLILIGHT PL 500 alternate forensic light source in white light and in ~515 nm range + appropriate filters, viewing again after few days
X36HXG	Visual Examination 1,2-Indanedione Alternate Light Source	Examined for patent prints I applied 1,2-indanedione to the envelope and put the envelope in a 100 degree Celsius oven for 20 minutes. I used the Arrowhead Forensics Dual 77+ Laser at 532nm with orange laser goggles to visualize the processed envelope.
X4VQZ6	Ninhydrin	
X4YAM9	Visual Examination Alternate Light Source DFO Alternate Light Source Ninhydrin	Initial visual examination. Initial ALS examination. Heat applied. ALS after DFO. Heat/steam applied.
X73DNN	Visual Examination DFO Ninhydrin Silver Nitrate	oblique lighting - nothing visible Apply with heat only Apply with heat and with moisture Apply and use UV light to develop

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
XD6XZE	White Light (WL)	30/04/2026 @ 08:00 am, pre-treatment examination
	DFO	30/04/2026 @ 08:05 am, item was immersed in DFO solution, after that it was left to dry completely, then item was placed in the Humidity chamber (Oven) @ T=100C . Finally, the item was subjected to Green light examination using orange goggles
	Ninhydrin	01/05/2026 @ 09:30 am, item was immersed in NH solution, after that it was left to dry completely, then item was placed in the Humidity chamber (Oven) @ T=75C, RH=65. Finally, the item was subjected to White light examination
XJCN67	Visual Examination Alternate Light Source Cyanoacrylate Fuming 1,2-Indanedione Physical Developer (PD)	
XXCVAF	Visual Examination	Tracer Laser; Rofin at various wavelengths
	DFO	100 degrees Celsius for 20 minutes; visualized with green light and orange filter
	Ninhydrin	60 degrees Celsius at 65% RH for 2 minutes; visualized with white light
Y4CUXB	Visual Examination	Utilized Tracer, Rofin, and Crime-lite 8x4: white light, green light with orange filter, blue light with yellow filter.
	DFO	100 Degrees Celsius with a 20-minute processing time
	Ninhydrin	65% Humidity and 60 Degrees Celsius with a 2-minute processing time
YGJKZH	Visual Examination	
	Ninhydrin CARON chamber	Acetone type CARON chamber for 10 minutes, with heat and humidity applied
YGLA8Z	Powder Dusting	Dusted with magnetic powder - no results
	DFO	DFO sprayed, dried, sprayed and dried in the fume hood for 20 minutes at 100°C - no results
	Ninhydrin	Ninhydrin sprayed, dried under the fume hood at 80°C, 65%RH for 3 minutes. Began to see results. Repeated 3 times.
YHFH8C	1,2-Indanedione	Visual examination (000-590nm); photography; 100 °c
YKHGH6	Visual Examination	NVRD
	Ninhydrin	VRD
YLVTLF	Visual Examination	Item 3 was examined visually upon opening it from its original packaging.
	Alternate Light Source	Item 3 was examined with the use of an alternative light source (ALS) at 520 nm.
	Ninhydrin	Item 3 was exposed to ninhydrin and allowed to dry in a ventilated fume hood. Item 3 was then placed into a secured ninhydrin chamber (airsience safe develop) once it was at 80 degrees celcius with a relative humidity of 65% for four minutes.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
YLZBJE	Powder Dusting	The envelope was processed using magnetic dusting powder and no ridge detail was visible so the item was then moved to the next processing technique after being photographed.
	Ninhydrin	Utilizing Ninhydrin prepared in advance by the lab, the envelope and a control sample were both submerged in the liquid inside of a metal tray so that they were completely covered. After being allowed to sit in the liquid for approximately 3 minutes, the envelope and control sample were allowed to drip dry before being placed on top of paper towels, and heat was applied in the form of steam from an iron. (no direct contact of the iron to the item occurred during this process) The items were flipped and the heat application was repeated for a few minutes. The control print developed within these steps and was visible, the print on the envelope showed very little development in quadrant D. A photo was taken of both items and then they were placed in a protective sleeve with an opening and allowed to sit for 48 hours for further development.
	Physical Developer (PD)	After being allowed to sit for 48 hours, and monitoring for further development. The control and the envelope were placed in a physical developer from Sirchie. This physical developer was prepared using two solutions provided in the packaging which come in a set ratio to be combined. The items were then completely submerged in the solution and allowed to sit for approximately 3 minutes before being rinsed with de-ionized water. While the control quickly darkened, the envelope showed very little further development.
YM9X27	[Not Tested]	
YMQHK4	Alternate Light Source	Optical examination
YN3BJC	Visual Examination	LASER, UV, ALS, Oblique lighting
	DFO	LASER
	Ninhydrin	
	Zinc Chloride	ALS
	Physical Developer (PD)	
YN4F48	Ninhydrin	Used with steam.
YYJ6PD	Visual Examination	Visual examination was conducted with negative results.
	Oblique (white) lighting	Oblique (white) lighting was used for negative results.
	Powder Dusting	The quality control test print was used by placing prints on a white sheet of paper and dusting using black magnetic powder with positive results. The white invitation envelope was dusted using black magnetic powder with positive results located on marker D. It should be noted a print appeared on marker B. The print located on marker D would not appear instantly but can see the ridge detail and pattern located in marker D.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
Z3VW7B	Visual Examination	On 4/15/26 I visually examined item 3 under a white light with magnification using an LED light source. No prints observed.
	Ninhydrin	On 4/16/26 I submerged item 3 in Ninhydrin (Batch: 326) and allowed to air dry. I then placed the item into the CARON humidifying chamber. I placed the item under a white light with magnification using an LED light source. Prints observed in section "D".
	Physical Developer (PD)	on 4/21/26, PD (Batch: 553) was completed by LPE [Name]. I placed Item 3 under a white light with magnification using an LED light source and there was no enhancement.
Z6LNB9	Ninhydrin	methanol formula, spray method, fingerprint development chamber used at 80°C and 60% humidity for 20 minutes
Z7FGZZ	Ninhydrin	
Z8C367	Ninhydrin	with steam
Z9M4NJ	Visual Examination 1,2-Indanedione	Visual exam using a LED flashlight and room lighting Envelope processed with 1,2-Indanedione
ZAUMPZ	Visual Examination Alternate Light Source DFO	This item was visually inspected for fingerprint residue. This item was viewed under a dual laser at 445nm and 520nm. This item was saturated with the DFO solution, allowed to air dry and placed inside the DFO heating chamber for 20 minutes. The item was then viewed under a dual laser at 445nm and 520nm.
	Ninhydrin	This item was saturated with the Ninhydrin solution, allowed to air dry and placed inside the Ninhydrin heating chamber for 20 minutes.
ZC4U8F	Visual Examination 1,2-Indanedione Alternate Light Source	print visible without Humidity chamber and after use of Humidity chamber TracER 532nm
ZDDGP8	Visual Examination	- Visual examination under white light and magnification on 4/15/2026 (LED). Number of items confirmed.
	Alternate Light Source	- Examination using an alternate light source (450nm filter) on 4/15/2026 (Crime Lite ML2 (420nm-470nm filter): Orange Filter). Number of items confirmed. - Examination using an alternate light source (530nm filter) on 4/15/2026 (Crime Lite ML2 (490nm-560nm filter): Red Filter). Number of items confirmed.
	FSIS II	- FSIS II examination on 4/15/2026 (UV). Number of items confirmed.
	Ninhydrin	- Ninhydrin (326) and processing in the CARON on 4/15/2026 (Fluorescent). Number of items confirmed.
	Physical Developer (PD)	- Physical Developer (553) on 4/21/2026 (Fluorescent). Number of items confirmed.
ZDU394	Visual Examination	Visual examination with white light, and with foster & freeman lightsouces 82S and 42S blue (420-470 nm), green (480-560nm) and UV (350-380 nm), no visible fingerprint.
	1,2-Indanedione	Nincha M31, 65C, 65%, 30 minutes.
	Alternate Light Source	Foster+Freeman 42S green (480-560nm) ja blue (420-470 nm) with red and orange filters. Fingerprint in section D, photographed.

Development Methods

TABLE 2 - Item 3 (White Invitation Envelope)

WebCode	Development Methods	Method Details
ZJJ8UY	Visual Examination Ninhydrin [No Methods Reported.] Visual Examination	Humidified Incubator for approximately 20 minutes.
ZJMZ79	Visual Examination DFO Ninhydrin	In NINcha chamber 12 minutes. In NINcha chamber for 10 minutes.
ZNE2QE	Visual Examination DFO	The item was labeled with squares A through D. No friction ridge detail was observed. DFO was applied to the paper and subsequently placed in a CARON FP Development Chamber. The chamber was set to 100°C with a cycle time of 20 minutes. After the process was completed, the paper was illuminated using a laser. Friction ridge detail of possible value was observed on square D
ZU4UBA	Visual Examination DFO Ninhydrin	Polilight PL550XL DFO, Attestor Forensic NINcha S31, time 20 minutes, temperature 100 centigrade degrees, light 450-530 nm, orange viewing filter Ninhydrin, Attestor Forensic NINcha S31, time 3 minutes, temperature 80 centigrade degrees, humidity 65%

Response Summary: Item 3 (White Invitation Envelope) - Development		
Methods Utilized		Responding Participants: 259
Alternate Light Source: 91	Physical Developer: 40	No Response: 0
Cyanoacrylate Fuming: 1	Powder Dusting: 7	Not Tested: 12
DFO: 60	Visual Examination: 210	Note: Methods listed are the preloaded options for selection via the CTS Portal and do not reflect all answers provided by participants.
Dye Stain: 1	Wet Powder Suspension: 0	
Ninhydrin: 210	1,2-Indanedione: 77	

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
2CMZ87	Lifting	Transparent tape utilized and placed onto lift card
2DBJ2C	Photography	Photo evidence scale.
2F2VM4	Photography Lifting	To preserve it, it was photographed using an L-shaped ruler. A white plastic patch was used to lift and preserve it.
2F43W4	Lifting	Standard 2 inch lift tape used.
2GWT2H	Photography Lifting	DCS images taken Lift card with lift tape
2JYQDB	Photography	
2KG7Z8	Photography	Fluorescent photography with orange barrier filter.
2YQNE7	Photography	One photograph (ALS) was taken of a latent print using the FSIS II camera, one latent print photograph was taken with the Latent Print camera 10/2 after cyanoacrylate fuming, one latent print photograph was taken with the Latent Print camera 10/2 with an orange filter after dye stain, and one latent print photograph was taken with the Latent Print camera 10/2 after powder dusting.
32VG7J	Photographic Documentation	All photographic documentation performed with resolution guidelines, which included a surface to sensor distance of no greater than 0.49 meters (Canon 100mm macro lens) and in RAW format. A Canon 5D Mark III full frame camera was used.
377UNH	Photography	The observed FRD in quadrant 'C' was digitally photographed using a Nikon D850 and captured in .jpg image format at multiple points in the examination process. Latent fingerprint was labelled in the photographs with a scale and unique identifier "FEN102403408".
382CQJ	Photography	
382VM2	Photography	Nikon D7000
3DT37A	Photography	Photographed patent and/or latent print at each step using Nikon digital camera
3E3PN2	Lifting	Lifted with tape
3EJB8X	Photography Lifting	The print was photographed after cyanoacrylate fuming and photographed again after using magnetic powder. One photographed the lifted and placed it onto a latent lift card.
3JBHP8	Lifting	Clear tape utilized to lift latent print from surface, then affixed to white latent lift card.
3V8UDY	Photography	

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
46T378	Photography	Four total photographs of ridge detail were photographed after a visual examination, superglue fuming and ardrex dye stain. Visual examination and superglue fuming photos were taken with a Full Spectrum Imaging System camera. Ardrex dye stain photos were taken with a normal camera under UV and LASER (485nm-blue) light sources). All photos included a metric scale next to the ridge detail.
	Lifting	After powdering, tape was used to lift the print and deposit it onto a properly labeled latent lift card.
	Scanning	A copy was made of the front and back of the latent lift card and will be included in the report.
473PNY	Photography	Photographs taken after each step where ridge detail was visualized.
4APDH8	Photography	The fingerprint was photographed at every stage of research after disclosure.
4EF4N3	Photography	photo'd
	Lifting	latent lift
4EJMC7	Photography	Took photos of latent impressions for visual examination, cyanoacrylate fuming, and dye stains
	Lifting	Lifted black powder dusting
4NQ3HE	Photography	Photographed with the FSIS camera before and after cyanoacrylate fuming. Photographed with Nikon D810 with yellow filter after dye stain.
4PGBJ3	Photography	Photographed using a Canon 90D set on comparison settings (F16, ISO100, 90 degrees from the surface, RAW image file) and adjusted the light meter (shutter speed adjustment) with the camera on the digital workstation until visualization occurred. Included a fingerprint scale sticker for framing and item information. (CA fuming)
	Lifting	Applied latent print tape to the surface and recovered the powdered print. Included item information on the card. (Powder processing)
4QV937	Photography	Nikon with Foster and Freeman Digital Capture system-5.
4UTEEB	Photography	Photographed after CA Photographed again after R6G at 515nm with orange and green barrier filters stacked
4XVR3G	[No Preservation Methods Reported.]	
62RVAU	[No Preservation Methods Reported.]	
64XJ67	Photography	Canon 5DSR
697GGC	Lifting	After CAE fuming and powder processing, lifted the developed ridge detail from quadrant C with lifting tape and placed the tape on a lift card.

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
6998MV	Photography	The print was photographed with a mirrorless digital camera after each of the following processing steps: initial visual examination, cyanoacrylate fuming, and dye stain. Specific information per each development step: -Visual: used a flashlight -Cyanoacrylate: used a flashlight -Dye Stain: used Foster+Freeman Crime-Lite Blue-Green (445-510nm) with an orange filter
6A3XTA	Photography	photographed after each process
6FPEV7	Lifting	Latent card and clear fingerprint tape
6GLV94	Photography	Visual, refUV, magnetpowder
6PD428	Photography	
6TBRA2	Photography	Photographed before CA, after CA, and after RAM blue/green light with orange filter used to photograph after RAM
	Lifting	Lift card generated after powder processing
6TF2AE	Photography	532 nm laser with orange filter goggles/camera lens for R6G photography
6TGYKA	Photography	Two digital photographs were taken of the print during the Rhodamine 6G development stage. Photographed with Dual 77 Laser 520nm (green light), an Orange Curved Filter, and a FF-1.0 Filter.
6U7AB3	Photography	420-470nm lightsources with 415nm BP and GG 455nm LP filters
6U88LY	Photography	- Apply a digital photography using DCS-5 camera Nikon D6 to save enhanced latent print; - Print enhanced latent print with DCS-5 printing machine; - Processing time for all steps of preservation was about 10 minutes; - Fluorescent green powder was used.
6XRKDU	[No Preservation Methods Reported.]	
76GRA6	Photography	Used after CAE and Dye stain
	Lifting	Used after Powder
76N6B3	Photography	After item 1 was chemically processed with superglue fuming, I observed ridge detail in quadrant C. To preserve the development I took exam quality photographs using a macro lens. An overall photo was taken of item 1 and then close-up photos were also taken of the print without and with a scale.
	Lifting	After item 1 was processed with magnetic black powder, I used lifting tape to lift the print and placed it on a fingerprint card.
77JMC4	Photography	Used FSIS camera with UV filter, used scale in photograph, uploaded to FORAY Used Nikon camera, used scale in photograph
79LLMW	Lifting	Latent lift card
7KEBX3	Photography	Nikon D750 +macro nikkor f 2.8 60 mm

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
7LBRAY	[No Preservation Methods Reported.]	
7PBTHA	Photography	Five photos taken; two after visual exam, two using the alternate light source, and one after applying magnetic powder.
	Lifting	One lift taken after applying magnetic powder.
7Q22KX	[No Preservation Methods Reported.]	
7U66KD	Photography	I took photographs of the ridge detail located in quadrant C with a scale using the DCS, alternative light source, filtered lens. Two photos of the ridge detail were taken.
	Lifting	After black powder application, I lifted the ridge detail located in quadrant C using lift tape. I wrote the case number, number of lifts (lift 1 of 2 and lift 2 of 2), date of collection, location, initials and ARJIS (4-digit employee ID number), and the orientation arrow on the drawing of the item and side with lift tape. I also placed an "X" on the drawing to depict where the print was lifted from. I collected two latent print lift cards from this item.
7VD3P2	Photography	Photographed the latent print using white light after visual examination. Photographed the latent print using white light after processing with Cyanoacrylate Fuming. Photographed latent print using blue light (445nm) and a yellow filter after processing with RAM dye stain. Photographed latent print using white light after processing with Black Magnetic Powder. Photographs taken on a Foster and Freeman DCS5.
7X6GGD	Photography	During visual examination, I pulled item 1 out and visually examined the item. I saw ridge detail in quadrant C. I went over to the DCS-5 and took images of the ridge detail.
	Lifting	During black powder dusting, I powdered the entire surface of item 1 and lifted 2 latent print lift cards with tape lifts from quadrant C.
86LCW8	Lifting	Latent print was developed in quadrant C. One latent lift card was prepared from quadrant C.
884Q3T	Photography	
92DBX2	Photography	The picture was taken with Nikkon Camera Z6, with Nikkor 60 mm Lens
9MYBGV	Taped over the print	
9RRZV2	Photography	Using FSIS with short wave UV and a mounted camera with UV and laser light sources
9TMF8Y	Photography	latent photograph
	Lifting	latent lift
9UBY36	Photography	The fingerprint was photography at every step of a research.
9VQBQ2	Photography	Took 5 digital photographs of latent impressions on Quadrant C of plastic tag (VISUAL EXAM, (2) CAE FUMING STEP, ARDROX/UV STEP, AND R6G/LASER STEP)

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
9WLCX7	Photography	-Captured using white light during visual examination and after lumicyano
9WMQ4X	Photography	Photo w/scale (VIS, CA) and photo'd with a scale, FLS & orange barrier filter (MBD dye stain)
	Lifting	Latent lift card and tap (BMP)
9WZX9T	Photography	Used Nikon D850 Digital Camera to capture photograph.
	Scanning	Scanned to better visualize print for analysis.
9XBAX4	Photography	
A4HN9T	Photography	Documentation photos captured upon ridge detail visualization.
A82HAZ	Photography	Latent print 1a was photographed using the Foster + Freeman DCS5 system.
A8XYLW	Lifting	Lifted using latent lift tape & latent lift card
AEWKBB	Photography	One digital image of visible prints was taken of quadrant C. One digital image of developed prints was taken after superglue fuming of quadrant C.
	Lifting	One latent print card containing a lift of developed prints was collected from quadrant C.
AEYBHU	Photography	Photograph taken of most ridge detail taken after powder step
AG7PNZ	Photography	-Captured using white light during visual examination -Captured using 490nm light after Lumicyano
AN6E8P	Lifting	
ATHZEB	Photography	Photograph any ridge detail observed that might be suitable for documentation and further examination.
	Scanning	To upload images into the LIMS case file.
AYJAL4	Photography	
B347KZ	Photography	Photos were taken at: cyanoacrylate fuming using FSIS(SUV) camera Ardrex using UV lighting and a camera Rhodamine using green LASER, orange filter and a camera powder using a camera and white light
B8D9LW	Photography	
BDMVNT	Photography	Photograph taken with white light after Rhodamine 6G- only fingertip portion present.
BHD6XQ	Photography	Photograph taken of most ridge detail taken after dye stain step
BQNTA4	Photography	

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
BU8LK8	Photography	Visible print after visual examination - DCS 5 @1000dpi Developed print after superglue - DCS 5 Used Crime-Lite 82S (UV 350-380nm) with U-filter (60nm HBW / 320-380nm) @1000dpi
	Lifting	Tape
BV2WD9	Photography	Nikon Z8
BWR6EW	Photography	Photographic documentation was made of the fingerprint fragment revealed on the surface of the item identified with number 1, in quadrant C.
	Lifting	The fingerprint evidence was transferred to a contrast medium using conventional tape.
C28Q84	Photography	Photography was carried out on a Foster and Freeman DCS-5 system consisting of a Nikon D5 camera. For visible spectrum image capture a 52mm visible imaging colour balancing filter was used. Captured images were scaled, saved and printed to a 1:1.
C2KUNU	Lifting	Lift tape and applied to fingerprint lift card
C3XY9R	[No Preservation Methods Reported.]	
C8DJ2Y	Lifting	ridge detail collected from quadrant "C" using lifting tape and lift card
CAHPLR	Lifting	Latent Print Appeared on Quadrant C. Used Lifting Tape to Pull Print and Placed On Latent Lift Card.
CDEVXW	Photography	Photo with and without scale
	Lifting	Used clear tape and on to a fingerprint card.
CKWJY7	Photography	Two digital images of the item were captured using a DCS5 camera.
	Lifting	Tape was used to lift the print from the item and place it on a latent print card.
CRZB2V	Photography	overall and comparative
	Lifting	black powder and lift tape
CU3NP2	Photography	Foster + Freeman DCS-5
D2FYF8	Photography	Photographed visible ridge detail.
	Lifting	Lifted with tape after black powder.
DFHQGY	Photography	Photographed print at V, BP, and MRM-10. Print pattern uncertain until MRM-10.
DFMB63	Photography	One photo taken after visual exam; one photo taken after dye stain and viewing with a green laser light source and using an orange filter on the camera
	Lifting	One lift taken after dusting with magnetic powder, one lift taken after dusting with black powder

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
DH8WG3	Photography	
DL78D3	Photography	Images captured
DNFJPT	Photography Lifting	photograph (TIFF, copied, Adobe Photoshop enhancement) photo cd latent lift (lift tape, white backing card)
DTPECU	Photography	1 digital image captured w/ FSIS (UV). 1 image captured w/ DCS5 (powder).
DTQW8R	Photography	OVERALL OF THE LATENT PRINT'S LOCATION
DVAVEV	Photography	Any suitable marks developed throughout sequential treatment were marked up and photographed 1:1 using a D6 Nikon digital camera with an AF-5 micro nikon 105mm lens, 8x4 Crime Lite light source(s) and appropriate camera filter(s). The camera is linked to Digital Capture System 5 (DCS5) software where the images are exhibited with full audit trails and further DCS5 enhancement tools can be used to improve contrast/remove background interference etc., where applicable. Exhibited images are then submitted to the Fingerprint Bureau for further analysis and comparison.
DXH4PZ	Photography	A photograph was taken of the impression developed in Quadrant 'C' using a Nikon D5600 camera and the image was uploaded to the case record object repository in Forensic Advantage.
E7RR4Y	Photography	Photographed prints using Nikon DSLR and Full Spectrum Identification system
E8HZ6M	[No Preservation Methods Reported.]	
EAUQER	Photography Lifting	fluorescent / flash light & ALS w/orange filter white lift card & clear tape
EDRL4Y	Photography	photographed positive results using DCS-5 system
EG9JJV	Photography	Both general photography and macro photography are carried out, in 'JPG' and 'RAW' formats
EJFULQ	Photography	The latent impression developed in section C was photographed using a Canon Rebel T7i digital camera with a macro lens.
EJTXZV	Photography	The item was photographed between processes when identifiable friction ridge detail was observable. It was photographed using CSU camera 11/3 using direct lighting with an LED after powder dusting and with direct lighting with a Polilight 2 after RAY.
EKBR27	Photography	Used a Nikon D90 attached to a camera stand. Camera set to raw. Latent print image at least 1000 pixels per inch (ppi) and photographed in color.
EP74VP	Photography Lifting	09-13/04/2026, DCS5 Photography System was used to preserve the mark after each processing step 13/04/2026, Black powder lifting was used to preserved the developed mark

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
ETJJ7U	Photography	Mideo
FBF9Z3	Photography	Two images of visible and developed prints were taken.
	Lifting	Two latent print cards containing lifts of developed prints were collected.
FD4CGV	Photography	Macro camera lens (Nikon D 3300).The photo of the latent print is archived in the AFIS data base of fingerprints
FLJW2U	Photography	
FMEE3V	Photography	The developed latent print was preserved by photography using Foray Adam's Imaging System at 505 nm to 515 nm light with OG 550 filter.
FN49TQ	Lifting	Lift tape applied to lift card
FYPCZP	Photography	5/15/26: Exhibit 1: Image capture post CAE: Nikon D810 and oblique lighting used to capture one (1) image of the FRD in Section C of the luggage tag. Adobe Photoshop 2026 used to view image. See documentation photograph for the location of FRD, as well as the scale label used in the image. Latent 1C: Resolution 1519.04 PPI. Calibrated 1:1. Saved as TIF.
FZXA3T	Photography	
G68W6W	Photography	Nikon D850 and FSIS II
	Lifting	Tape Lift
G9N34Q	Photography	Photographic documentation was carried out, beginning with general shots, close-ups, and extreme close-ups, both with and without a metric scale, and at a 90° angle to the located fingerprint fragment.
	Lifting	he transfer was performed using conventional tape, and the evidence or fingerprint fragment was placed on a white support.
GJT3MQ	FSIS Photography	FSIS camera used with a UV filter, used scale in photograph and uploaded into Foray.
	Photography	Used Nikon camera, used scale in photograph and uploaded into Foray.
GPTWNQ	Photography	One photograph of item 1 using the FSIS II camera and UV light. One photograph of item 1 using LP-Camera 10/Lens 2 with an orange filter and the 450 nm polilight 2 for the RAY photo.
GQMMU6	Photography	All photographic documentation was performed within resolution guidelines and in RAW format. The Canon EOS 5D Mark III was used. Overalls of the packaging and items were taken prior to chemical processing. Visible ridge detail of photo lift #1 was photographed using a direct reflect method of lighting. Ridge detail of photo lift #1 developed with MRM-10 was photographed using an ALS set at 450nm with an orange barrier filter.
HAXJLM	Photography	Photographs were taken of the latent print with scale.

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
HC4GXW	Lifting	
HCHHTQ	Photography	Canon EOS 5D Mark IV + 100mm 2.8L EOS Utility software
HDZWAT	Photography Lifting	photography used after CAE and again after dye stain lifting used after powdering
HENZRL	Photography	Canon EOS 5D mk.II Objective Canon EF 100mm, f/2.8 Macro White led lighsource.
HML2HT	Photography	On 4/7/26, I took one (1) photograph of a latent print in quadrant C following fluorescent dye staining with RAY. The latent print was documented using direct lighting with a 450 nm Polilight and a Nikon D500 (camera 11/lens 3) with an orange filter attached. On 4/7/26, I took one (1) photograph of a latent print in quadrant C following black powder dusting. The latent print was documented using direct LED lighting and a Nikon D500 (camera 11/lens 3).
J39ZLX	Photography Lifting	Used the DCS5 camera on the 5th floor processing room to take 1 image of the visible print. Used tape to lift the apparent print off of the luggage tag and placed it onto a latent print card.
J3EGEK	Lifting	Black Powder
J7DRBK	Lifting	Black powder
JDU34R	Photography	DCS-5
JHADGW	Photography	I captured photos of item 1 recording the results of after fuming and also after dusting.
JJ4NAX	Photography	The ridge structure that was visualized through the various staged were photographed with a camera on a camera stand with a microlens or using the FSIS camera. During the photography with the alternate light source a lens filter was used.
JNAG4T	Photography	Nikon D800E, F/22, ISO-200, 105 mm
JP6XGQ	Photography	NIKON camera, RAW format, scale in picture, uploaded and stored in Foray
JQZP7G	Photography	
JYT79K	[No Methods Reported.]	Covered with latent print tape
K4JZHR	Photography	captured IM using DCS-5
K6FFVN	Lifting Scanning	Hinge lifter (Item 1.1). Scanned image of lift holding L1A.

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
KAPTDM	Lifting	
KQVXZY	Photography	During visual examination, the latent was photographed using a Canon DSLR, scale, and ring lighting.
	Lifting	Latent was lifted using frosted lift tape. The latent was placed on a lift card with description, drawing, direction, case number, item number, initials, date, and lift number.
	Scanning	Latent lift cards were scanned at 1000 DPI with a scale.
KRQG3Z	Photography	DCS5 photography of visible print
	Lifting	Tape lift
KXD8NV	Photography	Nikon camera
L8DG9Q	Lifting	Clear tape was used to obtain a lift and placed on a white latent lift card. Powder was re-applied, and a re-lift of the area was then also obtained.
L8V3RN	Lifting	Tape Lift
LBMKRG	Photography	1. After Dye Stain, Mark photographed using 445nm light with 495nm Filter
LVNK7T	Lifting	
M2QB9H	Photography	Digital photographs with DSLR
M3K2EW	Photography	
M4BAFK	Photography	Photographic documentation was performed, beginning with general shots, close-ups, and extreme close-ups, both with and without a metric scale, and at a 90° angle to the located fingerprint fragment.
	Lifting	It was transferred using conventional tape and placed on a white support.
M4TNWN	Photography	On 04/06/2026, I photographed the visible ridge detail/print that was observed after the visual examination of the item with white light and magnification with a Nikon Z7 camera using oblique/side lighting with a white LED light. One (1) photograph was submitted for examination. On 04/13/2026, I photographed the visible ridge detail/print that was observed using wavelength 450nm light with an orange filter and magnification after applying the RAY dye stain. I used a Nikon Z7 camera with an orange filter and direct lighting with a 450nm light. One (1) photograph was submitted for examination. On 04/13/2026, I photographed the visible ridge detail/print that was observed after applying black latent print powder with a Nikon Z7 camera using direct lighting with a white LED light. One (1) photograph was submitted for examination.
M9KMXJ	Photography	Images saved in JPG and RAW at minimum of 1000 dpi, transferred to a DVD.
M9KQMN	Photography	FSIS II and Nikon D810 photography
	Lifting	Tape lift

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
MPE9MK	Scanning Photography	
MQARNL	Photography Lifting	I took a photo of the print without and with a scale with the copy stand camera. I then lifted the print with clear tape and onto a fingerprint card.
MUTJZN	Photography Lifting	Photographed at visual with SUV/FSIS, cyanoacrylate with SUV/FSIS, Rhodamine/Laser, and powder. Lifted after powder
MZU6GQ	Photography Lifting	iPhone photos for overalls. FSIS II camera system of 1A before and after cyanoacrylate. Lifted and scanned into Photos folder for review.
MZUD2N	Photography	The item was photographed with a Nikon Z7 camera. Direct polilight lighting was used for the dye stain photograph. Direct lighting was used for the powder photograph.
N3GWEE	Photography	Camera A - 3 photos of quadrant C
N4BMKT	Photography Photography Photography Photography Photography Photography	Visual examination - Digital Camera FSIS - FSIS Camera Cyanoacrylate - Digital Camera Cyanoacrylate/FSIS - FSIS Camera Rhodamine 6G/Polilight - Digital Camera Black powder - Digital Camera
N62VLG	Photography	
NKE4MK	Photography Lifting	Pre-powder and Post-powder Post powder and photography
NYGZWR	Photography	Photographed on a copy stand in RAW.
P9FD8C	Photography	One (1) photograph of a latent print in Quad. C
PAA4DQ	Photography	
PJ3RHN	Photography	Under Blue light/yellow filter.
PU7UTD	Photography	TM "1.1" in C section. The picture has been taken with 490 nm to photograph the developed latent print (partial as well as detail.)
PVZKYR	Photography	Ridge structure developed in quadrant C. Photographed at every processing step.

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
PWQTZG	Photography	UV: Canon utility software, Canon EOS 80D, Canon EF 50mm, F&F Crime-Lite 82S UV 350-380nm , Baader U-Venus filter 350nm. Normal: Canon utility software, Canon EOS 77D, Canon EF 100mm, F&F Crime-Lite 82S Blue 420-470nm, Schott GG495AG, Labino Nova Torch white, Haida Slimm PRO II MC-Pol filter.
Q2DM2R	Lifting	Used clear tape and white lift card to lift developed ridge detail in one lift.
Q2ZJMM	[No Preservation Methods Reported.]	
Q3QRNB	Photography	Capture and Enhancement processing completed with Foster + Freeman DCS5 imaging system - When using UV Examination (350 - 380nm). Add Baader U – filter 2" (350nm) 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. - When treat evidence by 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).
QAT8MC	Photography	Photographed
QUY8QP	[No Preservation Methods Reported.]	
QVPFTE	[No Preservation Methods Reported.]	
QXZBHC	Lifting	Latent lift card
QY79UL	Photography	
QYNUDH	Photography	Took scaled photographs of fluoresced ridge detail.
QYT2NQ	Photography	Digital photography Photos taken at Visual, FSIS before cyanoacrylate fuming, FSIS after cyanoacrylate fuming, Dye stain with crimescope, and powder
QZ3N8H	Photography	Crimelite Auto
QZJAQF	Photography	Photography using comparative settings to include RAW, ISO 100, and an F-stop greater than F-16. Photographs were taken after the following methods: visual, cyanoacrylate ester fuming, and powder dusting.
	Lifting	The print was lifted as LP1 and placed on a latent print card.
R2TADE	Lifting	Placed clear plastic lifting tape over suspected print. No collection performed as per instructions of CSM Dinterman.
RFA32L	Photography	The latent impression in quadrant C was captured utilizing a digital camera with a macro lens and bounce lighting after cyanoacrylate fuming. The latent impression in quadrant C was captured utilizing a digital camera with a macro lens, orange barrier filter, and the forensic laser light source after dye staining.
RMTZGF	Photography	Nikon D800, jpg/RAW, then burned to DVD

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
RQBPTH	Photography	Foster+Freeman DCS-5 station with co-axial and paddle lighting attachments for visual examination, Crime-Lite LED lights/Rofin ALS with filters for Lumicyano
RQRD2J	Photography	
RQTBCE	Photography	Photographed after dye-stain with no ALS.
RWDYZB	Photography	Photographed after Rhodamine 6G with Nikon D850 using Dual 77 and orange barrier filter.
RZWUZG	Photography Lifting Scanning	Latent 1.1.1 photographed after both CAE fuming and R6G staining. Latent 1.1.1 lifted after powdering and preserved on a lift card. Lift card of Latent 1.1.1 was scanned.
T8ELPL	Lifting	MP1 = BP1 = BP1A = BP1B
T9REZB	Photography Lifting	Photography System was used to preserve the mark after each processing step Black powder lifting was used to preserved the develop mark
TDZE48	Lifting	Item was lifted with tape and placed on lift card
TEXPWN	Photography Lifting	Photography on DCS5 camera system used prior to latent print processing. Tape lift used.
TFU6AL	Photography	DCS--5 imaging system was used.
TN3WEA	Lifting	Using Sirchie tape and a lift card, the print was lifted.
TRLRFG	Photography Lifting	Photographed after Cyanoacrylate fuming and Dye stain Lifted after powder dusting
TTH8RD	Lifting	Lifted possible fingerprint and placed it on MSP form 74.
TWEE4H	Photography	Took a photographs at Ardrex Dye Stain with UV, Rhodamine with Laser and orange wratten filter, and powder
TZDATP	Lifting	Tape lift.
UM2J78	Photography	Nikon DSLR camera was used to document the developed impression. Images taken during Cyanoacrylate Fuming and VMD. Impression was not visible with R6G and was not photographed during that stage.
UPA7T8	Photography	Canon Utility software, Canon EOS 5D Mark II, Canon Macro Lens EF 100 mm, white light
URVFTD	Lifting	Lifted using clear latent print tape and placed on white index card for preservation.

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
UZXWNC	Photography	photo'd w/scale using lab camera set to tiff file format
V7WWC8	Lifting	Latent lift card
V8QMHL	Photography	A Nikon D780 was used to capture the photographs of the ridge structure that was developed. An overall photograph at the end of processing was also taken, to show the location of the development.
V9GVJA	[No Preservation Methods Reported.]	
VDFZJA	Lifting	The latent print was photographed and then preserved using a hinged print lifter.
VPRB9K	Photography	I placed an orange filter on the camera and placed a scale in the frame prior to photographing. The image was opened in Adobe Photoshop and saved as an original and processed image to a photographic reproduction sheet.
VQGJB9	[No Preservation Methods Reported.]	
VQMTBL	Photography	4/20/26: RS was photographed at Vis/FSIS. RS photographed at CA/FSIS. RS photographed at BY40. RS photographed at BM.
VRD2CA	Photography	Canon Utility software, Canon EOS 5D Mark II, Canon macro lens EF 100mm, white light Canon Utility software, Canon EOS 5D Mark II, Canon macro lens EF 100mm, F&F Crime-Lite 82S Blue 420-470nm, Schott GG495AG.
VW7TK	Photography	
W4KGH7	[No Preservation Methods Reported.]	
W6FZJ8	Photography	
W74HED	Photography	Digital Capturing System DCS-5 Cyanoacrylate: White light source Dye stain (Rhodamine -G): Blue 475nm with filter OG-550
W8KF8D	Photography	All photographs taken were digitally preserved on a compact disc and axon evidence.com.
WH2CVG	Photography	Foster&Freeman DCS5 - episcopic mode, white lights, 415 nm with yellow filter
WH4GFD	Photography	A combination of the Rofin Polilight and Crime Lite 8x4 were used with the DCS-5 camera system to photograph the impressions.
WHL3YA	Photography	
WJX8LR	Photography	Illumination: UV Light
WL6PJM	Photography	Oblique and direct overhead lighting. BY-40 dye stain, 350nm lighting with orange and yellow filters.

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
WLZ7WK	Photography	
WQGVFG	Scanning	
WR84G6	Lifting	using clear tape, it is transferred to a backing
WRCEGH	Photography	Overall photo prior to processing using MIDEO camera, close-up of ridge detail after cyanoacrylate ester fuming using SPEX RUVIS camera. Images downloaded to DVD for comparison.
WTJ4BE	Photography	Photography utilizes various optical phenomena accompanying the interaction of light with surfaces, such as reflection, scattering, absorption, and emission. Images are recorded using digital photography techniques with NIKON D5600 camera
X36HXG	Photography	I used a Nikon D3400 with with a curved orange fitter and a FF1.0 Narrow band pass fitter in conjunction with the laser to photograph the developed print.
X4VQZ6	Lifting	Lifting on acetate
X4YAM9	Photography	Photographs were initially, after CA fuming and after RAM/ALS.
X73DNN	Photography	Orange filter and Blue Light Source after applying for both dye stains. No orange filter and regular light for the CA
XD6XZE	Photography	29/04/2026, DCS5 Photography System was used to preserve the mark ater each processing step
	Lifting	29/04/2026, Black powder lifing was used to preserved the developed mark
XJCN67	[No Preservation Methods Reported.]	
XXCVAF	Photography	Foster & Freeman DCS-5 system utilized for digital imaging
Y4CUXB	Photography	DCS5 camera system
YGJKZH	Lifting	
YGLA8Z	[No Preservation Methods Reported.]	
YHFH8C	Photography	
YKHGH6	Lifting	Tape lifted
YLVTLF	Photography	Photography of the developed print in quadrant C of the luggage tag was completed with a scale in place.

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
YLZBJE	Lifting	The developed prints on the luggage tag and postcard were lifted using traditional tape and placed on cards for submission.
	Photography	All of the items had photographs taken between every step of processing to preserve the prints.
	Scanning	After being placed on latent cards, the lifts were copied via a printer and placed in a case folder.
YM9X27	[No Preservation Methods Reported.]	
YMQHK4	Superglue Fuming Procedure	Fuming with cyanoacrylate operational conditions 120 Degrees Celsius temp. 80% humidity
YN3BJC	Photography	Digital photography - Visual, Superglue, Ardrex
YN4F48	Photography	Photographed and applied lift tape on top of the item to preserve the apparent ridge detail.
YYJ6PD	Photography	The luggage tag was photographed using a macro lens with and without scale. The print was placed on a compact disc.
Z3VW7B	Photography	VIS: 3 image(s) taken with CSU - Camera 11/Lens 3 on 4/15/2026 (Direct LED). CA: 1 image(s) taken with CSU - Camera 11/Lens 3 on 4/15/2026 (Direct LED). RAY: 1 image(s) taken with CSU - Camera 11/Lens 3 on 4/15/2026 (Direct Polilight 2 (450nm filter): Orange Filter). POW: 1 image(s) taken with CSU - Camera 11/Lens 3 on 4/15/2026 (Direct LED).
Z6LNB9	Photography	Nikon digital camera, RAW format, Foray digital archive storage
Z7FGZZ	Photography	DSC5
Z8C367	Lifting	Lift tape and applied to fingerprint lift card
Z9M4NJ	Photography	Latent print photographed after CA processing and then again after dye stain. Photos taken of dye stain with 450nm poli-light and a yellow filter using a Canon T6i camera.
ZAUMPZ	Photography	This item was photographed using ambient and direct light.
ZC4U8F	[No Preservation Methods Reported.]	
ZDDGP8	Photography	One (1) purple luggage tag, with quadrants A-D marked Prints Observed: VIS: . No Prints ALS: . 450, No Prints ALS: . 530, No Prints FSIS: . No Prints CA: 1 image(s) taken with LP - Camera 10/Lens 2 on 4/15/2026 (Bounce/Tent Halogen). POW: . No Prints RAY: . No Prints See image metadata for settings. Total image(s) taken: 1
ZDU394	Photography	Canon EOS 5D, Ultrasonic 100mm 1:2,8 DG Macro with white light.
ZJJ8UY	[No Preservation Methods Reported.]	

Preservation Methods

TABLE 3 - Item 1 (Luggage Tag)

WebCode	Preservation Methods	Method Details
ZJMZ79	Photography	Used DISCOVER w/ Crime Lite Auto. Photos were put on a CD.
ZNE2QE	Photography	Photography was used as the method of preservation
ZU4UBA	Photography	Canon EOS 800D, Canon Macro Lens EF-S 60mm, yellow and orange viewing filter (after BY40)

Response Summary: Item 1 (Luggage Tag) - Preservation

Methods Utilized

Responding Participants: 241

Lifting: 84 Photography: 204 Scanning: 9 Not Tested: 0 No Response: 18

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

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
2CMZ87	Lifting	Transparent tape utilized and placed onto lift card
2DBJ2C	Photography	Photo evidence scale.
2F2VM4	Photography Lifting	To preserve it, it was photographed using an L-shaped ruler. A white plastic patch was used to lift and preserve it.
2F43W4	Lifting	Standard 2 inch lift tape used.
2GWT2H	Photography Lifting	Images taken on DCS camera Lift cards with lift tape
2JYQDB	Photography	
2KG7Z8	Photography	Fluorescent photography with orange barrier filter.
2YQNE7	Photography	One photograph (ALS) was taken of a latent print using the FSIS II camera, one latent print photograph was taken with the Latent Print camera 10/2 after dusting with magnetic powder.
32VG7J	Photographic Documentation	All photographic documentation performed with resolution guidelines, which included a surface to sensor distance of no greater than 0.49 meters (Canon 100mm macro lens) and in RAW format. A Canon 5D Mark III full frame camera was used.
377UNH	Photography	The observed FRD in quadrant 'B' was digitally photographed using a Nikon D850 and captured in .jpg image format at multiple points in the examination process. Latent fingerprint was labelled in the photographs with a scale and unique identifier "FEN102403417".
382CQJ	Photography	
382VM2	Photography	Nikon D7000
3DT37A	Photography	Photographed patent and/or latent print at each step using Nikon digital camera
3E3PN2	Lifting	Lifted with tape
3EJB8X	Photography Lifting	The print was photographed after cyanoacrylate fuming and photographed again after using magnetic powder. Once photographed, the print was lifted and placed onto a latent lift card.
3JBHP8	Lifting	Clear tape utilized to lift latent print from surface, then affixed to white latent lift card.
3V8UDY	Photography	

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
46T378	Photography	Three total photographs of ridge detail were created after Ardrox (MEK), Aqueous Rhodamine and DFO processing. Ardrox dye stain photos were taken with a normal camera under UV. Rhodamine dye stain and DFO photos were taken with a normal camera with an orange filter (Wratten #21) under a 532nm LASER. All photos included a metric scale next to the ridge detail.
	Lifting	After powder dusting, tape was used to lift the print and deposit it onto a properly labeled latent lift card.
473PNY	Photography	Photographs taken after each step where ridge detail was visualized.
4APDH8	Photography	The fingerprint was photographed at every stage of research after disclosure.
4EF4N3	Photography	photo'd
	Lifting	latent lift
4EJMC7	Photography	Took photos of latent impressions for visual examination, cyanoacrylate fuming, dye stains, DFO, ninhydrin, zinc chloride, and physical developer
	Lifting	Lifted black powder dusting
4NQ3HE	Photography	Photographed with the FSIS camera before and after cyanoacrylate fuming.
	Lifting	Photographed with Nikon D810 after powder.
4PGBJ3	Photography	Photographed using a FSIS and UV light, with a scale and item details.
	Lifting	Powder print was lifted from service and placed on a card with item details.
4QV937	Photography	Nikon with Foster and Freeman Digital Capture system-5.
4UTEEB	Photography	Photographed after CA Photographed again after R6G - viewed at 515nm with orange and green barrier filters stacked
4XVR3G	[No Preservation Methods Reported.]	
62RVAU	[No Preservation Methods Reported.]	
64XJ67	Photography	Canon 5DSR
697GGC	Lifting	After CAE fuming and powder processing, lifted the developed ridge detail from quadrant B with lifting tape and placed the tape on a lift card.
6998MV	Photography	The print was photographed with a mirrorless digital camera after each of the following processing steps: initial visual examination, cyanoacrylate fuming, powder dusting, and dye stain. Specific information per each development step: -Visual: used a flashlight -Cyanoacrylate: used a flashlight -Powder Dusting: used a flashlight -Dye Stain: used Foster+Freeman Crime-Lite Blue-Green (445-510nm) with an orange filter
6A3XTA	Photography	photographed after each process

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
6FPEV7	Lifting	Latent card and clear fingerprint tape
6GLV94	Photography	
6PD428	Photography	
6TBRA2	Photography	Photographed after CA fuming and after RAM stain blue/green light and Orange filter used to photographs after RAM
	Lifting	Lift card generated after powder processing
6TF2AE	Photography	white light-oblique lighting for visual examination and cyanoacrylate photography; 532 nm wavelength laser with orange filter goggles/camera lens for R6G photography
6TGYKA	Photography	Two digital photographs were taken of the print during the cyanoacrylate and powder stages.
6U7AB3	Photography	lightsources green 480 – 560nm, blue 420 – 470nm with Canon EOS 5D Mark IV, (100mm, F710, ISO-200, 0,5-2 seconds).
6U88LY	Photography	- Apply digital photography with DCS-5 camera Nikon D6 to save enhanced image of the latent print; - Apply DCS-5 printer for printing enhanced latent print image; - Processing time was about 10 minutes; - Fluorescent green powder was used.
6XRKDU	[No Preservation Methods Reported.]	
76GRA6	Photography	Used after visual and CAE
	Lifting	Used after powder
76N6B3	Lifting	After processing item 2 with magnetic black powder, I used lifting tape to lift the print observed in quadrant B and placed it on a fingerprint card.
77JMC4	Photography	FSIS, used FSIS camera with UV filter, used scale in photograph Used Nikon camera, used scale in photograph, uploaded to FORAY
79LLMW	Lifting	Latent lift card
7KEBX3	Photography	Nikon D750 +macro nikkor f 2.8 60 mm
7LBRA Y	[No Preservation Methods Reported.]	
7PBTHA	Photography	Four photos taken; one after visual exam, two after Cyanoacrylate, one after applying magnetic powder.
	Lifting	Two lifts taken; one after applying magnetic powder and one after applying black powder.
7Q22KX	[No Preservation Methods Reported.]	

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
7U66KD	Lifting	After black powder application, I lifted the ridge detail located in quadrant B using lift tape. I affixed the lift tape with ridge detail onto a lift card and wrote out pertinent information (which included the case number, lift number, my initials and ARJIS, date of collection, and location of the print). I also drew the item with an "X" on the location where the print was at, and an orientation arrow on the drawing and lift tape. I collected one latent print lift card from this item.
7VD3P2	Photography	During the visual examination, white side lighting was used to photograph the latent print. After cyanoacrylate application, white side lighting was used to photograph the latent print. After RAM application, blue light at 445nm with a yellow filter was used to photograph the latent print. After Black Magnetic powder application, white light was used to photograph the latent print. After NIN application no latent prints developed, no photographs taken. All photographs were taken on a Foster and Freeman DCS5.
7X6GGD	Photography	During visual examination, I pulled item 2 out and visually examined the item. I saw ridge detail in quadrant B. I went over to the DCS-5 and took images of the ridge detail.
	Lifting	During black powder dusting, I powdered the glossy area of item 2 and lifted 1 latent print lift card with tape lift from quadrant B.
86LCW8	Lifting	Latent print was developed in quadrant B. One latent lift card was prepared from quadrant B.
884Q3T	Photography	
92DBX2	Photography	The picture was taken with Nikkon Camera Z6, with Nikkor 60 mm Lens
9MYBGV	[No Methods Reported.]	taped over the print
9RRZV2	Photography	Using FSIS with short wave UV and a mounted camera with UV and laser light sources
9TMF8Y	Photography	latent photographed
	Lifting	latent lift
9UBY36	Photography	The fingerprint was photography at every step of a research.
9VQBQ2	Photography	Took 5 digital photographs of latent impressions on Quadrant B of postcard (CAE FUMING STEP, (2) ARDROX/UV STEP, R6G/LASER STEP, AND POWDER STEP)
	Lifting	Lifted latent impression with latent lift tape and placed on latent lift card after powdering.
9WLCX7	Photography	-Captured using co-axial lighting attachment during visual examination -Captured using 490nm light with orange/red filter after lumicyano
9WMQ4X	Lifting	latent lift card and tape - black magnetic powder
9WZX9T	Photography	Used Nikon D850 Digital Camera to capture photograph.

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
9XBAX4	Photography	
A4HN9T	Photography	Documentation photos captured upon ridge detail visualization.
A82HAZ	Photography	Latent print 2a was photographed using the Foster + Freeman DCS5 system.
A8XYLW	Lifting	Lifted using latent lift tape & latent lift card
AEWKBB	Photography	One digital image of visible prints was taken of quadrant B. One digital image of developed prints was taken after superglue fuming of quadrant B.
	Lifting	One latent print card containing a lift of developed prints was collected from quadrant B.
AEYBHU	Photography	Photograph of most ridge detail taken after powder step
AG7PNZ	Photography	-Captured using co-axial lighting attachment during visual examination -Captured using 490nm light with orange/red filter after Lumicyano
AN6E8P	Lifting	Lift Tape
ATHZEB	Photography	Document any ridge detail observed before the next process for further examination.
	Scanning	Upload the images into the LIMS case file.
AYJAL4	Photography	
B347KZ	Photography	Photos were taken at: cyanoacrylate fuming with FSIS/SUV Ardrex with UV lighting and camera Rhodamine with LASER lighting, orange filter, and camera Powder with a camera and white light DFO with green LASER lighting, orange filter, and camera
B8D9LW	Photography	
BDMVNT	Photography	Photography after powdering. Right Slant Loop in Quadrant B.
BHD6XQ	Photography	Photograph taken of most ridge detail taken after powder step
BQNTA4	Photography	
BU8LK8	Photography	Developed print after superglue - DCS 5 Used Crime-Lite 82S (UV 350-380nm) with U-filter (60nm HBW / 320-380nm) @1000dpi
	Lifting	Tape
BV2WD9	Photography	Nikon Z8
BWR6EW	Photography	Photographic documentation was made of the fingerprint fragment revealed on the surface of the item identified with number 2, in quadrant B.
	Lifting	The fingerprint evidence was transferred to a contrast medium using conventional tape.

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
C28Q84	Photography	Photography was carried out on a Foster and Freeman DCS-5 system consisting of a Nikon D5 camera. For visible spectrum image capture a 52mm visible imaging colour balancing filter was used. Captured images were scaled, saved and printed to a 1:1.
C2KUNU	Lifting	Lift tape and applied to fingerprint lift card
C3XY9R	[No Preservation Methods Reported.]	
C8DJ2Y	Lifting	ridge detail collected from quadrant "B" using lifting tape and lift card
CAHPLR	Lifting	Latent Print Appeared On Quadrant B. Used Lifting Tape to Pull Print and Placed On Latent Lift Card.
CDEVXW	Photography	Photo with and without scale
	Lifting	Used clear tape and on to a fingerprint card
CKWJY7	Photography	One digital image of the item was captured using a DCS5 camera.
	Lifting	Tape was used to lift the print from the item and place it on a latent print card.
CRZB2V	Photography	overall and comparative
	Lifting	black powder and lift tape
CU3NP2	Photography	Foster + Freeman DCS-5
D2FYF8	Lifting	
DFHQGY	Photography	Photographed print at V, CA, BP, and MRM-10.
DFMB63	Photography	One photo taken after visual exam; one photo taken after cyanoacrylate fuming
	Lifting	One lift taken after dusting with magnetic powder, one lift taken after dusting with black powder
DH8WG3	Photography	
DL78D3	Photography	Images captured
DNFJPT	Photography	photograph (TIFF, copied, Adobe Photoshop enhancement) photo cd
	Lifting	latent lift (lift tape, white backing card)
DTPECU	Photography	1 digital image captured w/ FSIS (UV). 1 image captured w/ DCS5 (powder).
DTQW8R	Photography	OVERALL OF THE LATENT PRINT'S LOCATION

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
DVAVEV	Photography	Any suitable marks developed throughout sequential treatment were marked up and photographed 1:1 using a D6 Nikon digital camera with an AF-5 micro nikon 105mm lens, 8x4 Crime Lite light source(s) and appropriate camera filter(s). The camera is linked to Digital Capture System 5 (DCS5) software where the images are exhibited with full audit trails and further DCS5 enhancement tools can be used to improve contrast/remove background interference etc., where applicable. Exhibited images are then submitted to the Fingerprint Bureau for further analysis and comparison.
DXH4PZ	Photography	A photograph was taken of the print developed in Quadrant 'B' using a Nikon D5600 camera and the image was uploaded to the case record object repository in Forensic Advantage.
E7RR4Y	Photography	Photographed prints using Nikon DSLR and Full Spectrum Identification system
E8HZ6M	[No Preservation Methods Reported.]	
EAUQER	Photography Lifting	flashlight, photo'd white lift card & clear tape
EDRL4Y	Photography	photographed positive results using DCS-5 system
EG9JJV	Photography	Both general photography and macro photography are carried out, in 'JPG' and 'RAW' formats
EJFULQ	Lifting	Item 2 was dusted with black powder.
EJTXZV	Photography	The item was photographed between processes when identifiable friction ridge detail was observable. It was photographed using CSU camera 11/3 using direct lighting with an LED after powder dusting and was scanned with CSU scanner 13 after PD processing.
EKBR27	Photography	Used a Nikon D90 attached to a camera stand. Camera set to raw. Latent print image at least 1000 pixels per inch (ppi) and photographed in color.
EP74VP	Photography Lifting	09-13/04/2026, DCS5 Photography System was used to preserve the mark after each processing step 13/04/2026, Black powder lifting was used to preserved the developed mark
ETJJ7U	Photography	Mideo
FBF9Z3	Photography Lifting	One digital image of visible prints was taken. One latent print card containing a lift of developed prints was collected.
FD4CGV	Photography	Macro camera lens (Nikon D 3300).The photo of the latent print is archived in the AFIS data base of fingerprints
FLJW2U	Photography	

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
FME3V	Photography Lifting	Developed latent print was photographed under white light After Photography, the developed print was tape lifted.
FN49TQ	Lifting	Lift tape applied to lift card
FYPCZP	Photography	5/15/26: Exhibit 2: Image capture post RAM: Nikon D810 (orange filter) and CRIMESCOPE CS-16-500 CSS wavelength used to capture one (1) image of the FRD in Section B of the postcard. Adobe Photoshop 2026 used to view image. See documentation photograph for the location of FRD, as well as the scale label used in the image. Latent 2B: Resolution 1542.54 PPI. Calibrated 1:1. Saved as TIF.
FZXA3T	Photography	
G68W6W	Photography Lifting	Nikon D850 and FSIS II Tape Lift
G9N34Q	Photography Lifting	Photographic documentation was carried out, beginning with general shots, close-ups, and extreme close-ups, both with and without a metric scale, and at a 90° angle to the located fingerprint fragment For the transplantation of the evidence, a conventional tape was used, placing it on a transparent acetate-type plastic support.
GJT3MQ	FSIS Photography Photography	FSIS camera used with a UV filter, used scale in photograph and uploaded into Foray. Used Nikon camera, used scale in photograph and uploaded into Foray.
GPTWNQ	Photography Scanning	One photograph of item 2 using the FSIS II camera and UV light. One scan of item 2 using scanner 8.
GQMMU6	Photography	All photographic documentation was performed within resolution guidelines and in RAW format. The Canon EOS 5D Mark III was used. Overalls of the packaging and items were taken prior to chemical processing. Visible ridge detail of photo lift #2 was photographed using a front directional lighting method. CA development of ridge detail was photographed using oblique lighting. Ridge detail developed with MRM-10 was photographed using an ALS set at 450nm with an orange barrier filter.
HAXJLM	Photography	Photographs were taken of the developed print with a scale.
HC4GXW	Lifting	
HCHHTQ	Photography	Canon EOS 5D Mark IV + 100mm 2.8L EOS Utility software
HDZWAT	Photography Lifting	photography done after CAE lifting done after powder
HENZRL	Photography	Canon EOS 5D mk.II Objektiiv Canon EF 100mm, f/2.8 Macro white ledlight.

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
HML2HT	Scanning	On 4/7/26, I preserved the latent print in quadrant B following black powder dusting. The item was scanned using Epson scanner 13, resulting in one (1) photograph/scan.
J39ZLX	Photography	Used the DCS5 camera on the 5th floor processing room to take 2 images of the visible and developed prints.
	Lifting	Used mikrosil to lift the apparent print off of the glossy postcard and placed it onto a latent print card.
J3EGEK	Lifting	Black Powder
J7DRBK	Lifting	Black powder
JDU34R	Photography	DCS-5
JHADGW	Photography	I captured photos of item 2 recording the results of dusting.
JJ4NAX	Photography	The ridge structure that was visualized through the various staged were photographed with a camera on a camera stand with a microlens or using the FSIS camera.
JNAG4T	Photography	Nikon D800E, F/22, ISO-200, 105 mm
JP6XGQ	Photography	NIKON camera, RAW format, scale in picture, uploaded and stored in FORAY
JQZP7G	Photography	
JYT79K	[No Methods Reported.]	Covered with Latent print tape
K4JZHR	Photography	captured IM using DCS-5
K6FFVN	Lifting	Hinge lifter (Item 2.1)
	Scanning	Scanned image of lift holding latent L2A
KAPTDM	Lifting	
KQVXZY	Photography	During visual examination, the latent was photographed using a Canon DSLR, scale, and ring lighting.
	Lifting	Latent was lifted using frosted lift tape. The latent was placed on a lift card with description, drawing, direction, case number, item number, initials, date, and lift number.
	Scanning	Latent lift cards were scanned at 1000 DPI with a scale.
KRQG3Z	Photography	DCS5 photography of visible print
	Lifting	Mikrosil
KXD8NV	Photography	Nikon camera
L8DG9Q	Lifting	Clear tape was used to obtain a lift and was placed on a white latent lift card.

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
L8V3RN	Lifting	Tape Lift
LBMKRG	Photography	1. After Powdering, Mark has photographed
LVNK7T	Lifting	
M2QB9H	Photography	Digital photographs with DSLR
M3K2EW	Photography	
M4BAFK	Photography	Photographic documentation was performed, beginning with general shots, close-ups, and extreme close-ups, both with and without a metric scale, and at a 90° angle to the located fingerprint fragment.
	Lifting	Conventional tape was used to transfer the evidence, placing it on a transparent acetate-type plastic support.
M4TNWN	Photography	On 04/13/2026, I photographed the visible ridge detail/print that was observed after applying black magnetic latent print powder with a Nikon Z7 camera using direct lighting with a white LED light. One (1) photograph was submitted for examination.
	Scanning	On 04/23/2026, I scanned the visible ridge detail/print that was observed after receiving the item after physical developer was applied to it. I used an Epson Perfection V600 Photo Scanner to scan the item. One (1) scan was submitted for examination.
M9KMXJ	Photography	Images saved in JPG and RAW at minimum of 1000 dpi, transferred to a DVD.
	Lifting	Fingerprint lift tape utilized and placed on latent print lift card.
M9KQMN	Photography	FSIS II and Nikon D810 photography
	Lifting	Tape lift
MPE9MK	Scanning	
MQARNL	Photography	I took a photo of the print without and with a scale with the copy stand camera.
	Lifting	I then lifted the print with clear tape and onto a fingerprint card.
MUTJZN	Photography	Photographed at visual with SUV/FSIS, cyanoacrylate with SUV/FSIS, Ardrex/UV, Rhodamine/Laser, powder, and DFO/Laser
	Lifting	After black powder
MZU6GQ	Photography	iPhone photos for overalls. FSIS II camera system of 2A before and after cyanoacrylate. Nikon D850 of 2A after Rhodamine.
	Lifting	Lifted and scanned into Photos folder for review.
MZUD2N	Photography	The item was photographed with a Nikon Z7 camera. Direct fluorescent lighting was used for the powder photograph.
N3GWEE	Photography	Camera A - 1 photo of ridge detail in quadrant B

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
N4BMKT	Photography	Visual examination - Digital Camera
	Photography	FSIS - FSIS Camera
	Photography	Cyanoacrylate - Digital Camera
	Photography	Cyanoacrylate/FSIS - FSIS Camera
	Photography	Rhodamine 6G/Polilight - Digital Camera
	Photography	Black powder - Digital Camera
N62VLG	Photography	
NKE4MK	Photography	Post Lumicyano
NYGZWR	Photography	Photographed on a copy stand in RAW.
P9FD8C	Photography	One (1) latent print developed in Quad B (right loop)
PAA4DQ	Photography	
PJ3RHN	Photography	under white light
PU7UTD	Photography	TM "2.1" in B section. The picture has been taken with 490 nm to photograph the developed latent print (partial as well as detail.)
PVZKYR	Photography	Ridge structure developed in quadrant B. Photographed at every processing step.
PWQTZG	Photography	UV: Canon utility software, Canon EOS 80D, Canon EF 50mm, F&F Crime-Lite 82S UV 350-380nm , Baader U-Venus filter 350nm.
Q2DM2R	Lifting	Used clear tape and white lift card to lift developed ridge detail in one lift.
Q2ZJMM	Photography	Reflected UV after cyanoacrylate fuming
Q3QRNB	Photography	Capture and Enhancement processing completed with Foster + Freeman DCS5 imaging system: - When using UV Examination (350 - 380nm). Add Baader U – filter 2" (350nm) 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. - When treat evidence by Powder, Fix ring light under camera Nikon D5 (add Visible filter with UV& IR cut filter on camera Nikon D5). Add daylight filter to halogen light source to become latent print clearer - When treat evidence by 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).
QAT8MC	Photography	Photography
QUY8QP	[No Preservation Methods Reported.]	
QVPFTE	[No Preservation Methods Reported.]	
QXZBHC	Lifting	Latent lift card

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
QY79UL	Photography	
QYNUDH	Photography	Took scaled photographs of processed ridge detail.
QYT2NQ	Photography	Digital photography Photos taken at Visual, FSIS before cyanoacrylate fuming, FSIS after cyanoacrylate fuming, Dye stain with crimescope, and powder
QZ3N8H	Photography	CrimeliteAuto
QZJAQF	Photography	Photography using comparative settings to include RAW, ISO 100, and an F-stop greater than F-16. Photographs were taken after the following methods: cyanoacrylate ester fuming and powder dusting.
	Lifting	The print was lifted as LP2 and placed on a latent print card.
R2TADE	Lifting	Clear plastic lifting tape place over suspected print. No collection of the print performed as per instructions of CSM Dinterman.
RFA32L	Photography	The latent impression in quadrant B was captured utilizing a digital camera with a macro lens and bounce lighting after cyanoacrylate fuming. The latent impression in quadrant B was captured utilizing a digital camera with a macro lens and direct light after powder dusting.
RMTZGF	Photography	Nikon D800, jpg/RAW, burned to DVD
	Lifting	Tape lift to lift card
RQBPTH	Photography	Foster+Freeman DCS-5 station with Crime-Lite LED lights/Rofin ALS with filters for Lumicyano
RQRD2J	Photography	
RQTBCE	Photography	Photographed after powder dusting.
	Lifting	Lifted latent print after it was photographed.
	Scanning	Scanned latent lift card.
RWDYZB	Photography	Photographed after Rhodamine 6G with Nikon D850 using Dual 77 and orange barrier filter.
RZWUZG	Photography	Latent 1.2.1 photographed at visual.
	Lifting	Latent 1.2.1 lifted after powdering and preserved on a lift card.
	Scanning	Lift card of Latent 1.2.1 was scanned.
T8ELPL	Lifting	MP2
T9REZB	Photography	Photography System was used to preserve the mark after each processing step
	Lifting	Black powder lifting was used to preserved the develop mark
TDZE48	Lifting	Lift tape applied and placed on lift card.

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
TEXPWN	Photography Lifting	Photography on DCS5 camera system used prior to latent print processing. Tape lift used.
TFU6AL	Photography	DCS-5 imaging system was used.
TN3WEA	Lifting	Item preserved with a latent lift card and Sirchie tape.
TRLRFG	Photography Photography	Photographed after cyanoacrylate fuming Lifted after powder dusting
TTH8RD	Lifting	Lifted possible fingerprint and placed it on MSP form 74.
TWEE4H	Photography	Took a photographs at visual exam, superglue fuming, Rhodamine with Laser and orange wratten filter, and powder
TZDATP	Lifting	Mikrosil lift.
UM2J78	Photography	Nikon DSLR camera was used to document the developed impression. Images taken during Cyanoacrylate Fuming, R6G, and VMD. Impression was a little difficult to capture due to how faint the impression was developing. Had to use longer shutter speed and oblique lighting to capture in digital images.
UPA7T8	Photography	Canon Utility software, Canon EOS 5D Mark II, Canon Macro Lens EF 100 mm, white light
URVFTD	Lifting	Lifted using clear latent print tape and placed on white index card for preservation.
UZWXNC	Photography	photo'd w/scale using lab camera set to tiff file format
V7WWC8	Lifting	Latent lift card
V8QMHL	Photography	Nikon D780 was used to photograph the ridge structure. Overall photographs were taken at the end of processing to show the location of ridge structure development.
V9GVJA	[No Preservation Methods Reported.]	
VDFZJA	Lifting	The latent print was photographed and then preserved using a hinged print lifter.
VPRB9K	Photography	I placed a scale in the frame prior to photographing. The image was opened in Adobe Photoshop and saved as an original and processed image to a photographic reproduction sheet.
VQGJB9	[No Preservation Methods Reported.]	
VQMTBL	Photography	4/20/26: RS was photographed at Vis/FSIS. RS was photographed at CA/FSIS. RS was photographed at BM.

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
VRD2CA	Photography	Canon Utility software, Canon EOS 5D Mark II, Canon macro lens EF 100mm, white light Canon Utility software, Canon EOS 5D Mark II, Canon macro lens EF 100mm, F&F Crime-Lite 82S Green 480-560nm, Schott OG590AG.
VW7TK	Photography	
W4KGH7	[No Preservation Methods Reported.]	
W6FZJ8	Photography	
W74HED	Photography	Digital Capturing System DCS-5 Coaxially reflected: White light source Cyanoacrylate: White light source Dye stain (Rhodamine 6-G): Green 520 nm with filter OG-550
W8KF8D	Photography	All photographs taken were digitally preserved on a compact disc and axon evidence.com.
WH2CVG	Photography	Foster&Freeman DCS5 - episcopic mode, white lights
WH4GFD	Photography	A combination of the Rofin Polilight and Crime Lite 8x4 were used with the DCS-5 camera system to photograph the impressions.
WHL3YA	Photography	
WJX8LR	Photography	RUVIS Illumination: UV Light
WL6PJM	Photography	Overhead lighting.
WLZ7WK	Photography	
WQGVFG	Scanning	
WR84G6	Lifting	using clear tape, it is transferred to a backing
WRCEGH	Photography	Overall photo prior to processing using MIDEO camera, close-up of ridge detail after cyanoacrylate ester fuming using SPEX RUVIS camera. Images downloaded to DVD for comparison.
WTJ4BE	Photography	Photography utilizes various optical phenomena accompanying the interaction of light with surfaces, such as reflection, scattering, absorption, and emission. Images are recorded using digital photography techniques with NIKON D5600 camera
X36HXG	Photography	I used a Nikon D3400 with with a curved orange filter and a FF1.0 Narrow band pass filter in conjunction with the laser to photograph the developed print.
X4VQZ6	Lifting	Lifting on acetate
X4YAM9	Photography	Photographs were taken initially and after powder dusting. No further development occurred after DFO/Ninhydrin.

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
X73DNN	Photography	Orange filter and Blue Light Source after applying for both dye stains. No orange filter and regular light for the CA
XD6XZE	Photography	30/04/2026, DCS5 Photography System was used to preserve the mark ater each processing step
	Lifting	30/04/2026, Black powder lifing was used to preserved the developed mark
XJCN67	[No Preservation Methods Reported.]	
XXCVAF	Photography	Foster & Freeman DCS-5 system utilized for digital imaging
Y4CUXB	Photography	DCS5 camera system
YGJKZH	Lifting	
YGLA8Z	[No Preservation Methods Reported.]	
YHFH8C	Photography	
YKHGH6	Photography	Photographed
YLVTLF	Photography	Photography of the developed print in quadrant B of the postcard was completed with a scale in place.
YLZBJE	Lifting	The developed prints on the luggage tag and postcard were lifted using traditional tape and placed on cards for submission.
	Photography	All of the items had photographs taken between every step of processing to preserve the prints.
	Scanning	After being placed on latent cards, the lifts were copied via a printer and placed in a case folder.
YM9X27	[No Preservation Methods Reported.]	
YMQHK4	Chemical/physical visualization technique	1. cyanoacrylate standard method operational conditions 120 Degrees Celsius temp. 80% humidity 2. Magnetic powder
YN3BJC	Photography	Digital photography - Visual, Superglue, Ardrex, and powder
YN4F48	Photography	I photographed and placed lift tape on top of the apparent ridge detail.
YYJ6PD	Photography	The glossy postcard was photographed using a macro lens with and without scale. The print was placed on a compact disc.
Z3VW7B	Photography	VIS: 0 image(s) taken on 4/15/2026. No prints observed. CA: 2 image(s) taken with CSU - Camera 11/Lens 3 on 4/15/2026 (Direct LED). POW: 1 image(s) taken with CSU - Camera 11/Lens 3 on 4/15/2026 (Direct LED). NIN: 0 image(s) taken on 4/16/2026. No enhancement. PD: 1 image(s) taken with CSU - Scanner 13 on 4/23/2026 (Direct).

Preservation Methods

TABLE 3 - Item 2 (Glossy Postcard)

WebCode	Preservation Methods	Method Details
Z6LNB9	Photography	Nikon digital camera, RAW format, Foray digital archive storage
Z7FGZZ	Photography	DSC5
Z8C367	Lifting	Lift tape and applied to fingerprint lift card
Z9M4NJ	Photography	Latent print photographed after CA processing and then again after dye stain. Photos taken of dye stain with 450nm poli-light and a yellow filter using a Canon T6i camera.
ZAUMPZ	Photography	This item was photographed using ambient and direct light.
ZC4U8F	[No Preservation Methods Reported.]	
ZDDGP8	Photography	One (1) glossy postcard, with quadrants A-D marked Prints Observed: VIS: . No Prints ALS: . 450, No Prints ALS: . 530, No Prints FSIS: 1 image(s) taken with LP – FSIS II on 4/15/2026 (FSIS II – integration UV). CA: . No Prints POW: . No Prints NIN: . No Prints PD: . No Prints See image metadata for settings. Total image(s) taken: 1
ZDU394	Photography	Canon EOS 5D, Ultrasonic 100mm 1:2,8 DG Macro
ZJJ8UY	[No Preservation Methods Reported.]	
ZJMZ79	Photography	Photos taken with DISCOVER w/ Crime Lite Auto. Photos were put on a CD.
ZNE2QE	Photography	Photography was used as the method of preservation
ZU4UBA	Photography	Canon EOS 800D, Canon Macro Lens EF-S 60mm, UV light

Response Summary: Item 2 (Glossy Postcard) - Preservation

Methods Utilized

Responding Participants: 242

Lifting: 87 Photography: 200 Scanning: 11 Not Tested: 0 No Response: 17

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

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
2CMZ87	Photography	Using DCS-5, photographs were taken of the developed print.
2DBJ2C	Photography	Photo evidence scale.
2F2VM4	Photography	It was photographed using an L-shaped ruler to preserve it.
2F43W4	[Not Tested]	
2GWT2H	Photography	Images taken on DCS
2JYQDB	Photography	
2KG7Z8	Photography	Photography using white light.
2YQNE7	Scanning	One latent print photograph was taken using the latent print scanner #7 after Ninhydrin.
32VG7J	Photographic Documentation	All photographic documentation performed with resolution guidelines, which included a surface to sensor distance of no greater than 0.49 meters (Canon 100mm macro lens) and in RAW format. A Canon 5D Mark III full frame camera was used.
377UNH	Photography	The observed FRD in quadrant 'D' was digitally photographed using a Nikon D850 and captured in .jpg image format at multiple points in the examination process. Latent fingerprint was labelled in the photographs with a scale and unique identifier "FEN102403426".
382CQJ	Scanning	
382VM2	Photography	Nikon D7000
3DT37A	Photography	Photographed latent print using Nikon digital camera
3E3PN2	[Not Tested]	
3EJB8X	Photography	The print was photographed on the copy stand with a scale and in RAW format.
3JBHP8	Photography	DCS5 Fingerprint Imaging Workstation with Crime-lite 8x4 light attachment. Green light utilized to increase contrast between white substrate and purple developed latent print. Latent print was photographed with scale and photograph was printed.
3V8UDY	Photography	
46T378	Photography	Four total photographs of ridge detail were created after DFO, Ninhydrin and Zinc Chloride processing. DFO photos were taken with a normal camera with an orange filter (Wratten #21) under a 532nm LASER. Ninhydrin photos were taken under white light. Zinc Chloride photos were taken with a normal camera with an orange filter (Wratten #21) under a 495nm ALS. All photos included a metric scale next to the ridge detail.
473PNY	Photography	Photographs taken after each step where ridge detail was visualized.

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
4APDH8	Photography	The fingerprint was photographed at every stage of research after disclosure.
4EF4N3	Photography	photo'd
4EJMC7	Photography	Took photos of latent impressions for DFO, ninhydrin, and zinc chloride
4NQ3HE	Photography	Photographed with the Nikon D810 with orange filter.
4PGBJ3	Photography	Photographed using a Canon 90D set on comparison settings (F16, ISO100, 90 degrees from the surface, RAW image file) and adjusted the light meter (shutter speed adjustment) with the camera on the digital workstation until visualization occurred. Included a fingerprint scale sticker for framing and item information.
4QV937	Photography	Nikon with Foster and Freeman Digital Capture system-5.
4UTEEB	Photography	Photographed after IND, viewed at 515nm with orange barrier filter Photographed after 1st and 2nd Ninhydrin
4XVR3G	[No Preservation Methods Reported.]	
62RVAU	[No Preservation Methods Reported.]	
64XJ67	Photography	Canon 5DSR
697GGC	Photography	Photographed the ridge detail in quadrant D and an overall of the envelope using the DCS-5 after Ninhydrin.
6998MV	Photography	The print was photographed with a mirrorless digital camera after each of the following processing steps: DFO and Ninhydrin. Specific information per each development step: -DFO: used Foster+Freeman Crime-Lite Blue-Green (445-510nm) with a orange camera filter -Ninhydrin: used a flashlight
6A3XTA	Photography	photographed after DFO and NIN
6FPEV7	Photography	A photograph was taken using the CrimeLite Auto. White light and ISO 100 were used to ensure the latent was highly visible and examination quality. A label (with case/examiner information) and scale were also included in the photograph.
6GLV94	Photography	480nm - 560nm + OG590
6PD428	Photography	
6TBRA2	Photography	Photographed after DFO, blue/green light orange filter Photographed after NIN, without ALS & w/ ALS green light clear filter
6TF2AE	Photography	532nm wavelength laser with orange filter goggles/camera lens for IND photography; white light with and without green filter camera lens for NIN photography

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
6TGYKA	Photography	One digital photograph was taken of the print during the 1,2 Indanedione development stage. Photographed with Dual 77 Laser 520nm (green light), an Orange Curved Filter, and a FF-1.0 Filter.
6U7AB3	Photography	EOS5DMark4IV
6U88LY	Photography	- Apply digital photography with DCS-5 camera Nikon D6 to save enhanced image of the latent print; - Apply DCS-5 printer for printing enhanced latent print image; - Processing time was about 10 minutes; - Ninhydrin spray was used.
6XRKDU	[No Preservation Methods Reported.]	
76GRA6	Photography	Used after Ninhydrin
76N6B3	Photography	After item 3 was chemically processed with ninhydrin, I observed ridge detail in quadrant D. To preserve the development, I took exam quality photographs using a macro lens. An overall photo was taken of item 3 and then close-up photos were also taken of the developed print without and with a scale.
77JMC4	Photography	Used Nikon camera, used scale in photograph, uploaded to FORAY
79LLMW	no results	negative results, no latent area observed
7KEBX3	Photography	Nikon D750 +macro nikkor f 2.8 60 mm
7LBRAY	[No Preservation Methods Reported.]	
7PBTHA	Photography	Two photos taken using laser light source.
7Q22KX	[No Preservation Methods Reported.]	
7U66KD	Photography	I took photographs of the ridge detail located in quadrant D with a scale using the DCS.
7VD3P2	Photography	Photographed latent print after application of 1,2-Indanedione. Photographed latent print using green light (520nm) and an orange filter. Photographed latent print after application of Ninhydrin. Photographed latent print using green light and no filter. All photographs were taken on a Foster and Freeman DCS5.
7X6GGD	Photography	After development using Ninhydrin (non-running) and processing item 3 using the Caron chamber, I pulled item 3 out and visually examined the item. I saw ridge detail in quadrant D. I went over to the DCS-5 and took images of the ridge detail.
86LCW8	Photography	Latent print in quadrant D was photographed.
884Q3T	Photography	
92DBX2	Photography	The picture was taken with Nikkon Camera Z6, with Nikkor 60 mm Lens
9MYBGV	[Not Tested]	

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
9RRZV2	Photography	Using a mounted camera with UV and laser light sources
9TMF8Y	Photography	latent photograph
9UBY36	Photography	The fingerprint was photography at every step of a research.
9VQBQ2	Photography	Took 3 digital photographs of latent impressions on Quadrant D of paper envelope (DFO STEP, NINHYDRIN STEP, AND ZINC CHLORIDE STEP)
9WLCX7	Photography	-Captured using TracER after DFO
9WMQ4X	Photography	photo w/ a scale (nin)
9WZX9T	Photography Scanning	Used Nikon D850 Digital Camera to capture photograph. Used to better visualize Ninhydrin processed print.
9XBAX4	Photography	
A4HN9T	Photography	Documentation photos captured upon ridge detail visualization.
A82HAZ	Photography	Latent print 3a was photographed using the Foster + Freeman DCS5 system.
A8XYLW	[Not Tested]	
AEWKBB	Scanning	One scan of developed prints was taken after the application of ninhydrin and development in the Caron chamber of quadrant D.
AEYBHU	Photography	Photograph with most ridge detail taken after Indanedione processing step taken with Dual 77 Laser at 532nm
AG7PNZ	Photography	-Captured using 520nm light and orange/red filter after DFO
AN6E8P	Photography	DCS5 Camera
ATHZEB	Photography Scanning	Document any ridge detail before next process for further examination. Upload images into LIMS case file
AYJAL4	Photography	
B347KZ	Photography	Photos were taken at: DFO with green LASER lighting, orange filter, and camera NIN with a camera and white light ZC with a camera and white light
B8D9LW	Photography	
BDMVNT	Photography	Photographed at 520nm with the Dual 77 and orange barrier filter. Whorl developed in Quadrant D.
BHD6XQ	Photography	Photograph taken of most ridge detail taken after 1,2-Indanedione step

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
BQNTA4	Photography	
BU8LK8	Scanning	Developed print after Caron chamber - Scanner @1000dpi
BV2WD9	Photography	Nikon Z8
BWR6EW	Photography	Photographic documentation was made of the fingerprint fragment revealed on the surface of the item identified with number 3, in quadrant D.
C28Q84	Photography	Photography was carried out on a Foster and Freeman DCS-5 system consisting of a Nikon D5 camera. For visible spectrum image capture a 52mm visible imaging colour balancing filter was used. Captured images were scaled, saved and printed to a 1:1.
C2KUNU	Photography	Macro lens with the use of a scale. Camera was set to ISO 100 and in RAW format
C3XY9R	[No Preservation Methods Reported.]	
C8DJ2Y	Photography	photograph of ridge detail from quadrant "D"
CAHPLR	[Not Tested]	
CDEVXW	Scanning	Scanned to computer. Took overall photographs with and without scale and sent to computer.
CKWJY7	Scanning	One scan of the item was captured on a scanner.
CRZB2V	Photography	overall and comparative
CU3NP2	Photography	Foster + Freeman DCS-5
D2FYF8	Scanning	
DFHQGY	Photography	Photographed print at DFO and NIN.
DFMB63	Photography	One photo taken after Indanedione and viewing with a green laser light source and using an orange filter on the camera; one photo taken after Ninhydrin Pet Ether
DH8WG3	Photography	
DL78D3	Photography	Images captured
DNFJPT	Photography	photograph (TIFF, copied, Adobe Photoshop enhancement) photo cd
DTPECU	Photography	1 image captured w/ DCS5 (IND).
DTQW8R	Photography	OVERALL PHOTOGRAPH OF THE LATENT PRINT'S LOCATION

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
DVAVEV	Photography	Any suitable marks developed throughout sequential treatment were marked up and photographed 1:1 using a D6 Nikon digital camera with an AF-5 micro nikkon 105mm lens, 8x4 Crime Lite light source(s) and appropriate camera filter(s). The camera is linked to Digital Capture System 5 (DCS5) software where the images are exhibited with full audit trails and further DCS5 enhancement tools can be used to improve contrast/remove background interference etc., where applicable. Exhibited images are then submitted to the Fingerprint Bureau for further analysis and comparison.
DXH4PZ	Scanning	The print developed in Quadrant 'D' was scanned at 1000ppi using an Epson Perfection V800 Photo scanner and the image was uploaded to the case record object repository in Forensic Advantage.
E7RR4Y	Photography	Photographed prints using Nikon DSLR
E8HZ6M	[No Preservation Methods Reported.]	
EAUQER	Photography	incandescent light photography
EDRL4Y	Photography	photographed positive results using DCS-5 system
EG9JJV	Photography	Both general photography and macro photography are carried out, in 'JPG' and 'RAW' formats
EJFULQ	Photography	The latent impression developed in section D was photographed using a Canon Rebel T7i digital camera with a macro lens.
EJTXZV	Photography	The item was photographed between processes when identifiable friction ridge detail was observable. It was scanned with CSU scanner 13 after Ninhydrin processing.
EKBR27	Photography	Used a Nikon D90 attached to a camera stand. Camera set to raw. Latent print image at least 1000 pixels per inch (ppi) and photographed in color.
	Scanning	Used an Epson V700 scanner. Image scanned in 24 bit color at 1000 pixels per inch (ppi) resolution.
EP74VP	Photography	09-10/04/2026, DCS5 Photography System was used to preserve the mark after each processing step
ETJJ7U	Photography	Mideo
FBF9Z3	Scanning	One scan of developed prints was taken.
FD4CGV	Photography	- Macro camera lens (Nikon D 3300).The photo of the latent print is archived in the AFIS data base of fingerprints. - The photo of the latent print is archived in the AFIS data base of fingerprints.
FLJW2U	Photography	

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
FME3V	Photography	The developed latent print was preserved by photography using Foray Adam's Imaging System at 505 nm light with OG 550 filter
FN49TQ	Photography	Macro lens with the use of a scale. Camera was set to ISO 100 and in RAW format.
FYPCZP	Scanning	5/15/26: Exhibit 3: Post Ninhydrin: One (1) scan is taken of the FRD in Section D of the envelope with the Epson Expression 11000XL. Viewed with Adobe Photoshop 2026. 1000 PPI. Saved as TIF. See documentation photograph for the location of FRD, as well as the scale label used in the scan. Latent 3D: Resolution 1000 PPI. Scan, already 1:1, no need to calibrate, already saved as TIF.
FZXA3T	Photography	
G68W6W	Photography	Nikon D850 and FSIS II
G9N34Q	Photography	Photographic documentation was carried out, beginning with general shots, close-ups, and extreme close-ups, both with and without a metric scale, and at a 90° angle to the located fingerprint fragment
GJT3MQ	Photography	Used Nikon camera, used scale in photograph and uploaded into Foray.
GPTWNQ	Scanning	Item was scanned using Scanner 8
GQMMU6	Photography	All photographic documentation was performed within resolution guidelines and in RAW format. The Canon EOS 5D Mark III was used. 4/20/2026 Overalls of the packaging and items were taken prior to chemical processing. 4/23/2026 Ninhydrin developed ridge detail of photo lift #3 was photographed using a front directional lighting method without a barrier filter and with a green barrier filter.
HAXJLM	Scanning	The Ninhydrin test sheet was scanned into the case file. Overall and close up scans were taken of the developed print on section D with scale and entered into the case file.
HC4GXW	Photography	grayscale 1:1
HCHHTQ	Photography	Canon EOS 5D Mark IV + 100mm 2,8L + REd filter Light 480-560nm Canon Utility software
HDZWAT	Photography	done after ninhydrin
HENZRL	Photography	Canon EOS 5D mk. III Objektive Canon EF 100mm, f/2.8 Macro Foster&Freeman green light (480-560nm) red filter (OG 590)
HML2HT	Scanning	On 4/7/26, I preserved the latent print in quadrant D following ninhydrin processing. The item was scanned using Epson scanner 13, resulting in one (1) photograph/scan.
J39ZLX	Scanning	Two scans were captured using the scanner in CSU.
J3EGEK	Scanning	

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
J7DRBK	Scanning	
JDU34R	Photography	DCS-5
JHADGW	Photography	I captured photos of item 3 recording the results of the chemical processing with ninhydrin.
JJ4NAX	Photography	The ridge structure that was visualized through the various staged were photographed with a camera on a camera stand with a microlens. During the photography with the alternate light source a lens filter was used.
JNAG4T	Photography	Nikon D800E, F/22, ISO-200, 105 mm
JP6XGQ	Photography	NIKON camera, RAW format, scale in picture, uploaded and stored in FORAY
JQZP7G	Photography	
JYT79K	[Not Tested]	
K4JZHR	Photography	captured IM using DCS-5
K6FFVN	Scanning	Scanned image of Item 3.
KAPTDM	[Not Tested]	
KQVXZY	Photography	The latent was photographed using a Canon DSLR, scale, alternate light source (wavelength of 505 nm) and an orange bandpass filter on the camera lens.
KRQG3Z	Scanning	
KXD8NV	Photography	Nikon camera
L8DG9Q	Photography	Examination Quality Photographs obtained with scale using 1:1 macro lens, f/11, ISO 100, in RAW & JPEG FINE.
L8V3RN	Photography	DCS5 Photographed under green light in dark room, white light in dark room, ambient room light with no additional light added
LBMRKG	Photography	Mark found on section D after 1,2-Indanedione. Photographed using 532nm light (green light) and camera filter 550nm.
LVNK7T	Photography	
M2QB9H	Photography	Digital photographs with DSLR
M3K2EW	Photography	

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
M4BAFK	Photography	Photographic documentation was performed, beginning with general shots, close-ups, and extreme close-ups, both with and without a metric scale, and at a 90° angle to the located fingerprint fragment.
M4TNWN	Scanning	On 04/13/2026, I scanned the visible ridge detail/print that was observed after applying ninhydrin to the item and used an Epson Perfection V600 Photo Scanner to scan the item. One (1) scan was submitted for examination.
M9KMXJ	Photography	Images saved in JPG and RAW at minimum of 1000 dpi, transferred to a DVD.
M9KQMN	Photography	Nikon D810 photography
MPE9MK	Scanning	
MQARNL	Scanning	I put the Ninhydrin test sheet on the scanner and scanned it to the computer. I took an overall photo of the White Envelope. I then put a scale next to the print in Area D. I then put the White Envelope on the scanner and scanned it to the computer.
MUTJZN	Photography	Photographed at DFO/laser
MZU6GQ	Photography	iPhone photos for overalls. Nikon D850 of 3A after 1, 2 Indanedione.
MZUD2N	Scanning	The item was scanned with an Epson Scanner. The item was scanned after ninhydrin.
N3GWEE	Photography	Camera A - 1 photo of ridge detail in quadrant D
N4BMKT	Photography	Digital photography was used to preserve developed ridge structure using the Lansing Laboratory Latent Print Unit's camera. Indanedione/PoliLight - Digital Camera
	Photography	Ninhydrin - Digital Camera
	Photography	Ninhydrin/48 hour wait - Digital Camera
N62VLG	Photography	
NKE4MK	Photography	Post Ninhydrin
NYGZWR	Photography	Photographed on a copy stand in RAW.
P9FD8C	Photography	One (1) photograph of latent print in Quad D (whorl).
PAA4DQ	Photography	
PJ3RHN	Photography	ALS green light/orange filter.
PU7UTD	Photography	TM "3.1" in D section. The picture has been taken with 490 nm to photograph the developed latent print (partial as well as detail.)
PVZKYR	Photography	Ridge structure developed in quadrant D. Photographed at every processing step.

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
PWQTZG	Photography	Canon utility software, Canon EOS 77D, Canon EF 100mm, F&F Crime-Lite 82S Green 480-560nm, Schott OG590AG
Q2DM2R	Photography	Used DCS-5 systems with white light. Close-up and location images taken.
Q2ZJMM	[No Preservation Methods Reported.]	
Q3QRNB	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.
QAT8MC	Photography	Photography
QUY8QP	[No Preservation Methods Reported.]	
QVPFTE	[No Preservation Methods Reported.]	
QXZBHC	Photography	Photographs of positive latent area
QY79UL	Photography	
QYNUDH	Photography	Took scaled photographs of fluoresced ridge detail.
QYT2NQ	Photography	Digital photography Photos taken at Indanedione/Crimescope and Ninhydrin
QZ3N8H	Photography	Crimelite Auto
QZJAQF	Photography	Photography using comparative settings to include RAW, ISO 100, and an F-stop greater than F-16. Photographs were taken after the use of Ninhydrin.
R2TADE	[Not Tested]	
RFA32L	Photography	The latent impression in quadrant D was captured utilizing a digital camera with a macro lens, orange barrier filter, and the forensic laser light source after processing with 1,2-Indanedione. The latent impression in quadrant D was captured utilizing a digital camera with a macro lens and direct light after processing with Ninhydrin.
RMTZGF	Photography	Nikon D800, jpg/RAW, burned to DVD
RQBPTH	Photography	Foster+Freeman DCS-5 station with Crime-Lite LED lights/Rofin ALS with filters for DFO
RQRD2J	Photography	
RQTBCE	Scanning	

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
RWDYZB	Photography	Photographed after 1,2-Indanedione with Nikon D850 using Dual 77 and orange barrier filter.
RZWUZG	Photography	Latent 1.3.1 photographed at Ninhydrin.
T8ELPL	Photography	N1, captured with DCS5 and crime lite 8x4 MK2 520 nm (green light), polarizing filter
T9REZB	Photography	Photography System was used to preserve the mark after each processing step
TDZE48	[No Preservation Methods Reported.]	
TEXPWN	Scanning	Scan taken using Epson Perfection V700 Photo.
TFU6AL	Photography	DCS-5 imaging system was used.
TN3WEA	[No Preservation Methods Reported.]	
TRLRFG	Photography	Photographed after ninhydrin
TTH8RD	[Not Tested]	
TWEE4H	Photography	Photographed at DFO with laser, and Ninhydrin processing.
TZDATP	Scanning	
UM2J78	Scanning	Epson scanner. Impression only documented after NIN process.
UPA7T8	[Not Tested]	
URVFTD	[Not Tested]	
UZWXNC	Photography	photo'd w/scale using lab camera set to tiff file format
V7WWC8	Photography	Photographs of latent area with scale
V8QMHL	Photography	Nikon D780 was used to photograph the ridge structure. The camera was also used to take an overall photograph noting the location of the ridge structure.
V9GVJA	[No Preservation Methods Reported.]	
VDFZJA	Photography	The latent print was photographed using a tripod at 90 degrees and a scale.
VPRB9K	Photography	I placed a scale in the frame prior to photographing. The image was opened in Adobe Photoshop and saved as an original and processed image to a photographic reproduction sheet.
VQGJB9	[No Preservation Methods Reported.]	

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
VQMTBL	Photography	4/20/26: RS was photographed at IND. RS was photographed at NIN.
VRD2CA	Photography	Canon Utility software, Canon EOS 5D Mark II, Canon macro lens EF 100mm, F&F Crime-Lite 82S Green 480-560nm, Schott OG590AG.
VW7TK	Photography	Scanning done for Ninhydrin
W4KGH7	[No Preservation Methods Reported.]	
W6FZJ8	Photography	
W74HED	Photography	Digital Capturing System DCS-5 DFO: Green 520 nm with filter OG-590 Ninhydrin: White light source.
W8KF8D	Photography	All photographs taken were digitally preserved on a compact disc and axon evidence.com.
WH2CVG	Photography	Foster&Freeman DCS5 - episcopic mode, white lights, 505 nm with orange filter
WH4GFD	Photography	A combination of the Rofin Polilight and Crime Lite 8x4 were used with the DCS-5 camera system to photograph the impressions.
WHL3YA	Scanning	
WJX8LR	Scanning	Illumination: Direct
WL6PJM	Photography	Overhead lighting.
WLZ7WK	Photography	
WQGVFG	Scanning	
WR84G6	[No Methods Reported.]	Protection with crystal tape
WRCEGH	Scanning	Scanned the item on the Epson V600 photo scanner. Downloaded the scans onto DVDs for comparison.
WTJ4BE	Photography	Photography utilizes various optical phenomena accompanying the interaction of light with surfaces, such as reflection, scattering, absorption, and emission. Images are recorded using digital photography techniques with NIKON D5600 camera
X36HXG	Photography	I used a Nikon D3400 with with a curved orange filter and a FF1.0 Narrow band pass filter to photograph the developed print.
X4VQZ6	Photography	
X4YAM9	Photography	Photographs were taken initially, after DFO/ALS, and after Ninhydrin.

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
X73DNN	Photography	Orange filter and blue light for the DFO. No filter and standard light for Ninhydrin and Silver Nitrate
XD6XZE	Photography	01/05/2026, DCS5 Photography System was used to preserve the mark after each processing step
XJCN67	[No Preservation Methods Reported.]	
XXCVAF	Photography	Foster & Freeman DCS-5 system utilized for digital imaging
Y4CUXB	Photography	DCS5 camera system
YGJKZH	Scanning	
YGLA8Z	Photography	DCS5, ALS was used to capture print in Box D.
YHFH8C	Photography	
YKHGH6	Photography	Photography
YLVTLF	Photography	Photography of the developed print in quadrant D of the envelope was completed with a scale in place.
YLZBJE	Photography	All of the items had photographs taken between every step of processing to preserve the prints.
YM9X27	[Not Tested]	
YMQHK4	Ninhydrin	Ninhydrin standard method was used with the operational conditions 120 Degrees Celsius temp. 80% humidity Processing time 48 hours.
YN3BJC	Photography	Digital Photograph - DFO and Zinc Chloride
YN4F48	Photography	I used macro lens with use of a scale. Camera was set to ISO 100 in RAW format.
YYJ6PD	Photography	The white invitation envelope was photographed with and without scale. The print was uploaded to a compact disc.
Z3VW7B	Photography	VIS: 0 image(s) taken on 4/15/2026. No prints observed. NIN: 1 image(s) taken with CSU - Scanner 13 on 4/16/2026 (Direct LED). PD: 0 image(s) taken on 4/23/2026. No enhancement.
Z6LNB9	Photography	Nikon digital camera, RAW format, Foray digital archive storage
Z7FGZZ	Photography	DSC5
Z8C367	Photography	Macro lens with use of a scale. Camera was set to ISO 100 and in RAW format

Preservation Methods

TABLE 3 - Item 3 (White Invitation Envelope)

WebCode	Preservation Methods	Method Details
Z9M4NJ	Photography	Photos taken of latent print (after Indanedione) with 505nm poli-light and an orange filter using a Canon T6i camera.
ZAUMPZ	Photography	This item was photographed using a dual laser at 520nm.
ZC4U8F	[No Preservation Methods Reported.]	
ZDDGP8	Scanning	One (1) white invitation envelope, with quadrants A-D marked Prints Observed: VIS: . No Prints ALS: . 450, No Prints ALS: . 530, No Prints FSIS: . No Prints NIN: 1 image(s) taken with LP - Scanner 06 on 4/17/2026 . PD: . No Prints See image metadata for settings. Total image(s) taken: 1
ZDU394	Photography	Green light (Foster+Freeman 42S (480-560 nm))and red filter (Canon EOS 5D, Ultrasonic 100mm 1:2,8 DG Macro
ZJJ8UY	[No Preservation Methods Reported.]	
ZJMZ79	Photography	Used DISCOVER w/ Crime Lite Auto. Photos were put on CD.
ZNE2QE	Photography	Photography was used as the method of preservation
ZU4UBA	Photography	Canon EOS 800D, Canon Macro Lens EF-S 60mm, orange viewing filter (after DFO)

Response Summary: Item 3 (White Invitation Envelope) - Preservation

Methods Utilized

Responding Participants: 241

Lifting: 0 Photography: 195 Scanning: 35 Not Tested: 12 No Response: 18

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 (Luggage Tag)

		First Level Pattern(s)?					First Level Pattern(s)?		
WebCode		Arch	Loop	Whorl	WebCode		Arch	Loop	Whorl
2CMZ87	N/A				6U7AB3	N/A			
2DBJ2C			✓		6U88LY			✓	
2F2VM4	N/A				6XRKDU	Not Suitable			
2F43W4	N/A				76GRA6			✓	
2GWT2H	N/A				76N6B3	N/A			
2JYQDB			✓		77JMC4			✓	
2KG7Z8	N/A				79LLMW	N/A			
2YQNE7	N/A				7KEBX3			✓	
32VG7J	N/A				7LBAY	Not Suitable			
377UNH	N/A				7PBTHA	Not Suitable			
382CQJ	N/A				7Q22KX			✓	
382VM2			✓		7U66KD	N/A			
3DT37A	N/A				7VD3P2			✓	✓
3E3PN2	N/A				7X6GGD	N/A			
3EJB8X			✓		86LCW8	N/A			
3JBHP8	N/A				884Q3T	N/A			
3V8UDY	N/A				92DBX2			✓	
46T378	N/A				9MYBGV				
473PNY		✓	✓		9RRZV2			✓	
4APDH8			✓		9TMF8Y	N/A			
4EF4N3	N/A				9UBY36			✓	
4EJMC7	N/A				9VQBQ2			✓	✓
4NQ3HE	N/A				9WLCX7			✓	
4PGBJ3	N/A				9WMQ4X	N/A			
4QV937	Not Suitable				9WZX9T			✓	
4UTEEB			✓		9XBAX4			✓	
4XVR3G			✓		A4HN9T			✓	
62RVAU			✓		A82HAZ			✓	✓
64XJ67	N/A				A8XYLW	N/A			
697GGC	N/A				AEWKBB	N/A			
6998MV			✓		AEYBHU			✓	
6A3XTA			✓		AG7PNZ	N/A			
6FPEV7	N/A				AN6E8P	Not Suitable			
6GLV94	N/A				ATHZEB	Not Suitable			
6PD428			✓		AYJAL4	Not Suitable			
6TBRA2	N/A				B347KZ	N/A			
6TF2AE	Not Suitable				B8D9LW			✓	
6TGYKA	N/A				BDMVNT			✓	✓

First-Level Detail Findings

TABLE 4 - Item 1 (Luggage Tag)

First Level Pattern(s)?				First Level Pattern(s)?			
WebCode	Arch	Loop	Whorl	WebCode	Arch	Loop	Whorl
BHD6XQ	✓	✓		FN49TQ	N/A		
BQNTA4	N/A			FYPCZP		✓	
BU8LK8	N/A			FZXA3T		✓	
BV2WD9		✓		G68W6W	N/A		
BWR6EW	Not Suitable			G9N34Q	N/A		
C28Q84		✓		GJT3MQ		✓	
C2KUNU	Not Suitable			GPTWNQ		✓	
C3XY9R	✓	✓		GQMMU6	N/A		
C8DJ2Y	N/A			HAXJLM	Not Suitable		
CAHPLR	N/A			HC4GXW	N/A		
CDEVXW	Not Suitable			HCHHTQ			
CKWJY7				HDZWAT		✓	
CRZB2V		✓		HENZRL	N/A		
CU3NP2	Not Suitable			HML2HT	N/A		
D2FYF8	N/A			J39ZLX	N/A		
DFHQGY	N/A			J3EGEK	N/A		
DFMB63	Not Suitable			J7DRBK	N/A		
DH8WG3	N/A			JDU34R		✓	
DL78D3	N/A			JHADGW	Not Suitable		
DNFJPT	N/A			JJ4NAX	Not Suitable		
DTPECU		✓		JNAG4T		✓	
DTQW8R	Not Suitable			JP6XGQ		✓	
DVAVEV		✓		JQZP7G	N/A		
DXH4PZ	Not Suitable			JYT79K	N/A		
E7RR4Y		✓		K4JZHR		✓	
E8HZ6M	N/A			K6FFVN		✓	
EAUQER	N/A			KAPTDM	N/A		
EDRL4Y	Not Suitable			KQVXZY	Not Suitable		
EG9JJV		✓		KRQG3Z	N/A		
EJFULQ		✓		KXD8NV	N/A		
EJTXZV	N/A			L8DG9Q	N/A		
EKBR27		✓	✓	L8V3RN	N/A		
EP74VP		✓		LBMKRG		✓	
ETJJ7U		✓		LVNK7T	N/A		
FBF9Z3	N/A			M2QB9H	Not Suitable		
FD4CGV		✓		M3K2EW		✓	
FLJW2U		✓		M4BAFK	N/A		
FMEE3V		✓		M4TNWN	N/A		

First-Level Detail Findings

TABLE 4 - Item 1 (Luggage Tag)

First Level Pattern(s)?				First Level Pattern(s)?			
WebCode	Arch	Loop	Whorl	WebCode	Arch	Loop	Whorl
M9KMXJ		✓		T8ELPL	N/A		
M9KQMN	N/A			T9REZB		✓	
MPE9MK		✓		TDZE48		✓	✓
MQARNL	Not Suitable			TEXPWN	N/A		
MUTJZN		✓		TFU6AL	N/A		
MZU6GQ	N/A			TN3WEA	Not Suitable		
MZUD2N	N/A			TRLRFG		✓	
N3GWEE	N/A			TTH8RD	N/A		
N4BMKT		✓		TWEE4H		✓	
N62VLG		✓		TZDATP	N/A		
NKE4MK	N/A			UM2J78		✓	
NYGZWR	N/A			UPA7T8	N/A		
P9FD8C		✓	✓	URVFTD	N/A		
PAA4DQ	N/A			UZWXNC	N/A		
PJ3RHN	N/A			V7WWC8	N/A		
PU7UTD		✓		V8QMHL	N/A		
PVZKYR	N/A			V9GVJA		✓	
PWQTZG	N/A			VDFZJA	N/A		
Q2DM2R	N/A			VPRB9K		✓	
Q2ZJMM		✓		VQGJB9		✓	
Q3QRNB		✓		VQMTBL	N/A		
QAT8MC		✓		VRD2CA	N/A		
QUY8QP	N/A			VW7TK		✓	
QVPFTE		✓		W4KGH7			
QXZBHC	N/A			W6FZJ8		✓	
QY79UL		✓		W74HED		✓	
QYNUDH	N/A			W8KF8D	N/A		
QYT2NQ	N/A			WH2CVG		✓	
QZ3N8H	Not Suitable			WH4GFD	N/A		
QZJAQF	N/A			WHL3YA		✓	
R2TADE	N/A			WJX8LR		✓	✓
RFA32L		✓		WL6PJM		✓	
RMTZGF		✓		WLZ7WK	N/A		
RQBPTH		✓		WQGVFG	Not Suitable		
RQRD2J	Not Suitable			WR84G6		✓	✓
RQTBCE		✓		WRCEGH	N/A		
RWDYZB		✓		WTJ4BE		✓	
RZWUZG		✓		X36HXG	N/A		

First-Level Detail Findings

TABLE 4 - Item 1 (Luggage Tag)

		First Level Pattern(s)?					First Level Pattern(s)?		
WebCode		Arch	Loop	Whorl	WebCode		Arch	Loop	Whorl
X4VQZ6	Not Suitable								
X4YAM9	N/A								
X73DNN	N/A								
XD6XZE		✓	✓						
XJCN67			✓	✓					
XXCVAF			✓						
Y4CUXB			✓						
YGJKZH	N/A								
YGLA8Z	Not Suitable								
YHFH8C	Not Suitable								
YKHGH6	Not Suitable								
YLVTLF	Not Suitable								
YLZBJE	N/A								
YM9X27	N/A								
YMQHK4	Not Suitable								
YN3BJC	Not Suitable								
YN4F48	N/A								
YYJ6PD	N/A								
Z3VW7B	N/A								
Z6LNB9			✓						
Z7FGZZ			✓	✓					
Z8C367	N/A								
Z9M4NJ			✓						
ZAUMPZ	N/A								
ZC4U8F			✓						
ZDDGP8	N/A								
ZDU394	N/A								
ZJJ8UY			✓	✓					
ZJMZ79	N/A								
ZNE2QE	N/A								
ZU4UBA	Not Suitable								
Response Summary: Item 1 (Luggage Tag) - Pattern									
Responding Participants: 259									
Arch: 5	Loop: 102	Whorl: 11	Not Suitable: 34	N/A: 119	Not Tested: 0	No Response: 0			
NOTE: Numbers may not add up to the total number of participants, as more than one pattern option may be selected.									

First-Level Detail Findings
TABLE 4 - Item 2 (Glossy Postcard)

		First Level Pattern(s)?					First Level Pattern(s)?		
WebCode		Arch	Loop	Whorl	WebCode		Arch	Loop	Whorl
2CMZ87	N/A				6U7AB3	N/A			
2DBJ2C			✓		6U88LY		✓		
2F2VM4	N/A				6XRKDU			✓	
2F43W4	N/A				76GRA6			✓	
2GWT2H	N/A				76N6B3	N/A			
2JYQDB			✓		77JMC4			✓	
2KG7Z8	N/A				79LLMW	N/A			
2YQNE7	N/A				7KEBX3			✓	
32VG7J	N/A				7LBRAY		✓	✓	
377UNH	N/A				7PBTHA			✓	
382CQJ	N/A				7Q22KX			✓	
382VM2			✓		7U66KD	N/A			
3DT37A	N/A				7VD3P2			✓	
3E3PN2	N/A				7X6GGD	N/A			
3EJB8X			✓		86LCW8	N/A			
3JBHP8	N/A				884Q3T	N/A			
3V8UDY	N/A				92DBX2			✓	
46T378	N/A				9MYBGV				
473PNY		✓	✓		9RRZV2			✓	
4APDH8		✓			9TMF8Y	N/A			
4EF4N3	N/A				9UBY36			✓	
4EJMC7	N/A				9VQBQ2		✓	✓	
4NQ3HE	N/A				9WLCX7			✓	
4PGBJ3	N/A				9WMQ4X	N/A			
4QV937		✓	✓		9WZX9T			✓	
4UTEEB			✓		9XBAX4			✓	
4XVR3G			✓		A4HN9T			✓	
62RVAU			✓		A82HAZ			✓	✓
64XJ67	N/A				A8XYLW	N/A			
697GGC	N/A				AEWKBB	N/A			
6998MV			✓		AEYBHU			✓	
6A3XTA			✓		AG7PNZ	N/A			
6FPEV7	N/A				AN6E8P		✓		
6GLV94	N/A				ATHZEB			✓	
6PD428		✓			AYJAL4			✓	
6TBRA2	N/A				B347KZ	N/A			
6TF2AE		✓	✓		B8D9LW			✓	
6TGYKA	N/A				BDMVNT			✓	

First-Level Detail Findings
TABLE 4 - Item 2 (Glossy Postcard)

First Level Pattern(s)?				First Level Pattern(s)?			
WebCode	Arch	Loop	Whorl	WebCode	Arch	Loop	Whorl
BHD6XQ		✓		FN49TQ	N/A		
BQNTA4	N/A			FYPCZP		✓	
BU8LK8	N/A			FZXA3T		✓	
BV2WD9		✓		G68W6W	N/A		
BWR6EW	✓			G9N34Q	N/A		
C28Q84		✓		GJT3MQ		✓	
C2KUNU	✓	✓		GPTWNQ		✓	
C3XY9R	✓	✓		GQMMU6	N/A		
C8DJ2Y	N/A			HAXJLM		✓	
CAHPLR	N/A			HC4GXW	N/A		
CDEVXW	✓			HCHHTQ			
CKWJY7	N/A			HDZWAT			✓
CRZB2V		✓		HENZRL	N/A		
CU3NP2		✓		HML2HT	N/A		
D2FYF8	N/A			J39ZLX	N/A		
DFHQGY	N/A			J3EGEK	N/A		
DFMB63		✓		J7DRBK	N/A		
DH8WG3	N/A			JDU34R			✓
DL78D3	N/A			JHADGW		✓	
DNFJPT	N/A			JJ4NAX	Not Suitable		
DTPECU		✓		JNAG4T			✓
DTQW8R	✓			JP6XGQ			✓
DVAVEV		✓		JQZP7G	N/A		
DXH4PZ		✓		JYT79K	N/A		
E7RR4Y		✓		K4JZHR			✓
E8HZ6M	N/A			K6FFVN			✓
EAUQER	N/A			KAPTDM	N/A		
EDRL4Y	✓			KQVXZY			✓
EG9JJV		✓		KRQG3Z	N/A		
EJFULQ		✓		KXD8NV	N/A		
EJTXZV	N/A			L8DG9Q	N/A		
EKBR27	✓	✓		L8V3RN	N/A		
EP74VP		✓		LBMRKG			✓
ETJJ7U		✓		LVNK7T	N/A		
FBF9Z3	N/A			M2QB9H			✓
FD4CGV		✓		M3K2EW		✓	✓
FLJW2U		✓		M4BAFK			
FMEE3V		✓		M4TNWN	N/A		

First-Level Detail Findings
TABLE 4 - Item 2 (Glossy Postcard)

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
M9KMXJ		✓	✓		T8ELPL	N/A			
M9KQMN	N/A				T9REZB			✓	
MPE9MK			✓		TDZE48		✓		
MQARNL		✓			TEXPWN	N/A			
MUTJZN		✓	✓		TFU6AL	N/A			
MZU6GQ	N/A				TN3WEA		✓		
MZUD2N	N/A				TRLRFG		✓	✓	
N3GWEE	N/A				TTH8RD	N/A			
N4BMKT		✓	✓		TWEE4H		✓	✓	
N62VLG			✓		TZDATP	N/A			
NKE4MK	N/A				UM2J78			✓	
NYGZWR	N/A				UPA7T8	N/A			
P9FD8C			✓		URVFTD	N/A			
PAA4DQ	N/A				UZWXNC	N/A			
PJ3RHN	N/A				V7WWC8	N/A			
PU7UTD			✓		V8QMHL	N/A			
PVZKYR	N/A				V9GVJA			✓	
PWQTZG	N/A				VDFZJA	N/A			
Q2DM2R	N/A				VPRB9K		✓	✓	
Q2ZJMM	Not Suitable				VQGJB9			✓	
Q3QRNB			✓		VQMTBL	N/A			
QAT8MC			✓		VRD2CA	N/A			
QUY8QP	N/A				VW7TK			✓	
QVPFTE			✓		W4KGH7				
QXZBHC	N/A				W6FZJ8		✓	✓	
QY79UL			✓		W74HED			✓	
QYNUDH	N/A				W8KF8D	N/A			
QYT2NQ	N/A				WH2CVG			✓	
QZ3N8H		✓	✓		WH4GFD	N/A			
QZJAQF	N/A				WHL3YA		✓		
R2TADE	N/A				WJX8LR			✓	
RFA32L		✓	✓		WL6PJM		✓	✓	
RMTZGF		✓	✓		WLZ7WK	N/A			
RQBPTH		✓	✓		WQGVFG		✓	✓	
RQRD2J			✓		WR84G6		✓	✓	
RQTBCE			✓		WRCEGH	N/A			
RWDYZB		✓	✓		WTJ4BE			✓	
RZWUZG		✓	✓		X36HXG	N/A			

First-Level Detail Findings
TABLE 4 - Item 2 (Glossy Postcard)

WebCode		First Level Pattern(s)?			WebCode		First Level Pattern(s)?		
		Arch	Loop	Whorl			Arch	Loop	Whorl
X4VQZ6			✓						
X4YAM9	N/A								
X73DNN	N/A								
XD6XZE		✓	✓						
XJCN67		✓	✓						
XXCVAF		✓							
Y4CUXB		✓							
YGJKZH	N/A								
YGLA8Z		✓							
YHFH8C			✓						
YKHGH6			✓						
YLVTLF			✓	✓					
YLZBJE	N/A								
YM9X27	N/A								
YMQHK4		✓	✓						
YN3BJC		✓	✓						
YN4F48	N/A								
YYJ6PD	N/A								
Z3VW7B	N/A								
Z6LNB9			✓						
Z7FGZZ			✓						
Z8C367	N/A								
Z9M4NJ			✓						
ZAUMPZ	N/A								
ZC4U8F			✓						
ZDDGP8	N/A								
ZDU394	N/A								
ZJJ8UY		✓	✓						
ZJMZ79	N/A								
ZNE2QE	N/A								
ZU4UBA			✓						
Response Summary: Item 2 (Glossy Postcard) - Pattern									
Responding Participants: 259									
Arch: 47		Loop: 117		Whorl: 2		Not Suitable: 2		N/A: 119	
						Not Tested: 0		No Response: 0	
NOTE: Numbers may not add up to the total number of participants, as more than one pattern option may be selected.									

First-Level Detail Findings

TABLE 4 - Item 3 (White Invitation Envelope)

		First Level Pattern(s)?					First Level Pattern(s)?		
WebCode		Arch	Loop	Whorl	WebCode		Arch	Loop	Whorl
2CMZ87	N/A				6U7AB3	N/A			
2DBJ2C				✓	6U88LY				✓
2F2VM4	N/A				6XRKDU				✓
2F43W4	Not Tested				76GRA6				✓
2GWT2H	N/A				76N6B3	N/A			
2JYQDB				✓	77JMC4				✓
2KG7Z8	N/A				79LLMW	N/A			
2YQNE7	N/A				7KEBX3				✓
32VG7J	N/A				7LBRAY				✓
377UNH	N/A				7PBTHA				✓
382CQJ	N/A				7Q22KX				✓
382VM2				✓	7U66KD	N/A			
3DT37A	N/A				7VD3P2				✓
3E3PN2	Not Tested				7X6GGD	N/A			
3EJB8X				✓	86LCW8	N/A			
3JBHP8	N/A				884Q3T	N/A			
3V8UDY	N/A				92DBX2				✓
46T378	N/A				9MYBGV	Not Tested			
473PNY				✓	9RRZV2				✓
4APDH8				✓	9TMF8Y	N/A			
4EF4N3	N/A				9UBY36				✓
4EJMC7	N/A				9VQBQ2				✓
4NQ3HE	N/A				9WLCX7				✓
4PGBJ3	N/A				9WMQ4X	N/A			
4QV937				✓	9WZX9T				✓
4UTEEB				✓	9XBAX4				✓
4XVR3G				✓	A4HN9T				✓
62RVAU				✓	A82HAZ				✓
64XJ67	N/A				A8XYLW	Not Tested			
697GGC	N/A				AEWKBB	N/A			
6998MV				✓	AEYBHU				✓
6A3XTA				✓	AG7PNZ	N/A			
6FPEV7	N/A				AN6E8P				✓
6GLV94	N/A				ATHZEB				✓
6PD428				✓	AYJAL4				✓
6TBRA2	N/A				B347KZ	N/A			
6TF2AE				✓	B8D9LW				✓
6TGYKA	N/A				BDMVNT				✓

First-Level Detail Findings

TABLE 4 - Item 3 (White Invitation Envelope)

First Level Pattern(s)?				First Level Pattern(s)?			
WebCode	Arch	Loop	Whorl	WebCode	Arch	Loop	Whorl
BHD6XQ			✓	FN49TQ	N/A		
BQNTA4	N/A			FYPCZP			✓
BU8LK8	N/A			FZXA3T			✓
BV2WD9			✓	G68W6W	N/A		
BWR6EW			✓	G9N34Q	N/A		
C28Q84			✓	GJT3MQ			✓
C2KUNU			✓	GPTWNQ			✓
C3XY9R			✓	GQMMU6	N/A		
C8DJ2Y	N/A			HAXJLM			✓
CAHPLR	Not Tested			HC4GXW	N/A		
CDEVXW			✓	HCHHTQ			
CKWJY7	N/A			HDZWAT			✓
CRZB2V			✓	HENZRL	N/A		
CU3NP2			✓	HML2HT	N/A		
D2FYF8	N/A			J39ZLX	N/A		
DFHQGY	N/A			J3EGEK	N/A		
DFMB63			✓	J7DRBK	N/A		
DH8WG3	N/A			JDU34R			✓
DL78D3	N/A			JHADGW			✓
DNFJPT	N/A			JJ4NAX	Not Suitable		
DTPECU			✓	JNAG4T			✓
DTQW8R			✓	JP6XGQ			✓
DVAVEV			✓	JQZP7G	N/A		
DXH4PZ			✓	JYT79K	Not Tested		
E7RR4Y			✓	K4JZHR			✓
E8HZ6M	N/A			K6FFVN			✓
EAUQER	N/A			KAPTDM	Not Tested		
EDRL4Y			✓	KQVXZY			✓
EG9JJV			✓	KRQG3Z	N/A		
EJFULQ			✓	KXD8NV	N/A		
EJTXZV	N/A			L8DG9Q	N/A		
EKBR27			✓	L8V3RN	N/A		
EP74VP			✓	LBMRKG			✓
ETJJ7U			✓	LVNK7T	N/A		
FBF9Z3	N/A			M2QB9H	Not Suitable		
FD4CGV			✓	M3K2EW			✓
FLJW2U			✓	M4BAFK	N/A		
FMEE3V			✓	M4TNWN	N/A		

First-Level Detail Findings

TABLE 4 - Item 3 (White Invitation Envelope)

First Level Pattern(s)?				First Level Pattern(s)?			
WebCode	Arch	Loop	Whorl	WebCode	Arch	Loop	Whorl
M9KMXJ			✓	T8ELPL	N/A		
M9KQMN	N/A			T9REZB			✓
MPE9MK			✓	TDZE48	Not Suitable		
MQARNL			✓	TEXPWN	N/A		
MUTJZN			✓	TFU6AL	N/A		
MZU6GQ	N/A			TN3WEA	N/A		
MZUD2N	N/A			TRLRFG			✓
N3GWEE	N/A			TTH8RD	Not Tested		
N4BMKT			✓	TWEE4H			✓
N62VLG			✓	TZDATP	N/A		
NKE4MK	N/A			UM2J78			✓
NYGZWR	N/A			UPA7T8	Not Tested		
P9FD8C			✓	URVFTD	Not Tested		
PAA4DQ				UZWXNC	N/A		
PJ3RHN	N/A			V7WWC8	N/A		
PU7UTD			✓	V8QMHL	N/A		
PVZKYR	N/A			V9GVJA			✓
PWQTZG	N/A			VDFZJA	N/A		
Q2DM2R	N/A			VPRB9K			✓
Q2ZJMM			✓	VQGJB9			✓
Q3QRNB			✓	VQMTBL	N/A		
QAT8MC			✓	VRD2CA	N/A		
QUY8QP	N/A			VW7TK			✓
QVPFTE			✓	W4KGH7			
QXZBHC	N/A			W6FZJ8			✓
QY79UL			✓	W74HED			✓
QYNUDH	N/A			W8KF8D	N/A		
QYT2NQ	N/A			WH2CVG			✓
QZ3N8H			✓	WH4GFD	N/A		
QZJAQF	N/A			WHL3YA			✓
R2TADE	Not Tested			WJX8LR			✓
RFA32L			✓	WL6PJM			✓
RMTZGF			✓	WLZ7WK	N/A		
RQBPTH			✓	WQGVFG			✓
RQRD2J			✓	WR84G6			✓
RQTBCE			✓	WRCEGH	N/A		
RWDYZB			✓	WTJ4BE			✓
RZWUZG			✓	X36HXG	N/A		

First-Level Detail Findings

TABLE 4 - Item 3 (White Invitation Envelope)

First Level Pattern(s)?				First Level Pattern(s)?			
WebCode	Arch	Loop	Whorl	WebCode	Arch	Loop	Whorl
X4VQZ6			✓				
X4YAM9	N/A						
X73DNN	N/A						
XD6XZE			✓				
XJCN67			✓				
XXCVAF			✓				
Y4CUXB			✓				
YGJKZH	N/A						
YGLA8Z			✓				
YHFH8C			✓				
YKHGH6	Not Suitable						
YLVTLF			✓				
YLZBJE	N/A						
YM9X27	Not Tested						
YMQHK4			✓				
YN3BJC			✓				
YN4F48	N/A						
YYJ6PD	N/A						
Z3VW7B	N/A						
Z6LNB9			✓				
Z7FGZZ			✓				
Z8C367	N/A						
Z9M4NJ			✓				
ZAUMPZ	N/A						
ZC4U8F			✓				
ZDDGP8	N/A						
ZDU394	N/A						
ZJJ8UY			✓				
ZJMZ79	N/A						
ZNE2QE	N/A						
ZU4UBA			✓				
Response Summary: Item 3 (White Invitation Envelope) - Pattern Responding Participants: 259							
Arch: 0	Loop: 0	Whorl: 131	Not Suitable: 4	N/A: 114	Not Tested: 12	No Response: 0	
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
2CMZ87	Two non-porous and one porous item was received. The first two were processed utilizing cyanoacrylate ester fuming and magnetic powder dusting methods. The third item was processed for latent prints utilizing ninhydrin spray methods. After applying the chemical, the item was placed in a heat press to accelerate the development.
2F2VM4	After completing steps 1, 2, and 3 for the development, lifting, and preservation of fingerprints—using black magnetic powder in steps 1 and 2 and an iodine ampoule in step 3—we were able to develop, lift, photograph, and/or preserve fingerprints.
2F43W4	Directed to not process Item 3 by [Name].
2JYQDB	Final Report: Items 1A-1C were physically and chemically processed for latent prints with positive results. The developed latent prints will be examined, and those results will be released in a subsequent Latent Print report.
377UNH	Additional treatment steps to observed fingerprint ridge detail was performed for each item to ensure optimal development (examination was not stopped once fingerprint detail was initially observed).
382CQJ	All of the dye stain photos were taken with the Poli-Light PL500. One scan completed using a flat bed scanner set at TIFF and 1200 DPI and scan was transferred to Digital EMS.
4APDH8	During the tests we use the following equipment: - POLILIGHT PL 500 XL made by Rofin - it's a high intensity light source that emit light in a controlled spectrum centered at the labeled wavelength 350-650 nm and white. - MVC 3000 made by Foster+Freeman - it's cyanokarylate fuming chamber. - NINcha S31 made by Attestor Forensics - it's forensic climate chamber for Ninhydrin and DFO treated fingerprint evidence.
6A3XTA	Items 1A, 1B and 1C were physically and chemically processed for latent prints with positive results. The developed latent prints will be examined and those results released in a subsequent Latent Print report.
6TGYKA	Print deposition too hard or too much substance on fingers when depositing print on luggage tag. Print observed and developed was a large round deposit of oily substance that barely had ridge detail.
6XRKDU	All developed latent impressions would have been documented / preserved with digital photography.
ATHZEB	Better than previous test with handling one item with divided quadrants than multiple items and three items to test with various processes.
BDMVNT	Item 1 the fingerprint pattern type was not fully visible, only a fingertip was developed. There appear to be very heavy deposition pressure on both Item 1 and Item 2.
C28Q84	Photography was carried out on a Foster and Freeman DCS-5 system consisting of a Nikon D5 camera. A 52mm visible imaging colour balancing filter was fitted to the lens. The scale was checked before use by capturing a image of a calibrated ruler, scaled on the DCS software, printed and the printed image was manually checked against the calibrated ruler. Lighting was controlled by a Foster and Freeman 8x4 ring crime-lite. All exhibits were tracked via a barcode system on a LIMS and all examination details were recorded on the same system.
DVAVEV	Where "no suitable detail to be captured" has been stated, this refers to the treatment developing an area which does not contain sufficient(if any) characteristics to be of use. Sufficient is defined as the presence of core detail or 5 characteristics.
EG9JJV	According to our classification of fingerprints, fingerprint 1 would be a left-leaning delta. We believe that the answer that best matches your suggestion is: loop Fingerprint 2 is also a left-leaning delta, and fingerprint 3 is a bidelta: the answer that best matches is whorl

TABLE 5

WebCode	Additional Comments
FME3V	The packaging of item 2, (glossy post card) should have been packed in cardboard box instead of paper envelope to prevent damage to the latent print during transportation .
G68W6W	On 5/5/26 I processed the following items for ridge detail: Item 1- luggage tag, Item 2- glossy post card, Item 3- white invitation envelope. The following areas of ridge detail were found: Item 1- Quadrant C, Item 2- Quadrant B, Item 3- Quadrant D. All photos were submitted to the 26-5190 folder. Two (2) lift cards were secured in Locker 3 of the CSU lab. All items of evidence were secured in locker 3 of the CSU lab.
G9N34Q	Criminalistics (CSI) does not perform the study, examination, and classification of the fingerprint evidence.
JDU34R	Items 1A, 1B, and 1C were physically and chemically processed for latent prints with positive results. The developed latent prints will be examined, and those results will be released in a subsequent Latent Print report.
JNAG4T	The fingerprint deposited on Item 2 (field B) had central part impressed strongly enough to make it difficult to determine the pattern. After the independent re-examination of the photographs by three experts it was determined that the pattern was a loop but very tight, almost making it a tented arch. The fingerprints deposited on Item 1 (field C) and on Item 3 (field D) were much easier to determine the patterns.
K4JZHR	Final report: Items 1A-1C were physically and chemically processed for latent prints with positive results. The developed latent prints will be examined, and those results will be released in a subsequent Latent Print report.
K6FFVN	Report, images, and notes under 26-C-01606 in BEAST and Mideo.
KAPTDM	Item 3 not processed per [Name]
L8V3RN	Item 01: no ridge detail observed, did not submit lift. Item 03: faint development, ambient room light photographed the best.
M4BAFK	CSI does not perform the study, examination, or classification of fingerprint evidence.
M9KQMN	On 5/5/2026, I processed the following items for ridge detail: Item 1 - luggage tag, Item 2 - glossy post card, Item 3 - white invitation envelope. The following areas of ridge detail were found Item 1 - Quadrant C, Item 2 - Quadrant B, Item 3 - Quadrant D. All photos were submitted to the 26-5190 folder. Two (2) lift cards were secured in locker 20 of the CSU lab. All items of evidence were secured in locker 20 of the CSU lab.
MZU6GQ	Finished processing 5/9/2026. In a real case, photos and scan of latent cards would have been saved to Axon. Images of 1A, 2A, and 3A, plus the two latent lift cards of 1A and 2A would have been submitted to the Forensic ID Unit (FIU) for evaluation. Evidence would have been secured in the CSU lab and secure lockers while working the evidence. When completed, it would have been submitted to the Property and Evidence Section. All images and documents pertaining to test 26-5190 [are stored in a digital drive].
N4BMKT	The print on Item 2 appears to be a low count loop, but the ridges around the core and delta were not clear enough to determine if there is a sufficiently recurving ridge or if the possible recurve was spoiled which would make it an arch.
QUY8QP	Photograph was not taken of the developed print in quadrant B of Item 2, after the black powder processing.
RFA32L	In Item 2, the pattern appears to be a right slope loop; however, due to distortion and lack of clarity in the core area, the pattern is also referenced as a tented arch.

TABLE 5

WebCode	Additional Comments
UM2J78	All three impressions were pretty low contrast and felt a lot of the processing techniques utilized were just not reacting to the impressions very well despite the QA controls that were being processed with the items were showing high contrast.
UPA7T8	We did not use 1,2 - Indanedione method to sample 3 (white invitation envelope). Our climate cabin has not been maintained in accordance with the quality management system (ISO 17025).
W74HED	Tests on similar surfaces were done to make sure that the methods were correctly realized.
WJX8LR	For item 2 (multicolored glossy paper postcard), if this was casework, I would add another step to process the plain white back side of the postcard which is porous. As my final step in casework, I would apply ninhydrin to the entire surface and place it in a humidity chamber for 10 minutes to see if latent prints develop and preserve with a scanner those prints deemed suitable for further analysis. Since this test is only focused on latent prints that might appear within the designated quadrants and those quadrants are not on the porous side of the card, I believe it is not necessary to do this processing step in this scenario.
WQGVFG	Item 1 had a full print developed with almost no notable ridge detail. This made pattern determination impossible. Item 2 appears to be right slant loop, but the recurve area of the core isn't clear enough to rule out it being a tented arch.
YGLA8Z	[Table 4 – Item 1: First Level Detail Findings] 1-5 No identifying marks were observed. Print appeared to be a smudge with some small detail at the very top of the print. Unable to identify pattern type.
YLZBJE	While it can be assumed that there was meant to be a print in Quadrant D of item number 3, the envelope, due to minor activity seen during the Ninhydrin stage of development; no viable print was actually obtained through the processing and was not submitted for further testing.
YYJ6PD	On Item 3, the white invitation envelope was processed using black magnetic powder. A latent print initially appeared in Box B; however, an additional print developed in Box D which appears to be the correct result. Upon visual examination and the use of oblique (white) lighting, ridge detail and pattern were observable in Box D. The print in Box D did not appear to darken with the application of black magnetic powder in the same manner as the print observed in Box B. Additionally, a quality control test print was conducted by placing known prints on a blank sheet of white paper, which yielded positive results.
Z6LNB9	Impression on Item 2 was a double tap/touch and poor quality.

-End of Report-
(Appendix may follow)

Test No. 26-5190: Latent Print Processing - Varied Surfaces

DATA MUST BE SUBMITTED BY **May 26, 2026, 11:59 p.m. EDT** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: LHZHNZ

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

Scenario:

During the week of 23 February 2026, 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.

Items Submitted (Sample Pack LAP1):

Item 1: Quadrants A-D within the luggage tag.

Item 2: Quadrants A-D within the glossy postcard.

Item 3: Quadrants A-D within the white invitation envelope.

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 luggage tag.

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 glossy postcard.

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 white invitation envelope.

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.

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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)